

UNITED STATES DEPARTMENT OF THE INTERIOR

Harold L. Ickes, Secretary

U.S. GEOLOGICAL SURVEY

W. E. Wrather, Director

Bulletin 930—Vol. 1

SPIRIT LEVELING IN ILLINOIS

1896–1942

PART 1. SOUTHERN ILLINOIS

PART 2. WEST-CENTRAL ILLINOIS

Prepared in cooperation with the
STATE OF ILLINOIS
DEPARTMENT OF REGISTRATION AND EDUCATION
GEOLOGICAL SURVEY DIVISION



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UNITED STATES DEPARTMENT OF THE INTERIOR
Harold L. Ickes, Secretary
GEOLOGICAL SURVEY
W. C. Mendenhall, Director

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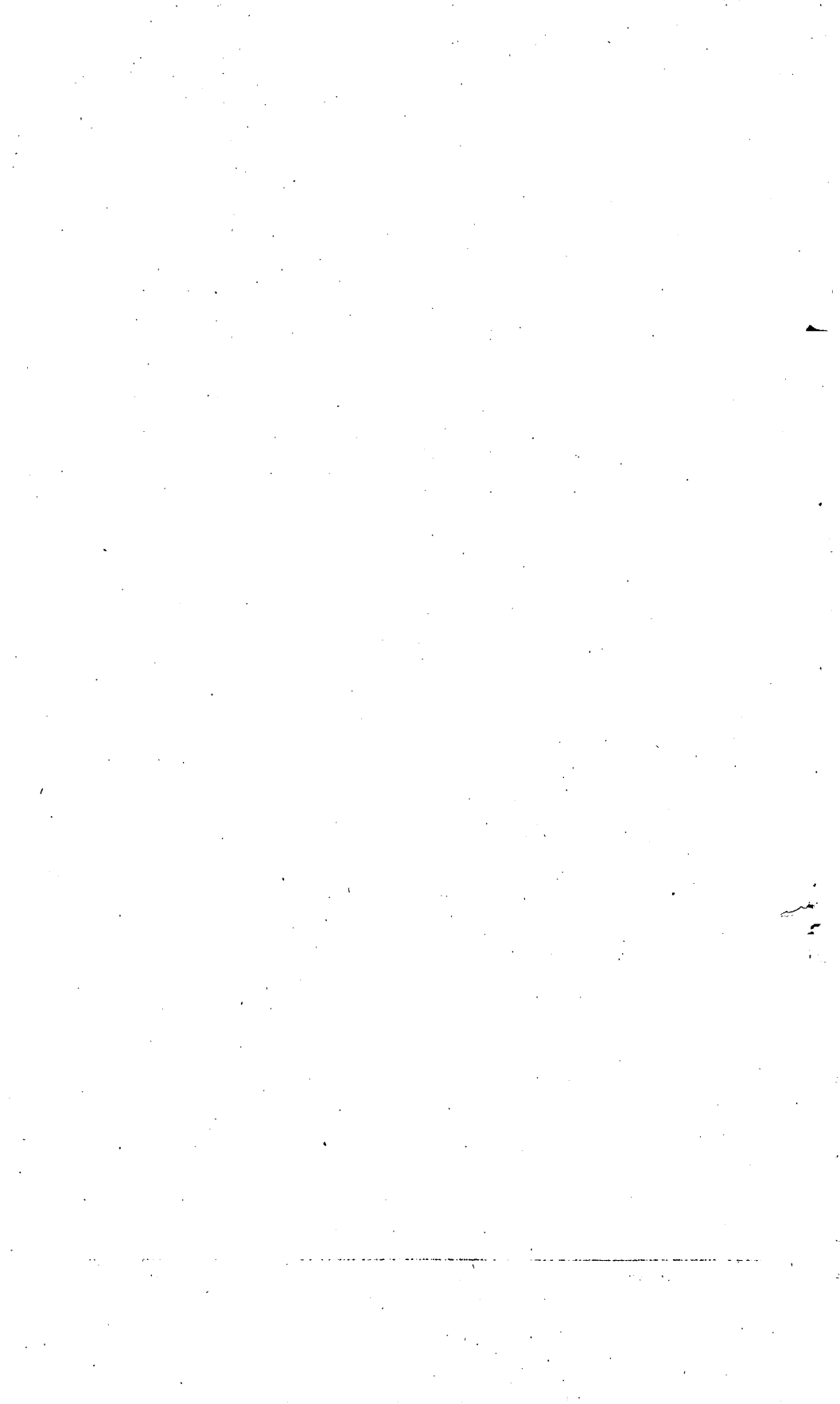
SPIRIT LEVELING IN ILLINOIS 1896-1941

PART 1. SOUTHERN ILLINOIS

Prepared in cooperation with the
STATE OF ILLINOIS
DEPARTMENT OF REGISTRATION AND EDUCATION
GEOLOGICAL SURVEY DIVISION



UNITED STATES
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SPIRIT LEVELING IN ILLINOIS, 1896-1941

PART 1. SOUTHERN ILLINOIS

INTRODUCTION

Scope of report.—This bulletin, which for convenience is to be published in four parts, contains the results of all spirit leveling done by the Geological Survey in Illinois, including those heretofore published. (See p. 7.) Each of the parts deals with one of four sections into which the State has been divided for this purpose and which have been designated southern, east-central, west-central, and northern Illinois. In each part, descriptions of the points for which figures of elevation have been determined are listed according to the quadrangles in which the points occur. In addition to the results of leveling by the Geological Survey the bulletin includes leveling by the State Geological Survey and by the Civil Works Administration.

Classification of leveling.—Spirit leveling is classified according to the degree of refinement in the instruments and methods used and according to the closure errors.

First-order leveling¹ consists of leveling done with the most improved instruments, all sections being leveled twice, in opposite directions, under varying conditions. Closures are not allowed to exceed the amount in feet represented by the formula

$$0.017 \sqrt{\text{length of section in miles.}}$$

All corrections for rod error, temperature, and unbalanced sights are applied, as well as the orthometric corrections for convergence toward the poles of level surfaces of different elevations.

Second-order leveling, according to regulations of the Geological Survey, comprises lines leveled twice with reliable instruments, though not necessarily of the most improved type. Closures are not allowed to exceed $0.035 \sqrt{\text{length of section in miles.}}$

Third-order leveling is made up of lines that are run, either with first-order equipment or with an engineer's wye level and rods of the New York type, in single-line circuits that are required to close within the limits, in feet, of $0.05 \sqrt{\text{length of circuit in miles.}}$ This is equivalent to $0.071 \sqrt{\text{length of section in miles}}$ if the line is leveled twice.

¹ See Avers, H. G., Manual of first-order leveling: U. S. Coast and Geodetic Survey Special Pub. 140, 1929.

All leveling done by the Geological Survey in Illinois is of third-order accuracy except as otherwise stated.

Adjustments.—The adjustment of a net of leveling begins with the first-order lines. Most of these lines in both the United States and Canada have already been combined in a general net, and the orthometric differences derived from the observed values by correction for the convergence of level planes toward the north have been adjusted by least squares to remove accidental closure errors. The latest adjustment of this kind was made in 1929 by the Coast and Geodetic Survey and is known as the "1929 general adjustment of first-order leveling." This adjustment included the first-order lines in Illinois (pl. 2), and the elevations thus derived are the fundamental references for elevations determined by second- and third-order nets. The third-order leveling of the Geological Survey in Illinois has been adjusted by determining weighted mean elevations for new junction points and prorating the errors of each link. The weights are taken as the reciprocals of lengths of links. The third-order net has thus been brought into agreement with the best information available for the results of the fundamental first-order leveling, although the published figures of elevation may be changed slightly by future adjustments of the level net.

Bench marks.—The bench marks used by the Geological Survey (pl. 1) are of two general classes—principal and supplementary. Principal bench marks are placed at more or less regular intervals along a level line, at sites offering them protection from disturbance and affording favorable conditions for their future recovery. They are usually bronze or aluminum tablets, iron posts with bronze caps, or copper bolts.

The tablets (A, B, and C, pl. 1) are circular in shape, measure $3\frac{7}{8}$ inches in diameter, and taper from a thickness of three-eighths of an inch at the center to about a quarter of an inch near the rounded edge. In the earlier years of the Survey's leveling, many of the tablets were made of aluminum. They were light in weight and easily transported. The softness of this metal, however, made them susceptible to damage, so that aluminum as a material for tablets was eventually discarded. The earliest tablets were made of bronze, which is the material now specified for standard tablets. Each tablet is cast with a 3-inch shank extending from the center of its reverse side, by means of which it is held in place, and each bears an inscription on its face. The inscriptions on the existing tablets differ in many details, because of changes in design at various times. The face of every tablet, however, is cast with the words "U. S. Geological Survey" and "Elevation above sea" and with a large or small cross at the center, which indicates the fiducial

point for position or elevation. On some tablets the inscription indicates that they were set in connection with a project in which a State or other organization cooperated; on some, the inscription includes a triangle, which signifies a located point, enclosing a small cross at the center. Tablets bearing a triangle enclosing a cross may be used not only as bench marks but also as triangulation- or traverse-station marks. The inscription on most of the existing principal bench marks includes the warning "250 dollars fine for disturbing this mark," but the latest design omits this phrase and adds the sentence "For information write the Director, Washington, D. C."

If a tablet is set to mark a transit-traverse station, the traverseman stamps upon it with steel dies letters indicating this use of it, such as "Prim Trav Sta," "P T S," or "T T," as well as his own identifying letter or letters, the serial number of the station, and the year. If a tablet is set as a bench mark, the levelman stamps it with his identifying letter or letters, the serial number of the bench mark, and the year. He may at the same time stamp upon it the figures of elevation to the nearest foot, or these figures may be added later. A tablet may be used both as a traverse-station mark and as a bench mark. The engineer who establishes the mark stamps it as noted above and records the stamping with the description to facilitate identification. Engineers who use the mark in subsequent surveys do not alter the original stamping nor add their own stampings with the exception of figures of elevation.

The figures of elevation that appear on a tablet are usually those determined by field computation only. It is sometimes found, therefore, that they do not represent the latest information. This has happened either because they refer to some independent datum temporarily adopted before first-order trunk lines made standard datum available, or because a later adjustment made in the office has rendered necessary an appreciable change in the figures as determined in the field. It is assumed that engineers and others who require accurate figures of elevation for the marks will use those printed in the bulletin instead of accepting the stamped figures. If the appropriate bulletin is not conveniently accessible, a request for the desired information may be addressed to the Director of the Geological Survey, United States Department of the Interior, Washington, D. C.

The tablet, of whatever style, is cemented into a hole drilled in solid rock or in the wall of a public building, bridge abutment, or other masonry structure. Where masonry or rock is not available the tablet is set in the top of a reinforced concrete post, which may be either precast or mixed and molded at the selected site. The posts are about 8 inches square or 8 inches in diameter at the top and larger

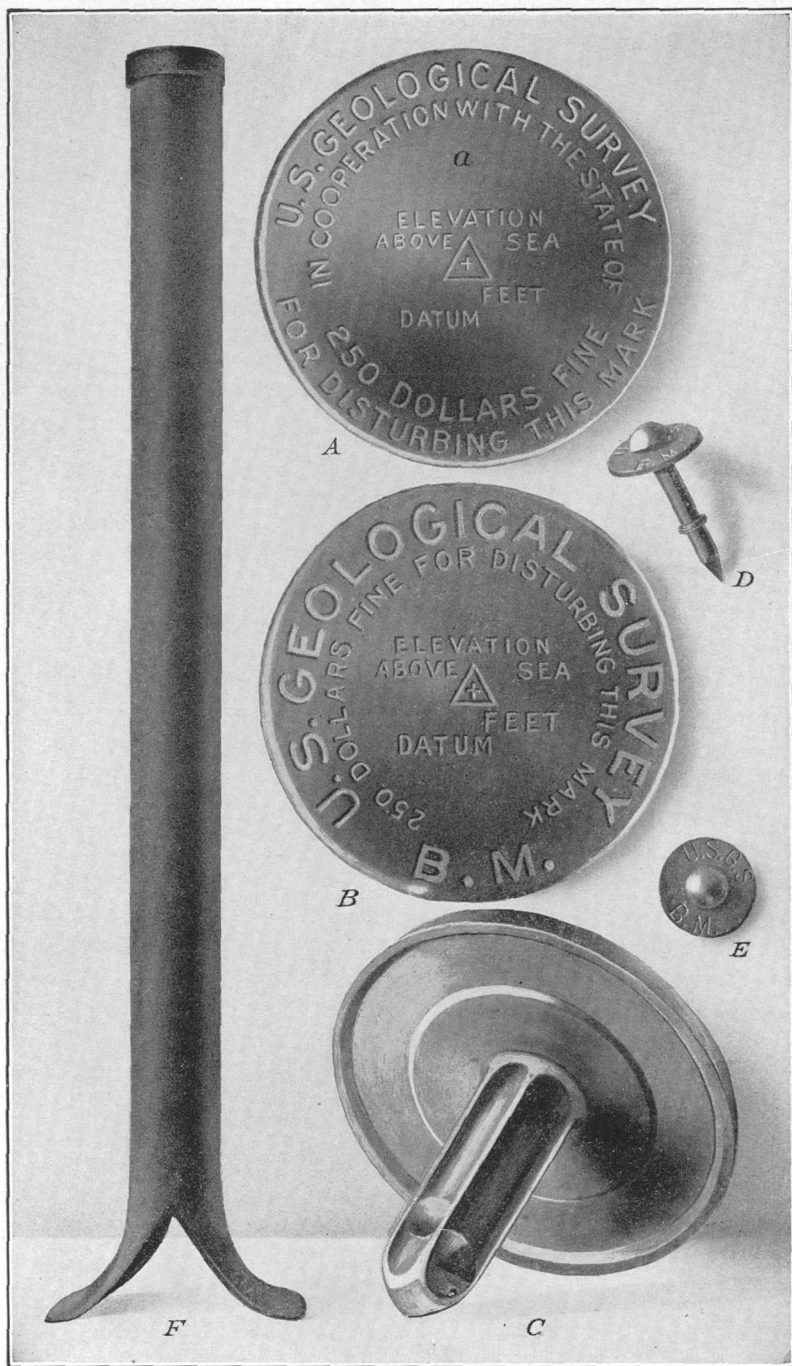
at the base. They are generally set so as to project about 6 inches above ground and are made sufficiently long to reach below the frost line.

The second form of principal bench mark (F, pl. 1), for use where masonry or rock is not available, consists of a hollow wrought-iron post to the top of which is riveted a bronze cap bearing the same general inscriptions as the tablets. These iron posts measure 4 feet in length and $3\frac{1}{2}$ inches in outer diameter and are set about 3 feet in the ground. The bottom of the post spreads out to a width of about 10 inches in order to give it a firm footing in the earth. Few iron posts have been set since 1920. They have proved impracticable, as they are easily disturbed and are eventually destroyed by rust at the ground level.

The third form of principal bench mark is a copper bolt designed to be wedged into a drill hole in rock or masonry and further secured with lead or cement. This bolt measures 4 inches in length and 1 inch in diameter and has a slot at the bottom end into which fits a brass wedge. The wedge serves to expand the lower part of the bolt so that after the bolt has been driven nearly its full length into the hole it cannot be easily removed. The exposed end of the bolt bears an appropriate inscription, stamped upon it with steel dies. The inscription is made up of the letters "U S G S," the letters indicating the datum used, the figures of elevation, and the abbreviated word "Ft." This form of bench mark has not been extensively used.

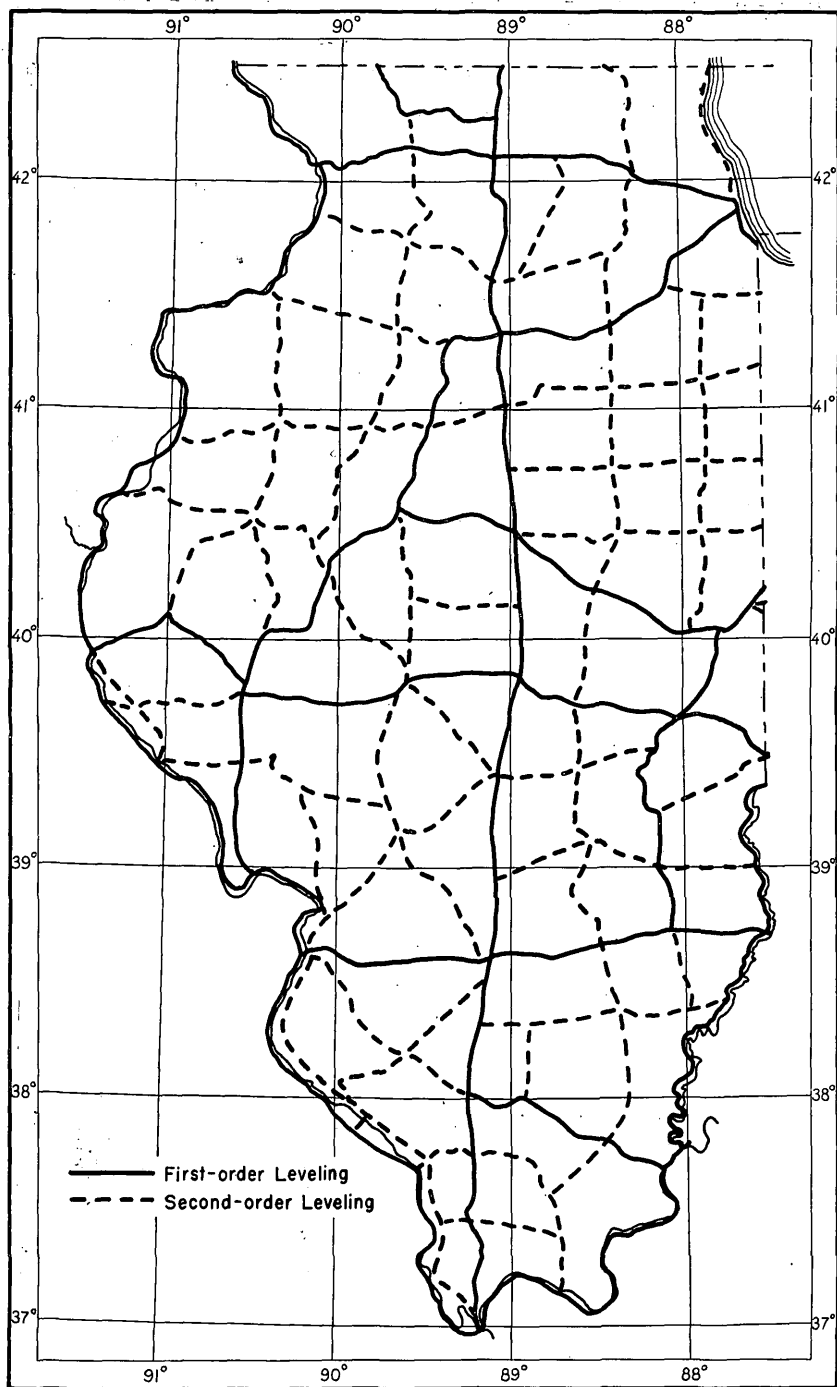
The principal bench mark used on Civil Works Administration projects is a bronze disk similar to the standard tablet used by the Geological Survey. The disk is 3 inches in diameter and has a $2\frac{1}{2}$ -inch shank. Near the center of the convex face of the disk is a small indentation which bisects a grooved line $1\frac{1}{8}$ inches long. The indentation serves as the fiducial point for position on transit-traverse surveys. The line, which lies in a horizontal plane when the disk happens to be set vertically in the walls of structures, is the fiducial line for which figures of elevation are determined by spirit leveling. The disk is cast with the inscription "U. S. Coast & Geodetic Survey and State Survey Station No Elevation Feet." Figures indicating the serial number of the station and the elevation are stamped in the appropriate spaces at the time the surveys are made.

Supplementary or auxiliary bench marks are less formal in design and are placed between the principal bench marks. They are of many kinds. One kind consists of a copper nail $1\frac{1}{2}$ inches long supplied with a copper washer seven-eighths of an inch in diameter (D and E, pl. 1). The nail is driven into the root of a tree or cemented into rock. The designation "U S G S B M" is stamped on each washer, and on some washers the abbreviation of the name of the cooperating

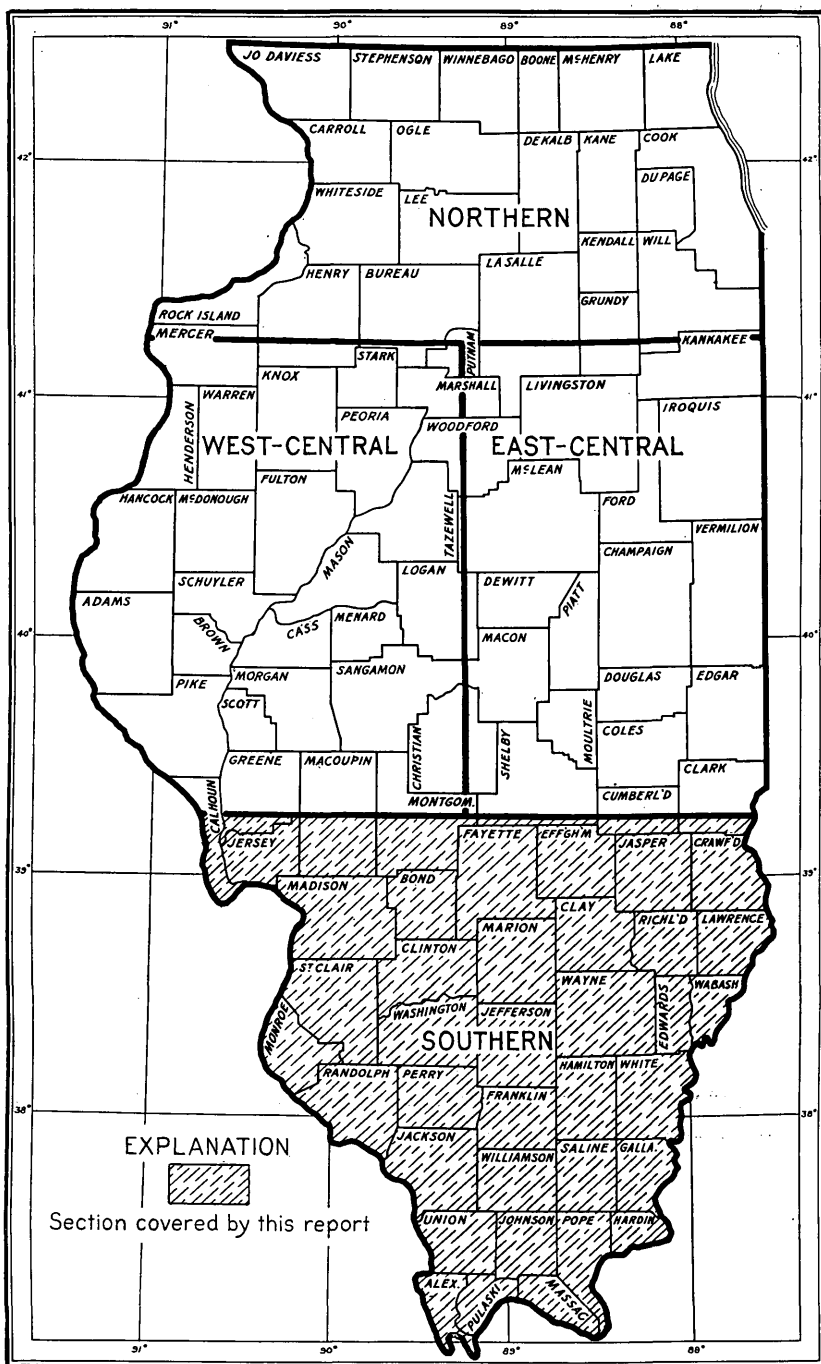


STANDARD GEOLOGICAL SURVEY BENCH MARKS.

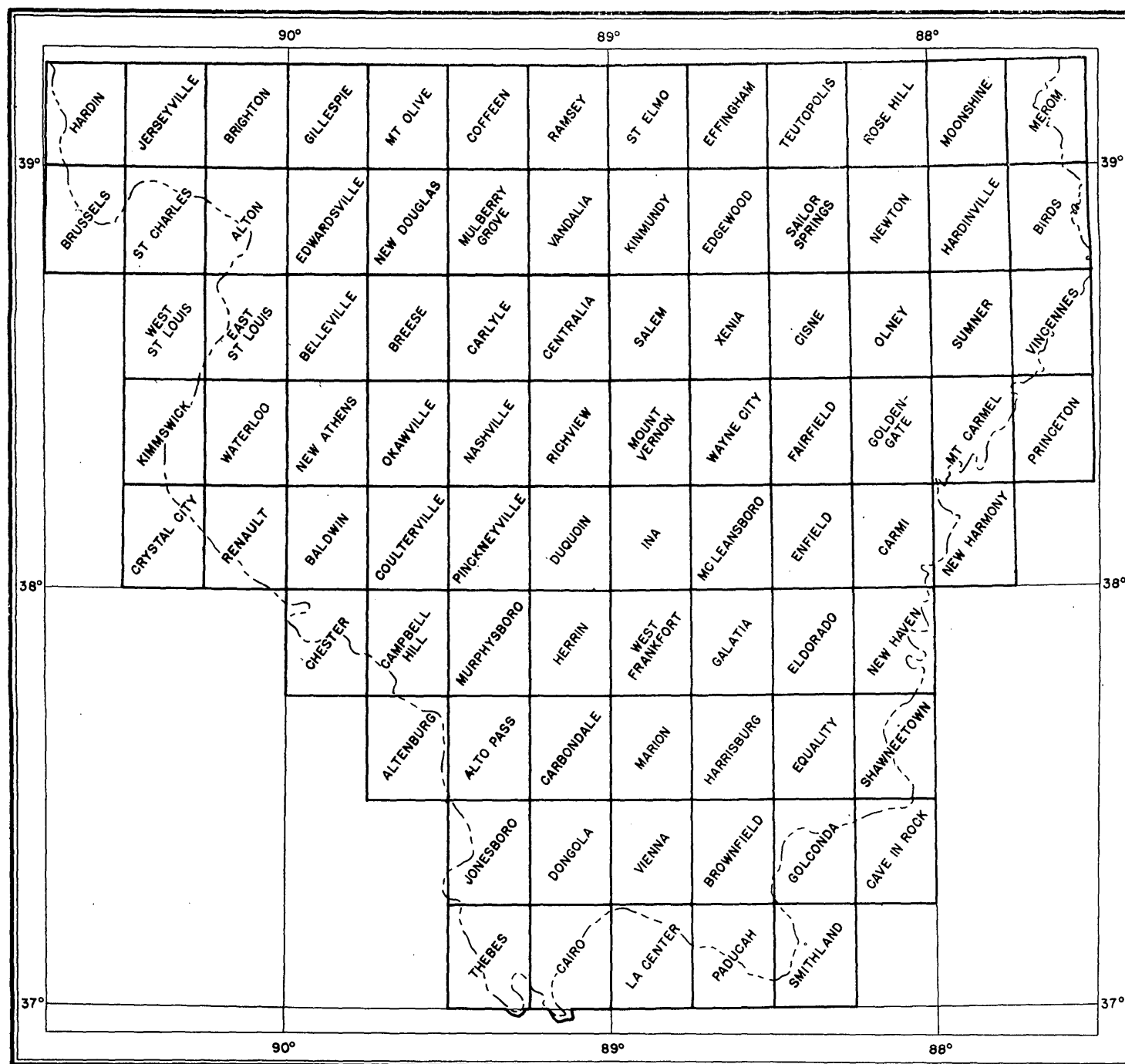
A and *B*, Standard tablets, principal bench marks, used where masonry or rock is available to hold them. *A* is used in cooperating States; the State name is inserted at *a*. *C*, Under side of *A* and *B*, showing shank used to hold tablet in place. *D* and *E*, Two views of copper nail and copper washer, a supplementary bench mark, used for points lying between those marked by standard tablets. *F*, Standard iron post fitted with bronze cap similar in design to the standard tablet, formerly used where no rock or masonry was available; superseded by concrete post with tablet set in top.



OUTLINE MAP OF ILLINOIS SHOWING THE NET OF FIRST AND SECOND-ORDER LEVELING.



OUTLINE MAP OF ILLINOIS SHOWING THE NAMES AND RELATIVE POSITION OF THE FOUR SECTIONS COVERED BY THE PARTS-OF BULLETIN 930.



INDEX MAP OF SOUTHERN ILLINOIS SHOWING THE QUADRANGLES INTO WHICH THIS SECTION OF THE STATE HAS BEEN DIVIDED.

State is added. Another kind of supplementary bench mark is a chiseled square, used on the horizontal surface of a rock or masonry structure, or a chiseled cross, used on a vertical surface. Nails, track spikes, and small capped iron pipes also serve as supplementary bench marks, and easily described points, such as doorsills and tops of hydrants, are occasionally used.

Preservation and restoration of bench marks.—Any person who finds that a principal bench mark has been damaged, disturbed, or destroyed or that it should be reset or redescribed on account of highway or other improvements will render a public service by communicating the facts to the Director, Geological Survey, United States Department of the Interior, Washington, D. C., before taking any action affecting the location or elevation of the mark. A proper form, accompanied by a return-addressed, franked envelope, will be sent for use in reporting the action taken and in recording the revised description of the mark, if any, and the notes made in obtaining the revised elevation.

Datum.—All elevations determined by the Geological Survey and those determined by the Coast and Geodetic Survey for inland mapping are referred to mean sea level, which is the level that the sea would assume if the influence of winds, tides, and currents were eliminated. This level is not the elevation determined from the mean of the highest and lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. *Mean sea level is the average height of the water, all stages of the tide being considered.* It is determined from observations made by means of tidal gages placed at stations where local conditions, such as those due to long, narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea levels determined from observations made in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean.²

Location of the area.—Southern Illinois, as the term is used in this bulletin and as the subject of part 1 of the bulletin, is that section of the State lying south of latitude $39^{\circ}15'$ (see pl. 3).

Index map.—The accompanying index map of Southern Illinois (pl. 4) shows the relative position of the quadrangle areas in which

² See Jones, E. L., *Hypsometry—Use of mean sea level as the datum for elevations*: U. S. Coast and Geodetic Survey Special Pub. 41, 1917; *Manual of tide observations*: U. S. Coast and Geodetic Survey Special Pub. 196, 1935.

leveling has been done. A quadrangle is the unit of topographic survey adopted by the Geological Survey for mapping purposes. All the quadrangles referred to in listing the results of leveling in Southern Illinois measure 15 minutes in latitude by 15 minutes in longitude.

Topographic maps of quadrangles in Southern Illinois for which surveys have been completed may be purchased at 10 cents each retail or 6 cents each in lots of 50 or more. Prepayment is required and may be made by money order, payable to the Director of the Geological Survey, or in cash—the exact amount, at sender's risk. Postage stamps should not be sent.

Diagrams of quadrangles showing routes of leveling.—At the beginning of the list of bench mark descriptions for each quadrangle is a diagram showing the routes followed by the lines of leveling in and immediately adjacent to that quadrangle. To aid in identifying these routes, the boundaries of the townships and ranges in the quadrangles are indicated by light dashed lines and the designations of these land subdivisions are given on the margin. Some of the principal settlements are also shown. The solid lines represent the routes of third-order leveling. To each of these is assigned a number, and the same number is assigned to the list of descriptions of bench marks along that route.

Cooperation.—Since 1906 equal allotments of funds for topographic surveys including leveling have been made from Federal and State sources. The cooperating agency in Illinois is the State Geological Survey Division, Department of Registration and Education. All principal bench marks established by the Geological Survey since the beginning of the cooperative agreement are stamped with the full or abbreviated State name.

Personnel.—The leveling of the Geological Survey in Southern Illinois was done under the supervision of the several chief geographers or chief topographic engineers who were in administrative charge of the topographic branch during the years when the lines were run. Leveling by the State Geological Survey along the Kaskaskia River in 1907 was under the supervision of the State geologist. Recent leveling on Civil Works Administration projects was under the supervision of the chief of the State Geological Survey Division, Department of Registration and Education. The name of the levelman who ran a particular line and the date when it was run immediately follow the designation of the route of that line and form part of the heading that precedes the descriptions of bench marks. The adjustment of the third-order level net, which included the adjustment of the recent leveling and readjustment of the earlier work, was made by S. R. Archer, associate engineer. The correlation and compilation of the descriptions and figures of elevation of the bench marks

and the assembling of the lists were done by R. G. Clinite, associate geodetic engineer, under the supervision of R. M. Wilson, chief of the section of computing, under the general direction of J. G. Staack, chief topographic engineer.

Related publications.—(1) Earlier publications on spirit leveling in Illinois issued by the Geological Survey are as follows:

Triangulation and spirit leveling, Illinois: U. S. Geol. Survey 18th Ann. Rept., pt. 1, pp. 324-325, 1897.

Triangulation and spirit leveling, Illinois: U. S. Geol. Survey 19th Ann. Rept., pt. 1, pp. 256-257, 1898.

Results of spirit leveling in Illinois, 1896 to 1908, inclusive: U. S. Geol. Survey Bull. 421, 74 pp., 1910.

Results of spirit leveling in Illinois, 1909 and 1910: U. S. Geol. Survey Bull. 493, 115 pp., 1911.

Results of spirit leveling in Illinois, 1911 to 1913, inclusive: U. S. Geol. Survey Bull. 553, 110 pp., 1914.

Results of spirit leveling in Illinois, 1914 to 1917, inclusive: U. S. Geol. Survey Bull. 672, 108 pp., 1918.

(2) For additional leveling in quadrangles which overlap adjoining States, see the following Geological Survey publications:

Bull. 555, Results of spirit leveling in Indiana, 1913.

Bull. 554, Results of spirit leveling in Kentucky, 1914.

Bull. 673, Results of spirit leveling in Kentucky, 1918.

Bull. 898-A, Spirit leveling in Missouri, Part 1, 1938.

Bull. 898-C, Spirit leveling in Missouri, Part 3, 1938.

DESCRIPTIONS OF BENCH MARKS

ALTENBURG QUADRANGLE

[Latitude 37°30'–37°45'; longitude 89°30'–89°45']

JACKSON AND UNION COUNTIES

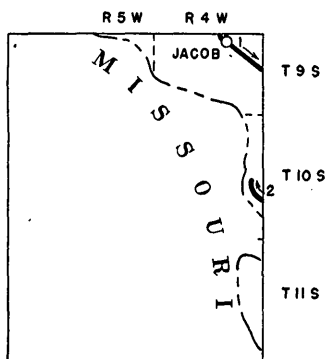


FIGURE 1.—Lines of leveling in Altenburg quadrangle.

1. From point 0.5 mile north of Jacob south along road to Jacob, thence southeast along Missouri Pacific Railroad to point about 1 mile northwest of Gorham (by J. M. Rawls in 1915; releveled from Jacob by J. M. Perkins in same year)

[Continued from Campbell Hill quadrangle, line 3]

Jacob, 300 ft. W. of sta., at rd. crossing; top of S. rail.....	Feet 363.8
Jacob, 30 ft. S. and 75 ft. W. from M. P. R. R. sta., 3.3 mi. NW. of Gorham, 3 ft. from N. corner of Jacob Drug Store; standard iron post with bronze cap stamped "1915 365" (recovered by U. S. C. & G. S. in 1935).....	364.382

[Continued in Alto Pass quadrangle, line 1]

2. From Grand Tower northwest and north along Illinois Central Railroad to point 0.5 mile northeast of Devils Bake Oven (by C. B. Schmeltzer in 1921)

[Continued from Alto Pass quadrangle, line 8]

Grand Tower, in front of sta.; top of W. rail.....	367.0
Grand Tower, 1.0 mi. NW. of, on left bank of Mississippi River, 650 ft. E. of Devils Bake Oven, 230 ft. from river bank, 264 ft. from NE. corner of house of Mrs. Howard Oliphant, 192 ft. from fence parallel to river, 135 ft. from fence corner, about 12 ft. E. of small barn, 7 ft. from E.-W. fence; stone post (Mississippi River Comm. B. M. fig. 40).....	367.226
Grand Tower, about 1 mi. NW. of, about 10 ft. from left high bank of Mississippi River, directly back of and about 150 ft. upstream from Devils Bake Oven, 80 ft. downstream from large walnut tree, 50 ft. north of blazed sycamore tree, about 8 ft. from oak post in barbwire fence; iron post (U. S. C. E. B. M. "Bake Oven 1899").....	362.811

Grand Tower, about 1.2 mi. NW. of, 0.5 mi. NE. of Devils Bake Oven, 0.2 mi. E. of river bank, 240 ft. E. of track, 100 ft. E. of haw tree in cornfield, 52 ft. from NE. corner of schoolhouse,³ 10 ft. from NE. corner of yard; stone post (Mississippi River Comm. B. M. 22/2) --

Feet
366.626

* Reported torn down.

ALTO PASS QUADRANGLE

[Latitude 37°30'–37°45'; longitude 89°15'–89°30']

JACKSON AND UNION COUNTIES

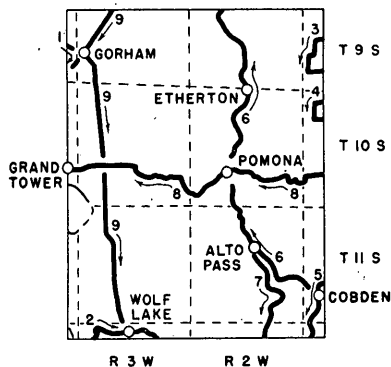


FIGURE 2.—Lines of leveling in Alto Pass quadrangle.

1. From point about 1 mile northwest of Gorham southeast along Missouri Pacific Railroad to Illinois Central Railroad, thence southwest to Fountain Bluff (by J. M. Rawls in 1915; releveled by J. M. Perkins in same year)

[Continued from Altenburg quadrangle, line 1]

Gorham, about 350 ft. W. of sta., at NE. corner of yard of residence of James Nichols; standard iron post with bronze cap stamped "1915 365" (recovered by U. S. C. & G. S. in 1935)-----	Feet 364. 835
Fountain Bluff, about 325 ft. from I. C. R. R. sta., 140 ft. S. of ruins of burned house, 52 ft. NW. of track, in fence corner of field, 70 ft. W. of blazed locust tree; Mississippi River Comm. B. M. 23/1 cap on iron pipe-----	371. 213
top of flat stone-----	366. 122
2. Along roads north and northwest 0.8 mile, thence generally east and southeast by way of Wolf Lake (by B. H. Oakley in 1918; leveled twice from Wolf Lake)	

[Continued from Jonesboro quadrangle, line 10]

Ware, 6.7 mi. NW. of, about 2.5 mi. W. of Wolf Lake, at crossroads, in root of 36-in. sycamore tree; copper nail and washer-----	347. 78
Wolf Lake, about 1 mi. NW. of, on W. side of rd., in front of little red house, in root of 30-in. walnut tree; copper nail and washer-----	358. 54
Wolf Lake, just N. of Illinois Central R. R. sta., at center of rd. crossing; top of W. rail-----	357. 1
Wolf Lake, in SE. part of, 230 ft. N. of semaphore, 140 ft. E. of tracks, 18 ft. S. of Wolf Lake-Jonesboro rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 153 1911" (not recovered in 1921)-----	352. 410

Wolf Lake, 0.7 mi. SE. of I. C. R. R. sta., 300 ft. W. of small bridge, 100 ft. W. of gray house, on N. side of rd., in root of 60-in elm tree; copper nail and washer-----	Feet 370. 73
[Continued in Jonesboro quadrangle, line 11]	
3. West along Murphysboro-Carbondale road 0.3 mile, thence along roads alternately south and west 2.3 miles, thence east (by H. S. Senseney in 1919)	
[A jog from Carbondale quadrangle, line 3]	
Carbondale, 2.3 mi. W. thence 1.0 mi. S. from, 20 ft. S. of N $\frac{1}{4}$ cor. sec. 30, T. 9 S., R. 1 W., at junction of E.-W. rd.; standard iron post with bronze cap stamped "436"-----	435. 356
Carbondale, 2.0 mi. S. and 2.6 mi. W. from, 0.25 mi. E. of SW. cor. sec. 30, T. 9 S., R. 1 W., in NE. corner of junction of T-rd. N., in root of oak tree; copper nail and washer-----	442. 47
[Continued in Carbondale quadrangle, line 3]	
4. Along roads west, south, and east in sections 6 and 7, T. 10 S., R. 1 W. (by H. S. Senseney in 1919)	
[A jog from Carbondale quadrangle, line 3]	
Carbondale, 4.5 mi. S. and 2.4 mi. W. from, near center of sec. 7, T. 10 S., R. 1 W., at NW. corner of T-junction of E.-W. rd., in root of peach tree; copper nail and washer-----	567. 20
[Continued in Carbondale quadrangle, line 3]	
5. From point about 0.8 mile northeast of Cobden southwest along Illinois Central Railroad to point 2.5 miles south of Cobden, (by R. G. Clinite in 1920)	
[Continued from Carbondale quadrangle, line 5]	
Cobden, about 400 ft. NW. of sta., 200 ft. W. of track, in SW. angle of street intersection, at NE. corner of building of John Buck Estate, in E. face; aluminum tablet stamped "1920 620", (recovered by U. S. C. & G. S. in 1922 and designated "Q 10") ⁴ -----	619. 789
Cobden, on Main Street, 56 ft. N. of N. line of Ash Street, 31 ft. E. of center line of U. S. Highway 51, near SW. corner of First National Bank Building, in W. face; standard tablet ⁵ -----	616. 521
Cobden, in front of sta.; top of W. rail of northbound track-----	594. 2
Cobden, 1.8 mi. S. of, in NW $\frac{1}{4}$ sec. 6, T. 12 S., R. 1 W., about 700 ft. S. of rd. crossing, on W. side of track, on NE. corner of concrete base of semaphore 3251; chiseled square-----	629. 33
[Continued in Jonesboro quadrangle, line 13]	
6. From Cobden northwest along road to Alto Pass, thence generally north along Mobile & Ohio Railroad to point about 1 mile south of Murphysboro (by C. B. Schmeltzer in 1921)	
Cobden, about 0.3 mi. W. of sta., 30 ft. NW. of rd. fork, in root on S. side of 15-in. hard-maple tree; copper nail and washer-----	601. 97
Cobden, 0.5 mi. W. of, at State rd., on SE. corner of SE. wing wall of large concrete culvert; chiseled square-----	593. 53
Cobden, 1.1 mi. NW. of, near SW. cor. sec. 19, T. 11 S., R. 1 W., on SE. corner of concrete box culvert; chiseled square-----	743. 41

⁴ In 1934 this tablet was reported destroyed. It was replaced by a standard tablet set near the northeast corner of Main and Ash Streets.

⁵ This mark was set in 1934 to replace the aluminum tablet stamped "1929 620," previously described.

12 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Cobden, 1.6 mi. NW. of, near center of sec. 24, T. 11 S., R. 2 W., 500 ft. E. of white farmhouse, on SE. corner of concrete box culvert; chiseled square-----	Feet 783. 82
Cobden, 2.3 mi. NW. of, near W $\frac{1}{4}$ cor. sec. 24, T. 11 S., R. 2 W., 900 ft. E. of old weatherbeaten house, on NE. corner of concrete box culvert; chiseled square-----	807. 82
Cobden, 2.7 mi. NW. of, in NE $\frac{1}{4}$ sec. 23, T. 11 S., R. 2 W., 600 ft. E. of big house at N. turn in rd., in front of house, in root on S. side of middle 15-in. hard-maple tree; copper nail and washer-----	855. 01
Cobden, 2.8 mi. NW. of, NE. of center of sec. 23, T. 11 S., R. 2 W., at N. turn in rd., near SE. corner of yard of residence of James Venable, in root on E. side of 30-in. oak tree; copper nail and washer-----	858. 92
Cobden, 3.9 mi. NW. of, about 1.2 mi. SE. of Alto Pass, about 700 ft. SE. of W $\frac{1}{4}$ cor. sec. 14, T. 11 S., R. 2 W., in front of residence of H. E. Keith, in concrete entrance to yard, 6 ft. N. of steps; aluminum tablet-----	856. 665
Reference mark, 200 ft. N. along rd. and 50 ft. W. from tablet, in root on E. side of hickory tree; copper nail and washer-----	861. 52
Alto Pass, 50 ft. S. of M. & O. R. R. sta., at Hotel Minton, in NW. corner of concrete porch walk; aluminum tablet-----	756. 616
Reference mark, 200 ft. SE. of Hotel Minton, on N. side of crossing, on top of concrete post; chiseled square-----	762. 88
Alto Pass; top of E. rail of main track-----	747. 9
Alto Pass, 1.4 mi. NW. of, in SE $\frac{1}{4}$ sec. 4, T. 11 S., R. 2 W., at trestle 540-99, on NW. corner of S. abutment; chiseled square-----	636. 26
Alto Pass, 2.5 mi. N. of, 2.0 mi. S. of Pomona, in SW $\frac{1}{4}$ sec. 33, T. 10 S., R. 2 W., 58 ft. S. of center line of rd., 4 ft. E. of E. right-of-way line; standard iron post with bronze cap-----	540. 504
Pomona, 1.3 mi. S. of, in NW $\frac{1}{4}$ sec. 33, T. 10 S., R. 2 W., near S. end of rock cut, on W. side, 2 ft. above track, on projecting rock point; chiseled square-----	476. 70
Pomona, in front of sta.; top of E. rail of main track-----	406. 8
Pomona, 2.1 mi. N. of, in NE $\frac{1}{4}$ sec. 6, T. 10 S., R. 2 W., at N. end of trestle 546-03, on W. side, in lower foundation timber; copper nail and washer-----	375. 34
Pomona, 3.1 mi. N. of, 2.0 mi. SW. of Etherton, in SW $\frac{1}{4}$ sec. 9, T. 10 S., R. 2 W., at S. end of trestle 547-02, on W. side, in lower foundation timber; copper nail and washer-----	373. 43
Etherton, in front of section house; top of E. rail-----	395. 6
Etherton, 2 ft. S. and 25 ft. E. from S. side of Etherton store; standard iron post with bronze cap-----	399. 873
Etherton, 2.0 mi. N. of, 5.0 mi. SE. of Jackson County courthouse in Murphysboro, in NW $\frac{1}{4}$ sec. 27, T. 9 S., R. 2 W., on S. side of rd. crossing, 2 ft. E. of E. right-of-way line, in fence line; standard iron post with bronze cap-----	514. 130

[Connects with line 3 in Murphysboro quadrangle]

7. From Alto Pass generally south along Mobile & Ohio Railroad to point about 1 mile south of Kaolin (by C. B. Schmeltzer in 1921)

Alto Pass, 2.1 mi. SE. of, 2.5 m. N. of Mountain Glen, in NW $\frac{1}{4}$ sec. 23, T. 11 S., R. 2 W., near end of S. tangent track 1,000 ft. long, on W. side of track, on E. side of mass of rock in place, 1 ft. from ground; chiseled square-----	639. 60
---	---------

Mountain Glen, 250 ft. NE. of sta., 1.4 mi. NE. of Kaolin, 28.5 ft. W. of dam, on S. side of creek, in bedrock; aluminum tablet-----	<i>Feet</i> 446.895
Mountain Glen, in front of sta.; top of W. rail-----	453.7

[Continued in Jonesboro quadrangle, line 14]

8. From point 6.2 miles east of Pomona along roads generally west to Grand Tower, thence northwest along Illinois Central Railroad (by C. B. Schmeltzer in 1921)

[Continued from Carbondale quadrangle, line 9]

Pomona, 5.4 mi. E. of, 0.9 mi. W. of Buncombe School, in NW $\frac{1}{4}$ sec. 30, T. 10 S., R. 1 W., at point where rd. jogs S., on W. side of rd., in root of 16-in. elm tree; copper nail and washer-----	669.32
Pomona, 3.3 mi. E. of, in NW $\frac{1}{4}$ sec. 25, T. 10 S., R. 2 W., 800 ft. W. of deserted cabin, on N. side of abandoned rd., in root of 24-in. oak tree; copper nail and washer-----	532.94
Pomona, 2.3 mi. E. of, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 26, T. 10 S., R. 2 W., in rd., 7 ft. SE. of fence corner, 24 ft. W. of walnut tree, on bedrock; chiseled square-----	445.93
Pomona, 1.2 mi. E. of, in NW $\frac{1}{4}$ sec. 27, T. 10 S., R. 2 W., near entrance lane, in root on S. side of 28-in. oak tree; copper nail and washer----	492.88
Pomona, 0.9 mi. E. of, about 700 ft. S. of N. cor. secs. 27 and 28, T. 10 S., R. 2 W., 100 ft. SE. of junction of rd. N. to Murphysboro, 5 ft. E. of honeylocust tree at fence corner; standard iron post with bronze cap ⁶ -----	557.589
Pomona, 1.2 mi. SW. of, about 0.2 mi. S. of center of sec. 29, T. 10 S., R. 2 W., 200 ft. SW. of whitewashed house, on large boulder in rd.; chiseled square-----	430.79
Pomona, 2.0 mi. SW. of, 0.5 mi. NE. of Jerusalem Church, in SE $\frac{1}{4}$ sec. 30, T. 10 S., R. 2 W., 700 ft. W. of white house, on N. side of rd., 80 ft. E. of turn S., in root on SE. side of 16-in. oak tree; copper nail and washer-----	527.00
Pomona, 2.5 mi. SW. of, at Jerusalem Church, near N $\frac{1}{4}$ cor. sec. 31, T. 10 S., R. 2 W., near SE. corner of cemetery, S. 23°15' E. from monument to Elizabeth Trost; standard iron post with bronze cap stamped "Prim Trav Sta No 151 1911"-----	736.177
Pomona, 2.6 mi. SW. of, in NW $\frac{1}{4}$ sec. 31, T. 10 S., R. 2 W., about 500 ft. W. of Jerusalem Church, in front of house of Albert Noble, in root on SE. side of cedar tree; copper nail and washer-----	753.57
Pomona, 3.4 mi. SW. of, in NE $\frac{1}{4}$ sec. 36, T. 10 S., R. 3 W., 70 ft. E. of rd. junction, on S. side of rd., in root on N. side of 10-in. white-oak tree; copper nail and washer-----	748.69
Pomona, 4.2 mi. by rd. W. of, near center of sec. 25, T. 10 S., R. 3 W., on E. side of rd., opposite T-rd. W., in root on S. side of 10-in. elm tree; copper nail and washer-----	734.20
Pomona, 5.0 mi. W. of, in E $\frac{1}{2}$ sec. 26, T. 10 S., R. 3 W., in front of house of Ed. Gerhart, in root on NE. side of walnut tree; copper nail and washer-----	760.40
Pomona, 5.5 mi. W. of, in W $\frac{1}{2}$ sec. 26, T. 10 S., R. 3 W., just E. of cave, 14 ft. SE. of SE. corner of bridge, on E. side of stream, on rock; chiseled square-----	651.95

⁶ In 1938 this bench mark was moved 30 ft. north and 7 ft. east from this position and reset 0.075 ft. higher than its original elevation. The figures given represent the new elevation.

14 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Pomona, 5.9 mi. W. of, near W $\frac{1}{4}$ cor. sec. 26, T. 10 S., R. 3 W., near foot of steepest part of Rattlesnake Hill, on N. side of rd., on bed-rock; chiseled equare-----	Feet 491.50
Pomona, 6.8 mi. W. of, 2.5 mi. SE. of Howardton, near Rattlesnake Ferry, across Big Muddy River, about 0.2 mi. N. of center of sec. 27, T. 10 S., R. 3 W., near SW. corner of dooryard of Jake Kraft, 2.6 ft. N. and 1.8 ft. W. from fence corner; standard iron post with bronze cap-----	354.281
Big Muddy River, at Rattlesnake Ferry; surface of water Aug. 30, 1921-----	329.4
Howardton, 1.6 mi. E. of, near SW. cor. sec. 22, T. 10 S., R. 3 W., on N. side of rd., 30 ft. E. of fence corner, in root on SW. side of 28-in. white-oak tree; copper nail and washer-----	352.46
Howardton, 0.8 mi. E. of, about 0.2 mi. E. of NW. cor. sec. 28, T. 10 S., R. 3 W., on S. side of rd., 8 ft. N. of fence, in root on N. side of 30-in. oak tree; copper nail and washer-----	353.12
Howardton, 90 ft. SE. of Missouri Pacific R. R. sta., 2.4 mi. E. of Illinois Central R. R. sta. at Grand Tower, 6 ft. N. and 2 ft. W. from fence corner; standard iron post with bronze cap-----	355.024
Reference mark, on SE. corner of R. R. culvert; chiseled square-----	356.33
Grand Tower, 1.4 mi. E. of, near N $\frac{1}{4}$ cor. sec. 30, T. 10 S., R. 3 W., on S. side of rd., opposite T-rd. N., in root on N. side of 30-in. oak tree; copper nail and washer-----	353.88
Grand Tower, 40 ft. S. and 90 ft. W. from intersection of I. C. R. R. and Shickle Street, near corner of wire fence; standard iron post with bronze cap stamped "Prim Trav Sta No 152 1911"-----	361.273

[Continued in Altenburg quadrangle, line 2]

9. From Grimsby generally south along Missouri Pacific Railroad to Wolf Lake (by C. B. Schmeltzer in 1921)

[Connects with line 3 in Murphysboro quadrangle]

Gorham, 1.0 mi. SE. of, near SE. cor. sec. 30, T. 9 S., R. 3 W., in NE. angle of rd. crossing, 2 ft. S. and 4 ft. E. from NE. corner of right-of-way fence; standard iron post with bronze cap-----	363.177
Gorham, 2.9 mi. SE. of, 2.5 mi. N. of Cave Valley, 0.5 mi. N. of Johns Spur, 0.3 mi. above drainage ditch and open R. R. culvert, 66 ft. S. of rd. crossing, 10 ft. E. of center line of track, 33 ft. SW. of old milepost 87, in Illinois bottom lands; top of 2-in. iron post (Board on Examination and Survey of Mississippi River, 1908, B. M. 40H)-----	368.426
Johns Spur, 3.0 mi. N. of Howardton, in NE. angle of rd. crossing, 2 ft. S. and 1 ft. E. from NE. corner of right-of-way fence; standard iron post with bronze cap ⁷ -----	360.212
Howardton, 0.6 mi. N. of, at concrete milepost 90; top of post-----	360.70
Howardton, in front of sta.; top of E. rail-----	359.4
Howardton, 1.4 mi. S. of, 725 ft. S. of bridge 127, 265 ft. N. of old milepost 92, 11.3 ft. W. of track, in Illinois bottom land; top of 2-in. iron pipe (Board on Examination and Survey of Mississippi River, 1908, B. M. 36 H) ⁸ -----	355.151

⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "M 98 1935," elevation 361.935 ft.

⁸ In 1936 this bench mark was tied to U. S. C. & G. S. monelmetal rivet designated "RV 109," elevation 358.756 ft.

Howardton, 2.1 mi. S. of, 4.1 mi. N. of Larue, near N $\frac{1}{4}$ cor. sec. 5, T. 11 S., R. 3 W., in SE. angle of rd. crossing, 2.6 ft. S. and 1.9 ft. W. from fence corner; standard iron post with bronze cap-----	<i>Feet</i> 345.219
Larue, 2.3 mi. N. of, at bridge 130 over Big Muddy River, on SE. foundation shoe; top of SW. foundation bolt-----	353.19
Big Muddy River, under R. R. bridge; surface of water Sept. 12, 1921-----	331.8
Larue, 4 ft. N. and 2.5 ft. E. from SE. corner of scales; standard iron post with bronze cap ⁹ -----	353.141
Larue, 1.7 mi. SE. of, 1.5 mi. NW. of M. P. sta. in Wolf Lake, in NW $\frac{1}{4}$ sec. 33, T. 11 S., R. 3 W., in SE. angle of rd crossing, on E. side of track, 3 ft. S. of S. side of entrance gate to hunting lodge, 2 ft. W. of fence; standard iron post with bronze cap ¹⁰ -----	356.252

⁹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "S 98 1935," elevation 353.520 ft.

¹⁰ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "T 98 1935," elevation 355.521 ft.

ALTON QUADRANGLE

[Latitude 38°45'–39°00'; longitude 90°00'–90°15']

JERSEY, MACOUPIN, AND MADISON COUNTIES

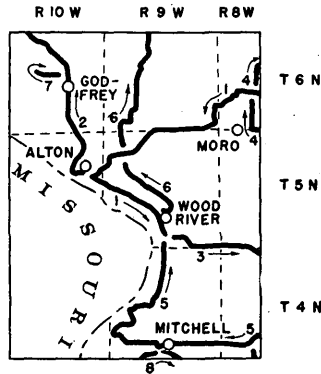


FIGURE 3.—Lines of leveling in Alton quadrangle.

1. From point 1.5 miles south of Dorsey southwest along roads to Alton, thence southeast along Illinois Terminal Railroad to point near Hartford (by R. G. Clinite in 1912)

[Continued from Edwardsville quadrangle, line 1]

Dorsey, 1.5 mi. S. thence 1.3 mi. W. from, 0.25 mi. W. of NE. cor. sec. 30, T. 6 N., R. 8 W., 30 ft. SE. of center of junction of T-rd. E., 10 ft. S. of corner fence post; standard iron post with bronze cap stamped "1912. 551" (recovered in 1926)-----	Feet 551.362
T. 6 N., R. 9 W., 0.25 mi. S. of E¼ cor. sec. 25, in NW. angle of rd. junction, 3 ft. S. of fence, in root of 14-in. oak tree; spike and copper washer-----	530.18
T. 5 N., R. 9 W., 0.1 mi. W. of NE. cor. sec. 2, on S. side of rd., opposite center line of private rd. N., 2 ft. E. of telephone pole, 1 ft. N. of fence; standard iron post with bronze cap stamped "1912 457"-----	457.266
T. 6 N., R. 9 W., near S¼ cor. sec. 34, 14 ft. N. and 16 ft. E. from center of crossroads, in root of 14-in. elm tree; copper nail and washer-----	497.72
Alton, 5.0 mi. NE. of, 0.1 mi. E. of S¼ cor. sec. 33, T. 6 N., R. 9 W., on W. side of junction of Big Four Trail and township-line rd., 2 ft. N. of E-W. fence; standard iron post with bronze cap stamped "1912 509" (reset in 1938; see following description)-----	509.125
Alton, 5.0 mi. NE. of, 0.1 mi. E. of S¼ cor. sec. 33, T. 6 N., R. 9 W., in NE. angle of junction of State Aid Route 5 and Hillsboro rd., 1 ft. E. of marker of right-of-way lines; standard iron post with bronze cap stamped "1912 509" ¹¹ -----	509.117
Alton, 3.4 mi. NE. of, near N¼ cor. sec. 8, T. 5 N., R. 9 W., 200 ft. SW. of junction of Big Four Trail and Greenville rd., 500 ft. NE. of crossing of Chicago, Burlington & Quincy R. R., 50 ft. E. of highway bridge over Wood River, in root of 36-in. sycamore tree; copper nail and washer-----	442.63

¹¹ This bench mark is 20 ft. north and 76 ft. west from its original position.

Alton, 35 ft. N. and 25 ft. E. from intersection of College Avenue and Scovell Street, 190 ft. W. of Washington Street, at SW. corner of lot on which is situated the village hall of former village of Upper Alton, in angle formed by sidewalk intersection; standard iron post with bronze cap stamped "1912 545" (recovered in 1926)-----	<i>Feet</i> 545.221
Alton, at foot of Washington Street, on S. side of East Second Street, 400 ft. E. of Illinois Glass Works, 8 ft. N. of N. rail of Cleveland, Cincinnati, Chicago & St. Louis Ry., 10 ft. W. of telephone pole, on curb; chiseled square (recovered in 1922)-----	437.41
Alton, at SE. corner of vinegar works building, horizontal line cut in stone; high-water mark of 1883-----	424.60
Alton, 2.7 mi. SE. of, at S. abutment of Illinois Terminal R. R. bridge over Wood River, on E. side of bridge seat, on capstone; bottom of chiseled square-----	428.27
Hartford (Edwardsville Crossing), 0.1 mi. S. and 0.3 mi. W. from, 0.3 mi. E. of E. bank of Mississippi River, 1.0 mi. above upper mouth of Missouri River, just E. of slough, 646 ft. W. of N.-S. wagon rd., 230 ft. N. of N. edge of timber; Mississippi River Comm. B. M. 59/2 cap on iron pipe-----	418.768
stone at bottom of pipe-----	413.680

2. From Alton northwest along Chicago & Alton Railroad and Delhi road to Jersey-Madison county line (by S. R. Archer in 1922)

Alton, 250 ft. S. and 60 ft. W. from city hall, 100 ft. E. of Chicago, Peoria & St. Louis R. R. Sta., 250 ft. W. of C. & A. R. R. sta., on S. side of tracks, at top of bank of Mississippi River, at high-power electric line steel tower 13, on top near center of 6- by 6-ft. concrete base; chiseled square-----	429.19
Alton, at NW. corner of intersection of Alby and East Sixteenth Streets, 20 ft. N. and 20 ft. W. from crossing, at top on E. side of circular concrete battery tank; chiseled square-----	489.27
Alton, 2.0 mi. N. of, in W½ sec. 1, T. 5 N., R. 10 W., 0.14 mi. N. of overhead wagon bridge, on E. side of track, in corner of field, in root on W. side of 30-in. oak tree; copper nail and washer-----	587.95
Alton, 2.6 mi. NW. of, in NE¼ sec. 2, T. 5 N., R. 10 W., 30 ft. S. of highway bridge over R. R., 30 ft. S. of right-of-way fence, on E. side of street, just E. of curb, in concrete post; standard tablet stamped "41 A 1922"-----	638.110
Reference mark, 30 ft. N. of tablet at highway bridge over R. R., on W. side of N. abutment; chiseled square-----	634.92
Alton, 3.6 mi. NW. of, 1.8 mi. S. of Godfrey, near center of NW¼ sec. 35, T. 6 N., R. 10 W., 150 ft. E. of Delhi rd., 7 ft. W. of W. right-of-way fence, at rear of barn, in root on SE. side of 14-in. maple tree; copper nail and washer-----	602.46
Godfrey, 0.8 mi. S. of, near center of NW¼ sec. 36, T. 6 N., R. 10 W., 25 ft. N. and 30 ft. W. from junction of T-rd. W.; standard iron post with bronze cap stamped "42 A 1922"-----	607.825
Reference mark, 15 ft. S. and 60 ft. E. from iron post, 10 ft. N. and 30 ft. E. from rd. junction, in root on SW. side of 24-in. oak tree; copper nail and washer-----	610.35
Godfrey, in NW. part of, 0.25 mi. W. of center of sec. 23, T. 6 N., R. 10 W., 280 ft. N. of junction of T-rd. E., 50 ft. S. of junction of T-rd. W., at W. end of concrete culvert under rd., on head wall, 8 ft. from N. end; chiseled square-----	588.88

Godfrey, 0.5 mi. NW. of, in SW $\frac{1}{4}$ sec. 14, T. 6 N., R. 10 W., in NW. angle of junction of rd. W., 15 ft. W. of fence corner, in root on SW. side of 24-in. elm tree; copper nail and washer (recovered in 1926)-----	<i>Feet</i> 599. 23
Godfrey, 1.0 mi. NW. of, near W $\frac{1}{4}$ cor. sec. 14, T. 6 N., R. 10 W., 90 ft. S. and 35 ft. W. from junction of T-rd. E., in field, in root on E. side of 15-in. pine tree; copper nail and washer (recovered in 1926)-----	617.51
Godfrey, 1.2 mi. NW. of, 0.2 mi. N. of quarter corner between secs. 14 and 15, T. 6 N., R. 10 W., on E. side of rd. junction, in line with center of rd. NW., at fence line; standard iron post with bronze cap stamped "43 A 1922" (recovered in 1926)-----	608. 259
Godfrey, 2.2 mi. NW. of, in SW $\frac{1}{4}$ sec. 10, T. 6 N., R. 10 W., 360 ft. SE. of houses standing on NE. side of rd. at top of hill, on SW. side of rd., in root on E. side of 30-in. elm tree; copper nail and washer	579. 70
Godfrey, 2.6 mi. NW. of, near W $\frac{1}{4}$ cor. sec. 10, T. 6 N., R. 10 W., 250 ft. SE. of junction of rd. N., at W. abutment of concrete bridge; on top of E. end of parapet; chiseled square-----	529. 16
Godfrey, 3.3 mi. NW. of, 4.4 mi. SE. of Delhi, near N $\frac{1}{4}$ cor. sec. 9, T. 6 N., R. 10 W., 40 ft. N. and 20 ft. W. from junction of rd. S., in N-S. fence line, 10 ft. N. of fence corner, in root on E. side of 6-in oak tree; copper nail and washer-----	559. 13
[Continued in Brighton quadrangle, line 1]	
3. From Hartford east to Roxana, thence southeast and east along Alton-Edwardsville road to point 2.1 miles east of Wanda (by S. R. Archer in 1926)	
Hartford, in N. part of, at Woodrow Wilson School, 270 ft. S. of intersection of State Highway 3 and E-W. rd., at S. side of arched entrance to schoolhouse, at E. end of vestibule, on floor, 3 in. W. of S. end of doorsill; chiseled square-----	432. 66
Hartford, 1.0 mi. E. of, at Roxana, near E $\frac{1}{4}$ cor. sec. 34, T. 5 N., R. 9 W., 165 ft. W. of Alton-Edwardsville rd., on S. side of E-W. rd., at concrete bridge on S. track of Illinois Terminal R. R., on top of E. end of S. guard wall; chiseled square-----	435. 27
Roxana, 120 ft. SE. of entrance to Roxana Refinery, on NE. side of Alton-Edwardsville rd., on NW. end of NE. head wall of concrete culvert; chiseled square-----	429. 41
Roxana, in W. part of, at angle SE. to E. in Alton-Edwardsville rd., 25 ft. N. of E-W. center line, 25 ft. SW. of SE-NW. center line, in root on E. side of 15-in. tree, northeasternmost of four elm trees; copper nail and washer-----	426. 37
Roxana, in E. part of, 0.7 mi. W. of Wanda, 125 ft. E. of intersection of Madison and Rose Avenues, on S. side of rd., in root of 24-in. tree, westernmost of three hickory trees; copper nail and washer---	433. 59
Wanda, 25 ft. N. and 25 ft. E. from crossroads, 15 ft. S. and 35 ft. E. from crossing of S. track of I. T. R. R. and N-S. rd., 4 ft. S. and 18 ft. E. from concrete warning post, 1 ft. S. and 2 ft. E. from corner post of R. R. right-of-way fence, in concrete post; standard tablet stamped "10 A 1926"-----	441. 155
Reference mark, 7 ft. S. and 100 ft. W. from tablet, 18 ft. N. and 75 ft. W. from crossroads, in root on SW. side of 30-in. elm tree; copper nail and washer-----	439. 36

Wanda, 0.6 mi. E. of, 0.1 mi. E. of quarter corner between secs. 6 and 31, Tps. 4 and 5 N., R. 8 W., at W. portal of subway on Alton-Edwardsville rd. under Cleveland, Cincinnati, Chicago & St. Louis Ry. and I. T. R. R., at W. end of SW. wing wall of subway, at W. end of concrete culvert running parallel with rd., on N. end of head wall; chiseled square-----	Feet 446.70
Wanda, 1.5 mi. E. of, 3.5 mi. NW. of Edwardsville, near N $\frac{1}{4}$ cor. sec. 5, T. 4 N., R. 8 W., 35 ft. W. of crossroads, on S. side of rd., on S. head wall of concrete culvert; chiseled square-----	479.69

[Continued in Edwardsville quadrangle, line 2]

4. From point 1.1 miles east of Moro west 0.3 mile, thence north to Dorsey (by S. R. Archer in 1926; last 1.7 miles leveled twice)

[Continued from Edwardsville quadrangle, line 2]

Moro, 0.8 mi. E. of, 0.25 mi. W. of SE. cor. sec. 32, T. 6 N., R. 8 W., in NE. angle of junction of private rd. N., 30 ft. N. of E-W. rd., in root on N. side of 36-in. maple tree; copper nail and washer-----	529.09
Moro, 0.5 mi. N. and 0.7 mi. E. from, 0.15 mi. E. of center of sec. 32, T. 6 N., R. 8 W., in NE. angle of junction of T-rd. N., 460 ft. W. of junction of private rd. E., in root on N. side of 24-in. elm tree; copper nail and washer-----	544.45
Moro, 1.0 mi. N. and 0.7 mi. E. from, 0.1 mi. E. of S $\frac{1}{4}$ cor. sec. 29, T. 6 N., R. 8 W., 0.1 mi. W. of rd. junction, 115 ft. E. of right-angle turn from N. to E. in rd., on N. side of E-W. rd., in root on E. side of 24-in. tree, westernmost of two hedge trees standing 15 ft. apart; copper nail and washer-----	551.49
Moro, 2.0 mi. N. and 0.7 mi. E. from, 1.5 mi. S. thence 0.3 mi. W. from Dorsey, 0.15 mi. E. of S $\frac{1}{4}$ cor. sec. 20, T. 6 N., R. 8 W., 0.1 mi. W. of junction of rd. S., 0.1 mi. E. of R. R. crossing; at base of N. head wall of concrete culvert, in top at center of W. step; chiseled square-----	559.61
Dorsey, in W. part of, 25 ft. S. and 80 ft. E. from crossing of C. C. & St. L. Ry., 25 ft. S. and 20 ft. E. from junction of rd. S., 20 ft. N. and 8 ft. W. from NW. corner of building of Dorsey Creamery Co., in concrete post; standard tablet stamped "Prim Trav Sta No 21 LS 1924"-----	586.127
Reference mark, 0.18 mi. S. of tablet, 240 ft. S. of angle from N. to NE. in rd., on W. side of rd., in root on E. side of 48-in. cottonwood tree; copper nail and washer-----	584.57

5. From point 4 miles southwest of Edwardsville west along State Highway 4 to Chouteau Slough, thence northeast by way of Oldenburg to Hartford (by S. R. Archer in 1926)

[Continued from Edwardsville quadrangle, line 3]

Mitchell, 4.6 mi. E. of, 4.2 mi. SW. of Edwardsville, near W $\frac{1}{4}$ cor. sec. 28, T. 4 N., R. 8 W., 400 ft. W. of main entrance to Sunset Hill Cemetery, 125 ft. E. of top of hill, 35 ft. E. of section line, on N. side of highway, in root on N. side of 36-in. elm tree; copper nail and washer-----	563.65
Mitchell, 4.1 mi. E. of, 0.1 mi. N. and 0.2 mi. E. from quarter corner between secs. 29 and 32, T. 4 N., R. 8 W., at junction of rd. SE. to Peters, at NE. corner of triangular plot, 30 ft. N. and 10 ft. E. from intersection of center lines of highway tangents, at concrete culvert, on top of S. end of E. head wall; chiseled square-----	434.20

Mitchell, 4.0 mi. E. of, 0.12 mi. NE. of quarter corner between secs. 29 and 32, T. 4 N., R. 8 W., at junction of rd. SE. to Peters, 175 ft. NE. of SW. corner of triangular plot, on N. side of highway, at concrete highway bridge over creek, in top near center of N. head wall; standard tablet stamped "12 A 1926"-----	<i>Feet</i> 427. 572
Mitchell, 3.1 mi. E. of, 0.2 mi. E. of N $\frac{1}{4}$ cor. sec. 31, T. 4 N., R. 8 W., 330 ft. W. of crossroads, at W. concrete abutment of highway bridge over drainage ditch, on top of S. parapet; chiseled square-----	421. 60
Mitchell, 2.5 mi. E. of, near cor. secs. 25, 30, 31, and 36, T. 4 N., Rs. 8 and 9 W., 35 ft. N. and 15 ft. E. from junction of T-rd. N., 20 ft. E. of range line, in concrete post; standard tablet stamped "Prim Trav Sta No 58 F 1925"-----	421. 963
Reference mark, 275 ft. W. of tablet, on S. side of highway, at culvert under private driveway, on top of E. head wall; chiseled square-----	422. 88
Mitchell, 1.5 mi. E. of, near SW. cor. sec. 25, T. 4 N., R. 9 W., 75 ft. E. of farmhouse, on N. side of highway, at concrete culvert under driveway to farmyard, on top of W. head wall; chiseled square-----	424. 13
Mitchell, 1.3 mi. E. of, 0.15 mi. W. of SE. cor. sec. 26, T. 4 N., R. 9 W., at N. end of highway culvert, on top of W. end of concrete head wall; chiseled square-----	423. 01
Mitchell, 0.8 mi. E. of, 0.22 mi. W. of quarter corner between secs. 26 and 35, T. 4 N., R. 9 W., 150 ft. E. of center line of rd. NW., 30 ft. E. of center line of rd. SE., 15 ft. W. of center line of street S., at concrete highway bridge over drainage ditch, on top at center of S. head wall; chiseled square-----	426. 26
Mitchell, 0.5 mi. E. of, near SE. cor. sec. 27, T. 4 N., R. 9 W., 30 ft. N. and 35 ft. W. from junction of T-rd. S., in root on N. side of 6-in. hedge tree; copper nail and washer-----	424. 24
Mitchell, 40 ft. E. of junction of Chicago and Eastern Illinois Street, at S. end of highway culvert, on top of W. end of head wall; chiseled square-----	425. 39
Mitchell, 340 ft. W. of E. junction and 140 ft. E. of W. junction of State Highways 3 and 4, 110 ft. W. of crossing of Chicago & Alton R. R., on S. side of highway, in top of concrete retaining wall; standard tablet stamped "Prim Trav Sta No 57 F 1925" ¹² -----	432. 872
Reference mark, 320 ft. E. of tablet, 75 ft. S. of E. junction of highways, on W. side of street, 20 ft. N. of point directly in front of powerline tower 191, 20 ft. S. of N. end of curb, on concrete curb; chiseled square-----	429. 09
Mitchell, 0.7 mi. SW. of, 0.1 mi. N. of center of sec. 33, T. 4 N., R. 9 W., 20 ft. NE. thence 25 ft. S. from crossroads, 18 ft. NE. of fence corner, on SE. side of rd., in fence line, in root on W. side of 8-in. cottonwood tree; copper nail and washer-----	415. 64
Mitchell, 0.8 mi. W. of, 0.7 mi. E. of St. Thomas, near quarter corner between secs. 28 and 33, T. 4 N., R. 9 W., 25 ft. W. of junction of rd. S., in root on SW. side of 24-in. elm tree; copper nail and washer-----	415. 04
St. Thomas, at crossing of A. & E. R. R., S. of sta.; top of W. rail-----	427. 4
St. Thomas, 225 ft. W. of R. R. crossing, on S. side of highway, in schoolyard, 75 ft. W. of NE. corner, 10 ft. E. of gate, in root on NW. side of 24-in. sycamore tree; copper nail and washer-----	416. 89

¹² In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "B 95 1935," elevation 429.290 ft.

St. Thomas, 1.0 mi. W. of, 0.25 mi. W. of E. cor. secs. 30 and 31, T. 4 N., R. 9 W., 37 ft. S. and 70 ft. W. from rd. junction, 80 ft. E. of Choteau Slough, in concrete post; standard tablet stamped "Prim Trav Sta No 56 F 1925" ¹³ -----	<i>Feet</i> 418. 767
St. Thomas, 1.0 mi. W. of, 0.25 mi. W. of E. cor. secs. 30 and 31, T. 4 N., R. 9 W., 45 ft. N. and 76 ft. W. from intersection of State Highway 4 and NE-SW rd., 74 ft. E. of Chouteau Slough, in concrete post; standard tablet stamped "Prim Trav Sta No 56 F 1925" ¹⁴ -----	417. 462
Reference mark, 105 ft. S. and 86 ft. E. from tablet, 60 ft. S. of crossroads, on E. side of rd., in root on SE. side of 42-in. cottonwood tree; copper nail and washer-----	419. 68
St. Thomas, 2.2 mi. NW. of, on Chouteau Island, at Atkins School, 0.1 mi. S. and 0.2 mi. E. from W $\frac{1}{4}$ cor. sec. 30, T. 4 N., R. 9 W., 75 ft. S. and 35 ft. E. from SE. corner of schoolhouse, at right angle turn from E. to N. in private rd., 15 ft. N. and 45 ft. W. from fence corner, in root on NE. side of 36-in. elm tree; copper nail and washer-----	417. 11
Chouteau Island, 460 ft. back from river bank, 984 ft. SW. of one-story house standing on E. side, at foot of main levee, on property of F. Kahle; Mississippi River Comm. B. M. 57/2 cap. on iron pipe-----	417. 400
flat stone at bottom of pipe-----	412. 310
Chouteau Island, 1.0 mi. below head of, in NW $\frac{1}{4}$ sec. 29, T. 4 N., R. 9 W., 490 ft. W. of W. bank of Chouteau Slough, 260 ft. S. of E-W. section-line rd., on small knoll in cultivated field on Melville property; Mississippi River Comm. B. M. 58/1 cap. on iron pipe-----	424. 800
flat stone at bottom of pipe-----	419. 700
Reference mark, 35 ft. S. and 130 ft. E. from iron pipe, 30 ft. W. of private lane, 30 ft. N. and 45 ft. W. from NW. corner of farmhouse, at N. side of shed, in root on NW. side of 14-in. cottonwood tree; copper nail and washer-----	419. 84
Chouteau Island, 656 ft. measured along slough below head of, 260 ft. W. of W. bank of Chouteau Slough, 738 ft. N. of main levee, 40 ft. N. of top of old levee, 25 ft. N. and 60 ft. W. from SW. corner of timber; Mississippi River Comm. B. M. 58/2 cap-on-iron pipe ¹⁵ -----	
flat stone at bottom of pipe-----	414. 640
Oldenburg, 1.7 mi. SW. of, 0.2 mi. W. of S $\frac{1}{4}$ cor. fractional sec. 17, T. 4 N., R. 9 W., 230 ft. N. of right-angle turn from N. to E. in rd., on E. bank of river, 85 ft. W. of top of levee, on NW. side of private rd., in root on NE. side of 24-in. cottonwood tree; copper nail and washer-----	417. 69
Oldenburg, 30 ft. N. and 20 ft. E. from rd. junction, 0.12 mi. SE. of center of sec. 16, T. 4 N., R. 9 W., 30 ft. N. and 26 ft. W. from crossing of A. & E. R. R., 6 ft. W. of W. rail of siding, 5 ft. N. and 1 ft. E. from telephone pole, in concrete post; standard tablet stamped "Prim Trav Sta No 55 F 1925"-----	426. 411

¹³ As reset in 1926, 32 ft. south and 50 ft. west from its original position. Again reset; see following description.

¹⁴ As reset in 1935, 82 ft. N.4° 18' W. from its previous position.

¹⁵ Cap was missing in 1926.

Reference mark, 40 ft. N. and 120 ft. E. from tablet, 70 ft. N. and 105 ft. E. from R. R. crossing, 10 ft. N. of SW. corner of barnyard, in root on N. side of 24-in. maple tree; copper nail and washer-----	Feet 428.66
Oldenburg, 0.7 mi. NE. of, 0.2 mi. W. of cor. secs. 9, 10, 15, and 16, T. 4 N., R. 9 W., 100 ft. S. of intersection of E.-W. rd., on State Highway 3, at N. abutment of bridge over Cahokia diversion channel, on top at N. end of E. wing wall; chiseled square-----	438.00
Oldenburg, 1.2 mi. NE. of, near quarter corner between secs. 9 and 10, T. 4 N., R. 9 W., 20 ft. N. of junction of private rd. W., on W. side of highway, 6 ft. N. of SE. corner of yard fence, in root on E. side of 12-in. maple tree; copper nail and washer-----	430.97
Oldenburg, 1.8 mi. NE. of, 1.2 mi. S. of Hartford, 0.1 mi. N. of SE. cor. sec. 4, T. 4 N., R. 9 W., 25 ft. N. and 25 ft. W. from junction of private rd. W., on W. side of highway, 10 ft. N. and 1 ft. E. from fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 54 F 1925"-----	431.467
Reference mark, 480 ft. S. of tablet, 115 ft. N. of section line, on W. side of highway, in root on NW. side of 30-in. maple tree; copper nail and washer-----	430.99
Hartford, at SE. corner of Main and Hawthorn streets, on top of E. head wall of highway culvert; chiseled square-----	433.01
6. From Hartford generally north along roads by way of Wood River, East Alton, Upper Alton, and Woods to point 1.9 miles east of the corner of Jersey, Macoupin, and Madison Counties (by S. R. Archer in 1928)	
Hartford, 0.6 mi. NW. along State Highway 3 from Woodrow Wilson School, 0.2 mi. W. of E. cor. secs. 28 and 33, T. 5 N., R. 9 W., 25 ft. S. of section line, 6 ft. W. of W. edge of brick pavement, in root on S. side of 15-in. elm tree; copper nail and washer-----	427.90
Wood River, 25 ft. N. and 15 ft. E. from intersection of Main Street and Evans Avenue, 4.5 ft. N. of inlet of storm sewer, on top of E. concrete curb of Main Street; chiseled square-----	429.55
Wood River, at First Baptist Church, at SE. corner of intersection of Third Street and Lorena Avenue, at main entrance, on E. end of doorsill; chiseled square-----	449.94
Wood River, at Washington School, at NW. corner of intersection of Sixth Street and Lorena Avenue, at main entrance, on W. end of stone doorsill; chiseled square-----	445.92
Wood River, at NE. corner of intersection of Sixth Street and Alton-Edwardsville rd., 45 ft. SE. thence 20 ft. N. from junction of rd. N., 30 ft. SE. thence 20 ft. N. from junction of rd. S., 10 ft. S. of E.-W. fence, 13 ft. SE. of fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No. 50 F 1925"-----	441.249
Wood River, near N. limits of, 75 ft. NW. of intersection of Alton-Edwardsville rd. and Wood River rd., 15 ft. NE. of curb, in root on NW. side of 24-in. oak tree; copper nail and washer-----	444.18
East Alton, 100 ft. W. of intersection of Broadway, Fourth Street, and Wood River rd., 210 ft. SE. of intersection of Wood River rd. and Kingshighway, on S. side of State Highway 3, S. of sidewalk, in root on SW. side of 36-in. oak tree; copper nail and washer-----	443.53

East Alton, on S. side of subway on State Highway 3 under C. & A. R. R., 2.2 ft. above sidewalk, in N. face of W. concrete buttress supporting steel girder; standard tablet stamped "11 A 1926"-----	<i>Feet</i> 432.424
East Alton, 275 ft. NW. of intersection of State Highway 3 and line marking W. corporation limits, at W. abutment of highway bridge over Wood River, on top of N. parapet; chiseled square-----	436.37
Upper Alton, in SE. part of, in NW $\frac{1}{4}$ sec. 17, T. 5 N., R. 9 W., 0.6 mi. NW. of junction of Milton Hill rd. and State Highway 3, at curve from NW. to N. in Milton Hill rd., 235 ft. NW. of junction of street S., 30 ft. NW. of private rd. W., 175 ft. SE. of culvert, on W. side of rd., in root on SE. side of 12-in. elm tree; copper nail and washer-----	538.09
Upper Alton, 60 ft. N. of intersection of Milton Hill rd. and Aberd��en Street, on E. side of Milton Hill rd., in front of Meitner's service sta., in root on N. side of 24-in. boxelder tree; copper nail and washer-----	530.35
Upper Alton, 25 ft. N. and 50 ft. W. from intersection of Milton Hill rd. and Brown Street, in root on SE. side of 30-in. elm tree; copper nail and washer-----	501.08
Upper Alton, 100 ft. E. of intersection of College and Worden Avenues, on N. side of College Avenue, between sidewalk and curb, in root on E. side of 30-in. tree, easternmost of two elm trees standing 30 ft. apart; copper nail and washer ¹⁶ -----	504.82
Alton, 35 ft. N. and 75 ft. E. from intersection of College Avenue and Scovell Street, 10 ft. N. of sidewalk, in root on N. side of 24-in. maple tree; copper nail and washer ¹⁷ -----	544.95
Upper Alton, at College Avenue subway under C. & A. R. R. bridge F-2568, 60 ft. N. and 30 ft. E. from intersection of center lines, in line with telegraph poles, 35 ft. SE. of pole, in concrete post; standard tablet stamped "Prim Trav Sta No. 51 F 1925"-----	490.853
Upper Alton, 1.1 mi. N. of College Avenue subway, 0.25 mi. N. of quarter corner between secs. 5 and 6, T. 5 N., R. 9 W., 125 ft. N. of bridge over Black Creek, 20 ft. S. of bridge over Rock Creek, on E. side of rd., at fence line, in root on E. side of 24-in. tree, northernmost of two elm trees standing 35 ft. apart; copper nail and washer-----	453.23
Upper Alton, 1.8 mi. N. of, 1.7 mi. SW. of Woods, near quarter corner between secs. 31 and 32, T. 6 N., R. 9 W., 30 ft. N. of junction of T-rd. S., on E. side of private rd. N., 20 ft. E. of stone marking quarter corner, in root on E. side of 6-in. oak tree; copper nail and washer--	520.60
Woods, 1.2 mi. SW. of, near center of sec. 32, T. 6 N., R. 9 W., 20 ft. N. and 65 ft. E. from junction of T-rd. N., 40 ft. E. of stone marking center of section, in field, in root on SW. side of 15-in. oak tree; copper nail and washer-----	456.56
Woods, 0.6 mi. SW. of, 0.15 mi. N. of S $\frac{1}{4}$ cor. sec. 29, T. 6 N., R. 9 W., at curve from N. to NE. in rd., on W. side of rd., inside field fence, 50 ft. S. of fence corner and S. end of gate, in trunk on E. side of 24-in. cherry tree; head of rail spike-----	468.49
Woods, 130 ft. E. of C. B. & Q. R. R. sta., 25 ft. N. and 80 ft. E. from crossing of main track and E.-W. rd., 10 ft. N. of fence corner, on W. side of fence, in concrete post; standard tablet stamped "Prim Trav Sta No 52 F 1925" (recovered by U. S. C. and G. S. in 1935)-----	469.681

¹⁶ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Q 103 1935," elevation 450.964 ft.

¹⁷ Established as a reference mark to principal bench mark stamped "1912 545," described in line 1.

24 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Reference mark, 550 ft. NW. of tablet, at R. R. bridge over West Fork of Wood River, on top of W. end of S. concrete pier; chiseled square.	Feet 471.39
Woods, 0.8 mi. N. of, near center of SE¼ sec. 20, T. 6 N., R. 9 W., 20 ft. N. and 20 ft. W. from junction of second-class rd. E., in root on S. side of 24-in. tree, northernmost of three locust trees; copper nail and washer	507.58
Woods, 1.5 mi. N. of, 0.25 mi. W. of SE. cor. sec. 17, T. 6 N., R. 9 W., in NW. angle of junction of rd. W., in SE. corner of yard of Salem Baptist Church, in root on SE. side of 24-in. hickory tree; copper nail and washer	553.09
Woods, 2.4 mi. N. of, 0.35 mi. NW. of center of sec. 16, T. 6 N., R. 9 W., at Sherty School, 140 ft. E. of rd. fork, 35 ft. N. of rd. SE., 20 ft. S. and 25 ft. W. from SW. corner of schoolhouse, in root on NW. side of large forked oak tree; copper nail and washer	571.44
Woods, 3.4 mi. N. of, 0.12 mi. W. of center of sec. 9, T. 6 N., R. 9 W., 35 ft. N. and 15 ft. E. from crossroads, 20 ft. N. of fence corner, on field side of fence, in concrete post; standard tablet stamped "Prim Trav Sta No 53 F 1925"	588.463
Reference mark, 20 ft. S. and 50 ft. E. from tablet, 15 ft. N. and 65 ft. E. from crossroads, in fence-line, in root on W. side of 8-in. oak tree; copper nail and washer	586.74
Woods, 4.2 mi. N. of, near SE. cor. sec. 32, T. 7 N., R. 9 W., 40 ft. N. of Macoupin-Madison county line, on E. side of rd., in root on W. side of 15-in. elm tree; copper nail and washer	594.72

[Continued in Brighton quadrangle, line 5]

7. From point 0.5 mile north of Godfrey west along road 1.8 miles (by S. R. Archer in 1926; spur line leveled twice)

Godfrey, 0.5 mi. N. thence 1.0 mi. W. from, 0.2 mi. E. of NW. cor. sec. 22, T. 6 N., R. 10 W., 240 ft. W. of junction of private rd. N., on S. side of rd., at E. side of gate, in root on N. side of 24-in. maple tree; copper nail and washer	595.32
Godfrey, 0.5 mi. N. thence 1.5 mi. W. from, 0.25 mi. E. of quarter corner between secs. 16 and 21, T. 6 N., R. 10 W., 10 ft. S. and 30 ft. W. from junction of rd. SE., on S. side of private rd. W., in root on NW. side of 15-in. boxelder tree; copper nail and washer	609.22
Godfrey, 1.3 mi. W. thence 1.0 mi. NW. from, 0.2 mi. S. of center of sec. 16, T. 6 N., R. 10 W., 15 ft. S. and 10 ft. W. from junction of rd. N., on bank of ditch along SE. side of rd., 5 ft. E. of telephone pole, in concrete post; aluminum tablet stamped "Prim Trav Sta No 84 W 1921"	616.802

8. Northeast and southeast along roads south of Mitchell between Chouteau Slough and Long Lake (by E. W. Gouchenour in 1929)

[A jog from East St. Louis quadrangle, line 19]

Mitchell, 0.7 mi. SW. of along State Highway 3, in NE¼ sec. 33, T. 4 N., R. 9 W., 240 ft. S. and 55 ft. W. from R. R. crossing, on W. end of concrete culvert; chiseled square	420.88
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[Continued in East St. Louis quadrangle, line 10]

BALDWIN QUADRANGLE

[Latitude 38°00'–38°15'; longitude 89°45'–90°00']

MONROE, RANDOLPH, AND ST. CLAIR COUNTIES

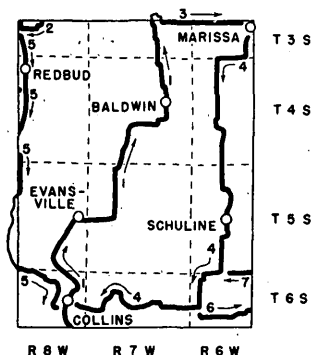


FIGURE 4.—Lines of leveling in Baldwin quadrangle.

1. From point 1.8 miles northwest of Reily Lake generally north and east along Missouri-Illinois Railroad to point 2 miles east of Evansville, thence alternately north and east along roads by way of Baldwin to sec. 22, T. 3 S., R. 7 W. (by P. E. Fletcher in 1907)

[Continued from Chester quadrangle, line 1]

Collins, 900 ft. NE. of M. I. R. R. (formerly Illinois Southern Ry.) sta., at turn in Collins-Ellis Grove rd., near crossing, in concrete post; aluminum tablet stamped "407" (recovered in 1908)-----	Feet 407.097
Evansville, 50 ft. SW. of sta. platform, at E. side of rd., in concrete post; aluminum tablet stamped "414" (recovered by U. S. C. & G. S. in 1935)-----	414.005
Evansville, 2.0 mi. E. thence 1.0 mi. N. from, near S¼ cor. sec. 8, T. 5 S., R. 7 W., 1.0 mi. N. of Campbell School, in NE. angle of crossroads, in concrete post; aluminum tablet stamped "450"-----	449.671
Evansville, 2.0 mi. E. thence 4.7 mi. N. from, 4.3 mi. SW. of Baldwin, in SW¼ sec. 28, T. 4 S., R. 7 W., at junction of rd. SE. to Preston, in concrete post; aluminum tablet stamped "455"-----	454.396
Baldwin, 1.0 mi. S. of, near center of sec. 23, T. 4 S., R. 7 W., in SW. angle of crossroads, in concrete post; aluminum tablet stamped "484" ¹⁸ -----	483.546
Baldwin, 2.4 mi. N. of, near quarter corner between secs. 2 and 3, T. 4 S., R. 7 W., 0.5 mi. S. of Randolph-St. Clair county line, in concrete post; aluminum tablet-----	428.783
Baldwin, 4.7 mi. N. of, near center of NE¼ sec. 27, T. 3 S., R. 7 W., in concrete post; aluminum tablet-----	408.651

[Connects with line 3 in New Athens quadrangle]

¹⁸ In 1931 it was reported that the post was leaning.

2. Along roads south, west, and north in secs. 27 and 28, T. 3 S., R. 8 W. (by W. A. Gelbach in 1907)

[A jog from New Athens quadrangle, line 4]

Redbud, 2.2 mi. N. of, near E $\frac{1}{4}$ cor. sec. 29, T. 3 S., R. 8 W., in NW. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 21 1907 447" ¹⁰ -----	Feet 447.126
---	-----------------

[Continued in New Athens quadrangle, line 4]

3. From point 4.5 miles north of Baldwin east along roads to Marissa (by W. A. Gelbach in 1907)

[Continued from New Athens quadrangle, line 3]

Marissa, 3.5 mi. W. of, 0.25 mi. W. of NE. cor. sec. 25, T. 3 S., R. 7 W., in SE. angle of crossroads; standard iron post with bronze cap stamped "1907 411"-----	410.413
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Marissa, in SW. corner of schoolyard; standard iron post with bronze cap stamped "1907 449" (recovered by U. S. C. & G. S. in 1935)---	447.837
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[Continued in Coulterville quadrangle, line 1]

4. From Marissa alternately south and west along roads by way of Houston and Schuline to road junction at north quarter corner sec. 18, T. 6 S., R. 6 W., thence west along winding roads to Collins (by W. A. Gelbach in 1908)

Marissa, 3.0 mi. S. and 2.0 mi. W. from, 3.0 mi. N. of Houston, at Jordan Grove School, 500 ft. N. of quarter corner between secs. 5 and 8, T. 4 S., R. 6 W., at T-rd. W., in SE. corner of schoolyard; standard iron post with bronze cap stamped "1908 489"-----	488.008
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Houston, at N. edge of village, in SE. angle of junction of T-rd. S.; standard iron post with bronze cap stamped "1908 441"-----	440.216
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Houston, 2.5 mi. S. of, 2.7 mi. by rd. N. of Schuline, 0.25 mi. E. of center of sec. 5, T. 5 S., R. 6 W., in SE. angle of crossroads; standard iron post with bronze cap stamped "1908 570"-----	569.696
--	---------

Schuline, about 600 ft. S. of R. R. crossing, near NW. cor. sec. 21, T. 5 S., R. 6 W., in SE. angle of crossroads, near picket fence; standard iron post with bronze cap stamped "1908 548" (recovered by U. S. C. & G. S. in 1935)-----	547.735
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Schuline, 3.0 mi. S. of, 0.25 mi. W. of NE. cor. sec. 5, T. 6 S., R. 6 W., on S. side of rd., opposite rd. N.; standard iron post with bronze cap stamped "1908 512"-----	510.787
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Schuline, 4.1 mi. S. and 1.5 mi. W. from, at quarter corner between secs. 6 and 7, T. 6 S., R. 6 W., at junction of T-rd. W.; top of stone marking quarter corner-----	525.38
--	--------

Schuline, 5.1 mi. S. and 1.5 mi. W. from, 1.8 mi. by rd. NE. of Palestine, near quarter corner between secs. 7 and 18, T. 6 S., R. 6 W., on E. side of rd., opposite rd. W.; standard iron post with bronze cap stamped "1908 546" (recovered in 1912)-----	544.044
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Palestine, 3.0 mi. by rd. NW. of, 4.7 mi. by winding rds. NE. of Ellis Grove, 0.25 mi. N. of SW. cor. sec. 11, T. 6 S., R. 7 W., 0.3 mi. NE. of bridge over Robinson Creek, in NE. angle of crossroads; standard iron post with bronze cap stamped "1908 550"-----	548.436
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¹⁰ In 1928 this bench mark was reset 20 ft. W. of and 1.210 ft. higher than its original position. The figures given represent the new elevation.

Ellis Grove, 1.7 mi. along rds. NE. of, 3.8 mi. NE. of Collins, near N $\frac{1}{4}$ cor. sec. 8, T. 6 S., R. 7 W., at junction of Walsh, Palestine and Ellis Grove rds., in center of triangular mound; standard iron post with bronze cap stamped "1908 464"----- *Feet*
461.988

5. From crossroads 2.2. miles north of Redbud south along road by way of Ruma to point 2.7 miles south of Marigold, thence south-east to Collins (by W. A. Gelbach in 1908)

Redbud, at M. & O. R. R. crossing near sta., on N. side of tracks, W. of rd., near corner of picket fence; standard iron post with bronze cap stamped "Prim Trav Sta No 10 1907 444"----- 443.700

Redbud, 1.5 mi. S. of, 4.0 mi. N. of Ruma, in SE. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 9 1908 460"----- 458.975

[Jogs into Renault quadrangle, line 1]

Ruma, near NW. cor. sec. 4, T. 5 S., R. 8 W., in SE. angle of crossroads, between hitching rail and sidewalk; standard iron post with bronze cap stamped "Prim Trav Sta No 7 1908 442"----- 442.407

Ruma, 1.2 mi. S. of, on W. side of rd., opposite junction of T-rd. E.; standard iron post with bronze cap stamped "Prim Trav Sta No 6 1908 522"²⁰----- 521.498

[Jogs into Renault quadrangle, line 2]

Collins, 0.8 mi. SW. of, at M. I. R. R. bridge over Kaskaskia River, over pier at W. end of bridge; top of N. rail----- 359.9

6. From, road junction at north quarter corner sec. 18, T. 6 S., R. 6 W., along roads south, east, and northeast about 4 miles to point near north quarter corner sec. 15 (by R. G. Clinite in 1912)

No permanent bench marks were established on this portion of the line.

[Continued in Coulterville quadrangle, line 3]

7. From point 0.5 mile west of Blair west along road 1.8 miles to point 3 miles south of Schuline (by G. W. Lucas in 1914)

[Continued from Coulterville quadrangle, line 4]

Schuline, 3.0 mi. S. and 0.7 mi. E. from, 1.3 mi. W. of Blair, 0.25 mi. W. of NE. cor. sec. 4, T. 6 S., R. 6 W., in SW. angle of junction of T-rd. S., in root of 14-in. oak tree; copper-nail and washer----- 492.58

²⁰ In 1939 this bench mark was reset 20 ft. W. of this position and reset 0.004 ft. higher than its original elevation. The figures given represent the new elevation.

BELLEVILLE QUADRANGLE

[Latitude 38°30'–38°45'; longitude 89°45'–90°00']

MADISON AND ST. CLAIR COUNTIES

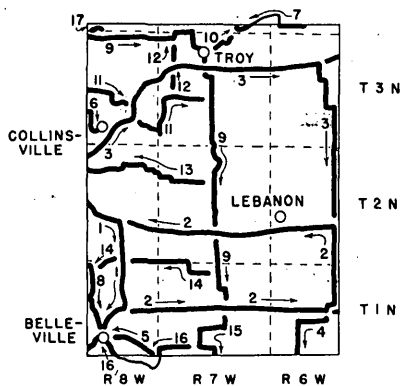


FIGURE 5.—Lines of leveling in Belleville quadrangle.

1. Southeast along Baltimore & Ohio Southwestern Railroad from point 2 miles southeast of Caseyville to road crossing 0.2 mile east of Furman, thence south along road and Southern Railway to Belleville (by C. S. Blair in 1905)

[Connects with line 1 in East St. Louis quadrangle]

Furman, 0.2 mi. E. of sta., 0.5 mi. N. of Ridge Prairie, in SW. angle of rd. crossing, 20 ft. S. of track; standard iron post with bronze cap stamped "564 Adj"-----	Feet 562. 945
Belleville, at St. Clair County courthouse, at NE. corner of yard; standard iron post stamped "Prim Trav Sta No 15 1905 531 Adj" ²¹ -----	530. 414
2. From point 2 miles northeast of Belleville east along Southern Railway to road crossing 4.3 miles east of Grassland, thence north along road to Summerfield, thence west along Baltimore and Ohio Southwestern Railroad to road crossing 0.2 mile east of Furman (by C. S. Blair in 1905)	
Grassland, 200 ft. S. of sta., 110 ft. E. of post office; standard iron post with bronze cap stamped "Prim Trav Sta No 16 1905 435 Adj" (recovered in 1930)-----	434. 093
Grassland, 4.3 mi. E. of, in NE. corner of rd. crossing, in SW. corner of field of J. B. Freeze; standard iron post with bronze cap stamped "Prim Trav Sta No 17 1905 469 Adj"-----	468. 558
Summerfield, at SE. corner of schoolhouse; aluminum tablet stamped "Prim Trav Sta No 18 1905 478 Adj"-----	477. 806
Lebanon, at St. Joseph's Church, just W. of main entrance, in stone step; aluminum tablet stamped "467 Adj"-----	466. 056

²¹ Reset prior to 1907. For revised description and elevation see line 5.

O'Fallon, at B. & O. SW. R. R. sta., at SW. corner of brick platform; standard iron post with bronze cap stamped "551 Adj"----- *Feet*
550.293

3. From point 1.4 miles northeast of Caseyville northeast along Vandalia Railroad ²² to St. Jacob, thence generally south along roads to Summerfield (by C. S. Blair in 1905)

[Connects with line 1 in East St. Louis quadrangle]

Collinsville, just W. of Vandalia R. R. sta., in NW. angle of rd. crossing, opposite saloon of Schmacker Bros.; standard iron post with bronze cap stamped "474 Adj" (recovered in 1926)----- 472.786

Formosa, 40 ft. N. and 115 ft. E. from crossing of N.-S. rd., 18 ft. N. of track; standard iron post with bronze cap stamped "571 Adj" (recovered in 1930)----- 570.032

Troy, 100 ft. N. of NW. corner of sta.; standard iron post with bronze cap stamped "549 Adj" ²³----- 548.510

St. Jacob, 0.3 mi. W. of sta., on S. side of stone bridge; aluminum tablet stamped "506 Adj" ²³----- 504.812

St. Jacob, about 5 mi. SE. of, 4.0 mi. N. of Summerfield, on S. side of Madison-St. Clair county line, in SW. angle of crossroads, 30 ft. W. of cottonwood tree; standard iron post with bronze cap stamped "507 Adj"----- 506.082

4. From road crossing on Southern Railway 4.3 miles east of Grassland along roads alternately south and west to point 0.8 mile north of Mascoutah (by W. A. Gelbach in 1907)

No bench marks were established along this portion of line.

[Continued in New Athens quadrangle, line 2]

5. Northwest along Louisville & Nashville Railroad from sec. 25, T. 1 N., R. 8 W., to point near Belleville (by W. A. Gelbach in 1907)

[Continued from New Athens quadrangle, line 1]

Belleville, 7 ft. N. and 20 ft. E. from NE. corner of St. Clair County courthouse, 150 ft. S. and 40 ft. W. from center of city square; top of bronze cap on iron post set flush with sidewalk and stamped "Prim Trav Sta No 15 1905 Adj" ²⁴ (recovered by U. S. C. & G. S. in 1935)----- 529.123

6. From point near west quarter corner sec. 28, T. 3 N., R. 8 W., east and southeast along roads and streets to Vandalia Railroad station in Collinsville (by S. R. Archer in 1926)

[Continued from East St. Louis quadrangle, line 3]

Collinsville, 1.3 mi. NW. of post office, 0.15 mi. N. and 0.25 mi. W. from center of sec. 28, T. 3 N., R. 8 W., 100 ft. S. of right-angle turn from E. to S. in rd., at S. abutment of concrete bridge, on E. parapet; chiseled square----- 466.22

Collinsville, at NW. corner of intersection of West Clay and Clinton Streets, at main entrance to post office, on SW. end of stone doorsill; chiseled cross----- 563.17

²² Subsidiary of Pennsylvania System.

²³ In 1927 this bench mark was reported destroyed.

²⁴ As reset; see line 1.

7. From road junction 2.4 miles northwest of St. Jacob along roads west and southwest to road junction 2.2 miles northeast of Troy, thence north 0.3 mile (by J. A. Shumate in 1927)

[Continued from Edwardsville quadrangle, line 6]

Marine, 2.7 mi. by direct rd. S. of, 2.4 mi. NW. of St. Jacob, 1.0 mi. E. of Hunter School, near E $\frac{1}{4}$ cor. sec. 32, T. 4 N., R. 6 W., 18 ft. S. and 16 ft. W. from junction of T-rd. W., opposite Marine Cemetery, in top of W. concrete head wall of culvert; standard tablet stamped "JAS 10 1927"	Feet 496.424
Reference mark, 36 ft. S.5°W. of tablet, in root on N. side of 34-in. black-oak tree; copper nail and washer	494.58
Hunter School, 17 ft. N. and 40 ft. E. from NE. corner of, 125 ft. E. of W $\frac{1}{4}$ cor. sec. 32, T. 4 N., R. 6 W., in root on NW. side of 18-in. elm tree; copper nail and washer	489.98
Hunter School, 0.5 mi. W. of, near center of sec. 31, T. 4 N., R. 6 W., 14 ft. S. and 115 ft. E. from junction of T-rd. E., in root on NE. side of 15-in. wild-cherry tree; copper nail and washer	482.13

[Jogs into Edwardsville quadrangle, line 7]

Troy, 2.2 mi. NE. of, in SE. angle of junction of N.-S. rd., in NW. corner of pasture owned by Henry Wendler; standard iron post with bronze cap stamped "Prim Trav Sta No 20 1905" (recovered in 1930)	489.252
Reference mark, 410 ft. N.85°E. of tablet, on NW. side of rd., in root on W. side of 15-in. cottonwood tree; copper nail and washer	486.79

[Continued in Edwardsville quadrangle, line 8]

8. From sec. 4, T. 1 N., R. 8 W., south and southeast along roads to Belleville (by E. W. Gouchenour in 1929)

[Continued from East St. Louis quadrangle, line 7]

Fairview, 2.5 mi. SE of, 4.5 mi. NW. of city square at Belleville, in NW $\frac{1}{4}$ sec. 4, T. 1 N., R. 8 W., 200 ft. S. of right-angle turn from E. to S. in rd., in front of two-story brick dwelling, in root on S. side of maple tree; copper nail and washer	589.51
Belleville, 3.3 mi. NW. of, in NW $\frac{1}{4}$ sec. 9, T. 1 N., R. 8 W., 330 ft. S. and 20 ft. W. from junction of dim rd. E., in root on E. side of large elm tree; copper nail and washer	583.88
Belleville, 2.2 mi. NW. of, 0.2 mi. S. and 0.2 mi. E. from NW. cor. sec. 16, T. 1 N., R. 8 W., 85 ft. W. of center line of rd., in yard at store, in root of tree; copper nail and washer	568.83
Belleville, 1.3 mi. NW. of, near N. limits of Swansea, on Caseyville rd., 300 ft. SE. of end of pavement, on E. curb; chiseled square	546.52

9. From point near Peters generally east and southeast to Troy, thence south along road to Southern Railway, thence east to Grassland (by L. V. Johnson in 1930)

[Connects with line 3 in East St. Louis quadrangle]

Glen Carbon, 0.7 mi. S. of, near W $\frac{1}{4}$ cor. sec. 3, T. 3 N., R. 8 W., 150 ft. E. of junction of rd. N., 15 ft. N. of rd., in root on SW. side of 48-in. elm tree; copper nail and washer	538.18
Glen Carbon, 0.7 mi. S. thence 1.0 mi. E. from, near W $\frac{1}{4}$ cor. sec. 2, T. 3 N., R. 8 W., 115 ft. SE. of junction of rd. N., 17 ft. N. of rd., on E. end of N. concrete and brick head wall of culvert; chiseled square	556.47

Glen Carbon, 0.7 mi. S. thence 1.0 mi. E. from, 0.17 mi. W. of center of sec. 1, T. 3 N., R. 8 W., 240 ft. E. of rd. S. to pavement, 43 ft. N. of center line of highway, 20 ft. N. of center line of rd. W., on N. end of 24-in. tile culvert; chiseled square-----	Feet 580.09
Glen Carbon, 0.7 mi. S. thence 2.6 mi. E. from, 3.0 mi. along rd. NW. of Troy, about 400 ft. E. of center of sec. 1, T. 3 N., R. 8 W., 35 ft. S. and 440 ft. W. from junction of T-rd. S., 20 ft. W. of fence corner, in concrete post; standard tablet stamped "T T Sta No 19-F 1928"-----	583.512
Reference mark, 380 ft. E. of tablet, 15 ft. S. and 55 ft. W. from rd. junction, on W. end of S. concrete head wall of culvert; chiseled square-----	574.48
Troy, 1.7 mi. NW. thence 0.5 mi. N. from, 740 ft. N. of E $\frac{1}{4}$ cor. sec. 6, T. 3 N., R. 7 W., 60 ft. N. and 24 ft. W. from rd. junction, in root on NW. side of 14-in. elm tree; copper nail and washer-----	570.74
Troy, 2.0 mi. NW. of, in NW $\frac{1}{4}$ sec. 5, T. 3 N., R. 7 W., 30 ft. S. and 260 ft. E. from junction of T-rd. N., 90 ft. SE. of junction of second-class rd., in root on SW. side of 30-in. Osage-orange tree; copper nail and washer-----	565.62
Troy, 1.5 mi. NW. of, near SE. cor. sec. 32, T. 4 N., R. 7 W., 540 ft. E. of junction of T-rd. N., 40 ft. NE. of junction of rd. S., 4 ft. S. of E-W. fence, in root on W. side of 30-in. elm tree; copper nail and washer-----	557.78
Troy, in NE. angle of street intersection, 11 ft. S. of SW. corner of Troy Exchange Bank, on S. edge of concrete walk; chiseled square--	563.59
Troy, 0.7 mi. S. of, 90 ft. SW. of Vandalia R. R. sta., 22 ft. S. and 30 ft. W. from R. R. crossing, on SW. corner of concrete head wall of culvert; chiseled square-----	545.75
Troy, 1.0 mi. S. thence 0.3 mi. E. from, 0.25 mi. S. of N. cor. secs. 15 and 16, T. 3 N., R. 7 W., S. of angle in rd. from E. to S., on SW. concrete head wall of culvert; chiseled square-----	544.21
Troy, 2.2 mi. S. and 0.3 mi. E. from, near W $\frac{1}{4}$ cor. sec. 22, T. 3 N., R. 7 W., 18 ft. S. and 40 ft. E. from crossroads, 8 ft. E. of 6-in. walnut tree used as corner fence post, in concrete post; standard tablet stamped "9 J 1930"-----	537.599
Reference mark, 8 ft. E. of tablet, in root on N. side of 8-in. walnut tree; copper nail and washer-----	538.20
Troy, 3.2 mi. S. and 0.3 mi. E. from, near W $\frac{1}{4}$ cor. sec. 27, T. 3 N., R. 7 W., 16 ft. SE. of center of crossroads, in triangle, in root on NW. side of 40-in. oak tree; copper nail and washer-----	535.66
Troy, 4.3 mi. S. and 0.3 mi. E. from, near W $\frac{1}{4}$ cor. sec. 34, T. 3 N., R. 7 W., 100 ft. NE. of junction of E-W. rd. and rd. S, 70 ft. W. of triangle, at entrance to schoolhouse, on first concrete step; chiseled square-----	530.88
Troy, 4.8 mi. S. and 0.3 mi. E. from, near SE. cor. sec. 33, T. 3 N., R. 7 W., 55 ft. N. and 23 ft. W. from right-angle turn from N. to E in rd., at Madison-St. Clair county line, 4 ft. W. of fence corner, in concrete post; standard tablet stamped "10 J 1930"-----	485.102
Troy, 5.5 mi. S. and 0.6 mi. E. from, near center of SW $\frac{1}{4}$ sec. 3, T. 2 N., R. 7 W., 20 ft. S. and 14 ft. W. from center of rd. fork, on SE. end of concrete head wall of culvert; chiseled square-----	503.51

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Troy, 6.0 mi. S. and 0.4 mi. E. from, 0.25 mi. N. of quarter corner between secs. 9 and 10, T. 2 N., R. 7 W., 70 ft. NW. of angle in rd., 55 ft. E. of SE corner of schoolhouse, in root on E. side of 36-in. oak tree; copper nail and washer-----	Feet 503. 34
Troy, 6.8 mi. S. and 0.4 mi. E. from, 2.5 mi. N. and 2.0 mi. E. from O'Fallon, near NW. cor. sec. 15, T. 2 N., R. 7 W., 90 ft. S. and 12 ft. E. from center of crossroads, 50 ft. W. of farmhouse, 1 ft. W. of picket fence, in root on SW. side of 24-in. locust tree; copper nail and washer-----	499. 60
O'Fallon, 2.0 mi. E. thence 0.9 mi. N. from, 3.0 mi. W. of W. limits of Lebanon, near W¼ cor. sec. 22, T. 2 N., R. 7 W., 30 ft. N. and 100 ft. E. from center of junction of rd. E., S. of fence, in concrete post; standard tablet stamped "T T Sta No 15 F 1928"-----	456. 678
O'Fallon, 2.0 mi. E. thence 0.3 mi. N. from, 0.13 mi. S. of NW. cor. sec. 27, T. 2 N., R. 8 W., just N. of angle in rd., at concrete bridge over creek, at center of top of E. head wall; chiseled square-----	489. 51
O'Fallon, 2.0 mi. E. thence 0.7 mi. S. from, 2.0 mi. NE. of Shiloh, 0.12 mi. S. of NE. cor. sec. 33, T. 2 N., R. 7 W., in SW. angle of intersection of N.-S. rd. and U. S. Highway 50, 7 ft. E. of NE. corner of service sta., on NE. corner of concrete walk along E. side of sta.; chiseled square-----	514. 16
Shiloh, 1.3 mi. E. of, 2.0 mi. N. and 1.8 mi. W. from Grassland, near E¼ cor. sec. 4, T. 1 N., R. 7 W., 68 ft. N. and 36 ft. W. from junction of T.-rd. S., in concrete post; standard tablet stamped "T T Sta No 14 F 1928" ²⁰ -----	490. 056
Reference mark, at SW. corner of rd. junction, on concrete head wall of culvert; chiseled square-----	491. 42
Grassland, 1.0 mi. N. and 1.8 mi. W. from, near W¼ cor. sec. 10, T. 1 N., R. 7 W., 0.5 mi. W. of NW. corner of Scott Field, 110 ft. N. and 18 ft. E. from crossroads, on E. concrete head wall of culvert; chiseled square-----	466. 36
Grassland, 1.0 mi. N. and 1.3 mi. W. from, near center of sec. 10, T. 1 N., R. 7 W., near NW. corner of Scott Field, 400 ft. W. of junction of rd. S. to buildings of aviation school, on S. concrete head wall of culvert; chiseled square-----	449. 24
Grassland, 1.3 mi. W. of, near center of sec. 15, T. 1 N., R. 7 W., near SW. corner of Scott Field, 200 ft. S. and 15 ft. E. from crossing of Southern Ry., on E. concrete head wall of culvert; chiseled square-----	439. 52
Grassland, 0.7 mi. W. of, near W¼ cor. sec. 14, T. 1 N., R. 7 W., on Southern Ry., 12 ft. S. of center line of track, on concrete head-wall of culvert; chiseled square-----	435. 56
10. From Troy northeast along road 2.2 miles to road junction in southwest quarter sec. 35, T. 4 N., R. 7 W. (by L. V. Johnson in 1930)	
Troy, near E. limits of, 700 ft. NW. of schoolhouse, 30 ft. S. of house, on N. end of concrete walk; chiseled square-----	545. 94
Troy, 1.2 mi. NE. of, in NW¼ SE¼ sec. 3, T. 3 N., R. 7 W., 150 ft. NE. of junction of rd. SE., in ravine, 55 ft. N. of fence corner, in root on W. side of 18-in. elm tree; copper nail and washer-----	485. 44

²⁰ In 1935 this bench mark was reset 48 ft. north and 16 ft. west from its original position and lowered 1.177 ft. The description and elevation given refer to the new position.

11. From point 1.1 miles west of Donkville southeast along roads to sec. 31, T. 3 N., R. 7 W., thence north and east to crossroads 2.2 miles south and 0.3 mile east from Troy (by L. V. Johnson in 1930; leveled twice)

[Continued from East St. Louis quadrangle, line 15]

Donkville, 0.4 mi. W. of schoolhouse, 200 ft. S. of junction of N.-S. rd. and rd. SE., 75 ft. S. of junction of rd. W., 600 ft. W. of old coal mine, at NE. corner of steel bridge in large ravine, on concrete base of span; chiseled square-----	Feet 499. 88
Donkville, at entrance to schoolhouse, on NW. corner of first concrete step; chiseled square-----	560. 37
Donkville, 0.7 mi. SE. of, 1.6 mi. along U. S. Highway 40 NE. of Collinsville, in SE $\frac{1}{4}$ sec. 22, T. 3 N., R. 8 W., at Cuba Lane Crossroads, 53 ft. N. and 33 ft. W. from center of crossroads, in concrete post; standard tablet stamped "T T Sta No 32 F 1928" ²⁷ -----	557. 015
Reference mark, 40 ft. S. of tablet, on NE. curve of sidewalk; chiseled square-----	557. 72
T. 3 N., R. 8 W., near center of SW $\frac{1}{4}$ sec. 23, at lead mine, 4.5 ft. W. of first step leading to office, on concrete walk; chiseled square-----	554. 17
T. 3 N., R. 8 W., near center of SE $\frac{1}{4}$ sec. 26, 500 ft. S. of brick plant, at N. side of large R. R. bridge, at NW. corner of steel bridge over Canteen Creek, on concrete base of span; chiseled square-----	484. 08
T. 3 N., R. 8 W., near quarter corner between secs. 25 and 36, 150 ft. SW of overhead R. R. crossing, 2 in. S. of SE. corner of S. head wall of concrete bridge over creek, on wing wall; chiseled square-----	504. 02
Collinsville, 2.8 mi. in air line E. of Vandalia R. R. sta., in W $\frac{1}{2}$ sec. 31, T. 3 N., R. 7 W., 15 ft. N. and 35 ft. W. from rd. junction, in concrete post; standard tablet stamped "T T Sta No 17 F 1928"-----	553. 842
T. 3 N., R. 7 W., near SW. cor. sec. 30, 25 ft. SE. of junction of rd. W., 220 ft. SE. of wooden bridge, 110 ft. SE. of Vandalia R. R. overhead crossing, on concrete head wall of culvert; chiseled square-----	527. 67
T. 3 N., R. 7 W., near center of W $\frac{1}{2}$ sec. 30, 35 ft. SE. of junction of rd. E., 30 ft. SW. of wooden culvert, on N. side of 24-in. elm tree; copper nail and washer-----	551. 74
T. 3 N., R. 7 W., 0.1 mi. SW. of center of sec. 19, 250 ft. E. of junction of rd. E., at culvert, on W. end of N. concrete head wall; chiseled square-----	552. 52
Formosa, 1.5 mi. S. of, near quarter corner between secs. 19 and 20, T. 3 N., R. 7 W., 35 ft. S. of junction of T-rd. N., in concrete post; standard tablet stamped "T T Sta No 18 F 1928"-----	560. 172
Reference mark, 150 ft. E. of rd. junction, on N. side of E.-W. rd., in root on SW. side of 50-in. elm tree; copper nail and washer-----	561. 08
Formosa, 1.5 mi. S. thence 0.5 mi. E. from, 3.2 mi. by rd. SW. of Troy, near center of sec. 20, T. 3 N., R. 7 W., 22 ft. N. and 10 ft. E. from junction of T-rd. S., on SE. corner of concrete curb around well; chiseled square-----	557. 46
Troy, 0.6 mi. SW. thence 2.0 mi. S. from, near quarter corner between secs. 20 and 21, T. 3 N., R. 7 W., 25 ft. S. and 8 ft. E. from junction of T-rd. N., 10 ft. W. of fence corner, in root on NW. side of 36-in. oak tree; copper nail and washer-----	555. 72

²⁷ In 1934 this bench mark was reset 33 ft. north and 7 ft. east from its original position and lowered 0.737 ft. The description and elevation given refer to the new position.

Troy, 2.2 mi. in air line S. of, near center of sec. 21, T. 3 N., R. 7 W., 13 ft. N. and 25 ft. E. from junction of T-rd. N., 13 ft. N. and 16 ft. E. from junction of lane S., 16 ft. W. of fence corner, in root on SE. side of 40-in. oak tree; copper nail and washer-----	<i>Feet</i> 555.67
12. North along section-line road by way of Formosa from west quarter corner sec. 20 to west quarter corner sec. 5, T. 3 N., R. 7 W. (by L. V. Johnson in 1930)	
Formosa, 0.5 mi. S. of, near E $\frac{1}{4}$ sec. 18, T. 3 N., R. 7 W., 48 ft. N. and 13 ft. W. from junction of T-rd. W., on S. end of corrugated- iron culvert; chiseled square-----	566.38
Formosa, 0.2 mi. N. of Vandalia R. R. crossing, 1.7 mi. SW. of Troy, in SW. angle of intersection of State Highway 11 and N.-S. rd., on concrete head wall of culvert; chiseled square-----	569.83
13. From crossroads 2.5 miles north and 2 miles east from O'Fallon west and northwest along roads to point 1.3 miles east of Casey- ville (by L. V. Johnson in 1930)	
O'Fallon, 2.5 mi. N. and 1.0 mi. E. from, near NW. cor. sec. 16, T. 2 N., R. 7 W., 6 ft. S. and 18 ft. E. from crossroads, at culvert under N.-S. rd., on NW. corner of concrete head wall; chiseled square----	558.58
O'Fallon, 2.5 mi. N. of, near NE. cor. sec. 18, T. 2 N., R. 7 W., 25 ft. S. and 40 ft. W. from crossroads, in concrete post; standard tablet stamped "T T Sta No 16 F 1928"-----	544.476
Reference mark, at NE. corner of crossroads, on brick and concrete head wall of culvert; chiseled square-----	537.02
O'Fallon, 2.5 mi. N. thence 0.6 mi. NW. from, 2.7 mi. SE. of Bethel Church, 0.2 mi. S. of center of sec. 7, T. 2 N., R. 7 W., 150 ft. SE. of junction of second-class rd., 500 ft. NW. of steel bridge over Ogles Creek, on N. end of E. concrete head wall of culvert; chiseled square-----	493.94
Bethel Church, 1.8 mi. SE. of, in SE $\frac{1}{4}$ sec. 12, 70 ft. NE. of bridge over creek, at junction of second-class rd., in triangle, in root on N. side of 24-in. maple tree; copper nail and washer-----	523.58
Bethel Church, 1.2 mi. SE. of, near center of NW $\frac{1}{4}$ sec. 12, SE. of farm buildings, 180 ft. W. of right-angle turn from N. to NW. in rd., on N. side of rd., in root on SW. side of 48-in. maple tree; copper nail and washer-----	574.58
Bethel Church, 2.5 mi. SE. of Collinsville, in SW. corner of stone founda- tion; aluminum tablet stamped "Prim Trav Sta No 14 1905"-----	604.047
Reference mark, 80 ft. W. of church, in root on E. side of 16-in. elm tree; copper nail and washer-----	597.98
Bethel Church, 1.1 mi. SW. of, 0.15 mi. N. and 0.10 mi. W. from center of sec. 10, T. 2 N., R. 8 W., NE. of coal mine, 30 ft. SE. of junction of dim rd., 50 ft. NW. of house, in root on NE. side of 50-in. oak tree; copper nail and washer-----	590.01
[Continued in East St. Louis quadrangle, line 13]	
14. From crossroads 1.3 miles east of Shiloh generally west along roads to point 3.5 miles north and 0.9 mile west from city square in Belleville (by L. V. Johnson in 1930)	
Shiloh, 0.5 mi. E. of, 500 ft. W. of farmhouse, at large culvert, on S. concrete head wall; chiseled square-----	588.93
Shiloh, 30 ft. S. and 20 ft. E. from junction of NE.-SW. improved rd. and rd. E., 5 ft. SW. of fence corner, in root on NW. side of 30-in. sycamore tree; copper nail and washer-----	658.94

Shiloh, 0.8 mi. NW. of, 1.5 mi. S. of O'Fallon, 0.2 mi. W. of N $\frac{1}{4}$ sec. 5, T. 1 N., R. 7 W., 10 ft. S. and 13 ft. W. from junction of T-rd. N., on E. end of S. concrete head wall of culvert; chiseled square-----	<i>Feet</i> 605.96
O'Fallon, 1.0 mi. W. thence 1.5 mi. S. from, near NW. cor. sec. 6, T. 1 N., R. 7 W., 16 ft. S. and 40 ft. E. from crossroads, on embankment, in root on N. side of 16-in. walnut tree used as fence post; copper nail and washer-----	541.75
O'Fallon, 2.0 mi. W. thence 1.5 mi. S. from, near NW. cor. sec. 1, T. 1 N., R. 8 W., 20 ft. S. and 20 ft. E. from junction of T-rd. S., 20 ft. S. and 155 ft. E. from junction of T-rd. N., in concrete post; standard tablet stamped "T T Sta No 20 F 1928"-----	556.535
O'Fallon, 4.0 mi. W. thence 1.5 mi. S. from, 4.0 mi. N. of Belleville city square, 0.12 mi. E. of NW. cor. sec. 3, T. 1 N., R. 8 W., in SW. angle of junction of rd. SE., 3 ft. W. of mail box, on E. side of 36-in. elm tree; copper nail and washer-----	597.37
Belleville, 3.5 mi. N. thence 0.5 mi. W. from, 2.0 mi. E. of Birkner, near center of sec. 4, T. 1 N., R. 8 W., 20 ft. NE. of angle from W. to N. in rd., 320 ft. S. of angle from N. to W., in root on N. side of 24-in. walnut tree; copper nail and washer-----	597.06

[Connects with line 8 in East St. Louis quadrangle]

15. From highway crossing on Southern Railway 1.3 miles west of Grassland along highways alternately south and west to quarter corner between secs. 28 and 29, T. 1 N., R. 7 W., thence east and south to point 0.6 mile north of Rentchler (by L. V. Johnson in 1930)

Grassland, 1.3 mi. W. thence 1.0 mi. S. from, near center of sec. 22, T. 1 N., R. 7 W., 22 ft. N. and 15 ft. W. from crossroads, on concrete head wall of culvert; chiseled square-----	436.68
Grassland, 2.3 mi. W. thence 1.0 mi. S. from, 0.8 mi. E. thence 1.0 mi. S. from Shiloh Sta., near center of sec. 21, T. 1 N., R. 7 W., on S. side of State Highway 161 (Carlyle rd.), 42 ft. S. of junction of T-rd. N., in concrete post; standard tablet stamped "T T Sta No 13 F 1928" ²⁸ -----	441.526
Reference mark, 860 ft. W. of tablet, at steel bridge over creek, on SW. wing wall; chiseled square-----	440.57
Shiloh Sta., 2.0 mi. S. and 0.3 mi. E. from, 0.8 mi. N. thence 0.8 mi. W. from Rentchler, near E $\frac{1}{4}$ cor. sec. 29, T. 1 N., R. 7 W., 18 ft. N. and 15 ft. W. from junction of State highway 15 (Mascoutah rd.) and rd. N., at small culvert under N.-S. rd., on concrete head wall; chiseled square-----	453.60

[Connects with line 1 in New Athens quadrangle]

16. From point 0.8 mile north and 0.8 mile west from Rentchler west 2 miles along State Highway 15, thence southwest along road to Grange Hall School, thence northwest along State Highway 13 to Belleville (by L. V. Johnson in 1930)

Belleville, 4.5 mi. E. of, 0.6 mi. N. of Plum Hill School, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 29, T. 1 N., R. 7 W., 12 ft. S. and 165 ft. W. from junction of T-rd. S., on S. concrete head wall of culvert; chiseled square-----	468.81
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²⁸ In 1933 this bench mark was reset 12 ft. south of its original position and raised 0.024 ft. The description and elevation given refer to the new position.

36 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Belleville, 3.6 mi. E. of, near center of W½ sec. 30, T. 1 N., R. 7 W., 55 ft. S. and 15 ft. E. from junction of T-rd. S., in concrete post; standard tablet stamped "T T Sta No 23 F 1928"-----	<i>Feet</i> 465. 722
Reference mark, 18 ft. N. of tablet, on E. concrete head wall of culvert; chiseled square.-----	465. 49
[Jogs into New Athens quadrangle, line 5]	
Belleville, in NE. corner of intersection of East Grant Street and Freeburg Avenue, on concrete curb of brick sidewalk; chiseled square -----	483. 30
17. From Peters northeast to Glen Carbon (by L. V. Johnson in 1930; spur line leveled twice)	
[Connects with line 3 in East St. Louis quadrangle]	
Glen Carbon, SE. of I. C. R. R. sta., on property of Madison Coal Co.; standard iron post with bronze cap stamped "Prim Trav Sta No 20 1905"-----	470. 046
Reference mark, 15 ft. N. of NE. corner of sta., 3 ft. S. of S. rail, on concrete retaining wall of sta. platform; chiseled square-----	465. 44

BIRDS QUADRANGLE

[Latitude 38°45'–39°00'; longitude 87°30'–87°45']

CRAWFORD AND LAWRENCE COUNTIES

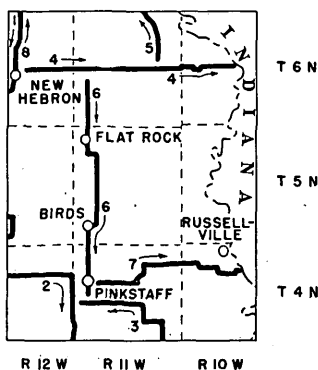


FIGURE 6.—Lines of leveling in Birds quadrangle.

1. From point in Robinson south and southwest about 4.7 miles along roads to point 0.9 mile southwest of New Hebron (by Henry Bücher in 1907)

[Continued from Merom quadrangle, line 1]

Robinson, 2.5 mi. S. of, 1.1 mi. N. of New Hebron, near center of NE $\frac{1}{4}$ sec. 16, T. 6 N., R. 12 W., at SE. corner of crossroads; 9 in. W. of fence, 4 ft. S. of fence corner; standard iron post with bronze cap stamped "533 Adj" (recovered in 1939) ----- *Feet*
533. 215

[Continued in Hardinville quadrangle, line 3]

2. From point 0.4 mile north and 4.4 miles west from Pinkstaff along roads east 3.6 miles and south 3.4 miles (by H. W. Peabody, Jr., in 1910)

[Connects with line 3 in Hardinville quadrangle]

Pinkstaff, 0.4 mi. N. and 2.9 mi. W. from, near E $\frac{1}{4}$ cor. sec. 10, T. 4 N., R. 12 W., in NW. angle of crossroads; standard iron post with bronze cap stamped "1910 438" ----- 436. 852

Pinkstaff, 1.0 mi. S. and 0.8 mi. W. from, about 3.3 mi. N. of Lawrenceville, near SW. cor. sec. 18, T. 4 N., R. 11 W., at Fairview School, 3 ft. N. of NW. corner of schoolyard; standard iron post with bronze cap stamped "1910 442" (recovered in 1914) ----- 441. 015

[Continued in Vincennes quadrangle, line 1]

3. From point near south corner secs. 25 and 26, T. 4 N., R. 11 W., alternately north and west along roads by way of Centerville School to road junction 1 mile south and 0.8 mile west from Pinkstaff (by R. G. Clinite in 1911)

[Continued from Vincennes quadrangle, line 4]

Allison post office (abandoned), 2.0 mi. S. and 4.0 mi. E. from Pinkstaff, 0.5 mi. E. of Centerville School, at cor. secs. 23, 24, 25, and 26, T. 4 N., R. 11 W., on NE. corner of stone marking section corner; chiseled circle ----- 428. 97

Pinkstaff, 2.0 mi. S. and 3.0 mi. E. from, at cor. secs. 22, 23, 26, and 27, T. 4 N., R. 11 W., at T-rd. N., on stone marking section corner; chiseled cross-----	Feet 425. 17
Pinkstaff, 1.0 mi. S. thence 3.0 mi. E. from, near SE. cor. sec. 15, T. 4 N., R. 11 W., in NW. corner of crossroads, in root of elm tree; copper nail and washer-----	419. 24
Pinkstaff, 1.0 mi. S. thence 1.4 mi. E. from, near N¼ cor. sec. 21, T. 4 N., R. 11 W., 850 ft. E. of Otter Pond drainage ditch, in bottoms at NW. corner of woodland, 3 ft. N. of fence, in root of 26-in. elm tree; copper nail and washer-----	414. 16
Pinkstaff, 1.0 mi. S. thence 1.0 mi. E. from, near SE. cor. sec. 17, T. 4 N., R. 11 W., in NW. angle of crossroads, 58 ft. N. of rd., in root of 30-in. sycamore tree; copper nail and washer-----	413. 62
4. From point 0.9 mile southwest of New Hebron along roads north-east 1.2 miles, thence east by way of Duncanville into Indiana at point 2 miles east of Richwood (by G. W. Lucas in 1914)	
[Connects with line 3 in Hardinville quadrangle]	
New Hebron, 0.8 mi. SW. of, near N¼ cor. sec. 28, T. 6 N., R. 12 W., at SE. corner of rd. fork, 100 ft. SW. of house, in root of 36-in. oak tree; copper nail and washer-----	533. 09
New Hebron, in SE. angle of crossroads, 80 ft. SW. of store, in root of hedge tree; copper nail and washer-----	532. 42
New Hebron, 1.4 mi. NE. of, 1.4 mi. W. of Duncanville, near NW. cor. sec. 23, T. 6 N., R. 12 W., in SE. angle of crossroads; standard iron post with bronze cap stamped "559"-----	558. 701
Duncanville, 0.4 mi. W. of, near SW. cor. sec. 13, T. 6 N., R. 12 W., at NE. corner of junction of T-rd. S., in root of 8-in. oak tree; copper nail and washer-----	530. 01
Duncanville, 1.1 mi. E. of, 3.8 mi. N. of Flat Rock, near SW. cor. sec. 17, T. 6 N., R. 11 W., 100 ft. SE. of Swearingen Chapel, in NE. angle of crossroads; standard iron post with bronze cap stamped "509"-----	508. 96
Duncanville, 2.5 mi. E. of, near NW. cor. sec. 21, T. 6 N., R. 11 W., 50 ft. SE. of crossroads, 6 ft. S. of gas meter, in root of 24-in. oak tree; copper nail and washer-----	487. 31
Duncanville, 4.5 mi. E. of, 3.3 mi. W. of Richwood, near SE. cor. sec. 15, T. 6 N., R. 11 W., opposite T-rd. S., 2 ft. W. of 12-in. concrete corner fence post; standard iron post with bronze cap stamped "512"-----	511. 258
Richwood, in NE. angle of junction of T-rd. E., 50 ft. N. of schoolhouse; standard iron post with bronze cap stamped "459"-----	458. 801
Richwood, 0.9 mi. W. of, near SW. cor. sec. 16, T. 6 N., R. 10 W., in NE. angle of crossroads, in root of 30-in. oak tree; copper nail and washer-----	429. 27
Richwood, 2.3 mi. E. of, 4.3 mi. below Palestine Landing on Wabash River, 300 ft. below Hites Ferry, 200 ft. E. of river bank, on top of levee, on Marks property, 75 ft. W. of house of William Shepherd, 60 ft. S. of rd. crossing; top of iron pipe ²⁰ (U. S. C. E. B. M. 36)----	440. 68

²⁰ This bench mark is in Indiana.

5. From crossroads 5.1 miles east of Duncanville north and northeast along road to Palestine (by G. W. Lucas in 1914)

Palestine, 2.1 mi. SE. of, near center of SE $\frac{1}{4}$ sec. 11, T. 6 N., R. 11 W., near summit of grade, on W. side of rd., 150 ft. NE. of farmhouse of J. H. Ritchie, at fence corner, in root of 20-in. walnut tree; copper nail and washer-----	Feet 559.29
Palestine, 0.5 mi. SE. of, in NW $\frac{1}{4}$ sec. 2, T. 6 N., R. 11 W., at wagon bridge over Lamotte Creek, on NE. rock abutment; chiseled square--	441.08
Palestine, at SE. corner of intersection of West Main and Lamotte Streets, 4 in. E. of sidewalk; standard iron post with bronze cap stamped "450" ³⁰ -----	449.282

[Continued in Merom quadrangle, line 2]

6. From crossroads 1.1 miles east of Duncanville along roads generally south by way of Flat Rock and Birds to road junction 1 mile south and 0.8 mile west from Pinkstaff (by G. W. Lucas in 1914)

Flat Rock, 2.7 mi. N. of, near NW. cor. sec. 29, T. 6 N., R. 11 W., 100 ft. E. of crossroads, on S. side of E.-W. rd., 6 in. N. of wire fence, in root of 20-in. oak tree; copper nail and washer-----	524.27
Flat Rock, 1.7 mi. N. of, near SW. cor. sec. 29, T. 6 N., R. 11 W., 200 ft. S. of Hope School, 50 ft. NE. of junction of T-rd. E., in root of 20-in. thorn tree; copper nail and washer-----	499.99
Flat Rock, on E. side of Main Street, 50 ft. SW. of Cleveland, Cincinnati, Chicago & St. Louis Ry. sta., just inside R. R. property, in corner of lot fenced with iron rail; standard iron post with bronze cap stamped "493"-----	492.762
Flat Rock, 2.4 mi. S. and 0.5 mi. E. from, 2.0 mi. N. and 0.5 mi. E. from Birds, near N $\frac{1}{4}$ cor. sec. 20, T. 5 N., R. 11 W., in SW. angle of crossroads, 8 ft. S. of corner fence post; standard iron post with bronze cap stamped "508"-----	507.408
Birds, 40 ft. W. of C. C. C. & St. L. Ry. sta., on S. side of rd., 8 ft. NE. of store building, 6 in. S. of sidewalk; standard iron post with bronze cap stamped "439"-----	438.167
Pinkstaff, in NW. angle of rd. junction, 200 ft. S. of C. C. C. & St. L. Ry. sta., 50 ft. N. of post office; standard iron post with bronze cap stamped "439"-----	438.658

7. From Pinkstaff generally east along roads by way of East Pinkstaff School to point 1.4 miles southeast of Russellville (by G. W. Lucas in 1914)

Pinkstaff, 1.0 mi. E. of, near NW. cor. sec. 16, T. 4 N., R. 11 W., 60 ft. S. of junction of T-rd. S., in root of 20-in. oak tree; copper nail and washer-----	454.16
Pinkstaff, 2.7 mi. E. of, 0.2 mi. E. of N $\frac{1}{4}$ cor. sec. 15, T. 4 N., R. 11 W., 30 ft. S. of rd. fork, 150 ft. SW. of house; standard iron post with bronze cap stamped "422"-----	420.935
Pinkstaff, 2.7 mi. E. thence 1.3 mi. NE. from, near SW. cor. sec. 2, T. 4 N., R. 11 W., 300 ft. E. of East Pinkstaff School, 20 ft. E. of crossroads, in root of 30-in. hickory tree; copper nail and washer-----	466.45

³⁰ In 1939 this bench mark was tied to U. S. C. & G. S. standard disk stamped "W 90 1935," elevation 447.896 ft.

40 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

East Pinkstaff School, 0.9 mi. E. of, 500 ft. W. of SE. cor. sec. 2, T. 4 N., R. 11 W., on summit of hill, in front of residence of Oliver Pinkstaff, in root of 36-in. oak tree; copper nail and washer-----	<i>Feet</i> 524.60
East Pinkstaff School, 2.0 mi. E. of, 0.9 mi. S. and 2.4 mi. W. from Russellville, near SE. cor. sec. 1, T. 4 N., R. 11 W., opposite T-rd. S., in root of 16-in. oak tree; copper nail and washer-----	421.33
Russellville, 1.4 mi. SE. of, 75 ft. from top of Wabash River bank, on top of levee, on property of C. N. Vennard, about 0.25 mi. E. of Vennard residence; top of iron pipe (U. S. C. E. B. M. 44)-----	430.560
8. From crossroads 2.5 miles south of Robinson generally north along road to Robinson (by W. C. Elledge in 1939)	
Robinson, 1.0 mi. S. of, near cor. secs. 3, 4, 9, and 10, T. 6 N., R. 12 W., in NW. angle of junction of T-rd. W., 7 ft. W. of E. end of concrete walk to front entrance of McCarthy School, on S. edge of walk; chiseled square-----	533.92

[Continued in Merom quadrangle, line 6]

BREESE QUADRANGLE

[Latitude 38°30'–38°45'; longitude 89°30'–89°45']

BOND, CLINTON, MADISON, AND ST. CLAIR COUNTIES

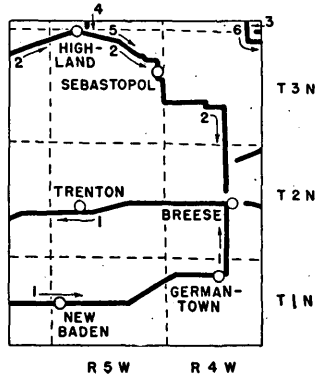


FIGURE 7.—Lines of leveling in Breese quadrangle.

1. From point about 3 miles west of New Baden east and northeast along Southern Railway to Germantown, thence north along road to Breese, thence west along Baltimore & Ohio South-western Railroad to Summerfield (by C. F. Wood in 1905)

[Connects with line 2 in Belleville quadrangle]

New Baden, about 5 mi. W. of Albers, in bank building; aluminum tablet stamped "463 Adj"	Feet 461. 868
Albers, about 4.5 mi. SW. of Germantown, at residence of Louis Fogtman, two houses N. of R. R., on W. side of street, in E. side of house; aluminum tablet stamped "445 Adj"	444. 308
Germantown, about 4 mi. S. of Breese, in NE. corner of St. Boniface's School; aluminum tablet stamped "433 Adj"	432. 091
Breese, about 4 mi. E. of Ariston, at St. Dominic's School, in NW. corner of building; aluminum tablet stamped "458 Adj" (recovered in 1907)	457. 954
Ariston, about 4.5 mi. E. of Trenton, in S. side of brick Catholic church, at E. side of entrance; aluminum tablet stamped "475 Adj"	474. 186
Trenton, at city hall, about 4 mi. E. of Summerfield, in SE. corner of building; aluminum tablet stamped "498 Adj"	497. 373

[Connects with line 2 in Belleville quadrangle]

2. From point about 4 miles southwest of Highland northeast along Vandalia Railroad³¹ to Highland, thence along roads generally southeast by way of Sebastopol and St. Rose to Breese (by C. F. Wood in 1905)

[Connects with line 3 in Belleville quadrangle]

Highland, at SW. corner of First National Bank Building, about 6 mi. NW. of Sebastopol, in E. stone column; aluminum tablet stamped "545 Adj" (recovered in 1935) ³²	544. 763
---	----------

³¹ Now part of the Pennsylvania System.

³² In 1935 it was reported that the stone column had been moved about 20 ft. east, to the southeast corner of the building. In remodeling the building, the elevation of the tablet may have been changed by a possible difference in thickness of cement between stones in new column. The figures given represent the new elevation.

42 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Sebastopol, about 4 mi. NW. of St. Rose, in S. side of old brick schoolhouse; aluminum tablet stamped "545 Adj" (recovered in 1935) ³³ -----	<i>Feet</i> 545.269
St. Rose, at N. side of Catholic church, in doorsill of N. entrance; aluminum tablet stamped "504 Adj"-----	503.922
St. Rose, 1.0 mi. E. thence 1.7 mi. S. from, about 3.5 mi. N. of Breese, at residence of August Lager, in E. side of house; aluminum tablet stamped "473 Adj" (recovered in 1907)-----	472.835
3. From point 0.5 mile north and 0.8 mile east from Jamestown west along Bond-Clinton county line 0.8 mile, thence north along road to point 1.2 miles north of Jamestown (by H. A. Drake in 1934)	
[Continued from Carlyle quadrangle, line 7]	
Jamestown, 0.5 mi. N. of, 0.25 mi. E. of W. cor. secs. 2 and 35, Tps. 3 and 4 N., R. 4 W., on E. side of N-S. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 1 1934" (recovered in 1935)-----	500.204
[Continued in New Douglas quadrangle, line 4]	
4. From point 0.5 mile north and 0.5 mile east from Highland along roads south and west to Highland (by S. R. Archer in 1935)	
[Continued from New Douglas quadrangle, line 6]	
Highland, in NE. part of, 300 ft. S. of Poplar Street crossing of Pennsylvania Railroad, on top of W. head wall of concrete culvert under Poplar Street; chiseled square-----	517.02
5. From Highland southeast along roads to Sebastopol (by S. R. Archer in 1935)	
Highland, 350 ft. E. of intersection of Broadway and Poplar Street, on N. side of street, on top of E. concrete head wall of culvert under driveway to large brick residence; chiseled square-----	526.00
Highland, 1.2 mi. SE. of First National Bank at, in NE $\frac{1}{4}$ sec. 4, T. 3 N., R. 5 W., 170 ft. W. of junction of private rd. S., on top of S. wing wall of E. abutment of concrete highway bridge; chiseled square-----	524.42
Highland, 1.5 mi. SE. of, near W $\frac{1}{4}$ cor. sec. 3, T. 3 N., R. 5 W., in SE angle of junction of rd. S., on top of N. end of E. head wall of concrete culvert under rd. S.; chiseled square-----	523.29
Highland, 2.6 mi. SE. of, 0.2 mi. N. of SE. cor. sec. 3, T. 3 N., R. 5 W., near SE corner of junction of T-rd. S., at E. end of corrugated iron pipe culvert under rd. S.; highest point-----	509.33
Highland, 3.0 mi. SE. of, about 800 ft. W. of S $\frac{1}{4}$ cor. sec. 2, T. 3 N., R. 5 W., in NE. angle of junction of T-rd. N., in trunk on W. side of 30-in. hackberry tree, driven horizontally; large, square steel spike-----	480.73
Highland, 4.1 mi. SE. of, 0.7 mi. N. thence 0.5 mi. W. from Sebastopol, 0.25 mi. W. of center of sec. 12, T. 3 N., R. 5 W., 25 ft. N. and 30 ft. W. from junction of T-rd. N. and second-class rd. S., in SE. corner of yard of Forrest School, in concrete post; standard tablet stamped "521"-----	521.165

³³ In 1935 it was reported that the top of the tablet had been destroyed but the stem was in its original position.

6. From point 1.2 miles north of Jamestown south to Jamestown, thence east 0.8 mile (by S. R. Archer in 1935)

[Connects with line 4 in New Douglas quadrangle]

Jamestown, at center of town, on N. side of main E.-W. street, 40 ft.

W. of T-street N., at W. entrance on S. side of store, at E side of steps, on top of N. end of lowest of three concrete steps; chiseled square -----

Feet

509.43

Jamestown, at W. edge of, 135 ft. S. and 80 ft. E. from crossroads, near S. line of schoolyard, in stone post; aluminum tablet stamped "Prim Trav Sta No 23 1905 495" -----

495.498

[Continued in Carlyle quadrangle, line 8]

BRIGHTON QUADRANGLE

[Latitude 39°00'–39°15'; longitude 90°00'–90°15']

GREENE, JERSEY, AND MACOUPIN COUNTIES

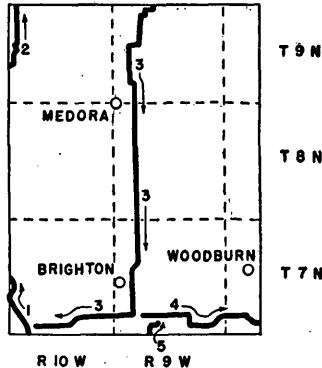


FIGURE 8.—Lines of leveling in Brighton quadrangle.

1. From point 4 miles northwest of Godfrey northwest along highway and Chicago & Alton Railroad to point 0.3 mile southeast of Delhi station (by S. R. Archer in 1922; releveled from point 4.5 miles northwest of Godfrey to point 0.5 mile southeast of Delhi station by E. O. Brooks in 1924)

[Continued from Alton quadrangle, line 2]

Godfrey, 4.5 mi. NW. of, 0.2 mi. W. of center of sec. 32, T. 7 N., R. 10 W., 20 ft. S. and 30 ft. W. from crossing of C. & A. R. R. and rd. E., 20 ft. S. and 125 ft. E. from crossroads, at R. R. right-of-way fence line, 10 ft. S. of fence corner; standard iron post with bronze cap stamped "44 A 1922"-----	Feet 555.900
Reference mark, 20 ft. S. and 100 ft. E. from crossroads, 25 ft. S. and 50 ft. W. from crossing of R. R. and rd. E., in field, in root on SE. side of 15-in. elm tree; copper nail and washer-----	555.31
Delhi sta., 2.7 mi. SE. of, 60 ft. NE. and 40 ft. E. from crossing of R. R. and rd. N., at Diamond Hill School, on S. side of yard, in root on S. side of 15-in. maple tree; copper nail and washer-----	538.14
Delhi sta., 2.2 mi. SE. of, at concrete R. R. bridge over Piasa Creek, 30 ft. E. of W. end, on top of N. coping wall; chiseled square-----	508.24
Delhi sta., 0.9 mi. SE. of, 440 ft. S. of rd. crossing, at N. concrete abutment of R. R. bridge G-348 over drain, on top of E. end of bridge seat; chiseled square (recovered in 1924)-----	571.83
Delhi sta., 0.5 mi. SE. of, 25 ft. N. and 40 ft. E. from rd. crossing, 15 ft. E. of right-of-way fence corner, in concrete post; standard tablet stamped "45 A 1922" (recovered in 1926)-----	596.667

[Continued in Jerseyville quadrangle, line 1]

2. From point 0.9 mile south and 4.6 miles west from Kemper along roads east and north to point 1.4 miles south and 2.3 miles west from Rockbridge (by E. O. Brooks in 1924; releveled by G. F. Williams in 1925)

[Continued from Jerseyville quadrangle, line 4]

Kemper, 0.9 mi. S. and 4.5 mi. W. from, near S $\frac{1}{4}$ cor. sec. 19, T. 9 N., R. 10 W., 20 ft. N. and 40 ft. W. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 5 1924 28 EB"-----	Feet 516.960
Reference mark, 380 ft. W. of tablet, on N. side of rd. in fence line, in root on SW. side of 12-in. Osage-orange tree; copper nail and washer-----	516.70
Kemper, 0.2 mi. S. and 4.3 mi. W. from, in NE $\frac{1}{4}$ sec. 19, T. 9 N., R. 10 W., at NW. corner of bridge over Macoupin Creek, at top of steel pier, on tap end of large bolt; chiseled cross-----	472.70
Kemper, 0.7 mi. N. and 4.3 mi. W. from, in NE $\frac{1}{4}$ sec. 18, T. 9 N., R. 10 W., about 500 ft. N. of Greene-Jersey county line, 900 ft. N. of farmhouse, at bridge over small drain, in center of top of concrete head wall; chiseled square-----	479.10
Kemper, 1.6 mi. N. and 4.3 mi. W. from, 2.0 mi. S. and 2.3 mi. W. from Rockbridge, 0.25 mi. E. of center of sec. 7, T. 9 N., R. 10 W., at offset crossroads, on S. side of E.-W. rd., 50 ft. E. of T-rd. S., opposite T-rd. N.; standard iron post with bronze cap stamped "Prim Trav Sta No 5S 1911 29 EB 1924"-----	516.303
Reference mark, 30 ft. W. of iron post, at fence corner, in root on W. side of 24-in. elm tree; copper nail and washer-----	515.82

[Continued in Greenfield quadrangle, line 6]

3. From point 0.4 mile south and 2.3 miles west from Chesterfield along roads south to road junction 1.7 miles south and 0.7 mile east from Brighton, thence generally west to point 4.5 miles northwest of Godfrey (by E. O. Brooks in 1924; releveled by G. F. Williams in 1925)

[Connects with line 7 in Greenfield quadrangle]

Chesterfield, 0.6 mi. S. and 2.3 mi. W. from, 0.25 mi. E. of SW. cor. sec. 4, T. 9 N., R. 9 W., in NE. angle of junction of T-rd. N., 6 in. S. and 5 ft. E. from fence corner; top of $\frac{3}{4}$ -in. pipe-----	564.51
Chesterfield, 1.0 mi. S. and 3.0 mi. W. from, 1.5 mi. N. of Challacombe, near S $\frac{1}{4}$ cor. sec. 8, T. 9 N., R. 9 W., 60 ft. N. and 25 ft. E. from steel bridge over Macoupin Creek, on E. side of rd., in fence line, in root on SW. side of 24-in. elm tree; copper nail and washer-----	494.95
Challacombe, 100 ft. W. of R. R. sta., 25 ft. S. and 30 ft. W. from junction of E.-W. rd., 1 ft. N. of fence, in concrete post; standard tablet stamped "33 EB 1924"-----	533.172
Reference mark, 100 ft. N. and 50 ft. E. from tablet, in root on S. side of 8-in. elm tree; copper nail and washer-----	532.97
Challacombe, 0.5 mi. W. of, near S. cor. secs. 17 and 18, T. 9 N., R. 9 W., on N. side of E.-W. rd., opposite center of T-rd. S., in center of top of N. concrete head wall of culvert; chiseled square-----	564.80
Challacombe, 0.5 mi. W. thence 1.0 mi. S. from, 0.3 mi. W. thence 1.0 mi. N. from Summerville, near W. cor. secs. 20 and 29, T. 9 N., R. 9 W., on E. side of rd., at fence corner, in root on SW. side of 12-in. Osage orange tree; copper nail and washer-----	575.54

Summerville, 0.3 mi. W. of, 1.0 mi. N. and 0.7 mi. E. from Medora, near SW. cor. sec. 29, T. 9 N., R. 9 W., in NE. angle of junction of E-W. rd., 6 in. S. and 5 ft. E. from fence corner; top of $\frac{3}{4}$ -in. pipe-----	<i>Feet</i> 594.84
Medora, 1.0 mi. E. of, 0.25 mi. E. of SW. cor. sec. 32, T. 9 N., R. 9 W., on E. side of rd., opposite T-rd. W., 10 ft. N. of small drain, 5 ft. N. and 1 ft. W. from fence corner, in concrete post; standard tablet stamped "34 EB 1924" ³⁴ -----	597.867
Reference mark, 200 ft. S. and 75 ft. E. from tablet, 35 ft. E. of rd. S., on summit of ridge, in root on W. side of 24-in. elm tree; copper nail and washer-----	605.46
Medora, 1.0 mi. E. thence 1.0 mi. S. from, 0.4 mi. N. thence 2.2 mi. E. from Fidelity, 0.25 mi. E. of SW. cor. sec. 5, T. 8 N., R. 9 W., in NE. angle of crossroads, 5 ft. N. and 6 in. W. from fence corner; top of $\frac{3}{4}$ -in. pipe-----	607.56
Medora, 1.0 mi. E. thence 2.0 mi. S. from, 2.0 mi. N. of Piasa, 0.25 mi. E. of NW. cor. sec. 17, T. 8 N., R. 9 W., in SE. angle of junction of T-rd. E., 15 ft. S. and 1 ft. W. from fence corner, in concrete post; standard tablet stamped "35 EB 1924"-----	620.097
Reference mark, 50 ft. S. and 65 ft. W. from tablet, 15 ft. W. of hedge fence, on W. side of N-S. rd., in root on NE. side of 24-in. apple tree; copper nail and washer-----	620.92
Piasa, 1.0 mi. N. of, 0.25 mi. E. of W. cor. secs. 17 and 20, T. 8 N., R. 9 W., on W. side of N-S. rd., opposite T-rd. E., at SE. corner of barnyard, in fence line, in root on NE. side of 24-in. Osage orange tree; copper nail and washer-----	625.77
Piasa, in NW. angle of crossroads, 5 ft. S. and 12 ft. E. from SE. corner of store; on SE. corner of concrete walk to N.; chiseled square ³⁵ -----	593.24
Piasa, 1.0 mi. S. of, 0.25 mi. E. of SW. cor. sec. 29, T. 8 N., R. 9 W., in NW. angle of crossroads, 20 ft. W. of fence corner, in fence line, in root on N. side of 24-in. Osage orange tree; copper nail and washer-----	635.23
Piasa, 2.0 mi. S. of, 1.5 mi. NE. thence 2.2 mi. N. from Brighton, 0.25 mi. E. of SW. cor. sec. 32, T. 8 N., R. 9 W., in NW. angle of crossroads, 8 ft. N. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "36 EB 1924"-----	649.525
Reference mark, 510 ft. N. of tablet, at W. end of bridge over small drain, in center of top of concrete head wall; chiseled square-----	639.85
Brighton, 1.5 mi. NE. thence 1.2 mi. N. from, 0.2 mi. N. thence 0.8 mi. W. from Miles, 0.25 mi. E. of SW. cor. sec. 5, T. 7 N., R. 9 W., in NE. angle of crossroads, 30 ft. N. and 2 ft. W. from fence corner, in root on SW. side of 4-in. walnut tree; copper nail and washer---	666.28
Brighton, 1.5 mi. NE. thence 0.2 mi. N. from, 0.25 mi. E. of SW. cor. sec. 8, T. 7 N., R. 9 W., 600 ft. N. of crossing of C. & A. R. R., in NW. angle of junction of private T-rd. W., 5 ft. N. and 1 ft. E. from fence corner; top of $\frac{3}{4}$ -in. pipe-----	660.62
Brighton, 1.0 mi. NE. of, near W $\frac{1}{4}$ cor. sec. 17, T. 7 N., R. 9 W., 510 ft. E. of R. R. crossing, in NE. angle of crossroads, 2 ft. S. and 5 ft. E. from fence corner, in concrete post; standard tablet stamped "37 EB 1924" ³⁶ -----	653.886

³⁴ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "E 103 1935," elevation 610.370 ft.

³⁵ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "G 103 1935," elevation 603.427 ft.

³⁶ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "J 103 1935," elevation 656.163 ft.

Reference mark, 75 ft. N. and 45 ft. W. from tablet, in front of old house, in root on SE. side of 36-in. maple tree; copper nail and washer-----	Feet 653.06
Brighton, 0.7 mi. E. of, 0.25 mi. S. of NE. cor. sec. 19, T. 7 N., R. 9 W., in SW. angle of junction of rd. S., 6 ft. S. and 50 ft. W. from fence corner, in root on E. side of 36-in. oak tree; copper nail and washer-----	653.26
Brighton, 0.7 mi. E. thence 0.6 mi. S. from, near SE. cor. sec. 19, T. 7 N., R. 9 W., 200 ft. N. of junction of private rd. SE., at SW. corner of bridge over large drain, in center of top of concrete wing wall; chiseled square-----	596.99
Brighton, 0.7 mi. E. thence 1.7 mi. S. from, near NE. cor. sec. 31, T. 7 N., R. 9 W., 30 ft. S. and 75 ft. W. from junction of E.-W. rd., at edge of timber, in root on SE. side of 6-in. twin oak trees; copper nail and washer (recovered in 1926)-----	613.02
Brighton, 0.7 mi. E. thence 1.7 mi. S. from, near NE. cor. sec. 31, T. 7 N., R. 9 W., 36 ft. S. and 60 ft. W. from rd. junction, in root on W. side of 12-in. oak tree; copper nail and washer-----	608.80
Brighton, 0.4 mi. SW. thence 1.5 mi. S. from, near SW. cor. sec. 30, T. 7 N., R. 9 W., in NE. angle of crossroads, 3 ft. S. and 18 ft. E. from fence corner, at top edge of high bank, in hedge root; copper nail and washer-----	633.28
Brighton, 1.7 mi. S. and 1.2 mi. W. from, 4.3 mi. NE. of Godfrey, near N. side NW $\frac{1}{4}$ sec. 36, T. 7 N., R. 10 W., 6 ft. S. and 20 ft. W. from crossroads, 140 ft. W. of crossing of C. & A. R. R., in yard at Budd School; standard iron post with bronze cap stamped "Prim Trav Sta No 83 W 1921 38 EB 1924"-----	673.315
Reference mark, 6 ft. S. and 10 ft. W. from tablet, in root on NE. side of 36-in. maple tree; copper nail and washer-----	673.10
Brighton, 1.7 mi. S. and 2.1 mi. W. from, 0.25 mi. E. of W. cor. secs. 26 and 35, T. 7 N., R. 10 W., at end of rd., 20 ft. N. and 50 ft. W. from brick farmhouse, in root on N. side of 18-in. apple tree; copper nail and washer-----	636.95
Brighton, 2.3 mi. S. and 2.8 mi. W. from, near center of sec. 34, T. 7 N., R. 10 W., at right-angle turn in rd., on E. side of rd. S., opposite center line of rd. W., in fence line S., 10 ft. S. of fence corner, in root on N. side of 4-in. elm tree; copper nail and washer-----	551.85
Brighton, 2.3 mi. S. and 3.0 mi. W. from, 3.8 mi. along highway and rd. NW. of Godfrey, 0.25 mi. W. of center of sec. 33, T. 7 N., R. 10 W., 25 ft. N. and 150 ft. W. from crossroads, in fence line, in root on NW. side of 12-in. Osage orange tree; copper nail and washer-----	585.22
4. From road junction 1.7 miles south and 0.7 mile east from Brighton generally east along roads to point 2.7 miles south and 0.6 mile east from Woodburn (by E. O. Brooks in 1924; releveled by G. F. Williams in 1925)	
Brighton, 1.7 mi. S. and 1.7 mi. E. from, near NW. cor. sec. 33, T. 7 N., R. 9 W., at SE. corner of steel bridge over West Fork of Wood River, at top of steel pier, on rivet head; chiseled cross (recovered in 1926)-----	554.26
Brighton, 1.7 mi. S. and 2.2 mi. E. from, near N $\frac{1}{4}$ cor. sec. 33, T. 7 N., R. 9 W., on S. side of E.-W. rd., opposite T-rd. N., 15 ft. S. of fence line, in pasture, in root on NE. side of 18-in. oak tree; copper nail and washer (recovered in 1926)-----	600.68

Brighton, 1.7 mi. S. and 3.3 mi. E. from, E. of N $\frac{1}{4}$ cor. sec. 34, T. 7 N., R. 9 W., at SE. corner of steel bridge over Honeycut Fork of Wood River, at top of steel pier, on rivet head; chiseled cross-	<i>Feet</i> 535. 53
Brighton, 1.7 mi. S. and 3.7 mi. E. from, 3.0 mi. N. of Fosterburg, near NE. cor. sec. 34, T. 7 N., R. 9 W., 15 ft. S. and 20 ft. W. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 82 W 1921 39 EB 1924"-----	612. 733
Reference mark, .38 ft. N. of tablet, in root on N. side of 18-in. hickory tree; copper nail and washer-----	613. 21
Fosterburg, 2.5 mi. N. of, 3.5 mi. SW. thence 1.4 mi. W. from Woodburn, near E $\frac{1}{4}$ cor. sec. 35, T. 7 N., R. 9 W., in NE. angle of crossroads, 4 in. S. and 15 ft. E. from fence corner; top of $\frac{3}{4}$ -in. pipe-----	608. 09
Woodburn, 3.5 mi. SW. thence 0.5 mi. W. from, 0.2 mi. W. of E $\frac{1}{4}$ cor. sec. 35, T. 7 N., R. 9 W., at SW. corner of steel bridge over East Fork of Wood River, at top of steel pier, on rivet head; chiseled cross-----	520. 89
Woodburn, 3.5 mi. SW. of, 0.3 mi. N. of W $\frac{1}{4}$ cor. sec. 36, T. 7 N., R. 9 W., on E. side of NE.-SW. rd., opposite center line of rd. W., 3 ft. N. of large telephone pole; top of $\frac{3}{4}$ -in. pipe-----	597. 67
Woodburn, 2.5 mi. SW. thence 0.2 mi. E. from, 0.25 mi. E. of SW. cor. sec. 30, T. 7 N., R. 8 W., 20 ft. N. and 20 ft. E. from crossroads, at Woodburn Presbyterian Church; standard iron post with bronze cap stamped "Prim Trav Sta No 65 1911 40 EB 1924"-----	620. 394
Reference mark, 5 ft. N. and 4 ft. E. from tablet, in root on S. side of 18-in. maple tree; copper nail and washer-----	620. 94

[Continued in Gillespie quadrangle, line 6]

5. From point 1.9 miles east of corner of Jersey, Macoupin, and Madison Counties along roads alternately north and east to road junction 1.7 miles south and 2.2 miles east from Brighton (by S. R. Archer in 1926)

[Continued from Alton quadrangle, line 6]

Brighton, 2.2 mi. S. and 2.0 mi. E. from, 0.25 mi. W. of center of sec. 33, T. 7 N., R. 9 W., 40 ft. E. of right-angle bend N. in rd., on S. side of private rd. E., 20 ft. E. of fence corner, in root on SW. side of 24-in. oak tree; copper nail and washer-----	605. 05
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BROWNFIELD QUADRANGLE

[Latitude 37°15'–37°30'; longitude 88°30'–88°45']

JOHNSON, MASSAC, AND POPE COUNTIES

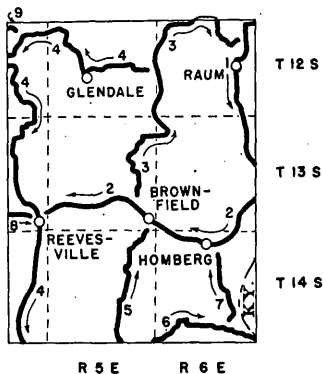


FIGURE 9.—Lines of leveling in Brownfield quadrangle.

1. From point 1 mile north and 1.5 miles west from Lusk along roads west 0.6 mile, thence generally south and southeast by way of Raun to point 2 miles northwest of Golconda (by S. R. Archer in 1913)

[Continued from Golconda quadrangle, line 1]

Raun, 2.4 mi. N. and 0.5 mi. E. from, near N¼ cor. NE¼ sec. 11, T. 12 S., R. 6 E., 175 ft. S. of turn to S. in rd., 12 ft. W. of W. fence line, 15 ft. S. of fence corner, in root on S. side of 18-in. oak tree; 40-penny spike-----	Feet 661. 38
Raun, 1.4 mi. N. and 0.5 mi. E. from, 0.3 mi. N. of Allen School, 200 ft. N. of S¼ cor. SE¼ sec. 11, T. 12 S., R. 6 E., in NW. angle of junction of T-rd. W., at fence line; standard iron post with bronze cap stamped "754"-----	752. 849
Raun, 0.8 mi. N. and 0.5 mi. E. from, about 800 ft. SW. of N¼ cor. SE¼ sec. 14, T. 12 S., R. 6 E., on W. side of rd., in front and 20 ft. N. of residence of Silas Bargar, in root on W. side of 24-in. oak tree; 40-penny spike-----	706. 72
Raun, 0.3 mi. N. of, near N¼ cor. NW¼ sec. 23, T. 12 S., R. 6 E., in SE. angle of junction of N-S. rd., near fence corner, in root on N. side of 14-in. hickory tree; 40-penny spike-----	687. 54
Raun, 50 ft. S. of store of R. R. Taylor, 500 ft. S. of center of NW¼ sec. 23, T. 12 S., R. 6 E., in front yard of house on W. side of rd., on NE. corner of concrete well curb; chiseled square-----	710. 91
Raun, 0.9 mi. S. of, near center of NW¼ sec. 26, T. 12 S., R. 6 E., on E. side of rd., at junction of T-rd. W. and private rd. E., 8 ft. E. of N-S. fence line, in root on W. side of 24-in. oak tree; copper nail and washer-----	715. 91

Raum, 1.8 mi. S. of, 125 ft. S. and 300 ft. E. from N $\frac{1}{4}$ cor. NW $\frac{1}{4}$ sec. 35, T. 12 S., R. 6 E., 150 ft. N. of residence of Joseph Robinson, in NE. angle of junction of private rd. E., at fence corner; standard iron post with bronze cap stamped "771"-----	Feet 770. 333
Raum, 2.1 mi. S. of, 700 ft. S. and 500 ft. E. from center of NW $\frac{1}{4}$ sec. 35, T. 12 S., R. 6 E., in NW. angle of junction of T-rd. W., in root on E. side of 8-in. oak tree; copper nail and washer-----	741. 15
Raum, 3.0 mi. SE. of, near N $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 2, T. 13 S., R. 6 E., 20 ft. S. of crossing of township line, on W. side of rd., in root on W. side of 12-in. walnut tree; copper nail and washer-----	435. 40
Raum, 3.5 mi. SE. of, about 650 ft. W. of E $\frac{1}{4}$ cor. sec. 2, T. 13 S., R. 6 E., on half-section line, at T-rd. W., at NE. end of small plank drain, on stone; chiseled square-----	494. 98
Raum, 4.1 mi. SE. of, near SW. cor. sec. 1, T. 13 S., R. 6 E., 5 ft. N. of section line, on E. side of rd., at junction of private rd. W., in fence corner, in root on W. side of 30-in. oak tree; copper nail and washer-----	418. 57
Raum, 5.0 mi. SE. of, 3.0 mi. NW. of Golconda, near E $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 11, T. 13 S., R. 6 E., 90 ft. N. of junction of rd. SW., on W. side of rd., at fence line; standard iron post with bronze cap stamped "441"-----	440. 215

[Continued in Golconda quadrangle, line 2]

2. From point about 1 mile southwest of Golconda alternately southwest and northwest along Illinois Central Railroad to Reevesville (by S. R. Archer in 1913)

[Continued from Golconda quadrangle, line 2]

Golconda, 2.3 mi. SW. of, 30 ft. S. of milepost R. 14-G. 2, 90 ft. S. of crossing of private rd., on top of E. end of stone R. R. culvert; chiseled square-----	359.43
Golconda, 3.1 mi. SW. of, 2.2 mi. NE. of Homberg, 0.2 mi. N. of S $\frac{1}{4}$ cor. sec. 35, T. 13 S., R. 6 E., 200 ft. S. of crossing of private rd., in front of residence of S. B. White, in stone R. R. culvert G R 151.26; aluminum tablet stamped "394"-----	393. 350
Homberg, 2.0 mi. NE. of, on SE. side of track, on N. side of township-line rd., on top of E. end of stone R. R. culvert; chiseled square--	405. 74
Homberg, 0.9 mi. NE. of, opposite and 5 ft. W. of milepost R. 12-G. 4, 10 ft. W. of Homberg sta. board, on NW. side of track, at small drain from N., on projecting rock; chiseled square-----	393. 29
Homberg, 0.4 mi. E. of sta., 200 ft. W. of crossing of private rd., on N. side of track, on top of stone R. R. culvert G R 149.60; chiseled square-----	364. 98
Homberg, at NE. corner of sta. platform, in top of plank curb; copper nail and washer-----	369. 03
Homberg, 0.3 mi. NW. of, 3.1 mi. SE. of Brownfield, 240 ft. N. of cattle guard, at rear of house on S. side of track, in SE. corner of stone R. R. culvert G R 148.80; aluminum tablet stamped "361"-----	360. 298
Brownfield, 2.2 mi. SE. of, 400 ft. E. of crossing of private rd., on top of S. end of stone culvert G R 147.86; chiseled square-----	349. 55
Brownfield, 1.2 mi. SE. of, 1,050 ft. S. of sta. board, 800 ft. N. of milepost R. 9-G. 7, on W. side of track, on top of N. end of stone culvert G R 146.85; chiseled square-----	348. 33

Brownfield, 600 ft. SE. of sta., on S. side of rd. crossing, on top of W. end of R. R. culvert G R 145.80; chiseled square-----	<i>Feet</i> 348. 28
Brownfield, in front of sta.; top of rail-----	348. 1
Brownfield, 0.5 mi. NW. of, 400 ft. S. of rd. crossing, at trestle G R 145.17 over Flat Lick Branch, on W. side of track; top of fifth bolt N. of trestle number-----	347. 63
Brownfield, 1.1 mi. NW. of, 40 ft. E. of bend N. in rd., on section line, on N. side of track and rd., in root on W. side of 6-in. elm tree; copper nail and washer-----	346. 79
Brownfield, 2.0 mi. NW. of, 0.8 mi. NE. of Perkins, at W. end of R. R. bridge 143-64, on N. side of track, on guard rail; top of bolt head-----	348. 21
Perkins, about 0.2 mi. NE. of, at rd. crossing, on S. side of track, on E. side of rd., on top of stone culvert; chiseled square-----	345. 84
Perkins, in front of sta.; top of N. rail-----	349. 4
Perkins, 1.4 mi. W. of, 0.2 mi. E. of Dixon Springs Sta., at rd. crossing, on E. side of rd., on N. side of track, on top of W. end of stone R. R. culvert 141-38; chiseled square-----	362. 89
Dixon Springs Sta. (Renshaw), 500 ft. E. of sta., 900 ft. W. of E $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 29, T. 13 S., R. 5 E., on N. side of track, in top of N. end of stone culvert G R 141-21; aluminum tablet stamped "368"-----	367. 673
Dixon Springs Sta., in front of sta.; top of rail-----	378. 3
Dixon Springs Sta., 1.0 mi. NW. of, 1.6 mi. NE. of Reevesville, at bridge over Bay Creek, in NE. corner of guard rail; top of bolt-----	357. 15
Reevesville, one block W. of sta., at Methodist Episcopal Church, in SE. corner of churchyard, at property line corner; standard iron post with bronze cap stamped "351" ³⁷ -----	350. 476
3. From point 1.1 miles northwest of Brownfield alternately northwest and northeast along roads to Eddyville, thence alternately northeast and southeast to road junction 1.4 miles north and 0.5 mile east from Raum (by S. R. Archer in 1913)	
Brownfield, 1.4 mi. NW. of, 0.6 mi. S. of Shedville School, near E $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 26, T. 13 S., R. 5 E., in SW. angle of cross-roads, at fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 9 1913 396" ³⁸ -----	395. 602
T. 13 S., R. 5 E., about 500 ft. E. of W $\frac{1}{4}$ cor. NW $\frac{1}{4}$ sec. 24, at N. end of jog in rd. to E. of N.-S. section line, on S. side of rd., in root on N. side of 30-in. oak tree; copper nail and washer-----	400. 96
T. 13 S., R. 5 E., at center of sec. 14, at junction of second-class rd. N., 12 ft. SE. of fence corner, 11 ft. NE. of 6-in. walnut tree, 15 ft. S. of mail box of J. A. Cletcher, 2 ft. S. of S. wagon track, on top of stone marking center of section; chiseled square-----	360. 56
T. 13 S., R. 5 E., 0.25 mi. W. of SE. cor. sec. 11, at turn N. in rd. from E.-W. section line, 8 ft. N. of section line, on E. side of rd., in root on W. side of triple-fork walnut tree; copper nail and washer-----	600. 08
Rock, 0.3 mi. S. thence 0.2 mi. E. from, near S $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 1; T. 13 S., R. 5 E., 15 ft. E. of junction of E.-W. rd., on N. side of rd., at fence line; standard iron post with bronze cap stamped "1913 650"-----	649. 270

³⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "F 111 1935," elevation 349.566 ft.

³⁸ In 1940 it was reported that this bench mark had been removed, probably by road improvement.

52 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

T. 13 S., R. 5 E., 115 ft. W. of SE. cor. sec. 1, 150 ft. E. of residence of Matthew Sistler, on N. side of rd., in root on S. side of 15-in. hickory tree; copper nail and washer-----	Feet 696. 22
Rising Sun, 0.8 mi. NW. of, 5.7 mi. SE of Glendale, W. of center of SE¼ sec. 6, T. 13 S., R. 6 E., in SW. angle of rd. fork, 3 ft. above level of rd., on sandstone rock; chiseled square-----	651. 46
Glendale, 4.6 mi. SE. of, about 300 ft. NW. of SE. cor. sec. 36, T. 12 S., R. 5 E., 90 ft. SE. of rd. fork at ford of Quarrel Creek, 55 ft. SE. of ford, at E. rd. fence line; standard iron post with bronze cap stamped "497"-----	495. 836
T. 12 S., R. 6 E., about 625 ft. E. of NW. cor. sec. 31, at crossing of E.-W. section line, at private rd. E., in SW. angle of junction of fourth-class rd. W., at fence line, in root on E. side of 6-in. gum tree; copper nail and washer-----	586. 36
T. 12 S., R. 6 E., 0.3 mi. W. of center of sec. 30, in SE. angle of junction of T-rd. E. on half-section line, at fourth-class rd. W., in root on NW. side of 18-in. oak tree; copper nail and washer-----	605. 72
T. 12 S., R. 6 E., about 500 ft. E. of NW. cor. sec. 30, at S. edge of timber, 40 ft. SE. of crossing of branch, on E. side of rd., at crossing of E.-W. section line, in root on W. side of 30-in. oak tree; copper nail and washer-----	548. 10
T. 12 S., R. 6 E., 500 ft. E. of W¼ cor. SW¼ sec. 19, at junction of second-class rd. SW., on E. side of rd., on N. side of branch, at fence line, in root on W. side of 24-in. oak tree; copper nail and washer-----	519. 98
Glendale, 4.5 mi. E. of, 3.0 mi. SW. of Eddyville, near E¼ cor. sec. 24, T. 12 S., R. 5 E., at junction of private rd. E., in NW. angle of junction of T-rd. W. to Glendale, at fence line; standard iron post with bronze cap stamped "515"-----	514. 634
Eddyville, 1.8 mi. SW. of, 100 ft. E. of W¼ cor. NW¼ sec. 18, T. 12 S., R. 6 E., on E. side of rd, 20 ft. S. of junction of T-rd. W., at residence of Tom Palmer, in front of gate to front yard, in root on W. side of 6-in. catalpa tree; copper nail and washer-----	667. 28
Eddyville, 0.8 mi. SW. of, near center of sec. 7, T. 12 S., R. 6 E., 50 ft. N. of private rd. W. on half-section line, on W. side of rd., on large flint rock; chiseled square-----	609. 30
Eddyville, 0.3 mi. S. of, 650 ft. E. of N¼ cor. NE¼ sec. 7, T. 12 S., R. 6 E., 750 ft. S. of junction of rd. SE., on W. side of rd., at fence line; standard iron post with bronze cap stamped "682" (recovered in 1923)-----	681. 436
Eddyville, 0.3 mi. S. thence 0.4 mi. E. from, 400 ft. S. of NW. cor. sec. 8, T. 12 S., R. 6 E., 15 ft. N. of center of junction of T-rd. SE., on rock outcrop; chiseled square-----	617. 50
Eddyville, 0.3 mi. S. thence 0.9 mi. E. from, near N¼ cor. sec. 8, T. 12 S., R. 6 E., in SE. angle of crossing of private rds. N. and S., in root on N. side of 12-in. oak tree; copper nail and washer--	606. 23
[Jogs into Harrisburg quadrangle, line 3]	
Raum, 2.5 mi. NW. of, 425 ft. S. of center of NW¼ sec. 10, T. 12 S., R. 6 E., on W. side of rd., 440 ft. S. of second-class rd. W., at private rd. E., inside fence, in root on W. side of 14-in. gum tree; copper nail and washer-----	460. 30
Lusk Creek, at Rose Ford; surface of water Oct. 25, 1913-----	378. 3

Raum, 1.9 mi. NW. of, near E $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 10, T. 12 S., R. 6 E., 120 ft. S. of ford across Lusk Creek, in NE. angle of rd. fork, on W. bank of branch from S., in root on NW. side of 24-in. elm tree; copper nail and washer-----	<i>Feet</i> 380. 32
Raum, 1.4 mi. N. of, near center of NW $\frac{1}{4}$ sec. 14, T. 12 S., R. 6 E., 100 ft. SW. of residence of Joseph Buchanan on NW. side of rd., 15 ft. N. and 50 ft. E. from NE. corner of barn, in fence line, in root on SE. side of 14-in. oak tree; copper nail and washer-----	668. 55
4. From road junction 4.5 miles east of Glendale along roads generally west to Glendale, thence northwest, west, and southwest to Simpson, thence southeast and southwest to Grantsburg, thence southeast and southwest along Illinois Central Railroad to Round Knob (by S. R. Archer in 1913-14)	
Glendale, 3.3 mi. E. of, near S $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 23, T. 12 S., R. 5 E., in NE. angle at turn to N. in rd., 435 ft. W. of residence of Jess Davidson, at fence line, in root on S. side of 14-in. oak tree used as corner fence post; copper nail and washer-----	467. 98
Glendale, 2.4 mi. E. of, near E $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 22, T. 12 S., R. 5 E., in SW. angle of crossroads, in trunk between forks of 4-in. double oak tree; copper nail and washer-----	464. 41
Glendale, 1.9 mi. E. of, just NE. of center of sec. 22, T. 12 S., R. 5 E., 150 ft. E. of ford of branch from N., in NW. angle of junction of T-rd. N., in root on S. side of 24-in. maple tree; copper nail and washer-----	394. 33
Glendale, 1.3 mi. E. of, at crossing of N.-S. section line between secs. 21 and 22, T. 12 S., R. 5 E., on N. side of rd., 4 ft. E. of 24-in. oak tree, 18 in. W. of 12-in. hickory tree, on pointed limestone rock; highest point-----	388. 12
Glendale, 0.5 mi. NE. of, near N $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 21, T. 12 S., R. 5 E., in NE. angle of junction of rd. N., in root on S. side of 24-in. locust tree with three forks; copper nail and washer-----	390. 78
Glendale, 100 ft. SW. of post office, 500 ft. N. and 600 ft. E. from SW. cor. sec. 21, T. 12 S., R. 5 E., at E. end of steel bridge over Hayes Creek, in top of N. abutment; aluminum tablet stamped "389"-----	388. 013
Glendale, 1.3 mi. NW. of, 500 ft. N. of S $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 17, T. 12 S., R. 5 E., 450 ft. N. of junction of private rd. E., 240 ft. S. of stream crossing, on W. side of rd., inside fence, in root on W. side of 18-in. gum tree; copper nail and washer-----	393. 01
Glendale, 1.6 mi. NW. of, 650 ft. N. of center of SE $\frac{1}{4}$ sec. 17, T. 12 S., R. 5 E., at bend NW. in rd., on N. side of junction of private rd. NE., on N.-S. quarter-section line, at fence line, in root on S. side of 4-in. tree; copper nail and washer-----	433. 00
Glendale, 2.5 mi. NW. of, near E $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 18, T. 12 S., R. 5 E., at rd. fork, at W. abutment of steel bridge over Bay Creek, in top of N. end of stone bridge seat; aluminum tablet stamped "392"-----	391. 206
Glendale, 3.7 mi. NW. of, 4.5 mi. NE. of Simpson, near W $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 7, T. 12 S., R. 5 E., at junction of rd. NW., 125 ft. W. of church, in center of rd., in root on S. side of 15-in. oak tree; copper nail and washer-----	523. 69

Simpson, 4.0 mi. NE. of, 0.7 mi. NE. of Simpson Springs School, 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 7, T. 12 S., R. 5 E., 0.2 mi. E. of Johnson-Pope county line, at jog in rd. to S. near quarter-section line, 100 ft. W. of bend to W., on N. side of rd., in front of residence of William Griscom, in root on W. side of 24-in. oak tree; copper nail and washer-----	Feet 581.08
Simpson, 2.2 mi. NE. of, 3.0 mi. NW. of Robbs, S. of center of sec. 11, T. 12 S., R. 4 E., 100 ft. S. of crossroads, on E side of rd. S., in red sandstone outcrop; aluminum tablet stamped "737" ³⁹ -----	736.045
Simpson, 1.1 mi. NE., of, 200 ft. N. and 370 ft. E. from W $\frac{1}{4}$ cor. sec. 14, T. 12 S., R. 4 E., 50 ft. W. of bend to W. in rd., on N. side of rd., at fence line, in root on S. side of 6-in. maple tree; copper nail and washer-----	400.39
[Jogs into Vienna quadrangle, line 1]	
Simpson, 0.8 mi. SE. of, 3.5 mi. NW. of Flatwoods, 0.5 mi. NW. of McKee School, just S. of center of NW $\frac{1}{4}$ sec. 23, T. 12 S., R. 4 E., in SE. angle of junction of rd. S., on S. side of rd., at fence line; standard iron post with bronze cap stamped "461" (recovered in 1915)-----	460.377
Flatwoods, 2.7 mi. NW. of, just NE. of SW. cor. sec. 23, T. 12 S., R. 4 E., 630 ft. N. of ford across Bay Creek, in NE. angle of crossing of fourth-class rd., on E. side of rd., in root on W. side of 24-in. oak tree; copper nail and washer-----	437.83
Flatwoods, 1.8 mi. NW. of, 0.2 mi. NW. of point where rd. crosses S. side of sec. 26, T. 12 S., R. 4 E., 50 ft. W. of bend SE. in rd., about 500 ft. SE. of point where rd. leaves N-S. line, 50 ft. W. of point where rd. enters timber, on S. side of rd., on sandstone outcrop; chiseled square-----	399.90
Flatwoods, 0.5 mi. N. of, 310 ft. S. of N $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 36, T. 12 S., R. 4 E., 60 ft. S. of rd. fork, on E. side of rd., in root on W side of 24-in. oak tree; copper nail and washer-----	486.71
Flatwoods, at store and schoolhouse, 460 ft. S. of N $\frac{1}{4}$ cor. NW $\frac{1}{4}$ sec. 1, T. 13 S., R. 4 E., in SE. angle of crossroads, at fence line; standard iron post with bronze cap stamped "526" ⁴⁰ -----	525.732
Flatwoods, 0.2 mi. S. of, near center of NW $\frac{1}{4}$ sec. 1, T. 13 S., R. 4 E., at rd. fork, in triangular grass plot, on stone; chiseled square--	528.01
Flatwoods, 1.3 mi. SW. of, 2.4 mi. NE. of Grantsburg, about 650 ft. N. of center of sec. 2, T. 13 S., R. 4 E., at T-rd. S., in center of rd., in root on S. side of 14-in. oak tree; copper nail and washer-----	527.86
Grantsburg, 1.3 mi. N. of, 200 ft. E. of cor. secs. 2, 3, 10, and 11, T. 13 S., R. 4 E., in SW. angle at fourth-class rds. S. and W., 250 ft. E. of house on S. side of rd., in root on W. side of 24-in. oak tree; copper nail and washer-----	442.22
Grantsburg, 0.5 mi. N. of, about 800 ft. E. of W $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 11, T. 13 S., R. 4 E., on S. side of private rd. E. on quarter-mile line, on E. side of main rd., in root on NE. side of 7-in. elm tree; copper nail and washer-----	357.06

³⁹ It has been reported that this bench mark was reset 49 ft. S. 71° 30' E. from this location, at the same elevation.

⁴⁰ In 1940 it was reported that this bench mark had been moved 21 ft. south of this position and reset at an elevation 0.054 ft. higher than that originally determined. The figures given represent the new elevation.

Grantsburg, at E. abutment of steel highway bridge over Bay Creek, in top of N. end of bridge seat; aluminum tablet stamped "360" ⁴¹ -----	<i>Feet</i> 359.241
Grantsburg, 0.8 mi. S. of, 3.3 mi. NW. of Reevesville, just N. of S $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 14, T. 13 S., R. 4 E., at NW. corner of steel bridge G136-21 over Big Bay Creek; top of W. end of N. steel girder-----	360.39
Reevesville, 1.9 mi. NW. of, just E. of W $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 26, T. 13 S., R. 4 E., at rd. crossing, on W. side of track, on N. side of rd.; top of N. end of drain under rd.-----	383.84
Reevesville, 0.6 mi. NW. of, about 650 ft. SE. of N $\frac{1}{4}$ cor. sec. 36, T. 13 S., R. 4 E., near center of W. leg of wye of tracks at junction of main line and Golconda branch of I. C. R. R., at steel culvert G 138-75; top of W. end of culvert-----	350.49
McNoel (R. R. name Big Bay), 350 ft. S. of sta., about 650 ft. W. of center of sec. 12, T. 14 S., R. 4 E., on W. side of track, at intersection of W. right-of-way line and E.-W. half-section line; standard iron post with bronze cap stamped "345" ⁴² -----	343.813
McNoel, 1.9 mi. SW. of, 50 ft. E. of rd. crossing, in E. right-of-way line, on S. side of rd., on top of rock; chiseled square-----	376.04
McNoel, 3.3 mi. SW. of, 1.8 mi. NW. of Round Knob; near center of sec. 26, T. 14 S., R. 4 E., 50 ft. S. of junction of T-rd. E., on W. side of rd., at fence corner; standard iron post with bronze cap stamped "372" (recovered by U. S. C. & G. S. in 1935)-----	370.954
Reference mark, at NE. corner of T-rd. E., in root on W. side of 24-in. oak tree; copper nail and washer-----	371.55
Round Knob, 1.2 mi. NW. of, 100 ft. S. of milepost B. 14-E. 145, on SW. corner of R. R. bridge G 145-02, on W. end of square bent; top of bolt head-----	350.40

[Continued in Paducah quadrangle, line 1]

5. From point 0.8 mile northwest of Midway generally northeast along roads by way of Temple Hill to point 0.5 mile northwest of Brownfield (by S. R. Archer in 1914)

[Continued from Paducah quadrangle, line 2]

Midway, 1.8 mi. NW. of, 3.4 mi. SW. of Temple Hill, 115 ft. N. and 650 ft. W. from SE. cor. sec. 27, T. 14 S., R. 5 E., on E. side of rd., at drain, in root on W. side of 14-in. hickory tree; copper nail and washer-----	472.99
Temple Hill, 2.8 mi. SW. of, 0.4 mi. W. of Point Pleasant School, about 300 ft. E. of W $\frac{1}{4}$ cor. sec. 26, T. 14 S., R. 5 E., 150 ft. E. of rd. fork, on NW. corner of concrete culvert; chiseled square-----	499.86
Temple Hill, 2.1 mi. SW. of, near E $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 22, T. 14 S., R. 5 E., 0.3 mi. N. of Massac-Pope county line, at SW. corner of junction of E.-W. rd., on top of S. end of stone culvert; chiseled square-----	542.35
Temple Hill, 0.2 mi. S. of, 0.25 mi. S. and 0.1 mi. W. from N $\frac{1}{4}$ cor. sec. 14, T. 14 S., R. 5 E., at right-angle turn to N. in rd., on N. side of rd. E., 10 ft. E. of fence corner; standard iron post with bronze cap stamped "528"-----	527.558

⁴¹ In 1929 this bench mark was reset in the southwest corner of the east abutment of the new bridge, at an elevation 0.017 ft. higher than that originally determined. The figures given represent the new elevation.

⁴² In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "H 111 1935," elevation 344.661 ft.

Temple Hill, in NW. angle of junction of T-rd. W., in root on S. side of 18-in. oak tree; copper nail and washer-----	<i>Feet</i> 538. 30
Temple Hill, 0.2 mi. NE. of, 3.2 mi. SW. of Brownfield, 300 ft. N. of S $\frac{1}{4}$ cor. sec. 11, T. 14 S., R. 5 E., 30 ft. S. of center of cross-roads, on E. side of rd. S., in fence line, in root on NW. side of 10-in. oak tree; copper nail and washer-----	496. 44
Brownfield, 2.5 mi. SW. of, at W $\frac{1}{4}$ cor. NE $\frac{1}{4}$ sec. 11, T. 14 S., R. 5 E., at bend to W. in rd., at private rd. E., in center of rd., on stone marking corner; chiseled square-----	428. 99
Brownfield, 1.4 mi. SW. of, at N $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 1, T. 14 S., R. 5 E., at T-rd. W., in center of rd., on stone marking corner; chiseled square-----	355. 84
Brownfield, 0.8 mi. SW. of, 500 ft. E. and 80 ft. NE. from S $\frac{1}{4}$ cor. sec. 36, T. 14 S., R. 5 E., on NW. side of rd., in front of house, in root on S. side of 30-in. poplar tree; copper nail and washer-----	349. 53
Brownfield, 0.2 mi. SE. of, near W $\frac{1}{4}$ cor. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 13 S., R. 5 E., at N. concrete abutment of steel highway bridge over Big Bay Creek, in top of W. end of bridge seat; aluminum tablet stamped "339"-----	338. 205

6. From point 2.2 miles northeast of Midway generally northeast 2.2 miles along roads to road junction 1.2 miles southeast of Rosebud, thence generally southeast to point 0.3 mile northwest of Bay City (by S. R. Archer in 1914)

[Continued from Paducah quadrangle, line 3]

Midway, 2.9 mi. NE. of, 1.2 mi. SE. thence 1.6 mi. SW. from Rosebud, at E $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 31, T. 14 S., R. 6 E., on E. side of rd., at bend NE., at fence corner, on stone marking corner; chiseled square-----	576. 64
Rosebud, 1.2 mi. SE. thence 0.5 mi. SW. from, at N $\frac{1}{4}$ cor. NW $\frac{1}{4}$ sec. 32, T. 14 S., R. 6 E., at bend N. in rd., in center of rd., on stone marking corner; chiseled square-----	578. 28
Rosebud, 1.2 mi. SE. of, 5.0 mi. NW. of Bay City, 0.25 mi. S. of center of sec. 29, T. 14 S., R. 6 E., on S. side of rd., opposite second-class rd. N., at fence line; standard iron post with bronze cap stamped "586"-----	585. 182
Bay City, 3.5 mi. NW. of, at S $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 28, T. 14 S., R. 6 E., on N. side of rd., on stone marking corner; chiseled square-----	538. 99
Bay City, 3.0 mi. NW. of, 100 ft. W. of S $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 27, T. 14 S., R. 6 E., 100 ft. W. of bend to S. in rd. and junction of private rd. N., in front yard of house on N. side of rd., in root on SW. side of 24-in. oak tree; copper nail and washer-----	505. 47
Bay City, 2.0 mi. NW. of, near W $\frac{1}{4}$ cor. NW $\frac{1}{4}$ sec. 35, T. 14 S., R. 6 E., in NE. angle of crossroads, in fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 6 1913 360" ⁴³ -----	359. 464
Bay City, 0.7 mi. NW. of, near E $\frac{1}{4}$ cor. sec. 35, T. 14 S., R. 6 E., at N. concrete abutment of steel bridge over Barren Creek, on top of W. end of wing wall; chiseled square-----	326. 94

[Continued in Golconda quadrangle, line 3]

⁴³ In 1940 it was reported that this bench mark had been removed and was lying nearby.

7. From point 2 miles northwest of Bay City northwest and north along road to point near Homberg (by S. R. Archer in 1914)

Bay City, 2.0 mi. NW. thence 1.4 mi. N. from, 2.7 mi. SE. of Tansill, about 650 ft. E. of center of NW $\frac{1}{4}$ sec. 26, T. 14 S., R. 6 E., at crossing of rd. and quarter-section line, on W. side of rd., opposite junction of clearing and timber line on E. side of rd., at foot of NE. corner of rock, on top of projection; chiseled square-----	Feet 346. 77
Tansill, 2.5 mi. SE. of, near N. side NW $\frac{1}{4}$ sec. 26, T. 14 S., R. 6 E., at Lackey Bridge over Big Bay Creek, on top of E. end of N. stone abutment; chiseled square-----	328. 81
Tansill, 2.0 mi. SE. of, at W $\frac{1}{4}$ cor. sec. 23, T. 14 S., R. 6 E., at center of bend N. in rd., at $\frac{1}{2}$ -in. galvanized pipe marking quarter corner; top of pipe-----	340. 44
Tansill, 0.8 mi. S. of, near E $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 15, T. 14 S., R. 6 E., in NW. angle of junction of T-rd. W.; standard iron post with bronze cap stamped "340"-----	339. 623
Tansill, 410 ft. N. of store, on top of W. end of concrete culvert; chiseled square-----	345. 60
Tansill, 1.1 mi. N. of, 0.6 mi. E. of Homberg, about 150 ft. N. and 600 ft. E. from S $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 3, T. 14 S., R. 6 E.; 150 ft. E. of junction of drainage ditches, at jog in private rd. to W., on N. bank of E. ditch, on S. side of rd. at bend N., in root on NW. side of 24-in. oak tree; copper nail and washer-----	358. 80

8. From point 0.5 mile north and 1.8 miles west from Reevesville along road east and southeast to Reevesville (by R. G. Clinite in 1915)

[Continued from Vienna quadrangle, line 5]

Reevesville, 1.9 mi. NW. of, near NW. cor. sec. 35, T. 13 S., R. 4 E., 200 ft. E. of crossroads, on S. side of rd., opposite Benton School, 100 ft. NW. of abandoned church, in root of 16-in. white-oak tree; copper nail and washer-----	492. 02
Reevesville, 0.7 mi. NW. of, about 800 ft. E. of NW. cor. sec. 36, T. 13 S., R. 4 E., on N. side of rd., just E. of summit of hill, 300 ft. SE. of farmhouse, 16 ft. E. of gate, in root of forked locust tree; copper nail and washer-----	508. 36

9. From point near Double Bridges School southeast 1 mile to crossroads about 2.2 miles northeast of Simpson (by S. R. Archer in 1923)

[Continued from Vienna quadrangle, line 8]

Robbs, 3.7 mi. NW. of, about 950 ft. S. and 425 ft. E. from NW. cor. sec. 11, T. 12 S., R. 4 E., on S. side of rd., 50 ft. E. of residence of Goin Harris, in root on N. side of 24-in. persimmon tree; copper nail and washer-----	621. 59
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BRUSSELS QUADRANGLE

[Latitude 38°45'–39°00'; longitude 90°30'–90°45']

CALHOUN AND JERSEY COUNTIES

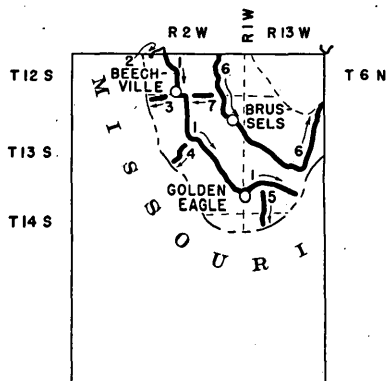


FIGURE 10.—Lines of leveling in Brussels quadrangle.

1. From point 2.4 miles south of Batchtown southeast along roads to Auer Landing on Mississippi River (by S. R. Archer in 1926)

[Continued from Hardin quadrangle, line 2]

Batchtown, 3.1 mi. SE. of, 1.7 mi. NW. of Beechville, 0.15 mi. N. of quarter corner between secs. 28 and 29, T. 12 S., R. 2 W., 90 ft. SW. of rd. junction, on SE. side of rd. SW., on W. side of private rd. S., in root on NE. side of 24-in. oak tree; copper nail and washer-----	Feet 502.34
Beechville, 0.8 mi. N. of, 60 ft. W. of quarter corner between secs. 28 and 33, T. 12 S., R. 2 W., at angle from S. to SW. in rd., on S. side of rd., at fence line, in root on NW. side of triple-forked elm tree; copper nail and washer-----	523.72
Beechville, in SW¼ sec. 33, T. 12 S., R. 2 W., 75 ft. N. and 30 ft. W. from junction of rd. W., 40 ft. N. and 15 ft. E. from NE. corner of store, 10 ft. N. and 1.5 ft. W. from fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 187 F 1925"-----	546.181
Beechville, 0.2 mi. S. of, 0.13 mi. NW. of S¼ cor. sec. 33, T. 12 S., R. 2 W., at junction of rd. SW. to Hastings Landing on Mississippi River, 100 ft. SE. of rd. fork, 50 ft. NW. of NW. corner of cooper shop, at top of bank, in root on N. side of 12-in. elm tree standing near small twin oak trees; copper nail and washer-----	557.45
Beechville, 0.2 mi. S. thence 0.6 mi. E. from, near SE. cor. sec. 33, T. 12 S., R. 2 W., on N. side of and 3.5 ft. above level of rd., in root on SE. side of 42-in. cottonwood tree; copper nail and washer-----	571.44
Beechville, 1.2 mi. S. and 0.6 mi. E. from, near SE. cor. sec. 3, T. 13 S., R. 2 W., 120 ft. N. and 45 ft. E. from junction of T-rd. E., in root on W. side of 10-in. boxelder tree; copper nail and washer--	522.37

Beechville, 1.7 mi. S. and 0.6 mi. E. from, near E $\frac{1}{4}$ cor. sec. 10, T. 13 S., R. 2 W., 35 ft. N. and 55 ft. W. from junction of rd. W., at SE. corner of fence enclosing cemetery lot of Walter Zimmerman, in concrete post; standard tablet stamped "9 A 1926"-----	<i>Feet</i> 621.087
Reference mark, 5 ft. S. and 20 ft. W. from tablet, in root on NW. side of 10-in. elm tree; copper nail and washer-----	620.89
Beechville, 3.1 mi. SE. of, 2.0 mi. by rd. NE. of Martin Landing on Mississippi River, in NW $\frac{1}{4}$ sec. 15, T. 13 S., R. 2 W., at junction of rd. SW., about midway along SW. side of triangle, in root on NW. side of 24-in. oak tree; copper nail and washer-----	619.97
Beechville, 3.7 mi. SE. of, 0.3 mi. E. of center of sec. 15, T. 13 S., R. 2 W., 30 ft. SW. of junction of rd. N., on N. side of woods rd. W., in root on N. side of 24-in. oak tree; copper nail and washer--	622.50
Beechville, 4.4 mi. SE. of, 0.12 mi. E. of W. cor. secs. 14 and 23, T. 13 S., R. 2 W., 240 ft. W. of entrance to cemetery, at W. end of short tangent of E.-W. rd. which is on section line, on S. side of rd., in root on E. side of forked oak tree; copper nail and washer----	627.14
Beechville, 4.9 mi. SE. of, 2.4 mi. along rd. SW. of Brussels, 0.2 mi. N. of center of sec. 23, T. 13 S., R. 2 W., 10 ft. N. and 50 ft. E. from junction of rd. NE., at edge of orchard, on embankment, in concrete post; standard tablet stamped "Prim Trav Sta No 189 F 1925"-----	641.625
Beechville, 5.7 mi. SE. of, 5.0 mi. NW. of Metter Landing on Mississippi River, in SE $\frac{1}{4}$ sec. 23, T. 13 S., R. 2 W., 0.2 mi. NW. of Liberty School, 100 ft. NW. of dwelling on NE. side of rd., at top of hill, in root on W. side of 10-in. oak tree; copper nail and washer-----	674.68
Metter Landing, 4.4 mi. NW. of, 0.1 mi. N. of quarter corner between secs. 25 and 26, T. 13 S., R. 2 W., 50 ft. SW. and 25 ft. SE. from junction of rd. SW., opposite SW. corner of triangular grass plot, in root on NW. side of 24-in. oak tree; copper nail and washer-----	646.36
Metter Landing, 3.9 mi. W. of, 0.1 mi. SE. of center of SW $\frac{1}{4}$ sec. 25, T. 13 S., R. 2 W., 280 ft. SE. of brick farmhouse, on SW. side of rd., in field, in root on N. side of lone 24-in. oak tree; copper nail and washer-----	647.40
Metter Landing, 3.1 mi. W. of, 0.2 mi. N. of Golden Eagle post office, about 300 ft. S. of NW. cor. sec. 31, T. 13 S., R. 1 W., in SE. angle of crossroads, 20 ft. S. of center line of rd. NE., 25 ft. E. of center line of N.-S. rd., 5 ft. S. of signpost, in concrete post; standard tablet stamped "Prim Trav Sta No 190 F 1925"-----	669.986
Reference mark, 80 ft. E. of tablet, on N. side of rd. NE., in root of 24-in. tree, easternmost of three oak trees; copper nail and washer--	671.69
Metter Landing, 2.4 mi. W. of, 0.15 mi. S. of center of sec. 30, T. 13 S., R. 1 W., 60 ft. E. of junction of private rd. NW., on N. side of rd., in root on E. side of 24-in. walnut tree; copper nail and washer-----	648.85
Metter Landing, 2.0 mi. W. of, 2.0 mi. N. of Dixon Landing, 2.4 mi. SE. of Centerville, near E $\frac{1}{4}$ cor. sec. 30, T. 13 S., R. 1 W., 110 ft. E. of crossroads, on N. side of rd., at SW. corner of timber, in root on E. side of 12-in. oak tree; copper nail and washer-----	642.71
Metter Landing, 1.4 mi. W. of, 0.1 mi. S. of center of sec. 29, T. 13 S., R. 1 W., 150 ft. E. of junction of second-class rd. S., 25 ft. E. of SW. corner of woods, 7 ft. N. of fence, in woods, on N. side of rd., in root on SE. side of 24-in. oak tree; copper nail and washer-----	592.30

Metter Landing, 0.9 mi. W. of, 0.25 mi. S. of quarter corner between secs. 28 and 29, 40 ft. N. and 25 ft. E. from crossroads, in root on E. side of 24-in. oak tree; copper nail and washer-----	Feet 604.60
Metter Landing, on Mississippi River, near NE. cor. fractional sec. 33, T. 13 S., R. 1 W., 220 ft. NE. of junction of rd. SW., 60 ft. N. of warehouse, at top of lower river bank, in root on N. side of 30-in. boxelder tree; copper nail and washer-----	434.90
Metter Landing, 0.6 mi. NE. of, near Auer Landing (formerly known as Point Landing) on Mississippi River, 115 ft. N. of small stone ice house, 820 ft. NE. of dwelling of Joseph Navar, 39 ft. above edge of water, 16 ft. below top of bluff rock; center of copper bolt leaded horizontally in solid rock (U. S. C. E. B. M. 47)-----	431.889
2. Near West Point Ferry on Mississippi River (by J. M. Lawson in 1926)	
[Connects with line 2 in Hardin quadrangle]	
West Point Ferry Landing, 360 ft. from E. bank of river, 130 ft. S. of new warehouse, 16 ft. SW. of two-story building, in NW. corner of garden; Mississippi River Comm. B. M. 73/2	
cap on iron pipe-----	445.900
copper bolt in tile at bottom of pipe-----	441.880
3. From Beechville west along road to point near Hastings Landing on Mississippi River (by J. M. Lawson in 1926)	
Beechville, 1.0 mi. SW. of, 0.6 mi. SE. of Hastings Landing, in NE $\frac{1}{4}$ sec. 5, T. 13 S., R. 2 W., 20 ft. S. and 10 ft. W. from crossroads, 70 ft. N. of creek crossing N.-S. rd., in fence corner, in root on S. side of 48-in. elm tree; copper nail and washer-----	447.13
Hastings Landing, 132 ft. around E. from NW. corner of bluff rocks below, 738 ft. below warehouse on property of E. B. Brown, 26 ft. E. of fence SW. from E. side of warehouse at landing, on N. side of corner W. from top of bank of small branch that empties into river below warehouse, in N. face of third large boulder at foot of hill; copper bolt (U. S. C. E. P. B. M. 42) ⁴ -----	442.558
Hastings Landing, 213 ft. back from E. bank of river, in Bond Hollow, 426 ft. above small branch, on property of Stephen Kethler, 262 ft. S. of frame house located on top of point above Bond Hollow, between fence and hickory tree; Mississippi River Comm. B. M. 72/2	
cap on iron pipe-----	451.440
copper bolt in tile at bottom of pipe-----	447.450
4. From road junction 3.1 miles southeast of Beechville southwest along road to point near Martin Landing on Mississippi River (by J. M. Lawson in 1926)	
Martin Landing, 1.0 mi. along rd. N. of, 0.35 mi. W. of NE. cor. fractional sec. 21, T. 13 S., R. 2 W., 200 ft. NE. of large white house on NW. side of rd., near top of hill, in fence line on NW. side of rd., in root on W. side of 24-in. twin elm tree; copper nail and washer-----	648.78

⁴ In 1926 the copper bolt was reported missing.

Martin Landing, in first valley above, 328 ft. back from E. bank of river, 49 ft. below (SE.) stone dwelling of Melhon Nolte, just above orchard of six apple trees, 23 ft. below log building; Mississippi River Comm. B. M. 71/2

cap on iron pipe ⁴⁵ -----	Feet 444.330
copper bolt in tile at bottom of pipe-----	440.350

5. From crossroads 2.4 miles southeast of Centerville south along road to Dixon Landing on Mississippi River (by J. M. Lawson in 1926)

Dixon Landing, 0.8 mi. N. of, 0.2 mi. S. of quarter corner between secs. 31 and 32, T. 13 S., R. 1 W., just S. of Twostory Hill, 20 ft. N. and 20 ft. W. from junction of rd. E., in woods, in root on S. side of 24-in. oak tree; copper nail and washer-----

594.73

Fruitland Landing, in first valley below, on N. side of rd. along left (N.) bank of river, at Dixon Landing, 262 ft. E. of dwelling of M. C. Dixon, 240 ft. W. of mouth of creek, 7 ft. SE. of large burr oak tree; Mississippi River Comm. B. M. 69/2

cap on iron pipe-----	434.680
copper bolt in tile at bottom of pipe-----	430.680

6. From Meppen southeast by way of Brussels to Auer Landing on Mississippi River, thence northeast to point 0.4 mile northeast of Marshall Landing on Illinois River (by J. M. Lawson in 1926)

[Continued from Hardin quadrangle, line 3]

Meppen, in NE. corner of yard of St. Joseph Catholic Church, 15 ft. S. and 40 ft. W. from junction of second-class rd. W., in concrete post; standard tablet stamped "9 L 1926"-----

469.911

Reference mark, 100 ft. S. of tablet, 80 ft. SE. of SE. corner of church, in root on NE. side of 48-in. maple tree; copper nail and washer-----

470.20

Meppen, 1.2 mi. S. of St. Joseph Catholic Church, 0.15 mi. S. of N¼ cor. sec. 35, T. 12 S., R. 2 W., 750 ft. S. of cross rd., 40 ft. N. and 10 ft. W. from bridge, in root on SE. side of elm tree; copper nail and washer-----

466.22

Meppen, 2.1 mi. S. of, 1.9 mi. NW. of junction of principal rds. in Brussels, 0.2 mi. E. of S¼ cor. sec. 35, T. 12 S., R. 2 W., 70 ft. N. and 25 ft. W. from junction of town-line rd. and rd. NW., on embankment, 10 ft. W. of barn, on N. side of leaning trunk of small maple tree; copper nail and washer-----

532.29

Brussels, 1.4 mi. NW. of, 0.25 mi. N. of quarter corner between secs. 1 and 2, T. 13 S., R. 2 W., 150 ft. N. and 20 ft. E. from junction of T-rd. E., on embankment, 3 ft. above level of rd., in root on W. side of 8-in. tree; copper nail and washer-----

507.19

Brussels, 0.6 mi. NW. of, near SW. cor. sec. 1, T. 13 S., R. 2 W., near Lutheran church and N. boundary of village, 30 ft. N. and 20 ft. E. from center of crossroads, in concrete post; standard tablet stamped "P T Sta No 183 F 1925"-----

492.212

Reference mark, 70 ft. NW. of tablet, 100 ft. N. and 25 ft. W. from crossroads, on E. side of cemetery, along fence, in root on SE. side of 30-in. maple tree; copper nail and washer-----

494.27

⁴⁵ In 1926 the cap on top of pipe was reported missing.

Brussels, 0.5 mi. SE. of, 800 ft. S. of Wittmond Hotel, 90 ft. SE. of junction of rd. E., 40 ft. SW. of cooper shop, on SW. side of rd., at stone bridge with iron handrail, on top of second concrete pier from N.; chiseled square-----	<i>Feet</i> 480. 86
Brussels, 1.0 mi. SE. of, 0.6 mi. NW. of Centerville, 0.1 mi. E. of W. cor. secs. 7 and 18, T. 13 S., R. 1 W., 40 ft. N. and 20 ft. E. from private rd. W., at foot of hill, on NE. corner of E. head wall of bridge; chiseled square-----	468. 69
Centerville, 30 ft. W. of rd. fork, 250 ft. S. and 750 ft. W. from center of sec. 18, T. 13 S., R. 1 W., 20 ft. N. and 100 ft. W. from NW. corner of store, 1 ft. E. of corner of corral, in concrete post; standard tablet stamped "10 L 1926"-----	536. 190
Reference mark, 160 ft. E. of tablet, 30 ft. E. of NE. corner of store, on NW. corner of concrete base of service sta.; chiseled square-----	538. 17
Centerville, 2.0 mi. SE. of, 1.5 mi. NW. of Calhoun Landing on Mississippi River, 0.15 mi. S. of W $\frac{1}{4}$ cor. sec. 21, T. 13 S., R. 1 W., 150 ft. SE. of rd. junction, on SW. side of rd., on embankment at top of hill, in root on NE. side of lone 18-in. hickory tree; copper nail and washer-----	512. 09
Calhoun Landing, 0.7 mi. NW. of, 1.3 mi. S. thence 0.2 mi. E. from Deer Plain, in SE $\frac{1}{4}$ sec. 21, T. 13 S., R. 1 W., on property of Charles Keener, on N. side of rd., 70 ft. NE. of power-line crossing, 60 ft. N. and 2 ft. E. from fence corner; U. S. C. E. iron post stamped "Ill River Survey 1903" (probably Auer triangulation sta.)-----	563. 694
Calhoun Landing, 0.4 mi. W. of, 0.6 mi. N. of Auer Landing, near NE. cor. sec. 28, T. 13 S., R. 1 W., 30 ft. S. and 20 ft. W. from junction of T-rd. S., 1 ft. NE. of fence corner, in root on N. side of lone 30-in. oak tree; copper nail and washer-----	522. 32
Calhoun Landing, 0.8 mi. N. of, 0.25 mi. N. of center of fractional sec. 22, T. 13 S., R. 1 W., 15 ft. NW. of center line of rd., 150 ft. S. of farmhouse, near barn, in root on E. side of 24-in. pecan tree; copper nail and washer-----	430. 98
Calhoun Landing, 1.5 mi. N. of, 1.9 mi. SW. of Marshall Landing on Illinois River, 0.25 mi. SE. of center of sec. 15, T. 13 S., R. 1 W., 400 ft. N. and 60 ft. E. from farmhouse, 20 ft. E. of rd., in root on W. side of 18-in. walnut tree; copper nail and washer-----	426. 84
Marshall Landing, 1.3 mi. SW. of, 0.2 mi. E. of quarter corner between secs. 10 and 15, T. 13 S., R. 1 W., at junction of second-class rd. E., 25 ft. E. of rd., in E-W. fence line, 10 ft. E. of corner post, on embankment, in root on E. side of lone 24-in. walnut tree; copper nail and washer-----	430. 73
Marshall Landing, 0.3 mi. S. of, near N. cor. secs. 10 and 11, T. 13 S., R. 1 W., 40 ft. S. of section line, 20 ft. E. of rd., 25 ft. W. of farmhouse, in root on SW. side of 36-in. maple tree, southernmost of three trees standing 15 ft. apart; copper nail and washer-----	427. 10
Marshall Landing on Illinois River, 0.3 mi. N. of S. cor. fractional secs. 2 and 3, T. 13 S., R. 1 W., 30 ft. S. of river bank, 6 ft. E. of barn, 30 ft. N. and 30 ft. E. from scales, at rd. junction, in triangular plot, in concrete post; standard tablet stamped "11 L 1926"-----	428. 220
Reference mark, 50 ft. NE. of tablet, 40 ft. S. of edge of water, just below top of river bank, in root on SW. side of 24-in. sycamore tree; copper nail and washer-----	422. 45

[Continued in St. Charles quadrangle, line 2]

7. From road junction 2.1 miles south of Meppen west along road
1.7 miles to road junction 0.2 mile south and 0.6 mile east from
Beechville (by J. M. Lawson in 1926)

Beechville, 0.2 mi. S. thence 1.6 mi. E. from, near S. cor. secs. 34 and
35, T. 12 S., R. 2 W., 15 ft. N. and 15 ft. E. from junction of T-rd.
S., 5 ft. E. of fence corner, in root on S. side of twin hedge tree;
copper nail and washer-----

Feet
499.26

CAIRO QUADRANGLE

[Latitude 37°00'–37°15'; longitude 89°00'–89°15']

ALEXANDER AND PULASKI COUNTIES

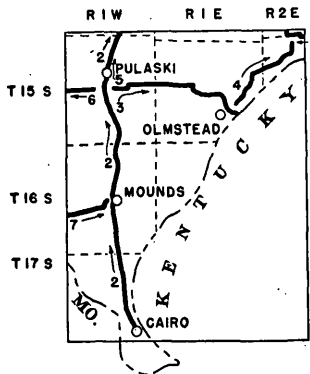


FIGURE 11.—Lines of leveling in Cairo quadrangle.

1. From 1.2 miles northwest of Grand Chain Landing on Ohio River along roads west and north to Grand Chain (by R. G. Clinite in 1915)

[Continued from La Center quadrangle, line 1]

Grand Chain, 0.7 mi. S. of, 2.5 mi. NW. of Grand Chain Landing, in NW. angle of junction of T-rd. N., on S. end of concrete head wall of drain; highest point in chiseled square (recovered in 1927)---

Feet
365.97

[Continued in Dongola quadrangle, line 1]

2. From Cairo generally north along Illinois Central Railroad (by H. S. Senseney in 1919)

Cairo, in square bounded by Fourteenth, Fifteenth, and Poplar Streets and Washington Avenue, on NW. side of customhouse, 23.6 ft. from NW. corner, 1.2 ft. below junction of sandstone and limestone, 3.1 ft. above surface of cement walk; small hole in center of copper bolt set vertically (U. S. C. E. B. M. 1; recovered by U. S. C. & G. S. in 1922)-----

317.680

Cairo, on Washington Avenue between Eighteenth and Nineteenth Streets, in E. side of building containing offices of trustees of Cairo City public property, 14.6 ft. from SE. corner, 4.7 ft. below lower surface of water table; hole in copper bolt set horizontally, with "U S B M" cut in stone nearby (U. S. C. E. B. M. 2; recovered by U. S. C. & G. S. in 1935)-----

319.048

Cairo, 1.6 mi. N. of, at R. R. bridge 362–8, on N. end of E. abutment; chiseled square-----

327.58

Cairo, 3.0 mi. N. of, at Cairo Junction, at R. R. bridge over highway, in E. end of N. abutment; aluminum tablet unstamped (recovered by U. S. C. & G. S. in 1922 and designated "E 11")-----

329.589

Cairo, 4.2 mi. N. of, 3.4 mi. S. of Mounds, 210 ft. N. of milepost C-360, at semaphore 3594, on E. side of track, on concrete base of battery box; chiseled square-----	<i>Feet</i> 329. 40
Mounds, 2.4 mi. S. of, 120 ft. S. of milepost C-359, at semaphore 3592, on E. side of track, on concrete base of battery box; chiseled square-----	329. 15
Mounds, 1.4 mi. S. of, 450 ft. S. of milepost C-358, at bridge over Cache River, in E. end of S. abutment; aluminum tablet unstamped (recovered by U. S. C. & G. S. in 1922 and designated "C 11")-----	332. 362
Mounds, 0.4 mi. S. of, 180 ft. S. of milepost C-357, at NE. corner of trestle 357-5; top of bolt-----	329. 42
Mounds, in front of sta.; top of E. rail-----	329. 2
Mounds, 0.4 mi. N. of, 2.6 mi. S. of Villa Ridge, 15 ft. E. of north-bound track, in concrete base of highway overpass; aluminum tablet unstamped (recovered in 1927; recovered also by U. S. C. & G. S. in 1922 and designated "B 11")-----	338. 182
Villa Ridge, 1.2 mi. S. of, at semaphore 3542, on concrete base; chiseled square-----	380. 22
Villa Ridge, in front of sta.; top of E. rail-----	391. 9
Villa Ridge, about 750 ft. N. of sta., on E. side of tracks, in S. end of W. side of concrete culvert under highway; aluminum tablet unstamped ⁴⁶ -----	376. 722
Villa Ridge, 1.6 mi. N. of, 2.1 mi. S. of Pulaski, at trestle 351-2, on E. end of N. abutment; chiseled square (recovered in 1927)-----	345. 27
Pulaski, 0.4 mi. SW. of, at S. end of tangent S. of sta., on E. side of tracks, on top of SW corner of concrete base of iron relay box; chiseled square (recovered in 1927)-----	344. 30
Pulaski, in front of sta.; top of E. rail-----	342. 4
Pulaski, 0.6 mi. NE. of, at trestle 348-3, in E. end of N. abutment; aluminum tablet unstamped (recovered by U. S. C. & G. S. in 1922 and designated "Z 10") ⁴⁶ -----	337. 703
Pulaski, 1.4 mi. NE. of, on E. side of track, opposite semaphore 3471, in SW. corner of base of iron relay box; top of bolt-----	341. 08

[Continued in Dongola quadrangle, line 9]

3. From point 0.2 mile north of Villa Ridge northwest along Illinois Central Railroad to point 0.9 mile southwest of Pulaski, thence east and southeast along roads to Caledonia Landing on Ohio River (by S. R. Archer in 1927)

U. S. C. & G. S. standard disk stamped "A 11 1922"-----	374. 297
Villa Ridge, 1.0 mi. N. of, at NE. corner of intersection of U. S. Highway 51 and E.-W. rd., on top of N. head wall of concrete culvert under rd. E.; chiseled square-----	356. 79
Villa Ridge, 1.9 mi. NW. of, 2.3 mi. S. of Pulaski, at concrete bridge on U. S. Highway 51, on top of W. parapet of S. abutment; chiseled square-----	345. 70
Pulaski, 1.9 mi. S. of, 700 ft. N. of milepost 351, at R. R. bridge 350-9, on top of E. end of N. concrete abutment; chiseled square-----	345. 30
Pulaski, 0.9 mi. SW. of, about 500 ft. E. of cor. secs. 15, 16, 21, and 22, T. 15 S., R. 1 W., 25 ft. S. and 75 ft. W. from crossing of E.-W. rd., 10 ft. S. of corner formed by right-of-way fence lines, on E. side of fence, in concrete post; standard tablet stamped "1927 348"-----	348. 169

⁴⁶ In 1927 it was reported that this bench mark had been destroyed.

Reference mark, 10 ft. N. of tablet, 90 ft. W. of rd. crossing, on S. side of rd., at fence corner, in root on NE. side of 10-in. sycamore tree; copper nail and washer-----	Feet 348.52
Pulaski, 0.9 mi. SW. thence 0.3 mi. E. from, about 800 ft. W. of quarter corner between secs. 15 and 22, T. 15 S., R. 1 W., at NE. corner of highway intersection, on top of N. concrete head wall of culvert under rd. E.; chiseled square-----	376.99
Pulaski, 0.9 mi. SW. thence 1.0 mi. E. from, near cor. secs. 14, 15, 22, and 23, T. 15 S., R. 1 W., 235 ft. E. of T-rd. N., on N. side of rd., at fence line, in root on SW. side of 24-in. wild-cherry tree; copper nail and washer-----	405.84
Pulaski, 0.9 mi. SW. thence 1.6 mi. E. from, 0.25 mi. S. of center of sec. 14, T. 15 S., R. 1 W., 30 ft. N. and 15 ft. W. from junction of rd. N. to Mount Pleasant School, at top of bank, in root on SW. side of 12-in. tree, easternmost of two oak trees 15 ft. apart; copper nail and washer-----	391.16
Pulaski, 0.9 mi. SW. thence 2.2 mi. E. from, 0.25 mi. N. of cor. secs. 13, 14, 23, and 24, T. 15 S., R. 1 W., 200 ft. E. of junction of T-rd. S., on N. side of rd., in root on SW. side of 30-in. ash tree; copper nail and washer-----	369.36
Pulaski, 0.9 mi. SW. thence 3.2 mi. E. from, about 800 ft. N. of SE. cor. sec. 13, T. 15 S., R. 1 W., at W $\frac{1}{4}$ cor. sec. 18, T. 15 S., R. 1 E., 28 ft. N. and 22 ft. W. from crossroads, in concrete post; standard tablet stamped "1927 437"-----	436.640
Reference mark, in SE. corner of crossroads, on top of N. end of E. head wall of concrete culvert under rd. S.; chiseled square-----	436.87
Pulaski, 0.9 mi. SW. thence 3.8 mi. E. from, at center of sec. 18, T. 15 S., R. 1 E., 150 ft. E. of crossroads, on N. side of rd., at SE. corner of yard of farmhouse, in root on SE. side of 8-in. persimmon tree; copper nail and washer-----	459.59
Pulaski, 0.9 mi. SW. thence 4.3 mi. E. from, 0.3 mi. W. of Center Church, near quarter corner between secs. 17 and 18, T. 15 S., R. 1 E., 135 ft. W. of T-rd. N., on N. side of rd., in fence line, in root on W. side of 15-in. elm tree; copper nail and washer-----	391.58
Pulaski, 0.9 mi. SW. thence 4.6 mi. E. from, 800 ft. W. of center of sec. 17, T. 15 S., R. 1 E., 60 ft. SW. of junction of T-rd. S., 45 ft. N. of N. end of Center Church, in root on N. side of 24-in. hickory tree; copper nail and washer-----	459.46
Pulaski, 0.9 mi. SW. thence 5.5 mi. E. from, 0.4 mi. NE. thence 2.9 mi. NW. from Olmsted, about 650 ft. S. and 250 ft. E. from W $\frac{1}{4}$ cor. sec. 16, T. 15 S., R. 1 E., about 650 ft. S. of rd. W., 190 ft. S. of abandoned rd. NW., on W. side of rd., in root on W. side of 6-in. persimmon tree; copper nail and washer-----	454.81
Olmsted, 0.4 mi. NE. thence 2.4 mi. NW. from, 0.2 mi. W. of quarter corner between secs. 16 and 21, T. 15 S., R. 1 E., 35 ft. S. and 20 ft. E. from junction of rd. E., 2 ft. SE. of 4-in. walnut tree, in concrete post; standard tablet stamped "1927 448"-----	447.390
Reference mark, 2 ft. NW. of tablet, 35 ft. S. and 20 ft. E. from rd. junction, in root on NW. side of 4-in. walnut tree; copper nail and washer-----	446.94
Olmsted, 0.4 mi. NE. thence 1.7 mi. NW. from, 200 ft. E. of cor. secs. 15, 16, 21, and 22, T. 15 S., R. 1 E., 200 ft. E. of T-rd. S., on side of rd., on W. bank of drain, in root on N. side of triple-forked willow tree; copper nail and washer-----	392.59

Olmsted, 0.4 mi. NE. thence 1.2 mi. NW. from, about 425 ft. SE. of N $\frac{1}{4}$ cor. sec. 22, T. 15 S., R. 1 E., 150 ft. SE. of point where N.-S. quarter line of sec. 22 crosses rd., at foot of hill, 60 ft. E. of small drain, on N. side of rd., in root on SE. side of 42-in. elm tree; copper nail and washer-----	Feet 368.08
Olmsted, 0.4 mi. NE. of Big Four R. R. sta., 1.1 mi. NW. of Caledonia Landing on Ohio River, at R. R. crossing, 80 ft. NE. of rd. junction, between track and rd. NE., in root on SW. side of 12-in. elm tree; copper nail and washer-----	349.37
Olmsted, 0.6 mi. SE. of, 2.9 mi. SW. of Levings, 0.6 mi. NW. of Caledonia Landing, on summit of hill, 175 ft. NE. of junction of T-rd. SE., 140 ft. SW. of junction of rd. NW., on SE. side of rd., 35 ft. SW. of SW. corner of Lutheran Church, 11 ft. SE. of NW. end of fence line between church and parsonage, on NE. side of fence, in concrete post; standard tablet stamped "1927 442"-----	441.375
Reference mark, on NE. side of concrete steps at entrance to church, on lower step; chiseled square-----	442.40
Caledonia Landing, 300 ft. below, 25-ft. below small branch running off hill, 40 ft. from foot of hill, 100 ft. above hand ferry landing, 25 ft. above ferryman's cabin, on land of G. W. Hathaway, in 18-by 18-in. concrete slab on right bank; U. S. C. E. B. M. 7 cap on 4-in. pipe-----	317.240
bolt in slab-----	313.200
4. From road junction 0.6 mile southeast of Olmsted generally north-east along roads by way of Ohio School to Grand Chain (by S. R. Archer in 1927)	
Levings, 2.4 mi. SW. of R. R. sta., about 300 ft. W. of center of sec. 23, T. 15 S., R. 1 E., 75 ft. NE. of junction of rd. W., on SE. side of rd., in root on E. side of 14-in. persimmon tree; copper nail and washer-----	419.16
Levings, 1.6 mi. SW. of, about 650 ft. NW. of cor. secs. 13, 14, 23, and 24, T. 15 S., R. 1 E., 210 ft. N. of point where E.-W. line between secs. 14 and 23 crosses rd., on W. side of rd., in root on SW. side of 8-in. walnut tree; copper nail and washer-----	460.06
Levings, 1.0 mi. S. of, about 0.2 mi. W. of center of sec. 13, T. 15 S., R. 1 E., 150 ft. N. of junction of rd. E., on W. side of rd., in fence line, in root on W. side of 6-in. mulberry tree; copper nail and washer-----	475.60
Levings, 0.7 mi. S. of, at SE. corner of T-rd. E. to U. S. Dam 53, under rd. E.; top of S. end of drain pipe-----	474.4
Levings, 0.2 mi. SE. of sta., near center of SW $\frac{1}{4}$ sec. 12, T. 15 S., R. 1 E., 50 ft. NW. of rd. fork, on NE. side of rd. NW. to Levings, at fence line, in concrete post; standard tablet stamped "1927 475"-----	474.536
Reference mark, 125 ft. NE. of rd. fork, on N. side of rd., in root on N. side of 12-in. oak tree; copper nail and washer-----	477.88
Levings, 0.2 mi. SE. thence 0.8 mi. NE. from, about 0.2 mi. S. of W $\frac{1}{4}$ cor. sec. 7, T. 15 S., R. 2 E., 60 ft. S. and 160 ft. E. from cross-roads, in horse lot, in root on NW. side of 36-in. oak tree; copper nail and washer-----	398.06
Levings, 0.2 mi. SE. thence 1.7 mi. NE. from, 0.25 mi. E. of center of sec. 7, T. 15 S., R. 2 E., 30 ft. S. and 8 ft. W. from right-angle turn N. in rd., in root on NW. side of 24-in. maple tree; copper nail and washer-----	358.72

Levings, 0.2 mi. SE. thence 2.7 mi. NE. from, 1.7 mi. S. and 0.3 mi. E. from Grand Chain, 0.3 mi. S. of Ohio School, at quarter corner between secs. 5 and 8, T. 15 S., R. 2 E., 15 ft. N. and 50 ft. E. from junction of T-rd. N., 35 ft. E. of fence corner, in concrete post; standard tablet stamped "1927 334"-----	Feet 333.593
Grand Chain, 1.4 mi. S. and 0.3 mi. E. from, 0.25 mi. S. of center of sec. 5, T. 15 S., R. 2 E., at Ohio School, 70 ft. N. of junction of rd. NE., on W. side of rd., in root on SE. side of 48-in. oak tree; copper nail and washer-----	351.18
Grand Chain, 0.7 mi. S. thence 0.3 mi. E. from, near quarter corner between secs. 5 and 32, Tps. 14 and 15 S., R. 2 E., 70 ft. W. of junction of E.-W. rd., on N. side of rd., at fence line, in root on SW. side of 10-in. elm tree; copper nail and washer-----	385.09
[Connects with line 1 in Dongola quadrangle]	
5. From road crossing 0.9 mile southwest of Pulaski northwest along Illinois Central Railroad 1.6 miles (by S. R. Archer in 1927; spur line leveled twice)	
Pulaski, on E. side of track, 70 ft. S. of SE. corner of sta., 4 ft. SE. of SE. corner of railing around grass plot S. of sta., in root on W. side of 48-in. oak tree; copper nail and washer-----	341.66
Pulaski, 0.6 mi. NE. of, at R. R. bridge 348-3, in E. end of bridge seat of N. abutment; standard tablet stamped "1927 338"-----	338.109
6. From point on Illinois Central Railroad 0.9 mile southwest of Pulaski west 2.2 miles along road (by S. R. Archer in 1927)	
Pulaski, 0.9 mi. SW. thence 1.2 mi. W. from, 0.2 mi. S. thence 2.4 mi. E. from Sandusky, 0.5 mi. E. of Rife School, near cor. secs. 16, 17, 20, and 21, T. 15 S., R. 1 W., in NE. angle of crossroads, 8 ft. N. of fence corner, in root on SW. side of 12-in. catalpa tree; copper nail and washer-----	340.42
[Continued in Thebes quadrangle, line 1]	
7. From point 3 miles southwest of Mounds east and northeast along Illinois Central Railroad to Mounds (by S. R. Archer in 1927)	
[Continued from Thebes quadrangle, line 3]	
Cache, 1.5 mi. E. of, 420 ft. W. of milepost "Cairo 9 mi.," at W. edge of timber, 55 ft. N. of crossing of private rd., on E. side of rd., in root on E. side of 4-in. elm tree; copper nail and washer-----	321.17
Cache, 2.3 mi. E. of, 1.3 mi. SW. of Mounds, 70 ft. S. and 30 ft. E. from rd. crossing, 50 ft. SE. of rd. fork, on NE. side of dim rd. SE., in root on NE. side of 12-in. oak tree; copper nail and washer-----	317.47
Mounds, 0.8 mi. SW. of, at W. end of first curve W. of main line of R. R., 51.5 ft. N. of center of track, about 250 ft. below old rd. crossing, 180 ft. E. of point where track crosses junction of levees to N. and E., about 180 ft. below upper end of two-acre strip of cultivated land, 3 ft. from N. edge of borrow pit; top of 2-in. iron post (Board on Examination and Survey of Mississippi River 1908 B. M. 20 F)-----	322.925
Mounds, at NW. side of, at NE. corner of Catholic Cemetery, 20 ft. S. and 60 ft. W. from W. end of steel viaduct over track, in concrete post; standard tablet stamped "Prim Trav Sta No 111 F 1925 369"-----	368.867

CAMPBELL HILL QUADRANGLE

[Latitude 37°45'–38°00'; longitude 89°30'–89°45']

JACKSON, PERRY, AND RANDOLPH COUNTIES

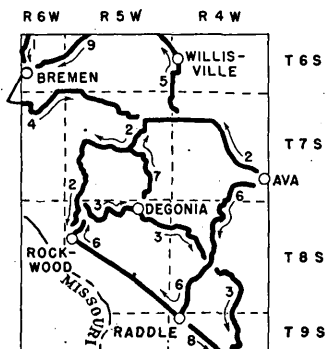


FIGURE 12.—Lines of leveling in Campbell Hill quadrangle.

1. From point 2 miles north of Bremen south and southeast along road 2.3 miles (by R. G. Clinite in 1912)

[Continued from Coulterville quadrangle, line 3].

Bremen, at store of H. Schroeder, 15 ft. E. of E. concrete base of porch post; standard iron post with bronze cap stamped "566" (recovered in 1915) -----

Feet
565.297

[Continued in Chester quadrangle, line 2]

2. From Ava northwest along Mobile & Ohio Railroad to Campbell Hill, thence along roads west and southwest to Rockwood (by J. M. Rawls in 1915; 4.5 miles of this line beginning with point 4 miles south of Willisville releveled by J. M. Perkins in same year)

[Connects with line 1 in Murphysboro quadrangle]

Campbell Hill, 50 ft. NE. of sta., N. of R. R. property line, on W. street line, near S. corner of Bank of Campbell Hill; standard iron post with bronze cap stamped "1915 552" -----

551.667

Campbell, 35 ft. SE. of sta., at center of sidewalk crossing; top of W. rail -----

551.1

Campbell Hill, 1.0 mi. NW. of, 4.0 mi. S. thence 1.1 mi. E. from Willisville, 0.7 mi. N. thence 3.1 mi. E. from Shiloh Hill, near center of sec. 8, T. 7 S., R. 4 W., 50 ft. SW. of junction of rd. N., 220 ft. SE. of schoolhouse, in root of large oak tree; spike -----

529.62

Willisville, 4.0 mi. S. of, 2.1 mi. NW. of Campbell Hill, near center of sec. 7, T. 7 S., R. 4 W., at junction of rd. N., 25 ft. N. of E. end of bridge over creek, on W. side of rd.; standard iron post with bronze cap stamped "1915 461"⁴⁸ -----

461.130

⁴⁸ Set by J. M. Perkins.

Willisville, 4.0 mi. S. thence 0.5 mi. W. from, near E $\frac{1}{4}$ cor. sec. 12, T. 7 S., R. 5 W., in NW. angle of junction of T-rd. W., near NW. fence corner, in root of hickory tree; copper nail and washer-----	Feet 498. 67
Willisville, 4.0 mi. S. thence 2.0 mi. W. from, 3.8 mi. SE. of Wine Hill, 0.7 mi. N. of Shiloh Hill, near center of sec. 11, T. 7 S., R. 5 W., at junction of rd. S., 6 ft. E. of SE. fence corner; standard iron post with bronze cap stamped "1915 519" ⁴⁰ -----	519. 192
Shiloh Hill, 1.0 mi. SW. of, in SE $\frac{1}{4}$ sec. 15, T. 7 S., R. 5 W., near junction of field rd. E., 20 ft. E. of rd., in root of small red-oak tree; nail-----	528. 63
Shiloh Hill, about 2 mi. SW. of, 2.1 mi. SE. of Leanderville, in NW $\frac{1}{4}$ sec. 22, T. 7 S., R. 5 W., 150 ft. E. of junction of rd. S., on N. side of rd., in root of large oak tree; nail-----	564. 90
Leanderville, 1.0 mi. S. of, 5.4 mi. N. of post office at Rockwood, in W $\frac{1}{2}$ sec. 20, T. 7 S., R. 5 W., at site of old house, 50 ft. E. of rd., 15 ft. S. of wire fence, in root of white-oak tree-----	500. 61
Rockwood, 2.2 mi. N. of, 1.2 mi. NW. of Ebenezer Church, near NE. cor. sec. 6, T. 8 S., R. 5 W., at junction of rd. E., on N. side of rd., in telephone pole; spike-----	600. 05
Rockwood, 0.7 mi. N. of, in NE $\frac{1}{4}$ sec. 7, T. 8 S., R. 5 W., at first bench below top of ridge, about 10 ft. E. of center line of rd., in root of small white-oak tree; copper nail and washer-----	569. 98
Rockwood, 200 ft. N. of post office, on SE. corner of stone culvert; chiseled mark-----	376. 31
Rockwood, in SE. part of, about 0.8 mi. SE. of post office, about 800 ft. below ravine, back of Liberty Island, at foot of Illinois bluffs, on river side of Grand Tower-Chester rd., in small narrow field, in fence corner; Mississippi River Comm. B. M. 28/1 cap on iron pipe-----	384. 240
flat stone at bottom of pipe-----	379. 165
3. From point 2.2 miles north of Rockwood along roads generally east and south to point 0.5 mile north of Jacob (by J. M. Rawls in 1915; releveled from Ebenezer Church to Degonia by J. M. Perkins in same year)	
Ebenezer Church, 60 ft. N. of, near S $\frac{1}{4}$ cor. sec. 5, T. 8 S., R. 5 W., at junction of rd. S. to Cora, on S. side of rd., near stone steps, on large rock; chiseled mark-----	673. 03
Ebenezer Church, 3.5 mi. W. of Degonia, near S $\frac{1}{4}$ cor. sec. 5, T. 8 S., R. 5 W., at junction of rd. S. to Cora, in churchyard, 6 ft. W. of front door; standard iron post with bronze cap stamped "1915 677" ⁵⁰ -----	676. 386
Degonia, 2.7 mi. W. of, in SW $\frac{1}{4}$ sec. 4, T. 8 S., R. 5 W., near junction of rd. S., in root of walnut tree; nail-----	697. 22
Degonia, 2.2 mi. W. of, near center of sec. 4, T. 8 S., R. 5 W., 60 ft. NW. of junction of rd. N., on bank, in root of peach tree; nail-----	704. 28
Degonia, 1.6 mi. W. of, near quarter corner between secs. 3 and 4, T. 8 S., R. 5 W., 50 ft. S. of rd., 250 ft. N. of Morgan residence, in root of red-oak tree; spike-----	676. 15
Degonia, 0.6 mi. W. of, in NE $\frac{1}{4}$ sec. 3, T. 8 S., R. 5 W., in NW. angle of junction of rd. N., in root of small oak tree; nail-----	704. 05

⁴⁰ Set by J. M. Perkins. In 1949 this bench mark was reported destroyed.⁵⁰ Set by J. M. Perkins.

Degonia, about 100 ft. S. of store, 3 ft. E. of fence in front of dwelling; standard iron post with bronze cap stamped "Prim Trav Sta No 10 1915 707"-----	<i>Feet</i> 706.249
Degonia, 1.3 mi. SE. of, in NE $\frac{1}{4}$ sec. 11, T. 8 S., R. 5 W., 200 ft. E. of junction of rd. S., on N. edge of steel sewer culvert; bolt-----	628.96
Degonia, 2.3 mi. SE. of, about 0.4 mi. W. of E $\frac{1}{4}$ cor. sec. 12, T. 8 S., R. 5 W., near junction of second-class rd. N., 50 ft. W. of small creek crossing, at foot of mail box, on stone; chiseled mark-----	571.00
Degonia, about 3.5 mi. SE. of, 3.3 mi. NW. of Dry Hill, in NE $\frac{1}{4}$ sec. 7, T. 8 S., R. 4 W., at T-junction of N.-S. rd., near NW. fence corner; standard iron post with bronze cap stamped "1915 685"-----	684.558
Dry Hill, 1.7 mi. NW. of, near center of sec. 17, T. 8 S., R. 4 W., at junction of second-class rd. S., on W. side of rd., in root of large oak tree; nail-----	702.04
Dry Hill, 0.2 mi. SE. of church, near center of sec. 21, T. 8 S., R. 4 W., 100 ft. E. of rd. junction, in cement foundation of red silo; iron bolt---	746.37
Dry Hill, about 1.5 mi. SE. of, about 5 mi. N. of Jacob, in NE $\frac{1}{4}$ sec. 27, T. 8 S., R. 4 W., in Austin Hollow, about 25 ft. SE. of crossroads, on large rock; chiseled mark-----	463.51
Jacob, 4.1 mi. N. of, in SE $\frac{1}{4}$ sec. 27, T. 8 S., R. 4 W., on W. side of rd., opposite rd. E., in root of beech tree; nail-----	399.73
Jacob, 3.6 mi. N. of, about 0.2 mi. E. of center of sec. 34, T. 8 S., R. 4 W., at mouth of Austin Hollow, 50 ft. N. of junction of NW.-SE. rd., on E. side of rd.; standard iron post with bronze cap stamped "1915 376"-----	375.167
Jacob, 2.5 mi. N. of, in NE $\frac{1}{4}$ sec. 3, T. 9 S., R. 4 W., 100 ft. S. of junction of rd. E., 200 ft. NW. of house, 20 ft. W. of rd., in root of pecan tree; nail-----	357.97
Jacob, 1.5 mi. NE. of, in SW $\frac{1}{4}$ sec. 11, T. 9 S., R. 4 W., at bridge over drainage ditch, in S. center edge of floor; bolt-----	356.36

[Continued in Altenburg quadrangle, line 1]

4. From sec. 3, T. 7 S., R. 6 W., along roads alternately east and south to Chester & Mount Vernon Railroad, thence northeast along railroad to Welge, thence east and southeast along road to point 0.7 mile north of Shiloh Hill (by J. M. Perkins in 1915)

[Connects with line 2 in Chester quadrangle]

Welge, opposite sta.; top of rail-----	408.9
Welge, 25 ft. NW. of sta., 2.8 mi. NW. of Wine Hill, 45 ft. N. of track, on E. side of rd.; standard iron post with bronze cap stamped "1915 410"-----	410.051
Wine Hill, 2.4 mi. NW. of, near SE. cor. sec. 36, T. 6 S., R. 6 W., at steel bridge over Marys River, in NE. corner; rivet-----	395.16
Wine Hill, in NE. corner of yard of St. Paul's Lutheran Church; standard iron post with bronze cap stamped "1915 593"-----	593.038
Wine Hill, 2.5 mi. SE. of, 0.7 mi. N. thence 1.3 mi. NW. from Shiloh Hill, about 0.2 mi. S. of N $\frac{1}{4}$ cor. sec. 10, T. 7 S., R. 5 W., at junction of T-rd. E., in root of oak tree; copper nail and washer-----	498.02

5. From point 4 miles south of Willisville generally north along road to Willisville, thence northwest along Mobile & Ohio Railroad 1.7 miles (by J. M. Perkins in 1915)

Willisville, 2.5 mi. S. of, 0.4 mi. S. of N. cor. secs. 1 and 6, T. 7 S., Rs. 4 and 5 W., at junction of T-rd. E., in root of giant oak tree; spike-----	444.86
--	--------

Willisville, 1.1 mi. S. of, at junction of E.-W. rd., in root of oak tree; copper nail and washer-----	Feet 517.44
Willisville, 100 ft. E. of M. & O. R. R. sta., on E. concrete support of watertank; chiseled square-----	502.19
[Connects with line 6 in Coulterville quadrangle]	
6. From Ava generally southwest along roads to Raddle, thence northwest along Missouri Pacific Railroad to Rockwood, thence northeast along road to Ebenezer School (by J. M. Perkins in 1915)	
[Connects with line 1 in Murphysboro quadrangle]	
Ava, 2.8 mi. SW. of, about 700 ft. S. of N $\frac{1}{4}$ cor. sec. 34, T. 7 S., R. 4 W., at junction of rd. S., in root of large red-oak tree; copper nail and washer-----	556.42
Ava, 3.9 mi. SW. of, 0.25 mi. W. of N $\frac{1}{4}$ cor. sec. 3, T. 8 S., R. 4 W., 0.3 mi. S. of bridge over Little Kincaid Creek, at junction of T-rd. W., in root of 18-in. oak tree; copper nail and washer-----	442.90
Ava, 5.1 mi. SW. of, in SE $\frac{1}{4}$ sec. 4, T. 8 S., R. 4 W., 130 ft. S. of steel bridge over Kincaid Creek, near letter box; standard iron post with bronze cap stamped "1915 443"-----	442.728
Ava, 6.1 mi. SW. of, in SW $\frac{1}{4}$ sec. 9, T. 8 S., R. 4 W., in front of farmhouse of James Korda, in mulberry tree; copper nail and washer----	673.97
Ava, 7.3 mi. SW. of, 4.2 mi. NE. of Raddle, 1.0 mi. NW. of church at Dry Hill, 0.2 mi. N. of SW. cor. sec. 16, T. 8 S., R. 4 W., near SW. fence corner; standard iron post with bronze cap stamped "1915 719"-----	718.652
Raddle, 2.0 mi. NE. of, 0.1 mi. N. of W $\frac{1}{4}$ cor. sec. 29, T. 8 S., R. 4 W., on S. side of E.-W. rd., 30 ft. E. of T-rd. S., near mail box; standard iron post with bronze cap stamped "1915 392"-----	391.453
Raddle, 1.0 mi. NE. of, about 0.3 mi. S. of NE. cor. sec. 31, T. 8 S., R. 4 W., on E. side of rd., 350 ft. SE. of large barn, in root of giant oak tree; copper nail and washer-----	364.68
Raddle, 40 ft. SE. of Missouri Pacific sta., 2.7 mi. SE. of Jones Ridge, 20 ft. NE. of track; standard iron post with bronze cap stamped "1915 366"-----	366.000
Jones Ridge, 35 ft. W. of rd. crossing, in root of maple tree; copper nail and washer-----	366.86
Jones Ridge, 40 ft. SW. of rd. crossing, 3.0 mi. SE. of Cora, on land of W. C. Dean, 10 ft. W. of maple tree, 1 ft. S. of fence; standard iron post with bronze cap stamped "1915 368" (recovered by U. S. C. & G. S. in 1935) ⁵¹ -----	367.381
Cora, 100 ft. NW. of R. R. sta., on W. side of rd., in twin elm tree; copper nail and washer-----	369.57
Cora, at rd. crossing, 1.8 mi. SE. of post office at Rockwood, 80 ft. W. of sta., on W. side of rd., 13 ft. S. of track; standard iron post with bronze cap stamped "1915 371" (recovered by U. S. C. & G. S. in 1935)-----	370.413
Rockwood, 1.4 mi. NE. of, 0.3 mi. NW. of Ebenezer Church, in SW $\frac{1}{4}$ sec. 5, T. 8 S., R. 5 W., at rd. junction, in gatepost; iron spike-----	642.11

⁵¹ In 1923 this bench mark was moved 14 feet south of this position and reset at the same elevation.

7. From Degonia generally north along roads to point 0.7 mile north of Shiloh Hill (by J. M. Perkins in 1915)

Degonia, 1.2 mi. N. of, near center of sec. 35, T. 7 S., R. 5 W., at junction of E.-W. rd., on E. side of rd., in root of oak tree; copper nail and washer-----	Feet 678. 80
Degoni, 1.9 mi. N. of, 0.25 mi. E. of quarter corner between secs. 25 and 36, T. 7 S., R. 5 W., at crossroads, near SW. fence corner; standard iron post with bronze cap-stamped "1915-634"-----	633. 804
Degonia, 3.0 mi. N. of, about 2 mi. S. of Shiloh Hill, near S $\frac{1}{4}$ cor. sec. 23, T. 8 S., R. 5 W., at German church and school, 20 ft. SE. of schoolhouse, in root of hickory tree; copper nail and washer-----	597. 97

8. From Raddle southeast along Missouri Pacific Railroad 3.2 miles (by J. M. Perkins in 1915)

Raddle, 1.1 mi. SE. of, 2.3 mi. NW. of Jacob, in SW $\frac{1}{4}$ sec. 5, T. 9 S., R. 4 W., 12.5 ft. W. of grade crossing, in root of large oak tree; copper nail and washer-----	358. 85
---	---------

[Connects with line 1 in Altenburg quadrangle]

9. From point 1.7 miles southwest of Steeleville southwest along Wabash, Chester & Western Railroad ⁶² 0.3 mile, thence southwest along roads to point 0.3 mile southwest of Bremen (by J. M. Perkins in 1915)

[Continued from Coulterville quadrangle, line 8]

Steeleville, 2.1 mi. SW. of, 3.7 mi. NE. of Bremen, about 0.2 mi. E. of center of sec. 19, T. 6 S., R. 5 W., at rd. junction, on W. end of N. side of parapet of concrete bridge; chiseled square-----	404. 45
Bremen, 2.2 mi. NE. of, in NE $\frac{1}{4}$ sec. 25, T. 6 S., R. 6 W., S. of intersection of N.-S. rd., in root of large oak tree; copper nail and washer-----	481. 32

[Connects with line 2 in Chester quadrangle]

⁶² Now the Chester & Mt. Vernon branch of the Missouri Pacific R. R.

CARBONDALE QUADRANGLE

[Latitude 37°30'–37°45'; longitude 89°00'–89°15']

JACKSON, JOHNSON, UNION, AND WILLIAMSON COUNTIES

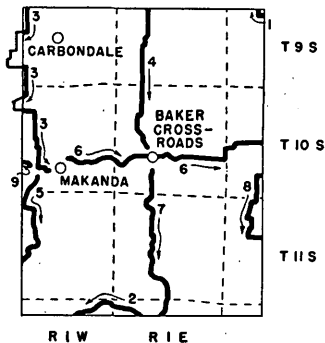


FIGURE 13.—Lines of leveling in Carbondale quadrangle.

1. West and north 0.4 mile along roads in northeast corner of quadrangle to point 1.7 miles south and 1.3 miles east from Fordville (by R. G. Clinite in 1911)

[Continued from Marion quadrangle, line 2]

T. 9 S., R. 2 E., near SE. cor. sec. 8, 1.3 mi. E. thence 2.0 mi. S. from Fordville, at turn from W. to N. in rd., opposite rd. E., 26 ft. SW. of center line of rd., 9 ft. N. of telephone pole; standard iron post with bronze cap stamped "455"⁶³ -----

Feet
454.937

[Continued in Herrin quadrangle, line 5]

2. From point 1.8 miles southeast of Saratoga along roads northwest and southwest to point 2.4 miles southwest of Saratoga (by Crawford Dickey in 1919)

[A jog from Dongola quadrangle, line 4]

Saratoga, 0.3 mi. SE. of, 0.4 mi. S. of NE. cor. sec. 1, T. 12 S., R. 1 W., in SW. angle of junction of T-rd. S., about 700 ft. E. of Saratoga Methodist Episcopal Church; standard iron post with bronze cap stamped "451" -----

446.460

Saratoga, 1.0 mi. SW. of, about 800 ft. E. of W¹/₄ cor. sec. 1, T. 12 S., R. 1 W., at S. end of E. abutment of steel bridge over Cache Creek, on concrete pillar; chiseled cross. -----

426.34

Saratoga, 2.2 mi. SW. of, in SE. corner of crossroads, on rock; chiseled cross -----

531.25

[Continued in Dongola quadrangle, line 4]

⁶³ In 1915 permission was granted to reset this bench mark.

3. From point 1.3 miles north and 1.8 miles west from Carbondale along roads generally south to point on Egyptian Trail 1.6 miles west of Makanda, thence east to Makanda (by H. H. Senseney in 1919; last three miles releveled by C. B. Schmeltzer in 1921)

[Connects with line 2 in Herrin quadrangle]

Carbondale, 1.8 mi. W. of, near NE. cor. sec. 19, T. 9 S., R. 1 W., 35 ft. S. of T-rd. N., in root of oak tree; copper nail and washer ⁶⁴ -----	Feet 396. 92
[Jogs into Alto Pass quadrangle, line 3]	
Carbondale, 2.0 mi. S. and 1.8 mi. W. from, in NW. cor. sec. 32, T. 9 S., R. 1 W., in SE. angle of junction of T-rd. S., in root of tree; copper nail and washer-----	439. 10
Carbondale, 3.0 mi. S. and 1.8 mi. W. from, near NE. cor. sec. 6, T. 10 S., R. 1 W., 20 ft. S. of junction of rd. W.; standard iron post with bronze cap stamped "466"-----	465. 645
[Jogs into Alto Pass quadrangle, line 4]	
Carbondale, 4.5 mi. S. and 1.8 mi. W. from, near E $\frac{1}{4}$ cor. sec. 7, T. 10 S., R. 1 W., at junction of T-rd. S., on N. side of rd.; standard iron post with bronze cap stamped "597"-----	597. 056
Carbondale, 5.7 mi. along Egyptian Trail S. of, near N $\frac{1}{4}$ cor. sec. 17, T. 10 S., R. 1 W., 100 ft. S. of junction of T-rd. W., on W. side of rd., in root of oak tree; copper nail and washer-----	602. 67
Carbondale, 7.3 mi. S. of, 1.6 mi. W. thence 1.5 mi. N. from Makanda, NE. of center of sec. 20, T. 10 S., R. 1 W., at point where old Egyptian Trail crosses Devil's Den, in W. end of S. abutment of bridge; aluminum tablet stamped "499" (recovered in 1921)-----	498. 604
Makanda, 1.6 mi. W. of, in SE $\frac{1}{4}$ sec. 29, T. 10 S., R. 1 W., at junction of rd. E. to Makanda, on W. side of Egyptian Trail, in root of maple tree; copper nail and washer (recovered in 1920)-----	693. 76
Makanda, 0.6 mi. W. of, near S $\frac{1}{4}$ cor. sec. 28, T. 10 S., R. 1 W., at rd. junction, on N. side of rd., in root of persimmon tree; copper nail and washer (recovered in 1921)-----	671. 30
Makanda, at Illinois Central R. R. bridge 316-3, in W. end of N. abutment; aluminum tablet (recovered in 1920 and stamped "1920 433"; also recovered in 1921)-----	432. 611

4. From point 1.3 miles south of Fredonia generally south along road to Baker Crossroads (by H. S. Senseney in 1919)

[Continued from Herrin quadrangle, line 6]

Fredonia, 2.1 mi. S. of, 5.7 mi. E. of Carbondale, 8.3 mi. N. of Baker Crossroads, 0.25 mi. E. of center of sec. 17, T. 9 S., R. 1 E., in SW. corner of crossroads, standard iron post with bronze cap stamped "411"-----	410. 867
Baker Crossroads, 6.9 mi. N. of, 0.25 mi. S. of center of sec. 20, T. 9 S., R. 1 E., in SW. angle of junction of T-rd. S., in root of maple tree; copper nail and washer-----	411. 33
Baker Crossroads, 5.6 mi. N. of, near N $\frac{1}{4}$ cor. sec. 32, T. 9 S., R. 1 E., in SE angle of crossroads; standard iron post with bronze cap stamped "441"-----	440. 748

⁶⁴ In 1935 this mark was reported destroyed.

Baker Crossroads, 4.6 mi. N. of, near N $\frac{1}{4}$ cor. sec. 5, T. 10 S., R. 1 E., in bend of rd., in root of sycamore tree; copper nail and washer-----	Feet 443.77
Baker Crossroads, 2.9 mi. N. of, 0.25 mi. S. of center of sec. 8, T. 10 S., R. 1 E., at junction of E-W. rd., on S. side of rd.; standard iron post with bronze cap stamped "442"-----	441.229
Baker Crossroads, 1.3 mi. NW. of, near N $\frac{1}{4}$ cor. sec. 20, T. 10 S., R. 1 E., in SW angle of crossroads, in root of oak tree; copper nail and washer-----	525.77
Baker Crossroads, 0.5 mi. N. of, near E $\frac{1}{4}$ cor. sec. 20, T. 10 S., R. 1 E., in NW angle of junction of T-rd. W., in root of oak tree; copper nail and washer-----	603.93
Baker Crossroads, 30 ft. S. and 20 ft. E. from crossroads, 3.6 mi. W. of Wolf Creek, in NW. cor. sec. 28, T. 10 S., R. 1 E.; standard iron post with bronze cap stamped "Prim Trav Sta No 36 1919 597" (recovered in 1920)-----	597.837
5. From point 1.6 miles west of Makanda southwest along Egyptian Trail 2.3 miles, thence east and south along roads to point on Illinois Central Railroad 2.5 miles northeast of Cobden, thence southwest along railroad (by R. G. Clinite in 1920)	
Makanda, 1.6 mi. W. thence 1.2 mi. SW. from, near S $\frac{1}{4}$ cor. sec. 2, T. 10 S., R. 1 W., 50 ft. W. of rd., 50 ft. S. of Clay Lick Creek, on rock; chiseled square-----	497.32
Makanda, 1.6 mi. W. thence 2.2 mi. SW. from, near SW. cor. sec. 5, T. 11 S., R. 1 W., on E. side of Egyptian Trail at right-angle turn, 60 ft. SE. of rd. junction; standard iron post with bronze cap stamped "1920 670"-----	669.716
Makanda, 3.2 mi. along Red Star Trail SW. of, 0.2 mi. S. and 0.25 mi. W. from NE. cor. sec. 8, T. 11 S., R. 1 W., near junction of private rd. E., on E. side of Red Star Trail, in root of 14-in. locust tree; copper nail and washer-----	622.22
Makanda, 5.0 mi. by rd. S. of, 2.5 mi. along I. C. R. R. NE. of Cobden, about 0.2 mi. NW. of SE. cor. sec. 17, T. 11 S., R. 1 W., 230 ft. NE. of milepost C-321, at N. corner of R. R. bridge 320-9, on concrete abutment; chiseled square-----	521.03
[Continued in Alto Pass quadrangle, line 5]	
6. From Makanda along roads generally east by way of Baker Crossroads to point 3.9 miles northeast of Wolf Creek (by R. G. Clinite in 1920)	
Makanda, about 1 mi. NE. of, in NE $\frac{1}{4}$ sec. 27, T. 10 S., R. 1 W., 250 ft. S. of rd. fork, on rock; chiseled square-----	432.34
Makanda, 2.3 mi. E. of, near center of sec. 26, T. 10 S., R. 1 W., 250 ft. E. of rd. junction, on N. side of rd., in root of 30-in. oak tree; copper nail and washer-----	666.70
Makanda, 3.6 mi. E. of, 3.1 mi. W. of Baker Crossroads, about 0.4 mi. N. of center of sec. 25, T. 10 S., R. 1 W., 30 ft. N. and 180 ft. E. from junction of T-rd. N., in boulder; aluminum tablet stamped "1920 575"-----	574.470
Baker Crossroads, 0.8 mi. W. of, about 0.25 mi. W. of S $\frac{1}{4}$ cor. sec. 20, T. 10 S., R. 1 E., on N. side of rd., 20 ft. E. of fence corner, in root of 12-in. maple tree; copper nail and washer-----	583.64

Baker Crossroads, 2.4 mi. E. of, 1.2 mi. W. of Wolf Creek, 0.25 mi. W. of S $\frac{1}{4}$ cor. sec. 23, T. 10 S., R. 1 E., 50 ft. E. of junction of T-rd. S., on N. side of rd., in root of 14-in. walnut tree; copper nail and washer-----	<i>Feet</i> 560.35
Wolf Creek, 0.25 mi. W. of, 0.25 mi. W. of N $\frac{1}{4}$ cor. sec. 25, T. 10 S., R. 1 E., 15 ft. S. and 20 ft. W. from junction of T-rd. N.; standard iron post with bronze cap stamped "1920 607"-----	606.718
Wolf Creek, 0.7 mi. N. and 0.5 mi. E. from, about 0.3 mi. S. of NE. cor. sec. 24, T. 10 S., R. 1 E., 30 ft. SW. of junction of rd. E., in root of 11-in. elm tree; copper nail and washer-----	586.44
Wolf Creek, 2.8 mi. NE. of, at cor. secs. 17, 18, 19, and 20, T. 10 S., R. 2 E., at center of crossroads, on stone marking section corner; chiseled square-----	520.67

[Connects with line 2 in Marion quadrangle]

7. From Baker Crossroads generally south along roads to point 1.4 miles west thence 2 miles southwest from Lick Creek (by R. G. Clinite in 1920)

Baker Crossroads, 1.0 mi. S. of, near SE. cor. sec. 29, T. 10 S., R. 1 E., at turn in rd., in root of 11-in. elm tree; copper nail and washer----	633.73
Baker Crossroads, 3.1 mi. S. of, 0.2 mi. W. of SE. cor. sec. 5, T. 11 S., R. 1 E., about 0.7 mi. NE. of Progress School, at Hiller farm, 45 ft. SE. of junction of rd. W.; standard iron post with bronze cap stamped "1920 747"-----	746.480
Baker Crossroads, 4.3 mi. S. of, near NE. cor. sec. 17, T. 11 S., R. 1 E., in SW. angle of junction of T-rd. W., in root of double cherry tree; copper nail and washer-----	777.75
Baker Crossroads, 5.5 mi. S. of, near SE. cor. sec. 17, T. 11 S., R. 1 E., on W. side of rd., on rock ledge; chiseled square-----	726.47
Baker Crossroads, 7.2 mi. S. of, 2.7 mi. NW. of Lick Creek, near E $\frac{1}{4}$ cor. sec. 29, T. 11 S., R. 1 E., 35 ft. NE. of rd. junction, 40 ft. E. of 36-in. oak tree, 1.5 ft. S. of fence; standard iron post with bronze cap stamped "1920 552"-----	552.320
Lick Creek, 1.4 mi. W. of, about 0.2 mi. S. of NW. cor. sec. 34, T. 11 S., R. 1 E., in SE. angle of junction of rd. S., 3.5 ft. W. of window in W. side of church and Masonic Hall, on rock; chiseled circle-----	569.62
Lick Creek, 1.4 mi. W. thence 1.4 mi. S. from, in SE $\frac{1}{4}$ sec. 4, T. 12 S., R. 1 E., in SW. angle of rd. fork, in root of 36-in. oak tree; copper nail and washer-----	537.45

[Continued in Dongola quadrangle, line 11]

8. From point in SW $\frac{1}{4}$ sec. 28, T. 10 S., R. 2 E., along roads west, southwest, and east to point in SW $\frac{1}{4}$ sec. 16, T. 11 S., R. 2 E., 1.8 miles west of Goreville (by R. G. Clinite in 1920)

[Continued from Marion quadrangle, line 3]

T. 10 S., R. 2 E., near center of SE $\frac{1}{4}$ sec. 29, 50 ft. S. of junction of third-class rd. S., near center line of rd., in root of 18-in. white-oak tree; copper nail and washer-----	620.67
T. 10 S., R. 2 E., about 0.3 mi. SE. of center of sec. 32, in NE. angle of T-junction of E-W. rd., in root of 14-in. ash tree; copper nail and washer-----	652.04

78 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

T. 11 S., R. 2 E., 0.25 mi. E. of NW. cor. sec. 8, 60 ft. E. of junction of T-rd. W., in field; standard iron post with bronze cap stamped "1920 695"-----	<i>Feet</i> 694.744
T. 11 S., R. 2 E., near center of sec. 8, 0.2 mi. S. of Wolf Creek School, 100 ft. S. of center line of T-rd. E., on E. side of rd., in base of 11-in. gum tree; copper nail and washer-----	710.51
T. 11 S., R. 2 E., near center of NW $\frac{1}{4}$ sec. 17, 100 ft. E. of Mount Joy Church, on E. side of rd., in root of 27-in. oak tree; copper nail and washer-----	791.01
T. 11 S., R. 2 E., near center of SW $\frac{1}{4}$ sec. 17, 2.7 mi. W. of Goreville, in NE. angle of junction of E.-W. rd., on rock; chiseled square-----	782.32
Goreville, 2.2 mi. W. of, in SE. angle of junction of T-rd. S., in root of 14-in. wild-cherry tree; copper nail and washer-----	773.37

[Continued in Marion quadrangle, line 4]

9. From point 1.6 miles west of Makanda northwest along Egyptian Trail 0.8 mile, thence west along road 0.4 mile (by C. B. Schmeltzer in 1921)

Makanda, 2.7 mi. NW. of, 6.3 mi. E. of Pomona, about 0.2 mi. N. of W $\frac{1}{4}$ cor. sec. 29, T. 10 S., R. 1 W., 20 ft. S. and 35 ft. E. from crossroads, in NW. corner of yard of Buncombe School, 120 ft. W. of well curb; standard iron post with bronze cap stamped "Prim Trav Sta No 150"-----	655.671
--	---------

[Continued in Alto Pass quadrangle, line 8]

CARLYLE QUADRANGLE

[Latitude 38°30'–38°45'; longitude 89°15'–89°30']

BOND, CLINTON, AND WASHINGTON COUNTIES

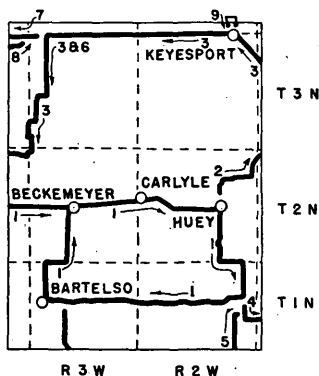


FIGURE 14.—Lines of leveling in Carlyle quadrangle.

1. From point about 1.8 miles east of Breese east along Baltimore & Ohio Southwestern Railroad by way of Beckemeyer and Carlyle to Huey, thence alternately south and east along roads to Hoffman, thence west along Southern Railway to Bartelso, thence alternately north and east along roads to Beckemeyer (by W. A. Gelbach in 1907)

[Connects with line 1 in Breese quadrangle]

Beckemeyer, near W. end of town, at rd. crossing, 50 ft. N. of track; standard iron post with bronze cap stamped "451"-----	Feet 451.072
Carlyle, at SE. corner of courthouse yard; standard iron post with bronze cap stamped "461"-----	460.540
Huey, at E. end of sta., in SE. angle of rd. crossing, 4 ft. S. of fence corner; standard iron post with bronze cap stamped "454"-----	453.583
Huey, 2.5 mi. S. thence 1.5 mi. E. from, 1.8 mi. N. of Hoffman, near S¼ cor. sec. 36, T. 2 N., R. 2 W., on N. side of rd., at junction of rd. S., 8 ft. E. of fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 4 1907 454"-----	453.289
Hoffman, about 4.5 mi. E. of Posey, 200 ft. W. of sta., 50 ft. N. of track; standard iron post with bronze cap stamped "Prim Trav Sta No 3 1907 456"-----	455.885
Posey, 0.5 mi. E. of, 4.2 mi. E. of Zachary, 40 ft. N. of track, on E. side of rd.; standard iron post with bronze cap stamped "451"-----	450.268
Zachary, about 0.3 mi. E. of, 2.8 mi. E. of Bartelso, 60 ft. N. of track, 20 ft. W. of wagon rd.; standard iron post with bronze cap stamped "418"-----	417.255
Bartelso, 150 ft. E. of sta., 60 ft. S. of track, near corner of lot by saloon of H. F. Johnson, 2 ft. inside sidewalk; standard iron post with bronze cap stamped "450 Reset 1938" ⁵⁵ -----	449.322

⁵⁵ In 1938 this bench mark was moved 175 ft. west of this position and reset at the same elevation.

Bartelso, 2.0 mi. N. thence 1.2 mi. E. from, 2.8 mi. S. of Beckemeyer, 0.25 mi. E. of SW. cor. sec. 33, T. 2 N., R. 3 W., in NE. angle of junction of T-rd. N., 3 ft. E. of fence corner; standard iron post with bronze cap stamped "459"----- *Feet*
459.067

2. From Huey along roads north, east, and northeast 5 miles (by W. A. Gelbach in 1907)

Huey, 2.0 mi. N. thence 1.0 mi. E. from, near W $\frac{1}{4}$ cor. sec. 12, T. 2 N., R. 2 W., in SE. corner of yard of White School; standard iron post with bronze cap stamped "463"----- 461.827

[Continued in Centralia quadrangle, line 1]

3. From point 2 miles southeast of Keyesport northwest along Chicago, Burlington & Quincy Railroad to Keyesport, thence west along Bond-Clinton county-line road to point 0.5 mile north and 2.6 miles east from Jamestown, thence along roads south to Frogtown, thence northwest and west 1.2 miles (by W. A. Gelbach in 1907)

[Continued from Centralia quadrangle, line 1]

Keyesport, 130 ft. SE. of sta., 35 ft. N. of center line of E. track, 21 ft. E. of center line of N.-S. rd.; standard iron post with bronze cap stamped "453" (recovered in 1937; also recovered by U. S. C. & G. S. in 1935)----- 453.122

Keyesport, 1.0 mi. W. of, near NE. cor. sec. 3, T. 3 N., R. 2 W., in SW. angle of crossroads; standard iron post with bronze cap stamped "473"----- 473.049

Keyesport, 5.3 mi. W. of, near SE. cor. sec. 36, T. 4 N., R. 3 W., in NW. angle of intersection of Carlyle-Greenville rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 7 1907 512"----- 512.396

Keyesport, 8.3 mi. W. of, near NW. cor. sec. 3, T. 3 N., R. 3 W., in SE. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 8 1907 473" (recovered in 1934)⁶⁶----- 472.927

Keyesport, 10.3 mi. W. of, 0.5 mi. N. and 2.6 mi. E. from Jamestown, 6.5 mi. N. and 0.8 mi. E. from Frogtown (Clinton County), near S. cor. secs. 31 and 32, T. 4 N., R. 3 W., on N. side of Bond-Clinton county-line rd., at junction of T-rd. S.; standard iron post with bronze cap stamped "Prim Trav Sta No 9 1907 480" (recovered in 1935)----- 479.908

Frogtown, 3.5 mi. N. and 0.8 mi. E. from, near N. cor. secs. 19 and 20, T. 3 N., R. 3 W., 0.5 mi. W. of Catholic church, at junction of E.-W. rd., on S. side of rd.; standard iron post with bronze cap stamped "467" (recovered in 1939)----- 467.537

Frogtown, 2.0 mi. N. of, near E $\frac{1}{4}$ cor. sec. 25, T. 3 N., R. 4 W., at junction of rd. W. and point where main rd. turns from W. to S., on W. side of rd.; standard iron post with bronze cap stamped "463"----- 463.187

Frogtown, in NW. angle of crossroads; standard iron post with bronze cap stamped "455"----- 454.835

[Connects with line 2 in Breese quadrangle]

4. From Hoffman along roads south 1.2 miles, thence east 0.8 mile (by R. G. Clinite in 1912; releveled by L. V. Johnson in 1930)

Hoffman, 0.75 mi. S. of, near center of sec. 13, T. 1 N., R. 2 W., on E. side of rd., opposite T-rd. W.; standard iron post with bronze cap stamped "Prim Trav Sta No 2 1907 456"----- 455.895

⁶⁶ In 1940 this bench mark was reported destroyed.

Hoffman, 1.2 mi. S. of, at quarter corner between secs. 13 and 24, at junction of T-rd. E.; top of stone marking quarter corner----- *Feet*
445.27

[Continued in Centralia quadrangle, line 2]

5. From point 4 miles north of Hoyleton north and east along roads to point 0.8 mile south of Hoffman (by L. V. Johnson in 1930)

[Continued from Nashville quadrangle, line 4]

Hoyleton, 4.4 mi. N. of, 2.3 mi. S. and 0.5 mi. W. from Hoffman, about 500 ft. S. of NE. cor. sec. 26, T. 1 N., R. 2 W., 75 ft. N. and 21 ft. W. from center of steel bridge over Crooked Creek, in root on E. side of 18-in. wild-cherry tree; copper nail and washer----- 433.25

Hoffman, 1.1 mi. S. and 0.5 mi. W. from, about 500 ft. N. of approximate SW. cor. sec. 13, T. 1 N., R. 2 W., 40 ft. E. of rd., in root on SE. side of 40-in. cottonwood tree; copper nail and washer----- 453.72

6. From crossroads 8.3 miles west of Keyesport west along Bond-Clinton county line to road junction 0.5 mile north and 2.6 miles east from Jamestown, thence south to point 3.5 miles north and 0.8 mile east from Frogtown (by H. A. Drake in 1934)

Keyesport, 9.3 mi. W. of, near SE. cor. sec. 32, T. 4 N., R. 3 W., 100 ft. W. of junction of T-rd. S., on N. side of rd., in root of 12-in. tree; spike----- 476.21

7. From road junction 0.5 mile north and 2.6 miles east from Jamestown west along Bond-Clinton county line 1.8 miles (by H. A. Drake in 1934)

Jamestown, 0.5 mi. N. and 1.8 mi. E. from, at cor. secs. 1, 6, 31, and 36, Tps. 3 and 4 N., Rs. 3 and 4 W., at junction of N.-S. rd., on W. side of rd., in stone marking section corner; monel-metal rivet (recovered in 1935)----- 480.22

Jamestown, 0.5 mi. N. and 1.0 mi. E. from, 0.25 mi. E. of W. cor. secs. 1 and 36, Tps. 3 and 4 N., R. 4 W., on W. side of N.-S. rd., in root of 24-in. oak tree; iron nail----- 450.51

[Continued in Breese quadrangle, line 3]

8. From point 0.8 mile east of Jamestown northeast and east along roads to road junction 0.5 mile north and 2.6 miles east from Jamestown (by S. R. Archer in 1935)

[Continued from Breese quadrangle, line 6]

Jamestown, 1.0 mi. E. of, about 0.3 mi. NW. of center of sec. 1, T. 3 N., R. 4 W., 85 ft. SW. of crossroads, on NE. side of 12-in. ash tree, about 4 ft. above ground, in center of triangular blaze; copper nail and washer----- 453.71

9. Southeast 0.7 mile along Chicago, Burlington & Quincy Railroad to Keyesport (by S. R. Archer in 1937)

[Continued from Mulberry Grove quadrangle, line 8]

U. S. C. & G. S. standard disk stamped "V 113 1935"----- 453.611
Keyesport, about 350 ft. SE. of sta., 210 ft. SE. of street crossing, at R. R. bridge 104-76 over Kaskaskia River, on top of SW. end of NW. concrete abutment, at foot of E. side of number post; chiseled square ⁶⁷----- 450.08

⁶⁷ Established as a reference mark for principal bench mark stamped "453," previously described in line 3.

CARMI QUADRANGLE

[Latitude 38°00'–38°15'; longitude 88°00'–88°15']

WHITE COUNTY

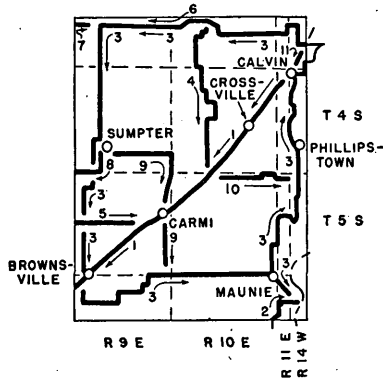


FIGURE 15.—Lines of leveling in Carmi quadrangle.

1. From Grayville southwest along Cleveland, Cincinnati, Chicago & St. Louis Railway (by C. S. Blair in 1905)

[Connects with line 2 in Mount Carmel quadrangle]⁶⁸

Carmi, on W. side of main entrance of First Presbyterian Church, in stone step; aluminum tablet stamped "399 Adj" (recovered in 1939) ----- Feet
397. 787

Browns-ville, at SW. cor. of stone platform; standard iron post with bronze cap stamped "417 Adj" (recovered in 1908)⁶⁹ ----- 415. 718

[Continued in Enfield quadrangle, line 1]

2. From point near northwest side of Dogtown Hills along road north and east to Louisville & Nashville Railroad bridge over Wabash River near Maunie (by C. S. Blair in 1905)

[Continued from New Haven quadrangle, line 1]

Maunie, at L. & N. R. R. bridge, on S. end of E. pier, 1 ft. from edge of coping; chiseled circle (Wabash River Survey P. B. M. 32 1903; recovered in 1908, recovered also by U. S. C. & G. S. in 1935) ----- 372. 673

[Continued in Indiana]

3. From Browns-ville along roads generally east to Louisville & Nashville Railroad bridge over Wabash River near Maunie, thence generally north by way of Phillipstown to Illinois Central Railroad bridge south of Grayville, thence west to point 2 miles east of Burnt Prairie (Liberty), thence south to Browns-ville (by W. A. Gelbach in 1908)

Browns-ville, 1.5 mi. S. of, in SE. angle of crossroads; standard iron post with bronze cap stamped "1908 442" ----- 441. 416

⁶⁸ This line cuts the northwest corner of New Harmony quadrangle, but no bench marks were set in that portion of the line.

⁶⁹ In 1939 it was reported that this bench mark had been damaged.

Brownsville, 1.5 mi. S. thence 2.0 mi. E. from, near quarter corner between secs. 9 and 10, T. 6 S., R. 9 E., at junction of N.-S. rd., in center of triangular grass plot; standard iron post with bronze cap stamped "1908 360"-----	<i>Feet</i> 359. 265
Brownsville, 4.0 mi. E. of, 2.0 mi. S. thence 3.5 mi. W. from Epworth, near SW. cor. sec. 36, T. 6 S., R. 9 E., opposite T-rd. N.; standard iron post with bronze cap stamped "1908 424" (recovered in 1939)-----	422. 964
Epworth, 2.0 mi. S. of, 3.3 mi. W. of Maunie, near S¼ cor. sec. 33, T. 6 S., R. 9 E., in SE. angle of crossroads, 10 ft. S. of telephone pole; standard iron post with bronze cap stamped "1908 398" ⁹⁰ -----	397. 551
Maunie, just W. of sta., at W. end of R. R. crossing; top of N. rail-----	373. 1
Maunie, at Methodist Church, in center of NW. side of foundation wall, set vertically; standard tablet stamped "1908 375" (recovered by U. S. C. & G. S. in 1935)-----	374. 550
Maunie, 3.0 mi. N. of, 4.0 mi. S. of Phillipstown, near NE. cor. sec. 24, T. 5 S., R. 10 E., 95 ft. N. and 14 ft. W. from junction of T-rd. E.; standard iron post with bronze cap stamped "1908 369" (recovered in 1939)-----	368. 520
Phillipstown, 1.7 mi. S. of, 0.2 mi. S. of W¼ cor. sec. 5, T. 5 S., R. 14 W., opposite T-rd. W., at Duck Pond School, in SW. corner of school-yard; standard iron post with bronze cap stamped "Prim Trav Sta No 29 1908 378" ⁹¹ -----	377. 670
Phillipstown, at W. edge of, in SE. angle of junction of T-rd. E., at NW. corner of store of Charles Fitzgerald; corner of foundation stone-----	490. 64
Phillipstown, 1.0 mi. N. of, 2.4 mi. E. of Crossville, 3.9 mi. S. of Calvin, in NE. angle of crossroads, in bank; standard iron post with bronze cap stamped "1908 498"-----	497. 337
Calvin, just E. of R. R. sta., at crossing; top of rail-----	428. 8
Calvin, at Union Methodist and Baptist Church, in center of N. foundation wall, 18. in. above ground; aluminum tablet stamped "1908 488" (recovered in 1939)-----	447. 677
[Jogs into New Harmony quadrangle, line 1]	
Calvin, 2.0 mi. N. of, 1.8 mi. S. and 1.0 mi. W. from Grayville, at cor. secs. 29, 30, 31, and 32, T. 3 S., R. 14 W.; top of stone marking section corner-----	401. 73
Grayville, 0.8 mi. S. and 1.0 mi. W. from, near cor. secs. 19, 20, 29, and 30, T. 3 S., R. 14 W., opposite and 20 ft. E. of center line of T-rd. S.; standard iron post with bronze cap stamped "1908 398"-----	397. 136
Grayville, 1.0 mi. S. and 4.5 mi. W. from, 5.5 mi. N. and 0.7 mi. W. from Crossville, near cor. secs. 22, 23, 26, and 27, T. 3 S., R. 10 E., opposite T-rd. S.; standard iron post with bronze cap stamped "1908 392"-----	391. 506
Grayville, 0.5 mi. S. and 6.0 mi. W. from, 8.2 mi. E. of Burnt Prairie, at High Shoals Bridge over Little Wabash River; top of SW. corner of iron railing-----	387. 11

⁹⁰In 1921 this bench mark was reset at an elevation 0.011 ft. lower than that originally determined. The description given refers to its new location and elevation.

⁹¹In 1939 this bench mark was reported destroyed.

Burnt Prairie, 7.4 mi. E. of, near line between secs. 20 and 21, T. 3 S., R. 10 E., opposite T-rd. S.; standard iron post with bronze cap stamped "1908 383" (recovered in 1934)-----	<i>Feet</i> 382.795
Burnt Prairie, 4.8 mi. E. of, near quarter corner between secs. 23 and 24, T. 3 S., R. 9 E., 25 ft. S. and 15 ft. W. from junction of T-rd. S., 10 ft. S. and 20 ft. E. from corner of house, below surface of ground and covered by iron plate; standard iron post with bronze cap stamped "1908 386" ⁶² (recovered in 1939)-----	383.972
Burnt Prairie, 1.8 mi. E. of, near quarter corner between secs. 20 and 21, T. 3 S., R. 9 E., opposite T-rd. S.; standard iron post with bronze cap stamped "1908 425"-----	424.430
Burnt Prairie, 1.8 mi. E. thence 4.0 mi. S. from, 3.0 mi. N. and 0.2 mi. W. from Sumpter, near W $\frac{1}{4}$ cor. sec. 9, T. 4 S., R. 9 E., in NE. angle of crossroads; standard iron post with bronze cap stamped "1908 388"-----	386.937
Sumpter, 0.3 mi. S. and 0.7 mi. W. from, near S $\frac{1}{4}$ cor. sec. 29, T. 4 S., R. 9 E., in NE. angle of junction of T-rd. E., in SW. corner of school-yard; standard iron post with bronze cap stamped "1908 388" (recovered in 1939)-----	387.880
Sumpter, 1.3 mi. S. and 0.7 mi. W. from, 6.0 mi. N. and 0.5 mi. E. from Brownsville, at quarter corner between secs. 5 and 32, Tps. 4 and 5 S., R. 9 E., at crossroads; top of stone marking quarter corner-----	398.21
Brownsville, 3.5 mi. N. of, just W. of Trumbull, near W $\frac{1}{4}$ cor. sec. 17, T. 5 S., R. 9 E., in SE. angle of crossroads, at foot of bank; standard iron post with bronze cap stamped "1908 419" (recovered in 1921)-----	418.504
4. From High Shoals Bridge over Little Wabash River generally south along roads to Cleveland, Cincinnati, Chicago & St. Louis Railway, thence southwest to Carmi (by W. A. Gelbach in 1908)	
Crossville, 2.8 mi. W. and 3.5 mi. N. from, 0.25 mi. E. of N $\frac{1}{4}$ cor. sec. 5, T. 4 S., R. 10 E., in SE. angle of junction of T-rd. S., 4 ft. S. of corner fence post; standard iron post with bronze cap stamped "1908 383"-----	381.930
Crossville, 2.1 mi. W. of, near center of sec. 21, T. 4 S., R. 10 E., in NE. angle of junction of E.-W. rd.; standard iron post with bronze cap stamped "1908 390" ⁶³ -----	389.162
Crossville, 2.6 mi. W. thence 3.0 mi. S. from, 3.3 mi. NE. of Carmi, at Simpson Switch on C. C. C. & St. L. Ry., 80 ft. N. of track, on W. side of wagon rd., near wire fence; standard iron post with bronze cap stamped "1908 388" (recovered in 1921)-----	387.540
Carmi, at R. R. bridge over Little Wabash River; center of bridge-----	387.0
5. From point 5 miles west of Carmi east along road to Carmi (by H. E. Wessman in 1921; leveled twice)	
[Continued from Enfield quadrangle, line 2]	
Carmi, 4.2 mi. W. of, 3.0 mi. N. of Brownsville, near SE. cor. sec. 18, T. 5 S., R. 9 E., in NW. angle of crossroads, in root on S. side of 28-in. oak tree; copper nail and washer-----	439.23

⁶² In 1934 it was found that this bench mark had been disturbed and it was reset. This description refers to its present location and elevation.

⁶³ In 1921 this bench mark was reported destroyed.

Carmi, 3.2 mi. W. of, near NW. cor. sec. 21, T. 5 S., R. 9 E., 60 ft. E. of crossroads, 20 ft. S. of S. fence line, in root on NW. side of 8-in. white-oak tree; copper nail and washer-----	<i>Feet</i> 460.15
Carmi, 2.2 mi. W. of, near NE. cor. sec. 21, T. 5 S., R. 9 E., 45 ft. S. of crossroads, 1 ft. W. of fence; standard iron post with bronze cap stamped "14 W 1921"-----	409.433
Reference mark 1, 220 ft. W. of crossroads, at bridge over creek branch, on S. wing wall of E. abutment; chiseled square-----	405.58
Reference mark 2, 134 ft. S. 6°30' E. from iron post, 190 ft. S. of crossroads, on W. wing wall of N. abutment of bridge; chiseled square--	404.94
Carmi, 1.7 mi. W. of, near N $\frac{1}{4}$ cor. sec. 22, T. 5 S., R. 9 E., at bridge over creek branch, on S. wing wall of W. abutment; chiseled square--	409.84
Carmi, 1.0 mi. W. of, 150 ft. E. of crossing of C. C. C. & St. L. Ry., on S. side of rd., in root on NE. side of 10-in. tree; copper nail and washer-----	399.44

6. From High Shoals Bridge over Little Wabash River west along road 3 miles (by G. W. Martin in 1934)

Burnt Prairie, 6.7 mi. E. of, 0.25 mi. N. of quarter corner between secs. 19 and 20, T. 3 S., R. 10 E., 15 ft. S. and 15 ft. E. from center of jog S. in rd., in root of elm tree; spike-----	381.38
Burnt Prairie, 6.4 mi. E. of, near center of NE $\frac{1}{4}$ sec. 19, T. 3 S., R. 10 E., on S. side of rd., near house, in root on N. side of elm tree; spike-----	380.75
Burnt Prairie, 5.8 mi. E. of, about 800 ft. W. of center of sec. 19, T. 3 S., R. 10 E., 0.4 mi. E. of crossroads, on top of SE. wing wall of E. abutment of bridge; chiseled square-----	380.83
Burnt Prairie, 5.2 mi. E. of, near center of sec. 24, T. 3 S., R. 9 E., on N. side of rd., in root of lone oak tree; spike-----	384.09

7. From point near Burnt Prairie (Liberty) east along road about 4.7 miles (by W. C. Elledge in 1939)

[Continued from Enfield quadrangle, line 5]

Burnt Prairie, 1.0 mi. E. of, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 20, T. 3 S., R. 9 E., 200 ft. E. of house on N. side of rd., on N. head wall of concrete culvert; chiseled square-----	402.66
Burnt Prairie, 1.5 mi. E. of, near quarter corner between secs. 20 and 21, T. 3 S., R. 9 E., 27 ft. N. of junction of T-rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	421.440
Burnt Prairie, 2.5 mi. E. of, 1,100 ft. E. of quarter corner between secs. 21 and 22, T. 3 S., R. 9 E., 35 ft. S. and 10 ft. E. from junction of private T-rd. S., on NE. corner of concrete bridge; chiseled square--	386.25
Burnt Prairie, 3.5 mi. E. of, near quarter corner between secs. 22 and 23, T. 3 S., R. 9 E., 35 ft. S. and 30 ft. E. from junction of T-rd. N., in root on N. side of 30-in. cottonwood tree; copper nail and washer-----	383.99

8. From point 0.3 mile south and 0.7 mile west from Sumpter along roads east 0.5 mile, south 1 mile, and west 1.8 miles (by W. C. Elledge in 1939)

Sumpter, 0.3 mi. S. and 0.2 mi. W. from, near SE. cor. sec. 29, T. 4 S., R. 9 E., 25 ft. N. and 40 ft. W. from crossroads, in yard of Sylvan Glen School, on SE. corner of well curb; chiseled square-----	392.31
--	--------

Sumpter, 1.3 mi. S. and 0.2 mi. W. from, 0.2 mi. E. of Burnt Prairie Church, near SE. cor. sec. 32, T. 4 S., R. 9 E., 16 ft. N. and 43 ft. W. from junction of rd. N., 16 ft. N. and 80 ft. W. from junction of rd. S., in concrete post; standard tablet stamped "T T 19 C 1939"-----	<i>Feet</i> 411. 850
Sumpter, 1.3 mi. S. and 0.8 mi. W. from, 1.0 mi. S. thence 2.2 mi. E. from Ball, 0.25 mi. E. of NW. cor. sec. 5, T. 5 S., R. 9 E., at steel bridge over Sevenmile Creek, on S. end of E. head wall, 2 in. N. of E. end of steel truss; chiseled square-----	378. 60

[Continued in Enfield quadrangle, line 8]

9. From crossroads 1.3 miles south and 0.2 mile west from Sumpter along roads east and south by way of Carmi to point 4 miles east of Brownsville (by W. C. Elledge in 1939)

Sumpter, 1.3 mi. S. and 0.8 mi. E. from, 2.5 mi. N. thence 3.0 mi. W. from Carmi, near SE. cor. sec. 33, T. 4 S., R. 9 E., 20 ft. N. and 140 ft. W. from crossroads, in root on N. side of 15-in. elm tree; copper nail and washer-----	413. 96
Carmi, 2.5 mi. N. thence 2.0 mi. W. from, near SE. cor. sec. 34, T. 4 S., R. 9 E., about 300 ft. W. of crossroads, on N. side of rd., at St. Johns Evangelical Church, on SE. corner of sidewalk at turn from W. to N. leading to front entrance; chiseled square-----	451. 70
Carmi, 2.5 mi. N. thence 1.0 mi. W. from, near NE. cor. sec. 2, T. 5 S., R. 9 E., 28 ft. S. and 25 ft. W. from junction of T-rd. S., in concrete post; standard tablet stamped "T T 20 C 1939"-----	440. 718
Carmi, 2.5 mi. N. of, near NW. cor. sec. 6, T. 5 S., R. 10 E., 15 ft. S. and 20 ft. E. from crossroads, in root on W. side of 20-in. oak tree; copper nail and washer-----	438. 97
Carmi, 1.0 mi. N. of, in NE $\frac{1}{4}$ sec. 12, T. 5 S., R. 9 E., on W. pier at S. end of steel bridge over Little Wabash River, at edge of outer semicircle of steel plate of pier, on top of middle bolt; chiseled cross-----	379. 23
Carmi, on N. side 8 ft. from W. end of Main Street concrete bridge over Little Wabash River, in top of ledge; standard tablet stamped "34 E 1939"-----	382. 056
Carmi, near S. edge of, on gravel rd. S. from town, at steel bridge over small creek, on SW. wing wall; chiseled square-----	367. 85
Carmi, 1.0 mi. S. of, near center of E $\frac{1}{2}$ sec. 24, T. 5 S., R. 9 E., 40 ft. S. and 25 ft. W. from junction of T-rd. E., in root on NE. side of 15-in. catalpa tree; copper nail and washer-----	378. 82
Carmi, 1.5 mi. S. of, 2.5 mi. W. of Epworth, about 0.25 mi. W. of E. cor. secs. 24 and 25, T. 5 S., R. 9 E., 110 ft. S. and 20 ft. E. from crossing of dim rd., in root on NE. side of 15-in. catalpa tree; copper nail and washer-----	368. 54
Carmi, 2.0 mi. S. of, near center of E $\frac{1}{2}$ sec. 25, T. 5 S., R. 9 E., at S. end of Possum Creek Bridge over Little Wabash River, in W. end of concrete head wall; standard tablet stamped "35 E 1939"-----	377. 041
Carmi, 2.5 mi. S. of, 0.25 mi. W. of E. cor. secs. 25 and 36, T. 5 S., R. 9 E., 200 ft. S. of T-rd. W., on E. head wall of concrete culvert; chiseled square-----	393. 58
Carmi, 3.5 mi. S. of, 4.8 mi. E. of Brownsville, 0.25 mi. W. of NE. cor. sec. 1, T. 6 S., R. 9 E., SW. of T-rd. N., 7 ft. N. and 25 ft. W. from NW. corner of Union School, on NW. corner of well curb; chiseled square-----	484. 76

10. From Carmi along roads northeast and east to point 1.8 miles south of Phillipstown, thence south and west to point 3 miles north of Maunie (by W. C. Elledge in 1939)

Carmi, 0.7 mi. NE. of Main Street bridge over Little Wabash River, along State Highway 14, on N. side of rd., at private drive N. at E. side of White County Home, on W. head wall of concrete culvert; chiseled square-----	Feet 383.06
Carmi, 2.2 mi. E. of bridge; in N½ sec. 8, T. 5 S., R. 10 E., at concrete bridge over McHenry Slough, on NE. wing wall, 8 in. E. of E. end of N. wall of bridge; chiseled square-----	381.06
Carmi, 3.1 mi. NE. of, 3.0 mi. S. and 2.6 mi. W. from Crossville, on quarter line of sec. 4, T. 5 S., R. 10 E., 10 ft. N. and 40 ft. W. from junction of rd. E., 52 ft. E. of center line of C. C. C. & St. L. Ry. track, in concrete post; standard tablet stamped "T T 22 C 1939"-----	387.250
Crossville, 3.0 mi. S. and 1.7 mi. W. from, near W¼ cor. sec. 3, T. 5 S., R. 10 E., 250 ft. N. and 25 ft. E. from crossroads, in root on E. side of 20-in. oak tree; copper nail and washer-----	407.00
Crossville, 3.0 mi. S. and 0.7 mi. W. from, near W¼ cor. sec. 2, T. 5 S., R. 10 E., 20 ft. N. and 11 ft. W. from junction of T-rd. N., on SW. wing wall of small steel bridge; chiseled square-----	386.50
Crossville, 3.0 mi. S. and 0.3 mi. E. from, near E¼ cor. sec. 2, T. 5 S., R. 10 E., 16 ft. N. and 3 ft. W. from junction of T-rd. S., 1 ft. S. of corner fence post, in concrete post; standard tablet stamped "T T 23 C 1939"-----	414.174
Crossville, 2.8 mi. S. and 1.1 mi. E. from, 1.5 mi. S. and 1.7 mi. W. from Phillipstown, near NE. cor. sec. 1, T. 5 S., R. 10 E., 10 ft. N. and 40 ft. W. from rd. fork, 10 ft. W. of tree at fence corner, in root on E. side of 15-in. gum tree; copper nail and washer-----	419.03
Phillipstown, 1.7 mi. S. thence 1.0 mi. W. from, near quarter corner between sec. 6, T. 5 S., R. 11 E., and sec. 6, T. 5 S., R. 14 W., on N. side of rd., 55 ft. S. and 10 ft. E. from SE. corner of house, in root on SE. side of 36-in. oak tree; copper nail and washer-----	376.54
Phillipstown, 1.7 mi. S. of, 36 ft. N. and 24 ft. E. from junction of T-rd. W., in SW. part of yard at Duck Pond School, on concrete post; standard tablet stamped "T T 24 C 1939" ^a -----	377.052
Phillipstown, 3.3 mi. S. of, near NE. cor. sec. 18, T. 5 S., R. 14 W., on W. side of rd., in SE. corner of farmyard, in root on E. side of 20-in. triple maple tree; copper nail and washer-----	369.48
Phillipstown, 4.4 mi. S. of, near center of N½ sec. 19, T. 5 S., R. 14 W., 280 ft. W. of rd. fork, on S. side of rd., in root on NW. side of 36-in. cottonwood tree; copper nail and washer-----	368.29

11. Southwest along State Highway 1 to Calvin (by W. C. Elledge in 1939)

[Continued from New Harmony quadrangle, line 2]

Grayville, 1.5 mi. SW. of, on line between secs. 29 and 32, T. 3 S., R. 14 W., 28 ft. S. and 28 ft. W. from crossroads, at angle on W. head wall of concrete culvert; chiseled square-----	402.22
Calvin, 0.8 mi. NE. of, near cor. secs. 5, 6, 31, and 32, Tps. 3 and 4 S., R. 14 W., 38 ft. W. of center line of highway, in line with fence W., at concrete highway right-of-way post; top of post-----	425.57

^a This bench mark replaces the standard iron post with bronze cap stamped "Prim Trav Sta No 29 1908 378."

CAVE IN ROCK QUADRANGLE

[Latitude 37°15'–37°30'; longitude 88°09'–88°15']

HARDIN COUNTY

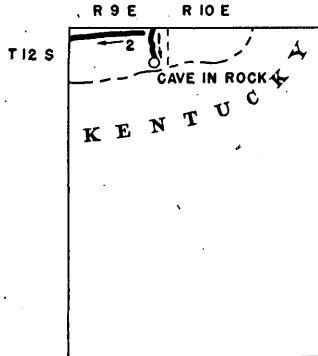


FIGURE 16.—Lines of leveling in Cave in Rock quadrangle.

1. From point 2.4 miles north of Cave in Rock south along road to Cave in Rock (by R. G. Clinite in 1914)

[Continued from Shawneetown quadrangle, line 6]

Cave in Rock, 2.2 mi. N. of, about 500 ft. E. of SW. cor. sec. 1, T. 12 S., R. 9 E., 450 ft. E. of Love School, in limestone ledge; aluminum tablet stamped "483"-----	<i>Feet</i> 482.900
Cave in Rock, in front of Hardesty Hotel; top of cap on iron pipe (U. S. C. E. B. M.)-----	362.18
Cave in Rock, on right bank of Ohio River, 80 ft. above landing rd., on levee, directly back from steamboat landing, in concrete base; U. S. C. E. base-line sta. 186	
top of cap on iron pipe-----	339.129
stone under pipe-----	336.065

2. From road junction 2.2 miles north of Cave in Rock along road and across country near Peters Creek to point 3 miles north and 3 miles east from Elizabethtown (by R. G. Clinite in 1914)

Cave in Rock, 2.2 mi. N. thence 2.9 mi. SW. from, near center of NW¼ sec. 9, T. 12 S., R. 9 E., in NE. angle of junction of rd. N., in root of 26-in. oak tree; spike-----	467.65
Cave in Rock, 2.2 mi. N. thence 3.7 mi. SW. from, 0.25 mi. N. of center of sec. 8, T. 12 S., R. 9 E., 800 ft. N. and 400 ft. E. from Peters Creek Store, on N. side of rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 34 1913 454"-----	453.142

[Continued in Golconda quadrangle, line 4]

CENTRALIA QUADRANGLE

[Latitude 38°30'–38°45'; longitude 89°00'–89°15']

CLINTON, FAYETTE, MARION, AND WASHINGTON COUNTIES

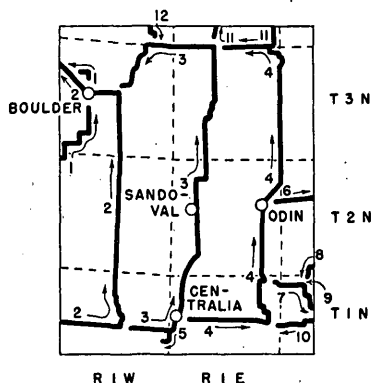


FIGURE 17.—Lines of leveling in Centralia quadrangle.

1. From point 5 miles northeast of Huey along roads alternately east and north to road junction 1 mile north of Boulder, thence west 0.9 mile to Chicago, Burlington & Quincy Railroad, thence northwest along railroad 1 mile to point 2 miles southeast of Keyesport (by W. A. Gelbach in 1907)

[Continued from Carlyle quadrangle, line 2]

Huey, 7.0 mi. NE. of, 2.3 mi. S. and 0.5 mi. W. from Boulder, about 0.25 mi. S. of NW. cor. sec. 32, T. 3 N., R. 1 W., in NW. corner of yard of Kansas School; standard iron post with bronze cap stamped "470"

Feet
470. 255

Boulder, 1.5 mi. NW. of, in NE. angle of intersection of C. B. & Q. R. R.; standard iron post with bronze cap stamped "442" (recovered by U. S. C. & G. S. in 1935)⁶⁵

442. 716

[Continued in Carlyle quadrangle, line 3]

2. From point 1.2 miles south and 0.8 mile east from Hoffman along roads east to road junction 0.7 mile south and 3 miles west from Centralia, thence north to road junction 1.5 miles east of Boulder, thence west and northwest to point on Chicago, Burlington & Quincy Railroad 1.5 miles northwest of Boulder (by R. G. Clinite in 1912; releveled to point 1.2 miles south and 1.3 miles east from Hoffman by L. V. Johnson in 1930)

[Continued from Carlyle quadrangle, line 4]

Hoffman, 1.2 mi. S. thence 1.3 mi. E. from, 0.7 mi. S. thence 5.7 mi. W. from post office in Centralia, 0.25 mi. W. of SE. cor. sec. 18, T. 1 N., R. 1 W., near NW. corner of rd. fork, 45 ft. W. of W. abutment of steel bridge over Crooked Creek, on W. bank of creek, 2 ft. outside fence; standard iron post with bronze cap stamped "446"

445. 725

⁶⁵ Assumed to have settled 0.300 ft.

Centralia, 0.7 mi. S. thence 3.0 mi. W. from, near N $\frac{1}{4}$ cor. sec. 22, T. 1 N., R. 1 W., on S. side of rd., opposite T-rd. N., 2 ft. N. of E.-W. fence; standard iron post with bronze cap stamped "475"-----	Feet 474. 897
Centralia, 1.3 mi. N. and 3.5 mi. W. from, 4.1 mi. S. of Shattuc, near NW. cor. sec. 10, T. 1 N., R. 1 W., in NW. corner of yard of Brookside School, in root of 24-in. maple tree; copper nail and washer -----	467. 68
Shattuc, 3.1 mi. S. of, near SE. cor. sec. 33, T. 2 N., R. 1 W., in NW. angle of crossroads, 8 ft. N. of power line pole, 2.5 ft. N. of fence corner, 1 ft. E. fence; standard iron post with bronze cap stamped "469" ⁶⁶ -----	469. 102
Shattuc, 2.6 mi. S. of, at quarter corner between secs. 33 and 34, T. 2 N., R. 1 W., at crossroads, on stone marking quarter corner; chiseled circle.-----	471. 33
Shattuc, 1.6 mi. S. of, near E $\frac{1}{4}$ cor. sec. 28, T. 2 N., R. 1 W., in NE. corner of yard of Sunnyside School, in root of 32-in. maple tree; copper nail and washer.-----	473. 86
Shattuc, at intersection of Baltimore & Ohio Southwestern and Chicago, Burlington & Quincy R. Rs.; top of rail-----	471. 2
Shattuc, 600 ft. W. of sta., 50 ft. N. of B. & O. track; standard iron post with bronze cap stamped "463 Reset 1940" (recovered by U. S. C. & G. S. in 1935) ⁶⁷ -----	464. 227
Shattuc, 2.9 mi. N. of, 1.5 mi. E. thence 3.0 mi. S. from Boulder, near NW. cor. sec. 3, T. 2 N., R. 1 W., in SE. angle of offset crossroads, 3 ft. N. of fence; standard iron post with bronze cap stamped "485"-----	484. 497
Boulder, 1.5 mi. E. of, near NW. cor. sec. 22, T. 3 N., R. 1 W., on E. side of rd., opposite T-rd. W., 2 ft. outside fence; standard iron post with bronze cap stamped "465"-----	464. 322
3. From road junction 0.7 mile south and 3 miles west from Centralia along roads east to Centralia, thence generally north to point 1 mile south of Patoka, thence west and southwest to road junction 1.5 miles east of Boulder (by R. G. Clinite in 1912)	
Centralia, 0.7 mi. S. thence 2.1 mi. W. from post office at, near N $\frac{1}{4}$ cor. sec. 23, T. 1 N., R. 1 W., at junction of T-rd. S., in grass plot, in root of 30-in. elm tree; copper nail and washer-----	480. 95
Centralia, 0.7 mi. S. thence 1.0 mi. W. from, at quarter corner between secs. 13 and 24, T. 1 N., R. 1 W., at junction of T-rd. S.; top of stone marking quarter corner-----	474. 94
Centralia, at E. side of post office, in granite sill of N. window; aluminum tablet stamped "1912 493" (recovered by U. S. C. & G. S. in 1922 and designated "K 9")-----	492. 246
U. S. C. & G. S. B. M. designated "N 3"-----	493. 916
Centralia, 2.9 mi. N. of, 3.3 mi. S. of Sandoval, near W $\frac{1}{4}$ cor. sec. 32, T. 2 N., R. 1 E., on E. side of Illinois Central R. R., near NE. corner of rd. junction, 1.3 ft. W. of end of crossing fence; standard iron post with bronze cap stamped "491"-----	490. 656

⁶⁶ In 1940 this bench mark was moved 18 ft. northwest of this position and reset 0.091 ft. lower than its original elevation. The figures given represent the new elevation.

⁶⁷ In 1940 this bench mark was moved 10 ft. south and 50 ft. west from this position and reset at an elevation 1.233 ft. higher than that originally determined. The figures given represent the new elevation.

Sandoval, 2.6 mi. S. of, near N $\frac{1}{4}$ cor. sec. 32, T. 2 N., R. 1 E., in grass plot at junction of rd. N., 60 ft. SE. of intersection of I. C. R. R., in root of sycamore tree; copper nail and washer-----	<i>Feet</i> 492. 84
Sandoval, 1.6 mi. S. of, at quarter corner between secs. 20 and 29, T. 2 N., R. 1 E., at crossroads, on stone marking quarter corner; chiseled square-----	500. 49
Sandoval, at intersection of Baltimore & Ohio Southwestern R. R., at mine No. 1; top of rail-----	509. 3
Sandoval, in NE. part of, near N $\frac{1}{4}$ cor. sec. 17, T. 2 N., R. 1 E., in SE. angle of junction of T-rd. E.; standard iron post with bronze cap stamped "514"-----	513. 782
Sandoval, 1.5 mi. N. of, 3.0 mi. S. and 0.5 mi. W. from Fairman, about 0.2 mi. W. of N $\frac{1}{4}$ cor. sec. 8, T. 2 N., R. 1 E., in SW. angle of intersection of I. C. R. R. and wagon rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 167 1911 515" (recovered by U. S. C. & G. S. in 1920)-----	515. 232
Fairman, 0.2 mi. E. thence 2.0 mi. S. from, near NE. cor. sec. 5, T. 2 N., R. 1 E., at jog W. in N.-S. rd., opposite center line of T-rd. N.; standard iron post with bronze cap stamped "517"-----	517. 221
Fairman, 1.5 mi. NE. of, 4.4 mi. S. of Patoka, about 0.2 mi. S. of N $\frac{1}{4}$ cor. sec. 21, T. 3 N., R. 1 E., in SE. corner of rd. junction, 3 ft. N. of fence corner, 0.5 ft. W. of fence; standard iron post with bronze cap stamped "478"-----	477. 933
Patoka, 2.8 mi. S. of, 0.25 mi. S. of center of sec. 9, T. 3 N., R. 1 E., in NE. angle of crossroads, in root of 12-in. maple tree; copper nail and washer-----	507. 68
Patoka, 2.1 mi. S. of, at quarter corner between secs. 4 and 9, T. 3 N., R. 1 E., on stone marking quarter corner; chiseled square-----	507. 83
Patoka, 1.0 mi. S. of, about 700 ft. W. of N $\frac{1}{4}$ cor. sec. 4, T. 3 N., R. 1 E., in SE. angle of intersection of I. C. R. R., 2 ft. N. of fence; standard iron post with bronze cap stamped "498" (recovered in 1928)-----	497. 580
Patoka, 1.0 mi. S. thence 3.2 mi. W. from, 6.2 mi. NE. of Boulder, near NE. cor. sec. 2, T. 3 N., R. 1 W., in SW. angle of crossroads, opposite Toad Island School, 1.5 ft. SW. of telephone pole; standard iron post with bronze cap stamped "482" (recovered in 1937)-----	481. 666
4. From Centralia along roads east 5 miles, thence generally north to road junction 1 mile south and 3.1 miles east from Patoka, thence west to point 1 mile south of Patoka (by R. G. Clinite in 1912)	
Centralia, about 1 mi. E. of post office, on S. side of East Broadway Street, at E. corner of 1300 block, in root of 30-in. maple tree; copper nail and washer-----	505. 51
Centralia, 2.5 mi. E. of, near W $\frac{1}{4}$ cor. sec. 15, T. 1 N., R. 1 E., near NE. corner of junction of T-rd. N.; standard iron post with bronze cap stamped "513" ⁶⁸ -----	512. 688
Centralia, 5.0 mi. E. of, 7.1 mi. S. of Odin, near center of sec. 13, T. 1 N., R. 1 E., on E. side of rd., near NW. corner of orchard of Frank Kline, 1 ft. inside fence; standard iron post with bronze cap stamped "525" (recovered in 1926)-----	524. 534

⁶⁸ In 1928 this bench mark was replaced by a standard tablet set 2.5 ft. north of this position, in north side of east head wall of culvert under road north, 0.350 ft. higher than the original elevation. The figures given represent the new elevation.

92 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Odin, 3.7 mi. S. of, about 0.25 mi. N. of SE. cor. sec. 35, T. 2 N., R. 1 E., near SW. corner of junction of T-rd. W., 300 ft. N. of iron bridge over Crooked Creek, 1 ft. inside field fence; standard iron post with bronze cap stamped "472" (recovered in 1926)-----	Feet 471.563
Odin, 2.9 mi. S. of, at Robinett, at crossing of Illinois Southern R. R.; top of rail-----	524.1
Odin, 1.9 mi. S. of, at cor. secs. 23, 24, 25, and 26, T. 2 N., R. 1 E., at center of crossroads, on stone marking section corner; chiseled circle-----	515.38
Odin, 0.9 mi. S. of, 35 ft. W. of E. cor. secs. 14 and 23, T. 2 N., R. 1 E., opposite T-rd. E., in fence line, in root of 12-in. oak tree; copper nail and washer-----	519.68
Odin, 125 ft. S. of intersection of Illinois Central and Baltimore & Ohio Southwestern R. Rs., in NE. angle of street intersection; standard iron post with bronze cap stamped "1912 526" (recovered in 1921; also recovered by U. S. C. & G. S. in 1920)-----	525.967
U. S. C. & G. S. B. M. designated "V"-----	526.820
Odin, 1.0 mi. E. thence 2.0 mi. N. from, at cor. secs. 1, 6, 31, and 36, Tps. 2 and 3 N., Rs. 1 and 2 E., at crossroads, on stone marking section corner; chiseled square-----	545.74
Odin, 1.0 mi. E. thence 2.5 mi. N. from, near E $\frac{1}{4}$ cor. sec. 36, T. 3 N., R. 1 E., near NW. corner of crossroads, 1.8 ft. E. of fence corner flush with surface of ground; standard iron post with bronze cap stamped "1912 548"-----	547.154
Odin, 1.0 mi. E. thence 3.7 mi. N. from, about 0.3 mi. S. of NE. cor. sec. 25, T. 3 N., R. 1 E., near NW. corner of junction of secondary rd., in root of 12-in. oak tree; copper nail and washer-----	557.15
Odin, 1.0 mi. E. thence 4.0 mi. N. from, at cor. secs. 19, 24, 25, and 30, T. 3 N., Rs. 1 and 2 E., at crossroads, on stone marking section corner; chiseled circle-----	548.20
Odin, 1.0 mi. E. thence 5.1 mi. N. from, about 600 ft. N. of SW. cor. sec. 18, T. 3 N., R. 2 E., on E. side of rd., opposite T-rd. W., 1 ft. of fence; standard iron post with bronze cap stamped "1912 542" ⁶⁹ -----	540.325
T. 3 N., R. 2 E., 0.3 mi. S. of NW. cor. sec. 18, T. 3 N., R. 2 E., in SE. angle of junction of T-rd. E., in root of 15-in. elm tree; copper nail and washer-----	544.27
T. 3 N., R. 1 E., near N $\frac{1}{4}$ cor. sec. 1, 1.0 mi. S. thence 3.1 mi. E. from Patoka, on E. side of N.-W. elbow rd., 2 ft. W. of rail fence; standard iron post with bronze cap stamped "1912 536" (recovered in 1928)-----	535.677
Patoka, 1.0 mi. S. thence 1.3 mi. E. from, 0.25 mi. E. of N $\frac{1}{4}$ cor. sec. 3, T. 3 N., R. 1 E., on stone marking sixteenth corner; chiseled circle-----	517.78
5. From Centralia south and west about 1.6 miles along streets and roads to point 0.25 mile east of center of sec. 24, T. 1 N., R. 1 W. (by R. G. Clinite in 1912; leveled twice)	
Centralia, 1.6 mi. SW. of post office, about 0.25 mi. E. of center of sec. 24, T. 1 N., R. 1 W., at junction of T-rd. S., on N. side of rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 168 1911 496"-----	495.469

⁶⁹ In 1939 this bench mark was reset 1.185 ft. lower than its original elevation. The figures given represent the new elevation.

6. From Odin east along road to point 2.9 miles west of Salem (by H. P. Kilby in 1921)

	<i>Feet</i>
U. S. C. & G. S. B. M. designated "D 9"-----	525. 862
U. S. C. & G. S. B. M. designated "C 9"-----	529. 389
Odin, 1.0 mi. E. of, near E. cor. secs. 12 and 13, T. 2 N., R. 1 E., 300 ft. E. of iron post marked "Sec D State Aid," on S. side of rd., on W. end of concrete culvert under rd. to house; chiseled square-----	535. 67
Odin, 2.0 mi. E. of, about 500 ft. N. of SW. cor. sec. 8, T. 2 N., R. 2 E., in NE. angle of crossroads, on concrete abutment of drain pipe under rd.; chiseled square-----	542. 83

[Continued in Salem quadrangle, line 1]

7. From road junction 3.7 miles south of Odin generally southeast along roads to point in SE¼ sec. 8, T. 1 N., R. 2 E. (by J. M. Lawson in 1926)

Odin, 4.0 mi. S. thence 0.4 mi. SE. from, in NW¼ sec. 1, T. 1 N., R. 1 E., 25 ft. N. and 20 ft. W. from rd. junction, 6 ft. N. of fence corner, in fence line at entrance to field, in root on E. side of 30-in. lone oak tree; copper nail and washer-----	517. 61
T. 1 N., R. 1 E., in NE¼ sec. 1, 15 ft. S. and 5 ft. W. from junction of rd. N., in fence line, in root on W. side of 12-in. lone tree; copper nail and washer-----	502. 23
T. 1 N., R. 2 E., 0.25 mi. W. of E¼ cor. sec. 6, 25 ft. S. and 30 ft. W. from crossroads, in fence line, in root on NE. side of lone 30-in. oak tree; copper nail and washer-----	520. 88
T. 1 N., R. 2 E., near center of sec. 5, 15 ft. N. and 35 ft. W. from junction of N.-S. rd., at Centralia reservoir, 140 ft. W. of edge of water, on top of bank, in concrete post; standard tablet stamped "20 L 1926"-----	524. 125
Reference mark, 30 ft. NE. of tablet, 40 ft. N. and 20 ft. W. from junction of T.-rd., 2 ft. E. of fence line, in root on S. side of 12-in. oak tree; copper nail and washer-----	523. 13
T. 1 N., R. 2 E., 0.25 mi. W. of NE. cor. sec. 8, 50 ft. S. and 15 ft. E. from junction of rd. S., 1 ft. W. of fence line, in root on S. side of lone wild-cherry tree; copper nail and washer-----	532. 89
T. 1 N., R. 2 E., near center of SW¼ sec. 8, 15 ft. N. and 50 ft. E. from junction of T.-rd. E., in root on N. side of 8-in. wild-cherry tree, second tree from corner; copper nail and washer-----	544. 32

[Continued in Salem quadrangle, line 2]

8. From point 3.4 miles south and 2.7 miles east from Odin west and south 1.3 miles along roads to center of sec. 5, T. 1 N., R. 2 E. (by J. M. Lawson in 1926)

[Continued from Salem quadrangle, line 2]

Odin, 3.9 mi. S. and 2.5 mi. E. from, near S¼ cor. sec. 32, T. 2 N., R. 2 E., about 600 ft. E. of N¼ cor. sec. 5, T. 1 N., R. 2 E., 30 ft. S. and 80 ft. W. from rd. junction, 40 ft. E. of bend SW. in rd., near ground level, in trunk of 30-in. oak tree; copper nail and washer-----	530. 41
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9. From center of sec. 5, T. 1 N., R. 2 E., northeast along road 0.4 mile (by J. M. Lawson in 1926; spur line leveled twice)

T. 1 N., R. 2 E., in NW. part of NE¼ sec. 5, at SW. corner of Centralia reservoir spillway, on top of S. retaining wall, 1 ft. E. of point where wall starts to level down spillway, in top of concrete wall; standard tablet stamped "25 L 1926"-----	511. 595
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10. From point about 7.5 miles east of Centralia generally west along roads to point 5 miles east of Centralia (by J. M. Lawson in 1926)

[Connects with line 2 in Salem quadrangle]

Centralia, 6.9 mi. E. of, 0.25 mi. W. of center of sec. 17, T. 1 N., R. 2 E., 40 ft. S. and 40 ft. E. from junction of N.-S. rd., 15 ft. N. and 40 ft. W. from NW. corner of Fairview Methodist Episcopal Church, in churchyard, 5 ft. S. of hitching rack, in westernmost row of trees, in root on N. side of 15-in. maple tree; copper nail and washer -----	Feet 540.38
Centralia, 6.1 mi. E. of, in SE $\frac{1}{4}$ sec. 18, T. 1 N., R. 2 E., 15 ft. N. and 220 ft. W. from junction of T-rd. N., 100 ft. E. of farmhouse, 2 ft. S. of fence line, in root on S. side of 15-in. maple tree; copper nail and washer-----	528.43
11. From point 3.3 miles east of Patoka along roads south 1 mile, thence west 3.3 miles, thence north along Illinois Central Railroad to Patoka (by S. R. Archer in 1928)	
[Continued from Vandalia quadrangle, line 2]	
Patoka, 1.0 mi. S. thence 2.6 mi. E. from, near SE. cor. sec. 35, T. 4 N., R. 1 E., 20 ft. N. and 40 ft. W. from crossroads, 25 ft. W. of fence corner, in root on SE. side of 15-in. oak tree; copper nail and washer-----	526.01
Patoka, 1.0 mi. S. thence 1.6 mi. E. from, near SW. cor. sec. 35, T. 4 N., R. 1 E., 40 ft. N. and 30 ft. E. from junction of T-rd. N., in root on SW. side of 12-in. forked maple tree; copper nail and washer -----	521.35
Patoka, 1.0 mi. S. thence 0.8 mi. E. from, about 0.2 mi. E. of SW. cor. sec. 34, T. 4 N., R. 1 E., on N. side of rd., 415 ft. W. of farmhouse, near SW. corner of orchard, on W. side of gate, just E. of concrete culvert, in root on S. side of 12-in. oak tree; copper nail and washer-----	508.88
Patoka, 1.0 mi. S. of, 340 ft. W. of N $\frac{1}{4}$ cor. sec. 4, T. 3 N., R. 1 E., near SW. corner of crossroads, on top of W. end of S. concrete head wall of culvert under rd. W.; chiseled square ⁷⁰ -----	500.50

[Continued in Vandalia quadrangle, line 3]

12. From point 3.5 miles west of Patoka alternately south and east along roads to crossroads 1 mile south and 3.2 miles west from Patoka (by S. R. Archer in 1937)

[Continued from Vandalia quadrangle, line 14]

Patoka, 0.4 mi. S. and 3.5 mi. W. from, 0.5 mi. N. and 0.25 mi. W. from Toad Island School, 0.25 mi. E. of center of sec. 35, T. 4 N., R. 1 W., on S. side of right angle in rd., on E. side of gate to field, in root on NW. side of 24-in. oak tree; copper nail and washer-----	478.68
--	--------

⁷⁰ Established as a reference mark to bench mark stamped "498," described in line 3.

CHESTER QUADRANGLE

[Latitude 37°45'–38°00'; longitude 89°45'–90°00']

RANDOLPH COUNTY

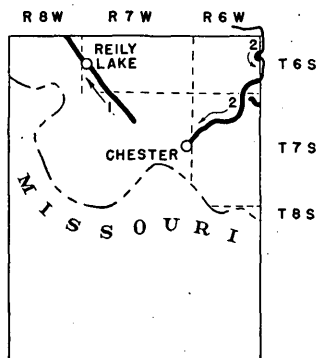


FIGURE 18.—Lines of leveling in Chester quadrangle.

1. From point near Chester northwest along Missouri-Illinois Railroad⁷¹ to point 1.8 miles northwest of Reily Lake (by P. E. Fletcher in 1907)

Kaskaskia, 1.8 mi. below, on W. side of Kaskaskia-Chester rd., at foot of bluffs, just inside field of J. Watier, 262 ft. SE. of N. corner of field, 0.5 mi. from river bank; Mississippi River Comm. B. M. 32/2 cap on iron pipe-----

Feet
392.455

stone at bottom of pipe-----

387.365

Reily Lake, at NW. corner of platform, near S. end of trestle over creek, in concrete post; aluminum tablet not stamped⁷²-----

384.705

[Continued in Baldwin quadrangle, line 1]

2. From point near Bremen southwest along Sparta road to Chester (by R. G. Clinite in 1912)

[Continued from Campbell Hill quadrangle, line 1]

Bremen, 2.2 mi. SW. of, 5.3 mi. NE. of Randolph County courthouse at Chester, at bridge over Little Marys River, on E. wing wall of S. stone abutment, on top of second course; chiseled square (recovered in 1915)-----

398.20

Chester, 3.1 mi. NE. of, in NW¼ sec. 8, T. 7 S., R. 6 W., at Union School, in NW. angle of crossroads, in SE. corner of schoolyard; standard iron post with bronze cap stamped "532"-----

531.872

Reference mark, 70 ft. E. of tablet, in NE. angle of crossroads, at fence corner, in root of 10-in. sycamore tree; copper nail and washer -----

528.25

⁷¹ Formerly the Illinois Southern Ry.

⁷² In 1936 this tablet was tied to U. S. C. & G. S. bench mark designated "RV 58," elevation 385.793 ft.

96 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Chester, in W. corner of yard of German Lutheran Church; standard iron post with bronze cap stamped "668" ⁷³ -----	<i>Feet</i> 667.691
Reference mark, at entrance to church, in center of top surface of second stone step; unmarked point-----	674.87
Chester, opposite Randolph County courthouse, in NW. corner of First State Bank building; aluminum tablet stamped "1912 635"-----	634.790
Chester, 1,240 meters (0.8 mi.) below, 4.3 ft. E. of SW. corner of Cole Brothers stone elevator, in front wall; copper bolt (U. S. C. E. B. M. 39)-----	380.898

⁷³ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "H 105 1935," elevation 645.855 ft.

CISNE QUADRANGLE

[Latitude 38°30'–38°45'; longitude 88°15'–88°30']

CLAY, RICHLAND, AND WAYNE COUNTIES

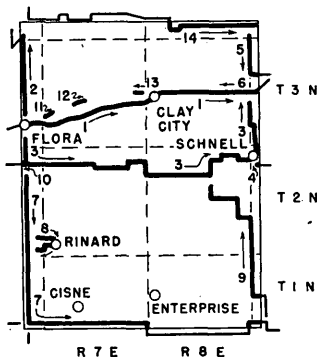


FIGURE 19.—Lines of leveling in Cisne quadrangle.

1. From Flora northeast along Lincoln Trail to point about 1.7 miles southwest of Noble (by H. P. Kilby in 1921)

[Continued from Xenia quadrangle, line 1]

Flora, at NW. end of Baltimore & Ohio R. R. sta., on concrete curb; chiseled square-----	495.66
U. S. C. & G. S. B. M. designated "C 3 1881" (recovered by U. S. C. & G. S. in 1935)-----	488.628
Flora, at public school building, at E. side of S. entrance, in concrete sidewalk; aluminum tablet stamped "1921 490" (recovered by U. S. C. & G. S. in 1935)-----	488.847
Flora, 1.0 mi. NE. of schoolhouse, in sec. 30, T. 3 N., R. 7 E., on N. end of concrete culvert; chiseled square-----	469.14
Flora, 2.0 mi. NE. of, in sec. 29, T. 3 N., R. 7 E., at rd. fork, on W. side of rd. to house, in root of 20-in. maple tree; copper nail-----	453.00
Flora, 2.6 mi. NE. of, 0.25 mi. E. of W. line sec. 28, T. 3 N., R. 7 E., at SE. corner of Stanford town hall; standard iron post with bronze cap stamped "1921 453" (recovered by U. S. C. & G. S. in 1935)-----	451.790
Reference mark, 6 ft. W. of iron post, on corner of concrete step; chiseled square-----	452.10
Flora, 3.4 mi. NE. of, 0.25 mi. E. of W. line and near N. side sec. 27, T. 3 N., R. 7 E., at Center School District 57, on concrete well platform; chiseled square-----	452.24
Flora, 4.2 mi. NE. of, near NE. cor. sec. 27, T. 3 N., R. 7 E., at T-rd. N., 30 ft. N. of rd., in root of 8-in. elm tree; copper nail-----	474.66
Flora, 5.3 mi. NE. of, 2.1 mi. SW. of Clay City, near SW. cor. sec. 24, T. 3 N., R. 7 E., in SE. angle of junction of T-rd. S., in fence corner; standard iron post with bronze cap stamped "1921 459"-----	457.648

Reference mark, 17 ft. S.40°W. from iron post, in root of 20-in. maple tree; copper nail and washer-----	<i>Feet</i> 456.54
Clay City, 1.0 mi. SW. of post office, near SW. cor. sec. 19, T. 3 N., R. 8 E., at sidewalk to house, in top of concrete hitching post; top of iron bolt-----	456.91
Clay City, at northwest corner of post office building, on concrete sidewalk; chiseled square-----	430.88
Clay City, 1.2 mi. E. of, near NE. cor. sec. 20, T. 3 N., R. 8 E., in SE. angle of junction of T-rd. S., in fence corner; standard iron post with bronze cap stamped "1921 455"-----	453.766
Clay City, 2.4 mi. E. of, in sec. 22, T. 3 N., R. 8 E., opposite T-rd. N., 30 ft. S. of highway, in root of 20-in. oak tree; copper nail and washer-----	416.40
Clay City, 3.4 mi. E. of, 3.8 mi. SW. of Noble, in sec. 23, T. 3 N., R. 8 E., at S. end of steel girder bridge over Big Muddy Creek, on E. abutment; chiseled square-----	417.11
Noble, 2.2 mi. SW. of, at sharp angle in highway, in SW. angle of junction of rd. N.; standard iron post with bronze cap stamped "1921 454" (recovered in 1936)-----	453.336

[Continued in Olney quadrangle, line 3]

2. From point near Flora north and west along roads to point 2.2 miles south of Louisville (by D. W. Querfeld in 1934; double-rodged line)

Flora, 0.5 mi. S. of B. & O. R. R. sta., on NW. corner of S. abutment of R. R. bridge 98; chiseled square (B. & O. R. R. B. M. 106)-----	477.64
Flora, at N. edge of, near cor. secs. 23, 24, 25, and 26, T. 3 N., R. 6 E., 40 ft. N. and 40 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 3 1934" ⁷⁴ -----	493.856
Flora, 1.2 mi. N. of public school building, near E. side SE $\frac{1}{4}$ sec. 23, T. 3 N., R. 6 E., 0.2 mi. N. of crossroads, 30 ft. W. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 9 3 1934"-----	495.850
Flora, 2.1 mi. N. of, near SE. cor. sec. 14, T. 3 N., R. 6 E., 200 ft. N. of crossroads, 20 ft. W. of rd., 10 ft. N. and 45 ft. E. from NE. corner of Flora water filter plant, on top of W. end of N. head wall of concrete culvert; chiseled square-----	464.88
Flora, 3.1 mi. N. of, near SE. cor. sec. 11, T. 3 N., R. 6 E., 40 ft. N. and 40 ft. W. from center of crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 2 1934"-----	473.379
Flora, 3.3 mi. N., of, 0.25 mi. N. of cor. secs. 11, 12, 13, and 14, T. 3 N., R. 6 E., near T-rd. E., 275 ft. NE. of farmhouse having three-cornered windows, 30 ft. W. of rd., at fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 9 2 1934"-----	470.701
Flora, 3.9 mi. N. of, about 0.25 mi. N. of quarter corner between secs. 11 and 12, T. 3 N., R. 6 E., at steel bridge over Buck Creek, on E. end of S. concrete abutment; chiseled square-----	456.72

⁷⁴In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "N 84 1935," elevation 496.518 ft.

Flora, 4.6 mi. N. of, near W $\frac{1}{4}$ cor. sec. 1, T. 3 N., R. 6 E., 45 ft. N. and 250 ft. E. from crossroads, in front of Beulah Methodist Episcopal Church, on concrete platform; chiseled square-----	<i>Feet</i> 471. 03
Flora, 5.2 mi. N. of, 2.2 mi. S. and 0.8 mi. E. from Louisville, near cor. secs. 1, 2, 35, and 36, Tps. 3 and 4 N., R. 6 E., on W. side of rd., 14 ft. E. of center of high-tension power line, 25 ft. E. of 6-in. cedar tree on township line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 1 1934"-----	470. 567
Louisville, 1.9 mi. S. and 0.8 mi. E. from, 0.25 mi. S. of quarter corner between secs. 35 and 36, T. 4 N., R. 6 E., 29 ft. W. of N-S. rd., opposite T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 9 1 1934"-----	462. 098

[Continued in Xenia quadrangle, line 3]

3. From point 2.6 miles northeast of Flora southwest along highway to Flora, thence south 2.2 miles, thence generally east and north by way of Schnell to point 1.7 miles southwest of Noble (by Robert Krause in 1934; double-rodged line)

Flora, 2.5 mi. NE. of, about 0.25 mi. N. and 600 ft. E. from W $\frac{1}{4}$ cor. sec. 28, T. 3 N., R. 7 E., 600 ft. E. of junction of highways, on top of S. abutment at E. end of concrete bridge; chiseled square--	443. 52
Flora, 1.4 mi. NE. of, near quarter corner between secs. 29 and 30, T. 3 N., R. 7 E., 300 ft. E. of section line and T-rd. N., on S. side of highway, on top of SE. corner of E. head wall of concrete culvert; chiseled square-----	463. 71
Flora, at E. edge of, about 0.25 mi. N. of quarter corner between secs. 25 and 30, T. 3 N., Rs. 6 and 7 E., 300 ft. W. of range line, on S. side of highway, in front of residence No. 1040, on top of curb; chiseled square-----	474. 70
Flora, 50 ft. S. and 200 ft. W. from B. & O. R. R. sta., in SE. corner of intersection of State Aid Rd. 1 and R. R. tracks, in water meter box with cover level with ground, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "9 4 1934"-----	493. 933
Flora, at S. edge of, 500 ft. N. of quarter corner between secs. 35 and 36, T. 3 N., R. 6 E., on E. side of rd., on NE. corner of N. abutment of small steel and concrete bridge; chiseled square-----	477. 83
Flora, 2.0 mi. S. of, 0.25 mi. N. of S. cor. secs. 1 and 2, T. 2 N., R. 6 E., 25 ft. W. of rd., near SE. corner of Catholic Cemetery, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 1 10 1934" (recovered in 1939)-----	469. 256
Flora, 2.2 mi. S. of, near SE. cor. sec. 2, T. 2 N., R. 6 E., 20 ft. N. and 30 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 1 10 1934" (recovered in 1939)-----	464. 684
Flora, 2.2 mi. S. thence 0.5 mi. E. from, near quarter corner between secs. 1 and 12, T. 2 N., R. 6 E., 30 ft. N. of rd., opposite and 100 ft. E. of farmhouse, in root of 20-in. oak tree; nail-----	469. 80
T. 2 N., R. 7 E., 700 ft. E. of crossroads and W. cor. secs. 6 and 7, 20 ft. N. of rd., opposite and 15 ft. E. of farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	466. 926
T. 2 N., R. 7 E., near S $\frac{1}{4}$ cor. sec. 6, 400 ft. N. and 70 ft. W. from crossroads, in yard of West Seminary School, 15 ft. S. and 30 ft. E. from SE. corner of building, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	465. 405

100 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

T. 2 N., R. 7 E., near quarter corner between secs. 5 and 8, just E. of Bloom Baptist Church, on NE. concrete wing wall of bridge; chiseled square-----	Feet 436.74
T. 2 N., R. 7 E., near NW. cor. sec. 9, 8.0 mi. N. of Cisne, 100 ft. S. and 35 ft. E. from highway crossing, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	454.313
T. 2 N., R. 7 E., about 0.28 mi. E. of NW. cor. sec. 9, 30 ft. S. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	451.100
T. 2 N., R. 7 E., near NE. cor. sec. 9, 40 ft. S. and 500 ft. W. from junction of N-S. rd., in root on S. side of 30-in. oak tree; spike-----	439.15
T. 2 N., R. 7 E., near center of NE¼ sec. 10, 30 ft. N. and 200 ft. W. from junction of T-rd. N., opposite and 150 ft. W. of farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk--	445.908
T. 2 N., R. 7 E., 0.25 mi. S. of N. cor. secs. 10 and 11, 33 ft. N. and 23 ft. W. from junction of T-rd. S. and private lane N., at NW. corner of lane, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	439.543
T. 2 N., R. 7 E., 0.25 mi. N. of center of sec. 11, about 500 ft. E. of N-S. quarter line of section, 150 ft. W. of farmhouse, 35 ft. S. of rd., in root of 18-in. locust tree; spike-----	452.63
T. 2 N., R. 7 E., 0.25 mi. N. of S. cor. secs. 1 and 2, 100 ft. N. and 33 ft. E. from junction of T-rd. E., opposite lane W. to brick farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk--	458.198
T. 2 N., R. 7 E., near center of SW¼ sec. 1, 30 ft. N. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	462.356
T. 2 N., Rs. 7 and 8 E., 265 ft. N. of SE. cor. sec. 1, 50 ft. W. of rd., in root of 25-in. sycamore tree; nail-----	461.67
T. 2 N., Rs. 7 and 8 E., near quarter corner between secs. 7 and 12, 100 ft. N. and 30 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	459.726
T. 2 N., R. 8 E., 0.25 mi. E. of W¼ cor. sec. 7, 0.25 mi. E. of junction of T-rd. E., 30 ft. N. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	458.570
T. 2 N., R. 8 E., 0.2 mi. E. of crossroads and quarter corner between secs. 7 and 8, 35 ft. N. of rd., in root of second thorn tree on N. side of rd.; nail-----	471.73
T. 2 N., R. 8 E., near W¼ cor. sec. 9, 80 ft. S. and 50 ft. E. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	461.752
T. 2 N., R. 8 E., 0.23 mi. E. of crossroads and W¼ cor. sec. 9, 25 ft. S. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	453.708
T. 2 N., R. 8 E., near center of sec. 9, on top of NE. corner of concrete abutment of small bridge; chiseled square-----	444.34
T. 2 N., R. 8 E., near W¼ cor. sec. 10, 20 ft. S. and 310 ft. E. from crossroads, in root of 16-in. oak tree; nail-----	439.65
T. 2 N., R. 8 E., 0.25 mi. E. of center of sec. 10, 20 ft. N. and 115 ft. W. from junction of N-S. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939)-----	434.103
T. 2 N., R. 8 E., near center of NE¼ sec. 10, 0.25 mi. N. of T-rd. W., 35 ft. W. of rd., in SW. corner of driveway to farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939)-----	445.576

T. 2 N., R. 8 E., near E $\frac{1}{4}$ cor sec. 3, 480 ft. E. of T-rd. S., at bridge over Little Wabash River, on SE. corner of column plate of NE. pier; chiseled square-----	<i>Feet</i> 417. 19
T. 2 N., R. 8 E., about 0.25 mi. N. of center of sec. 2, about 1 mi. NE. of bridge over Little Wabash River, 25 ft. S. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	425. 792
T. 2 N., R. 8 E., about 0.25 mi. N. of quarter corner between secs. 1 and 2, about 300 ft. W. of point where N-S. section line crosses rd., opposite and 100 ft. W. of farmhouse, 35 ft. S. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	449. 439
T. 2 N., R. 8 E., near center of sec. 1, 1.0 mi. W. of Schnell, 18 ft. S. and 36 ft. E. from junction of T-rd. E., in root on E. side of 24-in. oak tree; spike-----	443. 10
Schnell, 315 ft. N. of crossroads, 30 ft. W. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	438. 884
Schnell, 0.3 mi. N. of, about 800 ft. S. of N $\frac{1}{4}$ cor. sec. 6, T. 2 N., R. 9 E., 40 ft. W. of rd., near private garage, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	445. 308
Schnell, 0.7 mi. N. of, about 0.2 mi. S. of center of sec. 31, T. 3 N., R. 9 E., 0.3 mi. N. of crossroads, 500 ft. N. of church, near farmhouse on W. side of rd., 15 ft. W. of rd., in root on E. side of 30-in. oak tree; spike-----	447. 20
Schnell, 1.1 mi. N. of, about 800 ft. N. of center of sec. 31, T. 3 N., R. 9 E., opposite and 100 ft. N. of farmhouse, 20 ft. W. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	447. 681
Schnell, 1.4 mi. N. of, near N $\frac{1}{4}$ cor. sec. 31, T. 3 N., R. 9 E., 20 ft. S. and 80 ft. E. from junction of E-W. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	446. 203
Schnell, 1.6 mi. N. and 0.3 mi. W. from, 2.2 mi. SW. thence 1.6 mi. S. from Noble, 0.2 mi. N. of SE. cor. sec. 25, T. 3 N., R. 8 E., 0.2 mi. N. of junction of T-rd. N., 40 ft. W. of rd., 3 ft. N. and 15 ft. E. from NE. corner of farmhouse, in root on SE. side of 26-in. oak tree; spike-----	449. 34
Noble, 2.2 mi. SW. thence 0.9 mi. S. from, near NW. cor. sec. 30, T. 3 N., R. 9 E., 20 ft. S. and 40 ft. E. from crossroads, in root on W. side of 20-in. oak tree; spike-----	452. 99
Noble, 2.2 mi. SW. thence 0.2 mi. S. from, 0.2 mi. S. of NE. cor. sec. 24, T. 3 N., R. 8 E., 22 ft. N. and 65 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	453. 971
Noble, 2.2 mi. SW. of, near NE. cor. sec. 24, T. 3 N., R. 8 E., 33 ft. S. and 100 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	452. 581

[Continued in Olney quadrangle, line 4]

4. From point 0.5 mile south and 0.1 mile east from Schnell along roads west and north to Schnell (by H. M. Hunneman in 1934)

[Continued from Olney quadrangle, line 6]

Schnell, 0.5 mi. S. of, near N $\frac{1}{4}$ cor. sec. 7, T. 2 N., R. 9 E., 20 ft. S. and 20 ft. E. from crossroads, in schoolyard, in root of large maple tree; nail-----	439. 37
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5. From point near northeast corner of quadrangle along roads south and east to point 1.3 miles west of Noble (by L. L. Newlin in 1934; reveled by W. C. Elledge in 1939)

[Continued from Sailor Springs quadrangle, line 3]

Noble, 1.8 mi. W. thence 3.2 mi. N. from, near cor. secs. 25, 30, 31, and 36, T. 4 N., Rs. 8 and 9 E., on top of NE. concrete wing wall of iron bridge; chiseled square-----	<i>Feet</i> 430. 69
Noble, 1.8 mi. W. thence 2.2 mi. N. from, 0.25 mi. S. of quarter corner between secs. 31 and 36, T. 4 N., Rs. 8 and 9 E., at Clay-Richland county line, on W. side of rd., at summit of grade, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 9 13 1934"-----	440. 843
Noble, 1.8 mi. W. thence 2.0 mi. N. from, near SE. cor. sec. 36, T. 4 N., R. 8 E., at Clay-Richland county line, 70 ft. W. of junction of T-rd. W., on N. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 13 1934"-----	441. 977
Noble, 1.8 mi. W. thence 2.0 mi. N. from, near SW. cor. sec. 31, T. 4 N., R. 9 E., 65 ft. N. and 26 ft. E. from junction of T-rd. W., in root on S. side of 15-in. hickory tree; copper nail and washer ⁷⁵ ---	442. 81
Noble, 1.8 mi. W. thence 1.6 mi. N. from, about 650 ft. N. of quarter corner between secs. 1 and 6, T. 3 N., Rs. 8 and 9 E., 400 ft. S. of T-rd. E., on W. head wall of concrete culvert; circle of letter "R"---	440. 76
Noble, 1.8 mi. W. thence 0.5 mi. N. from, near E $\frac{1}{4}$ cor. sec. 12, T. 3 N., R. 8 E., 22 ft. S. and 40 ft. W. from junction of T-rd. W., in concrete post; U. S. C. and G. S. and State Survey standard disk stamped "T T 9 12 1934"-----	449. 766
Noble, 1.8 mi. W. thence 0.3 mi. N. from, about 0.2 mi. S. of E $\frac{1}{4}$ cor. sec. 12, T. 3 N., R. 8 E., on W. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 9 12 1934"---	450. 224

[Continued in Olney quadrangle, line 7]

6. From point 2.2 miles southwest of Noble along road west 1.3 miles (by E. W. Gouchenour in 1936; leveled twice)

Noble, 2.2 mi. W. of, near NE. cor. sec. 24, T. 3 N., R. 8 E., 33 ft. S. and 100 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 11 1934"---	452. 530
Noble, 3.2 mi. W. of, near NW. cor. sec. 24, T. 3 N., R. 8 E., 24 ft. S. and 21 ft. E. from junction of T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 10 1934"---	439. 398
U. S. C. & G. S. standard disk stamped "Z 109 1935"-----	428. 533

7. From point about 2 miles south of Flora along road south to crossroads 0.7 mile south and 2.7 miles west from Cisne, thence east 6.7 miles, thence south about 0.3 mile (by W. C. Elledge in 1939)

Flora, 2.5 mi. S. of, 0.25 mi. N. of cor. secs. 11, 12, 13, and 14, T. 2 N., R. 6 E., at steel bridge over Raccoon Creek, on SE. concrete wing wall; chiseled square-----	441. 64
Flora, 3.6 mi. S. of, 2.2 mi. N. and 1.5 mi. W. from Rinard, near cor. secs. 13, 14, 23, and 24, T. 2 N., R. 6 E., 175 ft. N. of center line of rd., in line with fences on Clay-Wayne county line, on E. side of rd., in root on W. side of 15-in. oak tree; copper nail and washer---	432. 68

⁷⁵ This bench mark was set in 1939.

Rinard, 1.2 mi. N. and 1.5 mi. W. from, near NW. cor. sec. 25, T. 2 N., R. 6 E., about 300 ft. S. of crossroads, on E. side of rd., 3 ft. S. and 1 ft. W. from NW. corner of farmyard fence, in concrete post; standard tablet stamped "17 E 1939"-----	<i>Feet</i> 479. 978
Rinard, 0.5 mi. N. and 1.5 mi. W. from, near cor. secs. 25, 26, 35, and 36, T. 2 N., R. 6 E., 33 ft. W. of T-rd. E., in root on E. side of 10-in. hedge tree used as N. gatepost; copper nail and washer-----	463. 95
Rinard, 0.5 mi. S. and 1.5 mi. W. from, near N. cor. secs. 1 and 2, T. 1 N., R. 6 E., 20 ft. E. of rd., 110 ft. S. of fence corner, at fence line, in root on SW. side of 15-in. catalpa tree; copper nail and washer-----	466. 70
Rinard, 2.0 mi. S. and 1.5 mi. W. from, 2.7 mi. W. thence 2.7 mi. N. from Cisne, 0.25 mi. S. of cor. secs. 1, 2, 11, and 12, T. 1 N., R. 6 E., in SW. corner of yard of Blue Point School, 2 ft. N. and 6 ft. E. from corner fence post, in concrete post; standard tablet stamped "18 E 1939"-----	508. 297
Cisne, 2.7 mi. W. thence 0.8 mi. N. from, 900 ft. S. of crossroads and NW. cor. sec. 13, T. 1 N., R. 6 E., on E. side of rd., at fence line, in root on NW. side of 24-in. oak tree; copper nail and washer-----	494. 68
Cisne, 2.7 mi. W. of, near NW. cor. sec. 24, T. 1 N., R. 6 E., 85 ft. N. and 25 ft. W. from crossroads, in root on E. side of 24-in. oak tree; copper nail and washer-----	478. 57
Cisne, 0.7 mi. S. thence 2.7 mi. W. from, near SE. cor. sec. 23, T. 1 N., R. 6 E., 36 ft. N. and 18 ft. W. from crossroads, 18 ft. N. and 2 ft. E. from corner fence post; standard tablet stamped "19 E 1939"-----	461. 552
Cisne, 0.7 mi. S. thence 1.7 mi. W. from, near NW. cor. sec. 30, T. 1 N., R. 7 E., 40 ft. S. and 30 ft. E. from junction of T-rd. S., in root on N. side of 12-in. wild-cherry tree; copper nail and washer--	484. 02
Cisne, 0.7 mi. S. thence 0.8 mi. W. from, near quarter corner between secs. 20 and 29, T. 1 N., R. 7 E., in yard of Antioch School, on SW. corner of concrete well curb; chiseled square-----	467. 11
U. S. C. & G. S. standard disk stamped "D 84 1934"-----	455. 301
Cisne, 0.7 mi. S. thence 1.0 mi. E. from, near cor. secs. 21, 22, 27, and 28, T. 1 N., R. 7 E., 40 ft. S. and 65 ft. E. from junction of T-rd. S., in root on N. side of 15-in. maple tree; copper nail and washer-----	450. 71
Cisne, 0.7 mi. S. thence 2.0 mi. E. from, 4.0 mi. N. of Jeffersonville (Geff post office), near SE. cor. sec. 22, T. 1 N., R. 7 E., 160 ft. N. and 12 ft. W. from crossing of U. S. Highway 45, on W. head wall of concrete culvert; chiseled square-----	450. 75
Cisne, 0.7 mi. S. thence 2.5 mi. E. from, 1.5 mi. S. and 1.5 mi. W. from Enterprise, near NE. cor. sec. 26, T. 1 N., R. 7 E., 20 ft. S. and 20 ft. W. from crossroads, on W. head wall of concrete culvert; chiseled square-----	442. 01
Enterprise, 1.5 mi. S. and 0.5 mi. W. from, near E. cor. secs. 24 and 25, T. 1 N., R. 7 E., 20 ft. N. and 15 ft. W. from intersection of rd. tangents S. and W., 4 ft. S. and 12 ft. W. from fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "20 E 1939"-----	436. 187

[Continued in Fairfield quadrangle, line 1]

8. From Rinard along roads alternately west and south to quarter corner between secs. 35 and 36, T. 2 N., R. 6 E., thence north, east, and south and back to Rinard (by W. C. Elledge in 1939)

U. S. C. & G. S. standard disk stamped "G 84 1935"----- 458. 218

104 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Rinard, 0.2 mi. S. and 1.5 mi. W. from, near W $\frac{1}{4}$ cor. sec. 36, T. 2 N., R. 6 E., 30 ft. N. and 51 ft. E. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk----- Feet
466.374

Rinard, 1.5 mi. W. of, 0.25 mi. S. of cor. secs. 25, 26, 35, and 36, T. 2 N., R. 6 E., 3 ft. S. and 48 ft. E. from center line of rd. in line with fence E., in concrete post; U. S. C. & G. S. and State Survey standard disk-----
469.880

9. From point 0.5 mile north and 1.2 miles west from Mount Erie alternately west and north along roads to sec. 10, T. 2 N., R. 8 E. (by W. C. Elledge in 1939)

[Continued from Olney quadrangle, line 13]

Mount Erie, 0.5 mi. N. and 1.5 mi. W. from, near E. cor. secs. 12 and 13, T. 1 N., R. 8 E., on W. side of rd., 25 ft. N. and 45 ft. E. from NE. corner of Lincoln School, 4 ft. N. and 1 ft. E. from corner fence post, in concrete post; standard tablet stamped "28 E 1939"-----
472.436

Reference mark, 70 ft. SW. of tablet, on SE. corner of well curb; chiseled square-----
472.87

Mount Erie, 1.7 mi. N. and 1.5 mi. W. from, near W. cor. secs. 6 and 7, T. 1 N., R. 9 E., 150 ft. S. of fence line E., 15 ft. E. of small bridge, on N. bank of small drain, in root on W. side of 12-in. catalpa tree; copper nail and washer-----
447.38

T. 2 N., R. 9 E., near W $\frac{1}{4}$ cor. sec. 31, 175 ft. S. and 20 ft. W. from junction of T-rd. E., 15 ft. S. and 5 ft. E. from SE. corner of farmyard, in root on NE. side of 30-in. catalpa tree; copper nail and washer-----
445.09

T. 2 N., R. 8 E., near E $\frac{1}{4}$ cor. sec. 25, 50 ft. N. and 50 ft. W. from junction of T-rd. W., 37 ft. N. and 2 ft. E. from corner fence post, in concrete post; standard tablet stamped "29 E 1939"-----
422.426

T. 2 N., R. 8 E., about 0.3 mi. E. of W. cor. secs. 24 and 25, 25 ft. S. and 60 ft. W. from junction of T-rd. N., at fence corner, in root on NE. side of 10-in. hedge tree; copper nail and washer-----
434.51

T. 2 N., R. 8 E., near NE. cor. sec. 23, at Clay-Wayne county line, 35 ft. S. and 7 ft. W. from T-rd. N., 2 ft. N. of fence, in concrete post; standard tablet stamped "30 E 1939"-----
437.259

T. 2 N., R. 8 E., near cor. secs. 14, 15, 22, and 23, about 125 ft. N. of T-rd. S., at Wells School, on NW. corner of concrete well curb; chiseled square-----
443.26

10. From point about 3 miles southeast of Flora on Baltimore & Ohio Railroad generally west along railroad and roads to point 2.2 miles south and 0.4 mile west from Flora (by W. C. Elledge in 1939)

U. S. C. & G. S. standard disk stamped "J 84 1935"-----
461.331

[Continued in Xenia quadrangle, line 5]

11. From point 1.1 miles northeast of Flora northeast 0.7 mile along Baltimore & Ohio Railroad (by W. C. Elledge in 1939; leveled twice)

U. S. C. & G. S. standard disk stamped "U 109 1935"-----
472.647

Flora, 1.8 mi. NE. of, 0.25 mi. S. of cor. secs. 19, 20, 29, and 30, T. 3 N., R. 7 E., 45 ft. S. and 60 ft. E. from rd. crossing, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 5 1934"-----
470.031

12. From point 3 miles northeast of Flora northeast 0.3 mile along Baltimore & Ohio Railroad (by W. C. Elledge in 1939; leveled twice)

Flora, 3.0 mi. NE. of sta., 0.3 mile N. of Stanford town hall, 40 ft. N. of track, 2 rails E. of rd. crossing, 6 poles W. of milepost 239, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 9 6 1934" (recovered by U. S. C. & G. S. in 1935)	Feet 461. 574
Flora, 3.3 mi. NE. of, in SW $\frac{1}{4}$ sec. 21, T. 3 N., R. 7 E., 0.3 mi. SW. of rd. crossing, 40 ft. N. and 24 ft. W. from center line of track in line with fence S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 9 6 1934"	459. 155

13. From point 1.7 miles east of Clay City west 3.1 miles along highway and Baltimore & Ohio Railroad (by W. C. Elledge in 1939)

U. S. C. & G. S. standard disk stamped "Y 109 1935"	432. 844
Clay City, 1.2 mi. E. of, 0.2 mi. E. of cor. secs. 16 and 21, T. 3 N., R. 8 E., 26 ft. S. and 16 ft. W. from junction of old T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 9 9 1934"	443. 214
Clay City, 0.5 mi. E. of, about 0.25 mi. E. of W. cor. secs. 17 and 20, T. 3 N., R. 8 E., 2 ft. N. and 4 ft. E. from center line of rd. in line with fence S., in concrete post; U. S. C. & G. S. and State Survey standard disk	428. 772
U. S. C. & G. S. standard disk stamped "W 109 1935"	450. 462

14. From point 0.6 mile south and 1 mile east from Sailor Springs generally east along roads to point 3.2 miles north and 1.3 miles west from Noble (by W. C. Elledge in 1939)

[Continued from Sailor Springs quadrangle, line 5]

Sailor Springs, 0.8 mi. S. and 1.8 mi. E. from, near center of NW $\frac{1}{4}$ sec. 33, T. 4 N., R. 8 E., 120 ft. N. and 20 ft. E. from junction of rd. W. and N-S. rd., in root on W. side of 20-in. oak tree; copper nail and washer	444. 98
Sailor Springs, 0.5 mi. S. and 2.6 mi. E. from, near SW. cor. sec. 27, T. 4 N., R. 8 E., 20 ft. N. and 195 ft. E. from crossroads, in SE. corner of yard of Snyder School, 1 ft. N. and 3 ft. W. from corner fence post, in concrete post; standard tablet stamped "13 E 1939"	444. 804
Reference mark, 13 ft. S. of SE. corner of schoolhouse, on SE corner of well curb; chiseled square	446. 85
Sailor Springs, 0.5 mi. S. and 3.9 mi. E. from, 3.2 mi. N. thence 3.5 mi. W. from Noble, 0.3 mi. E. of cor. secs. 26, 27, 34, and 35, T. 4 N., R. 8 E., 300 ft. E. of jog in rd., 600 ft. W. of steel bridge, on S. side of rd., in root on N. side of 24-in. oak tree; copper nail and washer	424. 62
Noble, 3.2 mi. N. thence 2.8 mi. W. from, near SW. cor. sec. 25, T. 4 N., R. 8 E., in NE. angle of crossroads, at entrance to Pleasant Dale School, on W. end of first concrete step; chiseled square	442. 35

[Continued in Olney quadrangle, line 14]

COFFEEN QUADRANGLE

[Latitude 39°00'–39°15'; longitude 89°15'–89°30']

BOND AND MONTGOMERY COUNTIES

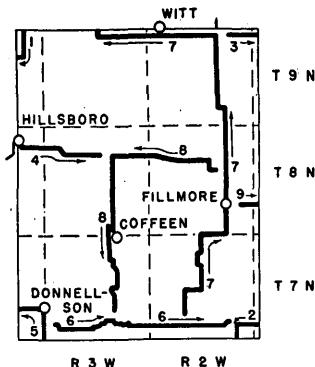


FIGURE 20.—Lines of leveling in Coffeen quadrangle.

1. From point 6.4 miles north of Hillsboro along roads south and west to point 2.2 miles north and 2.2 miles east from Butler (by E. O. Brooks in 1923)

[Continued from Morrisonville quadrangle, line 2]

Hillsboro, 6.2 mi. N. of, near NE. cor. sec. 11, T. 9 N., R. 4 W., in SW. angle of crossroads, on top of S. end of concrete culvert; chiseled square -----

Feet
635.06

[Continued in Mount Olive quadrangle, line 7]

2. From point 7.5 miles south and 1.8 miles east from Fillmore generally west and south along roads in southeast part of quadrangle (by Walter Thomson in 1934)

[Continued from Ramsey quadrangle, line 5]

Fillmore, 7.3 mi. S. and 1.3 mi. E. from, in NE¼ sec. 36, T. 7 N., R. 2 W., 150 ft. NW. of junction of T-rd. S., 750 ft. SE. of junction of T-rd. N., in root on SE. side of 30-in. oak tree; spike with "16" on head -----

575.53

Fillmore, 7.3 mi. S. and 1.0 mi. E. from, 0.2 mi. N. of center of sec. 36, T. 7 N., R. 2 W., in center of top of NE. head wall of concrete culvert; chiseled circle -----

540.51

Fillmore, 7.3 mi. S. and 0.8 mi. E. from, near center of NW¼ sec. 36, T. 7 N., R. 2 W., on N. side of rd., 35 ft. SW of farmhouse, in root on SW. side of 36-in. soft-maple tree; spike with "16" on head -----

577.52

Fillmore, 7.0 mi. S. and 0.5 mi. E. from, near SE. cor. sec. 26, T. 7 N., R. 2 W., 20 ft. N. and 35 ft. W. from junction of T-rd. W., at Neathery School, 100 ft. NW. of well platform, in concrete post; standard tablet stamped "Prim Trav Sta No 130 LS 1924" (recovered in 1937) -----

581.043

Reference mark, 100 ft. SE. of tablet, on NW. corner of concrete well platform; chiseled square (recovered in 1937)-----	<i>Feet</i> 582. 74
Fillmore, 7.7 mi. S. and 0.5 mi. E. from, 0.2 mi. S. of W¼ cor. sec. 36, T. 7 N., R. 2 W., 100 ft. NW. of farmhouse, on E. side of rd., in root on W side of 24-in. hickory tree; spike with "16" on head-----	579. 55

[Continued in Mulberry Grove quadrangle, line 1]

3. From point 3.3 miles south of Nokomis along roads south 0.2 mile, thence east to point 0.5 mile south and 5.5 miles east from Witt (by P. G. VanSickle in 1934; releveled by S. R. Archer in 1937)

Nokomis, 3.5 mi. S. of, 0.5 mi. S. thence 3.3 mi. E. from Witt, near SE. cor. sec. 3, T. 9 N., R. 2 W., 20 ft. N. and 20 ft. W. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 105 LS 1924"-----	720. 320
Witt, 0.5 mi. S. thence 4.3 mi. E. from, near NW. cor. sec. 11, T. 9 N., R. 2 W., in SE. angle of crossroads, at fence corner, at concrete right-of-way post; top of post-----	701. 52
Witt, 0.5 mi. S. thence 5.0 mi. E. from, 0.25 mi. W. of NE. cor. sec. 12, T. 9 N., R. 2 W., on S. side of rd., 65 ft. N. of NE. corner of farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 9 1934 669"-----	668. 654
Witt, 0.5 mi. S. thence 5.3 mi. E. from, near SW. cor. sec. 6, T. 9 N., R. 1 W., at offset crossroads, 65 ft. N. and 22 ft. E. from junction of rd. E., 22 ft. E. of center line of rd. W., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 8 1934 671"-----	670. 611

[Continued in Ramsey quadrangle, line 7]

4. From Hillsboro east along road 5.1 miles (single spur line by Robert Rinaker in 1934; releveled by S. R. Archer in 1937)

[Continued from Mount Olive quadrangle, line 8]

Hillsboro, at intersection of Washington and Franklin Streets, 20 ft. N. of center line of Franklin Street, 5 ft. S. of light pole, on concrete curb along E. side of street; chiseled square-----	635. 62
U. S. C. & G. S. standard disk stamped "T 93 1935"-----	630. 035
Hillsboro, at N. entrance of Montgomery County courthouse, in W. end of lower step; aluminum tablet stamped "Prim Trav Sta No 70 1911 640" (recovered by U. S. C. & G. S. in 1935)-----	640. 369
U. S. C. & G. S. standard disk stamped "S 93 1935"-----	639. 638
Hillsboro, on School Street, about midway between Crittenden Street and Lake View Drive, on top of N. corner at W. end of S. head wall of concrete bridge; chiseled square-----	583. 78
Hillsboro, on School Street, 15 ft. S. and 10 ft. W. from intersection of Leva Street, in concrete curb; monel-metal rivet-----	626. 76
U. S. C. & G. S. standard disk stamped "R 93 1935"-----	629. 861
Schram City, at right angle from W. to N. in State Highway 16, 25 ft. N. and 30 ft. W. from center of streets, in top of concrete curb; monel-metal rivet-----	631. 04
Hillsboro, 2.0 mi. E. of, near quarter corner between secs. 7 and 8, T. 8 N., R. 3 W., at S. end of jog in E.-W. rd., 25 ft. S. and 15 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "627"-----	627. 594

108 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Hillsboro, 2.8 mi. E. of, 0.25 mi. E. of center of sec. 8, T. 8 N., R. 3 W., in SE corner of crossroads, in top of E. head wall of concrete culvert under rd. S.; monel-metal rivet-----	Feet 651.77
Hillsboro, 4.1 mi. E. of, near W¼ cor. sec. 10, T. 8 N., R. 3 W., 35 ft. S. of E.-W. rd., on E side of T-rd. S., 17 ft. S of fence corner, inside fence; standard iron post with bronze cap stamped "Prim Trav Sta No 124 LS 1924 671"-----	670.748
Hillsboro, 5.1 mi. E. of, 0.5 mi. W. thence 4.0 mi. N. from Coffeen, near E¼ cor. sec. 10, T. 8 N., R. 3 W., 20 ft. S. and 30 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "657"-----	656.790
5. From point 2.2 miles south of Donnellson along roads north and west to point about 1.5 miles east of Panama (by S. R. Archer in 1935)	
[Continued from Mulberry Grove quadrangle, line 5]	
Donnellson, 1.8 mi. S. of, near W¼ cor. sec. 31, T. 7 N., R. 3 W., 15 ft. S. of junction of T-rd. W., on top of N. end of E. head wall of concrete culvert; chiseled square-----	609.31
Donnellson, 1.3 mi. S. of, near NE. cor. sec. 36, T. 7 N., R. 4 W., 28 ft. S. and 37 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "607" (recovered in 1937)-----	607.442
Donnellson, in S. part of, about 500 ft. S. of NE. cor. sec. 25, T. 7 N., R. 4 W., 500 ft. S. of crossroads, on top of N. end of W. head wall of concrete culvert; chiseled square-----	607.21
Donnellson, in S. part of, at SW. corner of crossroads, on top of E. side of S. end of concrete culvert under rd. W.; chiseled square---	612.00
Donnellson, 0.3 mi. S. thence 1.0 mi. W. from, 1.8 mi. by rd. E. of Panama, near cor. secs. 23, 24, 25, and 26, T. 7 N., R. 4 W., on N. side of rd., 30 ft. E. of private rd. N., 25 ft. S. of SW. corner of fence around electric sub-station, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "608"-----	607.927
[Continued in Mount Olive quadrangle, line 9]	
6. From road junction 1.3 miles south of Donnellson generally east along roads to road junction 7 miles south and 0.5 mile east from Fillmore (by S. R. Archer in 1937)	
Donnellson, 1.5 mi. S. and 1.0 mi. E. from, 0.2 mi. S. of cor. secs. 29, 30, 31, and 32, T. 7 N., R. 3 W., 270 ft. N. of right-angle in rd., on W. side of rd. N., in root on NE. side of 24-in. walnut tree; copper nail and washer-----	621.17
Donnellson, 1.6 mi. S. and 2.0 mi. E. from, 0.25 mi. S. of N. cor. secs. 32 and 33, T. 7 N., R. 3 W., 20 ft. S. and 10 ft. E. from junction of T-rd. N., opposite and SW. of schoolhouse, in fence line along S. side of rd., in concrete post; standard tablet stamped "Prim Trav Sta No 129 LS 1924 619"-----	618.875
Donnellson, 1.6 mi. S. and 2.4 mi. E. from, about 500 ft. E. of center of NW¼ sec. 33, T. 7 N., R. 3 W., at SE. corner of junction of T-rd. S., on top of E. head wall of concrete culvert under rd. S.; chiseled square-----	600.52
Donnellson, 1.3 mi. S. and 2.9 mi. E. from, about 500 ft. W. of E. cor. secs. 28 and 33, T. 7 N., R. 3 W., on top of N. wing wall of E. abutment of concrete bridge; chiseled square-----	546.22

Donnellson, 1.1 mi. S. and 3.3 mi. E. from, in E. part of SW $\frac{1}{4}$ sec. 27, T. 7 N., R. 3 W., 40 ft. NE. of intersection of rds., at SW. corner of triangular plot between rd. forks, in root on SW. side of 24-in. tree, southeasternmost of four oak trees in plot between rds.; copper nail and washer-----	Feet 601.78
Donnellson, 1.0 mi. S. and 3.5 mi. E. from, 5.3 mi. S. and 1.0 mi. W. from Coffeen, 0.25 mi. S. of center of sec. 27, T. 7 N., R. 3 W., on S. side of rd., in NE. corner of schoolyard, 15 ft. S. and 45 ft. W. from junction of private rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "601"-----	601.126
Coffeen, 5.6 mi. S. and 0.2 mi. W. from, 0.25 mi. E. of NW. cor. sec. 35, T. 7 N., R. 3 W., at bridge over Shoal Creek, on top of W. end of S. wing wall of W. concrete abutment; chiseled square-----	530.23
Coffeen, 5.6 mi. S. and 0.5 mi. E. from, near NE. cor. sec. 35, T. 7 N., R. 3 W., 230 ft. S. of T-rd. S., on E. side of rd., inside field, in root on E. side of 24-in. elm tree; copper nail and washer-----	585.40
Coffeen, 5.8 mi. S. and 0.8 mi. E. from, near center of NW $\frac{1}{4}$ sec. 36, T. 7 N., R. 3 W., 4 ft. S. and 20 ft. W. from junction of T-rd. E., in concrete post; standard tablet stamped "Prim Sta No 128 LS 1924 590"-----	590.100
Coffeen, 5.8 mi. S. and 1.5 mi. E. from, 0.25 mi. S. of NW. cor. sec. 31, T. 7 N., R. 2 W., 165 ft. N. of crossroads, on E. side of rd. N., in root on SE. side of 10-in. elm tree; copper nail and washer-----	591.60
Coffeen, 5.8 mi. S. and 2.3 mi. E. from, near center of NE $\frac{1}{4}$ sec. 31, T. 7 N., R. 2 W., 23 ft. S. and 13 ft. E. from junction of T-rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "592"-----	591.894
Coffeen, 5.8 mi. S. and 2.5 mi. E. from, 0.25 mi. S. of NW. cor. sec. 32, T. 7 N., R. 2 W., 60 ft. N. of junction of T-rd. N., on top of S. end of E. head wall of concrete culvert under rd. N.; chiseled square-----	568.62
Coffeen, 5.8 mi. S. and 3.0 mi. E. from, 0.25 mi. N. of center of sec. 32, T. 7 N., R. 2 W., 370 ft. E. of T-rd. S., 100 ft. W. of summit of hill, on S. side of rd., at NW. corner of yard of farmhouse, in root on E. side of 24-in. oak tree; copper nail and washer-----	626.13
Coffeen, 5.8 mi. S. and 3.7 mi. E. from, 2.0 mi. S. and 2.0 mi. W. from Hurricane, near center of NW $\frac{1}{4}$ sec. 33, T. 7 N., R. 2 W., at offset crossroads, 20 ft. S. and 25 ft. W. from junction of rds. W. and N., 39 ft. S. and 25 ft. W. from junction of rds. N. and E., 30 ft. W. of private rd. S.; standard iron post with bronze cap stamped "Prim Trav Sta No 127 LS 1924 636"-----	636.191
Hurricane, 2.0 mi. S. and 1.3 mi. W. from, 0.25 mi. S. of N. cor. secs. 33 and 34, T. 7 N., R. 2 W., 100 ft. W. of T-rd. N., 310 ft. E. of T-rd. S., on top of N. parapet of E. abutment of concrete bridge; chiseled square-----	561.31
Hurricane, 2.0 mi. S. and 0.7 mi. W. from, 7.3 mi. S. and 1.0 mi. W. from Fillmore, 0.25 mi. N. of center of sec. 34, T. 7 N., R. 2 W., 18 ft. S. and 60 ft. E. from crossroads, at fence line, 2 ft. E. of telephone pole, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "588"-----	588.366
Fillmore, 7.0 mi. S. of, near quarter corner between secs. 26 and 35, T. 7 N., R. 2 W., 140 ft. SW. of T-rd. N., on N. side of rd. W., in fence line, in root on N. side of 10-in. persimmon tree; copper nail and washer-----	574.95

7. From road junction 2 miles south and 2 miles west from Hurricane along roads alternately north and east to road junction 5 miles north of Fillmore, thence alternately west and north to point 0.3 mile south and 3.3 miles west from Witt (by S. R. Archer in 1937)

Hurricane, 1.2 mi. S. and 2.0 mi. W. from, 0.25 mi. W. of center of sec. 28, T. 7 N., R. 2 W., 50 ft. N. of fence line W., 175 ft. S. of fence line E., 40 ft. E. of rd., in field, in root on NW. side of 24-in. hickory tree; copper nail and washer-----	<i>Feet</i> 609.60
Hurricane, 0.2 mi. S. and 2.0 mi. W. from, 0.25 mi. W. of center of sec. 21, T. 7 N., R. 2 W., in SW. angle of junction of T-rd. W., in front of schoolhouse, on top of NE. corner of concrete porch floor; chiseled square-----	607.85
Hurricane, about 0.2 mi. N. and 1.2 mi. W. from, 5.0 mi. S. and 1.5 mi. W. from Fillmore, near cor. secs. 15, 16, 21, and 22, T. 7 N., R. 2 W., 180 ft. S. of cross fence, 20 ft. E. of rd., 20 ft. S. and 60 ft. W. from residence of T. E. Brown, at SW. corner of yard; standard iron post with bronze cap stamped "Prim Trav Sta No 126 LS 1924 606"-----	605.773
Fillmore, 4.2 mi. S. and 1.5 mi. W. from, 0.3 mi. S. of NW. cor. sec. 15, T. 7 N., R. 2 W., in NE. corner of crossroads, on top of N. head wall of concrete culvert; chiseled square-----	610.92
Fillmore, 4.0 mi. S. and 1.5 mi. W. from, near SE. cor. sec. 9, T. 7 N., R. 2 W., in NW. corner of crossroads, on top of S. end of W. head wall of concrete culvert under rd. N.; chiseled square---	614.05
Fillmore, 3.5 mi. S. and 1.5 mi. W. from, near W $\frac{1}{4}$ cor. sec. 10, T. 7 N., R. 2 W., on E. side of right-angle turn in rd., 15 ft. E. of rd. S., 4 ft. N. of rd. W., at fence corner, on S. side of gate, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "620"-----	619.551
Fillmore, 3.0 mi. S. and 1.6 mi. W. from, 500 ft. W. of SE. cor. sec. 4, T. 7 N., R. 2 W., 500 ft. W. of T-rd. N., on N. side of rd., at fence line, in root on NE. side of easternmost of two large cherry trees; copper nail and washer-----	621.26
Fillmore, 2.0 mi. S. thence 1.5 mi. W. from, near SW. cor. sec. 34, T. 8 N., R. 2 W., 20 ft. N. and 20 ft. E. from junction of T-rd. E., in fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 125 LS 1924 625"-----	625.190
Fillmore, 2.0 mi. S. thence 0.5 mi. W. from, near SW. cor. sec. 35, T. 8 N., R. 2 W., 135 ft. N. of junction of T-rd. N., on E. side of rd., at fence line, in root on W. side of 24-in. oak tree; copper nail and washer-----	623.78
Fillmore, 1.8 mi. S. of, 0.25 mi. S. of center of sec. 35, T. 8 N., R. 2 W., 15 ft. N. and 20 ft. E. from junction of T-rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "637 Reset 1940"-----	635.592
Fillmore, 1.0 mi. S. of, near S $\frac{1}{4}$ cor. sec. 26, T. 8 N., R. 2 W., 90 ft. N. and 60 ft. W. from crossroads, in root on NE. side of 24-in. hackberry tree; copper nail and washer-----	575.06

⁷⁷In 1940 this bench mark was moved 18 ft. N.68°15'E. from this location and reset 1.115 ft. lower than the elevation previously determined. The figures given represent the new elevation.

Fillmore, at NW. corner of main street intersection, at SE. corner of brick bank building, at entrance, on top of SW. end of stone doorsill; chiseled square-----	Feet 637. 91
Fillmore, 0.7 mi. N. of, 0.2 mi. N. of center of sec. 23, T. 8 N., R. 2 W., on top of N. end of W. head wall of concrete culvert; chiseled square-----	618. 19
Fillmore, 1.5 mi. N. of, near center of sec. 14, T. 8 N., R. 2 W., 20 ft. N. and 35 ft. E. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 122 LS 1924 647"-----	647. 247
Fillmore, 2.5 mi. N. of, near center of sec. 11, T. 8 N., R. 2 W., 150 ft. N. of T-rd. E., 50 ft. W. of center of rd., in front yard of farmhouse, on top of SE. corner of concrete well curb; chiseled square---	692. 91
Fillmore, 3.0 mi. N. of, near S $\frac{1}{4}$ cor. sec. 2, T. 8 N., R. 2 W., 18 ft. N. and 38 ft. E. from crossroads, 2 ft. N. of fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 121 LS 1924 658"-----	657. 725
Fillmore, 4.0 mi. N. of, near quarter corner between secs. 2 and 35, Tps. 8 and 9 N., R. 2 W., on E. side of rd., opposite T-rd. W., at concrete right-of-way post; top of post-----	636. 27
Fillmore, 5.0 mi. N. of, near S $\frac{1}{4}$ cor. sec. 26, T. 9 N., R. 2 W., on N. side of E.-W. rd., opposite center line of rd. S., opposite NE. corner of triangular plot between rds., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "674"-----	673. 313
Fillmore, 5.1 mi. N. and 0.5 mi. W. from, 490 ft. N. of SW. cor. sec. 26, T. 9 N., R. 2 W., 490 ft. N. of T-rd. N., on E. side of rd., at fence line, in root on E. side of 24-in. maple tree; copper nail and washer-----	657. 85
Fillmore, 6.0 mi. N. and 0.5 mi. W. from, 3.5 mi. S. and 3.3 mi. E. from Witt, near NW. cor. sec. 26, T. 9 N., R. 2 W., 40 ft. S. and 10 ft. E. from junction of T-rd. E., in concrete post; standard tablet stamped "Prim Trav Sta No 120 LS 1924 650"-----	649. 191
Witt, 2.7 mi. S. and 3.3 mi. E. from, 0.35 mi. N. of W $\frac{1}{4}$ cor. sec. 23, T. 9 N., R. 2 W., on top of E. parapet of N. abutment of concrete bridge; chiseled square-----	652. 10
Witt, 2.3 mi. S. and 3.3 mi. E. from, 0.25 mi. N. of SW. cor. sec. 14, T. 9 N., R. 2 W., at private rds. E. and W., on E. side of rd., on top of W. end of N. head wall of concrete culvert under rd. E.; chiseled square-----	656. 67
Witt, 1.5 mi. S. and 3.3 mi. E. from, near NW. cor. sec. 14, T. 9 N., R. 2 W., 20 ft. S. and 20 ft. E. from junction of T-rd. E., 6 ft. S. of fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "684"-----	683. 607
Witt, 0.5 mi. S. thence 3.3 mi. E. from, near SE. cor. sec. 3, T. 9 N., R. 2 W., 20 ft. N. and 20 ft. W. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No. 105 LS 1924 721" (recovered in 1939)-----	720. 320
Witt, 0.5 mi. S. thence 2.3 mi. E. from, near SW. cor. sec. 3, T. 9 N., R. 2 W., 25 ft. N. and 18 ft. E. from crossroads, 8 ft. N. and 3 ft. W. from fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "692"-----	691. 447
Witt, 0.5 mi. S. thence 2.1 mi. E. from, 1,210 ft. W. of NE. cor. sec. 9, T. 9 N., R. 2 W., on S. side of rd., 25 ft. E. of fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "688"-----	687. 972

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Witt, 0.5 mi. S. and 1.2 mi. E. from, near cor. secs. 4, 5, 8, and 9, T. 9 N., R. 2 W., at steel bridge over Shoal Creek, on top of S. end of W. concrete abutment; chiseled square-----	<i>Feet</i> 635. 07
Witt, 0.5 mi. S. thence 0.6 mi. E. from, 0.3 mi. E. of SW. cor. sec. 5, T. 9 N., R. 2 W., on N. side of rd., 10 ft. E. of small gate in yard fence, in line with E. side of two-story brick farmhouse on N. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "661"-----	660. 979
Witt, 0.5 mi. S. thence 0.3 mi. E. from, near SE cor. sec. 6, T. 9 N., R. 2 W., 38 ft. N. and 35 ft. W. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 119 LS 664"-----	663. 567
Witt, at S. edge of, near quarter corner between secs. 6 and 7, T. 9 N., R. 2 W., in NW corner of crossroads, on top of N. end of W. head wall of concrete culvert under street N.; chiseled square-----	666. 39
[Jogs into Morrisonville quadrangle, line 4]	
Witt, at SW. edge of, on W. side of C. C. C. & St. L. Ry. track, opposite curve from NE. to E. in State Highway 16, in SE. corner of crossroads, on top of E. end of S. head wall of concrete culvert under rd. E.; chiseled square-----	668. 86
Witt, 0.5 mi. S. thence 1.2 mi. W. from, 500 ft. W. of N $\frac{1}{4}$ cor. sec. 12, T. 9 N., R. 3 W., 700 ft. E. of bridge, 115 ft. W. of driveway S. to farmhouse, 15 ft. W. of line with W. row of trees in grove, on S. side of rd., at fence line, 4 ft. W. of telephone pole, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "666"-----	665. 429
Witt, 0.5 mi. S. thence 1.5 mi. W. from, near cor. secs. 1, 2, 11, and 12, T. 9 N., R. 3 W., at offset crossroads, 15 ft. S. and 20 ft. E. from junction of rd. W., 40 ft. N. and 30 ft. E. from junction of rd. E., 20 ft. N. of fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 118 LS 1924 663"-----	663. 040
Witt, 0.5 mi. S. thence 2.6 mi. W. from, 250 ft. W. of NE. cor. sec. 10, T. 9 N., R. 3 W., at W. abutment of concrete bridge, on top of W. end of S. wing wall; chiseled square-----	646. 50
Witt, 0.5 mi. S. thence 2.9 mi. W. from, 780 ft. E. of T-rd. S. at quarter corner between secs. 3 and 10, T. 9 N., R. 3 W., on N. side of rd., at fence line, 30 ft. W. of telephone pole, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "659"-----	658. 964
Witt, 0.5 mi. S. thence 3.3 mi. W. from, 0.25 mi. E. of NW. cor. sec. 10, T. 9 N., R. 3 W., 20 ft. S. and 10 ft. E. from junction of T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "658"-----	658. 040

[Continued in Morrisonville quadrangle, line 5]

8. From crossroads 1.5 miles north of Fillmore along roads west and north to crossroads 5 miles east of Hillsboro, thence generally south to road fork 1 mile south and 3.5 miles east from Donnellson (by S. R. Archer in 1937)

Fillmore, 1.5 mi. N. thence 1.0 mi. W. from, near center of sec. 15, T. 8 N., R. 2 W., 15 ft. N. and 40 ft. E. from junction of N.-S. rd., in root on NE. side of 24-in. elm tree; copper nail and washer-----	643. 91
Fillmore, 2.0 mi. N. and 1.0 mi. W. from, near quarter corner between secs. 10 and 15, T. 8 N., R. 2 W., at NE. side of bridge, on top of SE. end of concrete curb; chiseled square-----	626. 57

Fillmore, 2.0 mi. N. and 1.4 mi. W. from, near cor. secs. 9, 10, 15, and 16, T. 8 N., R. 2 W., in NW. corner of junction of T-rd. N., on top of W. end of concrete retaining wall around corner of rds.; chiseled square-----	Feet 633.11
Fillmore, 2.0 mi. N. and 2.5 mi. W. from, near cor. secs. 8, 9, 16, and 17, T. 8 N., R. 2 W., 20 ft. N. and 30 ft. W. from junction of rd. W., 100 ft. N. and 30 ft. W. from center line of rd. E., 15 ft. W. of fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "660"-----	659.740
Fillmore, 2.3 mi. N. and 3.2 mi. W. from, near center of SW $\frac{1}{4}$ sec. 8, T. 8 N., R. 2 W., 30 ft. S. and 85 ft. E. from junction of T-rd. N., 15 ft. S. and 30 ft. E. from NW. corner of yard, in root on SW. side of 24-in. oak tree; copper nail and washer-----	667.91
Fillmore, 2.3 mi. N. and 3.9 mi. W. from, W. of center of SE $\frac{1}{4}$ sec. 7, T. 8 N., R. 2 W., about 75 ft. SE. of bridge over Shoal Creek, on E. side of rd., on S. bank of creek, in root on S. side of 24-in. hackberry tree with triangular blaze; copper nail and washer----	585.15
Fillmore, 2.5 mi. N. and 4.5 mi. W. from, 7.1 mi. E. of Hillsboro, about 250 ft. E. of W $\frac{1}{4}$ cor. sec. 7, T. 8 N., R. 2 W., 250 ft. E. of private lane S., 20 ft. N. of rd., in SE. corner of yard of former residence of A. M. Davis (house and buildings burned); standard iron post with bronze cap stamped "Prim Trav Sta No 123 LS 1924 647"-----	646.640
Reference mark, 200 ft. W. of iron post, 50 ft. E. of private lane S., on top of W. end of S. head of concrete culvert; chiseled square----	646.64
Hillsboro, 6.2 mi. E. of, 0.6 mi. E. and 4.0 mi. N. from Coffeen, about 0.4 mi. W. of center of sec. 12, T. 8 N., R. 3 W., 415 ft. W. of T-rd. N., in top of E. end of S. head wall of concrete culvert; monel-metal rivet-----	657.91
Coffeen, 0.5 mi. W. thence 3.1 mi. N. from, 480 ft. N. of W $\frac{1}{4}$ cor. sec. 14, T. 8 N., R. 3 W., on E. side of rd., at fence line, on S. side of driveway to farmhouse, in root on W. side of 30-in. hedge tree; copper nail and washer-----	667.37
Coffeen, 0.5 mi. W. thence 2.5 mi. N. from, near NW. cor. sec. 23, T. 8 N., R. 3 W., 85 ft. S. and 55 ft. E. from crossroads, in front of schoolhouse, on top of SW. corner of concrete porch floor; chiseled square-----	659.07
Coffeen, 0.5 mi. W. thence 1.6 mi. N. from, near SW. cor. sec. 23, T. 8 N., R. 3 W., 15 ft. N. and 35 ft. E. from junction of T-rd. E., 15 ft. E. of fence corner; standard iron post with bronze cap stamped "648"-----	647.642
Reference mark, 20 ft. W. of T-rd. E., at fence corner, in root on E. side of 12-in. hedge tree; copper nail and washer-----	647.93
Coffeen, 0.5 mi. W. thence 0.6 mi. N. from, 400 ft. N. of T-rd. E. at cor. secs. 26, 27, 34, and 35, T. 8 N., R. 3 W., on E. side of rd., in root on NW. side of 30-in. cherry tree; copper nail and washer-----	639.26
Coffeen, 1.0 mi. NW. of, near center of NE $\frac{1}{4}$ sec. 34, T. 8 N., R. 3 W., 300 ft. NW. of junction of T-rd. S., on top of SE. end of SW. head wall of concrete culvert; chiseled square ⁷⁸ -----	637.25

⁷⁸ In 1941 it was reported that this bench mark had been destroyed.

Coffeen, 0.5 mi. S. thence 0.8 mi. W. from, 0.25 mi. W. of SE. cor. sec. 34, T. 8 N., R. 3 W., 20 ft. N. and 25 ft. E. from junction of T-rd. S., 17 ft. E. of driveway to farmhouse; standard iron post with bronze cap stamped "630"-----	<i>Feet</i> 629.455
Coffeen, 1.2 mi. S. thence 0.8 mi. W. from, near center of SE $\frac{1}{4}$ sec. 3, T. 7 N., R. 3 W., in NW. corner of crossroads, at fence corner, in root on W side of forked locust tree; copper nail and washer-----	625.71
Coffeen, 2.0 mi. S. thence 0.8 mi. W. from, 0.25 mi. E. of center of sec. 10, T. 7 N., R. 3 W., in NE. corner of junction of T-rd N., in root on SW. side of 12-in. oak tree used as corner fence post; copper nail and washer-----	624.18
Coffeen, 2.2 mi. S. and 0.5 mi. W. from, 0.2 mi. N. of SW. cor. sec. 11, T. 7 N., R. 3 W., on E. side of rd., at NW. corner of schoolhouse, on top of NE. corner of concrete porch; chiseled square-----	621.52
Coffeen, 2.7 mi. W. and 0.3 mi. W. from, 1.5 mi. N. and 4.2 mi. E. from Donnellson, near center of NW $\frac{1}{4}$ sec. 14, T. 7 N., R. 3 W., 35 ft. S. and 20 ft. E. from junction of T-rd. E., 15 ft. S. of fence corner; standard iron post with bronzed cap stamped "621"-----	620.828
Reference mark, 15 ft. N. and 30 ft. W. from junction of T-rd. E., 5 ft. N. and 10 ft. W. from fence corner, in root on S. side of twin oak tree; copper nail and washer-----	620.65
Donnellson, 0.7 mi. N. and 4.1 mi. E. from, near NW. cor. sec. 23, T. 7 N., R. 3 W., at bridge over Shoal Creek, on top of W. end of N. wing wall of SW. concrete abutment; chiseled square-----	544.23
Donnellson, 0.2 mi. N. and 4.0 mi. E. from, near E $\frac{1}{4}$ cor. sec. 22, T. 7 N., R. 3 W., 20 ft. S. and 65 ft. W. from junction of T-rd. W., in root on N. side of 30-in. oak tree; copper nail and washer-----	660.02
Donnellson, 0.6 mi. S. and 4.0 mi. E. from, 0.3 mi. S. of NW. cor. sec. 26, T. 7 N., R. 3 W., at summit of hill, on E. side of rd., in SW. part of front yard of farmhouse, in root on W. side of triple-forked maple tree; copper nail and washer-----	597.89
9. From Fillmore along road east 1.7 miles (by S. R. Archer in 1937)	
Fillmore, 750 ft. E. of intersection of main streets, in NE. corner of street intersection, in SW. corner of schoolyard, 2 ft. N. and 6 ft. E. from inside corner of junction of sidewalks, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "635"-----	634.623
Fillmore, 1.0 mi. E. of, near N $\frac{1}{4}$ cor. sec. 25, T. 8 N., R. 2 W., 200 ft. W. of crossroads, on S. side of rd, in root on SE. side of 24-in. oak tree; copper nail and washer-----	680.43
Fillmore, 1.5 mi. E. of, near E. cor. secs. 24 and 25, T. 8 N., R. 2 W., at Fayette-Montgomery county line, 20 ft. W. of T-rd. S., on top of N. head wall of concrete culvert; chiseled square-----	640.51

[Continued in Ramsey quadrangle, line 8]

COULTERVILLE QUADRANGLE

[Latitude 38°00'–38°15'; longitude 89°30'–89°45']

PERRY, RANDOLPH, ST. CLAIR, AND WASHINGTON COUNTIES

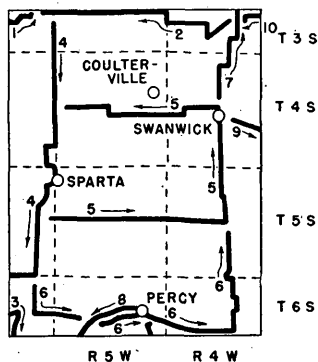


FIGURE 21.—Lines of leveling in Coulterville quadrangle.

1. From Marissa along road east and north to southwest corner sec. 24, T. 3 S., R. 6 W. (by W. A. Gelbach in 1907)

[Continued from Baldwin quadrangle, line 3]

Marissa, 2.0 mi. E. of, near SW. cor. sec. 24, T. 3 S., R. 6 W., in NE. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No. 18 1907 433" (recovered in 1908)---	Feet 432. 477
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[Continued in Okawville quadrangle, line 2]

2. From point 1.3 miles southwest of Oakdale southwest along Illinois Southern Railway⁷⁹ to McKinley, thence alternately north and west along roads to point 2 miles east of Marissa (by W. A. Gelbach in 1908)

[Continued from Nashville quadrangle, line 2]⁸⁰

McKinley, 50 ft. N. of rd. crossing, 30 ft. N. of warning post; standard iron post with bronze cap stamped "1908 555" (recovered by U. S. C. & G. S. in 1935)-----	553. 982
McKinley, 0.8 mi. N. of, near quarter corner between secs. 28 and 29, T. 3 S., R. 4 W., at junction of T-rd. W., in root of tree; notch---	531. 40
T. 3 S., R. 4 W., near W. cor. secs. 19 and 30, at junction of T-rd. W., on E. side of rd., 0.8 ft. S. of corner fence post; standard iron post with bronze cap stamped "1908 494"-----	493. 089
T. 3 S., R. 5 W., near NE. cor. sec. 26, in SW. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 17 1907 480" ⁸¹ -----	479. 670

⁷⁹ Now part of the Missouri-Illinois R. R.

⁸⁰ This line cuts the southeast corner of Okawville quadrangle, but no bench marks were set in that portion of the line.

⁸¹ In 1933 this bench mark was moved 61 ft. north and 35 ft. west from this position and reset in concrete 0.637 ft. higher than its original elevation. The figures given represent the new elevation.

T. 3 S., R. 5 W., near SW. cor. sec. 21, in NE. angle of crossroads, 2 ft. SW. of telephone pole; standard iron post with bronze cap stamped "1908 441"-----	Feet 440.638
T. 3 S., R. 5 W., near NW. cor. sec. 30, 3.0 mi. E. of Marissa, at St. Clair-Washington county line, at jog in E.-W. rd., in SE. angle of junction of N.-S. rd.; standard iron post with bronze cap stamped "1908 469" (recovered in 1914)-----	467.923
3. From north quarter corner sec. 15, T. 6 S., R. 6 W., along roads east 0.5 mile, thence south to point 2 miles north of Bremen (by R. G. Clinite in 1912)	
[Continued from Baldwin quadrangle, line 6]	
T. 6 S., R. 6 W., near cor. secs. 10, 11, 14, and 15, 2.0 mi. S. of Blair, in NE. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 2 1908 457 Reset 1939" ⁸² -----	456.310
[Continued in Campbell Hill quadrangle, line 1]	
4. From point 3 miles east of Marissa along roads generally south by way of Sparta to point on Sparta-Chester road 1 mile east of Blair, thence west 1.5 miles (by G. W. Lucas in 1914)	
Marissa, 3.0 mi. E. thence 2.0 mi. S. from, 6.6 mi. N. of Sparta, near NW. cor. sec. 6, T. 4 S., R. 5 W., near corner of Randolph, St. Clair, and Washington Counties, in SE. angle of crossroads; standard iron post with bronze cap stamped "522"-----	521.520
Sparta, 6.1 mi. N. of, near E $\frac{1}{4}$ cor. sec. 1, T. 4 S., R. 6 W., 30 ft. W. of T-rd. E., in root of 15-in. oak tree; copper nail and washer-----	516.62
Sparta, 3.6 mi. N. of, near SE. cor. sec. 13, T. 4 S., R. 6 W., in NW. angle of junction of T-rd. W.; standard iron post with bronze cap stamped "476"-----	475.700
Sparta, 1.1 mi. N. and 0.5 mi. W. from, near center of sec. 36, T. 4 S., R. 6 W., on E. side of rd., opposite T-rd. W.; standard iron post with bronze cap stamped "Prim Trav Sta No. 1 1908 518"-----	517.979
Sparta, at N. end of St. Louis Street, in SE. angle of junction of T-rd. S., in root of 20-in. elm tree; copper nail and washer-----	543.67
Sparta, near NW. corner of intersection of Broadway and Second Street, at SE. corner of property of United Presbyterian Church; standard iron post with bronze cap stamped "1914 538" (recovered by U. S. C. & G. S. in 1935)-----	537.460
Sparta, 400 ft. E. of Mobile & Ohio R. R. sta., at R. R. crossing; top of rail-----	540.1
Sparta, 1.1 mi. SW. of United Presbyterian Church, near center of sec. 12, T. 5 S., R. 6 W., at bend SW. in Sparta-Chester rd., on W. side of rd., in root of 12-in. elm tree; copper nail and washer-----	521.35
Sparta, 2.2 mi. SW. of, about 0.2 mi. N. of quarter corner between secs. 13 and 14, T. 5 S., R. 6 W., 200 ft. S. of rd. fork, in root of 30-in. oak tree; copper nail and washer-----	571.13
Sparta, 2.9 mi. SW. of, near SW. cor. sec. 13, T. 5 S., R. 6 W., in NE. angle of crossroads, 300 ft. N. of Union Church; standard iron post with bronze cap stamped "549"-----	548.931

⁸² In 1939 this bench mark was moved to a point 30 ft. north and 350 ft. east from the crossroads and reset 0.226 ft. lower than its original elevation. The figures given represent the new elevation.

Sparta, 6.0 mi. SW. of, 1.0 mi. E. of Blair, near SW. cor. sec. 36, T. 5 S., R. 6 W., at jog in N.-S. rd., opposite T-rd. S.; standard iron post with bronze cap stamped "478"-----	Feet 477.885
---	-----------------

[Continued in Baldwin quadrangle, line 7]

5. From point 2.9 miles southwest of Sparta along roads east to point
6 miles south of Swanwick, thence north to Swanwick; thence
west to point 3.6 miles north of Sparta (by G. W. Lucas in 1914)

T. 5 S., R. 5 W., 0.25 mi. W. of SE. cor. sec. 18, in NW. angle of junction of T-rd. N., 175 ft. SE. of Goddard School, in root of 10-in. wild-cherry tree; copper nail and washer-----	551.51
T. 5 S., R. 5 W., near NW. cor. sec. 21, near SE. corner of junction of T-rd. W.; standard iron post with bronze cap stamped "502"-----	501.494
T. 5 S., R. 5 W., near quarter corner between secs. 15 and 22, at center of junction of T-rd. S., in root of 30-in. oak tree; copper nail and washer-----	495.29
T. 5 S., R. 5 W., near NE. cor. sec. 23, near SW. corner of junction of rd. NE., in root of 12-in. oak tree; copper nail and washer-----	492.85
T. 5 S., R. 5 W., near SE. cor. sec. 13, at Perry-Randolph county line, in NW. angle of crossroads; standard iron post with bronze cap stamped "515"-----	514.582
T. 5 S., R. 4 W., near NE. cor. sec. 19, in SW. angle of junction of T-rd. S., in root of 6-in. hedge tree; copper nail and washer-----	492.48
T. 5 S., R. 4 W., 0.25 mi. E. of NW. cor. sec. 22, 6.0 mi. S. of Swan- wick, opposite T-rd. N.; standard iron post with bronze cap stamped "470" ⁸³ -----	469.942
Swanwick, 3.6 mi. S. of, near SE. cor. sec. 4, T. 5 S., R. 4 W., in NW. angle of crossroads; standard iron post with bronze cap stamped "502"-----	501.800
Swanwick, 2.6 mi. S. of, near NE. cor. sec. 4, T. 5 S., R. 4 W., at jog in N.-S. rd., 60 ft. SW. of junction of T-rd. S., in root of 12-in. walnut tree; copper nail and washer-----	570.86
Swanwick, 1.7 mi. S. of, near NE. cor. sec. 33, T. 4 S., R. 4 W., in SW. angle of junction of T-rd. W., in root of 4-in. hickory tree; copper nail and washer-----	535.34
Swanwick, 40 ft. N. of Illinois Central R. R. track, 30 ft. E. of rd.; standard iron post with bronze cap stamped "572" (recovered by U. S. C. & G. S. in 1935) ⁸⁴ -----	571.836
Swanwick, about 3 mi. in air line W. of, 1.3 mi. S. and 0.5 mi. E. from Coulterville, near W $\frac{1}{4}$ cor. sec. 19, T. 4 S., R. 4 W., in NE. angle of crossroads; standard iron post with bronze cap stamped "533"-----	531.985
Coulterville, 1.3 mi. S. and 1.8 mi. W. from, 0.25 mi. E. of center of sec. 22, T. 4 S., R. 5 W., 50 ft. NE. of junction of T-rd. N., in root of 48-in. oak tree; copper nail and washer-----	506.06
Coulterville, 1.3 mi. S. and 2.8 mi. W. from, 0.25 mi. E. of center of sec. 21, T. 4 S., R. 5 W., in NE. angle of crossroads; standard iron post with bronze cap stamped "526"-----	525.293

⁸³ In 1927 this mark was moved 11 ft. south of this position and reset 0.158 ft. lower than its original elevation. The figures given represent the new elevation.

⁸⁴ By comparison with other bench marks in the vicinity this mark appears to have been disturbed 0.2 ft.

Coulterville, 0.8 mi. S. and 4.0 mi. W. from, near N $\frac{1}{4}$ cor. sec. 20, T. 4 S., R. 5 W., in SW. angle of crossroads, in root of 12-in. wild-cherry tree; copper nail and washer-----	Feet 470. 26
Coulterville, 0.8 mi. S. and 4.5 mi. W. from, 3.6 mi. N. thence 1.0 mi. E. from Sparta, near SW. cor. sec. 17, T. 4 S., R. 5 W., in NE. angle of junction of T-rd. N., in root of lone hedge tree; copper nail and washer-----	474. 13
6. From point on Sparta-Chester road 1 mile east of Blair south 2 miles, thence along roads generally east to point 5.3 miles south-east of Percy, thence north to point 6 miles south of Swanwick (by G. W. Lucas in 1914)	
Blair, 1.0 mi. E. thence 1.2 mi. S. from, 4.0 mi. W. thence 0.8 mi. N. from post office in Steeleville, about 0.2 mi. S. of NE. cor. sec. 11, T. 6 S., R. 6 W., 250 ft. S. of T-rd. W., on W. side of rd., in root of 20-in. thorn tree; copper nail and washer-----	448. 86
Steeleville, 4.0 mi. W. of, near SW. cor. sec. 12, T. 6 S., R. 6 W., in NE. angle of crossroads, in root of lone 30-in. tree; copper nail and washer-----	457. 57
Steeleville, 3.0 mi. W. of, near NE. cor. sec. 13, T. 6 S., R. 6 W., opposite T-rd. N., 30 ft. W. of drain; standard iron post with bronze cap stamped "458"-----	458. 170
Steeleville, 20 ft. E. of gate to St. Mark's Lutheran cemetery, in root of 24-in. oak tree; copper nail and washer-----	439. 78
Steeleville, 60 ft. N. of post office, about 2 mi. W. of Percy, near SE. corner of public school property; standard iron post with bronze cap stamped "410"-----	409. 953
Percy, 1.3 mi. SE. of, 0.25 mi. N. of center of sec. 13, T. 6 S., R. 5 W., in SE. angle of crossroads, in root of 16-in. oak tree; copper nail and washer (recovered in 1915)-----	482. 66
Percy, 1.8 mi. SE. of, 0.3 mi. S. of NW. cor. sec. 18, T. 6 S., R. 4 W., at Perry-Randolph county line, 200 ft. NW. of house, 80 ft. SW. of barn, on N. side of rd.; standard iron post with bronze cap stamped "492" (recovered in 1915)-----	491. 174
Percy, 4.6 mi. SE. of, 0.25 mi. N. of SW. cor. sec. 15, T. 6 S., R. 4 W., 50 ft. S. of crossroads, on E. side of rd., in root of 24-in. oak tree; copper nail and washer-----	457. 30
Percy, 5.3 mi. SE. of, near center of SE $\frac{1}{4}$ sec. 15, T. 6 S., R. 4 W., in NE. angle of crossroads; standard iron post with bronze cap stamped "453"-----	452. 067
T. 6 S., R. 4 W., near center of SE $\frac{1}{4}$ sec. 10, S. and E. of bend from N. to E. in rd., in root of 10-in. elm tree; copper nail and washer---	460. 43
T. 6 S., R. 4 W., near NE. cor. sec. 10, in SW. angle of T-junction of E.-W. rd., in root of 18-in. thorn tree; copper nail and washer-----	459. 72
T. 6 S., R. 4 W., 0.25 mi. W. of NE. cor. sec. 3, on stone marking sixteenth corner; chiseled square-----	459. 78
T. 5 S., R. 4 W., 0.25 mi. S. of center of sec. 34, 650 ft. NE. of R. R. crossing, 60 ft. N. of track; standard iron post with bronze cap stamped "474"-----	473. 772
T. 5 S., R. 4 W., near center of sec. 27, on W. side of rd., 200 ft. S. of mail box, in root of 16-in. oak tree; copper nail and washer-----	451. 10
T. 5 S., R. 4 W., near N $\frac{1}{4}$ cor. sec. 27, 7.2 mi. S. of Swanwick, in SW. angle of junction of T-rd. W., in root of 30-in. oak tree; copper nail and washer-----	455. 91

7. From Swanwick alternately north and east along roads to point 1.8 miles southwest of Oakdale (by G. W. Lucas in 1914)

Swanwick, 2.4 mi. N. of, near SW. cor. sec. 3, T. 4 S., R. 4 W., at junction of E.-W. rd., opposite T.-rd. S., on bank; standard iron post with bronze cap stamped "499"-----	Feet 498. 373
Swanwick, 4.2 mi. N. and 0.8 mi. E. from, near center of NE $\frac{1}{4}$ sec. 34, T. 3 S., R. 4 W., in SW. angle of crossroads, in root of 12-in oak tree; copper nail and washer-----	523. 30
Swanwick, 4.9 mi. N. and 0.8 mi. E. from, 2.5 mi. SW. of Missouri-Illinois R. R. sta. at Oakdale, 0.25 mi. E. of center of sec. 27, T. 3 S., R. 4 W., on W. side of rd., opposite T.-rd. E., standard iron post with bronze cap stamped "545" (recovered in 1923)-----	544. 428

[Continued in Okawville quadrangle, line 4]

8. From point 1.3 miles southeast of Percy northwest along road to Percy, thence west and southwest along Wabash, Chester & Western Railroad⁸⁵ to point 1.7 miles southwest of Steeleville (by J. M. Perkins in 1915)

Percy, 150 ft. E. of sta., on N. line of W. C. & W. R. R. property line, in root of cherry tree; copper nail and washer-----	472. 72
Steeleville, 40 ft. W. of sta., in base of telephone pole; rail spike----	434. 96

[Continued in Campbell Hill quadrangle, line 9]

9. From Swanwick southeast along Illinois Central Railroad to point about 0.8 mile northwest of Winkle (by H. E. Wessman in 1921)

Swanwick, 1.7 mi. SE. of, 200 ft. E. of N.-S. rd. through center of sec. 23, T. 4 S., R. 4 W., on NE. corner of concrete base of semaphore G-522; chiseled square-----	555. 46
Swanwick, 2.1 mi. SE. of, 0.8 mi. NW. of Winkle (Craig), in NE $\frac{1}{4}$ sec. 26, T. 4 S., R. 4 W., on NW. corner of concrete base of semaphore G-521; chiseled square-----	552. 99

[Continued in Pinckneyville quadrangle, line 1]

10. From point 0.2 mile west of northeast corner sec. 26, T. 3 S., R. 4 W., alternately west and south along roads to point 4.9 miles north and 0.8 mile east from Swanwick (by C. E. Walker in 1923)

[Continued from Pinckneyville quadrangle, line 2]

T. 3 S., R. 4 W., near NE. cor. sec. 27, 5.4 mi. N. and 1.0 mi. E. from Swanwick, 15 ft. W. of junction of N.-S. rd., in line with center of T.-rd. E., in root on E. side of 6-in. elm tree; copper nail and washer-----	524. 86
---	---------

⁸⁵ Now the Chester & Mt. Vernon branch of the Missouri Pacific R. R.

CRYSTAL CITY QUADRANGLE

[Latitude 38°00'–38°15'; longitude 90°15'–90°30']

MONROE COUNTY

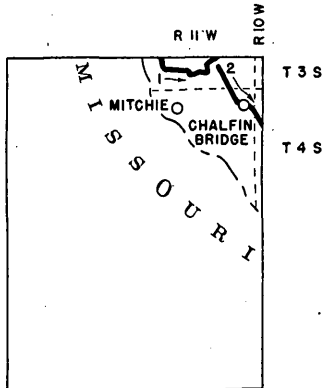


FIGURE 22.—Lines of leveling in Crystal City quadrangle.

1. Along roads south, east, and northeast in Harrisonville Township (by S. R. Archer in 1910)

[A jog from Kimmswick quadrangle, line 2]

Harrisonville, 2.5 mi. S. of, in SW $\frac{1}{4}$ sec. 29, T. 3 S., R. 11 W., 0.4 mi. NE. of head of Calico Island, 0.4 mi. NW. of Varnum School, 525 ft. S. of dwelling of John Trout, on W. side of rd., on levee; Mississippi River Comm. B. M. 44/1

cap on iron pipe-----	Feet 402.006
flat stone at bottom of pipe-----	396.938
Varnum School, 0.5 mi. E. of, near NE. cor. sec. 32, T. 3 S., R. 11 W., on S. side of E.-W. rd., opposite rd. N., in root of elm tree; spike--	399.98
Varnum School, 3.4 mi. NE. of, 2.0 mi. NW. of Maeystown Sta., in NW $\frac{1}{4}$ sec. 26, T. 3 S., R. 11 W., 0.2 mi. NE. of crossing of St. L. I. M. & S. R. R., on E. side of N.-S. rd., opposite junction of rd. SW., at fence corner; standard iron post with bronze cap stamped "398" ⁸⁰ -----	397.560

[Continued in Kimmswick quadrangle, line 2]

2. From point 2 miles northwest of Maeystown Station southeast along road by way of Chalfin Bridge to point near Branch Lake (by C. R. French in 1911)

Chalfin Bridge, in village of, in NW. angle of crossroads; standard iron post with bronze cap stamped "412"-----	411.148
--	---------

[Continued in Renault quadrangle, line 4]

⁸⁰ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "V 97 1935," elevation 396.272 ft.

DONGOLA QUADRANGLE

[Latitude 37°15'–37°30'; longitude 89°00'–89°15']

JOHNSON, PULASKI, AND UNION COUNTIES

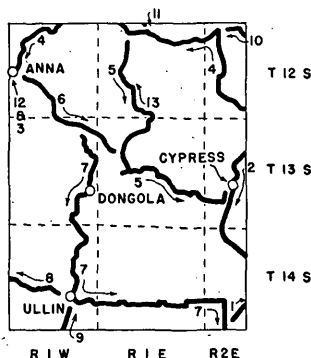


FIGURE 23.—Lines of leveling in Dongola quadrangle.

1. From Grand Chain north along road to Cleveland, Cincinnati, Chicago & St. Louis Railway, thence northeast to point 2 miles southwest of Karnak (by R. G. Clinite in 1915)

[Continued from Cairo quadrangle, line 1]

Grand Chain, 180 ft. N. of sta., on W. side of track, 18 ft. NE. of nearest side of stock pen, at fence corner; standard iron post with bronze cap stamped "405" (recovered in 1927)	Feet 404.067
Grand Chain, 1.6 mi. NE. of, 2.4 mi. SW. of Karnak, at milepost Dan-237, 30 ft. S. of crossing of private rd., in concrete block of rail support; point of rail spike embedded vertically	368.85

[Continued in Vienna quadrangle, line 2]

2. From point 2.4 miles northeast of Cypress southwest and southeast along Chicago & Eastern Illinois Railway to point 1.5 miles northwest of Karnak (by R. G. Clinite in 1915)

[Continued from Vienna quadrangle, line 3]

Boles (R. R. name West Vienna), 4.5 mi. SW. of, 1.1 mi. NE. of Cypress, 90 ft. E. of rd. crossing, in NE. angle of rd. junction, at corner of rail fence; standard iron post with bronze cap stamped "376" (recovered in 1919)	376.173
Cypress, 0.6 mi. NE. of, at reservoir; surface of water Nov. 16, 1915	361.1
Cypress, 2.7 mi. SW. of, at Joppa Junction, at SE. end of wye where Joppa branch of C. & E. I. Ry. leaves main line, 60 ft. S. of point of switch, 45 ft. E. of 16-in. oak tree, 1 ft. inside right-of-way; standard iron post with bronze cap stamped "344"	343.202
White Hill sta., at crossing; top of rail	344.8
Cache River; surface of water Nov. 16, 1915	325.6

[Continued in Vienna quadrangle, line 4]

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3. Northeast and northwest along streets in Anna (by L. H. Williams in 1918)

[A jog from Jonesboro quadrangle, line 3]

Anna, on E. side of first street W. of Illinois Central R. R. sta., at derail, on N. side of track; top of switch where lantern sits (recovered in 1919)-----	Feet 631.25
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[Continued in Jonesboro quadrangle, line 3]

4. From point 2 miles west of Boles along roads northwest and north by way of Pleasant Grove to Elvira School, thence alternately southwest and northwest by way of Saratoga to Anna (by Crawford Dickey in 1919; leveled twice to Pleasant Grove)

[Continued from Vienna quadrangle, line 6]

Boles, 2.8 mi. W. of, in NW $\frac{1}{4}$ sec. 32, T. 12 S., R. 2 E., at junction of rd. N., on sandstone; chiseled cross-----	380.56
Boles, 3.4 mi. W. of, 0.6 mi. SE. of Pleasant Grove, near SE. cor. sec. 30, T. 12 S., R. 2 E., 150 ft. S. of Pleasant Grove School, on S. side of rd., at junction of rd. N., in root of 36-in. oak tree; copper nail and washer-----	400.51
Pleasant Grove, 150 ft. E. of Pleasant Grove Church, in SW. angle of crossroads; standard iron post with bronze cap ⁸⁷ -----	446.514
Pleasant Grove, 2.3 mi. N. of, in SE $\frac{1}{4}$ sec. 18, T. 12 S., R. 2 E., in N. end of steel bridge over Cache River; copper nail and washer--	381.29
Pleasant Grove, 3.9 mi. N. of, 4.1 mi. NW. of Buncombe, near N $\frac{1}{4}$ cor. sec. 7, T. 12 S., R. 2 E., 250 ft. NE. of Elvira School, 30 ft. N. of rd. fork; standard iron post with bronze cap stamped "Prim Trav Sta No 13 1915 470" (recovered in 1920) ⁸⁸ -----	469.236
Pleasant Grove, 3.9 mi. N. thence 3.1 mi. SW. from, about 5 mi. SE. of Saratoga, 2.3 mi. NW. of Mount Pleasant, 0.2 mi. N. of SW. cor. sec. 11, T. 12 S., R. 1 E., near Newton School, in NE. angle of crossroads; standard iron post with bronze cap ⁸⁹ -----	437.315
Saratoga, 4.0 mi. SE. of, about 650 ft. E. of W $\frac{1}{4}$ cor. sec. 10, T. 12 S., R. 1 E., 20 ft. W. of junction of T-rd. N., on N. side of rd., on rock; cross-----	495.18
Saratoga, 2.8 mi. SE. of, in NW $\frac{1}{4}$ sec. 9, T. 12 S., R. 1 E., 0.2 mi. W. of crossing of Bradshaw Creek, on N. side of rd, 100 ft. W. of T-rd. N., in root of 48-in. oak tree; copper nail and washer-----	435.70
Saratoga, 2.3 mi. SE. of, 0.4 mi. SW. of Sitter School, near center of sec. 8, T. 12 S., R. 1 E., at Hineman farm, in NE. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 1 1916 485" (recovered in 1920)-----	484.542

[Jogs into Carbondale quadrangle, line 2]

Saratoga, 3.3 mi. SW. of, 4.2 mi. NE. of Anna, about 0.3 mi. SE. of NW. cor. sec. 10, T. 12 S., R. 1 W., 40 ft. NW. of Barringer School, on S. side of rd.; standard iron post with bronze cap ⁹⁰ -----	568.713
Anna, 3.5 mi. NE. of, in NE $\frac{1}{4}$ sec. 9, T. 12 S., R. 1 W., on E. side of rd., on sandstone; cross-----	560.09

⁸⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Y 105 1935," elevation 403.267 ft.

⁸⁸ In 1940 this bench mark was found to be in the southeast angle of the crossroads, in the schoolyard.

⁸⁹ In 1940 it was reported that the bank had eroded from the bench mark.

⁹⁰ In 1940 this bench mark was reported leaning at a 30° angle from the bank.

Anna, 2.6 mi. NE. of, about 0.3 mi. N. of SE. cor. sec. 8, T. 12 S., R. 1 W., in S. end of E. side of steel bridge over Cache River; copper nail and washer-----	<i>Feet</i> 510. 90
Cache River; surface of water June 12, 1919-----	504. 3
Anna, 1.2 mi. NE. of, in SE¼ sec. 17, T. 12 S., R. 1 W., about 450 ft. N. of rock crusher, 200 ft. N. of crossing of electric R. R., on E. side of rd., in root of 56-in. oak tree; copper nail and washer-----	552. 69
Anna, at NW. angle of intersection of Main and Vienna Streets, at drug store of E. P. Owens, on SE. corner of water fountain; cross (recovered in 1920)-----	628. 17

[Connects with line 2 in Jonesboro quadrangle]

5. From crossroads 2.3 miles southwest of Saratoga alternately southwest and southeast along roads by way of Chapel Church and Karraker School to Cypress, thence northeast 1.1 miles along Chicago & Eastern Illinois Railway (by Crawford Dickey in 1919)	
Cache River; surface of water June 25, 1919-----	394. 2
Sivia School, 0.7 mi. NW. of, 4.0 mi. W. of Mount Pleasant, 0.3 mi. SE. of Camp Ground Church, 500 ft. E. of W¼ cor. sec. 20, T. 12 S., R. 1 E., at rd. fork, on S. side of NW.-SE. rd., 20 ft. S. of fence corner, on rock; cross-----	433. 15
Sivia School, 0.6 mi. SE. of, 2.7 mi. SW. of Mount Pleasant, about 0.2 mi. N. of quarter corner between secs. 28 and 29, T. 12 S., R. 1 E., at T-rd. S., in N. end of small steel bridge; copper nail and washer-----	515. 80
Sivia School, 2.0 mi. SE. of, near center of SW¼ sec. 33, T. 12 S., R. 1 E., at rd. fork, on W. side of rd., on rock; cross-----	588. 39
Sivia School, 2.5 mi. SE. of, 3.7 mi. NE. of Chapel Church, near center of SE¼ sec. 33, T. 12 S., R. 1 E., on S. side of rd., 585 ft. E. of house on N. side of rd.; standard iron post with bronze cap (recov- ered in 1936)-----	580. 240
Chapel Church, 1.9 mi. NE. of, near center of SW¼ sec. 4, T. 13 S., R. 1 E., 270 ft. W. of junction of rd. N., in rd., on rock; cross----	504. 04
Chapel Church, 0.8 mi. N. of, about 500 ft. W. of center of sec. 8, T. 13 S., R. 1 E., on side of hill, on E. side of rd., on rock; cross--	462. 93
Chapel Church, 0.9 mi. S. of, 2.3 mi. NE. of Dongola, 0.7 mi. W. of Karraker School, about 0.2 mi. SW. of N¼ cor. sec. 20, T. 13 S., R. 1 E., in NE. angle of junction of E.-W. rd., 5 ft. E. of fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No. 2 1916" ⁶¹ -----	437. 946
Karraker School, 0.5 mi. E. of, near quarter corner between secs. 16 and 21, T. 13 S., R. 1 E., in SE. angle of crossroads, on sewer; cross--	378. 90
Karraker School, 3.5 mi. SE. of, 0.4 mi. in air line S. and 2.8 mi. W. from Cypress, about 0.2 mi. E. of S¼ cor. sec. 23, T. 13 S., R. 1 E., 40 ft. W. of creek, on N. side of rd., 5 ft. from fence corner, 5 ft. W. of mail box; standard iron post with bronze cap-----	352. 356
6. From Anna southeast along roads by way of Friendship School to point 0.4 mile southeast of Chapel Church (by Crawford Dickey in 1919)	
Anna, 1.5 mi. SE. of, about 0.2 mi. E. of NW. cor. sec. 29, T. 12 S., R. 1 W., on S. side of rd., in root of 36-in. oak tree; copper nail and washer-----	623. 86

⁶¹ In 1939 it was reported that this bench mark had been destroyed.

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Anna, 3.0 mi. SE. of, about 0.2 mi. E. of SW. cor. sec. 27, T. 12 S., R. 1 W., about 400 ft. N. of Friendship School, at small bridge, on S. side of rd., on rock; cross-----	Feet 510.26
Anna, 4.4 mi. SE. of, 0.6 mi. N. of Balcom, just S. of N¼ cor. sec. 3, T. 13 S., R. 1 W., in SE. angle of rd. forks, 15 ft. E. of mail box; standard iron post with bronze cap-----	567.845
Anna, 6.2 mi. SE. of, 4.5 mi. by rd. N. of Dongola, 0.4 mi. N. of Little Creek School, about 0.2 mi. E. of W¼ cor. sec. 1, T. 13 S., R. 1 W., 50 ft. W. of rd. S., on S. side of main rd., 18 ft. E. of fence corner, in root of 14-in. oak tree; copper nail and washer-----	495.28
Anna, 7.3 mi. SE. of, 2.2 mi. NW. of Chapel Church, near SE. cor. sec. 1, T. 13 S., R. 1 W., on S. side of rd., on rock; cross-----	409.13
Chapel Church, 0.5 mi. NW. of, about 700 ft. N. of SE. cor. sec. 7, T. 13 S., R. 1 E., 400 ft. E. of house on N. side of rd., about 700 ft. W. of house on S. side of rd., on N. side of rd., on rock; cross-----	476.10
7. From road junction 6.2 miles southeast of Anna alternately south-east and southwest along roads to Ullin, thence generally east along roads to Forestview School, thence south 1.5 miles to Grand Chain (by Crawford Dickey in 1919)	
Dongola, 2.6 mi. N. of, about 0.2 mi. NE. of S¼ cor. sec. 12, T. 13 S., R. 1 W., in NW. angle of rd. fork, 50 ft. W. of small bridge, 100 ft. E. of mail box; standard iron post with bronze cap-----	430.232
Dongola, 1.0 mi. N. of, at junction of Egyptian Trail, on N. side of rd., in root of 24-in. oak tree; nail-----	512.05
Dongola, 20 ft. N. of R. R. crossing, on sidewalk; cross-----	396.09
Dongola, 1.0 mi. SW. of, 2.6 mi. NW. of Wetaug, near center of SE¼ sec. 26, T. 13 S., R. 1 W., in SW. angle of rd. fork; standard iron post with bronze cap-----	377.730
Wetaug, 0.8 mi. SW. of, 3.0 mi. N. of Chicago & Eastern Illinois Ry. sta. at Ullin, 0.2 mi. SW. of NE. cor. sec. 11, T. 14 S., R. 1 W., on W. side of rd., at T-lane W., on opposite side of rd. from mail box of Joe Miller; standard iron post with bronze cap-----	379.692
Ullin, 1.8 mi. N. of, near N¼ cor. sec. 14, T. 14 S., R. 1 W., at summit of hill, on N. side of rd., 100 ft. S. of house, in root of walnut tree; nail-----	462.53
Ullin, 1.0 mi. N. of, 0.3 mi. SE. of center of sec. 14, T. 14 S., R. 1 W., 0.2 mi. NW. of crossing of Illinois Central R. R., in E. end of steel bridge; copper nail and washer-----	340.30
Ullin, at C. & E. I. Ry. sta., in NW. angle of crossing of track and wagon rd., 40 ft. N. of track, 10 ft. S. of telephone pole; standard iron post with bronze cap (recovered in 1920)-----	345.862
Ullin, 0.3 mi. SE. of, at steel bridge over Cache River, in N. side of E. end; copper nail and washer-----	333.43
Ullin, 2.0 mi. E. of, near NW. cor. sec. 30, T. 14 S., R. 1 E., on S. abutment of concrete bridge; chiseled cross-----	331.22
Ullin, 3.0 mi. E. of, near SE. cor. sec. 19, T. 14 S., R. 1 E., in NE. angle of junction of private T-rd. N., near residence of Dan Willis, 25 ft. E. of fence corner, 3 ft. from bank of ditch; standard iron post with bronze cap-----	398.880
Ullin, 4.4 mi. E. of, 1.5 mi. N. thence 5.5 mi. W. from Grand Chain, 0.2 mi. E. of NW. cor. sec. 28, T. 14 S., R. 1 E., 150 ft. SW. of house on summit of hill on N. side of rd., on S. side of rd. in root of tree; copper nail-----	372.57

Grand Chain, 1.5 mi. N. thence 1.2 mi. W. from, near SW. cor. sec. 19, T. 14 S., R. 2 E., in E. angle of junction of T-rd. S.; standard iron post with bronze cap-----	Feet 370.550
Reference mark, 70 ft. N. of iron post, on S. side of small concrete bridge; chiseled cross-----	369.86
Grand Chain, 1.5 mi. N. of, near NE. cor. sec. 30, T. 14 S., R. 2 E., 100 ft. W. of Forestview School, 300 ft. W. of junction of N.-S. rd., on S. side of rd., in root of 12-in. oak tree; copper nail-----	404.02
8. From Ullin northwest along roads to point 1 mile southeast of Elco (by Crawford Dickey in 1919; leveled twice)	
Ullin, 0.8 mi. NW. of, about 700 ft. W. of E $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 22, T. 14 S., R. 1 W., on N. side of rd., in front of house, in root of sycamore tree; copper nail and washer-----	343.50
Ullin, 2.0 mi. NW. of, 0.2 mi. W. of E $\frac{1}{4}$ cor. sec. 21, T. 14 S., R. 1 W., 200 ft. W. of residence of J. L. Cline, on S. side of rd., in root of 36-in. oak tree; copper nail and washer-----	354.22
Ullin, 2.8 mi. NW. of, 2.3 mi. SE. of Elco, near W $\frac{1}{4}$ cor. sec. 21, T. 14 S., R. 1 W., in SE. angle of rd. junction, 5 ft. W. of mail box of Edgar Schluter, 5 ft. E. of fence corner; standard iron post with bronze cap-----	345.665
[Connects with line 12 in Jonesboro quadrangle]	
9. North along Illinois Central Railroad to Ullin (by H. S. Senseney in 1919)	
[Continued from Cairo quadrangle, line 2]	
Pulaski, 2.6 mi. NE. of, about 2 mi. SW. of Ullin, on NW. corner of base of semaphore 3462; chiseled square-----	340.84
10. From point 2.2 miles northwest of Buncombe along roads northwest and west to Elvira School (by R. G. Clinite in 1920)	
[Continued from Vienna quadrangle, line 7]	
Buncombe, 3.4 mi. NW. of, on S. side of rd., in root of 36-in. locust tree; copper nail-----	425.45
11. From point 1.4 miles west, thence 2 miles southwest from Lick Creek along roads south 0.5 mile, thence west 0.9 mile (by R. G. Clinite in 1920)	
[Continued from Carbondale quadrangle, line 7]	
Lick Creek, 1.4 mi. W. thence 2.6 mi. S. from, N. of center of sec. 9, T. 12 S., R. 1 E., 80 ft. W. of junction of E.-W. rd., on S. side of rd., in mud plank at bridge; copper nail-----	402.66
12. Southeast along Illinois Central Railroad in Anna (by R. G. Clinite in 1920)	
[Continued from Jonesboro quadrangle, line 13]	
Anna, in front of sta.; top of rail-----	630.9
13. From point near center of southeast quarter sec. 33, T. 12 S., R. 1 E., 2.5 miles southeast of Sivia School, along roads northwest and north 1.8 miles to point 2.7 miles southwest of Mount Pleasant (by E. W. Gouchenour in 1936)	
Sivia School, 1.3 mi. SE. of, 395 ft. N. of SW. cor. sec. 28, T. 12 S., R. 1 E., on E. side of rd., in root on SW. side of 36-in. elm tree; copper nail and washer-----	592.34
U. S. C. & G. S. standard disk stamped "B 106 1935"-----	548.851

DUQUOIN QUADRANGLE

[Latitude 38°00'–38°15'; longitude 89°00'–89°15']

FRANKLIN, JEFFERSON, PERRY, AND WASHINGTON COUNTIES

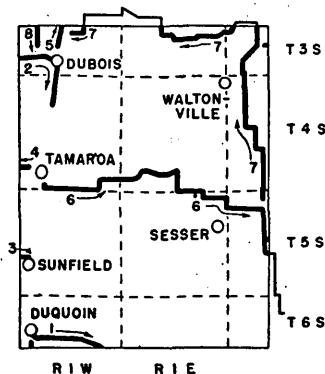


FIGURE 24.—Lines of leveling in Duquoin quadrangle.

1. From Duquoin east and southeast along Illinois Central Railroad to point near McDonald (by T. A. Green in 1906; first-order leveling).

	Feet
U. S. C. & G. S. B. M. designated "R 3"-----	461. 892
Duquoin, about 600 ft. E. of I. C. R. R. sta., at Exchange Bank, in E. brick wall; aluminum tablet stamped "1906 468" and designated "A ₁ " recovered by U. S. C. & G. S. in 1922) ¹ -----	467. 840
Duquoin, 3.2 mi. E. of, 2.0 mi. NW. of McDonald, 60 ft. W. of creek, 40 ft. N. of track, just S. of fence corner; standard iron post with bronze cap stamped "1906 396" and designated "B ₁ " (recovered by U. S. C. & G. S. in 1935)-----	395. 675

[Continued in Herrin quadrangle, line 1]

2. From point 2.1 miles west of Dubois east along road to Dubois, thence south along Illinois Central Railroad 2.3 miles (by C. E. Walker in 1923)

[Continued from Pinckneyville quadrangle, line 3]

Dubois, 1.1 mi. W. of, 0.2 mi. S. of N¼ cor. sec. 32, T. 3 S., R. 1 W., 25 ft. E. of Egyptian Trail, 25 ft. S. of rd., in concrete post; standard tablet stamped "15 WA 1923" ² -----	537. 622
Reference mark, in SE. angle of crossroads, 50 ft. S. of E.-W. rd., 55 ft. E. of highway, in root on N. side of 24-in. maple tree; copper nail and washer (recovered in 1930)-----	537. 29
Dubois (Bois sta.), at Illinois Central R. R. sta., 12 ft. W. of ticket office window and semaphore, 2 ft. E. of E. rail of main north-bound track, on top of concrete retaining wall of sta. platform; chiseled square (recovered in 1930)-----	523. 14

¹ In 1935 it was reported that this bench mark had been destroyed.

² This bench mark was reset in 1924, 1930, and 1937. In 1937 it was moved to a point 39 ft. south and 131 ft. east from the highway intersection and reset 0.410 ft. higher than its previous elevation. The figures given represent the new elevation.

Dubois, 1.1 mi. S. of, 0.12 mi. N. of milepost N. O. 637-C. 275, on top of collar at E. end of southernmost of two 4-ft. concrete drain pipes under R. R.; chiseled square-----	<i>Feet</i> 512. 77
U. S. C. & G. S. standard disk stamped "M 9 1922"-----	512. 515
3. From point 0.6 mile west of Sunfield east along road to Sunfield (by S. R. Archer in 1923)	
[Continued from Pinckneyville quadrangle, line 4]	
Sunfield, 0.2 mi. N. of Illinois Central R. R. sta., on E. edge of concrete pavement of State Highway 2, in line with center of T-rd. W.; chiseled square-----	458. 72
U. S. C. & G. S. standard disk stamped "P 9 1922"-----	457. 102
4. From Tamaroa west along roads 1.4 miles (by S. R. Archer in 1923)	
U. S. C. & G. S. standard disk stamped "O 9 1922"-----	503. 217
Tamaroa, in N. part of town, about 0.3 mi. N. of Illinois Central R. R. sta., near SW. corner of intersection of State Highway 2 and E.-W. rd., on top of corner of right-angular head wall of concrete culvert under highway; chiseled square-----	505. 58
Tamaroa, 1.1 mi. W. of, about 750 ft. W. of SE. cor. sec. 30, T. 4 S., R. 1 W., on N. side of rd., 35 ft. W. of front gate of residence of Emma Hummel, in root on S. side of easternmost of four maple trees standing in row; copper nail and washer-----	512. 38
[Continued in Pinckneyville quadrangle, line 5]	
5. From Dubois north along Illinois Central Railroad 1.8 miles (by S. R. Archer in 1923)	
Dubois, 1.0 mi. N. of, on E. side of tracks, on top of NW. corner of concrete foundation of semaphore block 2722; chiseled square (recovered in 1930)-----	506. 31
[Continued in Richview quadrangle, line 1]	
6. From Tamaroa along roads south 0.9 mile, thence generally east to south quarter corner sec. 35, T. 4 S., R. 1 E., thence alternately south and east to point 1 mile south and 2.7 miles east from Sesser (by F. D. Kramer in 1924)	
Tamaroa, 0.9 mi. S. thence 0.3 mi. E. from, about 750 ft. E. of NW. cor. sec. 4, T. 5 S., R. 1 W., on S. side of rd., in front of garage of W. G. Keith, on top of concrete apron; chiseled square-----	490. 05
Tamaroa, 0.9 mi. S. thence 0.7 mi. E. from, about 0.2 mi. E. of NW. cor. sec. 4, T. 5 S., R. 1 W., in SW. angle of junction of rd. S., near residence of J. W. Whitlock, in root of locust tree; copper nail and washer-----	484. 91
Tamaroa, 0.9 mi. S. thence 0.8 mi. E. from, 215 ft. E. of S $\frac{1}{4}$ cor. sec. 33, T. 4 S., R. 1 W., on N. side of rd., 210 ft. E. of junction of rd. S., on top of concrete culvert; chiseled square-----	481. 57
Tamaroa, 0.9 mi. S. thence 1.8 mi. E. from, 330 ft. E. of S $\frac{1}{4}$ cor. sec. 34, T. 4 S., R. 1 W., on N. side of rd., in front of residence of W. E. Stoker, in root of 8-in. maple tree; copper nail and washer----	480. 02
Tamaroa, 0.9 mi. S. thence 3.0 mi. E. from, 0.25 mi. W. of SE. cor. sec. 35, T. 4 S., R. 1 W., on N. side of rd., in front of frame farmhouse, in root of 20-in. elm tree; copper nail and washer-----	489. 08

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Tamaroa, 0.9 mi. S. thence 3.2 mi. E. from, near SW. cor. sec. 36, T. 4 S., R. 1 W., 145 ft. E. of T-rd. N., on N. side of rd., near corner post of fence E. of Winthrop residence, in concrete post; standard tablet stamped "1 K 1924"-----	Feet 493.365
Reference mark, on N. side of main rd., on E. side of rd. N., in root of maple tree; copper nail and washer-----	493.20
T. 4 S., R. 1 W., near quarter corner between secs. 35 and 36, on N. side of rd., about 125 ft. E. of T-rd., in root of black-walnut tree; copper nail and washer-----	499.31
T. 4 S., R. 1 E., near W¼ cor. sec. 31, in woods, about 35 ft. N. of center line of rd., at top of hill, in root of 8-in. white-oak tree; copper nail and washer-----	474.22
T. 4 S., R. 1 E., near center of sec. 31, about 0.3 mi. SW. of Rock Bridge over Little Muddy River, on N. side of rd., in fence corner, in root of black-walnut tree; copper nail and washer-----	432.54
Rock Bridge over Little Muddy River, in NE¼ sec. 31, T. 4 S., R. 1 E.; at E. end of S. abutment; on S. side; chiseled square-----	426.62
Little Muddy River, under bridge; surface of water July 6, 1924-----	410.8
Rock Bridge, 0.6 mi. NE. of, in NW¼ sec. 32, on N. side of rd., about 75 ft. E. of residence of Henry West, in root of 30-in. white-oak tree; copper nail and washer-----	428.81
T. 4 S., R. 1 E., about 0.2 mi. S. of N¼ cor. sec. 32, in NW. angle of crossroads, 15 ft. W. of fence corner, in concrete post; standard tablet stamped "2 K 1924"-----	426.861
Reference mark, 460 ft. S.80°E. from tablet, on S. side of rd., on side of hill, at fence, in root of double black-walnut tree; copper nail and washer-----	439.45
T. 4 S., R. 1 E., near center of NW¼ sec. 33, on N. side of rd., about 45 ft. W. of residence of E. R. Jenkins, in root of black-oak tree; copper nail and washer-----	469.22
T. 4 S., R. 1 E., 0.25 mi. E. of NW. cor. sec. 34, at junction of T-rd. S., in root of 24-in. white-oak tree; copper nail and washer-----	489.37
T. 4 S., R. 1 E., 0.25 mi. E. of SW. cor. sec. 34, near Franklin-Jefferson county line, in NW. angle of junction of E.-W. rd., on side of hill, in root of 24-in. white-oak tree; copper nail and washer-----	443.23
T. 4 S., R. 1 E., about 385 ft. E. of SW. cor. sec. 35, on S. side of Franklin-Jefferson county-line rd., in root of 30-in. white-oak tree; copper nail and washer-----	482.17
T. 4 S., R. 1 E., near S¼ cor. sec. 35, 2.4 mi. N. and 1.0 mi. W. from Sesser, near Franklin-Jefferson county line, in SW. angle of crossroads, inside fence, in concrete post; standard tablet stamped "3 K 1924"-----	469.439
Reference mark 1, 62.5 ft. N.32°E. from tablet, in NE. angle of crossroads, in root of 30-in. black-oak tree; copper nail and washer-----	467.08
Reference mark 2, on W. side of rd., in field S. of crossroads, in root of double black-oak tree; copper nail and washer-----	471.94
Sesser, 2.0 mi. N. of, near center of sec. 1, T. 5 S., R. 1 E., at intersection of Chicago, Burlington & Quincy R. R., in center of traveled way of rd.; top of E. rail of north-bound track-----	473.3
Sesser, 2.0 mi. N. and 0.5 mi. E. from, near quarter corner between secs. 1 and 6, T. 5 S., Rs. 1 and 2 E., in NW. angle of junction of N.-S. rd., in root of double wild-cherry tree; copper nail and washer-----	468.55

Sesser, 1.6 mi. N. and 0.8 mi. E. from, 0.25 mi. E. of SW. cor. sec. 6, T. 5 S., R. 2 E., on lawn of Horsepasture Church, about 90 ft. W. of W. fence of cemetery, on N. side of rd., in root of 20-in. hickory tree; copper nail and washer-----	<i>Feet</i> 457.99
Sesser, 1.6 mi. N. and 1.8 mi. E. from, near S $\frac{1}{4}$ cor. sec. 5, T. 5 S., R. 2 E., on W. end of N. wall of concrete culvert; chiseled square-----	421.15
Sesser, 1.6 mi. N. and 2.4 mi. E. from, near W. cor. secs. 4 and 9, T. 5 S., R. 2 E., at junction of N.-S. rd., on E. side of rd., on top of bank; standard iron post with bronze cap stamped "Prim Trav Sta. No 158 1911 4 K 1924"-----	440.635
Reference mark, about 103 ft. N. of T-rd., on W. side of N.-S. rd., in root of wild-cherry tree; copper nail and washer-----	441.42
Sesser, 0.8 mi. N. and 2.5 mi. E. from, about 0.3 mi. N. of SE. cor. sec. 8, T. 5 S., R. 2 E., at bridge over Jackie Branch, on S. corner of concrete slab floor; chiseled square (recovered in 1928)-----	405.75
Sesser, 2.5 mi. E. of, near W $\frac{1}{4}$ cor. sec. 16, T. 5 S., R. 2 E., NE. of crossroads, in yard of residence of W. E. Kirkpatrick, in root of second maple tree E. of concrete walk; copper nail and washer-----	442.89
Sesser, 0.6 mi. S. and 2.5 mi. E. from, about 900 ft. S. of NW. cor. sec. 21, T. 5 S., R. 2 E., on E. side of rd., about 36 ft. S. of house of George Phillips, in root of 14-in. white-oak tree; copper nail and washer-----	459.11

[Continued in Ina quadrangle, line 2]

7. From road junction 1.6 miles north and 2.4 miles east from Sesser along roads generally north to point 2.5 miles north and 1.5 miles east from Waltonville, thence generally west to point on Illinois Central Railroad 1.4 miles north of Dubois, thence south along railroad to Dubois (by F.D. Kramer in 1924)

Sesser, 2.9 mi. N. and 2.5 mi. E. from, 0.5 mi. S. and 0.8 mi. E. from Fitzgeraldrell, about 600 ft. S. of E $\frac{1}{4}$ cor. sec. 32, T. 4 S., R. 2 E., on W. side of rd., in root of 16-in. oak tree; copper nail and washer-----	425.54
Fitzgeraldrell, 0.3 mi. N. and 0.8 mi. E. from, near SW. cor. sec. 28, T. 4 S., R. 2 E., on E. side of rd., in yard of residence of Henry Allen, in root of 12-in. maple tree; copper nail and washer-----	408.41
Fitzgeraldrell, 1.0 mi. N. and 0.8 mi. E. from, near NW. cor. sec. 28, T. 4 S., R. 2 E., on E. side of rd., about 300 ft. S. of right-angle turn from N. to W., near house, in root of 36-in. elm tree; copper nail and washer-----	408.52
Fitzgeraldrell, 1.1 mi. N. and 0.3 mi. E. from, 1.3 mi. E. and 4.0 mi. S. from Waltonville, near N $\frac{1}{4}$ cor. sec. 20, T. 4 S., R. 2 E., on S. side of rd., opposite T-rd. N., in concrete post; standard tablet stamped "8 K 1924"-----	427.383
Reference mark, 129 ft. N.4°E. from tablet, on E. side of rd., in root of 30-in. elm tree; copper nail and washer-----	425.98
Waltonville, 1.3 mi. E. and 3.0 mi. S. from, about 125 ft. W. of S $\frac{1}{4}$ cor. sec. 17, T. 4 S., R. 2 E., about 125 ft. W. of junction of E.-W. rd., on N. side of rd., in front of residence of E. B. Kelly, in root of silver-poplar tree; copper nail and washer-----	421.81
Waltonville, 0.8 mi. E. thence 2.7 mi. S. from, near W. side of SW $\frac{1}{4}$ sec. 17, T. 4 S., R. 2 E., on E. side of rd., in front of residence of Riley Hall, in root of 15-in. white-oak tree; copper nail and washer-----	436.88

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Waltonville, 0.8 mi. E. thence 2.0 mi. S. from, 0.9 mi. S. of Utah School, about 384 ft. N. of SW. cor. sec. 8, T. 4 S., R. 2 E., on E. side of rd., in root of 30-in. wild-cherry tree; copper nail and washer-----	<i>Feet.</i> 434. 19
Waltonville, 0.8 mi. E. thence 1.1 mi. S. from, at Utah School, near SW. cor. sec. 5, T. 4 S., R. 2 E., in NE. angle of crossroads, in field, near 24-in. corner post, in concrete post; standard tablet stamped "9 K 1924"-----	433. 607
Reference mark, 99.4 ft. N.27°W. from tablet, 112 ft. N. of crossroads, in school lot, on W. side of rd., in root of 14-in. elm tree; copper nail and washer-----	433. 69
Waltonville, 0.8 mi. E. thence 0.2 mi. S. from, about 800 ft. S. of NE. cor. sec. 6, T. 4 S., R. 2 E., on W. side of rd., in front of residence of Jim Braden, in root of 20-in. maple tree; copper nail and washer-----	426. 85
Waltonville, 0.7 mi. E. thence 0.7 mi. N. from, 0.3 mi. S. of NW. cor. sec. 32, T. 3 S., R. 2 E., on E. side of rd., SE. of Wabash, Chester & Western R. R., in front of house, in root of 30-in. maple tree; copper nail and washer-----	430. 01
Waltonville, 1.5 mi. N. and 1.5 mi. E. from, 0.25 mi. E. of center of sec. 29, T. 3 S., R. 2 E., in NW. angle of intersection of NW. line of R. R. right-of-way and W. line of rd. right-of-way, in concrete post; standard tablet stamped "10 K 1924" (recovered in 1928)-----	422. 110
Reference mark, 59 ft. N.48°E. from tablet, NE. of R. R., on E. side of rd., in root of 42-in. black oak tree; copper nail and washer-----	421. 82
[Jogs into Richview quadrangle, line 2]	
T. 3 S., R. 2 E., about 0.2 mi. E. of W¼ cor. sec. 20, about 175 ft. W. of junction of T-rd. N., on S. side of rd., at corner of rail fence, in root of 18-in. elm tree; copper nail and washer-----	432. 56
Big Muddy River, under bridge; surface of water July 26, 1924-----	412. 1
T. 3 S., R. 2 E., in SW¼ sec. 19, about 125 ft. NE. of intersection of Chicago, Burlington & Quincy R. R., on NW. side of rd., on E. side of track, in root of 30-in. black-oak tree; copper nail and washer-----	433. 06
T. 3 S., R. 1 E., about 0.3 mi. E. of NW. cor. sec. 25, 0.3 mi. E. of Four Corners School, on S. side of rd., in front of residence of Oscar Newall, in root of 48-in. silver-maple tree; copper nail and washer--	464. 74
T. 3 S., R. 1 E., near SE. cor. sec. 23, at Four Corners School, in NW. angle of crossroads, in root of 48-in. locust tree; copper nail and washer-----	475. 94
T. 3 S., R. 1 E., in NW¼ sec. 26, 25 ft. N. of junction of rd. SW., on E. side of N-S. rd., in concrete post; standard tablet stamped "11 K 1924"-----	484. 480
Reference mark, 152 ft. N.12°W. from tablet, 538 ft. S. of right-angle bend from W. to S. in rd., on W. side of rd., in yard of residence of John A. Robinson, in root of 30-in. maple tree; copper nail and washer-----	482. 90
T. 3 S., R. 1 E., near center of NW¼ sec. 27, SW. of junction of N-S. rd., in field, in root of 30-in. black-oak tree; copper nail and washer--	481. 23

T. 3 S., R. 1 E., about 0.2 mi. W. of NE. cor. sec. 28, 1.0 mi. S. thence 0.3 mi. E. from Blissville Township polling house, on S. side of rd., in front of residence of Clifton Quinn, in root of 20-in. maple tree; copper nail and washer-----	<i>Feet</i> 487.84
[Jogs into Richview quadrangle, line 3]	
T. 3 S., R. 1 W., near N. cor. secs. 26 and 27, at junction of E.-W. rd., on S. side of rd., opposite T-rd. N., in concrete post; standard tablet stamped "13 K 1924"-----	514.251
Reference mark, 608 ft. N.20°W. from tablet, about 600 ft. N. of junction of T-rd. N., on E. side of rd., on 14-in. wrought-iron culvert under rd. E. to house; top of N. end-----	513.62
T. 3 S., R. 1 W., about 0.25 mi. E. of NW. cor. sec. 27, 1.4 mi. N. thence 0.5 mi. E. from Dubois, in SE. angle of crossroads, at point where main rd. turns S. to Dubois, in root of double black-oak tree; copper nail and washer-----	515.29
8. From point 1.1 miles west, thence 1.7 miles north from Dubois along roads south and east to Dubois, thence north along Illinois Central Railroad 1 mile (by L. V. Johnson in 1930)	
[Continued from Richview quadrangle, line 10]	
Dubois, 1.1 mi. W. thence 1.3 mi. N. from, near quarter corner between secs. 20 and 29, T. 3 S., R. 1 W., 460 ft. S. of junction of T-rd. E., on N. end of E. concrete head wall of culvert; chiseled square---	561.92

EAST ST. LOUIS QUADRANGLE

[Latitude 38°30'–38°45'; longitude 90°00'–90°15']

MADISON, MONROE, AND ST. CLAIR COUNTIES

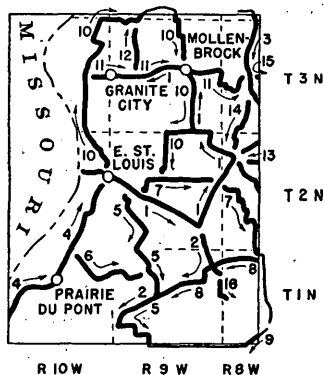


FIGURE 25.—Lines of leveling in East St. Louis quadrangle.

1. From East St. Louis along roads southeast and northeast by way of Edgemont to Caseyville, thence north and west to Granite City (by L. Scott Smith in 1903)

East St. Louis, at Eads Bridge, in S. face of E. land pier; mark on large bronze plate inscribed "U S Coast & Geodetic Survey Bench Mark 1882" and designated "I 3"-----	Feet 413. 087
Caseyville, 0.25 mi. E. of, in N. end of E. abutment of R. R. bridge; aluminum tablet stamped "449 St. Louis" ⁹³ (recovered in 1930)---	446. 467
Mollenbrock, at NE. end of Horseshoe Lake, in SE. abutment of iron bridge over bayou; aluminum tablet stamped "415 St. Louis" ⁹⁴ -----	414. 137
Granite City, at Emerson School, in NW. wall of NE. wing, at top of stone foundation; aluminum tablet stamped "431 St. Louis" (recovered in 1929)-----	430. 460

2. From Edgemont along roads south to Ogles, thence southwest to point 1.2 miles northeast of Imbs (by L. Scott Smith in 1903; single spur line)

Ogles, 300 ft. N. of west-bound track of I. C. R. R., on E. side of rd, in S foundation of large brick dwelling; aluminum tablet stamped "576 St. Louis" (not recovered in 1929; elevation doubtful)-----	575. 849
Imbs, 1.2 mi. NE. of, 0.25 mi. W. of center of sec. 17, T. 1 N., R. 9 W., in NW. corner of foundation of dwelling of John Schraff; aluminum tablet stamped "517 St. Louis" ⁹⁵ -----	516. 805

⁹³ In 1925 this bench mark was reset at an elevation 2.470 ft. lower than that originally determined. The description and elevation refer to the new position.

⁹⁴ In 1925 this bench mark was reported destroyed. For temporary bench mark at same location see line 10.

⁹⁵ In 1929 this bench mark was reported destroyed.

3. From point 0.6 mile northwest of Peters south along State Highway 157 to junction of U. S. Highway 40, thence southeast to point near west quarter corner sec. 28, T. 3 N., R. 8 W. (by S. R. Archer in 1926)

[Connects with line 5 in Alton quadrangle]

Peters, 0.5 mi. NW. of, at concrete highway bridge, on top of SW. coping at SE. end; chiseled square-----	Feet 457. 48
Peters, 30 ft. S. and 30 ft. E. from crossing of N. Y. C. & St. L. R. R., just E. of sta., 1 ft. N. and 4 ft. E. from corner of fence along SE. right-of-way, in concrete post; standard tablet stamped "13 A 1926" (recovered in 1930)-----	445. 602
Reference mark, 110 ft. W. of tablet, 8 ft. S. of sta. platform, E. of sta., S. of track, 3 ft. N. of right-of-way fence, in root on E. side of 24-in. maple tree; copper nail and washer (recovered in 1930)---	444. 41
Peters, 0.5 mi. S. of, on E. side of highway, 500 ft. S. of rd. junction, 150 ft. N. of highway bridge, at fence, in root on SW. side of 15-in. walnut tree; copper nail and washer-----	451. 73
Peters, 1.5 mi. SW. of, in SE $\frac{1}{4}$ sec. 8, T. 3 N., R. 8 W., 470 ft. N. of farmhouse, on E. side of highway, on top of N. end of E. concrete head wall of culvert; chiseled square-----	439. 78
Peters, 2.6 mi. SW. of, 0.2 mi. SE. of center of sec. 17, T. 3 N., R. 8 W., 50 ft N and 80 ft W from junction of rd. NE., on embankment 11 ft. higher than rd., in root on W. side of 24-in. elm tree; copper nail and washer-----	453. 92
Peters, 3.9 mi. S. of, 2.1 mi. NW. of post office at Collinsville, on NE. side of triangle formed by junction of U. S. Highway 40 and State Highway 157, 145 ft. SE. of SE. end of concrete bridge over Schoolhouse Branch, 65 ft. NW. and 20 ft. NE. from junction of rd. SW. to schoolhouse, 15 ft. NE. of NE. edge of pavement, at fence, in concrete post; standard tablet stamped "14 A 1926" (recovered in 1930)-----	442. 437
Reference mark, 200 ft. NW. of tablet, 50 ft. SE. of Y-junction, on NE. parapet of NW. abutment of concrete highway bridge over Schoolhouse Branch; chiseled square (recovered in 1930)-----	443. 11

[Continued in Belleville quadrangle, line 6]

4. From point 0.8 mile southwest of Vulcan along roads generally northeast by way of Cahokia to Tenth and State Streets in East St. Louis (by E. W. Gouchenour in 1929)

[Continued from West St. Louis quadrangle, line 1]

Vulcan, at junction of East Carondelet and Davis Street Ferry rds., in front of frame store building owned by William Combs, in root on NE. side of large cottonwood tree; copper nail and washer--	411. 03
East Carondelet, 5 ft. S. and 95 ft. E. from intersection of I. C. and Mobile & Ohio R. Rs., 30 ft. W. of rd., in line with telephone poles, in concrete post; standard tablet stamped "T T Sta No 39 F 1928"-----	410. 975
Reference mark, 1 block SE. thence 1 block NE. from tablet, in corner of yard, in root of maple tree; copper nail and washer-----	408. 84
Prairie du Pont, on SW. side of rd., 20 ft. SW. and 70 ft. NW. from junction of rd. SW., at country store, in root on N. side of locust tree; copper nail and washer-----	414. 46

Cahokia, on S. side of State Highway 157, about 600 ft. E. of junction of State Highway 3, in NW. corner of yard of Catholic school, 40 ft. S. and 45 ft. W. from junction of street N., 2 ft. S. and 3 ft. E. from fence corner, in concrete post; standard tablet stamped "T T Sta No. 38 F 1928" ⁹⁶ -----	<i>Feet</i> 410.556
Reference mark, 240 ft. N. of tablet, 25 ft. E. of center line of street, in root of cottonwood tree; copper nail and washer-----	409.86
Cahokia, 1.2 mi. NE. of along State Highway 3 (Mississippi Avenue), 5 ft. S. and 30 ft. E. from crossroads, on concrete culvert; chiseled square-----	410.78
Cahokia, 2.5 mi. NE. of, near S. limits of East St. Louis, on E. side of Falling Spring Avenue, 0.2 mi. SW. of crossing of I. C. R. R., 320 ft. NE. of single-track crossing, in front yard of dwelling, in root on NW. side of mulberry tree; copper nail and washer-----	411.88
East St. Louis, in S. part of, 20 ft. E. of center line of South Tenth Street, 25 ft. S. of center line of street E. along I. C. R. R., on N. side of track, 5 ft. E. of W. column of free bridge, in concrete post; standard tablet stamped "T T Sta No 45 F 1928"-----	413.727
East St. Louis, 69 ft. S. and 1 ft. E. from traffic signal at center of intersection of Tenth and State Streets, at base of telephone pole, on curb; chiseled square-----	416.73
5. From Tenth and State Streets in East St. Louis alternately south-east and southwest along streets and highways by way of Centerville and Imbs to point near southeast corner sec. 29, T. 1 N., R. 9 W. (by E. W. Gouchenour in 1929)	
East St. Louis, 50 ft. N. of intersection of State Street and tracks of Terminal Railroad Association of St. Louis, at N. edge of sidewalk, about on NW. line of R. R. right-of-way, in concrete post; standard tablet stamped "T T Sta No 33 F 1928"-----	415.141
Reference mark 1, 290 ft. NW. of tablet, on NE. side of State Street, on curb; chiseled square-----	416.36
Reference mark 2, 487 ft. SE. of tablet, 30 ft. NE. thence 15 ft. SE. from intersection of State and Twenty-second Streets, on curb; chiseled square-----	413.88
East St. Louis, 25 ft. E. of intersection of Twenty-second Street and Illinois Avenue, on concrete curb; chiseled square-----	408.75
East St. Louis, 40 ft. S. of intersection of Twenty-ninth Street and Missouri Avenue, on curb; chiseled square-----	416.88
East St. Louis, near E. edge of, 2.6 mi. by highway N. of Centerville, on Missouri Avenue, 0.2 mi. SE. of crossing of Alton & Southern R. R., 30 ft. S. and 55 ft. W. from junction of T-rd. SW., in concrete post; standard tablet stamped "T T Sta No 34 F 1928"-----	417.856
Reference mark, 175 ft. W. of tablet, 42 ft. S. and 250 ft. W. from rd. junction, in field, in root on E. side of lone tree; copper nail and washer-----	418.83
Centerville, 1.3 mi. NW. of, 80 ft. NW. and 20 ft. NE. from intersection of Mousette Lane and Church rd., in root on NE. side of black-oak tree; copper nail and washer-----	411.12

⁹⁶ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Y 114 1935," elevation 414.871 ft.

Centerville, about 300 ft. NE. of sta., 40 ft. S. of cross rd., on SE. side of State Highway 157, between power-line pole and telephone pole, in concrete post; standard tablet stamped "T T Sta No 35 F 1928" (recovered by U. S. C. & G. S. in 1935)-----	<i>Feet</i> 413.795
Reference mark, 120 ft. S. and 15 ft. W. from tablet, on W. side of rd., in root of large elm tree; copper nail and washer-----	414.73
Centerville, 1.7 mi. S. of, 1.9 mi. NE. of Imbs, 0.2 mi. W. of center of sec. 16, T. 1 N., R. 9 W., 15 ft. N. and 40 ft. W. from junction of rd. N., at Bluff Grange, in SW. corner of churchyard, in root on S. side of tree; copper nail and washer-----	525.69
Imbs, 0.9 mi. NE. of, 0.15 mi. W. of N $\frac{1}{4}$ cor. sec. 20, T. 1 N., R. 9 W., 10 ft. S. and 40 ft. W. from rd. junction, in root on E. side of large elm tree; copper nail and washer-----	503.83
Imbs, at sta. and store, 20 ft. N. and 90 ft. W. from center of highway bridge over I. C. R. R., at NE. corner of tool shed, in concrete post; standard tablet stamped "T T Sta No 36 F 1928"-----	453.064
Reference mark, at store, on base of NW. pillar of porch; chiseled square-----	452.84
Imbs, 2.4 mi. by rds. SE. of, 0.25 mi. W. of center of sec. 29, T. 1 N., R. 9 W., 15 ft. S. and 10 ft. E. from junction of T-rd. N., in root on NE. side of oak tree; copper nail and washer-----	537.68

[Connects with line 5 in Waterloo quadrangle]

6. From Cahokia southeast and east along roads to Centerville (by E. W. Gouchenour in 1929; leveled twice)

Cahokia, 1.6 mi. SE. of along State Highway 157, 75 ft. N. of dim rd. SW., in root on NW. side of oak tree; copper nail and washer-----	408.56
Cahokia, 2.2 mi. SE. of, 2.9 mi. W. of Centerville along State Highway 157, 135 ft. S. and 150 ft. E. from junction of T-rd. to house, 20 ft. SE. of center line of rd., 20 ft. N. of N. bank of Prairie du Pont Creek drainage ditch, in concrete post; standard tablet stamped "T T Sta No 37 F 1928"-----	411.976
Centerville, 1.8 mi. by rds. W. of, at junction of Mousette Lane and improved rd. SE., 0.5 mi. E. of bridge over ditch which drains Goose Lake, 40 ft. N. and 30 ft. E. from rd. junction, in root of small tree; copper nail and washer-----	406.38

7. From Twenty-second and State streets in East St. Louis generally east along streets and Bunkum road to Bunkum, thence southeast along roads by way of Fairview to point near west quarter corner sec. 4, T. 1 N., R. 8 W. (by E. W. Gouchenour in 1929)

East St. Louis, 55 ft. E. along State Street from intersection of Thirty-seventh Street, on N. curb, near telephone pole; chiseled square-----	419.39
East St. Louis, 25 ft. N. and 15 ft. E. from junction of Thirty-seventh Street and Bunkum rd., on end of curb; chiseled square-----	413.64
East St. Louis, near E. limits of, along Bunkum rd., 20 ft. N. and 75 ft. E. from intersection of Kingshighway, near W $\frac{1}{4}$ cor. sec. 15, T. 2 N., R. 9 W., in root on S. side of oak tree, copper nail and washer-----	419.09
East St. Louis, 0.25 mi. E. of E. limits of Washington Park, 1.9 mi. along Bunkum rd. W. of Bunkum, near E $\frac{1}{4}$ cor. sec. 15, T. 2 N., R. 9 W., 30 ft. S. and 130 ft. W. from junction of T-rd. N., 30 ft. S. and 85 ft. E. from center of bridge over Harding Ditch, in concrete post; standard tablet stamped "T T Sta No 27 F 1928"-----	414.334

Reference mark, 20 ft. N. and 730 ft. E. from tablet, at driveway to brick dwelling, in root of tree; copper nail and washer-----	<i>Feet</i> 421. 41
Bunkum, 1.0 mi. NW. of, about 600 ft. W. of E $\frac{1}{4}$ cor. sec. 14, T. 2 N., R. 9 W., 700 ft. E. of intersection of Church Lane, 15 ft. S. of rd., in root on S. side of walnut tree; copper nail and washer-----	422. 16
Bunkum, on State Highway 157, 30 ft. N. and 15 ft. E. from junction of rd. NW., on S. end of E. hub guard of concrete bridge; chiseled square-----	449. 92
Bunkum, 1.5 mi. SE. of, 2.0 mi. S. of Caseyville, 1.3 mi. NW. of Fairview, near W $\frac{1}{4}$ cor. sec. 20, T. 2 N., R. 8 W., 30 ft. N. and 30 ft. E. from center of right-angle curve in rd., in concrete post; standard tablet stamped "T T Sta No 26 F 1928"-----	604. 310
Fairview, near center of sec. 29, T. 2 N., R. 8 W., 20 ft. N. and 15 ft. W. from junction of U. S. Highway 50 and rd. N., on W. end of concrete culvert; chiseled square-----	593. 16
Fairview, 0.5 mi. E. of, near E $\frac{1}{4}$ cor. sec. 29, T. 2 N., R. 8 W., 15 ft. N. and 25 ft. W. from junction of U. S. Highway 50 and rd. S., on W. end of N. wing wall of concrete culvert; chiseled square-----	594. 76
Fairview, 0.5 mi. E. thence 0.7 mi. S. from, about 800 ft. S. and 600 ft. W. from NE. cor. sec. 32, T. 2 N., R. 8 W., 0.3 mi. E. of Union Hill School, on E side of rd., 25 ft. S. and 20 ft. E. from junction of dim rd. SW. to mine, on NE. concrete wing wall of culvert; chiseled square-----	524. 09

[Continued in Belleville quadrangle, line 8]

8. From point 3 miles southeast of Fairview along roads southwest by way of Birkner and Ogles to point 1.7 miles south of Center-ville (by E. W. Gouchenour in 1929)

[Connects with line 8 in Belleville quadrangle]

Fairview, 3.0 mi. SE. of, 4.0 mi. NW. of Belleville, 1.6 mi. E. of Birkner, near quarter corner between secs. 4 and 5, T. 1 N., R. 8 W., 0.2 mi. W. of crossroads, 30 ft. W. of right-angle curve in rd., 10 ft. N. and 2 ft. E. from power-line pole, in concrete post; standard tablet stamped "T T Sta No 11 F 1928"-----	594. 235
Reference mark, 15 ft. N. and 50 ft. E. from tablet, in root on NW. side of wild-cherry tree; copper nail and washer-----	592. 57
Birkner, in village of, 75 ft. S. of junction of N-S. rd. and rd. E., near store, on S. end of E. abutment of concrete bridge; chiseled square-----	493. 07
Birkner, 1.0 mi. W. of, 1.2 mi. NE. of Ogles, 0.2 mi. S. of Harmony School, on State Highway 15 (West Main Street), 35 ft. N. and 30 ft. W. from crossroads, on curb; chiseled square-----	610. 36
Birkner, 1.2 mi. SW. of, in SW. corner of grounds of St. Henry College, 38 ft. N. and 42 ft. E. from junction of State Highway 15 and Dutch Hollow rd., 15 ft. N. of fence corner, 1 ft. E. of fence, 6 in. underground, in concrete post; standard tablet stamped "T T Sta 12 F 1928" (recovered in 1936)-----	572. 814
Reference mark, 570 ft. NW. of tablet, on NE. side of highway, on curb; chiseled square-----	578. 04

Ogles, 0.25 mi. S. of, near W $\frac{1}{4}$ cor. sec. 12, T. 1 N., R. 9 W., 110 ft. S. and 30 ft. E. from intersection of State Highway 13 and N.-S. rd., in yard of stucco house, in root on SW. side of large tree; copper nail and washer-----	<i>Feet</i> 572.59
Ogles, 0.9 mi. W. of, in SW $\frac{1}{4}$ sec. 11, T. 1 N., R. 9 W., 20 ft. S. and 30 ft. W. from junction of highway and rd. SW., about 200 ft. NE. of bridge over I. C. R. R. tracks, in root on NW. side of oak tree; copper nail and washer-----	563.33
Ogles, 2.2 mi. SW. of, in NE $\frac{1}{4}$ sec. 16, T. 1 N., R. 9 W., 15 ft. SE. of center line of rd., in root on S. side of walnut tree; copper nail and washer-----	541.50
9. From point near Belleville southwest along State Highway 158 to point near south quarter corner sec. 29, T. 1 N., R. 8 W. (by E. W. Gouchenour in 1929)	
[Connects with line 5 in Belleville quadrangle]	
Belleville, 1.2 mi. SW. of city square, on SW. abutment of highway bridge over drainage ditch; chiseled square-----	489.77
[Continued in Waterloo quadrangle, line 5]	
10. From Tenth and State Streets in East St. Louis northwest and north to Chouteau Slough, thence east to Long Lake, thence south by way of Mollenbrock to U. S. Highway 40 near Monks Mound, thence west and south to intersection of Kingshighway and Bunkum road (by E. W. Gouchenour in 1929)	
East St. Louis, on NE. side of St. Clair Avenue, 12 ft. N. and 24 ft. E. from intersection of Collinsville Avenue, on curb; chiseled square-----	418.44
East St. Louis, on St. Clair Avenue, 680 ft. NW. of steel girder bridge over Cahokia Slough, 15 ft. S. and 25 ft. W. from power-line pole, on sidewalk, chiseled square-----	412.07
Brooklyn, near S. boundary of, 200 ft. SE. and 17 ft. NE. from crossing of U. S. Highway 66 and Southern Ry., 0.5 ft. from NE. edge of sidewalk, in concrete post; standard tablet stamped "T T Sta No 44 F 1928" ⁹⁷ -----	414.739
Reference mark, 510 ft. NW. of tablet, on sidewalk; chiseled square-----	414.75
Granite City, 0.8 mi. SW. of, on W. side of levee, on concrete retaining wall of city sewer pipe outlet; chiseled square (recovered in 1930)-----	416.35
Granite City, at W. edge of, on West Twentieth Street, about 400 ft. W. of levee, 20 ft. S. and 30 ft. E. from rd. fork, 90 ft. W. of power line, in concrete post; standard tablet stamped "T T Sta No 43 F 1928" ⁹⁸ -----	414.436
Reference mark, 530 ft. N. of tablet, on W. side of rd., in root on N. side of northernmost cottonwood tree; copper nail and washer (recovered in 1930)-----	413.15
Granite City, 1.6 mi. N. of N. limits of, along Chouteau, Nameoki and Venice Levee, at Gabaret School, in SW. corner of yard, in root on W. side of tree; copper nail and washer-----	417.85

⁹⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "J 95 1935," elevation 415.255 ft.

⁹⁸ In 1930 this bench mark was reset at an elevation 0.512 ft. lower than that originally determined. The figures given represent the new elevation.

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Granite City, 3.0 mi. in air line N. of, 25 ft. S. of junction of rd. N. across Chouteau Slough, 35 ft. W. of NW. corner of picket fence around house, at fence line, in concrete post; standard tablet stamped "T T Sta No 42 F 1928"-----	<i>Feet</i> 418.817
Reference mark, 580 ft. E. of tablet, on S. bank of slough, in root on S. side of ash tree; copper nail and washer-----	419.08
T. 4 N., R. 9 W., 0.3 mi. E. of SW. cor. sec. 31, 20 ft. N. and 20 ft. E. from junction of rd. SE., in root of locust tree; copper nail and washer-----	416.12
Nameoki, 1.1 mi. N. of, 0.15 mi. N. of S $\frac{1}{4}$ cor. sec. 32, T. 4 N., R. 9 W., 20 ft. S. and 40 ft. W. from rd. junction, in root on W. side of elm tree; copper nail and washer-----	425.11
[Jogs into Alton quadrangle, line 8]	
Mollenbrock, 2.7 mi. N. and 0.5 mi. W. from, 1.3 mi. S. of Mitchell, 0.07 mi. S. and 0.25 mi. W. from NE. cor. sec. 3, T. 3 N., R. 9 W., on SW. side of Long Lake, 1 ft. W. of fence on E. side of rd., 30 ft. S. of point where fence intersects cut bank, in concrete post; standard tablet stamped "T T Sta No 30 F 1928"-----	417.135
Reference mark, 0.25 mi. W. of tablet, 10 ft. E. of junction of rd. N., in root of tree; copper nail and washer-----	418.73
Mollenbrock, 1.7 mi. N. and 0.2 mi. W. from, near SE. cor. sec. 3, T. 3 N., R. 9 W., 30 ft. N. and 27 ft. W. from junction of rd. NE., in root on N. side of willow tree; copper nail and washer-----	413.39
Mollenbrock, 0.8 mi. N. and 0.2 mi. W. from, at Four Corners, 0.1 mi. N. of cor. secs. 10, 11, 14 and 15, T. 3 N., R. 9 W., 30 ft. S. and 45 ft. E. from crossroads, at SW. corner of store, in root on N. side of apple tree; copper nail and washer-----	416.17
Mollenbrock, at NE. end of Horseshoe Lake, at iron bridge over bayou, on SE. abutment; chiseled square ⁹⁹ -----	414.14
Mollenbrock, 1.0 mi. SE. of, near center of sec. 23, T. 3 N., R. 9 W., 25 ft. S. of junction of rd. N., 25 ft. S. and 90 ft. W. from junction of rd. S., 4 ft. E. of telephone pole; standard tablet stamped "T T Sta No 29 F 1928"-----	409.994
Reference mark, 40 ft. N. and 45 ft. E. from tablet, in yard of store, in root on W. side of sycamore tree; copper nail and washer-----	416.80
Mollenbrock, 3.5 mi. SE. of, 0.2 mi. W. of Monks Mound, on U. S. Highway 40 (Collinsville rd.), 15 ft. N. and 10 ft. W. from junction of rd. N., on W. end of concrete culvert; chiseled square-----	419.84
Monks Mound, 1.7 mi. W. of, 100 ft. S. and 25 ft. E. from NW. cor. sec. 3, T. 2 N., R. 9 W., at junction of U. S. Highway 40 and Kingshighway, 20 ft. S. of trolley tracks, 10 ft. S. and 1 ft. W. from fence corner, in concrete post; standard tablet stamped "T T Sta No 28 F 1928"-----	414.728
Reference mark, 885 ft. S. of tablet, on W. side of rd., in base of leaning locust tree; copper nail and washer-----	417.22
Rose Lake Sta., 0.7 mi. NE. of, 153 ft. N. and 27 ft. W. from intersection of Maryland Avenue and west-bound track of Vandalia R. R., on concrete base of R. R. telephone booth; chiseled square-----	418.63
Rosemont, 30 ft. N. and 30 ft. W. from junction of Kingshighway and Hollow Avenue, on sidewalk; chiseled square-----	421.31

⁹⁹ Same location as aluminum tablet described in line 1.

11. From Granite City along roads generally east to State Highway 157 near McDonough Lake (by E. W. Gouchenour in 1929)

Granite City, 30 ft. S. and 15 ft. W. from intersection of East Twenty-fourth Street and Hall Avenue, on curb; chiseled square-----	<i>Feet</i> 418.74
Granite City, at crossing of State Highway 3 and Illinois Terminal R. R., 25 ft. N. and 27 ft. E. from intersection, at W. side of and level with sidewalk, in concrete post; standard tablet stamped "T T Sta No 41 F 1928"-----	420.746
Reference mark, 18 ft. S. and 2 ft. E. from tablet, on sidewalk; chiseled square-----	420.56
Mollenbrock, 1.3 mi. W. of, in SE $\frac{1}{4}$ sec. 16, T. 3 N., R. 9 W., 300 ft. SW. of rd. junction, in NW. corner of yard of store, in root on N. side of maple tree; copper nail and washer-----	420.59
Mollenbrock, 0.8 mi. E. of, 0.25 mi. N. of SE. cor. sec. 14, T. 3 N., R. 9 W., 55 ft. S. and 15 ft. W. from junction of T-rd. S., in root on NE. side of large tree; copper nail and washer-----	423.13
Mollenbrock, 1.8 mi. E. of, in SE $\frac{1}{4}$ sec. 13, T. 3 N., R. 9 W., 25 ft. W. of center line of rd., 290 ft. S. of right-angle turn in rd., in root on W. side of persimmon tree; copper nail and washer-----	413.33
Mollenbrock, 1.8 mi. E. thence 1.0 mi. SE. from, 1.8 mi. NW. of Pleasant Grove School, at right-angle turn in rd., 5 ft. S. of gate, in root of large tree; copper nail and washer-----	413.70
Mollenbrock, 1.8 mi. E. thence 1.7 mi. SE. from, 0.2 mi. N. thence 1.0 mi. W. from Pleasant Grove School, 1.0 mi. S. of W. end of McDonough Lake, 35 ft. N. and 21 ft. E. from crossing of I. T. R. R. and N.-S. rd., in SE. angle of junction of T-rd. E., in SW. corner of concrete top of pipe-line manhole; standard tablet stamped "G 3 1929"-----	420.444
McDonough Lake, on SE. side of, in SW $\frac{1}{4}$ sec. 17, T. 3 N., R. 8 W., 0.3 mi. SW. of junction of State Highway 157 and rd. SW., on SW. wing of abutment of concrete bridge; chiseled square-----	418.48

12. From crossing of Illinois Terminal Railroad and State Highway 3 in Granite City north along highway to Nameoki, thence along road to point near south quarter corner sec. 32, T. 4 N., R. 9 W. (by E. W. Gouchenour in 1929)

Granite City, near NE. limits of, 280 ft. N. and 15 ft. W. from junction of State Highway 3 and Madison Avenue, on W. end of concrete culvert; chiseled square-----	418.79
Nameoki, at N. end of business district, 18 ft. S. and 24 ft. E. from point of curve of pavement; chiseled square-----	421.22

13. From point 1.3 miles east of Caseyville generally west along winding road to Caseyville (by L. V. Johnson in 1930)

[Continued from Belleville quadrangle, line 13]

Caseyville, 0.2 mi. NE. of crossing of State Highway 157 and B. & O. R. R., 10 ft. N. and 50 ft. E. from junction of rd. SE., 1.5 ft. S. of telephone pole, in concrete post; standard tablet stamped "T T Sta No 31 F 1928"-----	457.228
Reference mark, 5 ft. N. and 12 ft. E. from rd. junction, on curb; chiseled square-----	450.15

¹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "C 95 1935," elevation 424.379 ft.

14. From junction of U. S. Highway 40 and State Highway 157 at point 2.1 miles northwest of Collinsville southwest along highway and roads to Caseyville (by L. V. Johnson in 1930; leveled twice from American Bottom north base)

Caseyville, 3.1 mi. NE. of, 0.6 mi. SW. of Pleasant Grove School, on E. side of rd. running parallel to U. S. Highway 40, about 400 ft. E. of highway, on S. end of E. head wall of concrete bridge over creek; chiseled square-----	<i>Feet</i> 460.45
Caseyville, 2.0 mi. NE. of, 1.5 mi. W. of Collinsville, on W. side of bluff, 300 ft. E. of State Highway 157, on W. side of rd. from top of bluff, in top of 14- by 14-in. limestone post; U. S. C. and G. S. standard triangulation disk designated "American Bottom Upper Base" ² -----	521.295
Caseyville, 1.6 mi. N. of, on U. S. Highway 40 (Collinsville rd.), 0.4 mi. W. of intersection of Bluff rd., at waterworks, 25 ft. S. and 11 ft. E. from junction of rd. SW., at culvert under rd., on S. end of concrete head wall; chiseled square-----	427.91
Caseyville, 1.1 mi. N. of, in NE $\frac{1}{4}$ sec. 6, T. 2 N., R. 8 W., 150 ft. N. and 25 ft. W. from right-angle turn in rd., in root on N. side of 50-in. birch tree; copper nail and washer-----	425.99

15. From junction of U. S. Highway 40 and State Highway 157 at point 2.1 miles northwest of Collinsville north along highway and road to Sugar Loaf Mound, thence east to point 1.1 miles west of Donkville (by L. V. Johnson in 1930; leveled twice)

Collinsville, about 3 mi. NW. of, 0.25 mi. W. of cor. secs. 16, 17, 20 and 21, T. 3 N., R. 8 W., 600 ft. E. of State Highway 157, on Sugar Loaf Mound, on property of Ben Witte, 300 ft. N. of house, in top of 6- by 6-in. stone post; U. S. C. & G. S. standard triangulation disk designated "Sugar Loaf Mound" ³ -----	617.459
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[Continued in Belleville quadrangle, line 11]

16. From road junction 1.2 miles southwest of Birkner south 1.1 miles along road, thence southeast 1 mile along State Highway 13 and Illinois Central Railroad (by Harry McDermith in 1936)

Birkner, 1.2 mi. SW. thence 1.1 mi S. from, 1.3 mi. SE. of Ogles, near E $\frac{1}{4}$ cor. sec. 13, T. 1 N., R. 9 W., 18 ft. N. and 110 ft. W. from junction of State Highway 13, on E. head wall of concrete culvert under private farm entrance; chiseled square-----	566.35
U. S. C. & G. S. standard disk stamped "K 114 1935"-----	550.373

² Prior to 1922 the station was marked by a copper bolt designated "H 3."

³ In 1933 this station mark was lowered about 1 ft. The figures given represent the adjusted elevation as determined in 1930.

EDGEWOOD QUADRANGLE

[Latitude 38°45'–39°00'; longitude 88°30'–88°45']

CLAY, EFFINGHAM, FAYETTE, AND MARION COUNTIES

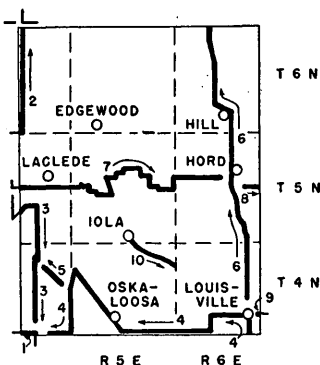


FIGURE 26.—Lines of leveling in Edgewood quadrangle.

1. From point 1.5 miles south and 6 miles east from Kimmundy along roads north 0.2 mile and west 0.6 mile (by S. R. Archer in 1928)

[Continued from Xenia quadrangle, line 2]

Kimmundy, 1.3 mi. S. and 6.0 mi. E. from, 2.0 mi. E. and 5.0 mi. S. from Farina, 0.25 mi. W. of E. cor. secs. 27 and 34, T. 4 N., R. 4 E., 20 ft. S. and 20 ft. E. from crossroads, 2 ft. S. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "78 S 1928" (recovered in 1939)-----

Feet
571.845

Reference mark, 45 ft. N. and 70 ft. W. from crossroads, in root on SSE. side of 36-in. oak tree; copper nail and washer (recovered in 1939)-----

572.61

[Continued in Kimmundy quadrangle, line 1]

2. From point 0.5 mile south and 4.6 miles west from Edgewood along roads east 0.1 mile, thence north to point 4 miles south of Altamont (by Caryl York in 1934)

[Continued from Kimmundy quadrangle, line 4]

Edgewood, 0.2 mile south and 4.5 mi. W. from, 0.2 mi. S. of quarter corner between secs. 33 and 34, T. 6 N., R. 4 E., on W. side at S. end of iron bridge; chiseled square-----

564.84

Edgewood, 1.0 mi. N. and 4.5 mi. W. from, 8.5 mi. S. of Altamont, near quarter corner between secs. 27 and 28, T. 6 N., R. 4 E., 42 ft. N. and 36 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 7 Reset 1938" ⁴-----

586.767

⁴ In 1938 this bench mark was reset at an elevation 0.280 feet higher than that originally determined. The figures given represent the new elevation.

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Altamont, 7.0 mi. S. of, near cor. secs. 15, 16, 21, and 22, T. 6 N., R. 4 E., 67 ft. S. and 39 ft. E. from crossroads, opposite town hall, in concrete post; standard tablet stamped "T T Sta No 6 L Reset 1938" ⁵	Feet 588.688
Altamont, 5.0 mi. S. of, near cor. secs. 3, 4, 9, and 10, T. 6 N., R. 4 E., 67 ft. N. and 41 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 8 Reset 1938" ⁶	568.884
[Connects with line 4 in Effingham quadrangle]	
3. From point about 1.8 miles northeast of Farina northeast 0.4 mile, thence east 0.7 mile, thence south to crossroads 1.3 miles south and 6 miles east from Kinmundy (by Caryl York in 1934)	
[Continued from Kinmundy quadrangle, line 5]	
Farina, 2.2 mi. NE. of, 2.4 mi. SW. of LaClede, 0.2 mi. W. of quarter corner between secs. 22 and 27, T. 5 N., R. 4 E., at SE. corner of junction of State Highway 37 and T-rd. E.; on N. end of W. wall of concrete culvert; chiseled square	577.47
Farina, 2.3 mi. E. thence 1.5 mi. N. from, near NE. cor. sec. 27, T. 5 N., R. 4 E., at SW. corner of crossroads, on top of W. end of S. head wall of concrete culvert; chiseled square	577.48
Farina, 2.3 mi. E. thence 0.5 mi. N. from, 28 ft. N. and 36 ft. W. from junction of T-rd. N. at S. cor. secs. 26 and 27, 28 ft. N. and 16 ft. W. from junction of T-rd. S. at N. cor. secs. 34 and 35, T. 5 N., R. 4 E., 14 ft. W. of fence corner, in concrete post; standard tablet stamped "T T Sta No 9 L 1929"	575.405
Farina, 2.3 mi. E. of, 5.3 mi. W. of Iola, near quarter corner between secs. 34 and 35, T. 5 N., R. 4 E., 25 ft. N. and 9 ft. W. from crossroads, on top of S. end of W. head wall of concrete culvert; chiseled square	577.13
Farina, 2.3 mi. E. thence 0.9 mi. S. from, 0.25 mi. N. of quarter corner between secs. 2 and 3, T. 4 N., R. 4 E., 70 ft. E. of rd., on S. side of farmhouse, on SW. corner at S. end of concrete sidewalk; chiseled square	572.20
Farina, 2.0 mi. E. and 1.3 mi. S. from, near center of SE $\frac{1}{4}$ sec. 3, T. 4 N., R. 4 E., on NE. side of rd., opposite rd. S., on top of W. end of N. head wall of concrete culvert; chiseled square (recovered in 1939)	571.34
Farina, 2.0 mi. E. and 1.5 mi. S. from, 0.25 mi. W. of E. cor. secs. 3 and 10, T. 4 N., R. 4 E., 33 ft. S. and 150 ft. W. from junction of T-rd. W., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 10 1934" (recovered in 1939)	572.683
Farina, 2.0 mi. E. and 2.5 mi. S. from, 0.25 mi. W. of E. cor. secs. 10 and 15, T. 4 N., R. 4 E., 19 ft. S. and 40 ft. W. from crossroads, in concrete post; standard tablet stamped "T T Sta No 10 L 1929"	564.687
Farina, 2.0 mi. E. and 3.5 mi. S. from, 0.5 mi. N. and 6.0 mi. E. from Kinmundy, 0.25 mi. W. of E. cor. secs. 15 and 22, T. 4 N., R. 4 E., 15 ft. N. and 40 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 11 1934"	578.517

⁵ In 1938 this bench mark was reset at an elevation 0.096 ft. lower than that originally determined. The figures given represent the new elevation.

⁶ In 1938 this bench mark was reset at an elevation 1.295 ft. higher than that originally determined. The figures given represent the new elevation.

Kinmundy, 0.5 mi. S. and 6.0 mi. E. from, 0.25 mi. W. of E. cor. secs. 22 and 27, T. 4 N., R. 4 E., 50 ft. W. of junction of T-rd. E., in root of 12-in. oak tree; spike-----	<i>Feet</i> 578.26
4. From point 1.4 miles south of Louisville north along Baltimore & Ohio Railroad to Louisville, thence generally west along roads to crossroads 1.5 miles south and 6 miles east from Kinmundy (double-rodde line by D. W. Querfeld in 1934; section west of Louisville releveled by W. C. Elledge in 1939)	
[Continued from Xenia quadrangle, line 3]	
Louisville, 0.8 mi. S. of, near center of SW $\frac{1}{4}$ sec. 26, T. 4 N., R. 6 E., at sta. 4233+50, on S. end of W. head wall of 30-in. pipe; chiseled square (B. & O. R. R. B. M. 116) ⁷ -----	470.38
Louisville (R. R. name Louis), 860 ft. SE. of B. & O. R. R. sta., 65 ft. N. and 26 ft. W. from crossing of U. S. Highway 45, in line with telegraph poles along R. R. right-of-way and N.-S. power line poles, in concrete post; standard tablet stamped "T T Sta No. 6 L 1930"-----	482.380
Louisville, 24 ft. SE. of sta., on concrete curb of platform; chiseled square (B. & O. R. R. B. M. 118) ⁸ -----	478.71
Louisville, 154 ft. SSE. of Clay County courthouse, 28 ft. from S. curb of courthouse square, 28 ft. from E. curb; iron pipe (Dept. of Agriculture B. M.)-----	474.920
Louisville, 0.2 mi. S. and 1.4 mi. W. from courthouse, about 500 ft. E. of W. cor. secs. 22 and 27, T. 4 N., R. 6 E., 30 ft. N. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 10 7 1934"-----	488.823
Louisville, 0.2 mi. S. and 1.6 mi. W. from, about 0.25 mi. W. of E. cor. secs. 21 and 28, T. 4 N., R. 6 E., 25 ft. S. of rd., at NE. corner of large orchard, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 10 7 1934"-----	494.881
Louisville, 0.2 mi. S. and 1.6 mi. W. from, about 0.25 mi. W. of E. cor. secs. 21 and 28, T. 4 N., R. 6 E., on N. side of rd., at fence N., in root on S. side of 10-in. thorn tree; copper nail and washer (established in 1939)-----	495.21
Louisville, 0.2 mi. S. and 1.8 mi. W. from, about 500 ft. E. of quarter corner between secs. 21 and 28, T. 4 N., R. 6 E., 10 ft. N. of rd., in root on S. side of 40-in. oak tree; spike-----	505.75
Louisville, 0.2 mi. S. and 2.4 mi. W. from, near NE. cor. sec. 29, T. 4 N., R. 6 E., 105 ft. S. and 105 ft. W. from junction of T-rd. S., in root on E. side of 36-in. hackberry tree; spike-----	517.51
Louisville, 0.2 mi. S. and 2.4 mi. W. from, near NW. cor. sec. 28, T. 4 N., R. 6 E., 36 ft. S. and 42 ft. E. from crossroads, at fence corner, at concrete right-of-way marker; top of marker (established in 1939)-----	520.93
Louisville, 1.0 mi. S. and 2.4 mi. W. from, 0.25 mi. N. of S. cor. secs. 28 and 29, T. 4 N., R. 6 E., 25 ft. E. of rd., in SW. corner of yard of C. M. Harrall, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 10 6 1934"-----	501.563

⁷ This point is not reliable, as the head wall has weathered and the stone can be shifted.

⁸ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "S 84 1935," elevation 479.061 ft.

Louisville, 1.2 mi. S. and 2.4 mi. W. from, near cor. secs. 28, 29, 32, and 33, T. 4 N., R. 6 E., 22 ft. S. and 10 ft. W. from junction of T-rd. N., 1 ft. N. and 8 ft. W. from T-fence S., in concrete post; standard tablet stamped "T T Sta No 8 L 1930"-----	<i>Feet</i> 508.453
Louisville, 1.2 mi. S. and 3.4 mi. W. from, near cor. secs. 29, 30, 31, and 32, T. 4 N., R. 6 E., 40 ft. N. and 200 ft. E. from junction of T-rd. S., in SE. corner of yard at Fleshman School, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 10 5 1934"-----	499.900
Louisville, 1.2 mi. S. and 3.6 mi. W. from, 0.25 mi. W. of cor. secs. 29, 30, 31, and 32, T. 4 N., R. 6 E., 25 ft. W. of sixteenth corner, 25 ft. N. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 10 5 1934"-----	511.854
Louisville, 1.2 mi. S. and 4.7 mi. W. from, 0.25 mi. W. of NE. cor. sec. 36, T. 4 N., R. 5 E., 0.25 mi. W. of crossroads, 63 ft. NE. of Bethel Church, 20 ft. S. of rd., in root of 18-in. maple tree; spike--	511.37
Louisville, 1.2 mi. S. and 5.4 mi. W. from, 0.5 mi. S. and 2.5 mi. E. from Oskaloosa, near NE cor. sec. 35, T. 4 N., R. 5 E., 22 ft. S. and 47 ft. W. from crossroads, in concrete post; standard tablet stamped "T T Sta No 9 L 1930"-----	519.861
Oskaloosa, 0.5 mi. S. and 2.3 mi. E. from, 0.25 mi. W. of cor. secs. 25, 26, 35, and 36, T. 4 N., R. 5 E., 84 ft. SW. of SW. corner of Maple Grove School, 30 ft. N. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 10 4 1934"---	524.585
Oskaloosa, 0.5 mi. S. and 1.8 mi. E. from, 0.25 mi. E. of W. cor. secs. 26, 27, 34, and 35, T. 4 N., R. 5 E., 30 ft. S. and 32 ft. E. from junction of T-rd. S., in root on N. side of 24-in. maple tree; copper nail and washer (established in 1939)-----	530.12
Oskaloosa, 0.5 mi. S. and 1.0 mi. E. from, near quarter corner between secs. 27 and 34, T. 4 N., R. 5 E., on N. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 10 3 1934"-----	536.179
Oskaloosa, 0.5 mi. S. and 0.7 mi. E. from, 0.2 mi. E. of W. cor. secs. 27 and 34, T. 4 N., R. 5 E., on S. side of curve in rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 10 3 1934"-----	526.861
Oskaloosa, 0.7 mi. SE. of, 5.6 mi. S. of Iola, near S. cor. secs. 27 and 28, T. 4 N., R. 5 E., in SW. angle of crossroads at diagonal rd. to Oskaloosa, on top of N. end of concrete head wall of culvert; chiseled square-----	523.40
Oskaloosa, 195 ft. NW. of NW. corner of schoolhouse, 20 ft. S. and 150 ft. W. from SW. corner of church, in concrete post; standard tablet stamped "T T Sta No 10 L 1930"-----	520.578
Oskaloosa, 0.5 mi. NW. of, 660 ft. S. and 800 ft. W. from N. cor. secs. 28 and 29, T. 4 N., R. 5 E., 840 ft. NW. of intersection of diagonal rd. and N.-S. rd., 170 ft. S. of diagonal rd., on W. side of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 10 2 1934"-----	521.689
Oskaloosa, 1.8 mi. NW. of, 0.25 mi. S. of N. cor. secs. 19 and 20, T. 4 N., R. 5 E., 75 ft. E. of rd., 26 ft. N. of residence of J. M. Peck, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 10 1 1934"-----	535.889

Oskaloosa, 2.1 mi. NW. of, 432 ft. W. of E. cor. secs. 18 and 19, T. 4 N., R. 5 E., 35 ft. N. of rd., 35 ft. S. and 125 ft. W. from SW. corner of Pleasant View School, at SW. corner of schoolyard, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 10 1 1934"	<i>Feet</i> 538.372
Holtzhausen triangulation sta., 3.7 mi. NW. of Oskaloosa, about 5.0 mi. by rd. E. and SE. from Farina, in SW $\frac{1}{4}$ sec. 7, T. 4 N., R. 5 E., on prominent hill in pasture owned by William Holtzhausen, about 0.6 mi. N. and NE. of Holtzhausen residence, at marble post 6 in. square and 30 in. long, projecting 4 to 6 in. above ground; top of post	643.78
Holtzhausen triangulation sta. NE. reference mark, 7 ft. NE. of sta., at stone post 6 in. square in cross section and projecting 6 in. above ground; top of post	643.81
Oskaloosa, 2.0 mi. N. and 2.5 mi. W. from, near quarter corner between secs. 13 and 18, T. 4 N., Rs. 4 and 5 E., 460 ft. S. of Farina-Oskaloosa rd. and rd. S. on Clay-Marion county line, 20 ft. W. of N.-S. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 1 1 1934"	595.551
Oskaloosa, 1.7 mi. N. and 2.5 mi. W. from, 0.25 mi. N. of S. cor. secs. 13 and 18, T. 4 N., Rs. 4 and 5 E., 1 ft. S. and 45 ft. W. from center line of rd. in line with fence W., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 1 1 1934"	586.398
Oskaloosa, 1.1 mi. N. and 2.5 mi. W. from, about 500 ft. N. of quarter corner between secs. 19 and 24, T. 4 N., Rs. 4 and 5 E., at Clay-Marion county line, on top of N. end of E. head wall of concrete culvert; chiseled square	538.64
Oskaloosa, 0.5 mi. N. and 2.5 mi. W. from, near cor. secs. 19, 24, 25, and 30, T. 4 N., Rs. 4 and 5 E., 170 ft. S. of rd. E., opposite rd. W., 20 ft. E. of rd., in root on W. side of 15-in. maple tree; spike	538.69
Oskaloosa, 2.5 mi. W. of, near quarter corner between secs. 25 and 30, T. 4 N., Rs. 4 and 5 E., 450 ft. S. and 15 ft. W. from junction of T-rd. E., 73 ft. S. of corn crib, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 1 2 1934"	570.481
Oskaloosa, 0.5 mi. S. and 2.5 mi. W. from, 6 ft. S. and 18 ft. E. from rock at cor. secs. 25, 30, 31, and 36, T. 4 N., Rs. 4 and 5 E., at Clay-Marion county line, in line with T-rd. W., in concrete post; standard tablet stamped "T T Sta No 11 L 1930"	530.903
Oskaloosa, 0.5 mi. S. and 2.9 mi. W. from, about 500 ft. E. of quarter corner between secs. 25 and 36, T. 4 N., R. 4 E., 15 ft. N. of rd., in root on S. side of 20-in. oak tree; spike	526.76
Oskaloosa, 0.5 mi. S. and 3.4 mi. W. from, near NE. cor. sec. 35, T. 4 N., R. 4 E., 18 ft. S. and 84 ft. W. from junction of T-rd. S., 105 ft. NE. of NE. corner of school, in root on S. side of 15-in. oak tree; spike	538.58
Oskaloosa, 0.5 mi. S. and 4.2 mi. W. from, 1.5 mi. S. and 6.4 mi. E. from Kinmundy, 0.2 mi. E. of W. cor. secs. 27 and 34, T. 4 N., R. 4 E., 35 ft. N. of rd., 12 ft. N. and 2 ft. W. from SE. corner of barnyard, in concrete post; U. S. C. & G. S. and State Survey standard disk	558.784

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Kinmundy, 1.5 mi. S. and 6.2 mi. E. from, near cor. secs. 26, 27, 34, and 35, T. 4 N., R. 4 E., 15 ft. N. of center line of rd. at fence N., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 13 2 1934"-----	Feet 560. 949
5. From point 2 miles north and 2.5 miles west from Oskaloosa northwest along road 3.1 miles (by W. C. Elledge in 1939)	
Oskaloosa, 2.5 mi. N. and 3.0 mi. W. from, 5.0 mi. SE. of Farina, near quarter corner between secs. 12 and 13, T. 4 N., R. 4 E., about 1,000 ft. SE. of crossroads, on N. side of rd., in root on S. side of 12-in. tree, westernmost of two wild-cherry trees; copper nail and washer-----	585. 75
Farina, 3.9 mi. SE. of, 0.25 mi. S. of quarter corner between secs. 2 and 11, T. 4 N., R. 4 E., 20 ft. N. and 7 ft. W. from junction of rd. N., on W. head wall of concrete culvert; chiseled square-----	573. 17
6. From Louisville north and northwest along U. S. Highway 45 (by W. C. Elledge in 1939)	
Louisville, 1.0 mi. N. of B. & O. R. R. sta., at SW. corner of steel bridge over Little Wabash River, on concrete abutment; chiseled square-----	459. 93
Louisville, 2.0 mi. N. of, near SW. cor. sec. 11, T. 4 N., R. 6 E., near Red Brush Church, 12 ft. N. and 22 ft. E. from crossroads, in center of top of N. head wall of concrete culvert; chiseled square-----	491. 95
Louisville, 2.8 mi. N. of, 0.25 mi. S. of N. cor. secs. 10 and 11, T. 4 N., R. 6 E., at driveway to Red Brush School, in center of top of S. head wall of concrete culvert; chiseled square-----	490. 96
Louisville, 3.2 mi. N. of, 0.25 mi. N. of E ¹ / ₄ cor. sec. 3, T. 4 N., R. 6 E., 31 ft. S. and 29 ft. W. from junction of T-rd. W., 1 ft. E. of fence line, in concrete post; standard tablet stamped "T T Sta No 5 L 1930"-----	497. 896
Reference mark, 375 ft. S. of tablet, on same side of highway, at driveway to barnyard, on S. head wall of concrete culvert; chiseled square-----	498. 05
Louisville, 4.0 mi. N. of, near quarter corner between secs. 34 and 35, T. 5 N., R. 6 E., 15 ft. S. and 18 ft. E. from crossroads, on head wall of concrete culvert; chiseled square-----	501. 07
Louisville, 5.6 mi. NW. of, 2.5 mi. SE. of Hord, 0.25 mi. E. of center of sec. 27, T. 5 N., R. 6 E., 85 ft. S. and 21 ft. E. from junction of T-rd. W., 3 ft. from N. end of E. head wall of concrete culvert; chiseled square-----	488. 00
Hord, 2.0 mi. SE. of, on line between secs. 22 and 27, T. 5 N., R. 6 E., 14 ft. N. and 20 ft. E. from junction of T-rd. E., in center of top of N. head wall of concrete culvert; chiseled square-----	510. 95
Hord, 1.0 mi. SE. of, near quarter corner between secs. 15 and 22, T. 5 N., R. 6 E., 30 ft. N. and 29 ft. W. from crossroads, in concrete post; standard tablet stamped "T T Sta No 4 L 1930"-----	509. 294
Reference mark, 570 ft. N. of tablet, on W. head wall of concrete culvert; chiseled square-----	511. 40
Hord, 0.25 mi. E. of W. cor. secs. 10 and 15, T. 5 N., R. 6 E., 10 ft. S. and 19 ft. W. from crossroads, on S. head wall of concrete culvert; chiseled square-----	520. 96

Hord, 1.0 mi. N. of, 2.0 mi. S. of Hill, 0.25 mi. E. of W. cor. secs. 3 and 10, T. 5 N., R. 6 E., on W. head wall of concrete culvert; chiseled square-----	<i>Feet</i> 527.90
Hill, 1.0 mi. S. of, 0.25 mi. E. of W. cor. secs. 3 and 34, Tps. 5 and 6 N., R. 6 E., 25 ft. S. and 30 ft. W. from crossing of Clay-Effingham county-line rd., 11 ft. S. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "T T Sta No 3 L 1930"-----	518. 007
Reference mark, 30 ft. N. and 54 ft. E. from tablet, on N. head wall of concrete culvert; chiseled square-----	518. 39
Hill, 30 ft. E. of center line of highway, 70 ft. S. of service sta., on W. head wall of concrete culvert; chiseled square-----	537. 74
Hill, 1.0 mi. NW. of, 1.0 mi. S. and 4.7 mi. E. from Mason, 0.25 mi. W. of center of sec. 28, T. 6 N., R. 6 E., at angle to N. in highway, 26 ft. S. and 26 ft. E. from crossroads, in concrete post; standard tablet stamped "T T Sta No 2 L 1930"-----	534. 395
Mason, 0.2 mi. S. and 4.7 mi. E. from, in sec. 21, T. 6 N., R. 6 E., at center of concrete bridge over Bishop Creek; on E. edge of concrete pavement; chiseled square-----	484. 38
Mason, 0.5 mi. N. and 4.7 mi. E. from, about 0.25 mi. E. of W. cor. secs. 16 and 21, T. 6 N., R. 6 E., 16 ft. S. and 13 ft. W. from crossroads, on S. wall of concrete culvert; chiseled square-----	494. 43
Mason, 1.5 mi. N. and 4.7 mi. E. from, 1.5 mi. E. thence 3.5 mi. S. from Watson, 0.25 mi. E. of W. cor. secs. 9 and 16, T. 6 N., R. 6 E., 24 ft. N. and 46 ft. E. from junction of T-rd. E., 2 ft. N. and 4 ft. E. from fence corner, in concrete post; standard tablet stamped "T T Sta No 1 L 1930"-----	493. 956
Watson, 1.5 mi. E. thence 3.0 mi. S. from, at steel bridge over Big Salt Creek, on SW. wing wall; chiseled square-----	487. 22
Watson, 1.5 mi. E. thence 2.5 mi. S. from, at cor. secs. 4, 5, 8, and 9, T. 6 N., R. 6 E., 25 ft. S. and 18 ft. E. from crossroads, on top of rock marking section corner; chiseled square-----	491. 56
Little Salt Creek, on SE. wing wall of concrete bridge; painted square-----	486.7

[Continued in Effingham quadrangle, line 7]

7. From point 0.8 mile south and 2 miles west from LaCledé generally east along roads to Hord (by W. C. Elledge in 1939)

[Connects with line 4 in Kinmundry quadrangle]

LaCledé, 0.8 mi. S. and 1.3 mi. W. from, near quarter corner between secs. 15 and 22, T. 5 N., R. 4 E., 7 ft. N. and 18 ft. E. from junction of T-rd. N., in center of top of N. head wall of concrete culvert; chiseled square-----	581. 18
LaCledé, 0.8 mi. S. and 0.5 mi. W. from, 3.5 mi. NE. of Farina, 0.25 mi. E. of W. cor. secs. 14 and 23, T. 5 N., R. 4 E., 42 ft. N. and 45 ft. E. from junction of rd. W., 10 ft. N. of rd. E., in center of top of N. head wall of concrete culvert; chiseled square-----	575. 07
LaCledé, 0.8 mi. S. and 0.2 mi. E. from, near NW. cor. sec. 24, T. 5 N., R. 4 E., 20 ft. S. and 95 ft. E. from crossroads, in NE. corner of farmyard, 45 ft. N. and 7 ft. W. from NE. corner of house, in concrete post; standard tablet stamped "1 E 1939"-----	569. 286

Reference mark, 80 ft. W. of tablet, on N. head wall of concrete culvert; chiseled square-----	Feet. 569.65
LaCledé, 0.8 mi. S. and 1.2 mi. E. from, near W. cor. secs. 18 and 19, T. 5 N., R. 5 E., on Clay-Fayette county line, 4 ft. N. and 20 ft. W. from intersection of rd. tangents S. and E., in root on S. side of 24-in. oak tree; copper nail and washer-----	564.81
LaCledé, 1.0 mi. S. and 2.2 mi. E. from, 2.3 mi. N. and 2.5 mi. W. from Iola, 0.25 mi. S. of N. cor. secs. 19 and 20, T. 5 N., R. 5 E., in NE. corner of yard at Littleton School, 17 ft. N. and 3 ft. E. from NE. corner of schoolhouse, 2 ft. S. of fence, in concrete post; standard tablet stamped "2 E 1939"-----	551.643
Reference mark, 50 ft. SE. of tablet, in root on SE. side of 20-in. oak tree; copper nail and washer-----	547.50
Iola, 2.0 mi. N. and 1.8 mi. W. from, 800 ft. E. of center of sec. 20, T. 5 N., R. 5 E., 800 ft. E. of intersection of rd. tangents N. and E., on S. side of rd., in root on N. side of 20-in. oak tree; copper nail and washer-----	542.86
U. S. C. & G. S. standard disk stamped "X 84 1935"-----	530.944
Iola, 3.4 mi. NW. of along B. & O. R. R., 3.0 mi. SE. of Edgewood, 3.4 mi. NW. of Iola, in sec. 16, T. 5 N., R. 5 E., 110 ft. S. and 28 ft. W. from crossing of rd. and R. R., in concrete post; standard tablet stamped "T T Sta No 14 L 1930"-----	545.949
Iola, 3.5 mi. N. and 0.5 mi. W. from, near cor. secs. 9, 10, 15, and 16, T. 5 N., R. 5 E., 65 ft. S. and 15 ft. E. from rd. in line with fences E. and W., in root on S. side of 20-in. oak tree; copper nail and washer-----	539.47
Iola, 3.4 mi. N. and 0.5 mi. E. from, 640 ft. S. of intersection of rd. tangents S. and W. at cor. secs. 10, 11, 14, and 15, T. 5 N., R. 5 E., on E. side of rd., in front of farmhouse, in root on W. side of 24-in. oak tree; copper nail and washer-----	532.52
Iola, 2.5 mi. N. and 1.0 mi. E. from, near quarter corner between secs. 14 and 23, T. 5 N., R. 5 E., 16 ft. S. and 9 ft. W. from intersection of rd. tangents N. and E., 2 ft. N. of fence, in concrete post; standard tablet stamped "3 E 1939"-----	524.689
Reference mark, 65 ft. NE. of tablet, in root on SW. side of 20-in. oak tree; copper nail and washer-----	525.25
Iola, 2.5 mi. N. and 1.8 mi. E. from, near center of NW $\frac{1}{4}$ sec. 24, T. 5 N., R. 5 E., 40 ft. N. of NW. corner of Hazel Dell School, in yard, on NW. corner of concrete well platform; chiseled square--	516.59
Iola, 2.5 mi. N. and 2.5 mi. E. from, 1.3 mi. S. and 3.2 mi. W. from Hord, 0.25 mi. S. of E. cor. secs. 13 and 24, T. 5 N., R. 5 E., 205 ft. S. and 18 ft. E. from junction of T-rd. W., in root on W. side of 18-in. oak tree; copper nail and washer-----	514.24
Hord, 0.5 mi. S. and 3.0 mi. W. from, in sec. 18, T. 5 N., R. 5 E., at SW. pier of bridge over Little Wabash River, at last bolt on S. edge of steel truss; top of bolt-----	466.01
Hord, 0.5 mi. S. and 1.8 mi. W. from, near center of sec. 17, T. 5 N., R. 6 E., 20 ft. N. and 90 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "4 E 1939"-----	522.104
Reference mark, 250 ft. W. of tablet, on N. side of rd., 3 ft. N. of fence, in root on S. side of 24-in. oak tree; copper nail and washer-----	521.13

Hord, 0.5 mi. S. and 0.8 mi. W. from, near center of sec. 16, T. 5 N., R. 6 E., on N. side of rd., 300 ft. E. of house on N. side of rd., in root on S. side of 18-in. wild-cherry tree; copper nail and washer----	<i>Feet</i> 518.56
Hord, 0.5 mi. S. and 0.3 mi. W. from, near quarter corner between secs. 15 and 16, T. 5 N., R. 6 E., 75 ft. N. and 20 ft. W. from intersection of rd. tangents N. and W., in root on W. side of 12-in. elm tree; copper nail and washer-----	516.52
8. From point 1 mile southeast of Hord east along road 1.3 miles (by W. C. Elledge in 1939)	
Hord, 1.0 mi. S. and 1.1 mi. E. from, 0.3 mi. S. and 3.0 mi. W. from Bible Grove, about 0.3 mi. E. of W. cor. secs. 14 and 23, T. 5 N., R. 6 E., 20 ft. N. and 90 ft. W. from junction of T-rd. N., on N. head wall of concrete culvert; chiseled square-----	500.08
[Continued in Sailor Springs quadrangle, line 4]	
9. From Louisville east along road 0.7 mile (by W. C. Elledge in 1939)	
Louisville, in SE. part of, at W. end of steel bridge over Little Wabash River, on S. wing wall; chiseled square-----	457.39
[Continued in Sailor Springs quadrangle, line 5]	
10. Southeast along Baltimore & Ohio Railroad from Iola (Geological Survey transit-traverse stations; elevations determined by U. S. C. & G. S.)	
Iola, 140 ft. NW. of sta., 58 ft. N. and 6 ft. E. from rd. crossing, in line with telegraph poles, in concrete post; standard tablet stamped "T T Sta No 15 L 1930"-----	523.680
Iola, 3.0 mi. SE. of, 5.2 mi. NW. of Louisville, near cor. secs. 1, 6, 7, and 12, T. 4 N., Rs. 5 and 6 E., 46 ft. N. and 57 ft. E. from rd. crossing, in line with telegraph poles, in concrete post; standard tablet stamped "T T Sta No 16 L 1930"-----	503.286

EDWARDSVILLE QUADRANGLE

[Latitude 38°45'–39°00'; longitude 89°45'–90°00']

MACOUPIN AND MADISON COUNTIES

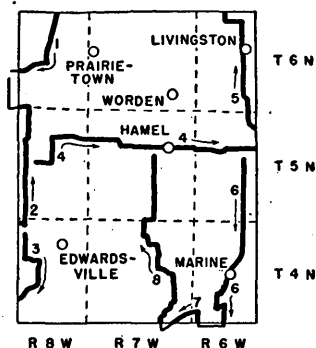


FIGURE 27.—Lines of leveling in Edwarsville quadrangle.

1. From point 3.4 miles south of Bunker Hill along roads generally south and west to point 1.5 miles south of Dorsey (by R. G. Clinite in 1912)

[Continued from Gillespie quadrangle, line 1]

Bunker Hill, 6.4 mi. S. of, 1.5 mi. S. thence 1.8 mi. NE. from Dorsey, 0.2 mi. E. of center of sec. 22, T. 6 N., R. 8 W., 1 ft. N. and 2 ft. W. from corner fence post; standard iron post with bronze cap stamped "1912 577"

Feet
576.995

Dorsey, 1.5 mi. S. thence 0.7 mi. E. from, 0.2 mi. NE. of S¼ cor. sec. 21, T. 6 N., R. 8 W., at small bridge over Indian Creek, on top course of stone wing wall; chiseled square

520.21

[Continued in Alton quadrangle, line 1]

2. From point 2.1 miles east of Wanda along roads southeast 0.4 mile, thence generally north and west to point 1.1 miles east of Moro (by S. R. Archer in 1926)

[Continued from Alton quadrangle, line 3]

Wanda, 2.5 mi. E. of, 2.4 mi. NW. of Edwarsville, about 500 ft. N. of center of sec. 4, T. 4 N., R. 8 W., in NE. corner of crossroads, on top of E. head wall of concrete culvert under rd. N.; chiseled square

489.43

Edwarsville, 2.4 mi. NW. thence 0.4 mi. N. from Madison County courthouse, near quarter corner between secs. 4 and 33, Tps. 4 and 5 N., R. 8 W., 10 ft. N. and 20 ft. E. from junction of private rds. E. and W., 2 ft. NW. of post at end of fence line from E., in concrete post; standard tablet stamped "Prim Trav Sta No 24 LS 1924"

494.871

Edwarsville, 2.4 mi. NW. thence 1.4 mi. N. from, near S¼ cor. sec. 28, T. 5 N., R. 8 W., 100 ft. S. of crossing of Cleveland, Cincinnati, Chicago & St. Louis Ry., on E. side of rd., on S. side of driveway, near W. end of fence line E., in root on N. side of 10-in. hedge tree; copper nail and washer

493.82

Edwardsville, 2.4 mi. NW. thence 3.4 mi. N. from, near quarter corner between secs. 21 and 28, T. 5 N., R. 8 W., 50 ft. E. of rd., 5 ft. N. of fence line, in root on W. side of forked ash tree; copper nail and washer-----	Feet 489.41
Edwardsville, 2.4 mi. NW. thence 3.4 mi. N. from, near N $\frac{1}{4}$ cor. sec. 21, T. 5 N., R. 8 W., 15 ft. S. and 10 ft. E. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 23 LS 1924" (recovered in 1927)-----	492.338
Reference mark, 5 ft. E. of tablet, 15 ft. S. and 15 ft. E. from crossroads, in root on N. side of 10-in. hedge tree; copper nail and washer (recovered in 1927)-----	492.68
Edwardsville, 2.4 mi. NW. thence 4.4 mi. N. from, 0.3 mi. S. thence 2.8 mi. E. from Bethalto, near N $\frac{1}{4}$ cor. sec. 16, T. 5 N., R. 8 W., 90 ft. W. of right-angle turn W. in rd., on S. side of rd., 30 ft. N. and 4 ft. W. from NE. corner of Grove School, in root on N. side of 24-in. oak tree; copper nail and washer-----	505.84
Edwardsville, 2.4 mi. NW. thence 5.0 mi. N. from, 1.8 mi. E. thence 1.7 mi. N. from Moro, NW. of center of SE $\frac{1}{4}$ sec. 9, T. 5 N., R. 8 W., 290 ft. W. of T-rd. N., on N. side of rd., in SW. corner of barn lot, in root on E. side of 12-in. walnut tree; copper nail and washer-----	506.36
Moro, 1.8 mi. E. of, 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 33, T. 6 N., R. 8 W., 20 ft. N. and 20 ft. W. from crossroads, 6 ft. W. of fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No. 22 LS 1924"-----	537.794
Reference mark, 400 ft. W. of crossroads, on N. side of rd., 35 ft. E. of SW. corner of large lawn at dwelling, in root on S. side of 24-in. locust tree; copper nail and washer-----	531.35

[Continued in Alton quadrangle, line 4]

3. From crossroads 2.4 miles northwest of Edwardsville along roads south and east to U. S. Highway 66 (State Highway 4), thence southwest (by S. R. Archer in 1926)

Edwardsville, 2.0 mi. W. of, 0.2 mi. N. of center of sec. 9, T. 4 N., R. 8 W., 30 ft. N. and 20 ft. W. from crossroads, on S. side of private rd. W., in root 5 in. underground on SE. side of easternmost of two hedge trees 3 ft. apart; copper nail and washer ^o -----	499.14
Edwardsville, 2.0 mi. W. thence 1.0 mi. S. from, 0.25 mi. N. of center of sec. 16, T. 4 N., R. 8 W., 90 ft. W. of crossing of St. Louis & Alton Electric Ry. at Lewis stop, in NE. angle of rd. junction, at top of bank, in root on NE. side of southernmost of two oak trees standing together; copper nail and washer-----	533.85
Edwardsville, 1.5 mi. SW. of, about 650 ft. NW. of center of sec. 15, T. 4 N., R. 8 W., 45 ft. S. of rd., on E. side of U. S. Highway 66, on top 2 ft. N. of center of E. head wall of concrete culvert; chiseled square-----	569.75
Edwardsville, 2.1 mi. SW. of, near S. side SW $\frac{1}{4}$ sec. 15, T. 4 N., R. 8 W., 75 ft. S. of crossing of Illinois Traction System, 20 ft. W. of highway, at top of bank, 12 ft. N. and 6 ft. E. from SW right-of-way fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 25 LS 1924"-----	580.320

^oIn 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Y 94 1935," elevation 462.447 ft.

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Edwardsville, 2.3 mi. SW. of, near center of NW¼ sec. 22, T. 4 N., R. 8 W., 300 ft. S. of junction of T-rd. E., 200 ft. S. of Center Grove School, on W. side of highway, on top of S. end of W. head wall of concrete culvert; chiseled square-----	Feet 581.37
Edwardsville, 3.7 mi. SW. of, 0.2 mi. S. of quarter corner between secs. 21 and 22, T. 4 N., R. 8 W., in SE. angle of junction of rd. S., on top of E. concrete head wall of drain under rd. S.; chiseled square-----	586.14
[Continued in Alton quadrangle, line 5]	
4. From crossroads 2.4 miles northwest thence 3.4 miles north from Edwardsville alternately east and north along roads by way of Carpenter and Hamel to point 0.9 mile west of Alhambra (by J. A. Shumate in 1927)	
Edwardsville, 4.8 mi. N. along State Highway 112 thence 0.7 mi. W. from courthouse, 0.25 mi. E. of SW. cor. sec. 15, T. 5 N., R. 8 W., 15 ft. N. and 44 ft. W. from junction of T-rd. S., in root on S. side of 18-in. elm tree; copper nail and washer-----	501.10
Edwardsville, 4.8 mi. N. of, near SE. cor. sec. 15, T. 5 N., R. 8 W., 18 ft. N. and 85 ft. W. from highway junction, in root on E. side of 30-in. elm tree; copper nail and washer-----	521.59
Edwardsville, 5.6 mi. N. of, 0.25 mi. N. of quarter corner between secs. 14 and 15, T. 5 N., R. 8 W., 60 ft. N. and 29 ft. E. from turn from N. to E. in highway, in root on S. side of 24-in. boxelder tree; copper nail and washer-----	538.46
Edwardsville, 6.3 mi. N. of, 4.0 mi. W. of Carpenter, about 300 ft. N. of E¼ cor. sec. 11, T. 5 N., R. 8 W., 42 ft. N. and 25 ft. E. from junction of State Highway 140, in yard of C. F. Kaiser, in concrete post; standard tablet stamped "1 JAS. 1927"-----	537.138
Reference mark, 280 ft. S. and 68 ft. E. from tablet, at Liberty Prairie School, on step; chiseled square-----	544.69
Paddock Creek, at bridge; surface of water July 7, 1927-----	458.0
Cahokia Creek, at bridge; surface of water July 7, 1927-----	454.9
Carpenter, 1.4 mi. W. of, in SE¼ sec. 7, T. 5 N., R. 7 W., in NW. angle of junction of rd. N., in root on S. side of 18-in. sycamore tree; copper nail and washer-----	515.35
Carpenter, 0.3 mi. W. of, 25 ft. N. of crossing of C. C. C. & St. L. Ry., in concrete post; standard tablet stamped "Prim Trav Sta No 26 LS 1924" ¹⁰ -----	535.652
Reference mark 800 ft. S.80°W. from tablet, in SW. angle of rd. junction, in root on N. side of 10-in. maple tree; copper nail and washer-----	536.35
Carpenter, 0.3 mi. NW. of, at crossing of C. C. C. & St. L. Ry.; top of rail-----	529.0
Carpenter, at crossing of Wabash Ry.; top of rail-----	535.6
Carpenter, 1.2 mi. E. of, 1.5 mi. W. of Hamel, 540 ft. W. of SE. cor. sec. 9, T. 5 N., R. 7 W., 20 ft. N. and 154 ft. W. from junction of rd. NE., in root on SE. side of 18-in. elm tree; copper nail and washer-----	546.96

¹⁰ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "S 94 1935," elevation 535.724 ft.

Hamel, 0.7 mi. W. of, 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 10, T. 5 N., R. 7 W., 19 ft. N. and 25 ft. E. from crossroads, in bench on W. side of 8-in. hedge tree; copper nail and washer-----	Feet 547.52
Hamel, at crossing of Illinois Traction System; top of rail-----	549.2
Hamel, 0.3 mi. E. of, 0.25 mi. W. of NE. cor. sec. 14, T. 5 N., R. 7 W., 25 ft. S. and 20 ft. E. from junction of T-rd. S., in concrete post; standard tablet stamped "Prim Trav Sta No 27 LS 1924"-----	541.932
Reference mark, 253 ft. N.80°E. from tablet, on top of S. head wall of concrete culvert; chiseled square-----	543.60
Hamel, 1.6 mi. E. of, near SE. cor. sec. 12, T. 5 N., R. 7 W., in NW. angle of junction of rd. W., on top of W. head wall of concrete culvert; chiseled square-----	539.85
Hamel, 2.8 mi. E. and 0.3 mi. S. from, in NW $\frac{1}{4}$ sec. 17, T. 5 N., R. 6 W., at S. end of steel bridge over Silver Creek, on top of S. wing wall of concrete abutment; chiseled square-----	507.00
Silver Creek, at bridge; surface of water July 11, 1927-----	496.2
Hamel, 3.4 mi. E. of, 2.6 mi. W. of Alhambra, 30 ft. S. and 30 ft. E. from junction of T-rd. E., in concrete post; standard tablet stamped "Prim Trav Sta No 28 LS 1924"-----	538.176
Reference mark, 160 ft. N. of tablet, in root on S. side of 15-in. elm tree; copper nail and washer-----	537.87
Alhambra, 1.4 mi. W. of, 0.25 mi. E. of NW. cor. sec. 15, T. 5 N., R. 6 W., 30 ft. S. and 32 ft. W. from junction of T-rd. S., in root on N. side of 10-in. elm tree; copper nail and washer-----	552.72
[Continued in New Douglas quadrangle, line 2]	
5. From point 1.1 miles north and 0.9 mile west from Alhambra gen- erally northwest along roads by way of Livingston and William- son to point in south part of Staunton (by J. A. Shumate in 1927)	
[Continued from New Douglas quadrangle, line 3]	
Silver Creek, at bridge; surface of water July 15, 1927-----	510.5
Alhambra, 2.0 mi. N. and 1.4 mi. W. from, 3.7 mi. S. of Livingston, 0.25 mi. E. of SW. cor. sec. 34, T. 5 N., R. 6 W., 28 ft. N. and 28 ft. W. from junction of T-rd. N., in concrete post; standard tablet stamped "2 JAS 1927"-----	553.580
Reference mark, 96 ft. N. of tablet, in root on E. side of 15-in. red- oak tree; copper nail and washer-----	556.14
Livingston, 3.0 mi. S. of city hall, near center of NW $\frac{1}{4}$ sec. 34, T. 6 N., R. 6 W., 30 ft. S. and 12 ft. E. from junction of T-rd. W., on top of E. head wall of concrete culvert; chiseled square-----	555.49
Livingston, 2.0 mi. S. of, near E $\frac{1}{4}$ cor. sec. 28, T. 6 N., R. 6 W., in NW. angle of crossroads, on top of W. head wall of concrete cul- vert; chiseled square-----	570.74
Livingston, 1.5 mi. S. of, near SE. cor. sec. 21, T. 6 N., R. 6 W., 22 ft. N. and 28 ft. W. from junction of T-rd. E., 11 ft. N. of private rd. W., in concrete post; standard tablet stamped "3 JAS 1927"-----	574.480
Reference mark, at NE. corner of T-rd. E., on top of N. end of con- crete culvert; chiseled square-----	574.25
Livingston, at S. edge of, near NE. cor. sec. 21, T. 6 N., R. 6 W., in SW. angle of junction of T-rd. W., on top of W. head wall of concrete culvert; chiseled square-----	587.94
Livingston, at city hall, on S. end of S. step; chiseled square-----	591.18
Livingston, at crossing of C. C. C. & St. L. Ry.; top of S. rail-----	591.8

Livingston, in N. part of, near SE. cor. sec. 9, T. 6 N., R. 6 W., 28 ft. N. and 27 ft. W. from crossroads, 5 ft. N. of fence corner, on concrete walk; chiseled square-----	Feet 597.44
Williamson, in N. part of, 1.5 mi. S. thence 1.0 mi. E. from Staunton, 20 ft. N. and 30 ft. W. from SE. cor. sec. 4, T. 6 N., R. 6 W., on N. side of rd., at No. 2 Mine; standard iron post with bronze cap stamped "Prim Trav Sta No 72 1911"-----	608.830
Reference mark, 79 ft. S.35°E. from tablet, at car-loading elevator, on NE. corner of NE. foundation; chiseled square-----	609.02
Staunton, 1.5 mi. S. of, near SE. cor. sec. 5, T. 6 N., R. 6 W., in NW. angle of crossroads, on top of N. head wall of concrete culvert; chiseled square-----	613.77
[Continued in Gillespie quadrangle, line 7]	
6. From point 1.4 miles west of Alhambra generally south and south-west along roads by way of Marine to point 2.4 miles northwest of St. Jacob (by J. A. Shumate in 1927)	
Alhambra, 1.6 mi. W. and 0.5 mi. S. from, 6.7 mi. NE. of Marine, near W¼ cor. sec. 15, T. 5 N., R. 6 W., 335 ft. S. and 40 ft. E. from junction of T-rd. W., in yard of West School, in root on W. side of 24-in. elm tree; copper nail and washer-----	545.89
Marine, 5.9 mi. NE. of, about 850 ft. N. of W¼ cor. sec. 22, T. 5 N., R. 6 W., 425 ft. S. of crossing of New York, Chicago & St. Louis R. R., on E. side of rd., on top of bank, in root on NW. side of 36-in. maple tree; copper nail and washer-----	537.09
Marine, 5.2 mi. NE. of, 0.8 mi. E. of Kaufman, near NE. cor. sec. 28, T. 5 N., R. 6 W., 30 ft. S. and 28 ft. W. from crossroads, 9 ft. S. of fence corner, in concrete post; standard tablet stamped "7 JAS 1927"-----	540.581
Reference mark, 13 ft. N.20°W. from tablet, in root on E. side of 18-in. elm tree; copper nail and washer-----	541.24
Marine, 4.0 mi. NE. of, 0.25 mi. S. of NE. cor. sec. 33, T. 5 N., R. 6 W., 255 ft. N. and 75 ft. W. from crossing of Illinois Central R. R., in NW. angle of crossroads, in root on E. side of 15-in. elm tree; copper nail and washer-----	542.24
Marine, 3.2 mi. NE. of, near SE. cor. sec. 33, T. 5 N., R. 6 W., 340 ft. S. of Bonn School, 28 ft. N. and 31 ft. W. from crossroads, in corner of pasture, in concrete post; standard tablet stamped "8 JAS 1927"-----	514.161
Reference mark, 78 ft. N. of tablet, on N. bank of branch, in bench on E. side of 18-in. willow tree; copper nail and washer-----	515.15
Marine, 1.7 mi. NE. of, near E¼ cor. sec. 9, T. 4 N., R. 6 W., in NW. angle of junction of T-rd. N., in bench on N. side of lone 12-in. hedge tree; copper nail and washer-----	539.31
Marine, 1.1 mi. NE. of, about 800 ft. W. of SE. cor. sec. 9, T. 4 N., R. 6 W., in NE. angle of rd. forks, in root on W. side of 20-in. hedge tree; copper nail and washer-----	531.89
Marine, in front of Illinois Central R. R. sta.; top of rail-----	524.4
Marine, at center of W. side of public park, 6 ft. N. and 4 ft. E. from junction of sidewalk E., in concrete post; standard tablet stamped "9 JAS 1927"-----	527.624
Reference mark, 24 ft. N.45°E. from tablet, in root on W. side of 15-in. maple tree; copper nail and washer-----	527.22

Marine, in W. part of, 270 ft. E. of NW. cor. sec. 21, T. 4 N., R. 6 W., in SE. angle of crossroads, in root on NW. side of 32-in. maple tree; copper nail and washer-----	Feet 523.97
Marine, 1.0 mi. SW. of, 0.87 mi. E. of center of sec. 20, T. 4 N., R. 6 W., at NW. corner of right angle from W. to S. in rd., in bench on E. side of double wild-cherry tree; copper nail and washer-----	496.90
Marine, 1.9 mi. SW. of, near S $\frac{1}{4}$ cor. sec. 20, T. 4 N., R. 6 W., opposite T-rd. S., in root on S. side of 18-in. mulberry tree; copper nail and washer-----	497.00
Marine, 2.7 mi. SW. of, about 900 ft. N. of S $\frac{1}{4}$ cor. sec. 29, T. 4 N., R. 6 W., in NE. angle of rd. junction, on top of concrete head wall of culvert; chiseled square-----	492.59
Marine, 2.0 mi. by direct rd. S. of, 3.3 mi. NW. of St. Jacob, about 650 ft. S. of E $\frac{1}{4}$ cor. sec. 29, T. 4 N., R. 6 W., 10 ft. S. and 80 ft. E. from crossroads, in triangle of rds., on top of N. head wall of concrete culvert; chiseled square-----	503.69

[Continued in Belleville quadrangle, line 7]

7. From point 1.8 miles west and 2.5 miles south from Marine along roads north 0.5 mile and southwest 1.5 miles (by J. A. Shumate in 1927)

[A jog from Belleville quadrangle, line 7]

Marine, 1.8 mi. W. thence 2.0 mi. S. from, 4.5 mi. NE. of Troy, 0.5 mi. W. thence 0.5 mi. N. from Hunter School, near N $\frac{1}{4}$ cor. sec. 31, T. 4 N., R. 6 W., in SE. angle of crossroads, on top of E. head wall of concrete culvert; chiseled square-----	489.27
Troy, 3.7 mi. NE. of, in NE $\frac{1}{4}$ sec. 36, T. 4 N., R. 7 W., at steel bridge over Silver Creek, on N. end of E. abutment; chiseled square-----	461.18
Silver Creek, at bridge; surface of water July 25, 1927-----	449.3
Troy, 2.5 mi. NW. of, near W $\frac{1}{4}$ cor. sec. 36, T. 4 N., R. 7 W., 100 ft. E. of private driveway N., in root on S. side of 50-in. oak tree; copper nail and washer-----	473.13

[Continued in Belleville quadrangle, line 7]

8. From point 2.2 miles northeast thence 0.3 mile north from Troy along roads generally northeast, northwest, and north by way of Fruit to crossroads 0.7 mile west of Hamel (by J. A. Shumate in 1927)

[Continued from Belleville quadrangle, line 7]

Troy, 2.2 mi. NE. thence 1.0 mi. N. from, 3.2 mi. W. thence 2.5 mi. S. from Marine, about 800 ft. W. of S $\frac{1}{4}$ cor. sec. 26, T. 4 N., R. 7 W., at Sylvan Hill School, opposite T-rd. S., in root on S. side of 38-in. white-oak tree; copper nail and washer-----	492.97
Silver Creek, at bridge; surface of water July 23, 1927-----	455.1
Marine, 3.2 mi. W. thence 1.0 mi. S. from, near SE. cor. sec. 23, T. 4 N., R. 7 W., 17 ft. N. and 25 ft. W. from crossroads, in root on E. side of 12-in. hedge tree; copper nail and washer-----	498.81
Marine, 3.2 mi. W. of, 7.2 mi. SE. of Edwardsville, near S. cor. secs. 13 and 14, T. 4 N., R. 7 W., 26 ft. N. and 45 ft. E. from junction of E.-W. rd., 45 ft. E. of T-fence N., in concrete post; standard tablet stamped "6 JAS 1927"-----	513.776
Reference mark, 220 ft. S.80°W. from tablet, on top of S. head wall of concrete culvert; chiseled square-----	512.44

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Marine, 3.9 mi. W. of, 1.8 mi. NE. of Kuhn Siding, E. of center of SW $\frac{1}{4}$ sec. 14, T. 4 N., R. 7 W., 195 ft. E. of entrance to dairy, on top of N. head wall of concrete culvert; chiseled square	Feet 508.04
Marine, 4.2 mi. W. thence 0.4 mi. N. from, N. of quarter corner between secs. 14 and 15, T. 4 N., R. 7 W., at bridge over Silver Creek, on N. end of W. abutment; chiseled square	476.19
Silver Creek, at bridge; surface of water July 22, 1927	467.4
Marine, 4.2 mi. W. thence 1.5 mi. N. from, near W $\frac{1}{4}$ cor. sec. 11, T. 4 N., R. 7 W., 20 ft. N. and 10 ft. W. from junction of E-W. rd., in root on S. side of 8-in. hedge tree; copper nail and washer	524.65
Marine, 4.2 mi. W. thence 2.8 mi. NW. from, 0.2 mi. W. thence 1.0 mi S. from Fruit, 0.3 mi. W. of Union Grove School, 0.25 mi. W. of S $\frac{1}{4}$ cor. sec. 3, T. 4 N., R. 7 W., 28 ft. N. and 39 ft. W. from crossroads, in concrete post; standard tablet stamped "5 JAD 1927"	530.634
Reference mark, 51 ft. N.10°E. from tablet, in root on E. side of 18-in. wild-cherry tree; copper nail and washer	531.00
Fruit, at post office, on top of W. end of concrete step; chiseled square	533.47
Fruit, 0.4 mi. E. thence 0.5 mi. N. from, 0.25 mi. E. of center of sec. 34, T. 5 N., R. 7 W., in SW. angle of junction of T-rd. W., in root on W. side of 10-in. walnut tree; copper nail and washer	525.41
Fruit, 0.4 mi. E. thence 1.5 mi. N. from, 0.25 mi. E. of center of sec. 27, T. 5 N., R. 7 W., 54 ft. S. and 20 ft. W. from junction of T-rd. E., in bench on E. side of 24-in. walnut tree; copper nail and washer	528.98
Fruit, 0.4 mi. E. thence 2.0 mi. N. from, 0.7 mi. W. thence 2.0 mi. S. from Hamel, 0.25 mi. E. of NE. cor. sec. 27, T. 5 N., R. 7 W., 34 ft. S. and 22 ft. E. from crossroads, in concrete post; standard tablet stamped "4 JAS 1927"	536.391
Reference mark, 117 ft. S. 30°W. of tablet, on W. side of rd., in root on E. side of 30-in. elm tree; copper nail and washer	535.76
Hamel, 0.7 mi. W. thence 1.5 mi. S. from, 0.25 mi. E. of center of sec. 22, T. 5 N., R. 7 W., in NE. angle of T-rd. E., in root on W. side of 15-inch elm tree; copper nail and washer	531.94
Hamel, 0.7 mi. W. thence 0.8 mi. S. from, near center of SE $\frac{1}{4}$ sec. 15, T. 5 N., R. 7 W., 180 ft. N. and 15 ft. E. from crossing of U. S. Highway 66, on top of head wall of concrete culvert; chiseled square	532.09

EFFINGHAM QUADRANGLE

[Latitude 39°00'–39°15'; longitude 88°30'–88°45']

EFFINGHAM AND SHELBY COUNTIES

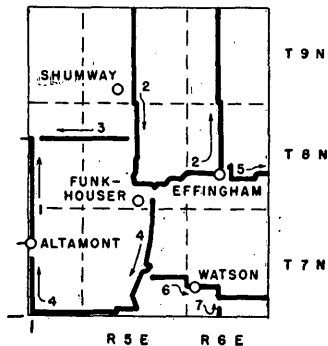


FIGURE 28.—Lines of leveling in Effingham quadrangle.

1. From Altamont along roads north to point 0.5 mile east of Moccasin, thence west 0.2 mile (by E. W. Gouchenour in 1928)

[Continued from St. Elmo quadrangle, line 2]

Altamont, at B. & O. R. R. sta., on SW. corner of platform; chiseled square (B. & O. R. R. B. M.; recovered in 1929) ¹¹ -----	Feet 624. 15
Altamont, near N. limits of, on SE. wing wall of abutment of concrete bridge over creek; chiseled square-----	612. 76
Altamont, 1.0 mi. N. of, near SE. cor. sec. 4, T. 7 N., R. 4 E., at NW. corner of crossroads, on N. wing wall of concrete culvert; chiseled square-----	625. 50
Altamont, 2.0 mi. N. of, near SE. cor. sec. 33, T. 8 N., R. 4 E., 30 ft. N. and 25 ft. W. from crossroads, in concrete post; standard tablet stamped "T T Sta No 1 L 1929 627"-----	626.291
Reference mark, 10 ft. S. and 40 ft. E. from crossroads, on S. end of concrete culvert; chiseled square-----	627. 27
Altamont, 3.0 mi. N. of, near SW. cor. sec. 27, T. 8 N., R. 4 E., 20 ft. N. and 15 ft. E. from crossroads, on S. wing wall of concrete culvert; chiseled square-----	629. 16
Altamont, 4.0 mi. N. of, near SE. cor. sec. 21, T. 8 N., R. 4 E., 20 ft. N. and 45 ft. W. from crossroads, in root on NE. side of 20-in. black-oak tree; copper nail and washer-----	619. 99
Altamont, 5.0 mi. N. of, 0.5 mi. E. thence 1.0 mi. S. from Moccasin, near SE. cor. sec. 16, T. 8 N., R. 4 E., 20 ft. N. and 20 ft. W. from crossroads, in concrete post; standard tablet stamped "T T Sta No. 2 L 1929 615"-----	615. 173
Reference mark, 40 ft. S. and 20 ft. E. from crossroads, in root on NW. side of 20-in. pin-oak tree; copper nail and washer-----	609. 29

¹¹In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "A 89 1935," elevation 624.592 ft.

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Moccasin, 0.5 mi. E. of, near SW. cor. sec. 10, T. 8 N., R. 4 E., in SW. corner of farmhouse yard, in root on SW. side of 36-in. maple tree; copper nail and washer (recovered in 1929)----- Feet
616. 29

[Continued in St. Elmo quadrangle, line 3]

2. From point 1.1 miles south and 0.5 mile west from Stewardson along roads south and east to Effingham, thence north to point 0.5 mile south and 4.5 miles east from Stewardson (by E. E. Harris in 1929)

[Connects with line 3 in Stewardson quadrangle]

Stewardson, 1.5 mi. S. and 0.5 mi. W. from, near NW. cor. sec. 10, T. 9 N., R. 5 E., at SE. corner of crossroads, on top of concrete culvert; chiseled square----- 626. 96

Stewardson, 2.5 mi. S. and 0.5 mi. W. from, near NW. cor. sec. 15, T. 9 N., R. 5 E., at SE. corner of crossroads, in center of concrete culvert; chiseled square----- 631. 89

Stewardson, 3.5 mi. S. and 0.5 mi. W. from, 1.0 mi. E. thence 2.0 mi. N. from Shumway, near NW. cor. sec. 22, T. 9 N., R. 5 E., in SE. corner of crossroads, 5 ft. S. and 6 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "1 H 1929"¹² 653. 376

Reference mark, 180 ft. N. 25° W. from tablet, in root on W. side of 10-in. boxelder tree; copper nail and washer----- 654. 55

Shumway, 1.0 mi. E. thence 1.0 mi. N. from, near NW. cor. sec. 27, T. 9 N., R. 5 E., on E. edge of rd., 60 ft. S. of R. R. crossing, 4 ft. E. of fence line, in root on E. side of 24-in. hedge tree; copper nail and washer----- 647. 15

Shumway, 1.0 mi. E. of, near NW. cor. sec. 34, T. 9 N., R. 5 E., on E. edge of rd., in line with T-rd. W., in root on W. side of 12-in. hackberry tree; copper nail and washer----- 635. 66

Shumway, 1.0 mi. E. thence 1.0 mi. S. from, 0.25 mi. W. of NE. cor. sec. 4, T. 8 N., R. 5 E., 28 ft. S. of rd., 60 ft. E. of T-rd. N., just E. of R. R. crossing, 11 ft. S. and 2 ft. W. from corner fence post, in concrete post; standard tablet stamped "2 H 1929"----- 634. 294

Shumway, 1.5 mi. S. and 1.2 mi. E. from, near NE. cor. sec. 9, T. 8 N., R. 5 E., in SW. corner of crossroads, in root on N. side of 12-in. wild-cherry tree; copper nail and washer----- 614. 59

Shumway, 2.5 mi. S. and 1.2 mi. E. from, near NW. cor. sec. 15, T. 8 N., R. 5 E., in SE. corner of crossroads, in root on W. side of wild-cherry tree; copper nail and washer----- 613. 98

Shumway, 4.0 mi. S. and 1.2 mi. W. from, 4.8 mi. W. and 0.5 mi. N. from Effingham, near E $\frac{1}{4}$ cor. sec. 21, T. 8 N., R. 5 E., on S. edge of rd., in line with T-rd. N., in concrete post; standard tablet stamped "3 H 1929"----- 607. 522

Effingham, 4.8 mi. W. of, near SE. cor. sec. 21, T. 8 N., R. 5 E., 71 ft. N. and 25 ft. W. from crossroads, in root on E. side of 24-in. elm tree; copper nail and washer----- 606. 71

Effingham, 4.8 mi. W. and 0.5 mi. S. from, 1.3 mi. N. and 0.4 mi. W. from Funkhouser, near W $\frac{1}{4}$ cor. sec. 27, T. 8 N., R. 5 E., at NE. corner of crossroads, on top near W. end of SE. concrete wing wall of culvert; chiseled square----- 599. 69

¹² In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "R 83 1935," elevation 643.011 ft.

Effingham, 4.3 mi. SW. of Effingham County courthouse, 1.2 mi. NW. of Ewington, in SW $\frac{1}{4}$ sec. 26, T. 8 N., R. 5 E., 16 ft. N. of rd., 79 ft. W. of rd. SW., 11 ft. W. of telephone pole, in concrete post; standard tablet stamped "4 H 1929"-----	Feet 593.053
Effingham, 3.3 mi. SW. of, in NE $\frac{1}{4}$ sec. 26, T. 8 N., R. 5 E., about 200 ft. N. of bridge over Bluepoint Creek, in SE. corner of rd. fork, in center of concrete culvert; chiseled square-----	519.68
Effingham, 1.8 mi. W. of, near S $\frac{1}{4}$ cor. sec. 19, T. 8 N., R. 6 E., at NW. corner of junction of T-rd. N., in center of concrete culvert; chiseled square-----	585.19
Effingham, 0.9 mi. W. of, 0.25 mi. E. of cor. secs. 20 and 29, T. 8 N., R. 6 E., 25 ft. S. and 44 ft. W. from SW. corner of intersection of Fayette Avenue and Henrietta Street, 2 ft. N. and 16 ft. W. from L-angle in fence line, in concrete post; standard tablet stamped "5 H 1929"-----	589.719
Reference mark, 333 ft. E. of tablet, on curbstone; chiseled square-----	590.29
Effingham, in front of Wabash Ry. sta.; top of near rail-----	590.7
Effingham, in SW. corner of courthouse grounds, in center of NE. side of concrete block foundation of cannon; standard tablet stamped "6 H 1929" (recovered by U. S. C. & G. S. in 1935)-----	597.820
Reference mark, 193 ft. N. of tablet, at pump, in center of N. side of concrete foundation; chiseled square-----	597.64
Effingham, near N. limits of, at NE. corner of intersection of North Fourth and Joseph Streets, just E. of crossing of I. C. R. R., in center of top of head wall of concrete culvert; chiseled square-----	597.82
Effingham, 0.9 mi. N. of courthouse, 3.5 mi. W. of Teutopolis, near NE. cor. sec. 20, T. 8 N., R. 6 E., at SW. corner of crossroads, in center of top of head wall of concrete culvert; chiseled square-----	588.37
Effingham, 1.9 mi. N. of, near NW. cor. sec. 16, T. 8 N., R. 6 E., in SE. corner of crossroads, just E. of North School, on top of angle in head wall of concrete culvert; chiseled square-----	607.98
Effingham, 2.6 mi. N. of, 0.25 mi. N. of W $\frac{1}{4}$ cor. sec. 9, T. 8 N., R. 6 E., in SE. corner of junction of T-rd. E., at junction of private rd. W., in concrete post; standard tablet stamped "7 H 1929"-----	609.320
Reference mark, 456 ft. S. of tablet, in root on W. side of 30-in. elm tree; copper nail and washer-----	609.43
Effingham, 3.4 mi. N. thence 0.2 mi. W. from, 0.2 mi. W. of NE. cor. sec. 5, T. 8 N., R. 6 E., on S side of rd., 100 ft. E. of junction of T-rd. N., in center of top of head wall of concrete culvert; chiseled square-----	605.19
Effingham, 4.6 mi. N. and 0.2 mi. W. from, at E. side SE $\frac{1}{4}$ sec. 29, T. 9 N., R. 6 E., on W. side of rd., at S. end of bridge over Green Creek, in bridge span; top of lower iron bolt-----	552.64
Effingham, 5.2 mi. N. and 0.2 mi. W. from, about 0.2 mi. S. of NW. cor. sec. 23, T. 9 N., R. 6 E., 23 ft. N. and 23 ft. E. from crossroads, in concrete post; standard tablet stamped "8 H 1929"-----	613.184
Effingham, 6.4 mi. N. and 0.2 mi. W. from, near NW. cor. sec. 21, T. 9 N., R. 6 E., 70 ft. S. of crossroads, on E. edge of rd, in center of top of head wall of concrete culvert; chiseled square-----	608.76
Effingham, 7.4 mi. N. and 0.2 mi. W. from, 0.2 mi. N. and 2.8 mi. W. from Sigel, near SW. cor. sec. 9, T. 9 N., R. 6 E., 80 ft. E. of crossroads, on N. side of rd., in center of top of head wall of concrete culvert; chiseled square-----	663.62

Effingham, 7.9 mi. N. and 0.2 mi. W. from, 4.5 mi. E. and 2.0 mi. S. from Stewardson, near E $\frac{1}{4}$ cor. sec. 8, T. 9 N., R. 6 E., 23 ft. S. and 23 ft. W. from junction of T-rd. W., in L-angle in fence line, 4 ft. from each fence, in concrete post; standard tablet stamped "9 H 1929"-----	<i>Feet</i> 650.285
Stewardson, 4.5 mi. E. and 1.5 mi. S. from, near NW. cor. sec. 9, T. 9 N., R. 6 E., in SE. angle of crossroads, in root on N. side of 15-in. hickory tree; copper nail and washer-----	639.93
[Connects with line 3 in Stewardson quadrangle]	
3. From crossroads 2.5 miles south and 1.2 miles east from Shumway west along road to crossroads 0.5 mile east of Moccasin (by E. E. Harris in 1929)	
Shumway, 2.5 mi. S. and 0.2 mi. E. from, 5.6 mi. E. of Moccasin, near SE. cor. sec. 8, T. 8 N., R. 5 E., 28 ft. N. and 25 ft. W. from crossroads, 5 ft. NW. of telephone pole, in concrete post; standard tablet stamped "10 H 1929"-----	604.602
Reference mark, 355 ft. W. of tablet, in front of house, in root of 30-in. tree; copper nail and washer-----	606.52
Moccasin, 4.7 mi. E. of, near SW. cor. sec. 8, T. 8 N., R. 5 E., at NE. corner of crossroads, in center of small concrete culvert; chiseled square-----	635.40
Moccasin, 3.6 mi. E. of, near NW. cor. sec. 18, T. 8 N., R. 5 E., in SE. corner of junction of T-rd. E., at jog in E.-W. rd., on W. end of SW. wing wall of small concrete culvert; chiseled square-----	640.59
Moccasin, 2.6 mi. E. of, near NW. cor. sec. 13, T. 8 N., R. 4 E., 40 ft. S. and 26 ft. E. from crossroads, 6 ft. S. and 6 ft. E. from fence line, in concrete post; standard tablet stamped "11 H 1929"-----	626.200
Reference mark, 82 ft. N.45°E. from tablet, in root on W. side of apple tree; copper nail and washer-----	627.01
Moccasin, 1.5 mi. E. of, near NW. cor. sec. 14, T. 8 N., R. 4 E., at SE. corner of crossroads, on E. end of N. abutment of small bridge over ditch; chiseled square-----	622.37
4. From road junction 4.3 miles southwest of Effingham generally south, southwest, and west along roads to point 4 miles south of Altamont, thence north to Altamont (by E. E. Harris in 1929)	
Effingham, 5.7 mi. SW. of, 1.0 mi. SW. of Ewington, 0.6 mi. NE. of Funkhouser, near W $\frac{1}{4}$ cor. sec. 35, T. 8 N., R. 5 E., in NW. corner of highway crossing, on top at angle in head wall of concrete culvert; chiseled square ¹³ -----	576.40
Ewington, 1.0 mi. SW. thence 0.8 mi. S. from, near W $\frac{1}{4}$ cor. sec. 2, T. 7 N., R. 5 E., in NE. angle of crossroads, in root on W. side of 12-in. white-oak tree; copper nail and washer-----	565.36
Ewington, 0.8 mi. SW. thence 1.3 mi. S. from, 3.5 mi. N. and 2.5 mi. W. from Watson, near NW. cor. sec. 11, T. 7 N., R. 5 E., 39 ft. S. and 17 ft. E. from junction of rd. E., 27 ft. S. and 2 ft. E. from angle in fence line, in concrete post; standard tablet stamped "12 H 1929"-----	573.477

¹³ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "F 89 1935," elevation 584.461 ft.

Reference mark, 53 ft. N.35°W. from tablet, in root on NE. side of 36-in. white-oak tree; copper nail and washer-----	Feet 573.52
Watson, 2.5 mi. N. and 2.6 mi. W. from, in SE $\frac{1}{4}$ sec. 10, T. 7 N., R. 5 E., in N. end of triangle formed by junction of rd E., in root on S. side of 36-in. elm tree; copper nail and washer-----	514.67
Watson, 1.5 mi. N. and 2.7 mi. W. from, in NE $\frac{1}{4}$ sec. 22, T. 7 N., R. 5 E., 16 ft. S. and 31 ft. W. from junction of rd. W., in concrete post; standard tablet stamped "13 H 1929"-----	564.303
Reference mark, 107 ft. W. of tablet, in root on SW. side of 36-in. white-oak tree; copper nail and washer-----	564.38
Watson, 0.2 mi. N. and 3.4 mi. W. from, 0.2 mi. S. and 1.6 mi. E. from Osker, in NW $\frac{1}{4}$ sec. 27, T. 7 N., R. 5 E., 18 ft. S. and 50 ft. W. from junction of T-rd. W., 3 ft. S. and 32 ft. W. from L-angle in fence line, in root on E. side of 18-in. red-oak tree; copper nail and washer-----	558.60
Watson, 0.5 mi. S. thence 3.5 mi. W. from, in SW $\frac{1}{4}$ sec. 27, T. 7 N., R. 5 E., on W. edge of rd., 80 ft. SE. of house, in root on E. side of 12-in. walnut tree; copper nail and washer-----	562.39
Watson, 1.3 mi. S. and 3.3 mi. W. from, 4.0 mi. N. of Mason, 3.8 mi. S. and 6.2 mi. E. from Altamont, near W $\frac{1}{4}$ cor. sec. 34, T. 7 N., R. 5 E., 38 ft. S. and 23 ft. W. from junction of T-rd. S., 23 ft. S. and 2 ft. W. from L-angle in fence line, in concrete post; standard tablet stamped "14 H 1929"-----	558.735
Reference mark, 75 ft. N.50°E. from tablet, in root of 12-in. oak tree; copper nail and washer-----	559.12
Altamont, 3.8 mi. S. and 4.8 mi. E. from, near center of SE $\frac{1}{4}$ sec. 32, T. 7 N., R. 5 E., in SE. angle of junction of T-rd. E., at jog in E.-W. rd., in root on W. side of 24-in. red-oak tree; copper nail and washer-----	562.79
Altamont, 4.0 mi. S. thence 4.0 mi. E. from, near SE. cor. sec. 31, T. 7 N., R. 5 E., 62 ft. W. of center of rd. S. at jog in N.-S. rd., on N. side of rd., on SW. corner of concrete walk to house; chiseled square-----	567.72
Altamont, 4.0 mi. S. thence 3.0 mi. E. from, near SE. cor. sec. 36, T. 7 N., R. 4 E., 26 ft. N. and 20 ft. W. from crossroads, 3 ft. N. and 4 ft. W. from corner fence post, in concrete post; standard tablet stamped "15 H 1929"-----	574.213
Altamont, 4.0 mi. S. thence 2.0 mi. E. from, near NE. cor. sec. 2, T. 6 N., R. 4 E., in SW. corner of crossroads, in root on N. side of 24-in. poplar tree; copper nail and washer-----	581.80
Altamont, 4.0 mi. S. thence 1.0 mi. E. from, near NE. cor. sec. 3, T. 6 N., R. 4 E., in SW. corner of crossroads, just E. of R. R. crossing, in root on N. side of 15-in. locust tree; copper nail and washer-----	582.98
Altamont, 4.0 mi. S. of, near NE. cor. sec. 4, T. 6 N., R. 4 E., 30 ft. S. and 62 ft. W. from crossroads, 25 ft. N. and 22 ft. W. from corner fence post, in concrete post; standard tablet stamped "16 H 1929" ¹⁴ -----	601.046
Reference mark, 66 ft. N.45°E. from tablet, in center of top of head wall of concrete culvert; chiseled square-----	601.75

¹⁴ In 1938 this bench mark was reset at an elevation 0.022 ft. higher than that originally determined. The figures given represent the new elevation.

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Altamont, 2.0 mi. S. of, near SE. cor. sec. 21, T. 7 N., R. 4 E., 30 ft. N. and 6 ft. W. from crossroads, 2 ft. E. of fence corner, in concrete post; standard tablet stamped "17 H 1929" ¹⁵ -----	Feet 610.406
Reference mark, 252 ft. S.10°E. from tablet, in center of concrete culvert; chiseled square-----	608.57
5. From Effingham alternately east and south along roads to point 1.5 miles south and 1.2 miles west from Teutopolis (by E. E. Harris in 1928)	
Effingham, 1.0 mi. E. of courthouse, near SW. corner sec. 22, T. 8 N., R. 6 E., at R. R. trestle over Salt Creek, on S. end of W. concrete abutment; chiseled square-----	579.71
Effingham, 1.5 mi. NE. thence 0.2 mi. S. from, 0.2 mi. S. of center of sec. 22, T. 8 N., R. 6 E., in SW. corner of R. R. crossing, in center of concrete culvert; chiseled square-----	589.74
Effingham, 1.5 mi. NE. thence 1.0 mi. S. from, 1.5 mi. S. thence 2.0 mi. W. from Teutopolis, near center of sec. 27, T. 8 N., R. 6 E., about 150 ft. S. of right-angle turn E. in rd., in root on N. side of 30-in. oak tree; copper nail and washer-----	593.90
[Continued in Teutopolis quadrangle, line 1]	
6. From road junction 1.5 miles north and 2.7 miles west from Watson generally south and east along roads by way of Watson to point 1 mile north and 2.4 miles west from Elliottstown (by E. E. Harris in 1929)	
Little Wabash River, under bridge; surface of water June 5, 1929----	485.0
Watson, 0.5 mi. N. and 2.5 mi. W. from, near SW. cor. sec. 23, T. 7 N., R. 5 E., 144 ft. N. and 47 ft. E. from right-angle turn E. in rd., in crotch of cherry tree; copper nail and washer-----	531.68
Watson, 0.5 mi. N. and 1.5 mi. W. from, near NE. cor. sec. 26, T. 7 N., R. 5 E., at SW. corner of crossroads, in center of top of head wall of concrete culvert; chiseled square-----	560.97
Watson, 0.5 mi. N. and 0.5 mi. W. from, near NW. cor. sec. 30, T. 7 N., R. 6 E., 31 ft. S. and 25 ft. E. from junction of T-rd. W., 2 ft. W. of fence line, in concrete post; standard tablet stamped "22 H 1929" ¹⁶ -----	545.288
Reference mark, 98 ft. S.30°W. from tablet, on top near S. end of W. head wall of concrete culvert; chiseled square-----	545.05
Watson, 0.5 mi. W. of, near E¼ cor. sec. 25, T. 7 N., R. 5 E., 20 ft. S. and 60 ft. W. from junction of T-rd. E., in root on NE side of 24-in. maple tree; copper nail and washer-----	563.41
Watson, just N. of I. C. R. R. sta., at center of rd. crossing; top of rail-----	563.1
Watson, 0.5 mi. E. of, near W¼ cor. sec. 29, T. 7 N., R. 6 E., at NE. corner of crossroads, on top of S. end of 12-in. drain pipe under private rd. to dwelling; chiseled square-----	558.02
Watson, 1.5 mi. E. of, about 6.7 mi. S. of Effingham, near E¼ cor. sec. 29, T. 7 N., R. 6 E., in SW. angle of junction of U. S. Highway 45, on angle of head wall of concrete culvert; chiseled square--	549.82

¹⁵ In 1938 this bench mark was reset at an elevation 0.676 ft. higher than that originally determined. The figures given represent the new elevation.

¹⁶ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "H 83 1935," elevation 555.425 ft.

Watson, 1.5 mi. E. thence 0.5 mi. S. from, 1.0 mi. N. thence 4.9 mi. W. from Elliottstown, near NW. cor. sec. 33, T. 7 N., R. 6 E., 25 ft. E. of center line of U. S. Highway 45, 48 ft. S. of T-rd. E., 28 ft. S. and 3 ft. W. from corner fence post, in concrete post; standard tablet stamped "23 H 1929" (recovered in 1939) -----	Feet 543.815
Reference mark, 81 ft. N.45°W. from tablet, in center of top of head wall of concrete culvert; chiseled square -----	544.56
Elliottstown, 1.0 mi. N. thence 4.1 mi. W. from, 0.25 mi. E. of S¼ cor. sec. 28, T. 7 N., R. 6 E., in NE. angle of crossroads, in root on S. side of 40-in. red-oak tree; copper nail and washer -----	493.08
Elliottstown, 1.0 mi. N. thence 3.3 mi. W. from, near N¼ cor. sec. 34, T. 7 N., R. 6 E., in SW. angle of junction of T-rd. S., in root on N. side of 15-in. oak tree; copper nail and washer -----	548.32

[Continued in Teutopolis quadrangle, line 2]

7. From point 1.5 miles east and 1.6 miles south from Watson north 1.6 miles along U. S. Highway 45 (by W. C. Elledge in 1939)

[Continued from Edgewood quadrangle, line 6]

Watson, 1.5 mi. E. thence 1.4 mi. S. from, 435 ft. N. of T-rd. E. at S. cor. secs. 32 and 33, T. 7 N., R. 6 E., 20 ft. E. of highway, 30 ft. S. of fence line E., on E. head wall of concrete culvert; chiseled square -----	541.13
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ELDORADO QUADRANGLE

[Latitude 37°45'–38°00'; longitude 88°15'–88°30']

GALLATIN, HAMILTON, SALINE, AND WHITE COUNTIES

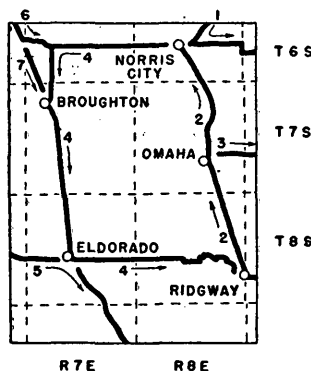


FIGURE 29.—Lines of leveling in Eldorado quadrangle.

1. Southwest along Cleveland, Cincinnati, Chicago & St. Louis Railroad to Norris City, thence east along road (by C. S. Blair in 1905)

[Continued from Enfield quadrangle, line 1]

Norris City, on N. side of Cumberland Presbyterian Church, at main entrance, in stone sill; aluminum tablet stamped "444 Adj" ¹⁷ -----	Feet 442. 888
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[Continued in New Haven quadrangle, line 1]

2. From Ridgway northwest along Baltimore & Ohio Railroad to Norris City (by C. S. Blair in 1905)

[Continued from New Haven quadrangle, line 2]

Ridgway, just E. of front entrance of Catholic Church, in stone foundation wall; aluminum tablet stamped "377 Adj"-----	376. 309
Omaha, 90 ft. S. of sta., 12 ft. E. of track; standard iron post with bronze cap stamped "367 Adj"-----	366. 260
Middlepoint (Roland Sta.), at NE. corner of cinder platform; standard iron post with bronze cap stamped "433 Adj"-----	432. 008

3. From Omaha east along road 2.8 miles (by C. S. Blair in 1905)

Omaha, 2.7 mi. E. of, in SW. angle of junction of T-rd. S.; standard iron post with bronze cap stamped "405 Adj"-----	404. 527
---	----------

[Continued in New Haven quadrangle, line 3]

4. From Norris City along road west 7 miles, thence south along road and Louisville & Nashville Railroad to Eldorado; thence east and southeast along road to Ridgway (by C. S. Blair in 1905)

Norris City, 3.5 mi. W. of, 1.0 mi. W. of Hamilton-White county line, in SW. angle of crossroads, at NE. corner of Jennings School; standard iron post with bronze cap stamped "410 Adj"-----	409. 110
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¹⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "C 85 1935," elevation 423.260 ft.

Norris City, 7.0 mi. W. of, 3.0 mi. N. of Broughton, in SE. angle of junction of T-rd. S.; standard iron post with bronze cap stamped "371 Adj" (recovered in 1939)-----	Feet 370.318
Broughton, at L. & N. R. R. sta., at NE. corner of cinder platform; standard iron post with bronze cap stamped "379 Adj" (recovered in 1939)-----	377.914
Francis Mills, at NE. corner of cinder platform; standard iron post with bronze cap stamped "371 Adj"-----	370.417
Eldorado, 30 ft. S. of SW. corner of Grand Hotel; standard iron post with bronze cap stamped "388 Adj" (recovered in 1906 and designated "R ₁ ")-----	387.332
Eldorado, 3.5 mi. E. of, at jog in rd., 3 ft. NE. of 36-in. oak tree in middle of rd.; standard iron post with bronze cap stamped "373 Adj"-----	372.470
Eldorado, 6.0 mi. E. of, 5.0 mi. NW. of Ridgway, in front wall at NE. corner of Zion Church; aluminum tablet stamped "390 Adj"-----	389.182

5. East along Illinois Central Railroad to Eldorado, thence southeast along Louisville & Nashville Railroad (by T. A. Green in 1906; first-order leveling)

[Continued from Galatia quadrangle, line 1]

Grayson, 0.5 mi. SE. of, 40 ft. N. of center line of track, inside wire fence; standard iron post with bronze cap stamped "1906" and designated "S ₁ "-----	392.076
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[Continued in Equality quadrangle, line 1]

6. From point near Dale southeast and east along roads to road junction 3 miles north of Broughton (by W. C. Elledge in 1939)

[Continued from McLeansboro quadrangle, line 5]¹⁸

Dale, 20 ft. S. and 20 ft. W. from crossroads, at NE. corner of yard of Methodist Episcopal Church, on top of W. head wall of concrete culvert; chiseled square-----	399.90
Dale, 1.0 mi. along State Highway 142 SE. of, 0.25 mi. N. of E. cor. secs. 24 and 25, T. 6 S., R. 6 E., 200 ft. N. of crossroads, on W. head wall of concrete culvert; chiseled square-----	378.56
7. From point 1 mile southeast of Dale southeast along State Highway 142 to Broughton (by W. C. Elledge in 1939)	
Dale, 2.2 mi. SE. of, near quarter corner between secs. 30 and 31, T. 6 S., R. 7 E., 15 ft. S. and 140 ft. E. from junction of T-rd. E., on S. head wall of concrete culvert; chiseled square-----	365.29
Dale, 2.8 mi. SE. of, 2.0 mi. NW. of Broughton, in SE¼ sec. 31, T. 6 S., R. 7 E., at concrete bridge over Contrary Creek, on NW. wing wall; chiseled square-----	372.33
Broughton, 1.5 mi. NW. of, near cor. secs. 5, 6, 31, and 32, Tps. 6 and 7 S., R. 7 E., at first bridge NW. of Broughton, on SW. wing wall; chiseled square-----	370.28

¹⁸ This line cuts the southwest corner of Enfield quadrangle, but no bench marks were set in that portion of the line.

ENFIELD QUADRANGLE

[Latitude 38°00'–38°15' ; longitude 88°15'–88°30']

HAMILTON AND WHITE COUNTIES

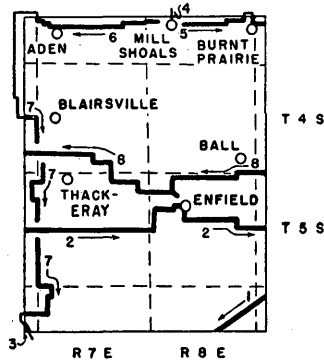


FIGURE 30.—Lines of leveling in Enfield quadrangle.

1. Southwest along Cleveland, Cincinnati, Chicago & St. Louis Railway (by C. S. Blair in 1905)

[Continued from Carmi quadrangle, line 1]

Stokes, at store of J. Pyle, in SE. corner of yard; standard iron post with bronze cap stamped "415 Adj"-----	Feet 413.568
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[Continued in Eldorado quadrangle, line 1]

2. From point 0.5 mile south and 2 miles east from McLeansboro generally east along roads by way of Enfield to point 5 miles west of Carmi (by H. E. Wessman in 1921; leveled twice)

[Continued from McLeansboro quadrangle, line 1]

McLeansboro, 2.8 mi. SE. of, 1.2 mi. S. thence 9.0 mi. W. from Enfield, near SW. cor. sec. 13, T. 5 S., R. 6 E., 40 ft. NE. of junction of T-rd. S., in root on S. side of 20-in. tree; copper nail and washer-----	451.11
Enfield, 1.2 mi. S. thence 8.0 mi. W. from, near NW. cor. sec. 19, T. 5 S., R. 7 E., 40 ft. S. of junction of T-rd. E., 20 ft. E. of fence line; standard iron post with bronze cap stamped "9 W 1921"-----	433.526
Reference mark 1, 100 ft. W. of rd. fork, on N. side of rd., 8 ft. N. of fence line, in root on E. side of 20-in. white-oak tree; copper nail and washer-----	432.80
Reference mark 2, 212 ft. S.24°15'W. from iron post, 120 ft. N. of rd. fork, on W. side of rd., 8 ft. W. of fence line, in root on E. side of 10-in. ash tree; copper nail and washer-----	430.88
Enfield, 1.2 mi. S. thence 7.5 mi. W. from, near N¼ cor. sec. 19, T. 5 S., R. 7 E., 30 ft. SW. of junction of T-rd. N., in root on E. side of 12-in. hickory tree; copper nail and washer-----	464.34
Enfield, 1.2 mi. S. thence 7.0 mi. W. from, 2.8 mi. S. and 0.6 mi. W. from Thackeray, 100 ft. E. of SW. cor. sec. 17, T. 5 S., R. 7 E., on N. side of rd., 15 ft. N. of fence line, in root on S. side of 14-in. walnut tree; copper nail and washer-----	408.39

Enfield, 1.2 mi. S. thence 6.0 mi. W. from, near NW. cor. sec. 21, T. 5 S., R. 7 E., 60 ft. E. of rd. fork, on S. side of rd., 3 ft. S. of fence line, in root on N. side of 15-in. white-oak tree; copper nail and washer-----	Feet 492.50
Enfield, 1.2 mi. S. thence 5.0 mi. W. from, near NE. cor. sec. 21, T. 5 S., R. 7 E., 50 ft. S. of town hall; standard iron post with bronze cap stamped "10 W 1921"-----	466.801
Reference mark 1, 75 ft. SW. of crossroads, in rear of town hall, in root on N. side of 8-in. hickory tree; copper nail and washer-----	462.70
Reference mark 2, 50 ft. S.7°E. from iron post, 100 ft. S. of crossroads, on W. side of rd., in root on N. side of 14-in. white-oak tree; copper nail and washer-----	467.58
Enfield, 1.2 mi. S. thence 4.0 mi. W. from, near NE. cor. sec. 22, T. 5 S., R. 7 E., 100 ft. N. of junction of T-rd. N., on W. side of rd., in root on E. side of 14-in. oak tree; copper nail and washer-----	444.12
Enfield, 1.2 mi. S. thence 3.0 mi. W. from, near NE. cor. sec. 23, T. 5 S., R. 7 E., 190 ft. W. of crossroads, on S. side of rd., 12 ft. S. of fence line, in root on N. side of 6-in. hickory tree; copper nail and washer-----	454.00
Enfield, 1.2 mi. S. thence 2.0 mi. W. from, near SE. cor. sec. 13, T. 5 S., R. 7 E., 300 ft. W. of rd. fork, on N. side of rd., 15 ft. N. of fence line, in root on N. side of 12-in. hickory tree; copper nail and washer-----	470.83
Enfield, 1.2 mi. S. thence 1.8 mi. W. from, 0.25 mi. E. of SW. cor. sec. 18, T. 5 S., R. 8 E., 40 ft. N. of rd. junction, 20 ft. W. of W. fence line; standard iron post with bronze cap stamped "11 W 1921"-----	477.342
Reference mark 1, 25 ft. NW. of junction of N.-S. rd., in root on E. side of 15-in. white-oak tree; copper nail and washer-----	477.66
Reference mark 2, 41 ft. N.3°W. from iron post, 65 ft. N. of rd. junction, on W. side of rd., 20 ft. W. of fence line, in root on E. side of 15-in. hickory tree; copper nail and washer-----	475.68
Enfield, 0.2 mi. S. and 1.8 mi. W. from, 0.25 mi. W. of N¼ cor. sec. 18, T. 5 S., R. 8 E., 320 ft. S. of crossroads, on E. side of rd., in fence line, in root on E. side of 6-in. oak tree; copper nail and washer-----	465.10
Enfield, 0.2 mi. S. and 1.0 mi. W. from, near SW. cor. sec. 8, T. 5 S., R. 8 E., 150 ft. E. of T-rd. S., at bridge over Gowdy Creek, on N. end of W. abutment; chiseled square-----	405.87
Enfield, 750 ft. S. of sta., 2 rails S. of Baltimore & Ohio R. R. mile-post S-33, on NW. corner of W. head wall of 48-in. iron-pipe culvert; dim chiseled square (recovered in 1939; recovered also by U. S. C. & G. S. in 1935)-----	421.518
Enfield, 750 ft. S. of sta., on SW. corner of W. head wall of 48-in. iron-pipe culvert; chiseled square (B. & O. R. R. B. M. 51; recovered in 1939)-----	421.44
Enfield, opposite sta. 1714+25, on NW. cor. of concrete base of semaphore; chiseled square (B. & O. R. R. B. M. 50)-----	437.16
Enfield, at SW. corner of Louisville & Nashville R. R. sta., 6 in. from building, on concrete platform; chiseled square-----	469.85
Enfield, 0.5 mi. S. thence 1.0 mi. E. from, near W¼ cor. sec. 15, T. 5 S., R. 8 E., 40 ft. S. of junction of T-rd. S., 18 in. E. of E. fence line; standard iron post with bronze cap stamped "12 W 1921"	440.933

Reference mark, at corner of T-rd. S., on top of galvanized iron culvert; scratched square-----	<i>Feet</i> 437. 98
Enfield, 0.5 mi. S. thence 2.0 mi. E. from, near W $\frac{1}{4}$ cor. sec. 14, T. 5 S., R. 8 E., 50 ft. S. of crossroads, on E. side of rd., in fence line, in root on W. side of 10-in. maple tree; copper nail and washer-----	421. 85
Enfield, 0.5 mi. S. thence 3.0 mi. E. from, 3.5 mi. S. of Ball, near W $\frac{1}{4}$ cor. sec. 13, T. 5 S., R. 8 E., 120 ft. S. of crossroads, on E. side of rd., in fence line, in root on W. side of 24-in. maple tree; copper nail and washer-----	396. 79
Enfield, 1.0 mi. S. thence 3.0 mi. E. from, near NE. cor. sec. 23, T. 5 S., R. 8 E., 40 ft. W. of rd. junction, in root on SE. side of 26-in. black-oak tree; copper nail and washer-----	394. 64
Enfield, 1.0 mi. S. thence 4.0 mi. E. from, near NE. cor. sec. 24, T. 5 S., R. 8 E., 105 ft. W. of crossroads, 15 ft. S. of S fence line, in root on N. side of 12-in. hickory tree; copper nail and washer--	395. 20
Enfield, 1.0 mi. S. thence 4.0 mi. E. from, near SW. cor. sec. 18, T. 5 S., R. 9 E., 50 ft. N. of crossroads, 1 ft. E. of E fence line; standard iron post with bronze cap stamped "13 W 1921" ¹⁰ -----	395. 511
Enfield, 1.0 mi. S. thence 4.0 mi. E. from, 5.2 mi. W. of Carmi, near SW. cor. sec. 18, T. 5 S., R. 9 E., in top of NE. wing wall of highway bridge; standard tablet stamped "13 W 1921"-----	401. 477
Reference mark, 18 ft. S.5°E. from iron post, 30 ft. N. of crossroads, on E. side of rd., 1 ft. E. of fence line, in root on SW. side of 30-in. maple tree; copper nail and washer-----	395. 46

[Continued in Carmi quadrangle, line 5]

3. Northwest along Louisville & Nashville Railroad across southwest corner of quadrangle (by H. E. Wessman in 1921)

[Connects with line 4 in Eldorado quadrangle]

Dale, 1.1 mi. NW. of, 40 ft. W. of track, at rd. crossing, on S. side of rd., in fence line, in root on N. side of 32-in. beech tree; copper nail and washer-----	392. 80
---	---------

[Continued in McLeansboro quadrangle, line 2]

4. At Mill Shoals (by W. C. Elledge in 1939)

U. S. C. & G. S. standard disk stamped "Q 85 1935"-----	382. 995
Mill Shoals, 1 block E. of sta., 25 ft. E. of U. S. Highway 45, 15 ft. W. of SW. corner of residence of Alice Hendershott, 4 ft. N. of public sidewalk; iron post stamped "385.4 (Dept. of Agriculture B. M.; recovered by U. S. C. & G. S. in 1935)-----	384. 740

[Continued in Fairfield quadrangle, line 2]

5. From Mill Shoals along roads east and north to point near Burnt Prairie (by W. C. Elledge in 1939)

Mill Shoals, 1.0 mi. E. of, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 21, T. 3 S., R. 8 E., in NW. angle of crossroads, 30 ft. N. and 50 ft. W. from NW. corner of Snowdrop School, in root on S. side of 24-in. oak tree; copper nail and washer-----	500. 04
Mill Shoals, 1.8 mi. E. of, 800 ft. W. of E $\frac{1}{4}$ cor. sec. 21, T. 3 S., R. 8 E., 500 ft. E. of crossroads, on end of SE. wing wall of concrete bridge; chiseled square-----	400. 18

¹⁰ In 1926 this bench mark was replaced by the standard tablet the location of which is given in the next description.

Mill Shoals, 2.8 mi. E. of, 0.5 mi. S. and 2.0 mi. W. from Burnt Prairie, near quarter corner between secs. 22 and 23, T. 3 S., R. 8 E., 25 ft. S. and 65 ft. E. from junction of T-rd. S., 47 ft. E. of corner fence post, in concrete post; standard tablet stamped "T T 31 C 1939"-----	Feet 444.760
Burnt Prairie (Liberty), 1.0 mi. W. of, about 600 ft. N. of quarter corner between secs. 23 and 24, T. 3 S., R. 8 E., 200 ft. N. of jog N. in rd., on NW. wing wall of concrete bridge; chiseled square-----	408.96
Burnt Prairie, about 1,000 ft. W. of W. limits of, 400 ft. W. of small creek, on S. side of rd., in root on N. side of 24-in. elm tree; copper nail and washer-----	443.98

[Jogs into Fairfield quadrangle, line 5]

No additional bench marks were established in this portion of the line.

[Continued in Carmi quadrangle, line 7]

6. From Mill Shoals along roads generally west to point near Aden, thence north (by W. C. Elledge in 1939)

Mill Shoals, 0.9 mi. W. of B. & O. R. R. sta., in E½ sec. 19, T. 3 S., R. 9 E., at SE. corner of steel bridge over Skillet Fork Creek, 2 ft. S. and 2 ft. W. from truss; chiseled square-----	377.89
Mill Shoals, 1.5 mi. W. of, 4.9 mi. E. of Aden, 0.25 mi. W. of Hamilton-White county line, in SE¼ sec. 24, T. 3 S., R. 7 E., on S. side of rd., in root on N. side of 30-in. oak tree, largest and westernmost of group of three trees; copper nail and washer-----	375.26
Aden, 3.6 mi. E. of, on line between secs. 23 and 26, T. 3 S., R. 7 E., 23 ft. S. and 28 ft. W. from junction of T-rd. W., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	373.925
Aden, 3.0 mi. E. of, about 525 ft. E. of W. cor. secs. 23 and 26, T. 3 S., R. 7 E., 150 ft. W. of small steel bridge, 60 ft. S. of dim crossroad, in root on N. side of 30-in. oak tree; copper nail and washer-----	370.63
Aden, 2.8 mi. E. of, near NW. cor. sec. 27, T. 3 S., R. 7 E., 80 ft. S. and 20 ft. E. from crossroads, in root on N. side of 20-in. oak tree; copper nail and washer-----	378.13
Aden, 0.8 mi. E. of, near SW. cor. sec. 21, T. 3 S., R. 7 E., 30 ft. N. and 21 ft. E. from crossroads, in fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	385.047
Aden, 90 ft. N. and 35 ft. E. from junction of T-rd. N., in SW. corner of schoolyard, in root on S. side of 15-in. wild-cherry tree; copper nail and washer-----	398.42
Aden, 0.8 mi. W. thence 0.5 mi. N. from, near center of sec. 19, T. 3 S., R. 7 E., 30 ft. S. and 20 ft. E. from center line of rd. in line with fences E. and W., in root on SW. side of 36-in. oak tree; copper nail and washer-----	399.93

[Continued in Fairfield quadrangle, line 3]

7. From point 1.8 miles west of Blairsville along roads east 0.8 mile, thence generally south to point near Dale (by W. C. Elledge in 1939)

[Continued from McLeansboro quadrangle, line 4]

Blairsville, 1.0 mi. W. of, near NE. cor. sec. 24, T. 4 S., R. 6 E., 67 ft. S. and 28 ft. W. from crossroads, in concrete post; standard tablet stamped "T T 7 C 1939"-----	394.503
Blairsville, 1.0 mi. W. thence 1.0 mi. S. from, near E. cor. secs. 24 and 25, T. 4 S., R. 6 E., 84 ft. S. and 20 ft. W. from crossroads, in root on E. side of 12-in. maple tree; copper nail and washer-----	460.77

170 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Blairsville, 0.8 mi. W. and 2.0 mi. S. from, about 0.2 mi. E. of W. cor. secs. 30 and 31, T. 4 S., R. 7 E., 250 ft. W. of T-rd. S., on S. side of rd., in root on N. side of 20-in. oak tree; copper nail and washer	<i>Feet</i> 492.73
Blairsville, 0.8 mi. W. and 3.0 mi. S. from, 1.2 mi. W. of Thackeray, in NW¼ sec. 6, T. 5 S., R. 7 E., 48 ft. N. and 70 ft. E. from crossing of Louisville & Nashville R. R., 55 ft. E. of corner fence post, inside R. R. right-of-way, in concrete post; standard tablet stamped "T T 6 C 1939"	495.241
Blairsville, 0.8 mi. W. and 1.2 mi. W. from, 1.5 mi. N. and 2.5 mi. E. from McLeansboro, 0.25 mi. E. of center of sec. 1, T. 5 S., R. 6 E., 300 ft. E. of T-rd. S., on S. side of rd., in NE corner of farmyard, in root on W. side of 24-in. cherry tree; copper nail and washer	498.50
McLeansboro, 1.0 mi. N. and 2.5 mi. E. from, about 600 ft. W. of E¼ cor. sec. 12, T. 5 S., R. 6 E., 15 ft. N. and 165 ft. E. from junction of T-rd. N., in root on S. side of 24-in. oak tree, last tree to E.; copper nail and washer	466.04
McLeansboro, 2.8 mi. E. of, near E. cor. secs. 12 and 13, T. 5 S., R. 6 E., about 450 ft. S. of T-rd. W., 35 ft. W. of rd., at edge of timber, in root on NE. side of 12-in. oak tree; copper nail and washer	470.52
McLeansboro, 2.8 mi. SE. of along State Highway 14, T. 5 S., Rs. 6 and 7 E., near cor. secs. 13, 18, 19, and 24, 29 ft. S. and 86 ft. E. from crossroads, 40 ft. E. of corner fence post, in pasture, in concrete post; standard tablet stamped "T T 5 C 1939"	433.430
McLeansboro, 2.8 mi. SE. thence 1.0 mi. S. from, near E. cor. secs. 24 and 25, T. 5 S., R. 6 E., 35 ft. S. and 30 ft. W. from junction of T-rd. W., in root on W. side of 12-in. elm tree; copper nail and washer	427.53
McLeansboro, 2.8 mi. SE. thence 2.2 mi. S. from, about 0.25 mi. S. of E. cor. secs. 25 and 36, T. 5 S., R. 6 E., on E. side of rd., in SW. corner of farmyard, in root on SW. side of 15-in. oak tree; copper nail and washer	396.98
McLeansboro, 2.8 mi. SE. thence 3.7 mi. S. from, near cor. secs. 1, 6, 31 and 36, Tps. 5 and 6 S., Rs. 6 and 7 E., 12 ft. S. and 23 ft. W. from junction of T-rd. E., 4 ft. S. of corner fence post, in concrete post; standard tablet stamped "T T 4 C 1939" ²⁰	378.633
McLeansboro, 3.6 mi. E. and 4.2 mi. S. from, 0.25 mi. W. of E¼ cor. sec. 6, T. 6 S., R. 7 E., 30 ft. N. and 55 ft. E. from junction of T-rd. E., in root on N. side of 15-in. oak tree; copper nail and washer	377.36
McLeansboro, 3.3 mi. E. and 5.2 mi. S. from, 1.7 mi. N. and 0.9 mi. E. from Dale, near center of sec. 7, T. 6 S., R. 7 E., 33 ft. N. of crossroads, in center of rd., in root on W. side of 24-in. tree, northernmost of two cottonwood trees; copper nail and washer	384.84
Dale, 1.5 mi. N. of, about 600 ft. W. of center of sec. 12, T. 6 S., R. 6 E., on N. side of rd., 15 ft. N. of NW. corner of old shed, in root on W. side of 30-in. oak tree; copper nail and washer	380.10

[Jogs into McLeansboro quadrangle, line 5]

No additional bench marks were established in this portion of the line.

[Continued in Eldorado quadrangle, line 6]

²⁰ In 1940 it was reported that this bench mark had been destroyed.

8. From point 1 mile south and 1.2 miles east from Ball along roads alternately west and south to Enfield, thence north and west to point 2 miles south and 1.8 miles west from Blairsville (by W. C. Elledge in 1939)

[Continued from Carmi quadrangle, line 8]

Ball, 1.0 mi. S. thence 1.0 mi. E. from, near cor. secs. 1, 6, 31, and 36, Tps. 4 and 5 S., Rs. 8 and 9 E., on N. side of rd., 10 ft. E. of point in rd. in line with fence S., in root on S. side of 36-in. oak tree; copper nail and washer-----	Feet 410.67
Ball, 1.0 mi. S. of, near S. cor. secs. 35 and 36, T. 4 S., R. 8 E., 20 ft. S. and 33 ft. W. from point in line with rds. E. and N.; standard iron post with bronze cap stamped "Prim Trav Sta No 24 1908"-----	406.450
Ball, 1.2 mi. S. thence 1.0 mi. W. from, 1.5 mi. N. thence 2.0 mi. E. from Enfield, 0.25 mi. S. of N. cor. secs. 2 and 3, T. 5 S., R. 8 E., 20 ft. S. and 140 ft. E. from junction of T-rd. E. at jog in rd., in root on NW. side of 15-in. oak tree; copper nail and washer-----	419.43
Enfield, 1.5 mi. N. thence 1.2 mi. E. from, near center of NW $\frac{1}{4}$ sec. 3, T. 5 S., R. 8 E., 70 ft. S. and 20 ft. E. from crossroads, in root on W. side of 10-in. catalpa tree; copper nail and washer-----	409.30
Enfield, 1.5 mi. N. of, 0.25 mi. S. of N. cor. secs. 4 and 5, T. 5 S., R. 8 E., 15 ft. N. and 25 ft. E. from crossroads, in center of top of head wall of concrete culvert; chiseled square-----	386.83
U. S. C. & G. S. standard disk stamped "K 85 1935"-----	421.626
U. S. C. & G. S. standard disk stamped "J 85 1935"-----	432.985
Enfield, 0.8 mi. N. and 2.2 mi. W. from, 0.25 mi. W. of E. cor. secs. 1 and 12, T. 5 S., R. 7 E., 165 ft. N. and 30 ft. W. from junction of T-rd. N., in root on S. side of 24-in. elm tree; copper nail and washer-----	403.30
Enfield, 1.3 mi. N. and 3.0 mi. W. from, near quarter corner between secs. 1 and 2, T. 5 S., R. 7 E., 3 ft. S. and 21 ft. E. from junction of T-rd. W., in concrete post; standard tablet stamped "T T 18 C 1939"-----	448.338
Enfield, 1.3 mi. N. and 4.0 mi. W. from, 3.0 mi. E. thence 3.5 mi. S. from Blairsville, near quarter corner between secs. 2 and 3, T. 5 S., R. 7 E., 25 ft. S. and 95 ft. E. from crossroads, in root on SE. side of 15-in. oak tree; copper nail and washer-----	441.35
Blairsville, 2.5 mi. S. and 2.8 mi. E. from, 800 ft. W. of E $\frac{1}{4}$ cor. sec. 34, T. 4 S., R. 7 E., about 200 ft. E. of house on N. side of rd., on N. side of rd., in root on SE. side of 30-in. oak tree; copper nail and washer-----	417.26
Blairsville, 2.0 mi. S. thence 2.0 mi. E. from, near SW. cor. sec. 27, T. 4 S., R. 7 E., 78 ft. N. and 24 ft. E. from crossroads, 59 ft. N. of corner fence post, in concrete post; standard tablet stamped "T T 17 C 1939"-----	451.472
Blairsville, 2.0 mi. S. thence 1.0 mi. E. from, 200 ft. E. of W. cor. secs. 28 and 33, T. 4 S., R. 7 E., on summit of hill, on S. side of rd., in root 2 in. under ground on N. side of 12-in. walnut tree; copper nail and washer-----	498.66
Blairsville, 2.0 mi. S. of, 1.2 mi. N. and 0.5 mi. W. from Thackeray, about 600 ft. E. of W. cor. secs. 29 and 32, T. 4 S., R. 7 E., in NE. corner of yard of Cutoff School, on NW. corner of well curb; chiseled square-----	440.38

[Continued in McLeansboro quadrangle, line 6]

EQUALITY QUADRANGLE

[Latitude 37°30'–37°45'; longitude 88°15'–88°30']

GALLATIN, HARDIN, POPE, AND SALINE COUNTIES

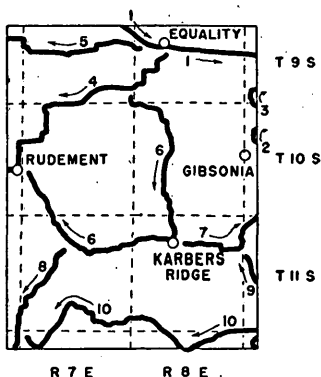


FIGURE 31.—Lines of leveling in Equality quadrangle.

1. From point 2.3 miles northwest of Equality southeast along Louisville & Nashville Railroad (by T. A. Green in 1906; first-order leveling)

[Continued from Eldorado quadrangle, line 5]

Equality, 2.2 mi. NW. of, 3.1 mi. SE. of Grayson, 40 ft. NW. of rd. crossing; standard iron post with bronze cap stamped "1906" and designated "T ₁ "	Feet 362. 473
Equality, 30 ft. NW. of track, on W. side at NW. corner of sta.; standard iron post with bronze cap stamped "1906 362" (recovered in 1913)	361. 702
Equality, 2.7 mi. SE. of, 0.9 mi. NW. of Lawler, 40 ft. N. of tracks, 100 ft. SE. of residence of E. P. Fowler, in fence corner; standard iron post with bronze cap stamped "1906" and designated "V ₁ "	376. 351

[Continued in Shawneetown quadrangle, line 1]

2. From point 0.2 mile northeast of Eagle Ripple Ford across Saline River along road northwest, north, and east (by R. G. Clinite in 1911)

[A jog from Shawneetown quadrangle, line 2]

Eagle Ripple Ford, 0.9 mi. N. of, 0.9 mi. NE. of Gibsonia, 2.2 mi. W. and 0.5 mi. S. from Bowlesville, about 500 ft. E. of center of sec. 7, T. 10 S., R. 9 E., on N. side of rd. at right-angle turn E., 20 ft. E. of fence corner; standard iron post with bronze cap stamped "353"	352. 395
---	----------

[Continued in Shawneetown quadrangle, line 2]

3. From point near west end of Gold Hill along roads northwest, north, and east to point 2.5 miles southwest of Junction (by R. G. Clinite in 1911)

[A jog from Shawneetown quadrangle, line 2]

Junction, 2.9 mi. SW. of, 0.5 mi. E. of Island Ripple Bridge over Saline River, in NW $\frac{1}{4}$ sec. 31, T. 10 S., R. 9 E., 46 ft. NE. of junction of E.-W. rd., on N. side of rd.; standard iron post with bronze cap stamped "354"-----

Feet
354. 230

[Continued in Shawneetown quadrangle, line 2]

4. From Equality along roads alternately south and west by way of Horseshoe to point 0.6 mile west of Rudement (by R. G. Clinite in 1911)

Equality, in SE. part of, at steel bridge over Saline River, on NE. wing wall; chiseled square-----	355. 81
Equality, 0.6 mi. S. of, in NW $\frac{1}{4}$ sec. 20, T. 9 S., R. 8 E., in NW. angle of rd. fork, at SE. corner of yard fence, in root of oak tree; spike-----	358. 34
Equality, 1.3 mi. SW. of, near center of SW $\frac{1}{4}$ sec. 20, T. 9 S., R. 8 E., 60 ft. SW. of angle in rd. from SW. to S., in root of oak tree; spike-----	354. 44
Equality, 2.5 mi. SW. of, 0.25 mi. N. of center of sec. 30, T. 9 S., R. 8 E., in SE. angle of right-angle turn S. in rd., 100 ft. NE. of bridge, in root of small elm tree; nail-----	344. 73
Equality, 3.9 mi. SW. of, 3.9 mi. NW. of Kedron, 0.3 mi. E. of Horseshoe, 0.25 mi. S. of N. cor. secs. 31 and 36, T. 9 S., Rs. 7 and 8 E., at Gallatin-Saline county line, 180 ft. N. of small house, on S. side of rd.; standard iron post with bronze cap stamped "362" (recovered in 1913)-----	361. 863
Horseshoe, near center of NE $\frac{1}{4}$ sec. 36, T. 9 S., R. 7 E., in SE. angle of junction of rd. S., at store of Thomas Blackman, at E. end of platform, in lower step; nail-----	362. 28
Horseshoe, 0.6 mi. W. of, in NW $\frac{1}{4}$ sec. 36, T. 9 S., R. 7 E., in center of rd., in 24-in. oak tree; spike-----	379. 14
Horseshoe, 1.6 mi. SW. of, in NW $\frac{1}{4}$ sec. 35, T. 9 S., R. 7 E., in NW. angle of junction of river rd. and mountain rd., in root of 9-in. white-oak tree; spike-----	357. 26
Horseshoe, 2.8 mi. SW. of, near center of SW $\frac{1}{4}$ sec. 34, T. 9 S., R. 7 E., at junction of rd. N., 85 ft. SE. of Sulphur Spring, on limestone rock; chiseled square-----	365. 79
Horseshoe, 3.2 mi. SW. of, 2.3 mi. N. and 1.7 mi. E. from Somerset, near line between secs. 3 and 34, Tps. 9 and 10 S., R. 7 E., 27 ft. SE. of rd. fork, 1 ft. outside rail fence; standard iron post with bronze cap stamped "Prim Trav Sta No. 21 1911 388"-----	387. 950
Somerset, 2.3 mi. N. of, near S $\frac{1}{4}$ cor. sec. 32, T. 9 S., R. 7 E., near NW. corner of right-angle turn from W. to S. in rd., in root of oak tree; spike-----	357. 09
Somerset, 2.0 mi. N. and 0.3 mi. W. from, in NW $\frac{1}{4}$ sec. 5, T. 10 S., R. 7 E., at bridge over South Fork of Saline River, on NE. wing wall; chiseled circle-----	350. 56
Somerset, 1.3 mi. N. and 0.3 mi. W. from, 0.25 mi. E. of W. cor. secs. 5 and 8, T. 10 S., R. 7 E., at junction of rd. W., 5 ft. W. of center line of rd., on stone; chiseled square-----	398. 17
Somerset, 0.8 mi. N. thence 0.3 mi. W. from, 2.0 mi. N. and 1.5 mi. E. from Rudement, 0.25 mi. W. of center of sec. 8, T. 10 S., R. 7 E., on S. side of E.-W. rd., opposite rd. N., 7 ft. E. of fence corner; standard iron post with bronze cap stamped "374"-----	373. 840

Rudement, 1.5 mi. N. thence 1.3 mi. E. from, near SE. cor. sec. 7, T. 10 S., R. 7 E., in NW. corner of right-angle turn from S. to W. in rd., in root of 20-in. elm tree; nail-----	<i>Feet</i> 369.28
Rudement, 1.5 mi. N. of, 0.25 mi. W. of E. cor. secs. 12 and 13, T. 10 S., R. 6 E., at junction of T-rd. S., 18 in. E. of stone marking sixteenth corner, in root of 19-in. gum tree; nail-----	356.29
Rudement, 1.0 mi. N. of, 0.25 mi. E. of center of sec. 13, T. 10 S., R. 6 E., on W. side of rd., in root of oak tree; nail-----	361.73
Rudement, in NE. angle of crossroads, in SW. corner of schoolyard; standard iron post with bronze cap stamped "Prim Trav Sta. No 8 1911 399" (recovered in 1921)-----	398.695

[Continued in Harrisburg quadrangle, line 1]

5. From Equality generally west along roads to point 2.1 miles east of Harrisburg (by R. G. Clinite in 1913)

Equality, 2.4 mi. W. of, 0.25 mi. N. of SW. cor. sec. 13, T. 9 S., R. 7 E., in NE. angle of junction of rd. N., 18 in. S. of corner fence post, on stone; chiseled circle-----	392.93
Equality, 3.4 mi. W. of, 0.25 mi. N. of SW. cor. sec. 14, T. 9 S., R. 7 E., in NE. angle of junction of N-S. rd., 4 ft. E. of corner fence post, 1 ft. S. of fence; standard iron post with bronze cap stamped "1913 374"-----	373.595
Equality, 6.2 mi. W. of, 4.6 mi. E. and 0.7 mi. S. from Harrisburg, 0.3 mi. N. of East Big Ridge School, 0.25 mi. N. of center of sec. 20, T. 9 S., R. 7 E., opposite T-rd. S., 110 ft. NW. of store building, 19 in. S. of rd. fence; standard iron post with bronze cap stamped "1913 400"-----	399.300
Harrisburg, 3.0 mi. E. of Saline County courthouse, at quarter corner between secs. 13 and 17, T. 9 S., R. 6 E., at junction of T-rd. W., on stone marking quarter corner; chiseled square-----	367.37
Harrisburg, 2.2 mi. E. of, 0.25 mi. W. of center of sec. 13, T. 9 S., R. 6 E., 27 ft. NE. of junction of T-rd. N., 170 ft. NE. of 36-in white-oak tree; standard iron post with bronze cap stamped "1913 362"-----	361.284

[Continued in Harrisburg quadrangle, line 2]

6. From point 3.9 miles southwest of Equality along roads south and southeast by way of Kedron to Karbers Ridge, thence west and northwest by way of Herod to Rudement (by R. G. Clinite and F. B. Barrett in 1913)

Kedron, 3.3 mi. NW. of, near center of SW $\frac{1}{4}$ sec. 36, T. 10 S., R. 7 E., 100 ft. E. of rd. fork, at SE. corner of small iron bridge, in top of iron post rail; top of bolt-----	363.72
Kedron, 2.8 mi. NW. of, about 800 ft. S. of NE. cor. sec. 1, T. 10 S., R. 7 E., 23 ft. N. and 7 ft. W. from junction of Gallatin-Saline county-line rd. and T-rd. E.; standard iron post with bronze cap stamped "Prim Trav Sta No 20 1911 374"-----	373.374
Kedron, 0.5 mi. N. thence 0.3 mi. W. from, near N $\frac{1}{4}$ cor. sec. 8, T. 10 S., R. 8 E., on S. side of rd., opposite rd. N., 10 ft. S. and 20 ft. E. from stone marking quarter corner, in root on N. side of tree; copper nail-----	416.76
Kedron, opposite T-rd. W., 60 ft. NW. of church, in SW. corner of lot owned by S. P. Graves, 20 in. inside fence; standard iron post with bronze cap stamped "1913 384"-----	383.155

Kedron, 2.1 mi. S. of, 0.3 mi. NE. of center of sec. 20, T. 10 S., R. 8 E., 15 ft. NW. of crossroads, on large rock; chiseled square...	Feet 380. 87
Kedron, 3.1 mi. S. of, 3.4 mi. NW. of Karbers Ridge, 0.3 mi. N. of Moore store, 0.25 mi. N. of center of sec. 29, T. 10 S., R. 8 E., on E. side of rd., 4 ft. NE. of corner of woven wire fence in woodland; standard iron post with bronze cap stamped "1913 596"...	595. 156
Karbers Ridge, in NW. angle of crossroads, 10 ft. N. and 2 ft. E. from SE. corner of yard of F. C. Karber; standard iron post with bronze cap stamped "1913 605"-----	603. 930
Karbers Ridge, 1.9 mi. W. of, 0.25 mi. S. of N $\frac{1}{4}$ cor. sec. 7, T. 11 S., R. 8 E., on S. side of rd., at junction of T-rd. N., on sandstone rock; highest point-----	527. 60
Karbers Ridge, 2.4 mi. W. of, in NW $\frac{1}{4}$ sec. 7, T. 11 S., R. 8 E., 10 ft. N. of rd., in front of residence of Richard Ledbetter, in root of oak tree; copper nail and washer-----	544. 94
Karbers Ridge, 3.1 mi. W. of, 3.2 mi. E. of Herod, near center of sec. 12, T. 11 S., R. 7 E., at T-rd. N., 35 ft. W. of two mail boxes, 2 ft. from rail fence; standard iron post with bronze cap stamped "1913 519"-----	518. 686
Herod, 2.8 mi. SE. of, in SE $\frac{1}{4}$ sec. 11, T. 11 S., R. 7 E., at junction of rds. E., W., SW., and S., on stone; highest point-----	486. 55
Herod, 1.9 mi. SE. of, in SW $\frac{1}{4}$ sec. 11, T. 11 S., R. 7 E., 50 ft. E. of crossing of Rose Creek, 10 ft. N. of rd., in root of large maple tree; copper nail and washer-----	394. 79
Herod, 100 ft. W. of crossroads, 2 ft. SW. of corner of wagon scales, in root of maple tree; copper nail and washer-----	423. 53
Herod, 1.4 mi. NW. of, 3.9 mi. SE. of Rudement, E. of center of sec. 5, T. 11 S., R. 7 E., 50 ft. NE. of right-angle turn from W. to N. in rd.; standard iron post with bronze cap stamped "1913 475"-----	473. 782
Rudement, 2.8 mi. SE. of, W. of center of sec. 32, T. 10 S., R. 7 E., at rd. SW. to house, on large sandstone rock; highest point-----	536. 48
Rudement, 2.0 mi. SE. of, 640 ft. N. of SE. cor. sec. 30, T. 10 W., R. 7 E., on SW. side of rd., in root of large elm tree; copper nail and washer-----	607. 69
7. From Karbers Ridge along roads southeast to Sparks Hill, thence northeast to point 3.7 miles southwest of Saline Mines (by F. B. Barrett in 1913)	
Karbers Ridge, 2.4 mi. SE. of, NE. of center of sec. 11, T. 11 S., R. 8 E., 0.25 mi. W. of Rogers residence, on N. side of rd., in root of maple tree; copper nail and washer-----	531. 91
Karbers Ridge, 3.1 mi. SE. of, 0.9 mi. W. of Sparks Hill, 0.3 mi. E. of Philadelphia Church, near W $\frac{1}{4}$ cor. sec. 12, T. 11 S., R. 8 E., in SW. angle of junction of T-rd. S.; standard iron post with bronze cap stamped "1913 519" ²¹ -----	518. 045
Sparks Hill, 60 ft. N. of post office, 6 ft. N. of telephone pole, on limestone rock; highest point-----	608. 98
Sparks Hill, 0.7 mi. N. of, in NE $\frac{1}{4}$ sec. 12, T. 11 S., R. 8 E., 500 ft. N. of lane W. to house, on E. side of rd., in root of elm tree; copper nail and washer-----	698. 08

²¹ In 1934 this bench mark was moved 32 ft. north of this location and reset at the same elevation.

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Sparks Hill, 1.5 mi. NE. of, in NW¼ sec. 6, T. 11 S., R. 9 E., in front of first house E. of range line, on N. side of rd., just W. of mail box, on sandstone rock; chiseled square-----	<i>Feet</i> 626.88
Sparks Hill, 2.0 mi. NE. of, 4.0 mi. SW. of Saline Mines, 0.2 mi. N. and 500 ft. E. from center of sec. 6, T. 11 S., R. 9 E., 20 ft. SE. of SE. corner of garden of Mrs. Moore, on E. side of rd.; standard iron post with bronze cap stamped "1913 633"-----	632.875

[Continued in Shawneetown quadrangle, line 4]

8. From Herod southwest and south along road to point 3 miles south of Hartsville (by S. R. Archer in 1913)

Herod, 0.8 mi. SW. of, 0.22 mi. NE. of crossing of line between secs. 9 and 16, T. 11 S., R. 7 E., 20 ft. S. of private rd. E., 50 ft. S. of branch from W., on E. side of rd., at fence line E., in root on W. side of 12-in. oak tree; spike-----	450.76
Herod, 1.1 mi. SW. of, 0.2 mi. E. of SW. cor. sec. 9, T. 11 S., R. 7 E., on N. side of rd., 60 ft. W. of drain from N., in trunk between southernmost two of cluster of four 4-in. oak trees; spike-----	467.74
Herod, 1.7 mi. SW. of, 60 ft. S. of N. side SE¼ sec. 17, T. 11 S., R. 7 E., on N. bank of branch, on E. side of rd., in bare root on rd. side of 12-in. poplar tree; spike-----	450.20
Herod, 2.7 mi. SW. of, 1.7 mi. NE. of Hartsville, near center of NW¼ sec. 20, T. 11 S., R. 7 E., 250 ft. N. of J. B. Hart store, on E. side of rd., in root on rd. side of 24-in. walnut tree; spike-----	487.54
Hartsville, 0.2 mi. N. of, about 500 ft. N. of center of NW¼ sec. 30, T. 11 S., R. 7 E., on W. side of N-S. rd., at fence line, in root on rd. side of 4-in. tree; spike-----	541.04
Hartsville, 500 ft. N. of S. side NW¼ sec. 30, T. 11 S., R. 7 E., on E. side of rd., 40 ft. S. and 50 ft. W. from gate to front yard of John Johnson, at fence line; standard iron post with bronze cap stamped "504"-----	503.112
Hartsville, 0.6 mi. SW. of, 0.25 mi. N. of S. cor. secs. 25 and 30, T. 11 S., Rs. 6 and 7 E., on stone marking sixteenth corner; chiseled square-----	507.94
Hartsville, 1.3 mi. SW. of, 0.2 mi. NW. of E¼ cor. sec. 36, T. 11 S., R. 6 E., 60 ft. W. of bend E. in rd., at junction of private rd. W., 30 ft. E. of stream crossing, 20 ft. N. of S. fence line, in root on NE. side of 30-in. oak tree; spike-----	651.82
Hartsville, 2.0 mi. SW. of, about 650 ft. W. of SE. cor. sec. 36, T. 11 S., R. 6 E., at junction of third-class rd. W., in center of rd., in oak tree; spike-----	717.0
Hartsville, 2.2 mi. SW. of, 2.8 mi. NW. of Lusk, in NE¼ sec. 1, T. 12 S., R. 6 E., near Grand Pierre School and Church, 150 ft. E. of junction of T-rd. E., on N. side of rd., at SW. corner of cemetery; standard iron post with bronze cap stamped "748" (recovered in 1914)-----	747.558

[Continued in Golconda quadrangle; see line 1]

9. From point 2 miles southeast of Sparks Hill northwest along road to Sparks Hill (by R. G. Clinite in 1914)

[Continued from Shawneetown quadrangle, line 5]

Sparks Hill, 0.8 mi. SE. of, in NW¼ sec. 18, T. 11 S., R. 9 E., on SW. side of rd., on NE. bank of creek, 450 ft. NW. of farmhouse, in root of 14-in. sycamore tree; spike-----	407.04
---	--------

10. From point 1.4 miles east of Jackson Store west 1.7 miles along township-line road, thence alternately southwest and northwest along other roads to point 2.2 miles southwest of Hartsville (by R. G. Clinite in 1914)

[Connects with line 5 in Shawneetown quadrangle]

Jackson Store, 50 ft. N. of, W. of quarter corner between secs. 1 and 36, Tps. 11 and 12 S., R. 8 E., at center of crossroads, in root of 16-in. maple tree; spike-----
 Feet
 411. 64

Jackson Store, 1.5 mi. SW. of, E. of W $\frac{1}{4}$ cor. sec. 2, T. 12 S., R. 8 E., 300 ft. N. of rd. fork, 150 ft. N. of store of George Pankey, on E. side of rd., 7 ft. E. of fence, in limestone ledge; aluminum tablet stamped "379"-----
 378. 819

[Jogs into Golconda quadrangle, line 5]

Hicks, 3.5 mi. SE. of, about 0.3 mi. SE. of Wolrab Mill, 0.25 mi. S. of NE. cor. sec. 5, T. 12 S., R. 8 E., in NW. angle of rd. junction, 140 ft. E. of residence of Henry Parton, in root of 26-in. walnut tree; spike-----
 376. 20

Hicks, 1.9 mi. SE. of, in NE $\frac{1}{4}$ sec. 31, T. 11 S., R. 8 E., 15 ft. S. and 33 ft. W. from rd. fork, 7 ft. NW. of 12-in. walnut tree, in 22- by 10- by 13-in. limestone rock, set flush with ground; aluminum tablet stamped "434"-----
 433. 357

Reference mark, in NW. angle of rd. fork, in root on E. side of 40-in. sycamore tree; spike-----
 433. 01

Hicks, 1.9 mi. SE. thence 1.0 mi. W. from, 0.3 mi. NE. of Hubbard Mill, 0.2 mi. S. of NE. cor. sec. 36, T. 11 S., R. 7 E., 30 ft. N. of rd. fork, 80 ft. W. of house, in root of 36-in. oak tree; spike-----
 536. 50

Hicks, 2.5 mi. by direct rd. SW. of, 1.0 mi. SE. of Hubbard Store, 0.25 mi. W. of center of sec. 36, T. 11 S., R. 7 E., in NW. angle of crossroads, 5 ft. E. of corner fence post, in root of 12-in. oak tree; spike-----
 505. 22

Hicks, 2.5 mi. SW. thence 1.5 mi. W. from, 0.9 mi. SE. of Pierce Mines, near quarter corner between secs. 34 and 35, T. 11 S., R. 7 E., just W. of Hardin-Pope county line, 35 ft. N. and 10 ft. E. from rd. junction, 6 ft. N. of 14-in. oak tree; in 27- by 11- by 9-in. sandstone rock; aluminum tablet stamped "460"-----
 459. 800

Big Grand Pierre Creek; surface of water June 18, 1914-----
 357. 7

Pierce Mines, 1.0 mi. NW. of, 4.4 mi. NE. of Lusk, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 28, T. 11 S., R. 7 E., 100 ft. E. of rd. fork, on S. side of rd., on sandstone ledge; chiseled square-----
 378. 86

Lusk, 3.0 mi. NE. of, 0.25 mi. W. of center of sec. 33, T. 11 S., R. 7 E., 90 ft. E. of Sodom Church, at junction of second-class rd. E., in root of 12-in. oak tree; spike-----
 496. 83

Lusk, 2.0 mi. NW. of, N. of center of sec. 6, T. 12 S., R. 7 E., at summit of hill, 350 ft. E. of residence of T. M. Benham, opposite rd. W., in root of 12-in. oak tree; spike-----
 821. 10

[Latitude 38°15'–38°30'; longitude 88°15'–88°30']

HAMILTON, WAYNE, AND WHITE COUNTIES

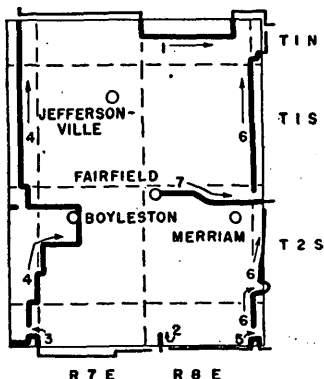


FIGURE 32.—Lines of leveling in Fairfield quadrangle.

1. From point 1.9 miles south and 0.5 mile west from Enterprise along roads south 0.6 mile, east 5.7 miles, and north 0.6 mile (by W. C. Elledge in 1939).

[Continued from Cisne quadrangle, line 7]

Enterprise, 2.5 mi. S. thence 0.5 mi. W. from, 2.0 mi. E. thence 3.2 mi. N. from Jeffersonville, near W $\frac{1}{4}$ cor. sec. 30, T. 1 N., R. 8 E., 20 ft. S. and 30 ft. E. from junction of T-rd. W., in root on NW. side of 12-in. walnut tree; copper nail and washer-----	<i>Feet</i> 420. 36
Jeffersonville (Geff post office), 3.0 mi. E. thence 3.2 mi. N. from, near W $\frac{1}{4}$ cor. sec. 29, T. 1 N., R. 8 E., in SE. angle of crossroads, in yard of Union School, on NW. corner of concrete wall curb; chiseled square-----	431. 84
Jeffersonville, 4.0 mi. E. and 3.2 mi. N. from, near W $\frac{1}{4}$ cor. sec. 28, T. 1 N., R. 8 E., 22 ft. N. and 140 ft. E. from crossroads, 2 ft. S. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "21 E 1939"-----	412. 115
Jeffersonville, 5.2 mi. E. and 3.2 mi. N. from; about 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 27, T. 1 N., R. 8 E., at steel bridge over Elm River, on NE. wing wall; chiseled square-----	396. 90
Jeffersonville, 6.1 mi. E. and 3.2 mi. N. from, 1.3 mi. S. and 3.1 mi. W. from Mount Erie, 535 ft. E. of T-rd. N. at W $\frac{1}{4}$ cor. sec. 26, T. 1 N., R. 8 E., on N. side of rd., at fence line, in root on S. side of 24-in. oak tree; copper nail and washer-----	392. 25
Mount Erie, 1.3 mi. S. and 2.2 mi. W. from, near E $\frac{1}{4}$ cor. sec. 26, T. 1 N., R. 8 E., 30 ft. S. and 20 ft. W. from crossroads, 15 ft. S. and 2 ft. E. from corner fence post, in concrete post; standard tablet stamped "22 E 1939"-----	404. 360

Mount Erie, 1.3 mi. S. and 1.5 mi. W. from, 0.25 mi. E. of center of sec. 25, T. 1 N., R. 8 E., 85 ft. N. and 20 ft. E. from junction of T-rd. W., in root on SW. side of 15-in. wild-cherry tree; copper nail and washer -----	Feet 426.49
[Continued in Olney quadrangle, line 11 ²²]	
2. North along Baltimore & Ohio Railroad from Mill Shoals (by W. C. Elledge in 1939)	
[Continued from Enfield quadrangle, line 4]	
U. S. C. & G. S. standard disk stamped "R 85 1935" -----	379.825
3. From point near Aden along roads north and west in southwest corner of quadrangle (by W. C. Elledge in 1939)	
[Continued from Enfield quadrangle, line 6]	
Aden, 1.0 mi. N. and 1.0 mi. W. from, 4.0 mi. E. thence 1.0 mi. S. from Mayberry, near SE. cor. sec. 13, T. 3 S., R. 6 E., at Hamilton-Wayne county line, 21 ft. N. and 21 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	412.571
[Continued in Wayne City quadrangle, line 4]	
4. From point 1 mile north and 1 mile west from Aden along roads alternately north and east to Boyleston, thence north and west to crossroads 0.7 mile south and 2.7 miles west from Cisne (by W. C. Elledge in 1939)	
Mayberry, 4.0 mi. E. thence 0.2 mi. S. from, near NE. cor. sec. 13, T. 3 S., R. 6 E., 1,075 ft. S. and 25 ft. W. from crossroads, 5 ft. W. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "2 8 1934" -----	394.050
Mayberry, 4.0 mi. E. thence 1.0 mi. N. from, 5.3 mi. S. and 2.0 mi. W. from Boyleston, 6.0 mi. W. of Barnhill, near W. cor. secs. 6 and 7, T. 3 S., R. 7 E., about 0.5 mi. N. of sawmill just N. of small creek, on E. side of rd., in root on N. side of 24-in. double oak tree; copper nail and washer -----	381.22
Boyleston, 4.2 mi. S. and 1.8 mi. W. from, on line between secs. 31 and 36, T. 2 S., Rs. 6 and 7 E., 235 ft. N. and 17 ft. E. from center of bridge over Skillet Fork, at residence of Peter B. Reed, at NW. corner of yard fence, in concrete post; standard tablet stamped "T T 34 C 1939" -----	384.663
Boyleston, 3.6 mi. S. and 1.8 mi. W. from, near cor. secs. 25, 30, 31, and 36, T. 2 S., Rs. 6 and 7 E., 150 ft. S. of junction of private T-rd. W., on E. side of rd., in root on N. side of 20-in. maple tree; copper nail and washer -----	383.54
Boyleston, 2.5 mi. S. and 1.6 mi. W. from, 0.25 mi. E. of W. cor. secs. 19 and 30, T. 2 S., R. 7 E., 200 ft. S. of crossroads, in center of rd., in root on E. side of 36-in. oak tree; copper nail and washer -----	392.82
Boyleston, 1.5 mi. S. thence 1.6 mi. W. from, about 5.5 mi. E. of Wayne City, 1,140 ft. E. of W. cor. secs. 18 and 19, T. 2 S., R. 7 E., 18 ft. N. and 13 ft. W. from junction of T-rd. S., in concrete post; standard tablet stamped "T T 33 C 1939" -----	400.881

²² This line cuts the southeast corner of Cisne quadrangle, but no bench marks were set in that portion of the line.

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Boyleston, 1.5 mi. S. thence 0.8 mi. W. from, 0.25 mi. E. of W. cor. secs. 17 and 20, T. 2 S., R. 7 E., in yard of Shorb School, directly in front of building, in root on SW. side of 40-in. oak tree; copper nail and washer-----	Feet 408.62
Boyleston, 1.5 mi. S. of, about 500 ft. N. of S. cor. secs. 16 and 17, T. 2 S., R. 7 E., about 600 ft. N. of junction of T-rd. E., on W. side of rd., in root on E. side of lone 20-in. cottonwood tree; copper nail and washer-----	394.80
Boyleston, 150 ft. N. of crossing of Southern Ry., on W. head wall of concrete culvert; chiseled square-----	434.65
U. S. C. & G. S. standard disk stamped "R 108 1935"-----	441.968
Boyleston, 0.5 mi. N. of, 4.5 mi. W. of Fairfield, near NE. cor. sec. 8, T. 2 S., R. 7 E., 20 ft. S. and 280 ft. W. from crossing of State Highway 14, on S. head wall of concrete culvert; chiseled square-----	449.30
Boyleston, 0.5 mi. N. thence 1.0 mi. W. from, near cor. secs. 5, 6, 7, and 8, T. 2 S., R. 7 E., 130 ft. W. of center line of State Highway 14, in line with fences N. and S., on N. head wall of concrete culvert; chiseled square-----	413.00
Boyleston, 0.5 mi. N. thence 1.7 mi. W. from, 3.0 mi. E. thence 0.5 mi. N. from Sims, near SE. cor. sec. 1, T. 2 S., R. 6 E., 28 ft. N. and 78 ft. W. from crossroads, 60 ft. W. of corner fence post, in concrete post; standard tablet stamped "T T 32 C 1939"-----	415.144
Sims, 3.0 mi. E. thence 1.5 mi. N. from, near NE. cor. sec. 1, T. 2 S., R. 6 E., 300 ft. W. of T-rd. S., on S. side of rd, at NW. corner of farmyard, in root on N. side of 20-in. maple tree; copper nail and washer-----	420.14
Sims, 2.0 mi. E. and 1.5 mi. N. from, 4.8 mi. W. thence 4.0 mi. S. from Jeffersonville, near SW. cor. sec. 36, T. 1 S., R. 6 E., 30 ft. N. and 12 ft. E. from junction of T-rd. N., on S. end of E. head wall of concrete culvert; chiseled square-----	408.99
Jeffersonville, 4.8 mi. W. thence 3.0 mi. S. from, 2.5 mi. N. and 2.8 mi. W. from Boyleston, near NW. cor. sec. 36, T. 1 S., R. 6 E., 13 ft. S. and 21 ft. E. from crossroads, 20 ft. S. of corner fence post, in concrete post; standard tablet stamped "T T 35 C 1939"-----	421.056
Jeffersonville, 4.8 mi. W. thence 2.0 mi. S. from, near NW. cor. sec. 25, T. 1 S., R. 6 E., 35 ft. S. and 40 ft. E. from crossroads, in root on N. side of 18-in. hickory tree; copper nail and washer-----	439.75
Jefferson, 4.8 mi. W. thence 1.0 mi. S. from, near SW. cor. sec. 13, T. 1 S., R. 6 E., 480 ft. N. of T-rd. E., on E. side of rd., in SW. corner of yard of Willis School, in root on W. side of 12-in. wild-cherry tree; copper nail and washer-----	449.36
Jeffersonville, 4.8 mi. W. of, near SE. cor. sec. 11, T. 1 S., R. 6 E., 55 ft. N. and 25 ft. W. from crossroads, 25 ft. N. of corner fence post, in concrete post; standard tablet stamped "T T 36 C 1939"-----	469.367
Jeffersonville, 4.8 mi. W. thence 1.0 mi. N. from, near SW. cor. sec. 1, T. 1 S., R. 6 E., 60 ft. N. and 60 ft. E. from crossroads, in root on S. side of 20-in. oak tree; copper nail and washer-----	486.49
Jeffersonville, 4.8 mi. W. thence 2.2 mi. N. from, 2.7 mi. W. thence 2.8 mi. S. from Cisne, about 0.2 mi. N. of S. cor. secs. 35 and 36, T. 1 N., R. 6 E., on W. head wall of concrete culvert; chiseled square--	476.54

Cisne, 2.7 mi. W. thence 1.7 mi. S. from, 0.25 mi. N. of SW. cor. sec. 25, T. 1 N., R. 6 E., in NE. corner of crossroads, 10 ft. N. and 30 ft. W. from SW. corner of Watson School, in root on W. side of 30-in. oak tree; copper nail and washer----- *Feet*
476.79

[Connects with line 7 in Cisne quadrangle]

5. Along roads just north of Burnt Prairie (by W. C. Elledge in 1939)

[A jog from Enfield quadrangle, line 5]

Burnt Prairie (Liberty), 0.3 mi. N. of, on Wayne-White county line, at turn in rd.; standard iron post with bronze cap stamped "Prim Trav. Sta No 23 1908"----- 405.531

[Continued in Enfield quadrangle, line 5]

6. From point 0.3 mile north of Burnt Prairie along roads generally north to point near center of sec. 31, T. 1 N., R. 9 E. (by W. C. Elledge in 1939)

Burnt Prairie, 1.0 mi. N. of, 6.0 mi. E. thence 1.5 mi. S. from Barnhill, near quarter corner between secs. 13 and 18, T. 3 S., Rs. 8 and 9 E., 4 ft. S. and 20 ft. E. from center line of rd. in line with fence E., in concrete post; U. S. C. & G. S. and State Survey standard disk----- 415.335

Barnhill, 6.0 mi. E. thence 0.3 mi. S. from, 1,028 ft. S. of cor. secs. 1, 6, 7, and 12, T. 3 S., Rs. 8 and 9 E., 4 ft. N. and 4 ft. E. from yard gate at farmhouse of R. H. Merritt, in concrete post; U. S. C. & G. S. and State Survey standard disk----- 453.578

Barnhill, 6.0 mi. E. of, near cor. secs. 1, 6, 7, and 12, T. 3 S., Rs. 8 and 9 E., about 500 ft. N. of crossroads, on E. side of rd., 30 ft. S. and 30 ft. W. from SW. corner of old church, in concrete post; U. S. C. & G. S. and State Survey standard disk----- 430.018

Barnhill, 6.0 mi. E. thence 1.2 mi. N. from, 1.0 mi. E. and 4.0 mi. S. from Merriam, about 500 ft. N. of cor. secs. 1, 6, 31, and 36, Tps. 2 and 3 S., Rs. 8 and 9 E., about 600 ft. S. of T-rd. E., 55 ft. N. and 27 ft. W. from center of small bridge, in root on SE. side of 20-in. maple tree; copper nail and washer----- 408.89

[Jogs into Golden Gate quadrangle, line 3]

Merriam, 2.9 mi. S. and 1.5 mi. E. from, about 500 ft. N. of S $\frac{1}{4}$ cor. sec. 30, T. 2 S., R. 9 E., at steel bridge over Pond Creek, on NE. wing wall; chiseled square----- 382.58

Merriam, 2.2 mi. S. and 1.5 mi. E. from, 2.0 mi. S. and 2.5 mi. W. from Golden Gate, near quarter corner between secs. 19 and 30, T. 2 S., R. 9 E., 70 ft. N. and 21 ft. W. from junction of T-rd. E., in concrete post; standard tablet stamped "T T 25 C 1939"----- 410.730

[Jogs into Golden Gate quadrangle, line 4]

Fairfield, 5.2 mi. E. of, near cor. secs. 1, 6, 7, and 12, T. 2 S., Rs. 8 and 9 E., 25 ft. N. and 20 ft. E. from crossroads, on E. head wall of concrete culvert; chiseled square----- 468.57

Fairfield, 5.2 mi. E. thence 1.0 mi. N. from, near cor. secs. 1, 6, 31, and 36, Tps. 1 and 2 S., Rs. 8 and 9 E., 250 ft. N. of T-rd. W., on W. side of small bridge, in center of curb; chiseled square----- 390.58

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Fairfield, 5.2 mi. E. thence 2.5 mi. N. from, 8.0 mi. E. and 2.5 mi. S. from Jeffersonville, near quarter corner between secs. 25 and 30, T. 1 S., Rs. 8 and 9 E., in SE. corner of yard of Thomas Prairie School, diagonally across rd. from Gather store, 50 ft. N. and 20 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	Feet 446.178
Jeffersonville, 8.0 mi. E. and 2.3 mi. S. from, 960 ft. N. of crossroads and quarter corner between secs. 25 and 30, T. 1 S., Rs. 8 and 9 E., on W. side of rd., 2 ft. W. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	438.324
Jeffersonville, 8.0 mi. E. and 2.0 mi. S. from, 0.5 mi. N. of Thomas Prairie, near cor. secs. 19, 24, 25, and 30, T. 1 S., Rs. 8 and 9 E., 70 ft. N. and 22 ft. W. from junction of T-rd. W., in concrete post; standard tablet stamped "T T 46 C 1939"-----	415.412
Jeffersonville, 8.0 mi. E. and 1.0 mi. S. from, near cor. secs. 13, 18, 19, and 24, T. 1 S., Rs. 8 and 9 E., at center of W. edge of concrete floor of small bridge; chiseled square-----	382.32
Jeffersonville, 8.0 mi. E. and 0.2 mi. S. from, 0.25 mi. S. of cor. secs. 7, 12, 13, and 18, T. 1 S., Rs. 8 and 9 E., at large steel bridge over Elm Creek, on SW. wing wall; chiseled square-----	385.81
Jeffersonville, 8.0 mi. E. and 1.0 mi. N. from, 3.5 mi. N. of Thomas Prairie, near cor. secs. 1, 6, 7, and 12, T. 1 S., Rs. 8 and 9 E., 8 ft. N. and 18 ft. W. from point of intersection of rds. from E. and S., 12 ft. S. of corner fence post, in concrete post; standard tablet stamped "T T 47 C 1939"-----	391.641
Jeffersonville, 8.2 mi. E. and 2.0 mi. N. from, 2.7 mi. S. and 1.0 mi. W. from Mount Erie, 0.25 mi. N. and 0.25 mi. E. from SW. cor. sec. 31, T. 1 N., R. 9 E., 15 ft. N. and 24 ft. E. from intersection of rd tangents E. and S., in root on NW. side of 20-in. wild-cherry tree; copper nail and washer-----	440.32

[Continued in Golden Gate quadrangle, line 5]

7. From Fairfield generally east along State Highway 15 to point about 0.7 mile north and 1.4 miles east from Merriam (by W. C. Elledge in 1939)

U. S. C. & G. S. standard disk stamped "X 85 1935"-----	488.173
U. S. C. & G. S. standard disk stamped "W 85 1935"-----	447.972
U. S. C. & G. S. standard disk stamped "N 108. 1935"-----	431.371
Fairfield, near E. edge of, about 200 ft. W. of T-rd. N. along E. side of cemetery, on NE. wing wall of concrete bridge; chiseled square--	416.50
Fairfield, 1.5 mi. E. of, near center of sec. 4, T. 2 S., R. 8 E., on NE. wing wall of concrete bridge over creek; chiseled square-----	416.30
Fairfield, 2.7 mi. E. of, on quarter line of sec. 3, T. 2 S., R. 8 E., 43 ft. N. and 75 ft. W. from crossroads, 5 ft. W. of power-line pole, in concrete post; standard tablet stamped "T T 27 C 1939"-----	491.692
Fairfield, 3.2 mi. E. of, about 0.2 mi. N. of cor. secs. 2, 3, 10, and 11, T. 2 S., R. 8 E., 20 ft. S. and 10 ft. W. from junction of T-rd. S., on W. head wall of concrete culvert; chiseled square-----	461.51
Fairfield, 4.2 mi. E. of, 0.7 mi. N. of Merriam, near SW. cor. sec. 1, T. 2 S., R. 8 E., 15 ft. N. and 145 ft. E. from crossroads, in center of top of N head wall of concrete culvert; chiseled square--	437.36

[Continued in Golden Gate quadrangle, line 6]

GALATIA QUADRANGLE

[Latitude 37°45'–38°00'; longitude 88°30'–88°45']

FRANKLIN, HAMILTON, SALINE, AND WILLIAMSON COUNTIES

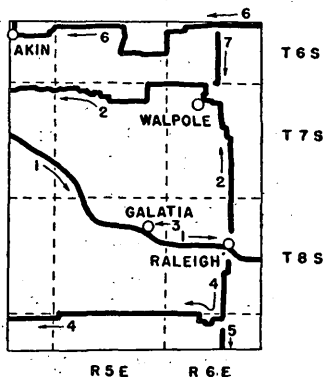


FIGURE 33.—Lines of leveling in Galatia quadrangle.

1. From point 0.7 mile southeast of Thompsonville generally south-east along Illinois Central Railroad to point 3.6 miles west of Eldorado (by T. A. Green in 1906; first-order leveling)

[Continued from West Frankfort quadrangle, line 1]

West End, 75 ft. N. of sta., 23 ft. W. of SE. corner of West End Rolling Mill, in twenty-first course of bricks; aluminum tablet stamped "1906 429" and designated "M ₁ "	Feet 429.930
Rileyville, 0.7 mi. SE. of, 3.0 mi. W. of Galatia, at point where county rd. jogs N. from track, 500 ft. NW. of house on S. side of track, 30 ft. N. of track, 30 ft. NW. of cattle guard, in fence corner; standard iron post with bronze cap stamped "1906 392" and designated "N ₁ "	392.647
Galatia, 0.3 mi. NW. of sta., 25 ft. N. of track, at Galatia Rolling Mill, in SW side of foundation; aluminum tablet stamped "1906 397" and designated "O ₁ " (reported destroyed)	397.611
Galatia, 3.2 mi. SE. of, 1.4 mi. W. of Raleigh, 130 ft. E. of R. R. bridge over stream, 20 ft. S. of milepost "East St. Louis-114; Eldorado-7," just S. of fence post, in field; standard iron post with bronze cap designated "P ₁ "	393.828
Raleigh, 1.6 mi. SE. of, 4.0 mi. W. of Eldorado, 70 ft. W. of milepost "East St. Louis-117; Eldorado-4," 62 ft. S. of track, in field owned by Mrs. Liza Elder; standard iron post with bronze cap stamped "1906 390" and designated "Q ₁ "	390.524

[Continued in Eldorado quadrangle, line 5]

2. From point 1.4 miles west of Raleigh east along Illinois Central Railroad to Raleigh, thence generally north and west by way of Walpole to point 2 miles north and 0.5 mile east from Thompsonville (by F. C. Higley in 1906)

Raleigh, 2.5 mi. N. of, near N¼ cor. sec. 3, T. 8 S., R. 6 E., in SE. angle of junction of township-line rd.; standard iron post with bronze cap stamped "1906 400"	401.045
---	---------

Raleigh, 5.6 mi. N. of, 2.1 mi. S. and 1.4 mi. E. from Walpole, near N $\frac{1}{4}$ cor. sec. 22, T. 7 S., R. 6 E., at Hamilton-Saline county line, in SW. angle of junction of E-W. rd.; standard iron post with bronze cap stamped "1906 381"-----	Feet 381. 315
Walpole, 0.4 mi. S. and 0.9 mi. E. from, 0.25 mi. S. of NW. cor. sec. 10, T. 7 S., R. 6 E., in SE. angle of junction of T-rd. E.; standard iron post with bronze cap stamped "1906 409"-----	409. 418
Walpole, 0.9 mi. N. and 0.1 mi. E. from, 0.25 mi. E. of NW. cor. sec. 4, T. 7 S., R. 6 E., in SW. angle of junction of township-line rd.; standard iron post with bronze cap stamped "1906 443" (recovered in 1939)-----	443. 505
Walpole, 0.9 mi. N. and 3.2 mi. W. from, 3.0 mi. N. and 0.5 mi. E. from Cornerville, 2.2 mi. SE. of Rural Hill, near SW. cor. sec. 36, T. 6 S., R. 5 E., just NE. of junction of T-rd. S.; standard iron post with bronze cap stamped "1906 478"-----	478. 565
Cornerville, 2.0 mi. N. thence 1.1 mi. W. from, 3.4 mi. N. and 3.4 mi. E. from West End, about 575 ft. W. of S $\frac{1}{4}$ cor. sec. 3, T. 7 S., R. 5 E., about 500 ft. W. of crossing of Rector Creek, on N. side of rd., at junction of rd. SE., in field belonging to J. Webber, 6 ft. W. of 6-in. walnut tree; standard iron post with bronze cap-----	441. 119
West End, 3.9 mi. N. of, 2.0 mi. N. and 3.0 mi. E. from Thompsonville, about 700 ft. N. of W $\frac{1}{4}$ cor. sec. 6, T. 7 S., R. 5 E., 40 ft. E. of Franklin-Hamilton township line, in SE. angle of crossroads; standard iron post with bronze cap stamped "1906 593"-----	593. 373
[Continued in West Frankfort quadrangle, line 2]	
3. At Galatia (by F. C. Higley in 1906)	
Galatia, at schoolhouse, in SE. corner of yard; standard iron post with bronze cap-----	410. 292
4. From point 1.6 miles southeast of Raleigh along roads generally south and west to point 1.1 miles east of Attila (by F. C. Higley in 1906)	
Raleigh, 1.5 mi. S. and 0.4 mi. W. from, 4.6 mi. N. of Harrisburg, near NW. cor. sec. 27, T. 8 S., R. 6 E., in SE. angle of junction of State Highway 34; standard iron post with bronze cap stamped "373"-----	372. 600
Harrisburg, 2.3 mi. N. thence 0.5 mi. W. from, 0.25 mi. N. of center of sec. 4, T. 8 S., R. 6 E., in SE. angle of right-angle turn S. in rd.; standard iron post with bronze cap stamped "1906 363" (recovered in 1921)-----	362. 306
Harrisburg, 2.6 mi. N. and 3.4 mi. W. from, 4.4 mi. S. and 0.8 mi. E. Galatia, 0.25 mi. W. of NE. cor. sec. 1, T. 9 S., R. 5 E., opposite Mount Moriah Church, in SE. angle of crossroads; standard iron post with bronze cap stamped "1906 459"-----	458. 752
Galatia, 4.4 mi. S. and 2.0 mi. W. from, 1.5 mi. S. thence 2.0 mi. E. from Newhope, near NE. cor. sec. 4, T. 9 S., R. 5 E., at town hall, in SW. angle of crossroads; standard iron post with bronze cap stamped "1906 402"-----	401. 561
Newhope, 1.8 mi. S. and 1.5 mi. W. from, 3.0 mi. E. of Attila, 0.5 mi. W. of Saline-Williamson county line, 0.25 mi. S. of N $\frac{1}{4}$ cor. sec. 1, T. 9 S., R. 4 E., in NE. angle of crossroads, between R. R. right-of-way and rd.; standard iron post with bronze cap stamped "1906 487"-----	486. 813

[Continued in West Frankfort quadrangle, line 3]

5. From point 2.3 miles north and 0.5 mile west from Harrisburg along roads east and south to point 0.8 mile north of Harrisburg (by H. E. Wessman in 1921)

Harrisburg, 2.1 mi. N. of, N. of E $\frac{1}{4}$ cor. sec. 4, T. 9 S., R. 6 E., at bridge over creek branch, on SW. corner of concrete floor; chiseled cross----	Feet 360. 69
Harrisburg, 0.9 mi. N. of, 0.25 mi. N. of SW. cor. sec. 10, T. 9 S., R. 6 E., 100 ft. N. of junction of T-rd. W., at bridge over creek branch, on SE. corner of concrete floor; chiseled square-----	360. 86

[Continued in Harrisburg quadrangle, line 4]

6. From point 0.4 mile west of Dale alternately west and south along roads by way of Olga to point 0.9 mile northeast of Rural Hill, thence north and west to point 0.8 mile north of Akin (by W. C. Elledge in 1939)

[Connects with line 6 in Eldorado quadrangle]

Dale, 0.5 mi. W. of, near SW. cor. sec. 13, T. 6 S., R. 6 E., in NE. angle of crossroads, in SW. corner of yard of Dale School, in root on S. side of 30-in. oak tree; copper nail and washer-----	383. 02
Dale, 1.5 mi. W. of, near NE. cor. sec. 22, T. 6 S., R. 6 E., 27 ft. S. and 130 ft. W. from junction of T-rd. S., 20 ft. W. of private garage, in concrete post; standard tablet stamped "T T 2 C 1939"-----	382. 600
Dale, 2.5 mi. W. of, near NE. cor. sec. 21, T. 6 S., R. 6 E., 75 ft. W. of junction of T-rd. N., at steel bridge over drainage ditch, on SW. wing wall, 15 in. S. of steel rail; chiseled square-----	389. 30
Dale, 3.5 mi. W. of, near NE. cor. sec. 20, T. 6 S., R. 6 E., 170 ft. S. and 20 ft. W. from crossroads, in root on W. side of 12-in. catalpa tree; copper nail and washer-----	427. 21
Dale, 4.5 mi. W. of, 0.3 mi. N. of Olga, near SW. cor. sec. 17, T. 6 S., R. 6 E., 40 ft. N. and 27 ft. E. from junction of N.-S. rd., in SW. corner of yard of Olga School, in concrete post; standard tablet stamped "T T 1 C 1939"-----	439. 029
Olga, 1.0 mi. W. of, 0.25 mi. S. of NW. cor. sec. 19, T. 6 S., R. 6 E., 40 ft. N. and 75 ft. E. from junction of range-line rd., in root on W. side of 15-in. maple tree; copper nail and washer-----	445. 23
Olga, 1.0 mi. W. thence 1.3 mi. S. from, 0.9 mi. NE. thence 2.5 mi. E. from Rural Hill, near E $\frac{1}{4}$ cor. sec. 25, T. 6 S., R. 5 E., 55 ft. S. and 18 ft. W. from junction of T-rd. W., in root on E. side of 12-in. linden tree; copper nail and washer-----	417. 10
Rural Hill, 0.9 mi. NE. thence 1.7 mi. E. from, near center of W $\frac{1}{2}$ sec. 25, T. 6 S., R. 5 E., 65 ft. N. of rd., at curve, 17 ft. S. and 5 ft. E. from T-fence E., in sandstone post; aluminum tablet stamped "Prim Trav Sta No 6 1906"-----	432. 033
Rural Hill, 0.9 mi. NE. thence 0.5 mi. E. from, near quarter corner between secs. 26 and 27, T. 6 S., R. 5 E., on SW. wing wall of concrete bridge; chiseled square-----	448. 18
Rural Hill, 2.1 mi. NE. of, in NE $\frac{1}{4}$ sec. 22, T. 6 S., R. 5 E., on summit of hill, on E. side of rd., opposite house, 40 ft. E. of gate, in root on W. side of 15-in. oak tree; copper nail and washer-----	537. 19
Rural Hill, 2.4 mi. NE. of, 1.3 mi. W. of Braden, 0.5 mi. N. and 5.8 mi. E. from Akin, near N $\frac{1}{4}$ cor. sec. 22, T. 6 S., R. 5 E., 22 ft. S. and 5 ft. E. from junction of T-rd. N., in fence corner, in concrete post; standard tablet stamped "30 E 1939"-----	535. 722

Akin, 0.5 mi. N. and 5.3 mi. E. from, near NE. cor. sec. 21, T. 6 S., R. 5 E., in SW. angle of junction of T-rd. S., 1 ft. N. and 12 ft. W. from NW. corner of Center School, on NW. corner of well curb; chiseled square-----	Feet 565.69
Akin, 0.5 mi. N. and 4.3 mi. E. from, near NW. cor. sec. 21, T. 6 S., R. 5 E., 200 ft. E. of crossroads, on S. side of rd., in root on N. side of 15-in. walnut tree, westernmost tree of group; copper nail and washer-----	582.76
Akin, 0.5 mi. N. and 3.2 mi. E. from, near SW. cor. sec. 17, T. 6 S., R. 5 E., in NE. angle of crossroads, 18 ft. S. and 27 ft. W. from SW. corner of Little Hill School, on SW. corner of well curb; chiseled square-----	546.50
Akin, 0.5 mi. N. and 2.8 mi. E. from, near S $\frac{1}{4}$ cor. sec. 18, T. 6 S., R. 5 E., 16 ft. N. and 30 ft. E. from crossroads, in concrete post; standard tablet stamped "31 E 1939"-----	540.906
Akin, 0.3 mi. N. and 2.0 mi. E. from, near center of NE $\frac{1}{4}$ sec. 24, T. 6 S., R. 4 E., 40 ft. S. and 25 ft. W. from junction of N.-S. rd., in root on W. side of 24-in. oak tree; copper nail and washer-----	535.44
Akin, 1.0 mi. E. of, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 23, T. 6 S., R. 4 E., 30 ft. S. and 5 ft. W. from junction of rd. N., in root on N. side of 12-in. linden tree; copper nail and washer-----	505.78
Akin, in SE. angle of crossroads, in front of Drake store, in NW. corner of concrete well curb; standard tablet stamped "32 E 1939"-----	472.794

[Continued in McLeansboro quadrangle, line 7]

7. From point 2.5 miles west of Dale along roads west and south to road junction 0.9 mile north and 0.1 mile east from Walpole (by W. C. Elledge in 1939; leveled twice)

Dale, 2.8 mi. W. thence 1.0 mi. S. from, in NE $\frac{1}{4}$ sec. 28, T. 6 S., R. 6 E., 200 ft. S. of crossroads, on E. side of rd., in front of house, in root on NW. side of 20-in. oak tree; copper nail and washer-----	391.24
Dale, 2.8 mi. W. thence 2.0 mi. S. from, 1.9 mi. N. and 0.7 mi. E. from Walpole, 0.25 mi. W. of SE. cor. sec. 28, T. 6 S., R. 6 E., 15 ft. N. and 45 ft. E. from crossroads, in root on SW. side of 15-in. catalpa tree; copper nail and washer-----	413.66
Walpole, 0.9 mi. N. and 0.7 mi. E. from, 0.25 mi. W. of SE. cor. sec. 33, T. 6 S., R. 6 E., at junction of E.-W. rd., in root on N. side of 30-in. oak tree; copper nail and washer-----	447.42

GILLESPIE QUADRANGLE

[Latitude 39°00'–39°15'; longitude 89°45'–90°00']

MACOUPIN COUNTY

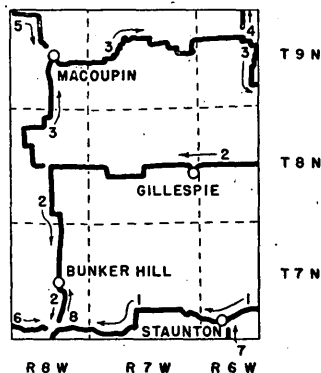


FIGURE 34.—Lines of leveling in Gillespie quadrangle.

1. From point 2.3 miles northeast of Staunton generally west and south along roads to point 3.4 miles south of Bunker Hill (by R. G. Clinite in 1912)

[Continued from Mount Olive quadrangle, line 1]

Staunton, 1.8 mi. NE. of, 0.25 mi. E. of center of sec. 28, T. 7 N., R. 6 W., at center of junction of N-S. rd., on stone; chiseled square-----	Feet 644.49
Staunton, in E. part of, on S. side of St. Michael's School, at E. base-ment window, on stone sill; chiseled circle (recovered in 1940)----	623.39
Staunton, at SE. corner of public park; standard iron post with bronze cap stamped "1912 622" (recovered by U. S. C. & G. S. in 1935) ²³ -----	621.629
Staunton, 2.1 mi. NW. of, near center of SW¼ sec. 25, T. 7 N., R. 7 W., 600 ft. W. of bridge over Cahokia Creek, on N. side of rd., 1 ft. E. of fence line; standard iron post with bronze cap stamped "1912 522"-----	522.127
Staunton, 3.2 mi. NW. of, 0.25 mi. W. of center of sec. 26, T. 7 N., R. 7 W., at T-rd. N., in center of rd., on stone; chiseled circle-----	592.90
Staunton, 3.5 mi. NW. of, 0.3 mi. N. of Lower West Prairie School, near E¼ cor. sec. 27, T. 7 N., R. 7 W., in SW. angle of junction of T-rd. S., in root of 12-in. sassafras tree; copper nail-----	593.26
Staunton, 5.0 mi. NW. of, 1.5 mi. S. and 4.0 mi. E. from Bunker Hill, near center of sec. 28, T. 7 N., R. 7 W., 16 ft. S. and 12 ft. W. from crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 64 1911 600"-----	599.332

²³ In 1940 this bench mark was tied to U. S. C. & G. S. standard disk stamped "M 94 1935," elevation 621.593 ft.

Bunker Hill, 2.9 mi. S. thence 3.0 mi. E. from, 0.25 mi. S. of W $\frac{1}{4}$ cor. sec. 32, T. 7 N., R. 7 W., in NE. angle of crossroads, 6 ft. E. of corner fence post, 2 ft. S. of fence; standard iron post with bronze cap stamped "1912 590"-----	<i>Feet</i> 589.765
Bunker Hill, 2.9 mi. S. thence 0.9 mi. E. from, about 400 ft. N. and 800 ft. E. from W $\frac{1}{4}$ cor. sec. 36, T. 7 N., R. 8 W., at small steel bridge over Paddock Creek, on SW. wing wall; chiseled square (recovered in 1940)-----	569.59
Bunker Hill, 2.9 mi. S. of, 0.3 mi. W. of center of sec. 35, T. 7 N., R. 8 W., 15 ft. S. and 12 ft. E. from crossroads; standard iron post with bronze cap stamped "1912 619" (recovered in 1940)---	619.253
[Continued in Edwardsville quadrangle, line 1]	
2. From point 0.2 mile north and 3.5 miles east from Gillespie along roads west and south to crossroads 2.9 miles south of Bunker Hill (by R. G. Clinite in 1912)	
[Continued from Mount Olive quadrangle, line 2]	
Gillespie, 0.2 mi. N. and 2.9 mi. E. from, 0.25 mi. E. of quarter corner between secs. 16 and 21, T. 8 N., R. 6 W., at crossroads, on stone marking sixteenth corner; chiseled square-----	638.24
Gillespie, 0.2 mi. N. and 2.4 mi. E. from, 0.25 mi. E. of NW. cor. sec. 21, T. 8 N., R. 6 W., opposite T-rd. N., 4 ft. W. of telephone pole, 1 ft. N. of fence; standard iron post with bronze cap stamped "1912 645"-----	644.566
Gillespie, at entrance of National Bank building; top of NE. corner of concrete doorstep-----	660.23
Gillespie, 0.2 mi. N. and 0.7 mi. W. from, near NW. cor. sec. 24, T. 8 N., R. 7 W., 74 ft. S. and 11 ft. E. from stone marking section corner; standard iron post with bronze cap stamped "1912 662" ²⁴ -----	661.184
Gillespie, 0.3 mi. S. and 3.8 mi. W. from, near E $\frac{1}{4}$ cor. sec. 20, T. 8 N., R. 6 W., 18 ft. N. and 27 ft. W. from crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 67 1911 661"-----	661.250
Gillespie, 0.2 mi. N. and 6.7 mi. W. from, 6.0 mi. N. and 0.5 mi. E. from Bunker Hill, near SW. cor. sec. 13, T. 8 N., R. 8 W., 38 ft. N. and 24 ft. E. from crossroads, in concrete post; standard tablet ²⁵ -----	643.278
Bunker Hill, 5.0 mi. N. and 0.5 mi. W. from, 3.0 mi. S. and 1.5 mi. E. from Plainview, near SW. cor. sec. 23, T. 8 N., R. 8 W., 25 ft. N. and 22 ft. E. from crossroads; standard iron post with bronze cap stamped "1912 651"-----	651.174
Bunker Hill, 3.5 mi. N. of, at center of sec. 35, T. 8 N., R. 8 W., at T-rd. S., on stone marking center of section; chiseled square-----	653.46
Bunker Hill, 3.0 mi. N. of, near S $\frac{1}{4}$ cor. sec. 35, T. 8 N., R. 8 W., 16 ft. N. of township-line fence, 22 ft. W. of N-S. fence; standard iron post with bronze cap stamped "1912 667"-----	666.594

²⁴ In 1937 this bench mark was moved 19 ft. south and 18 ft. east from this location and reset at an elevation 0.700 ft. lower than that originally determined. The figures given represent the new elevation.

²⁵ This bench mark was set in 1937 to replace the standard iron post with bronze cap stamped "1912 643," which was located 56 ft. south of the present mark and at an elevation 0.149 ft. lower.

Bunker Hill, 2.0 mi. N. of, near N $\frac{1}{4}$ cor. sec. 11, T. 8 N., R. 8 W., in SW. angle of junction of T-rd. W., in root of 20-in. locust tree; copper nail-----	<i>Feet</i> 659. 87
Bunker Hill, 1.0 mi. N. of, near N $\frac{1}{4}$ cor. sec. 14, T. 7 N., R. 8 W., at SW. corner of crossroads, on top of concrete cap of tile drain; chiseled square-----	655. 71
Bunker Hill, at Lincoln Monument, in base; aluminum tablet stamped "1912 669" (recovered in 1940)-----	668. 278
Bunker Hill, 1.1 mi. S. of, about 650 ft. N. and 500 ft. E. from S $\frac{1}{4}$ cor. sec. 23, T. 7 N., R. 8 W., opposite T-rd. E., 7 ft. E. of gate in N.-S. fence, on stone; chiseled square-----	641. 04
3. From crossroads 6 miles north and 0.5 mile west from Bunker Hill generally north along roads by way of Plainview to Macoupin, thence generally east and south to point 1.3 miles north and 0.3 mile west from Hornsby (by R. G. Clinite in 1912)	
Plainview, 1.0 mi. S. of, near S $\frac{1}{4}$ cor. sec. 9, T. 8 N., R. 8 W., 25 ft. N. and 18 ft. E. from junction of N.-S. rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 66 1911 628"-----	627. 983
Plainview, 1.2 mi. N. and 1.5 mi. E. from, 1.9 mi. SW. of Macoupin, 0.25 mi. N. of SE. cor. sec. 34, T. 9 N., R. 8 W., 27 ft. N. of rd. E., on W. side of rd., 3 ft. E. of fence; standard iron post with bronze cap stamped "1912 585"-----	584. 465
Macoupin, 1.4 mi. SW. of, near W $\frac{1}{4}$ cor. sec. 26, T. 9 N., R. 8 W., opposite center line of rd. S., on E.-W. fence line, at SW. corner of yard of W. H. Rhodes, near mail box, on stone; chiseled circle-----	606. 64
Macoupin, 0.9 mi. SW. of, at Chicago & Alton R. R. bridge over Macoupin Creek, at W. side of N. stone abutment, on top course; chiseled square-----	528. 92
Macoupin, 200 ft. SW. of R. R. sta., 28 ft. S. and 20 ft. E. from center of rd. fork; standard iron post with bronze cap stamped "1912 533" (recovered in 1923)-----	532. 512
Macoupin, 1.0 mi. SE. of, about 500 ft. SW. of E $\frac{1}{4}$ cor. sec. 23, T. 9 N., R. 8 W., at top of bluff, on S. side of rd., at W. edge of meadow, in root of 10-in. hickory tree; copper nail-----	607. 47
Macoupin, 3.2 mi. SE. of, 5.0 mi. S. and 1.3 mi. W. from Carlinville, about 650 ft. S. of E $\frac{1}{4}$ cor. sec. 19, T. 9 N., R. 7 W., in SW. angle of junction of N.-S. rd., 4 ft. W. of corner fence post, 1 ft. N. of fence; standard iron post with bronze cap stamped "1912 625"-----	624. 511
Carlinville, 3.0 mi. S. and 1.0 mi. E. from, 7.0 mi. N. and 2.5 mi. W. from Gillespie, near center of NW $\frac{1}{4}$ sec. 15, T. 9 N., R. 7 W., opposite T-rd. N., 20 ft. S. of rd., 2 ft. N. of E.-W. hedge fence; standard iron post with bronze cap stamped "1912 633"-----	632. 305
Gillespie, 5.5 mi. N. and 1.3 mi. W. from, 0.25 mi. S. of center of sec. 14, T. 9 N., R. 7 W., at right-angle turn in rd., on stone marking quarter section; chiseled square-----	637. 79
Gillespie, 6.0 mi. N. of, near center of NE $\frac{1}{4}$ sec. 24, T. 9 N., R. 7 W., 300 ft. S. of iron bridge over Honey Creek, opposite rd. W., 30 ft. E. of elm tree in center of grass plot; standard iron post with bronze cap stamped "1912 589"-----	589. 276

190 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Gillespie, 6.8 mi. N. and 2.7 mi. E. from, near center of sec. 16, T. 9 N., R. 6 W., 25 ft. W. of junction of N-S. rd., 12 ft. W. of forked peach tree; standard iron post with bronze cap stamped "1912 659" Feet
659.309
(recovered in 1922)-----

[Continued in Mount Olive quadrangle, line 3]

4. From point 3 miles north and 5 miles west from Litchfield along roads alternately west and north to point 1 mile south and 3.7 miles west from Barnett (by S. R. Archer in 1922)

[Continued from Mount Olive quadrangle, line 6]

Gillespie, 6.4 mi. N. and 3.3 mi. E. from, 3.0 mi. S. and 3.3 mi. W. from Barnett, near SE. cor. sec. 16, T. 9 N., R. 6 W., 30 ft. N. and 25 ft. W. from right-angle turn N. in rd., 35 ft. N. and 25 ft. W. from junction of private rd. W., 25 ft. N. of fence corner, on W. side of fence, in root on E. side of 12-in. hickory tree; copper nail and washer----- 664.22

Barnett, 2.1 mi. S. and 3.7 mi. W. from, near S $\frac{1}{4}$ cor. sec. 9, T. 9 N., R. 6 W., in NW. angle of crossroads, in root on NE. side of forked maple tree; copper nail and washer----- 653.98

[Continued in Carlinville quadrangle, line 1]

5. From point 0.3 mile south and 3.5 miles west from Chesterfield south and east along roads to Macoupin (by E. O. Brooks in 1923)

[Connects with line 3 in Carlinville quadrangle]

Macoupin, 2.1 mi. N. and 1.0 mi. W. from, 0.2 mi E. of NW. cor. sec. 10, T. 9 N., R. 8 W., on S. side of rd., in front of brick farmhouse, in root on N side of westernmost maple tree; copper nail and washer 619.28

Macoupin, 2.1 mi. N. and 0.7 mi. W. from, near N $\frac{1}{4}$ cor. sec. 10, T. 9 N., R. 8 W., in SW. angle of junction of T-rd. S., in root on N. side of 24-in. Osage orange tree; copper nail and washer----- 618.28

Macoupin, 1.1 mi. N. and 0.7 mi. W. from, near quarter corner between secs. 10 and 15, T. 9 N., R. 8 W., on E. side of rd., at T-rd. W., in fence line, in root on NW. side of 12-in. Osage orange tree; copper nail and washer----- 610.95

Macoupin, 0.5 mi. N. and 0.2 mi. W. from, 0.25 mi N. of SE. cor. sec. 15, T. 9 N., R. 8 W., on N. side at right-angle turn S. in rd., 8 ft. S. and 20 ft. W. from corner of right-of-way fence and fence N., in root on NW. side of 6-in. Osage orange tree; copper nail and washer 534.38

6. From point 2.7 miles south and 0.6 mile east from Woodburn along road east to crossroads 2.9 miles south of Bunker Hill (by E. O. Brooks in 1924; releveled by S. R. Archer in 1925)

[Continued from Brighton quadrangle, line 4]

Woodburn, 2.9 mi. S. and 2.0 mi. E. from, 2.9 mi. S. thence 0.9 mi. W. from Bunker Hill, 0.25 mi. W. of center of sec. 34, T. 7 N., R. 8 W., at bridge over Indian Creek, on top of base of concrete head wall; chiseled square (recovered in 1940)----- 565.16

7. From point in south part of Staunton along streets north and west to public park in Staunton (by J. A. Shumate in 1927)

[Continued from Edwardsville quadrangle, line 5]

Staunton, in SE. angle of intersection of East Seventh and Madison Streets, on concrete walk; chiseled square----- 618.19

8. From bridge 2.9 miles south and 0.9 mile east from Bunker Hill along roads west and north to Bunker Hill (by W. C. Elledge in 1940)

Bunker Hill, 1.8 mi. S. of Lincoln monument, near center of sec. 26, T. 7 N., R. 8 W., 15 ft. S. and 21 ft. E. from crossroads, on S. head wall of concrete culvert; chiseled square-----	<i>Feet</i> 633.99
Bunker Hill, 0.8 mi. S. of, about 500 ft. E. of quarter corner between secs. 23 and 26, T. 7 N., R. 8 W., on W. side of highway where it curves from S. to NW. and dirt rd. continues N., on S. head wall of concrete culvert at drive to field; chiseled square-----	637.82

GOLCONDA QUADRANGLE

[Latitude 37°15'–37°30'; longitude 88°15'–88°30']

HARDIN AND POPE COUNTIES

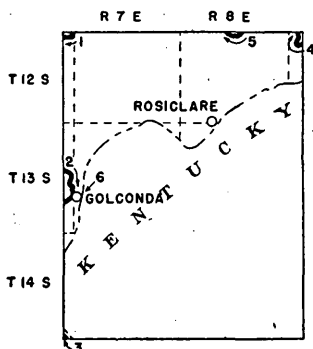


FIGURE 35.—Lines of leveling in Golconda quadrangle.

1. From point 1.1 miles north and 1 mile west from Lusk along roads south 0.1 mile and west 0.5 mile (by S. R. Archer in 1913)

[Continued from Equality quadrangle, line 8]

Lusk, 1.0 mi. N. and 1.0 mi. W. from, 0.25 mi. W. of NE. cor. sec. 12, T. 12 S., R. 6 E., on S. side of rd. at turn W., at residence of O. Trammel, in fence line, in root on N. side of 16-in. oak tree; spike—	Feet 759.84
--	----------------

[Continued in Brownfield quadrangle, line 1]

2. From point 2 miles northwest of Golconda southeast and southwest along roads and Illinois Central Railroad to point 1 mile southwest of Golconda (by S. R. Archer in 1913)

[Continued from Brownfield quadrangle, line 1]

Golconda, 1.5 mi. NW. of, about 630 ft. N. and 320 ft. W. from SE. cor. sec. 13, T. 13 S., R. 6 E., in SW. angle of junction of N.-S. rd., on rock; chiseled square-----	522.80
Golconda, at NW. corner of Pope County courthouse, under fire alarm bell; standard iron post with bronze cap stamped "Prim Trav Sta No. 354 1913"-----	353.186
Golconda, at courthouse, 12 ft. S. and 8 ft. W. from N. gate to yard; top of copper plate (U. S. C. E. B. M.)-----	352.378
Golconda, at wharf, at lower end of warehouse, on downstream side, at stone tablets indicating high water:	
high water mark 1883-----	348.835
high water mark 1884-----	350.305
high water mark 1913-----	351.353

[Continued in Brownfield quadrangle, line 2]

3. From point 0.3 mile northwest of Bay City southeast along road to Bay City (by S. R. Archer in 1914)

[Continued from Brownfield quadrangle, line 6]

Bay City, on right bank of Ohio River, on W. side of rd. to post office, in 4- by 4- by 18-in. concrete base; galvanized iron pipe (U. S. C. E. B. M. 899)-----	360.982
---	---------

4. Southwest 0.3 mile near Peters Creek, thence northeast to point near northeast corner of quadrangle (by R. G. Clinite in 1914)

[Continued from Cave in Rock quadrangle, line 2]

Elizabethtown, 2.8 mi. N. and 2.8 mi. E. from, near center of sec. 7, T. 12 S., R. 9 E., just S. of Peters Creek, 30 ft. N. of rd. fork. 170 ft. W. of log cabin of Mrs. Dutton, on sandstone rock; chiseled square-----

Feet
404.05

[Continued in Shawneetown quadrangle,²⁰ line 5]

5. Southwest and northwest along road north of junction of Hogthief and Goose Creeks (by R. G. Clinite in 1914)

[A jog from Equality quadrangle, line 10]

Elizabethtown, 3.5 mi. N. and 1.4 mi. W. from, 4.3 mi. SE. of Hicks, 0.3 mi. S. of center of sec. 4, T. 12 S., R. 8 E, in center of junction of rds. to Rosiclare and Elizabethtown, in root of 14-in. locust tree; spike-----

353.45

[Continued in Equality quadrangle, line 10]

6. From Golconda along road east (by F. L. Whaley in 1916)

Golconda, at SW. corner of intersection of Main and Water Streets, on river front, in side of gutter, on limestone; chiseled square-----

337.69

Golconda, at intersection of Main and Water Streets, on top of 3-in. water pipe projecting 18 inches above ground; top of iron rivet----

337.05

[Continued in Kentucky]

²⁰ This line cuts the southeast corner of Equality quadrangle, but no bench marks were set in that portion of the line.

GOLDEN GATE QUADRANGLE

[Latitude 38°15'–38°30'; longitude 88°00'–88°15']

EDWARDS, WAYNE, AND WHITE COUNTIES

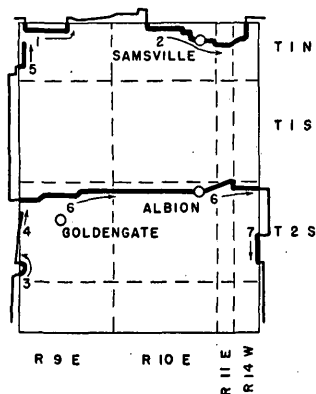


FIGURE 36.—Lines of leveling in Golden Gate quadrangle.

1. South, east, and north along roads south of Mount Erie (by W. C. Elledge in 1939; leveled twice)

[A jog from Olney quadrangle, line 11]

Mount Erie, 1.0 mi. S. of, 0.25 mi. E. of W. cor. secs. 20 and 29, T. 1 N., R. 9 E., 27 ft. S. and 105 ft. W. from crossroads, in root on N. side of 15-in. hickory tree; copper nail and washer-----	Feet 452.95
Mount Erie, 1.0 mi. S. thence 0.8 mi. E. from, near cor. secs. 20, 21, 28, and 29, T. 1 N., R. 9 E., 25 ft. N. and 115 ft. W. from center line of rd. in line with fence N., about 400 ft. W. of junction of rd. SE., in root on S. side of 20-in. oak tree; copper nail and washer-----	463.85
Mount Erie, 1.0 mi. S. thence 1.8 mi. E. from, near cor. secs. 21, 22, 27, and 28, T. 1 N., R. 9 E., 16 ft. N. and 95 ft. W. from junction of T-rd. S., in root on S. side of 12-in. hickory tree; copper nail and washer---	447.35

[Continued in Olney quadrangle, line 11]

2. From point about 3 miles west and 0.7 mile north from Samsville along roads alternately south and east by way of Samsville to sec. 30, T. 1 N., R. 14 W., thence northeast to point 1.2 miles south of West Salem (by W. C. Elledge in 1939; leveled twice)

[Continued from Olney quadrangle, line 11]

Samsville, 3.0 mi. W. and 0.5 mi. N. from, near cor. secs. 20, 21, 28, and 29, T. 1 N., R. 10 E., 20 ft. S. of intersection of rd. tangents N. and E., 2 ft. S. and 2 ft. W. from corner fence post, in concrete post; standard tablet stamped "26 E 1939"-----	428.498
Reference mark, 15 ft. S. of tablet, in root on NW. side of 15-in. oak tree; copper nail and washer-----	426.91
Samsville, 2.0 mi. W. and 0.5 mi. N. of, near NW. cor. sec. 27, T. 1 N., R. 10 E., 65 ft. S. and 19 ft. E. from crossroads, in root on N. side of 24-in. walnut tree; copper nail and washer-----	457.93

Samsville, 1.0 mi. W. and 0.5 mi. N. from, near NE. cor. sec. 27, T. 1 N., R. 10 E., 300 ft. W. of crossroads, on S. side of rd., 6 ft. S. of fence, in root on N. side of 24-in. oak tree; copper nail and washer----	<i>Feet</i> 495. 47
Samsville, 20 ft. N. and 140 ft. W. from crossing of State Highway 130, 2 ft. S. and 15 ft. W. from fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "27 E 1939"-----	475. 518
Reference mark, 160 ft. E. of tablet, 20 ft. S. and 20 ft. E. from crossroads, on concrete culvert; chiseled square-----	477. 11
Samsville, 1.0 mi. E. of, near E $\frac{1}{4}$ cor. sec. 25, T. 1 N., R. 10 E., 10 ft. E. of junction of N.-S. rd., in root on NW. side of 36-in. oak tree; copper nail and washer-----	524. 56
Samsville, 1.2 mi. E. and 0.2 mi. S. from, 2.6 mi. SW. of West Salem, in SW $\frac{1}{4}$ sec. 30, T. 1 N., R. 14 W., 600 ft. E. of crossroads, 65 ft. W. of turn NE. in rd., in root on S. side of 15-in. wild-cherry tree, middle tree of three; copper nail and washer-----	457. 41
U. S. C. & G. S. standard disk stamped "L 91 1935"-----	436. 620

[Continued in Olney quadrangle, line 12]

3. Along roads northeast and northwest in sec. 31, T. 2 S., R. 9 E.
(by W. C. Elledge in 1939)

[A jog from Fairfield quadrangle, line 6]

Merriam, about 3.7 mi. S. and 1.6 mi. E. from, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 2 S., R. 9 E., about 60 ft. W. of rd. at turn from SE. to N., in hog pen, 1 ft. N. and 11 ft. W. from SE. corner of pen, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	466. 640
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[Continued in Fairfield quadrangle, line 6]

4. North 2.5 miles along road west of Golden Gate (by W. C. Elledge in 1939)

[A jog from Fairfield quadrangle, line 6]

Golden Gate, 1.0 mi. S. and 2.5 mi. W. from, near quarter corner between secs. 18 and 19, T. 2 S., R. 9 E., 500 ft. S. of crossroads, on W. side of rd. at timber line W., 10 ft. N. and 3 ft. W. from corner fence post, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	483. 030
Golden Gate, 0.8 mi. S. and 2.5 mi. W. from, near S $\frac{1}{4}$ cor. sec. 18, T. 2 S., R. 9 E., 800 ft. W. of crossroads, on N. side of rd., 15 ft. S. and 5 ft. W. from SW. corner of farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	496. 920
Golden Gate, 2.5 mi. W. of, 0.2 mi. S. and 1.5 mi. E. from Merriam, near quarter corner between secs. 7 and 18, T. 2 S., R. 9 E., 20 ft. S. and 144 ft. E. from junction of T-rd. E., in root on SE. side of 12-in. maple tree; copper nail and washer-----	391. 72
U. S. C. & G. S. standard disk stamped "K 108 1935"-----	387. 808
Fairfield, 5.7 mi. E. of, 1.0 mi. N. and 2.5 mi. W. from Golden Gate, near quarter corner between secs. 6 and 7, T. 2 S., R. 9 E., 33 ft. S. and 30 ft. W. from junction of T-rd. S., 6 ft. S. of telephone pole, in concrete post; standard tablet stamped "T T 26 C 1939"-----	425. 879
Fairfield, 5.7 mi. E. of, near quarter corner between secs. 6 and 7, T. 2 S., R. 9 E., 30 ft. N. and 50 ft. E. from junction of T-rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk---	424. 973

[Continued in Fairfield quadrangle, line 6]

5. From point near center of sec. 31, T. 9 N., R. 9 E., alternately east and north along roads in northwest corner of quadrangle (by W. C. Elledge in 1939)

[Continued from Fairfield quadrangle, line 6]

Mount Erie, 2.0 mi. S. thence 0.7 mi. W. from, near quarter corner between secs. 30 and 31, T. 1 N., R. 9 E., 18 ft. N. and 75 ft. W. from crossroads, in root on S. side of 15-in. catalpa tree; copper nail and washer-----	<i>Feet</i> 455.63
Mount Erie, 1.0 mi. S. thence 0.7 mi. W. from, near quarter corner between secs. 19 and 30, T. 1 N., R. 9 E., 18 ft. N. and 45 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	459.657

[Connects with line 11 in Olney quadrangle]

6. From point 0.7 mile north and 1.4 miles east from Merriam east along State Highway 15 to point about 1 mile west of Browns (by W. C. Elledge in 1939)

[Continued from Fairfield quadrangle, line 7]

Fairfield, 6.3 mi. E. of, 1.0 mi. N. thence 1.7 mi. SW. from Golden Gate, in SW $\frac{1}{4}$ sec. 5, T. 2 S., R. 9 E., at steel bridge over Little Wabash River, on SE. corner of SW. pier; chiseled square-----	394.71
Golden Gate, 1.0 mi. N. thence 1.0 mi. W. from, near line between secs. 4 and 5, T. 2 S., R. 9 E., on NE. wing wall of first concrete bridge E. of curve; chiseled square-----	391.46
Golden Gate, 1.0 mi. N. of, 0.25 mi. N. of S. cor. secs. 3 and 4, T. 2 S., R. 9 E., 27 ft. N. and 27 ft. E. from crossroads, 1 ft. S. of corner fence post, at concrete right-of-way post; top of post-----	387.09
Golden Gate, 1.0 mi. N. thence 1.1 mi. NE. from, 7.0 mi. W. of Albion, near line between secs. 2 and 3, T. 2 S., R. 9 E., 75 ft. S. and 16 ft. E. from junction of T-rd. S., 785 ft. E. of center of bridge over White Oak Slough, in concrete post; standard tablet stamped "T T 40 C 1939"-----	386.696
Albion, 6.3 mi. W. of, 0.25 mi. W. of quarter corner between secs. 1 and 2, T. 2 S., R. 9 E., just W. of T-rd. S., on NW. wing wall of concrete culvert; chiseled square-----	391.50
Albion, 5.0 mi. W. of, 1.5 mi. N. of Ellery, near quarter corner between secs. 1 and 6, T. 2 S., Rs. 9 and 10 E., at Edwards-Wayne county line, 36 ft. N. and 24 ft. W. from center line of rd. in line with fences N. and S., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	409.214
Albion, 4.5 mi. W. of, 1.5 mi. N. thence 0.5 mi. E. from Ellery, near center of sec. 6, T. 2 S., R. 10 E., 42 ft. N. and 19 ft. E. from crossroads, 12 ft. N. of corner fence post, in concrete post; standard tablet stamped "T T 41 C 1939"-----	459.914
Albion, 3.7 mi. W. of, 0.25 mi. E. of quarter corner between secs. 5 and 6, T. 2 S., R. 10 E., 20 ft. N. and 15 ft. E. from junction of T-rd. N., on E. head wall of concrete culvert; chiseled square----	465.23
Albion, 2.8 mi. W. of, about 500 ft. E. of quarter corner between secs. 4 and 5, T. 2 S., R. 10 E., on NE. wing wall of concrete bridge; chiseled square-----	419.28
Albion, 1.7 mi. W. of, about 850 ft. W. of center of sec. 3, T. 2 S., R. 10 E., about 700 ft. E. of crossroads, on NE. wing wall of concrete bridge; chiseled square-----	466.05

Albion, 1.0 mi. W. of, on line between secs. 2 and 3, T. 2 S., R. 10 E., 23 ft. S. and 33 ft. E. from junction of T-rd. S., in concrete post; standard tablet stamped "T T 42 C 1939"-----	<i>Feet</i> 444.711
Albion, at Edwards County courthouse, 7 ft. S. and 50 ft. E. from NW. corner of yard, 6 ft. N. and 6 ft. W. from 24-in. maple tree, in concrete post; U. S. C. & G. S. and State Survey standard disk ²⁷ -----	531.123
Albion, 1.2 mi. E. of, in W½ sec. 6, T. 2 S., R. 11 E., on NE. wing wall of culvert; chiseled square-----	431.25
Albion, 1.8 mi. E. of, 2.0 mi. W. of Browns, near E¼ cor. fractional sec. 6, T. 2 S., R. 11 E., 29 ft. S. and 70 ft. E. from crossroads, 40 ft. E. of fence post, in concrete post; standard tablet stamped "T T 43 C 1939"-----	429.660
U. S. C. & G. S. standard disk stamped "B 108 1935"-----	400.189
Browns, 1.0 mi. W. of, near S. cor. secs. 31 and 32, T. 1 S., R. 14 W., about 200 ft. W. of T-rd. N., in center of top of S. head wall of concrete culvert; chiseled square-----	402.10

[Continued in Mount Carmel quadrangle, line 9]

7. From point 2.8 miles south and 0.9 mile west from Browns south along road to point 3.5 miles north and 0.2 mile west from Grayville (by W. C. Elledge in 1939)

[A jog from Mount Carmel quadrangle, line 9]

Browns, 2.8 mi. S. thence 1.0 mi. W. from, near N¼ cor. sec. 20, T. 2 S., R. 14 W., 15 ft. S. and 15 ft. W. from junction of T-rd. S., on S. head wall of concrete culvert; chiseled square-----	411.92
Browns, 3.8 mi. S. and 1.0 mi. W. from, 4.5 mi. N. and 0.3 mi. W. from Grayville, near quarter corner between secs. 20 and 29, T. 2 S., R. 14 W., 4 ft. N. and 12 ft. W. from junction of T-rd. E., in root on SW. side of 15-in. catalpa tree; copper nail and washer-----	495.15
Grayville, 3.5 mi. N. and 0.3 mi. W. from, 4.8 mi. S. and 1.0 mi. W. from Browns, near quarter corner between secs. 29 and 32, T. 2 S., R. 14 W., 8 ft. W. of point of intersection of rds. from E. and N., 10 ft. N. of corner post of T-fence E., in concrete post; standard tablet stamped "T T 45 C 1939"-----	432.560

[Continued in Mount Carmel quadrangle, line 9]

²⁷ In 1939 this bench mark was tied to U. S. C. & G. S. standard disk stamped "D 108 1935," elevation 463.493 ft.

HARDIN QUADRANGLE

[Latitude 39°00'–39°15'; longitude 90°30'–90°45']

CALHOUN, GREENE, AND JERSEY COUNTIES

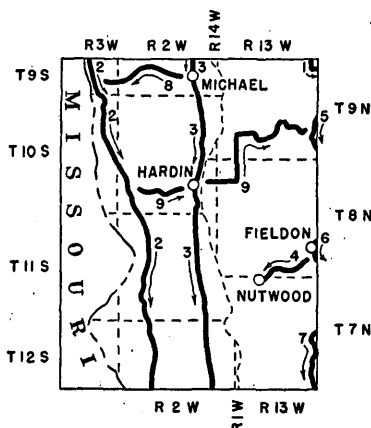


FIGURE 37.—Lines of leveling in Hardin quadrangle.

1. From point 1 mile west, thence 0.9 mile south from Woody along roads south 0.4 mile and east 0.2 mile in northeast corner of quadrangle (by E. O. Brooks in 1924)

[Continued from Pearl quadrangle, line 2]

Woody, 1.0 mi. W. thence 1.3 mi. S. from, about 0.25 mi. S. of NE. cor. sec. 11, T. 9 N., R. 13 W., at Forest Oak School, 20 ft. W. of center line of T-rd. E., on W. side of N.-S. rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 54 1911 3 EB 1924" (recovered in 1926)

Feet
654.865

Reference mark, 80 ft. N. and 88 ft. E. from iron post, near SW. corner of schoolyard, in root on SW. side of 36-in. white-oak tree; copper nail and washer (recovered in 1926)

655.67

[Continued in Jerseyville quadrangle, line 2]

2. From point 1.4 miles northwest of Hamburg southeast and south along road to point 2.4 miles south of Batchtown (by S. R. Archer in 1926)

[Continued from Pearl quadrangle, line 6]

Hamburg, 1.3 mi. NW. of, near NW. cor. sec. 26, T. 9 S., R. 3 W., 120 ft. S. of farmhouse on E. side of rd., at mouth of creek, on top of N. end of E. wing wall of N. abutment of concrete bridge; chiseled square

449.67

Hamburg, just N. of center of business section, on E. side of main street, at S. line and 5 ft. E. from E. edge of sidewalk, at yard of Christian church, in concrete post; standard tablet stamped "8 A 1926"

445.029

Hamburg, at center of business section, in SE. angle of street intersection, at Bank of Hamburg, at E. side of N. porch column, on NW. corner of concrete floor; chiseled square

445.63

Hamburg, 1.1 mi. SE. of, near cor. secs. 1, 2, 35, and 36, Tps. 9 and 10 S., R. 3 W., 30 ft. NW. of ford and rd. fork at crossing of Gresham Branch, on N. side of rd., at fence line, in root on S. side of 24-in. locust tree; copper nail and washer-----	<i>Feet</i> 479.20
Hamburg, 1.6 mi. SE. of, 0.25 mi. W. of center of sec. 1, T. 10 S., R. 3 W., at summit of hill, on W. side of rd., on S. side of driveway W. to farmhouse, at E. end of concrete retaining wall, on top of SE. end of angular wing wall; chiseled square-----	583.36
Hamburg, 1.9 mi. SE. of, near center of SW $\frac{1}{4}$ sec. 1, T. 10 S., R. 3 W., 250 ft. NW. of junction of rd. E., 60 ft. S. of private rd. W., on E. side of rd., at fence corner, in root on W. side of 24-in. oak tree; copper nail and washer-----	518.83
Hamburg, 1.9 mi. SE. along rd. thence 0.3 mi. SW. across country from, on land of Henry Campbell, about 325 ft. above head of Kelly Island, 325 ft. below mouth of prominent ravine, 731 ft. from left bank, in clearing, in E.-W. fence line from left bank to bluff; Mississippi River Comm. B. M. 78/2 cap on iron pipe-----	445.980
copper bolt in tile-----	441.960
Hamburg, 2.8 mi. SE. of, about 650 ft. W. of center of sec. 12, T. 10 S., R. 3 W., 100 ft. S. of angle SE. in rd., 50 ft. N. of Indian Creek Church, at entrance to Indian Creek Cemetery, on W. side of rd., in root on N. side of 24-in. tree, northernmost of row of maple trees on E. side of church lot; copper nail and washer-----	572.47
Hamburg, 3.2 mi. SE. of, near quarter corner between secs. 12 and 13, T. 10 S., R. 3 W., 50 ft. N. of ford across Indian Creek, 75 ft. N. of rd. E., 150 ft. S. of farmhouse on E. side of rd., 3 ft. W. of fence, in concrete post; standard tablet stamped "Prim Trav Sta No 181 F 1925"-----	456.343
Reference mark, on W. side of rd., on N. bank of creek, in root on SE. side of forked walnut tree; copper nail and washer-----	455.10
Hamburg, 4.1 mi. SE. of, about 500 ft. SE. of center of SE $\frac{1}{4}$ sec. 13, T. 10 S., R. 3 W., 45 ft. S. and 35 ft. W. from junction of T-rd. E., 15 ft. S. and 35 ft. W. from ford of creek, on S. bank of creek, in root on E. side of forked cottonwood tree; copper nail and washer-----	454.04
Hamburg, 5.3 mi. SE. of, about 650 ft. NW. of S $\frac{1}{4}$ cor. sec. 19, T. 10 S., R. 2 W., 470 ft. SE. of ford across McNabb Branch, 380 ft. NW. of rd. E., 500 ft. NW. of rd. W. to Red Landing on Mississippi River, on E. side of rd., in line with SE. side of farmhouse, in yard, in root on S. side of 15-in. maple tree; copper nail and washer-----	467.07
Hamburg, 5.3 mi. SE. thence 0.9 mi. NW. from, about 325 ft. above Red Landing, 0.5 mi. E. of left bank, on W. side of rd., N. of curve, on S. bank of creek, 140 ft. SW. of wooden culvert, 35 ft. N. of blazed pin-oak tree; Mississippi River Comm. B. M. 77/1 cap on iron pipe-----	437.440
copper bolt in tile-----	433.430
Hamburg, 5.8 mi. SE. of, 1.8 mi. NW. of Star City, 0.25 mi. N. of sec. 30, T. 10 S., R. 2 W., 40 ft. E. of rd., 5 ft. S. and 3 ft. W. from NW. corner of Oak Grove School, in concrete post; standard tablet stamped "Prim Trav Sta No 182 F 1925"-----	479.176

200 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Star City, 1.5 mi. NW. of, about 800 ft. SE. of center of sec. 30, T. 10 S., R. 2 W., 160 ft. S. of T-rd. E., just N. of Squire Creek, on W. side of rd., in root on E. side of 30-in. walnut tree; copper nail and washer-----	Feet 473.04
Star City, 0.7 mi. NW. of, about 650 ft. S. of center of NE¼ sec. 31, T. 10 S., R. 2 W., 70 ft. S. and 45 ft. W. from crossroads, 70 ft. N. and 45 ft. W. from ford across Metz Branch, on NE. bank of creek, in root on N. side of 10-in. walnut tree; copper nail and washer----	463.33
Star City, at N. edge of, about 650 ft. W. of SE. cor. sec. 31, T. 11 S., R. 2 W., 100 ft. N. of township line, on W. side of rd., in root on N. side of 30-in. oak tree; copper nail and washer-----	453.07
Gilead, 250 ft. NW. of crossroads, 10 ft. N. and 65 ft. W. from entrance to store, on W. side of rd., 23 ft. S. and 10 ft. E. from SE. corner of yard to house, 1 ft. E. of fence, in concrete post; standard tablet stamped "Prim Trav Sta No 184 F 1925"-----	469.114
Reference mark, 35 ft. S. and 60 ft. E. from concrete post, on E. side of rd., 15 ft. S. of line with S. side of store and residence, in root on SW. side of 30-in. maple tree; copper nail and washer-----	471.14
Gilead, 1.1 mi. W. of, 764 ft. back from left bank of river, 771 ft. below Gilead Landing warehouse, on left bank at widest point of slough, 15 ft. NE. of large hollow ash tree, 30 ft. from water edge, in timber between two large blazed trees; Mississippi River Comm. B. M. 76/2 cap on iron pipe----- copper bolt in tile-----	430.900 426.880
Gilead, 0.6 mi. S. of, 1.2 mi. N. of Kritesville, 0.25 mi. S. of center of sec. 8, T. 11 S., R. 2 W., 340 ft. S. of T-rd. E., 175 ft. N. of ford across Salt Creek, on E. side of rd., at SW. corner of yard of farmhouse, in root on E. side of 36-in. walnut tree; copper nail and washer-----	465.17
Kritesville, at W. side of, 165 ft. N. of T-rd. E., 600 ft. N. of bridge over creek, 30 ft. NW. of NW. corner of cooper shop, on E. side of rd., in root on E. side of 24-in. walnut tree; copper nail and washer-----	470.15
Kritesville, 1.2 mi. S. of, 3.7 mi. NW. of Batchtown, 0.1 mi. S. and 0.25 mi. W. from N¼ cor. sec. 29, T. 11 S., R. 2 W., 300 ft. S. of T-rd. W. to Churches Landing, 150 ft. S. and 25 ft. E. from junction of T-rd. E., 110 ft. S. of stone bridge over creek, on E. side of rd., on W. side of private rd. SE., 45 ft. S. and 15 ft. E. from large lone white-oak tree, in concrete post; standard tablet stamped "Prim Trav Sta No 185 F 1925"-----	472.529
Reference mark, 45 ft. N. and 15 ft. W. from tablet, 100 ft. S. of T-rd. E., 65 ft. S. of stone bridge over creek, in root on E. side of 48-in. white-oak tree; copper nail and washer-----	471.99
Batchtown, 2.7 mi. NW. of, near NW. cor. sec. 32, T. 11 S., R. 2 W., at junction of rd. W. to Turner Landing, 40 ft. S. of rd. W., 50 ft. W. of ford of drain, on S. bank of drain, in root on E. side of 18-in. mulberry tree; copper nail and washer-----	446.78
Batchtown, 1.9 mi. NW. of, near center of SW¼ sec. 32, T. 11 S., R. 2 W., 110 ft. NW. and 40 ft. W. from junction of T-rd. W., 50 ft. S. and 40 ft. W. from bridge over Turner Branch, 400 ft. NW. of ford, on SE. bank of drain, in root on N. side of 15-in. sycamore tree; copper nail and washer-----	457.87

Batchtown, 1.1 mi. NW. of, near center of sec. 5, T. 12 S., R. 2 W., in Dixon Hollow, 230 ft. N. of concrete culvert, on W. side of rd., opposite private rd. SE., at fence line W., in root on E. side of 30-in. cottonwood tree; copper nail and washer-----	<i>Feet</i> 469. 60
Batchtown, at N. limits of, near center of N. side NE $\frac{1}{4}$ sec. 8, T. 12 S., R. 2 W., 275 ft. S. of section line, on E. side of rd., in root on NW. side of 24-in. elm tree; copper nail and washer-----	568. 51
Batchtown, on W. side of, about 500 ft. N. of crossroads, 20 ft. N. and 20 ft. W. from junction of street E., at residence of John Simon, at SE. corner of yard, 18 in. N. of fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 186 F. 1925"-----	592. 743
Reference mark, 20 ft. N. and 50 ft. W. from crossroads, in line with front door of residence in NW. angle of crossroads, inside sidewalk, in root on E. side of 24-in. maple tree; copper nail and washer----	571. 32
Batchtown, 1.3 mi. S. of, NW. of center of SW $\frac{1}{4}$ sec. 17, T. 12 S., R. 2 W., 50 ft. N. and 25 ft. E. from junction of T-rd. W., 40 ft. S. and 25 ft. E. from bridge over Cave Spring Branch, in root 1 ft. underground on E. side of 24-in. walnut tree; copper nail and washer-----	470. 66
Batchtown, 2.3 mi. S. of, about 650 ft. N. of center of SE $\frac{1}{4}$ sec. 20, T. 12 S., R. 2 W., 30 ft. N. and 50 ft. W. from junction of rd. SW. to West Point Landing, on S. bank of creek, in root on SE. side of 10-in. elm tree; copper nail and washer-----	462. 27
[Continued in Brussels quadrangle, line 1]	
3. From point 1 mile north of Michael generally south along road to Meppen (by J. M. Lawson in 1926)	
[Continued from Pearl quadrangle, line 8]	
Michael, 0.5 mi. N. of, 0.3 mi. W. of E $\frac{1}{4}$ cor. sec. 27, T. 9 S., R. 2 W., 150 ft. W. of Crater School, in SW. corner of schoolyard, 5 ft. N. of E.-W. fence, in concrete post; standard tablet stamped "P T Sta No 179 F 1925"-----	440. 595
Reference mark, 250 ft. S. of tablet, on W. side of highway, at entrance to farmhouse, on NE. corner of NW. head wall of concrete culvert; chiseled square-----	448. 55
Michael, 25 ft. N. and 20 ft. W. from crossroads, 17 ft. E. of SE. corner of store, on SW. corner of concrete base of service sta.; chiseled square-----	441. 12
Michael, 1.1 mi. SE. of, about 500 ft. W. of NE. cor. sec. 3, T. 10 S., R. 2 W., 90 ft. S. and 30 ft. W. from crossroads, 50 ft. W. of rd., in front of house on W. side of rd., in root on SE. side of tree, southernmost of two elm trees 15 ft. apart; copper nail and washer-----	434. 96
Michael, 2.0 mi. SE. of, 3.6 mi. N. of Hardin, 0.1 mi. N. and 0.2 mi. E. from SW. cor. sec. 2, T. 10 S., R. 2 W., 100 ft. S. of junction of rd. NW., on NE. corner of E. head wall of concrete culvert; standard tablet stamped "5 L 1926"-----	435. 875
Hardin, 2.5 mi. N. of, about 0.25 mi. E. and 0.1 mi. S. from NW. cor. sec. 14, T. 10 S., R. 2 W., 200 ft. S. and 100 ft. W. from farmhouse, 60 ft. S. of T-rd. W., on SW. wing wall of concrete bridge; chiseled square-----	439. 31
Hardin, 1.6 mi. N. of, 0.3 mi. E. of NW. cor. sec. 23, T. 10 S., R. 2 W., opposite S. end of Diamond Island, 20 ft. S. and 25 ft. E. from crossroads, in line with fence, on NE. corner of E. head wall of concrete culvert; chiseled square-----	440. 88

202 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Hardin, at SW. corner of yard at Calhoun County courthouse, in NE. corner of concrete curb of public well; standard tablet stamped "P T Sta No 183 F 1925"-----	Feet 445.957
Reference mark, 0.3 mi. N. of tablet, at NE. corner of rd. E. to ferry, 60 ft. N. and 100 ft. W. from ferry landing, at store, on NW. corner of concrete step; chiseled square-----	435.69
Hardin, 0.6 mi. S. of, 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 27, T. 10 S., R. 2 W., 20 ft. S. of second-class rd. E., on W. side of rd., 6 ft. S. of culvert, in fence line, in root on NE. side of 24-in. walnut tree; copper nail and washer-----	461.37
Hardin, 1.7 mi. S. of, about 800 ft. W. of SE. cor. sec. 34, T. 10 S., R. 2 W., 10 ft. N. and 25 ft. E. from junction of rd. W., in root on E. side of lone 42-in. walnut tree; copper nail and washer-----	438.77
Hardin, 2.7 mi. S. of, near E $\frac{1}{4}$ cor. sec. 10, T. 11 S., R. 2 W., 160 ft. S. of quarter-section fence W., 15 ft. W. of rd., in root on E. side of 36-in. elm tree; copper nail and washer-----	439.43
Hardin, 3.2 mi. S. of, near SE. cor. sec. 10, T. 11 S., R. 2 W., 500 ft. S. of rd. SW., 450 ft. S. of creek, on E. side of rd., in concrete post; standard tablet stamped "6 L 1926"-----	453.091
Reference mark, 30 ft. W. of tablet, 500 ft. S. of rd. SW., 10 ft. N. and 15 ft. W. from junction of rd. and fence W., in root on SE. side of 18-in. locust tree; copper nail and washer-----	454.59
Hardin, 4.3 mi. S. of, near NW. cor. sec. 23, T. 11 S., R. 2 W., 120 ft. S. of section line, on W. bank of creek, at fence line, in root on W. side of lone 24-in. tree; copper nail and washer-----	451.85
Hardin, 5.3 mi. S. of, 0.2 mi. E. of SW. cor. sec. 23, T. 11 S., R. 2 W., 100 ft. N. of section line, at SW. corner of yard fence, in crooked fork of willow tree; copper nail and washer-----	455.35
Hardin, 5.8 mi. S. of, 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 26, T. 11 S., R. 2 W., 30 ft. N. and 20 ft. W. from crossroads, 10 ft. N. and 1 ft. W. from fence corner, in concrete post; standard tablet stamped "7 L 1926"-----	467.623
Reference mark, 45 ft. S. of tablet, 15 ft. S. and 20 ft. W. from crossroads, at fence line, in root on SE. side of 48-inch twin elm tree; copper nail and washer-----	467.39
Hardin, 6.3 mi. S. of, 0.3 mi. E. of SW. cor. sec. 35, T. 11 S., R. 2 W., 80 ft. N. of section-line fence, on summit of hill, 35 ft. W. of rd., 20 ft. SE. of SE. corner of house, in root on E. side of 18-in. cedar tree; copper nail and washer-----	481.44
Hardin, 7.4 mi. S. of, 0.4 mi. E. of W. cor. secs. 2 and 35, Tps. 11 and 12 S., R. 2 W., at Union School, at sharp angle in rd., 60 ft. S. and 80 ft. W. from junction of T-rd. W., 160 ft. SW. of rd. E., 120 ft. SW. of bridge over creek, on SW. corner of top step; chiseled square-----	468.78
Hardin, 8.4 mi. S. of, just E. of quarter corner between secs. 2 and 11, T. 12 S., R. 2 W., 10 ft. N. and 30 ft. W. from junction of rd. W. and fence E., in root on S. side of 24-in. locust tree; copper nail and washer-----	449.25
Hardin, 9.1 mi. S. of, 2.5 mi. N. of Meppen, about 600 ft. S. of center of sec. 11, T. 12 S., R. 2 W., 25 ft. S. and 85 ft. E. from SW. corner of Monterey School, 50 ft. N. of stone culvert, 20 ft. W. of rd., in concrete post; standard tablet stamped "8 L 1926"-----	461.381

Reference mark, 10 ft. N. and 30 ft. W. from tablet, 60 ft. W. of rd., 60 ft. E. of schoolhouse, in root on S. side of 48-in. oak tree; copper nail and washer-----	<i>Feet</i> 461.82
Meppen, 1.6 mi. N. of, just E. of center of sec. 14, T. 12 S., R. 2 W. 250 ft. S. of quarter-section fence, 10 ft. E. of rd., 10 ft. W. of fence around farm corral, in root on W. side of 30-in. hackberry tree; copper nail and washer-----	456.51
Meppen, 1.1 mi. N. of, about 800 ft. E. of S $\frac{1}{4}$ cor. sec. 14, T. 12 S., R. 2 W., 60 ft. N. and 20 ft. W. from crossroads, on SW. corner of concrete abutment of stone culvert; chiseled square-----	471.60

[Continued in Brussels quadrangle, line 6]

4. From Fieldon southwest along road to Nutwood (by J. M. Lawson in 1926)

[Continued from Jerseyville quadrangle, line 5]

Fieldon, at center of business section, 25 ft. S. and 20 ft. W. from street intersection, 10 ft. E. of NE. corner of yard fence of Dr. Brewster, 3 ft. SE. of sidewalk intersection, in concrete post; standard tablet stamped "P T Sta No 9 LS 1924"-----	699.908
Reference mark, 35 ft. N. and 10 ft. E. from tablet, 12 ft. N. of street intersection, on SW. corner of concrete curb of public well; chiseled square-----	699.35
Fieldon, 1.1 mi. SW. of, 0.25 mi. N. of center of sec. 35, T. 8 N., R. 13 W., 90 ft. N. and 10 ft. W. from rd. fork, on W. side of rd., on top of SW. corner of W. head wall of concrete culvert over creek; chiseled square-----	689.30
Fieldon, 1.5 mi. SW. of, 2.3 mi. NE. of Nutwood, 0.3 mi. S. of NE. cor. sec. 34, T. 8 N., R. 13 W., 110 ft. W. of section-line fence, 15 ft. S. of rd., on top of bank, 3 ft. above rd., in root on NW. side of 18-in. oak tree; copper nail and washer-----	676.70
Nutwood, 1.0 mi. NE. of, 0.2 mi. W. of E $\frac{1}{4}$ cor. sec. 33, T. 8 N., R. 13 W., 7 ft. S. and 7 ft. W. from center line of bridge with steel handrail, at SW. corner of bridge, in top of piling; copper nail and washer-----	495.22
Nutwood, at N. edge of, about 500 ft. W. of SW. cor. sec. 33, T. 8 N., R. 13 W., near township line, 100 ft. N. and 25 ft. E. from junction of township-line rd. W., on top of bank, in concrete post; standard tablet stamped "P T Sta No 13 LS 1924"-----	456.284
Nutwood, 300 ft. W. of T-street N., 50 ft. SE. of SE. corner of post office (now abandoned), at farmhouse of A. O. Auten; at SE. corner of yard; U. S. C. E. P. B. M. 5 cap on iron pipe-----	437.499
copper bolt in tile-----	433.500

5. From point in northwest quarter sec. 25, T. 9 N., R. 13 W., southwest and southeast along road 1.4 miles (by J. M. Lawson in 1926)

[A. jog from Jerseyville quadrangle, line 6]

T. 9 N., R. 13 W., 260 ft. S. and 500 ft. E. from W $\frac{1}{4}$ cor. sec. 25, 260 ft. S. of junction of T-rd. W., 360 ft. S. of Pleasant Grove School, 15 ft. W. of rd., on E. bank of creek, in root on E. side of 12-in. poplar tree; copper nail and washer-----	612.12
---	--------

T. 9 N., R. 13 W., about 800 ft. E. and slightly S. from NW. cor. sec. 36, 500 ft. S. of turn NW. in rd., at summit of hill, 25 ft. E. of rd., just inside fence line, in root on W. side of 24-in. oak tree; copper nail and washer-----

Feet
629.56

[Continued in Jerseyville quadrangle, line 6]

6. From Fieldon along road south and southeast 0.5 mile (by J. M. Lawson in 1926)

[A jog from Jerseyville quadrangle, line 6]

Fieldon, 0.5 mi. S. of, about 800 ft. E. of cor. secs. 25, 26, 35, and 36, T. 8 N., R. 13 W., at angle SE. in rd., on SW. wing wall of concrete culvert; chiseled square-----

623.70

[Continued in Jerseyville quadrangle, line 6]

7. From point in northwest quarter sec. 24, T. 7 N., R. 13 W., alternately southwest and southeast along road to point near northwest corner sec. 1, T. 6 N., R. 13 W. (by J. M. Lawson in 1926)

[Continued from Jerseyville quadrangle, line 6]

T. 7 N., R. 13 W., in NE $\frac{1}{4}$ sec. 23, 30 ft. S. and 35 ft. W. from rd. fork, in root on NE. side of 18-in. oak tree, westernmost of two trees; copper nail and washer-----

760.85

T. 7 N., R. 13 W., in SE $\frac{1}{4}$ sec. 23, 15 ft. S. of rd., 75 ft. E. of rd. fork, in root on NW. side of 15-in. oak tree, second tree from fork; copper nail and washer-----

771.31

T. 7 N., R. 13 W., about 800 ft. NW. of SE. cor. sec. 26, 100 ft. SW. of SW. corner of Meadow Branch School, 40 ft. E. of rd., at schoolyard entrance, 1 ft. N. of S. yard fence line, in concrete post; standard tablet stamped "16 L 1926"-----

791.532

Reference mark, 150 ft. NE. of tablet, 40 ft. N. of NW. corner of schoolhouse, 25 ft. E. of rd., 20 ft. W. of oak tree in schoolyard, in root on NW. side of 24-in. oak tree; copper nail and washer-----

793.29

T. 7 N., R. 13 W., 0.2 mi. W. of E $\frac{1}{4}$ cor. sec. 35, 60 ft. W. of SW. corner of Meadow Branch Church, 30 ft. E. of rd., at foot of bank, in exposed root on W. side of lone 12-in. oak tree; copper nail and washer-----

832.30

[Continued in St. Charles quadrangle, line 3, and Jerseyville quadrangle, line 7]

8. From Michael northwest and southwest along road to Hamburg (by J. M. Lawson in 1926)

Michael, 0.8 mi. NW. of, near center of SE $\frac{1}{4}$ sec. 28, T. 9 S., R. 2 W., at angle in rd., 30 ft. E. of junction of private rd. N., on S. side of rd., on N. bank of creek, in root on N. side of twin elm tree; copper nail and washer-----

465.16

Michael, 1.8 mi. NW. of, near W $\frac{1}{4}$ cor. sec. 28, T. 9 S., R. 2 W., 40 ft. W. of junction of rd. N. through draw, just W. of wooden culvert, in root on NE. side of 15-in. sycamore tree; copper nail and washer-----

524.52

Michael, 2.9 mi. NW. of, 3.2 mi. NE. of Hamburg, near E $\frac{1}{4}$ cor. sec. 30, T. 9 S., R. 2 W., about 500 ft. W. of Mount Hope School, on summit of ridge, 50 ft. N. and 30 ft. E. from rd. fork, 20 ft. N. of gate to house, 15 ft. W. of fence, in concrete post; standard tablet stamped "P T Sta No 178 F 1925"-----

736.723

Reference mark, 70 ft. E. of tablet, at junction of rd. N., in line with rd. SE., in front of house, in root on SW. side of boxelder tree; copper nail and washer-----

735.08

Hamburg, 2.7 mi. NE. of, near center of SE $\frac{1}{4}$ sec. 30, T. 9 S., R. 3 W., near summit of steep hill, on N. head wall of concrete culvert; chiseled square-----	Feet 644.94
Hamburg, 2.3 mi. NE. of, about 600 ft. S. of N $\frac{1}{4}$ cor. sec. 31, T. 9 S., R. 3 W., 20 ft. S. of rd. fork, on SE. head wall of concrete culvert; chiseled square-----	615.04
Hamburg, 0.7 mi. E. of, about 800 ft. N. and 250 ft. E. from W $\frac{1}{4}$ cor. sec. 36, T. 9 S., R. 3 W., 300 ft. W. of creek crossing, 150 ft. N. and 60 ft. E. from house, 30 ft. N. of rd., 5 ft. N. of N. bank of creek, in root on SW. side of 42-in. cottonwood tree; copper nail and washer-----	496.95
9. From road junction 1.5 miles northwest of Star City alternately east and north along roads and Chicago & Alton Railroad by way of Hardin and Titus to road junction 3.5 miles northeast of Spankey (by J. M. Lawson in 1926)	
Star City, 1.5 mi. NW. thence 0.4 mi. E. from, 3.6 mi. W. of Hardin, S. of E $\frac{1}{4}$ cor. sec. 30, T. 10 S., R. 2 W., 200 ft. W. of dwelling, 70 ft. N. of T-rd. E., 40 ft. S. of fence, on NE. side of rd., in root on S. side of 24-in. walnut tree; copper nail and washer-----	499.35
Hardin, 2.6 mi. SW. of courthouse, about 0.1 mi. W. of center of SE $\frac{1}{4}$ sec. 29, T. 10 S., R. 2 W., 20 ft. S. and 25 ft. W. from junction of T-rd. S., 150 ft. N. of farmhouse, at NE. corner of orchard, in root on N. side of 12-in. plum tree; copper nail and washer-----	769.48
Hardin, 1.3 mi. SW. of, 0.2 mi. N. and 0.3 mi. W. from SE. cor. sec. 28, T. 10 S., R. 2 W., near summit of steep hill, on SE. corner of S. head wall of concrete culvert; chiseled square-----	747.86
Hardin, 0.9 mi. SW. of, about 800 ft. S. and 800 ft. E. from W $\frac{1}{4}$ cor. sec. 27, T. 10 S., R. 2 W., at foot of steep hill, 100 ft. E. of rd. SW., on N. head wall of culvert; chiseled square-----	497.81
East Hardin, 200 ft. E. of C. & A. R. R. sta., 10 ft. S. of track, 30 ft. N. of rd., on N. side of water tank, in center of top of concrete pillar; chiseled square-----	427.03
East Hardin, 1.2 mi. E. of, about 500 ft. E. of N $\frac{1}{4}$ cor. sec. 7, T. 8 N., R. 13 W., 60 ft. S. of track, 15 ft. S. of rd., on W. side of creek crossing, 40 ft. N. of house, 15 ft. S. and 150 ft. W. from rd junction, on top of bank, 4 ft. above rd., in root on W. side of 24-in. sycamore tree; copper nail and washer-----	425.48
East Hardin, 1.6 mi. E. thence 0.4 mi. N. from, 2.0 mi. S. of Titus, 230 ft. N. and 30 ft. E. from rd. crossing, 150 ft. N. of crossing of Macoupin Creek, 30 ft. E. of track, 3 ft. E. of right-of-way fence, in root on W. side of 42-in. pecan tree; copper nail and washer-----	424.28
Titus, 0.6 mi. S. of, at large steel R. R. bridge over Nutwood levee, on E. side of bridge, at span N. of center, on top of third bolt in second row from N.; chiseled cross-----	440.45
Titus, just S. of Squire Dingle Pickle Factory, at rd. crossing, on top of E. rail of track; chiseled cross-----	422.48
Titus, 0.8 mi. E. of, 0.9 mi. NW. of Spankey, 0.3 mi. NW. of SE. cor. sec. 29, T. 9 N., R. 13 W., 35 ft. W. of house at angle in rd., in yard of house on E. side of rd., 10 ft. E. of fence line, in root on SW. side of 30-in. maple tree; copper nail and washer-----	429.67

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Spankey, on N. bank of creek, on N. side of Nutwood levee, in NW. angle of crossroads, 14.5 ft. S. and 10.3 ft. E. from SE. corner of residence of J. A. Clark, in yard, in stone set underground; U. S. C. E. P. B. M. 7

cap on iron pipe-----	<i>Feet</i> 444.267
bolt in tile-----	440.285
Spankey, 60 ft. S. and 15 ft. E. from store, on W. side of N.-S. rd., in concrete post; standard tablet stamped "PT Sta No 11 LS 1924"---	435.365
Spankey, 1.0 mi. NE. of, about 800 ft. E. of W $\frac{1}{4}$ cor. sec. 27, T. 9 N., R. 13 W., on N. bank at N. end of creek, 25 ft. E. of rd., 220 ft. S. of house on W. side of rd., at edge of timber, in root on N. side of 24-in. elm tree; copper nail and washer-----	454.28
Spankey, 2.2 mi. NE. of, about 800 ft. E. of W $\frac{1}{4}$ cor. sec. 26, T. 9 N., R. 13 W., on N. side of rd., 200 ft. N. of house, in root on SW. side of lone 24-in. walnut tree; copper nail and washer-----	530.72

HARDINVILLE QUADRANGLE

[Latitude 38°45'–39°00'; longitude 87°45'–88°00']

CRAWFORD, JASPER, LAWRENCE, AND RICHLAND COUNTIES

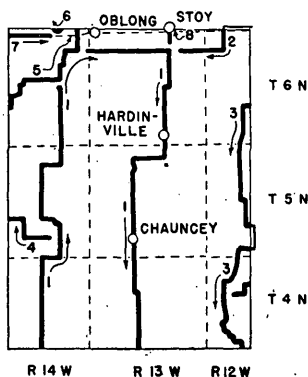


FIGURE 38.—Lines of leveling in Hardinville quadrangle.

1. From point 2.5 miles northeast of Claremont along roads generally north by way of Cotterell School and Cow Ford Ferry over Embarrass River to point 1 mile south and 1.8 miles west from Oblong, thence east to crossroads 1 mile south of Stoy, thence alternately south and west by way of Hardinville and Chauncey to point about 2.5 miles north of Sumner (by Henry Bücher in 1907)

[Continued from Sumner quadrangle, line 2]

Claremont, 3.0 mi. N. of, 0.25 mi. S. of NW. cor. sec. 27, T. 4 N., R. 14 W., in SE. angle of T-rd. E., 15 ft. S. of fence corner, 16 in. W. of fence; standard iron post with bronze cap stamped "510 Adj"-----	Feet 510.111
Claremont, 6.3 mi. N. of, 5.0 mi. W. thence 2.0 mi. S. from Chauncey, opposite Cotterell School, near SW. cor. sec. 3, T. 4 N., R. 14 W., in NE. angle of crossroads, 11 ft. N. of fence corner, 13 in. W. of fence; standard iron post with bronze cap stamped "508 Adj"-----	508.788
Chauncey, 4.0 mi. W. of, 2.0 mi. S. thence 3.0 mi. W. from Landes, near NE. cor. sec. 34, T. 5 N., R. 14 W., in SW. angle of crossroads, 7 ft. S. of fence corner, 13 in. E. of fence; standard iron post with bronze cap stamped "496 Adj"-----	496.294
Embarrass River, at Cow Ford Ferry; surface of water Aug. 24, 1907-----	433.3
Landes, 4.0 mi. W. of, near SW. corner sec. 15, T. 5 N., R. 14 W., in NE. angle of crossroads, about 14 ft. E. of N-S. fence line; standard iron post with bronze cap stamped "457 Adj"-----	457.306
Landes, 3.0 mi. W. and 2.0 mi. N. from, 2.5 mi. S. and 2.0 mi. W. from Pierceburg, near SE. cor. sec. 3, T. 5 N., R. 14 W., at Crawford-Jasper county line, in NW. angle of crossroads, 4 ft. N. of fence corner, 7 in. E. of fence; standard iron post with bronze cap stamped "462 Adj"-----	463.043
Pierceburg, 0.5 mi. N. and 2.0 mi. W. from, 4.0 mi. S. and 2.0 mi. W. from Oblong, near NE. cor. sec. 27, T. 6 N., R. 14 W., in SW. angle of crossroads, 6 ft. S. of fence corner, 14 in. E. of fence; standard iron post with bronze cap stamped "483 Adj"-----	483.787

Oblong, 1.0 mi. S. thence 1.8 mi. W. from, 0.25 mi. E. of SW. cor. sec. 2, T. 6 N., R. 14 W., on N. side of rd. at T-junction, 15 ft. E. of N.-S. fence, 16 in. S. of E.-W. fence; standard iron post with bronze cap stamped "478 Adj" (recovered in 1911)-----	Feet 478. 227
Oblong, 1.0 mi. S. thence 1.1 mi. E. from, 1.0 mi. S. thence 2.9 mi. W. from Stoy, near NW. cor. sec. 8, T. 6 N., R. 13 W., in SW. angle of junction of T-rd. S., 8 ft. S. of fence corner, 14 in. E. of fence; standard iron post with bronze cap stamped "483 Adj"-----	483. 140
Stoy, 1.0 mi. S. of, 1.0 mi. N. of Oil Center, near SW. cor. sec. 2, T. 6 N., R. 13 W., in NE. angle of crossroads, on small bank near pipe line, 76 ft. N. of E.-W. fence line, 1 ft. E. of fence; standard iron post with bronze cap stamped "475 Adj" (recovered in 1936)-----	476. 085
Oil Center, 1.0 mi. S. of, 2.5 mi. N. thence 0.3 mi. E. from Hardinville, near NW. cor. sec. 23, T. 6 N., R. 13 W., on bank on S. side of rd., 34 ft. E. of N.-S. section-line fence, 18 in. N. of E.-W. fence; standard iron post with bronze cap stamped "484 Adj" ²⁸ -----	485. 059
Hardinville, 500 ft. S. of crossroads, on E. side of rd., just N. of Christian Church, 4 ft. N. of fence line between McCarty and Newman property; standard iron post with bronze cap stamped "510 Adj"-----	510. 645
Hardinville, 1.2 mi. S. thence 1.7 mi. W. from, 4.4 mi. N. of Chauncey, 0.3 mi. N. of Spencer Bridge over Embarrass River, 0.3 mi. N. of SW. cor. sec. 4, T. 5 N., R. 13 W., in SE. angle of rd. junction, 39 ft. E. of N.-S. fence, 11 in. N. of E.-W. fence; standard iron post with bronze cap stamped "463 Adj"-----	463. 520
Chauncey, in NE. angle of crossroads, 7 ft. N. of fence corner, 14 in. W. of fence; standard iron post with bronze cap stamped "488 Adj"-----	488. 300
Chauncey, 2.8 mi. S. of, 5.7 mi. N. of Sumner, 0.2 mi. N. of SE. cor. sec. 8, T. 4 N., R. 13 W., in NW. angle of rd. fork, between two walnut trees, 28 ft. W. of N.-S. fence, 14 in. S. of E.-W. fence; standard iron post with bronze cap stamped "492 Adj"-----	492. 535

[Continued in Sumner quadrangle, line 3]

2. From crossroads 1 mile south of Stoy along roads east and north
(by Henry Bücher in 1907)

Stoy, 1.0 mi. S. thence 3.0 mi. E. from, near NW. cor. sec. 8, T. 6 N., R. 12 W., opposite Wilson School, on E. side of lane S., 12 ft. E. of fence corner, 8 in. N. of fence; standard iron post with bronze cap stamped "531 Adj"-----	531. 256
--	----------

[Continued in Moonshine quadrangle, line 1]

3. From point 0.9 mile southwest of New Hebron along roads west
0.5 mile, thence generally south by way of Westport to point
3 miles north of Bridgeport (by Henry Bücher in 1907)

[Continued from Birds quadrangle, line 1]

New Hebron, 1.3 mi. S. and 0.8 mi. W. from, 8.7 mi. by rd. N. of Westport, 0.5 mi. N. of Hurricane School, near E $\frac{1}{4}$ cor. sec. 29, T. 6 N., R. 12 W., in SW. angle of junction of rd. W., 7 ft. W. of 24-in. oak tree at fence corner, 13 in. N. of fence; standard iron post with bronze cap stamped "512 Adj" (recovered in 1914)-----	512. 355
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²⁸ In 1941 this bench mark was reported disturbed.

Westport, 6.1 mi. N. of, near NW. cor. sec. 9, T. 5 N., R. 12 W., in SE. angle of crossroads, 6 ft. S. of fence corner, 10 in. W. of fence; standard iron post with bronze cap stamped "523 Adj"-----	<i>Feet</i> 522. 880
Westport, 2.8 mi. by rd. N. of, 0.25 mi. E. of NW. cor. sec. 28, T. 5 N., R. 12 W., in SE. angle of junction of Crawford-Lawrence county-line rd., 6 ft. S. of fence corner, 10 in. W. of fence; standard iron post with bronze cap stamped "442 Adj"-----	442. 275
[Jogs into Birds quadrangle, but no permanent marks were set in that portion of line]	
Westport, at SW. corner of bridge over Embarrass River, in highest part of masonry support for iron truss, 13 in. from E. edge and 4 in. from S. edge; aluminum tablet stamped "437 Adj"-----	436. 801
Westport, 3.0 mi. SW. of, 0.3 mi. N. of Island School, near NE. cor. sec. 18, T. 4 N., R. 12 W., in SW. angle of crossroads, 22 ft. W. of N.-S. fence, 16 in. N. of E.-W. fence; standard iron post with bronze cap stamped "436 Adj" ²⁹ (recovered in 1910)-----	435. 546
Westport, 5.3 mi. SW. of, 3.7 mi. N. and 1.0 mi. W. from Bridgeport, near NW. cor. sec. 29, T. 4 N., R. 12 W., 23 ft. E. of N.-S. fence, 2 ft. N. of E.-W. fence; standard iron post with bronze cap stamped "455 Adj"-----	455. 092

[Continued in Sumner quadrangle, line 4]

4. From crossroads 4 miles west of Chauncey along roads alternately west and north to point on Jasper-Richland county line (by H. W. Peabody, Jr., in 1910)

Stringtown, 0.7 mi. N. of, 1.0 mi. E. of Linder School, near SW. cor. sec. 28, T. 5 N., R. 14 W., in NE. angle of crossroads, in root of 24-in. oak tree; copper nail and washer-----	448. 22
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[Continued in Newton quadrangle, line 2]

5. From point near south side sec. 20, T. 6 N., R. 14 W., alternately east and north along roads to point about 1 mile west of Oblong (by R. G. Clinite in 1911)

[Continued from Newton quadrangle, line 4]

Ste. Marie, 0.5 mi. N. and 1.6 mi. E. from, 4.0 mi. S. and 4.9 mi. W. from Oblong, 0.25 mi. N. and 0.1 mi. E. from SW. cor. sec. 20, T. 6 N., R. 14 W., 100 ft. NE. of schoolhouse, on E. side of rd., in root of 17-in. oak tree; copper nail-----	478. 12
Oblong, 2.5 mi. S. thence 4.0 mi. W. from, near E $\frac{1}{4}$ cor. sec. 17, T. 6 N., R. 14 W., on W. side of rd., 42 ft. NW. of small bridge, 1 ft. outside fence; standard iron post with bronze cap stamped "465"-----	465. 020
Oblong, 2.5 mi. S. thence 3.9 mi. W. from, about 500 ft. E. of W $\frac{1}{4}$ cor. sec. 16, T. 6 N., R. 14 W., on NW. corner of bridge over North Fork of Embarrass River; chiseled square-----	469. 54
Oblong, about 1 mi. W. of, near SW. cor. sec. 36, T. 7 N., R. 14 W., in NW. corner of yard of Mike Diedrich, in root of sycamore tree; copper nail-----	497. 00

[Continued in Moonshine quadrangle, line 2]

²⁹ In 1937 this bench mark was moved 46 ft. south and 63 ft. east from this position and reset at an elevation 0.380 ft. lower than that originally determined. The figures given represent the new elevation.

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6. Southwest, west, and north along roads in southeast quarter
sec. 34, T. 7 N., R. 14 W. (by R. G. Clinite in 1911)

[A jog from Moonshine quadrangle, line 2]

Oblong, about 2.3-mi. W. of, 0.2 mi. N. and 0.25 mi. W. from SE. cor.
sec. 34, T. 7 N., R. 14 W., on S. side of E.-W. rd., opposite center
line of rd. N., 4 ft. E. of telephone pole, 1 ft. outside fence; stand-
ard iron post with bronze cap stamped "483" (recovered in 1932) Feet
483.157

[Continued in Moonshine quadrangle, line 2]

7. From point about 5 miles west of Oblong east along road about
2.8 miles (by S. R. Archer in 1932)

[Continued from Newton quadrangle, line 6]

Oblong, about 4 mi. W. of, near cor. secs. 4, 5, 32, and 33, Tps. 6 and 7
N., R. 14 W., 22 ft. S. and 33 ft. W. from crossroads, in concrete
post; standard tablet stamped "28 A 1932"³⁰----- 481.487
Reference mark, in NE. angle of crossroads, 7 ft. N. of fence corner,
in root on SW. side of 24-in. oak tree; copper nail and washer----- 481.98
Oblong, about 3 mi. W. of, near cor. secs. 3, 4, 33, and 34, Tps. 6 and
7 N., R. 14 W., on S. side of rd., 45 ft. W. of T-rd. N., inside fence,
in trunk, 2 ft. above ground, on NE. side of W. fork of willow
tree with two forks; copper nail and washer----- 483.14

8. From crossroads 1 mile south of Stoy north along road to Stoy
(by E. W. Gouchenour in 1936; leveled twice)

U. S. C. & G. S. standard disk stamped "L 90 1935"----- 466.538

³⁰ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "G 90 1935," elevation 485.189 ft.

HARRISBURG QUADRANGLE

[Latitude 37°30'–37°45'; longitude 88°30'–88°45']

JOHNSON, POPE, SALINE, AND WILLIAMSON COUNTIES

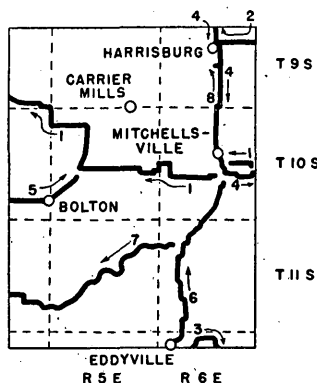


FIGURE 39.—Lines of leveling in Harrisburg quadrangle.

1. From point 0.6 mile west of Rudement generally west along roads to point 2.4 miles northeast of Bolton, thence alternately north and west to point 0.7 mile northwest of Absher (by R. G. Clinite in 1911)

[Continued from Equality quadrangle, line 4]

Rudement, 1.3 mi. W. thence 0.5 mi. N. from, 0.6 mi. SE. thence 1.2 mi. E. from Mitchellsville, near N $\frac{1}{4}$ cor. sec. 23, T. 10 S., R. 6 E., on S. side of rd., in root of elm tree; nail-----	Feet 364.22
Mitchellsville, 1.3 mi. SE. of, near center of sec. 22, T. 10 S., R. 6 E., at junction of T-rd. W., on E. side of rd., 1 ft. W. of fence; standard iron post with bronze cap stamped "406" (recovered in 1923)-----	405.756
Mitchellsville, 1.3 mi. SE. thence 0.8 mi. W. from, near center of SE $\frac{1}{4}$ sec. 21, T. 10 S., R. 6 E., at NW. corner of jog S. in rd., in root of oak tree; copper nail-----	376.80
Mitchellsville, 1.3 mi. SE. thence 1.5 mi. W. from, 0.25 mi. S. of W $\frac{1}{4}$ cor. sec. 21, T. 10 S., R. 6 E., 40 ft. SW. of bridge, in root of gum tree; copper nail-----	366.84
Mitchellsville, 1.3 mi. SE. thence 2.5 mi. W. from, 0.25 mi. S. of W $\frac{1}{4}$ cor. sec. 20, T. 10 S., R. 6 E., on top of stone marking sixteenth corner; chiseled square-----	479.58
Mitchellsville, 1.3 mi. SE. thence 3.0 mi. W. from, 3.7 mi. S. and 2.5 mi. E. from Carrier Mills, 0.25 mi. S. of center of sec. 19, T. 10 S., R. 6 E., 36 ft. SE. of junction of T-rd. N., 5 ft. E. of corner fence post, 1 ft. outside fence; standard iron post with bronze cap stamped "395"-----	394.552
Carrier Mills, 3.0 mi. S. and 2.0 mi. E. from, near NW. cor. sec. 19, T. 10 S., R. 6 E., on E. side of range line, at angle to S. in rd., on W. side of yard of J. Pankey, in root of tree; copper nail-----	399.64
Carrier Mills, 3.5 mi. S. and 2.0 mi. E. from, about 500 ft. N. of quarter corner between secs. 19 and 24, T. 10 S., Rs. 5 and 6 E., at right-angle turn W. in rd., on stone; chiseled circle-----	387.84

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Carrier Mills, 3.5 mi. S. and 1.0 mi. E. from, near W¼ cor. sec. 24, T. 10 S., R. 5 E., 60 ft. E. of rd. junction, near center of E-W. rd., in root of tree; copper nail-----	<i>Feet</i> 430.77
Carrier Mills, 3.2 mi. S. thence 1.0 mi. E. from, 0.25 mi. N. of E¼ cor. sec. 23, T. 10 S., R. 5 E., in SW. angle of junction of T-rd. W., 6 ft. W. of fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No. 9 1911 400"-----	400.030
Carrier Mills, 3.2 mi. S. thence 2.3 mi. W. from, 2.4 mi. NE. of Bolton (Stonefort post office), in NE¼ sec. 20, T. 10 S., R. 5 E., at crossing of Cleveland, Cincinnati, Chicago & St. Louis Ry., 600 ft. N. of Saline tank, on S. side of rd., on W. side of R. R. right-of-way, 1 ft. E. of corner fence post; standard iron post with bronze cap stamped "410" (recovered in 1923)-----	409.920
Carrier Mills, 1.0 mi. S. and 2.5 mi. W. from, 18 ft. W. of stone marking quarter corner between secs. 5 and 8, T. 10 S., R. 6 E., at T-rd. N., on S. side of rd.; standard iron post with bronze cap stamped "395"-----	394.225
Carrier Mills, 4.5 mi. W. of, 1.3 mi. E. thence 0.3 mi. S. from, 1.2 mi. E. thence 0.3 mi. S. from Absher, near S¼ cor. sec. 36, T. 9 S., R. 4 E., in NE. angle of junction of N-S. rd., 15 ft. N. of corner fence post; standard iron post with bronze cap stamped "434"-----	433.870
Absher, 0.5 mi. E. of, near center of SW¼ sec. 35, T. 9 S., R. 4 E., in NE. corner of jog in rd., in root of cottonwood tree; nail-----	422.37
[Continued in Marion quadrangle, line 1]	
2. From point 2.1 miles east of Harrisburg along roads west to Harrisburg, thence north 0.8 mile (by R. G. Clinite in 1913)	
[Continued from Equality quadrangle, line 5]	
Harrisburg, at SE. corner of C. C. C. & St. L. Ry. sta., N. of sidewalk, on S. edge of third flagstone curb; chiseled square-----	368.24
Harrisburg, at SW. corner of courthouse square; standard iron post with bronze cap stamped "Prim Trav Sta No 1 1911 400" (recovered in 1921) ³¹ -----	398.887
[Connects with line 4 in Galatia quadrangle]	
3. From point 1.3 miles east of Eddyville northeast, east, and south-east 2 miles (by S. R. Archer in 1913)	
[A jog from Brownfield quadrangle, line 3]	
Eddyville, 2.5 mi. in air line E. of, about 500 ft. E. of W¼ cor. sec. 3, T. 12 S., R. 6 E., 0.2 mi. SE. of rd. fork, 20 ft. S. of house on E. side of rd., at SW. corner of yard, at E. fence line; standard iron post with bronze cap stamped "1912 428"-----	427.604
[Continued in Brownfield quadrangle, line 3]	
4. From point 0.8 mile north of Harrisburg generally south and east along roads by way of Mitchellsville to point 0.6 mile west of Rudement (by H. E. Wessman in 1921)	
[Continued from Galatia quadrangle, line 5]	
Harrisburg, 0.3 mi. N. of courthouse, 0.2 mi. S. of NW. cor. sec. 15, T. 9 S., R. 5 E., at crossing of branch line of C. C. C. & St. L. Ry., in center of rd., on top of S. rail; chiseled cross-----	363.43

³¹ In 1940 this bench mark was reported destroyed.

Harrisburg, near S. limits of, at R. R. crossing, on E. side of rd., near SW. corner of flagman's house, in timber; copper nail and washer-----	Feet 367.25
Harrisburg, 0.2 mi. E. thence 1.3 mi. S. from courthouse, 0.8 mi. N. of Pankeyville, near center of SW $\frac{1}{4}$ sec. 22, T. 9 S., R. 6 E., 110 ft. N. of crossroads, at bridge over Pankey Branch, on W. end of S. abutment; chiseled square-----	363.97
Pankeyville, on E. side of rd., opposite schoolhouse, in root on W. side of 3-in. elm tree; copper nail and washer-----	377.23
Pankeyville, 0.9 mi. S. of, 0.25 mi. W. of center of sec. 34, T. 9 S., R. 6 E., at bridge over dredge ditch, on E. end of N. abutment; chiseled square-----	364.06
Pankeyville, 1.4 mi. S. of, 2.9 mi. by rd. N. of Mitchellsville, 0.25 mi. E. of NW. cor. sec. 3, T. 10 S., R. 6 E., 35 ft. W. of junction of E.-W. rd., 18 in. S. of S. fence line; standard iron post with bronze cap stamped "15 W 1921" (recovered in 1936)-----	368.901
Reference mark, at NE. corner of rd. junction, on top of end of iron pipe culvert; chiseled cross-----	367.58
Mitchellsville, 2.3 mi. NW. of, 0.3 mi. S. of NW. cor. sec. 3, T. 10 S., R. 6 E., on E. side of bridge over creek, on N. end of floor beam; chiseled cross-----	389.38
Mitchellsville, 1.6 mi. NW. of, near NE. cor. sec. 9, T. 10 S., R. 6 E., 150 ft. S. of junction of T-rd. E., on W. side of rd., in fence line, in root on E. side of 15-in. catalpa tree; copper nail and washer-----	423.04
Mitchellsville, 0.5 mi. NW. of, 540 ft. S. of NW. cor. sec. 15, T. 10 S., R. 6 E., at bridge over dredge ditch, on E. end of S. abutment; chiseled square-----	360.19
Mitchellsville, on E. side of rd., 60 ft. S. of Odd Fellows Hall, 10 ft. NE. of telephone pole; standard iron post with bronze cap stamped "16 W 1921" ²³ -----	385.654
Reference mark 1, 97 ft. N.63°30'W. from iron post, on W. side of rd., opposite Odd Fellows Hall, 12 ft. E. of house, 8 ft. W. of fence line, in root on E. side of 10-in. maple tree; copper nail and washer-----	385.38
Reference mark 2, on E. side of rd., in front of office of Dr. Hart, on NW. corner of concrete walk; chiseled circle-----	393.03
Mitchellsville, 0.6 mi. SE. of, 0.3 mi. E. of NW. cor. sec. 22, T. 10 S., R. 6 E., 120 ft. SE. of rd. fork, at NW. corner of shed, on foundation stone; chiseled cross-----	402.49
Mitchellsville, 1.2 mi. SE. of, near center of sec. 22, T. 10 S., R. 6 E., 45 ft. E. of junction of T-rd. E., 3 ft. N. of fence line, in root on N. side of 30-in. black-oak tree; copper nail and washer-----	390.13
Mitchellsville, 1.2 mi. SE. thence 0.6 mi. E. from, just E. of W $\frac{1}{4}$ cor. sec. 23, T. 10 S., R. 6 E., on N. side of rd. at turn S., 200 ft. N. of residence of A. P. Blackman, in root on W. side of 12-in. oak tree; copper nail and washer-----	432.22
Mitchellsville, 2.0 mi. SE. of, 1.6 mi. W. and 0.2 mi. S. from Rudement, near center of SW $\frac{1}{4}$ sec. 23, T. 10 S., R. 6 E., at bridge over Blackman Creek, on S. end of E. abutment; chiseled square--	373.66

²³ In 1937 it was reported that the iron post was battered and the cap illegible, but that the elevation was unchanged.

Rudement, 0.8 mi. W. of, near W $\frac{1}{4}$ cor. sec. 24, T. 10 S., R. 6 E., 30 ft. S. of junction of T-rd. E., in center of rd., in root on E. side of 6-in. wild-cherry tree; copper nail and washer-----	Feet 391.53
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[Connects with line 4 in Equality quadrangle]

5. From point 2.6 miles west of Bolton along roads east and north-east to point 2.4 miles northeast of Bolton (by S. R. Archer in 1923)

[Continued from Marion quadrangle, line 7]

Bolton (Stonefort post office), 2.3 mi. W. of, near SE. cor. sec. 27, T. 10 S., R. 4 E., at concrete bridge over Grassy Creek, on bridge end of N. wing wall of W. abutment; chiseled square-----	415.82
Bolton, 1.4 mi. W. of, about 650 ft. W. of NE. cor. sec. 35, T. 10 S., R. 4 E., in SW. angle of junction of T-rd. S., 10 ft. W. of fence corner, in root on NW. side of 24-in. oak tree; copper nail and washer-----	474.67
Bolton, 0.7 mi. W. of, N. of S $\frac{1}{4}$ cor. sec. 25, T. 10 S., R. 4 E., in NW. angle of junction of rd. NW., in root on S. side of 24-in. oak tree; copper nail and washer-----	460.49
Bolton, on NE. side of Cedar Street, 500 ft. N. of C. C. C. & St. L. Ry. sta., in front of First Baptist Church, 3 ft. NE. of junction of walk on NE. side of Cedar Street and walk leading to main entrance of church, in concrete post; standard tablet stamped "65 A 1923"-----	416.880
Reference mark, 100 ft. E. of tablet, in root on W. side of westernmost of two 12-in. maple trees standing 20 ft. apart; copper nail and washer-----	416.07
Bolton, at R. R. sta., at NW. corner of platform, on concrete curb; chiseled square ³⁴ -----	410.85
Bolton, 150 ft. N. of, at NE. corner of intersection of Roosevelt and Cedar Streets, at store building owned by J. L. Ridgway, in W. side at SW. corner, 3 in. above sidewalk; spike driven horizontally, "412.84" chiseled in brick-----	412.61
Bolton, 0.7 mi. NE. of, near center of sec. 30, T. 10 S., R. 5 E., 470 ft. NE. of junction of rd. N., in center of top of W. head wall of highway culvert; chiseled square ³⁴ -----	395.17
Bolton, 1.6 mi. NE. of, 0.25 mi. E. of W. cor. secs. 20 and 29, T. 10 S., R. 5 E., 110 ft. NE. of rd. W., 80 ft. SE. and 110 ft. NE. from R. R. crossing, on SE. side of highway, in SW. corner of yard of house, in root on W. side of 30-in. oak tree; copper nail and washer-----	395.59
Bolton, 2.4 mi. NE. of, 800 ft. NE. of center of sec. 20, T. 10 S., R. 5 E., 175 ft. N. of Saline tank, at R. R. bridge over Saline Creek, on top of W. end of parapet of S. concrete abutment; chiseled square ³⁵ -----	403.19

³⁴ In 1940 this bench mark was tied to U. S. C. & G. S. standard disks stamped "S 110 1935," elevation 409.228 ft., and "R 110 1935," elevation 402.663 ft.

³⁵ In 1940 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Q 110 1935," elevation 417.886 ft.

6. From Eddyville alternately northeast and northwest along roads by way of Delwood to road junction 1.3 miles southeast of Mitchellsville (by C. E. Walker in 1923)

[Connects with line 3 in Brownfield quadrangle]

Eddyville, 0.4 mi. NE. of, near E $\frac{1}{4}$ cor. sec. 6, T. 12 S., R. 6 E., 380 ft. E. of large two-story house, 10 ft. S. of rd., 4 ft. N. of rail fence, in root 2 in. underground on N. side of 14-in. oak tree; copper nail and washer-----	<i>Feet</i> 709.99
Eddyville, 1.5 mi. NE. of, near center of SW $\frac{1}{4}$ sec. 32, T. 11 S., R. 6 E., 300 ft. N. of small drain, 20 ft. W. of rd., 30 ft. S. of fence line, on N. side of 16-in. tree, northernmost of three wild-cherry trees in N.-S. row; copper nail and washer-----	628.25
Eddyville, 2.5 mi. NE. of, near quarter corner between secs. 29 and 32, T. 11 S., R. 6 E., 0.2 mi. N. of T-rd. E. 400 ft. W. of New Home Church, 40 ft. E. of well, at fence corner, in root on W. side of 18-in. oak tree; copper nail and washer-----	735.60
Eddyville, 3.2 mi. NE. of, 3.9 mi. by rd. S. of Delwood, center of sec. 29, T. 11 S., R. 6 E., 35 ft. S. of E.-W. rd., 10 ft. W. of rd. S., 10 ft. S. of blazed elm tree, in concrete post; standard tablet stamped "1 WA 1923"-----	802.040
Reference mark, 160 ft. W. of rd. S. on N. side of E.-W. rd., in root 3 in. underground on S. side of 6-in. sassafras tree; copper nail and washer-----	801.08
Delwood, 2.8 mi. SW. of, S. of center of NW $\frac{1}{4}$ sec. 20, T. 11 S., R. 6 E., 0.3 mi. N. of farmhouse, on E. side of rd. at right-angle turn W., 10 ft. N. of rail fence, in root on W. side of 30-in. oak tree; copper nail and washer-----	749.70
Delwood, 1.4 mi. SW. of, 0.25 mi. S. of NE. cor. sec. 18, T. 11 S., R. 6 E., 0.6 mi. N. of point where rd. enters woods at NE. cor. sec. 19, 20 ft. W. of rd., in root 2 in. underground on E. side of 16-in. blazed oak tree; copper nail and washer-----	657.10
Delwood, 0.3 mi. W. of, in NW $\frac{1}{4}$ sec. 8, T. 11 S., R. 6 E., 15 ft. N. of rd., in line with rd. S., 130 ft. W. of small bridge, in concrete post; standard tablet stamped "2 WA 1923"-----	684.031
Reference mark, 15 ft. N. of E.-W. rd., 80 ft. E. of N.-S. rd., in root on S. side of 12-in. oak tree; copper nail and washer-----	681.43
Delwood, 0.9 mi. NE. of, 0.2 mi. NE. of Cedar Bluff Church, near E $\frac{1}{4}$ cor. sec. 5, T. 11 S., R. 6 E., 20 ft. SE. of rd., in root 2 in. underground on S. side of 8-in. blazed oak tree; copper nail and washer-----	658.42
Delwood, 2.2 mi. NE. of, 0.5 mi. NE. of crossing of Pope-Saline county line, in SE $\frac{1}{4}$ sec. 33, T. 10 S., R. 6 E., 400 ft. N. of farmhouse, 50 ft. NW. of bend E. in rd., in field, 8 ft. W. of fence line, in root on E. side of 8-in. blazed oak tree; copper nail and washer-----	523.93
Delwood, 3.1 mi. NE. of, 3.0 mi. by rd. S. of Mitchellsville, 100 ft. S. and 200 ft. E. from NW. cor. sec. 34, T. 10 S., R. 6 E., 62 ft. W. of Winkeman School, 28 ft. E. of rd., in concrete post; standard tablet stamped "3 WA 1923"-----	634.292
Reference mark, 70 ft. E. of rd., 55 ft. N. of schoolhouse, in schoolyard, in root 2 in. underground on S. side of 8-in. oak tree; copper nail and washer-----	630.75

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7. From road junction 0.3 mile west of Delwood generally southwest along roads by way of McCormick to point 0.6 mile east of Ozark (by C. E. Walker in 1923)

Delwood, 1.4 mi. W. of, near center of NW¼ sec. 7, T. 11 S., R. 6 E., 20 ft. N. and 25 ft. W. from crossroads, in root 4 in. underground on S. side of 8-in. oak tree; copper nail and washer-----	Feet 736.05
Delwood, 2.4 mi. W. of, in NW¼ sec. 12, T. 11 S., R. 5 E., 400 ft. E. of rd. fork, 400 ft. W. of farmhouse of G. D. Lightfoot, near summit of hill, 20 ft. N. of rd., on rock; chiseled square-----	796.24
Delwood, 3.6 mi. SW. of, 3.8 mi. NE. of McCormick, in SE¼ sec. 11, T. 11 S., R. 5 E., 100 ft. E. of farmhouse of Joe Mooren, 10 ft. S. of rd., in field, in fence line, in concrete post; standard tablet stamped "4 WA 1923"-----	783.965
Reference mark, 75 ft. E. of Mooren farmhouse, 5 ft. S. of rd., in root on E. side of 8-in. oak tree; copper nail and washer-----	785.16
McCormick, 2.5 mi. NE. of, in SE¼ sec. 15, T. 11 S., R. 5 E., 0.25 mi. N. of farmhouse of T. W. Rose, 55 ft. S. of deserted farmhouse, 10 ft. S. of rd. at center of jog W., in root 2 in. underground on N. side of 6-in. walnut tree; copper nail and washer-----	747.34
McCormick, 1.4 mi. NE. of, near W. side SW¼ sec. 15, T. 11 S., R. 5 E., 500 ft. W. of farmhouse of W. E. Parsons, 25 ft. W. of rd. at bend SW., in root 2 in. underground on E. side of 24-in. blazed oak tree; copper nail and washer-----	771.36
McCormick, 0.4 mi. E. of, N. of center of sec. 21, T. 11 S., R. 5 E., at junction of rd. SE., 10 ft. W. of rd., in fence line, in concrete post; standard tablet stamped "5 WA 1923"-----	727.300
Reference mark, 50 ft. S. of rd. junction, 10 ft. E. of rd., on rock; chiseled square-----	726.27
McCormick, 0.9 mi. SW. of, about 500 ft. S. of N¼ cor. sec. 29, T. 11 S., R. 5 E., 20 ft. N. of rd., at edge of woods, in root on S. side of blazed 12-in. oak tree; copper nail and washer-----	713.09
McCormick, 2.1 mi. SW. of, 0.2 mi. S. of center of sec. 30, T. 11 S., R. 5 E., 600 ft. W. of store, 15 ft. N. of rd., 75 ft. W. of Zion Cemetery, 10 ft. S. of fence line, in root on N. side of blazed 18-in. oak tree; copper nail and washer-----	706.75
McCormick, 2.5 mi. SW. of, 3.7 mi. SE. of Ozark, near center of SW¼ sec. 30, T. 11 S., R. 5 E., 600 ft. E. of farmhouse of Frank Taylor, 150 ft. W. of farmhouse of S. L. Harris, at junction of T-rd. N., in NW. fence corner, in concrete post; standard tablet stamped "6 WA 1923"-----	711.283
Reference mark, in center of rd. junction, on rock outcrop; chiseled square-----	710.32
Ozark, 2.8 mi. SE. of, just N. of center of sec. 25, T. 11 S., R. 4 E., 130 ft. W. of rd. N., 10 ft. SW. of rd., at Bundren farmhouse, in root on E. side of 24-in. oak tree; copper nail and washer-----	723.65
Ozark, 1.3 mi. E. thence 0.5 mi. S. from, near center of sec. 26, T. 11 S., R. 4 E., 200 ft. NW. of Reagan School, 20 ft. W. of rd., 30 ft. N. of junction of rd. E., in root 5 in. underground on N. side of 14-in. hickory tree; copper nail and washer-----	755.18

[Continued in Marion quadrangle, line 8]

8. From point 1.4 miles south of Pankeyville generally north along road to point 1 mile south of Cleveland, Cincinnati, Chicago & St. Louis Railway station at Harrisburg (by E. W. Gouchenour in 1936; leveled twice)

Pankeyville, 1.4 mi. S. of, on S. head wall of concrete culvert under rd. W.; chiseled square. ³⁶ -----	<i>Feet</i> 369. 00
Pankeyville, 0.4 mi. S. of, 40 ft. N. of line between secs. 27 and 34, T. 9 S., R. 6 E., on E. head wall of concrete culvert; chiseled square-----	371. 16
Pankeyville, 0.8 mi. N. of, 0.2 mi. E. and 1.3 mi. S. from courthouse at Harrisburg, near center of SW $\frac{1}{4}$ sec. 22, T. 9 S., R. 6 E., 60 ft. N. and 18 ft. W. from junction of T-rd. E., at concrete bridge over Pankey Branch, on W. end of S. abutment; chiseled square-----	364. 68
U. S. C. & G. S. standard disk stamped "K 110 1935"-----	377. 630

³⁶ This bench mark is 9 ft. north of the standard iron post with bronze cap stamped "15 W 1921," for which it was established as a reference mark.

HERRIN QUADRANGLE

[Latitude 37°45'–38°00'; longitude 89°00'–89°15']

FRANKLIN, JACKSON, PERRY, AND WILLIAMSON COUNTIES

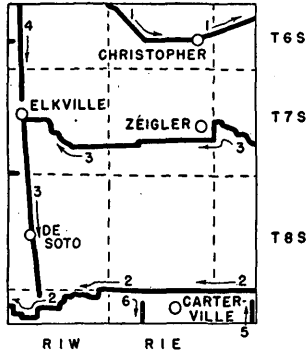


FIGURE 40.—Lines of leveling in Herrin quadrangle.

1. From point near McDonald along Illinois Central Railroad south-east to Mulkeytown, thence east to Christopher, thence north-east 3 miles (by T. A. Green in 1906; first-order leveling)

[Continued from Duquoin quadrangle, line 1]

McDonald, 1.0 mi. SE. of, 2.0 mi. NW. of Mulkeytown, 60 ft. directly N. of milepost "E. St. Louis 77 mi. Eldorado 44 mi."; standard iron post with bronze cap stamped "1906 402" and designated "C ₁ " (recovered by U. S. C. & G. S. in 1935)	Feet 401.403
Mulkeytown, 324 ft. S. of sta., 3.2 mi. W. of Christopher, at NE. corner of hall of Modern Woodmen of America, in E. side of corner-stone; aluminum tablet stamped "1906 449" and designated "D ₁ " (recovered by U. S. C. & G. S. in 1935; reported destroyed in 1935)	448.444
Christopher, at SW. corner of Christopher National Bank, on W. side, in nineteenth tier above ground, in second brick from corner; aluminum tablet stamped "1906 443" and designated "E ₁ " (recovered by U. S. C. & G. S. in 1935)	443.283
Christopher, 2.7 mi. NE. of, 348 ft. W. of small R. R. bridge over stream, 100 ft. N. of track, 150 ft. SE. of house occupied by Isaac Denton; standard iron post with bronze cap stamped "1906 392" and designated "F ₁ "	392.388

[Continued in West Frankfort quadrangle, line 1]

2. From point 1.4 miles east of Fordville generally west along Coal Belt Railway and roads to point on Illinois Central Railroad 3.9 miles south of De Soto, thence south 0.5 mile, thence alternately west and north along roads to point 5.7 miles east of Murphysboro (by Henry Bücher in 1907)

[Continued from West Frankfort quadrangle, line 4]

Fordville, 0.3 mi. E. of, near NW. cor. sec. 5, T. 9 S., R. 2 E., on S. side of rd., opposite T-rd. N.; standard iron post with bronze cap stamped "Prim Trav Sta No 10 1906 464 Adj" (recovered in 1911)	464.116
Fordville, at SW. end of Carterville-Herrin switch; top of rail	460.0

Fordville, 2.8 mi. W. of, 1.0 mi. N. of Carterville, near NE. cor. sec. 3, T. 9 S., R. 1 E., in SW. angle of crossroads, 6.7 ft. S. of fence corner; standard iron post with bronze cap stamped "431 Adj" ³⁷ -----	<i>Feet</i> 430.491
Carterville, 1.0 mi. N. thence 3.0 mi. W. from, 0.4 mi. N. thence 0.7 mi. W. from Fredonia, near SW. cor. sec. 32, T. 8 S., R. 1 E., in NE. angle of junction of T-rd. N., 12.5 ft. E. of fence corner; standard iron post with bronze cap stamped "427 Adj" (recovered in 1919)-----	427.242
T. 9 S., R. 1 W., about 0.3 mi. S. of NW. cor. sec. 1, on E. side of rd., opposite rd. W., N. of fence corner at N. end of house lot, on W. side of fence; standard iron post with bronze cap stamped "488 Adj"-----	488.072
T. 9 S., R. 1 W., in NE $\frac{1}{4}$ sec. 2, at NE. corner of wagon bridge over Craborchard Creek, on top of stone abutment; chiseled square-----	375.14
T. 9 S., R. 1 W., near NW. cor. sec. 10, 3.9 mi. S. thence 0.7 mi. E. from De Soto, in SE. angle of crossroads, 11 ft. S of E-W. fence; standard iron post with bronze cap stamped "391 Adj"-----	390.702
De Soto, 3.9 mi. S. of, at intersection of I. C. R. R., at S. end of crossing; top of E. rail-----	394.3
T. 9 S., R. 1 W., near NE. cor. sec. 7, 5.9 mi. E. of Jackson County courthouse in Murphysboro, in SW. angle of junction of T-rd. W., 24 ft. S. of fence corner, 8 ft. E. of fence; standard iron post with bronze cap stamped "397 Adj" (recovered in 1919)-----	396.958

[Continued in Murphysboro quadrangle, line 3]

3. From point 1.1 miles southeast of Plumfield generally west along roads to Elkville, thence south along Illinois Central Railroad to point 3.9 miles south of De Soto (by Henry Bücher in 1907)

[Continued from West Frankfort quadrangle, line 5]

Plumfield, 0.3 mi. NW. of, about 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 20, T. 7 S., R. 2 E., at SW. corner of iron wagon bridge over Muddy River, at end of third span and beginning of plank approach; in top of steel pile; bolt-----	382.00
Plumfield, 1.8 mi. NW. of, 0.5 mi. N. and 0.7 mi. E. from Ziegler, near SW. cor. sec. 18, T. 7 S., R. 2 E., in NE. angle of crossroads, 20 ft. E. of N-S. fence line, 8 ft. S. of fence; standard iron post with bronze cap stamped "398 Adj"-----	397.650
Ziegler, 0.5 mi. S. and 0.3 mi. W. from, near SW. cor. sec. 24, T. 7 S., R. 1 E., in NE. angle of crossroads, 2.5 ft. N. of fence corner; standard iron post with bronze cap stamped "393 Adj Reset 1939" ³⁸ -----	390.792
Ziegler, 0.5 mi. S. and 3.3 mi. W. from, 7.9 mi. E. of Illinois Central R. R. sta. in Elkville, near NW. cor. sec. 28, T. 7 S., R. 1 E., in SE. angle of crossroads, 1 ft. N. of fence, 6.8 ft. E. of fence corner; standard iron post with bronze cap stamped "440 Adj"-----	439.807
Elkville, 5.4 mi. SE. of, near center of NE $\frac{1}{4}$ sec. 25, T. 7 S., R. 1 W., in SE. angle of rd. junction, on N. side of straight rail fence, E. of fence corner; standard iron post with bronze cap stamped "395 Adj"-----	394.743

³⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "A 120 1935," elevation 457.279 ft.

³⁸ In 1939 this bench mark was reset 1.681 ft. lower than its original elevation. Its present position is 350 ft. southwest of southwest line of Franklin Street, 1 ft. southeast of southeast curb of Maple Street. The figures given represent the new elevation.

Elkville, 2.5 mi. SE. of, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 22, T. 7 S., R. 1 W., at rd. junction, on N. side of rd., opposite center line of rd. S.; standard iron post with bronze cap stamped "391 Adj"-----	<i>Feet</i> 391.097
Elkville, 2.1 mi. SE. of, in NE. cor. sec. 21, T. 7 S., R. 1 W., at SE. corner of bridge over Little Muddy River, in top of steel pile; bolt-----	384.19
Elkville, 0.3 mi. S. of I. C. R. R. sta., 1.2 mi. N. of Hallidayboro, at NE. corner of R. R. bridge 295-70 over wagon rd., on top step at SE. corner of concrete abutment; chiseled cross-----	400.20
Hallidayboro, 0.3 mi. N. of, at concrete culvert 296-60, on top of W. wall, on brass plate "Myers Construction Co. 1902 St. Louis"; center of "0" in "1902" (recovered by U. S. C. & G. S. in 1935; designated "A 10" by U. S. C. & G. S. in 1922)-----	404.313
Hallidayboro, just S. of sta., at crossing; top of E. rail-----	406.9
Hallidayboro, 0.8 mi. S. of, at concrete culvert 297-71, on top of E. wall, on brass plate "Gilbert Spencer, Jr., Chicago 1902"; middle "c" of "Chicago" (recovered by U. S. C. & G. S. in 1922 and designated "B 10")-----	395.472
Hallidayboro, 1.1 mi. S. of, at concrete culvert 298-01, on top of E. wall, on brass plate "Gilbert Spencer, Jr., Chicago 1902"; middle "c" of "Chicago" (recovered by U. S. C. & G. S. in 1922 and designated "C 10")-----	394.556
Hallidayboro, 1.5 mi. S. of, at concrete culvert 298-42, on top of E. wall, on brass plate "Gilbert Spencer, Jr., Chicago 1902"; middle "c" of "Chicago" (recovered by U. S. C. & G. S. in 1922 and designated "D 10")-----	389.806
Hallidayboro, 1.7 mi. S. of, 1.0 mi. N. of Ward, 3.3 mi. N. of De Soto, in SW. angle of intersection of wagon rd., 32 ft. W. of W. south-bound rail, 1.5 ft. N. of fence; standard iron post with bronze cap stamped "394 Adj" (recovered by U. S. C. & G. S. in 1922 and designated "E 10")-----	393.365
Ward, at sta., at N. end of crossing; top of W. rail-----	408.6
De Soto, 0.6 mi. N. of, at concrete culvert 301-28, on top of E. wall, on brass plate "Gilbert Spencer, Jr., Chicago 1902"; middle "c" of "Chicago" (recovered by U. S. C. & G. S. in 1922 and designated "F 10")-----	386.174
De Soto, about 500 ft. N. of I. C. R. R. sta., just S. of overhead crossing of Missouri Pacific R. R., at concrete culvert 301-78, on brass plate "Gilbert Spencer, Jr., Chicago 1902"; middle "c" of "Chicago" (recovered by U. S. C. & G. S. in 1922 and designated "G 10")-----	390.301
De Soto, 120 ft. S. of sta., at NW. corner of section house lot, in right-of-way, 19 ft. E. of E. rail, about 2 ft. S. of fence corner, 9 in. W. of fence; standard iron post with bronze cap stamped "401 Adj" (recovered by U. S. C. & G. S. in 1922 and designated "H 10")--	401.213
De Soto, 2.2 mi. S. of, at extreme SW. corner of R. R. bridge 304-00 over Big Muddy River, in top of W. wall, 2.3 ft. from S. end, 2.6 ft. from W. end; aluminum tablet stamped "392 Adj" (recovered by U. S. C. & G. S. in 1922 and designated "J 10")-----	391.502
De Soto, 3.4 mi. S. of, at concrete culvert 305-51, on NE. corner of E. wall; chiseled square-----	382.77

4. From point 0.8 mile south of Duquoin south along Illinois Central Railroad to Elkville (by Henry Bücher in 1907)

[Connects with line 1 in Duquoin quadrangle]

Duquoin, 1.8 mi. S. of, at concrete culvert 290-26, on top of W. wall, on brass plate "Myers Construction Co. 1902 St. Louis"; "0" in "1902" (recovered by U. S. C. & G. S. in 1922 and designated "S 9")	Feet 433.687
Duquoin, 2.4 mi. S. of, at concrete culvert 290-81, on top of W. wall, on brass plate "Myers Construction Co. 1902 St. Louis"; "0" in "1902" (recovered by U. S. C. & G. S. in 1922 and designated "T 9")	419.914
Duquoin, 2.5 mi. S. of, 4.4 mi. N. of Elkville, at SW. corner of concrete culvert 291-01, in top of W. wall, 22 in. N. of S. edge, 16 in. E. of W. edge; aluminum tablet stamped "420 Adj" (recovered by U. S. C. & G. S. in 1922 and designated "V 9")	419.605
Reference mark, on W. wall of culvert, on brass plate "Myers Construction Co. 1902 St. Louis"; "0" in "1902" (recovered by U. S. C. & G. S. in 1922 and designated "U 9")	419.592
Elkville, 3.1 mi. N. of, at concrete culvert 292-23, on top of W. wall, on brass plate "Myers Construction Co. 1902 St. Louis"; "0" in "1902" (recovered by U. S. C. & G. S. in 1922 and designated "W 9")	413.549
Elkville, 2.5 mi. N. of, at concrete culvert 292-88, in top of W. wall, on brass plate "Myers Construction Co. 1902 St. Louis"; "0" in "1902" (recovered by U. S. C. & G. S. in 1922 and designated "X 9")	401.246
Elkville, 1.9 mi. N. of, at concrete culvert 293-58, in top of W. wall, on brass plate "Myers Construction Co. 1902 St. Louis"; "0" in "1902" (recovered by U. S. C. & G. S. in 1922 and designated "Y 9")	397.060
Elkville, 1.3 mi. N. of, at concrete culvert 294-05, in top of W. wall, on brass plate "Myers Construction Co. 1902 St. Louis"; "0" in "1902" (recovered by U. S. C. & G. S. in 1922 and designated "Z 9")	398.037
Elkville, at N. end of sta. platform; standard iron post with bronze cap stamped "Prim Trav Sta No 34 1906 400 Adj"	399.960

5. From point 1.7 miles south and 1.3 miles east from Fordville along roads north and west to Fordville (by R. G. Clinite in 1911)

[Continued from Carbondale quadrangle, line 1]

Fordville, 1.3 mi. E. thence 1.0 mi. S. from, near NW. cor. sec. 9, T. 9 S., R. 2 E., in SE. angle of crossroads; top of galvanized drain pipe	478.34
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6. From road junction 0.4 mile north and 0.7 mile west from Fredonia east and south along roads to point 1.3 miles south of Fredonia (by H. S. Senseney in 1919)

Fredonia, 0.6 mi. S. of, 0.25 mi. W. of SE. cor. sec. 5, T. 9 S., R. 1 E., in NW. angle of crossroads, in root of elm tree; copper nail and washer	417.37
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[Continued in Carbondale quadrangle, line 4]

INA QUADRANGLE

[Latitude 38°00'–38°15'; longitude 88°45'–89°00']

FRANKLIN AND JEFFERSON COUNTIES

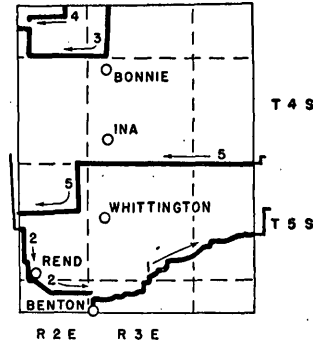


FIGURE 41.—Lines of leveling in Ina quadrangle.

1. From Benton along roads alternately north and east to point 0.8 mile north and 2.5 miles west from Macedonia (by H. E. Wessman in 1921; leveled twice)

[Connects with line 1 in West Frankfort quadrangle]

Benton, 0.9 mi. N. of Illinois Central Railroad sta., near S¼ cor. sec. 7, T. 6 S., R. 3 E., 40 ft. NW. of junction of T-rd. E., 3 ft. W. of pavement, in root on E. side of 30-in. locust tree; nail	<i>Feet</i> 445.34
Benton, 0.9 mi. N. thence 0.6 mi. E. from, near cor. secs. 7, 8, 17, and 18, T. 6 S., R. 3 E., at county fair grounds, 30 ft. NE. of junction of T-rd. N., in root on W. side of 12-in. elm tree; copper nail and washer	453.46
Benton, 1.2 mi. N. and 1.4 mi. E. from, near center of SE¼ sec. 8, T. 6 S., R. 3 E., 600 ft. N. of residence of P. A. D. Martin, 30 ft. N. of crossroads, 1 ft. N. of fence, in root on E. side of 20-in. Osage-orange tree; copper nail and washer	442.83
T. 6 S., R. 3 E., 0.25 mi. W. of center of sec. 9, near SW. end of Moses Lake, 35 ft. E. of junction of T-rd. E., 1 ft. N. of N. fence line; standard iron post with bronze cap stamped "1 W 1921"	443.818
Reference mark, 105 ft. S.66°30'E. from iron post, 130 ft. E. of rd. junction, on S. side of rd., in root on N. side of 26-in. thorn tree; copper nail and washer	444.80
T. 6 S., R. 3 E., near E¼ cor. sec. 9, 15 ft. W. of right-angle turn in rd., at junction of private rd. N., in root on E. side of 8-in. wild-cherry tree; copper nail and washer	435.41
T. 6 S., R. 3 E., near S¼ cor. sec. 3, 20 ft. N. of rd. junction, 8 ft. N. of fence line, in root on SW. side of 24-in. wild-cherry tree; copper nail and washer	441.59
T. 6 S., R. 3 E., N. of center of SE¼ sec. 3, N. of junction of private rd. W., on W. side of rd.; top of iron-pipe culvert	438.47

T. 6 S., R. 3 E., 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 3, 0.3 mi. W. of Possum Hollow School, in NW. angle of crossroads, 100 ft. W. of N.-S. fence, 10 ft. S. of E.-W. fence, in root on S. side of 30-in. oak tree; copper nail and washer-----	Feet 447. 67
T. 6 S., R. 3 E., S. of center of NW $\frac{1}{4}$ sec. 2, 273 ft. NE. of crossing of Jordan Creek, 35 ft. N. of junction of rd. N., 2 ft. W. of W. fence line; standard iron post with bronze cap stamped "2 W 1921"-----	414. 025
Reference mark 1, 273 ft. S.52°30'W. from iron post, at bridge over Jordan Creek, on N. wing wall of E. abutment; chiseled square-----	411. 44
Reference mark 2, S. of center of NW $\frac{1}{4}$ sec. 2, T. 6 S., R. 3 E., at bridge over Jordan Creek, on N. wing wall of W. abutment; chiseled square-----	411. 60
T. 5 S., R. 3 E., 480 ft. N. of S. side sec. 35, 30 ft. from junction of T-rd. E., on S. wing wall of E. abutment of culvert; chiseled square-----	412. 47
T. 5 S., R. 3 E., near center of SW $\frac{1}{4}$ sec. 36, 50 ft. E. of rd. fork, on S. wall of concrete culvert; chiseled cross-----	415. 76
T. 5 S., R. 3 E., S. of center of sec. 36, on N. wing wall of E. abutment of bridge over dry run; chiseled square-----	415. 57
T. 5 S., R. 4 E., 0.25 mi. N. of center of sec. 31, 200 ft. NE. of crossroads, on N. side of rd., in yard of C. M. Teippet, in root on W. side of 11-in. maple tree; copper nail and washer-----	484. 33
T. 5 S., R. 4 E., 0.25 mi. N. of SW. cor. sec. 29, 60 ft. NE. of junction of T-rd. E., in corner of yard of D. E. Bain; standard iron post with bronze cap stamped "3 W 1921"-----	442. 594
Reference mark 1, 63 ft. N. 76°30' E. from iron post, 100 ft. E. of rd. junction, 55 ft. N. of E.-W. rd., in yard of D. E. Bain, in root on NW. side of 26-in. black oak tree; copper nail and washer-----	442. 22
Reference mark 2, 0.25 mi. N. of SW. cor. sec. 29, T. 5 S., R. 3 E., 50 ft. NE. of rd. junction, in yard of D. E. Bain, in root on SE. side of 15-in. boxelder tree; copper nail and washer-----	442. 43
T. 5 S., R. 4 E., 0.25 mi. W. of center of sec. 28, 0.5 mi. N. and 3.7 mi. W. from Macedonia, at bridge over Sugar Camp Creek, on S. wing wall of E. abutment; chiseled square-----	414. 48
Macedonia, 0.8 mi. N. and 3.0 mi. W. from, 0.3 mi. N. of West Point School, near center of sec. 28, T. 5 S., R. 4 E., 100 ft. S. of crossroads, on W. side of rd., 5 ft. inside fence line, in root on N. side of 24-in. black-oak tree; copper nail and washer-----	434. 98

[Continued in McLeansboro quadrangle, line 1]

2. From point 1 miles south and 2.7 miles east from Sesser alternately east and south along roads to Benton (by F. D. Kramer in 1924)

[Continued from Duquoin quadrangle, line 6]

Sesser, 1.0 mi. S. and 3.0 mi. E. from, near center of sec. 21, T. 5 S., R. 2 E., in SW. angle of crossroads, on top of bank, inside fence, in concrete post; standard tablet stamped "5 K 1924"-----	439. 938
Reference mark 1, 375 ft. N.88°W. from tablet, on top of NW. corner of concrete slab bridge; chiseled square-----	451. 77
Reference mark 2, at NW. corner of crossroads, on top of concrete culvert wall; chiseled square-----	436. 63
Sesser, 2.0 mi. S. and 3.0 mi. E. from, near center of sec. 28, T. 5 S., R. 2 E., on top of E. end of N. concrete abutment of concrete and steel bridge; chiseled square-----	395. 28

Sesser, 2.5 mi. S. and 3.0 mi. E. from, near quarter corner between secs. 28 and 33, T. 5 S., R. 2 E., 145 ft. N. of E-W. rd., on E. side of N-S. rd., in root of 24-in. black-oak tree; copper nail and washer-----	Feet 428. 51
Sesser, 3.2 mi. S. and 3.0 mi. E. from, 2.5 mi. E. and 1.8 mi. N. from Valier, 1.2 mi. N. and 0.3 mi. W. from Rend, 0.25 mi. S. of center of sec. 33, T. 5 S., R. 3 E., on W. side of rd., 80 ft. S. of residence of S. H. Stockton, in root of 22-in. black walnut tree; copper nail and washer-----	445. 68
Rend, 0.6 mi. of, N. of E $\frac{1}{4}$ cor. sec. 4, T. 5 S., R. 3 E., on E. end of N. abutment of concrete and steel bridge; chiseled square-----	394. 66
Rend, on N. side of Benton-Duquoin rd., on W. side of Main Street, 4 ft. N. of SE. fence corner of property of J. Richardson, in concrete post; standard tablet stamped "6 K 1924"-----	391. 592
Reference mark 1, 165 ft. N.21°E. from tablet, in NE. angle of crossroads, in field, on concrete well platform; chiseled square-----	391. 80
Reference mark 2, on S. side of E-W. rd., in root of 12-in. water-elm tree; copper nail and washer-----	390. 20
Rend, 1.1 mi. SE. of, 1.4 mi. N. thence 2.3 mi. W. from Benton, at bridge over Big Muddy River, on S. end of W. concrete abutment; chiseled square-----	387. 88
Big Muddy River; surface of water July 16, 1924 (after fairly heavy rain) -----	375. 66
Benton, 1.4 mi. N. thence 2.0 mi. W. from, near center of sec. 11, T. 6 S., R. 2 E., at summit of hill, on S. side of rd., near residence of T. J. Ward, on top of bank, in root of 36-in. black-oak tree; copper nail and washer-----	428. 02
Benton, 1.4 mi. N. thence 1.4 mi. W. from, about 635 ft. E. of W $\frac{1}{4}$ cor. sec. 12, T. 6 S., R. 2 E., on top of W. end of S. wall of concrete culvert; chiseled square-----	420. 52
Benton, 1.4 mi. N. thence 0.5 mi. W. from, near W $\frac{1}{4}$ cor. sec. 7, T. 6 S., R. 3 E., 70 ft. E. of crossroads, on S. side of rd., near brick house, in root of 22-in. oak tree; copper nail and washer-----	441. 06
Benton, 1.4 mi. N. of, near center of sec. 7, T. 6 S., R. 3 E., at crossing of dirt and concrete rds., on S. end of E. wall of concrete culvert; chiseled square-----	443. 49
Benton, 0.9 mi. N. of Franklin county courthouse, at SW. corner of intersection of Bond and North Main Streets, on curb; chiseled square-----	441. 37

[Continued in West Frankfort quadrangle, line 7]

3. From point 0.6 mile south of Bakerville along roads south to crossroads 4.5 miles north of Ina, thence alternately west and north to point 2.2 miles east and 1.5 miles north from Waltonville (by E. W. Gouchenour in 1928)

[Continued from Mount Vernon quadrangle, line 1]

Mount Vernon, 5.2 mi. S. of, 6.3 mi. N. of Ina, 820 ft. S. and 600 ft. E. from NW. cor. sec. 29, T. 3 S., R. 3 E., 500 ft. N. of crossroads, 35 ft. W. of Chicago & Eastern Illinois Ry. milepost 821, in W. edge of right-of-way; R. R. B. M.-----	438. 04
Ina, 5.5 mi. N. of, 0.25 mi. W. of quarter corner between secs. 29 and 32, T. 3 S., R. 3 E., 20 ft. N. and 35 ft. W. from intersection of State Highway 37 and E-W. rd., in concrete post; standard tablet not stamped -----	423. 764

Reference mark, 10 ft. E. of tablet, on N. wing wall of concrete culvert; chiseled square-----	<i>Feet</i> 425.78
Ina, 4.5 mi. N. of, 0.8 mi. N. of Bonnie, about 400 ft. E. of SW. cor. sec. 32, T. 3 S., R. 3 E., 30 ft. N. and 15 ft. W. from crossroads, on N. end of W. wing wall of concrete culvert; chiseled square-----	443.38
Ina, 4.5 mi. N. thence 1.4 mi. W. from, 6.0 mi. E. of Waltonville, near NW. cor. sec. 1, T. 4 S., R. 2 E., 30 ft. S. and 25 ft. E. from crossroads, in NW. corner of yard of abandoned house, in concrete post; standard tablet not stamped-----	411.281
Reference mark, 10 ft. N. and 25 ft. E. from crossroads, in root on E. side of 30-in. oak tree; copper nail and washer-----	411.26
Waltonville, 5.0 mi. E. of, near SW. cor. sec. 36, T. 3 S., R. 2 E., 45 ft. N. and 20 ft. E. from crossroads, in root on W. side of 36-in. black-oak tree; copper nail and washer-----	451.51
Waltonville, 4.2 mi. E. of, 0.25 mi. E. of SW. cor. sec. 35, T. 3 S., R. 2 E., 30 ft. N. and 30 ft. E. from crossing of Jefferson & South-western R. R., on concrete culvert; chiseled square-----	456.64
Waltonville, 3.8 mi. E. of, 0.25 mi. W. of SE. cor. sec. 34, T. 3 S., R. 2 E., 10 ft. N. and 125 ft. E. from crossroads, in root on S. side of 20-in. wild-cherry tree; copper nail and washer-----	461.30
Waltonville, 3.0 mi. E. of, near SW. cor. sec. 34, T. 3 S., R. 2 E., 20 ft. N. and 35 ft. E. from rd. junction, in concrete post; standard tablet not stamped-----	433.002
Reference mark, 30 ft. S. and 20 ft. E. from tablet, in root of 10-in. tree; copper nail and washer-----	431.71
Waltonville, 3.0 mi. E. thence 1.0 mi. N. from, near NW. cor. sec. 34, T. 3 S., R. 2 E., 22 ft. S. and 10 ft. E. from junction of T-rd. W., in root on W. side of 30-in. white-oak tree; copper nail and washer-----	436.11
Waltonville, 3.0 mi. E. thence 1.5 N. from, near E $\frac{1}{4}$ cor. sec. 28, T. 3 S., R. 2 E., 10 ft. N. and 200 ft. W. from junction of T-rd. W., in root on S. side of 12-in. sassafras tree; copper nail and washer--	432.24
[Connects with line 7 in Duquoin quadrangle]	
4. From point 0.6 mile south and 2.7 miles west from Bakerville along roads alternately south and west to point 3 miles east and 1.5 miles north from Waltonville (by E. W. Gouchenour in 1928)	
[Continued from Mount Vernon quadrangle, line 6]	
Mount Vernon, 5.0 mi. S. and 2.6 mi. W. from, 5.0 mi. E. thence 2.0 mi. N. from Waltonville, near NE. cor. sec. 26, T. 3 S., R. 2 E., 30 ft. S. and 25 ft. W. from crossroads, in concrete post; standard tablet stamped "44 S 1928"-----	499.642
Reference mark, 60 ft. S. and 30 ft. E. from crossroads, in root on W. side of 25-in. red-oak tree; copper nail and washer-----	502.08
Waltonville, 4.0 mi. E. thence 2.0 mi. N. from, near NW. cor. sec. 26, T. 3 S., R. 2 E., 20 ft. S. and 110 ft. E. from crossroads, in root on N. side of 15-in. white-oak tree; copper nail and washer-----	469.68
Waltonville, 3.0 mi. E. thence 2.0 mi. N. from, near NW. cor. sec. 27, T. 3 S., R. 2 E., 240 ft. S. and 20 ft. E. from junction of N.-S. rd., in root on W. side of 15-in. elm tree; copper nail and washer-----	426.35

5. From point 7.5 miles south and 0.8 mile west from Belle Rive west along Franklin-Jefferson county-line road to point 1.5 miles south and 2 miles west from Ina, thence south and west to point 2.7 miles east of Sesser (by E. W. Gouchenour in 1928)

[Connects with line 3 in McLeansboro quadrangle]

Belle Rive, 7.5 mi. S. thence 1.5 mi. W. from, 1.5 mi. S. thence 7.2 mi. E. from Ina; near N $\frac{1}{4}$ cor. sec 4, T. 5 S., R. 4 E., 20 ft. S. and 300 ft. E. from junction of T-rd. N., in yard of farmhouse, in root on N. side of 40-in. black-oak tree; copper nail and washer-----	<i>Feet</i> 473.72
Ina, 1.5 mi. S. thence 6.2 mi. E. from, near S $\frac{1}{4}$ cor. sec. 32, T. 4 S., R. 4 E., 35 ft. N. and 110 ft. E. from rd. at fence N., in root on S. side of triple oak tree; copper nail and washer-----	473.32
Ina, 1.5 mi. S. thence 5.7 mi. E. from, near N. cor. secs. 5 and 6, T. 5 S., R. 4 E., 12 ft. S. and 35 ft. W. from junction of T-rd. S., in concrete post; standard tablet stamped "67 S 1928"-----	485.836
Reference mark, in center line of T-rd. S., in root of 20-in. tree; copper nail and washer-----	485.37
Ina, 1.5 mi. S. thence 4.6 mi. E. from, near NE. cor. sec. 1, T. 5 S., R 3 E, 65 ft. S. and 125 ft. W. from crossroads, in pasture, in root on N. side of lone elm tree; copper nail and washer-----	529.78
Ina, 1.5 mi. S. thence 3.6 mi. E. from, near SE. cor. sec. 35, T. 4 S., R. 3 E., 30 ft. N. and 20 ft. W. from junction of T-rd. N., in root on N. side of 10-in. persimmon tree; copper nail and washer-----	463.38
Ina, 1.5 mi. S. thence 2.6 mi. E. from, 0.2 mi. E. and 2.5 mi. S. from Spring Garden, near NE. cor. sec. 3, T. 5 S., R. 3 E., 20 ft. S. and 45 ft. W. from junction of T-rd. S., in concrete post; standard tablet stamped "68 S 1928"-----	442.938
Reference mark, 20 ft. S. and 60 ft. W. from crossroads, in root on N. side of 20-in. black-oak tree; copper nail and washer-----	443.04
Ina, 1.5 mi. S. thence 1.4 mi. E. from, 0.25 mi. W. of SE. cor. sec. 33, T. 4 S., R. 3 E., 5 ft. N. and 90 ft. W. from junction of T-rd. S., in root on N. side of 36-in. black-locust tree; copper nail and washer-----	419.96
Ina, 1.5 mi. S. thence 0.7 mi. E. from, near SE. cor. sec. 32, T. 4 S., R. 3 E., 20 ft. N. and 75 ft. W. from junction of T-rd. N., in root on S. side of 30-in. elm tree; copper nail and washer-----	412.83
Ina, 1.5 mi. S. of, 2.7 mi. N. of Whittington, 0.3 mi. E. of NW. cor. sec. 5, T. 5 S., R. 3 E., 10 ft. S. and 20 ft. W. from intersection of State Highway 37, on concrete culvert; chiseled square ³⁹ -----	422.29
Ina, 1.5 mi. S. thence 1.0 mi. W. from, 0.3 mi. E. of NW. cor. sec. 6, T. 5 S., R. 3 E., 15 ft. S. and 30 ft. E. from crossroads, in concrete post; standard tablet stamped "69 S 1928"-----	425.020
Reference mark, 15 ft. N. and 200 ft. W. from crossroads, in root on S. side of 30-in. black-oak tree; copper nail and washer-----	424.84
Ina, 1.5 mi. S. thence 1.9 mi. W. from, near N $\frac{1}{4}$ cor. sec. 1, T. 5 S., R. 2 E., 240 ft. S. and 20 ft. E. from junction of T-rd S., in root on NW. side of 20-in. water-oak tree; copper nail and washer-----	412.52

³⁹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "J 123 1935," elevation 411.794 ft.

Ina, 3.0 mi. S. and 2.0 mi. W. from, 5.7 mi. E. thence 1.0 mi. N. from Sesser, 0.25 mi. W. of center of sec. 12, T. 5 S., R. 2 E., 130 ft. S. and 30 ft. E. from junction of T-rd. S., in root on W. side of 36-in. water-oak tree; copper nail and washer-----	<i>Feet</i> 428.77
Sesser, 5.7 mi. E. of, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 13, T. 5 S., R. 2 E., 25 ft. N. and 25 ft. E. from crossroads, in concrete post; standard tablet stamped "70 S 1928" ⁴⁰ -----	413.842
Reference mark, 45 ft. S. of tablet, at Johnson store, on NW. corner of concrete base of gasoline pump; chiseled square-----	412.10
Sesser, 4.8 mi. E. of, near center of sec. 14, T. 5 S., R. 2 E., at steel girder bridge over Big Muddy River, on SE. wing wall of concrete abutment; chiseled square-----	392.50
Sesser, 3.6 mi. E. of, W. of center of sec. 15, T. 5 S., R. 2 E., on SE. wing wall of concrete abutment of steel girder bridge; chiseled square-----	391.98
Sesser, 2.8 mi. E. of, near center of sec. 16, T. 5 S., R. 2 E., on N. side of rd., 18 ft. W. of junction of T-rd. S., in concrete post; standard tablet stamped "71 S 1928" ⁴¹ -----	429.780
Reference mark, 40 ft. S. and 120 ft. W. from rd. junction, in NE. corner of barnyard, in root on N. side of 25-in. water-oak tree; copper nail and washer-----	429.30

[Connects with line 6 in Duquoin quadrangle]

⁴⁰ In 1933 this bench mark was moved 33 ft. north of this location and reset at an elevation 0.968 ft. higher than that originally determined. The figures given represent the new elevation.

⁴¹ In 1933 this bench mark was moved 20 ft. north of this location and reset at an elevation 0.654 ft. higher than that originally determined. The figures given represent the new elevation.

JERSEYVILLE QUADRANGLE

[Latitude 30°00'–39°15'; longitude 90°15'–90°30']

GREENE AND JERSEY COUNTIES

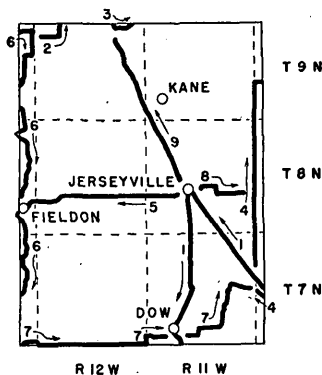


FIGURE 42.—Lines of leveling in Jerseyville quadrangle.

1. From point 0.3 mile southeast of Delhi station northwest along Chicago & Alton Railroad to Jerseyville, thence south and southwest along highways and Chicago, Springfield & St. Louis Railway to point 0.6 mile southeast of Newbern (by S. R. Archer in 1922)

[Continued from Brighton quadrangle, line 1]

	<i>Feet</i>
Delhi sta., in front of; top of rail.....	600.4
Delhi sta., 0.4 mi. NW. of, 60 ft. E. of crossing of N-S. rd., on NE. side of track, at SW. corner of yard of residence, outside yard fence, in root on SE. side of 24-in. maple tree; copper nail and washer.....	598.66
Delhi sta., 2.2 mi. NW. of, near SW. cor. sec. 1, T 7 N., R. 11 W., in NE. angle of crossroads, in SW. corner of yard, in root on SW. side of large triple-forked maple tree; copper nail and washer.....	660.39
Delhi sta., 3.5 mi. NW. of, 2.9 mi. SE. of sta. at Jerseyville, at NE. corner of crossing of township-line rd., at fence corner; standard iron post with bronze cap stamped "46 A 1922".....	642.256
Reference mark, 175 ft. E. of rd. crossing, on S. side of rd., in root on SW. side of four-forked mulberry tree; copper nail and washer..	643.29
Jerseyville, 1.8 mi. SE. of, 0.25 mi. SE. of crossing of E-W. rd., at stone arch bridge over creek, on top of E. head wall, directly over keystone of arch; chiseled square.....	598.99
Jerseyville, 1.0 mi. SE. of, in NW. angle of crossing of E-W. rd., at right-of-way corner, in root on S. side of 30-in. maple tree; copper nail and washer.....	626.60
Jerseyville, 0.2 mi. SE. of sta., at SE. corner of crossing of Chicago, Springfield & St. Louis Ry.; top of rail.....	649.66
Jerseyville, on E. side of sta., in front of operator's window, on top of E. side of concrete base of semaphore block; chiseled square.....	651.91
Jerseyville, at Jersey County courthouse, in E. corner of yard, on top of S. corner of concrete base of Centennial Boulder; chiseled square (recovered in 1926).....	662.99

Jerseyville, at E. corner of courthouse yard, 25 ft. NW. of corner of sidewalk, on SE. side of Centennial Boulder, in concrete post; standard tablet stamped "47 A 1922" (recovered in 1926)-----	<i>Feet</i> 662.754
Jerseyville, at right side of girls' entrance to high school building, 6 in. from wall, in concrete step; standard tablet stamped "L 635" (set in 1940)-----	634.989
Jerseyville, at sta. of C. S. & St. L. Ry., at middle (front) window of operator's office, on top of S. end of windowsill; chiseled square-----	655.08
Jerseyville, 0.4 mi. S. of C. S. & St. L. Ry. sta., near center of sec. 28, T. 8 N., R. 11 W., 15 ft. S. and 50 ft. E. from crossroads, in S. fence line, in root on E. side of 12-in. walnut tree; copper nail and washer-----	640.17
Jerseyville, 0.8 mi. S. of sta., 35 ft. S. and 20 ft. E. from N $\frac{1}{4}$ cor. sec. 33, T. 8 N., R. 11 W., 25 ft. S. and 20 ft. E. from junction of T-rd. W., on E. side of rd., at fence line, in root on W. side of 12-in. maple tree; copper nail and washer-----	622.58
Jerseyville, 1.8 mi. S. of, 3.1 mi. N. of McClusky, near N $\frac{1}{4}$ cor. sec. 4, T. 7 N., R. 11 W., at SE. corner of crossroads, 3 ft. E. of fence corner; standard iron post with bronze cap stamped "48 A 1922"-----	600.511
Reference mark, at NE. corner of crossroads, in center of top of head wall of concrete culvert under rd. E.; chiseled square-----	601.38
McClusky, 2.1 mi. N. of, near N $\frac{1}{4}$ cor. sec. 9, T. 7 N., R. 11 W., at SE. corner of T-rd. E., on top of S. head wall of concrete culvert under rd. E.; chiseled square-----	613.14
McClusky, 1.0 mi. N. of, 330 ft. E. of quarter corner between secs. 9 and 16, T. 7 N., R. 11 W., 330 ft. E. of crossroads, on S. side of rd., in fence line, in root on NW. side of 42-in. locust tree; copper nail and washer-----	639.45
McClusky, in NE. angle of rd. junction, 5 ft. E. of fence corner; standard iron post with bronze cap stamped "49 A 1922"-----	639.062
Reference mark, 70 ft. E. of rd. junction, on N. side of E.-W. rd., in fence line, in root on E. side of 30-in. maple tree; copper nail and washer-----	639.03
McClusky, 1.1 mi. along R. R. SW. of, 1.3 mi. NE. of Dow, 280 ft. NE. of crossing of E.-W. rd., at W. railroad right-of-way fence line, in root on E. side of 10-in. cherry tree; copper nail and washer-----	638.24
Dow, 0.6 mi. NE. of, 160 ft. N. and 25 ft. E. from crossing of N.-S. rd., 90 ft. S. and 25 ft. E. from junction of T-rd. W., inside E. fence line, in root on SE. side of 8-in. cherry tree; copper nail and washer-----	653.86
Dow, 650 ft. N. and 160 ft. E. from sta., 20 ft. S. and 65 ft. E. from quarter corner between secs. 29 and 32, T. 7 N., R. 11 W., 20 ft. S. and 60 ft. W. from street S., 20 ft. S. and 160 ft. E. from R. R. crossing, on S. side of street, in root on NW. side of 24-in. maple tree; copper nail and washer-----	669.04
Dow, at sta., in front of operator's window; top of E. rail-----	670.6
Newbern, at N. edge of, 25 ft. S. and 40 ft. W. from crossing of N.-S. rd., at S. right-of-way fence, on W. side of fence N. to cattle guard, in concrete post; standard tablet stamped "50 A 1922" (recovered in 1926)-----	654.365

230 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Reference mark, 100 ft. N. and 95 ft. E. from tablet, 75 ft. N. and 55 ft. E. from crossing of N.-S. rd., 30 ft. E. of SW. corner of yard of house on E. side of rd., in fence line on S. side of yard, in root on W. side of 24-in. maple tree; copper nail and washer (recovered in 1926)----- Feet
649.96

Newbern, 0.6 mi. SE. of, 25 ft. N. and 75 ft. E. from crossing of E.-W. rd., in root on SW. side of 24-in. elm tree; copper nail and washer----- 619.19

[Continued in St. Charles quadrangle, line 1]

2. From point 1.3 miles south and 0.8 mile west from Woody generally east and north along roads to point 0.9 mile south and 1.5 miles east from Woody (by E. O. Brooks in 1924)

[Continued from Hardin quadrangle, line 1]

Woody, 1.0 mi. E. thence 1.5 mi. S. from, near E $\frac{1}{4}$ cor. sec. 7, T. 9 N., R. 12 W., in NW. angle of crossroads, at Mt. Gilead School, in SE. corner of yard, 10 ft. N. and 30 ft. W. from fence corner, in root on S. side of 18-in. maple tree; copper nail and washer----- 621.66

Woody, 1.5 mi. E. thence 1.0 mi. S. from, near quarter corner between secs. 5 and 8, T. 9 N., R. 12 W., 2 ft. W. and 2 ft. S. from NW. corner of bridge over small creek, on top of S. end of stone wing wall; chiseled square----- 560.70

[Continued in Roodhouse quadrangle, line 4]

3. From point 3.5 miles south of Carrollton south 0.2 mile, thence east and northeast 1 mile (by E. O. Brooks in 1924)

[A jog from Roodhouse quadrangle, line 4]

Carrollton, 3.7 mi. S. of, 4.4 mi. NW. of Old Kane, near N $\frac{1}{4}$ cor. sec. 11, T. 9 N., R. 12 W., in SE. angle of junction of T-rd. E., 15 ft. N. of fence corner, at S. end of culvert, in center of top of concrete head wall; chiseled square (recovered in 1926)----- 542.31

[Continued in Roodhouse quadrangle, line 4]

4. From point 0.5 mile southeast of Delhi along roads northwest and north to point 0.9 mile south and 5 miles west from Kemper, thence east 0.4 mile (by E. O. Brooks in 1924; releveled by G. F. Williams in 1925)

[Connects with line 1 in Brighton quadrangle]

Delhi, 45 ft. S. and 15 ft. E. from junction of T-rd. NE., at old store, 2 ft. SW. of corner of porch, in concrete post; standard tablet stamped "Prim Trav Sta No 1 S 1924 24 EB" (recovered in 1926)----- 599.517

Delhi, 0.2 mi. NW. thence 0.7 mi. N. from, 320 ft. S. of NW. cor. sec. 18, T. 7 N., R. 10 W., in center of top of E. concrete head wall of culvert; chiseled square----- 607.30

Delhi, 0.2 mi. NW. thence 2.8 mi. N. from, 3.7 mi. E. thence 2.0 mi. S. from Jerseyville, near NE. cor. sec. 1, T. 7 N., R. 11 W., 35 ft. S. and 35 ft. W. from corner of crossroads, at White School, in NE. corner of yard, 6 ft. W. of elm tree, in concrete post; standard tablet stamped "Prim Trav Sta No 2 S 1924 25 EB"----- 602.070

Reference mark, 8 ft. N. and 4 ft. E. from tablet, in root on SE. side of 12-in. elm tree; copper nail and washer----- 601.30

Jerseyville, 3.7 mi. E. thence 1.0 mi. S. from, near SW. cor. sec. 30, T. 8 N., R. 10 W., in NE. angle of crossroads, 6 ft. N. and 4 in. W. from fence corner; top of $\frac{3}{4}$ -in. pipe----- 596.65

Jerseyville, 3.7 mi. E. of, near NW. cor. sec. 30, T. 8 N., R. 10 W., 25 ft. S. and 25 ft. E. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 3 S 1924 EB" (recovered in 1926) ⁴² -----	<i>Feet</i> 588.392
Reference mark, 120 ft. W. of tablet, on S. side of rd. W., in root on NW. side of 18-in. walnut tree; copper nail and washer (recovered in 1926)-----	587.32
Jerseyville, 3.7 mi. E. thence 1.0 mi. N. from, near NE. cor. sec. 24, T. 8 N., R. 11 W., in SW. angle of junction of T-rd. W., 20 ft. S. and 30 ft. W. from fence corner, in pasture, in root on NE. side of 36-in. locust tree; copper nail and washer-----	563.22
Jerseyville, 3.7 mi. E. thence 1.6 mi. N. from, N. of E $\frac{1}{4}$ cor. sec. 13, T. 8 N., R. 11 W., in SW. angle of crossroads, at fence corner, in root on S. side of 12-in. Osage-orange tree; copper nail and washer-----	562.13
Jerseyville, 3.7 mi. E. thence 2.5 mi. N. from, near E $\frac{1}{4}$ cor. sec. 12, T. 8 N., R. 11 W., in NW. angle of crossroads, in root on S. side of 12-in. Osage-orange tree used as corner fence post; copper nail and washer-----	552.61
Jerseyville, 3.7 mi. E. thence 3.0 mi. N. from, near SE. cor. sec. 1, T. 8 N., R. 11 W., in NW. angle of crossroads, 5 ft. W. of fence corner, in fence line, in root on S. side of 18-in. oak tree; copper nail and washer-----	531.70
Jerseyville, 3.7 mi. E. thence 4.0 mi. N. from, near SW. cor. sec. 31, T. 9 N., R. 10 W., 55 ft. N. and 35 ft. E. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No. 4 S 1924 27 EB"-----	488.126
Reference mark, 90 ft. S. and 200 ft. W. from tablet, 50 ft. W. of bridge over Phils Creek, on S. right-of-way fence line, in root on NE. side of 24-in. hackberry tree; copper nail and washer-----	487.42
Jerseyville, 3.7 mi. E. thence 5.0 mi. N. from, near NW. cor. sec. 31, T. 9 N., R. 10 W., in SE. angle of crossroads, 3 in. N. and 5 ft. E. from fence corner; top of $\frac{3}{4}$ -in. pipe-----	528.65
Jerseyville, 3.7 mi. E. thence 6.0 mi. N. from, 0.9 mi. S. and 5.0 mi. W. from Kemper, near NW. cor. sec. 30, T. 9 N., R. 10 W., in SE. angle of crossroads, 30 ft. S. and 5 ft. W. from fence corner, in root on NW. side of 24-in. elm tree; copper nail and washer-----	507.44

[Continued in Brighton quadrangle, line 2]

5. From Jerseyville west along State Highway 38 to Fieldon (by J. M. Lawson in 1926)

Jerseyville, 0.7 mi. W. of courthouse, near S $\frac{1}{4}$ cor. sec. 20, T. 8 N., R. 11 W., 25 ft. N. and 20 ft. E. from junction of T-rd. S. and fence line N., 20 ft. S. of house, in root on W. side of lone 30-in. mulberry tree; copper nail and washer-----	645.28
Jerseyville, 2.3 mi. W. of, near S. cor. secs. 19 and 24, T. 8 N., Rs. 11 and 12 W., at N-S. fence line, 35 ft. N. of highway, in line with fence N., in corner of field, in root on E. side of lone 30-in. elm tree; copper nail and washer-----	608.90

⁴² In 1933 this bench mark was moved 22.8 ft. south and 7.7 ft. east of this location and reset at an elevation 1 ft. higher than that originally determined. The figures given represent the new elevation.

Jerseyville, 3.3 mi. W. of, 4.7 mi. NE. of Otterville, near NE. cor. sec. 26, T. 8 N., R. 12 W., 30 ft. S. and 25 ft. W. from crossroads, 2 ft. N. and 2 ft. W. from fence corner, 15 ft. S. of S. head wall of culvert, in concrete post; standard tablet stamped "P T Sta No. 7 LS 1924"-----	<i>Feet</i> 612.583
Reference mark, 900 ft. E. of tablet, 35 ft. N. of rd., 30 ft. S. and 10 ft. E. from SE. corner of farmhouse, in yard, in root on S. side of 48-in. maple tree; copper nail and washer-----	615.29
Jerseyville, 4.3 mi. W. of, near NE. cor. sec. 27, T. 8 N., R. 12 W., 25 ft. S. and 10 ft. W. from crossroads, on top of S. corner of W. head wall of concrete culvert under rd. S.; chiseled square-----	636.88
Jerseyville, 4.8 mi. W. of, near S $\frac{1}{4}$ cor. sec. 22, T. 8 N., R. 12 W., 30 ft. N. and 50 ft. E. from junction of second-class T-rd. N. and fence line S., 50 ft. S. of center of residence, 20 ft. E. of rail fence on W. side of yard, in root on S. side of maple tree; copper nail and washer-----	648.35
Jerseyville, 5.6 mi. W. of, 0.3 mi. W. of SE. cor. sec. 21, T. 8 N., R. 12 W., 25 ft. N. and 300 ft. W. from junction of T-rd. S., on top of bank, 8 ft. above highway, opposite farmhouse on S. side of rd., in projecting root on S. side of 42-in. maple tree; copper nail and washer-----	680.92
Jerseyville, 6.4 mi. W. of, 3.1 mi. NE. of Fieldon, near NW. cor. sec. 28, T. 8 N., R. 12 W., 30 ft. S. and 5 ft. E. from junction of T-rd. N., 5 ft. NE. of fence corner, in concrete post; standard tablet stamped "P T Sta No 8 LS 1924"-----	661.441
Reference mark, 55 ft. N. and 540 ft. W. from tablet, 25 ft. N. and 530 ft. W. from rd. junction, 4 ft. S. of fence line, in root on S. side of 24-in. wild cherry tree; copper nail and washer-----	661.38
Fieldon, 2.3 mi. NE. of, near center of NW $\frac{1}{4}$ sec. 29, T. 8 N., R. 12 W., 20 ft. N. and 10 ft. W. from crossroads, 250 ft. N. of NE. entrance to St. Mary's Cemetery, on corner of W. head wall of concrete culvert under rd. N.; chiseled square-----	633.84
Fieldon, 1.5 mi. NE. of, 0.25 mi. N. of center of sec. 30, T. 8 N., R. 12 W., 30 ft. N. and 15 ft. W. from junction of T-rd. N., 350 ft. NW. of Catholic church, on N. corner of W. head wall of concrete culvert under rd. N.; chiseled square-----	680.06
Fieldon, 1.0 mi. NE. of, 110 ft. N. and 90 ft. W. from center of E. side NE $\frac{1}{4}$ sec. 25, T. 8 N., R. 13 W., 2 ft. N. and 5 ft. W. from gate to yard of residence, in yard, in root on S. side of 30-in. tree, second tree from W. end of row of maple trees; copper nail and washer-----	688.84

[Continued in Hardin quadrangle, line 4]

6. From point 1.3 miles south and 0.8 mile west from Woody along roads east 0.8 mile, thence generally south by way of Fieldon to point in northwest quarter sec. 24, T. 7 N., R. 13 W. (by J. M. Lawson in 1926)

[Connects with line 1 in Hardin quadrangle]

Woody, 1.5 mi. S. of, about 300 ft. N. of E $\frac{1}{4}$ cor. sec. 13, T. 9 N., R. 13 W., 300 ft. N. and 30 ft. W. from junction of T-rd. W., in yard of farmhouse, 4 ft. W. of wooden fence, in root of 48-in. hollow pecan tree, southernmost of two pecan trees 30 ft. apart; copper nail and washer-----	663.34
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T. 9 N., R. 13 W., near center of sec. 13, 125 ft. S. and 20 ft. E. from turn S. in rd., 100 ft. S. and 125 ft. W. from SW. corner of school-house, 10 ft. S. and 1 ft. W. from fence corner, on top of bank, 5 ft. above rd., in root on E. side of 24-in. oak tree; copper nail and washer-----	<i>Feet</i> 650. 75
T. 9 N., R. 13 W., 300 ft. S. of center of sec. 24, 25 ft. E. of rd., 300 ft. S. of fence and private rd. E., in fence line, in knob near root on NE. side of 48-in. oak tree; copper nail and washer-----	628. 40
T. 9 N., R. 13 W., about 500 ft. W. of quarter corner between secs. 24 and 25, 10 ft. S. and 15 ft. E. from junction of rds. N., W., and SE., 30 ft. N. and 10 ft. E. from residence of John Richard, in concrete post; standard tablet stamped "P T Sta No 10 LS 1924"-----	648. 790
Reference mark, 50 ft. NW. of tablet, 20 ft. S. and 25 ft. W. from rd. junction, in NW. angle of rd. fork, 3 ft. W. of yard fence, in root on E. side of 18-in. maple tree; copper nail and washer-----	648. 00
[Jogs into Hardin quadrangle, line 5]	
Tps. 8 and 9 N., R. 13 W., about 500 ft. W. of quarter corner between secs. 1 and 36, at summit of hill, 20 ft. E. of rd., just W. of family cemetery on W. side of rd., on N. side of township-line fence, in root on NW. side of 24-in. oak tree; copper nail and washer-----	568. 04
T. 8 N., R. 13 W., 320 ft. S. and 0.2 mi. W. from center of sec. 1, 240 ft. E. of point where rd. turns S., 15 ft. S. and 5 ft. E. from farm entrance to N., on N. side of orchard, in fence line, in root on N. side of 24-in. forked elm tree; copper nail and washer-----	435. 00
Fieldon, 3.9 mi. NE. of, 0.3 mi. NE. of center of sec. 12, T. 8 N., R. 13 W., 0.9 mi. SE. of Reddish Bridge over Macoupin Creek, 15 ft. N. of junction of T-rd. SW. down Sugar Creek Hollow, 40 ft. N. of creek crossing, 1 ft. S. of fence line, in concrete post; standard tablet stamped "14 L 1926"-----	438. 517
Reference mark, 170 ft. S. of tablet, 120 ft. S. of creek crossing, 15 ft. E. of rd., between two sycamore trees 30 ft. apart, in NW. side near root of 30-in. elm tree; copper nail and washer-----	437. 75
Fieldon, 2.8 mi. NE. of, about 500 ft. E. of center of NE¼ sec. 13, T. 8 N., R. 13 W., 220 ft. S. of sharp turn S. in rd., on top of E. bank of creek, 40 ft. E. of rd., opposite house on W. side of rd., in bare root on W. side of 24-in. lone ash tree; copper nail and washer-----	499. 61
Fieldon, 2.2 mi. NE. of, W. of center of SE¼ sec. 13, T. 8 N., R. 13 W., 80 ft. S. of creek crossing, at angle W. in rd., 35 ft. W. of creek just S. of angle S., at edge of rd., opposite rd. N., in root on NW. side of 24-in. sycamore tree; copper nail and washer-----	493. 14
Fieldon, 1.1 mi. NE. of, SW. of center of sec. 24, T. 8 N., R. 13 W., 360 ft. S. of creek crossing, 30 ft. E. of rd., in pasture, 5 ft. E. of fence, 4 ft. NW. of sycamore tree, in root on SW. side of 18-in. elm tree; copper nail and washer-----	556. 21
Fieldon, 0.5 mi. N. of, in NW¼ sec. 25, T. 8 N., R. 13 W., 20 ft. W. of rd., on E. bank of creek, 6 ft. W. of fence, in knob near root on E. side of 30-in. oak tree; copper nail and washer-----	611. 09
[Jogs into Hardin quadrangle, line 6]	
Fieldon, 1.5 mi. SE. of, in SE¼ sec. 36, T. 8 N., R. 13 W., at angle SW. in rd., 80 ft. S. and 100 ft. W. from house on hillside, 30 ft. E. of creek, 10 ft. E. of rd., 10 ft. S. of farm lot gate, in root on S. side of 18-in. walnut tree; copper nail and washer-----	515. 69

T. 7 N., R. 13 W., in SE $\frac{1}{4}$ sec. 1, 0.2 mi. NE. of bridge over Otter Creek, 340 ft. W. of junction of rd. E. to Otterville, 380 ft. E. of junction of rd. W. to Nutwood and Rosedale, 5 ft. S. of rd., on N. bank of creek, in root on N. side of 48-in. sycamore tree; copper nail and washer-----	Feet 454.52
T. 7 N., R. 13 W., near E $\frac{1}{4}$ cor. sec. 12, 35 ft. S. and 240 ft. E. from Pleasant Cove School, in yard, 10 ft. N. of rd., 1 ft. NW. of corner fence post, in concrete post; standard tablet stamped "15 L 1926"--- Reference mark, 300 ft. W. of rd. fork, 30 ft. S. and 120 ft. E. from SE. corner of schoolhouse, in yard, in root 18 in. from trunk on E. side of lone 24-in. sycamore tree; copper nail and washer-----	530.846 530.22
T. 7 N., R. 13 W., about 200 ft. N. and 50 ft. W. from S $\frac{1}{4}$ cor. sec. 12, 100 ft. N. and 300 ft. E. from old farmhouse on hill, 5 ft. S. and 10 ft. E. from angle S. in rd., 6 ft. N. of fence line, in root on NW. side of lone walnut tree; copper nail and washer-----	704.35
T. 7 N., R. 13 W., just S. of center of sec. 13, 15 ft. E. of rd., 30 ft. W. of SW. corner of residence of R. Fraley, 1 ft. W. of yard fence, in root on W. side of 18-in. maple tree; copper nail and washer-----	698.27
T. 7 N., R. 13 W., in NW $\frac{1}{4}$ sec. 24, 15 ft. N. of rd., 170 ft. W. of rd. N., in field, 1 ft. N. of fence line, 2 ft. W. of trunk of lone tree, in exposed root on W. side of 24-in. oak tree; copper nail and washer-----	729.36

[Continued in Hardin quadrangle, line 7]

7. From point near northwest corner sec. 1, T. 6 N., R. 13 W., generally east along township-line road and State Highway 109 to south corner of Mississippi and Otter Creek townships, thence alternately north and east along roads by way of Newbern and East Newbern to point 0.5 mile east of Delhi (by J. M. Lawson in 1926) ⁴³

[Continued from Hardin quadrangle, line 7]

Grafton, 5.7 mi. NW. of, 0.25 mi. E. of NW. cor. sec. 1, T. 6 N., R. 13 W., on NE. side of Graham Hollow rd., 40 ft. N. and 100 ft. E. from junction of second-class rd. SW., 25 ft. S. of E.-W. rd., on NW. corner of NW. concrete base of Mississippi River Power Co. transmission tower; chiseled square-----	865.30
T. 7 N., R. 13 W., 0.2 mi. N. of SE. cor. sec. 36, 25 ft. S. of rd., 30 ft. N. and 100 ft. E. from dwelling on S. side of rd., on W. side of range-line fence, in line with yard fence, in root on S. side of 18-in. walnut tree; copper nail and washer-----	868.95
T. 7 N., R. 12 W., in SW $\frac{1}{4}$ sec. 31, 7 ft. S. and 20 ft. E. from junction of rd. W., 25 ft. S. and 20 ft. W. from SW. corner of house, 1 ft. W. of yard fence, in concrete post; standard tablet stamped "17 1 1926"-----	856.714
Reference mark, 90 ft. S. of tablet, at SW. corner of yard fence, 100 ft. S. of rd. W., 20 ft. E. of rd., in root on SE. side of 24-in. oak tree; copper nail and washer-----	853.82
T. 7 N., R. 12 W., near S $\frac{1}{4}$ cor. sec. 31, 160 ft. E. of dwelling, 25 ft. N. of rd., S. of corn crib, at foot of hill, on knob on SE. side of 36-in. oak tree; copper nail and washer-----	799.44
T. 7 N., R. 12 W., near N $\frac{1}{4}$ cor. sec. 5, 10 ft. S. and 30 ft. E. from junction of Dagett Hollow rd., along property of Mississippi River Power Co.; top of concrete right-of-way post-----	836.94

⁴³ Part of this line is published also as line 3 in St. Charles quadrangle.

T. 7 N., R. 12 W., near S $\frac{1}{4}$ cor. sec. 32, 7 ft. N. and 12 ft. W. from junction of private rd. N., 50 ft. E. of junction of second-class rd. S., at top of hill, 10-ft. S. of fence corner, in root on SE. side of lone 30-in. oak tree; copper nail and washer-----	<i>Feet</i> 792.21
T. 7 N., R. 12 W., 0.15 mi. W. of SE. cor. sec. 32, 40 ft. S. of four-way rd. fork, 10 ft. W. of Mason Hollow rd., 10 ft. E. of creek, in trunk on NE. side near base of 36-in. oak tree; copper nail and washer---	670.86
T. 7 N., R. 12 W., 0.25 mi. W. of S $\frac{1}{4}$ cor. sec. 33, 40 ft. S. and 90 ft. E. from SE. corner of dwelling, 30 ft. N. and 240 ft. E. from S. end of fence N., in root on S. side of 18-in. walnut tree; copper nail and washer-----	788.99
Grafton, 2.5 mi. along State Highway 109 NE. of, 0.2 mi. W. of N $\frac{1}{4}$ cor. sec. 2, T. 6 N., R. 12 W., 36 ft. S. and 24 ft. W. from crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 87 W 1921"-----	708.667
Grafton, 4.1 mi. NE. of, 0.5 mi. S. and 2.6 mi. W. from Newbern, 420 ft. E. of SW. cor. sec. 36, T. 7 N., R. 12 W., 80 ft. W. of creek crossing, 20 ft. N. of rd., 7 ft. S. of hedge fence, at edge of embankment, in root on SW. side of 30-in. hickory tree; copper nail and washer-----	631.81
Newbern, 1.8 mi. W. of, near E $\frac{1}{4}$ cor. sec. 36, T. 7 N., R. 12 W., 25 ft. S. and 20 ft. W. from junction of T-rd. E., E. of Salem Church, SE. of Salem School; standard iron post with bronze cap stamped "Prim Trav Sta No 86 W 1921"-----	672.829
Reference mark, 100 ft. N. of iron post, at SE. corner of schoolyard, in root on NW. side of 15-in. walnut tree; copper nail and washer-----	674.36
Newbern, 1.3 mi. W. of, 350 ft. S. and 60 ft. E. from center of sec. 31, T. 7 N., R. 11 W., 20 ft. S. and 60 ft. E. from angle N. in rd., on bank, 4 ft. above rd., in field, 2 ft. S. of fence line, in root on NE. side of lone 48-in. oak tree; copper nail and washer-----	670.46
Newbern, 0.4 mi. W. of, 420 ft. W. of center of sec. 32, T. 7 N., R. 11 W., 300 ft. N. of house on hill, 7 ft. S. of rd., 15 ft. N. of fence line, on NW. corner of SE. wing wall of culvert, at junction of head wall; chiseled square-----	637.79
Newbern, 1.2 mi. E. of, 0.5 mi. S. of East Newbern, near E $\frac{1}{4}$ cor. sec. 33, T. 7 N., R. 11 W., 85 ft. N. and 15 ft. W. from rd. junction, on top of N. corner of W. head wall of concrete culvert; chiseled square-----	631.16
East Newbern, 20 ft. S. and 20 ft. E. from crossroads, 50 ft. S. and 20 ft. W. from SW. corner of store, on top of E. corner of S. head wall of culvert under rd. E.; chiseled square-----	639.46
East Newbern, 0.7 mi. E. of, 0.2 mi. E. of N $\frac{1}{4}$ cor. sec. 34, on NW. corner of S. head wall of concrete bridge over creek; chiseled square-----	585.84
East Newbern, 1.3 mi. E. of, 0.25 mi. E. of SW. cor. sec. 26, T. 7 N., R. 11 W., 20 ft. N. and 20 ft. W. from junction of T-rd. N., opposite Round Prairie School, on top of 2-ft. bank, 1 ft. S. and 2 ft. W. from fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 85 W 1921"-----	579.880
Reference mark, 5 ft. S. and 15 ft. E. from iron post, 15 ft. N. and 8 ft. W. from rd. junction, on top of W. head wall of concrete culvert; chiseled square-----	578.56

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East Newbern, 1.3 mi. E. thence 0.7 mi. N. from, just N. of S. side NW¼ sec. 26, T. 7 N., R. 11 W., about half way down hill, on E. side of rd., on large boulder projecting about 6 in. above ground; chiseled cross-----	Feet 541.96
East Newbern, 1.3 mi. E. thence 1.6 mi. N. from, 300 ft. S. of center of sec. 23, T. 7 N., R. 11 W., 300 ft. N. of house on E. side of rd., on S. corner of E. head wall of large concrete box culvert; chiseled square-----	557.43
East Newbern, 1.3 mi. E. thence 2.0 mi. N. from, 1.8 mi. NW. thence 0.6 mi. S. from Delhi, 0.25 mi. N. of center of sec. 23, T. 7 N., R. 11 W., 7 ft. N. and 15 ft. W. from junction of T-rd. W. to McClusky, on top of W. corner of N. head wall of concrete culvert; chiseled square-----	615.07
Delhi, 1.4 mi. W. of, 0.2 mi. N. of S. cor. secs. 13 and 14, T. 7 N., R. 11 W., 25 ft. S. and 50 ft. W. from junction of second-class T-rd. S. through gate, 25 ft. S. and 40 ft. E. from bridge over creek, just W. of angle SE. in rd., in fence line, in root on SW. side of 15-in. elm tree; copper nail and washer-----	602.67
[Connects with line 1 in Brighton quadrangle]	
8. From Jerseyville generally east along road to crossroads 3.7 miles east of Jerseyville (by J. M. Lawson in 1926)	
Jerseyville, 0.8 mi. E. of courthouse, about 400 ft. W. of E¼ cor. sec. 21, T. 8 N., R. 11 W., 30 ft. N. and 20 ft. E. from rd. junction, 90 ft. W. of SE. corner of cemetery, 5 ft. S. of cemetery fence, at end of sidewalk, in root on E. side of 24-in. maple tree; copper nail and washer-----	632.21
Jerseyville, 2.0 mi. E. of, 220 ft. S. of E¼ cor. sec. 22, T. 8 N., R. 11 W., 220 ft. S. and 25 ft. W. from junction of N-S. rd., at hedge fence, in root on SE. side of 12-in. tree, fifth tree S. of rd. W.; copper nail and washer-----	586.57
Jerseyville, 2.0 mi. E. of along State Highway 38, near SW. cor. sec. 23, T. 8 N., R. 11 W., 20 ft. N. and 15 ft. E. from crossroads, on top of SE. corner of wing wall of concrete culvert; chiseled square-----	590.18
Jerseyville, 3.0 mi. E. of, about 160 ft. E. of SW. cor. sec. 24, T. 8 N., R. 11 W., 80 ft. E. of rd. between houses on N. and S. side of rd., 20 ft. N. and 6 ft. E. from entrance to farm on N. side of rd., on top of E. round head wall of concrete culvert under rd. N.; chiseled square-----	566.97
9. From Jerseyville northwest along U. S. Highway 67 to road junction 3.7 miles south of Carrollton (by J. M. Lawson in 1926)	
Jerseyville, 0.9 mi. NW. of courthouse, about 500 ft. W. of E. cor. secs. 17 and 20, T. 8 N., R. 11 W., 10 ft. S. and 35 ft. E. from, 120 ft. SE. of main entrance to county fair grounds, on top of NE. corner of U-shaped head wall of concrete box culvert under rd. E.; chiseled square-----	600.79
Jerseyville, 2.0 mi. NW. of, 0.4 mi. E. of NW. cor. sec. 17, T. 8 N., R. 11 W., 25 ft. E. of junction of rd. W., at entrance to field, on top of E. corner of S. head wall of concrete culvert; chiseled square-----	571.65
Jerseyville, 2.5 mi. NW. of, in SW¼ sec. 8, T. 8 N., R. 11 W., on NE. corner of NE. abutment of large concrete bridge; chiseled square-----	538.76

Jerseyville, 3.2 mi. NW. of, 2.2 mi. SE. of crossroads at Old Kane, 0.2 mi. W. of SE. cor. sec. 6, T. 8 N., R. 11 W., 110 ft. N. and 80 ft. W. from junction of rd. E., 15 ft. N. of NE. corner of Tolman School, in yard, in top of SE. corner of concrete well curb; standard tablet stamped "12 L 1926"-----	<i>Feet</i> 564.081
Reference mark, 100 ft. SE. of tablet, 10 ft. N. and 20 ft. W. from rd. junction, at entrance to schoolyard, on top of NW. corner of N. head wall of concrete culvert; chiseled square-----	563.35
Old Kane, 1.4 mi. SE. of, 0.3 mi. SE. of crossing of Greene-Jersey county line, 0.2 mi. E. of center of NW $\frac{1}{4}$ sec. 6, T. 8 N., R. 11 W., 10 ft. N. and 25 ft. W. from junction of rd. W., 6 ft. SE of corner fence post, on top of NW. corner of N. head wall of concrete culvert under rd. W.; chiseled square-----	566.63
Old Kane, 0.6 mi. SE. of, 600 ft. E. of W $\frac{1}{4}$ sec. 31, T. 9 N., R. 11 W., 15 ft. S. and 15 ft. W. from crossroads, 7 ft. N. of fence corner, on top of SE. corner of S. head wall of concrete culvert under rd. W.; chiseled square-----	582.57
Old Kane, 1.0 mi. W. of Kane, about 500 ft. W. of SE. cor. sec. 25, T. 9 N., R. 12 W., 20 ft. N. and 20 ft. W. from crossroads, at W. end of concrete culvert, on top of S. side of L-shaped head wall; chiseled square-----	585.03
Old Kane, 0.8 mi. NW. of, 7.2 mi. SE. of Carrollton, in NE $\frac{1}{4}$ sec. 25, T. 9 N., R. 12 W., in top of SW. corner of W. head wall of long low concrete bridge; standard tablet stamped "13 L 1926"-----	546.000
Reference mark, 930 ft. SE. of tablet, 70 ft. S. and 10 ft. E. from junction of rd. S., on top of SW. corner of SE. head wall of concrete culvert under rd. S.; chiseled square-----	568.50
Carrollton, 6.4 mi. SE. of, about 800 ft. W. of center of sec. 24, T. 9 N., R. 12 W., 15 ft. S. and 30 ft. E. from crossroads, on NE. corner of wing wall of W. head wall of concrete culvert; chiseled square-----	528.70
Carrollton, 5.5 mi. SE. of, 0.3 mi. NE. of SE. cor. sec. 14, T. 9 N., R. 12 W., 50 ft. N. and 50 ft. W. from entrance to Mid-City Pavilion, on top of SW. abutment of concrete bridge; chiseled square-----	464.06
Carrollton, 4.5 mi. SE. of, 7 ft. N. and 10 ft. W. from center of steel bridge over Macoupin Creek, on W. side of bridge, just N. of center span; top of bolt-----	459.87

⁴⁴ In 1940 this bench was reported destroyed.

JONESBORO QUADRANGLE

[Latitude 37°15'–37°30'; longitude 89°15'–89°30']

ALEXANDER AND UNION COUNTIES

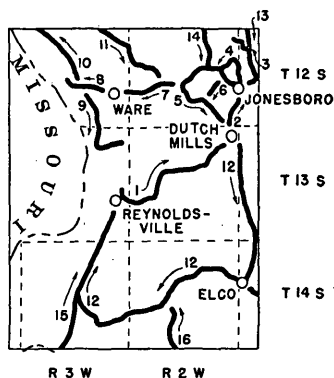


FIGURE 43.—Lines of leveling in Jonesboro quadrangle.

1. From point 0.7 mile northeast of Reynoldsville along roads south 0.7 mile, thence east and northeast to bridge 0.3 mile northwest of Dutch Mills (by Preece in 1918) ⁴⁶

Reynoldsville, 0.7 mi. NE. of, in N. part of sec. 24, T. 13 S., R. 3 W., E. of Illinois Central R. R. track, in fence corner; iron post (Board on Examination and Survey of Mississippi River 1908 B. M. 16 H; recovered in 1927)-----	Feet. 345.508
Reynoldsville, 1.6 mi. E. of, in S. part of sec. 19, T. 13 S., R. 2 W., 0.4 mi. W. of ditch, 600 ft. E. of house, on S. side of rd. along S. side of Bluff Lake, in root of 48-in. oak tree; spike-----	342.29
Reynoldsville, 2.0 mi. E. of, at Lyerle Bridge over creek entering Bluff Lake, on N. side of E. wing wall; corner of concrete-----	339.10
Reynoldsville, 2.4 mi. E. of, 0.4 mi. E. of Lyerle Bridge, 0.3 mi. S. of Lyerle School, 0.2 mi. S. of center of sec. 20, T. 13 S., R. 2 W.; standard iron post with bronze cap stamped "Prim Trav Sta No 4 1916 345"-----	344.280
Lyerle School, at SE. corner of; SE. corner of cistern top-----	344.92
Lyerle School, 1.0 mi. NE. of, 0.2 mi. E. of center of sec. 17, T. 13 S., R. 2 W., at point where Plank Hill rd. enters bluff, 500 ft. NE. of barn, on N. side of rd., in root of 30-in. beech tree; spike-----	347.10
Lyerle School, 1.5 mi. NE. of, about 0.2 mi. NW. of center of sec. 16, T. 13 S., R. 2 W., about 0.8 mi. E. of bottom lands, 0.2 mi. W. of junction of second-class T-rd. N., on S. side of rd., in root of 20-in. walnut tree; spike-----	387.17
Lyerle School, 3.1 mi. NE. of, 0.3 mi. NW. thence 2.7 mi. SW. from Dutch Mills, in NE¼ sec. 15, T. 13 S., R. 2 W., in front of Tucker place, on N. side of rd., in root of 30-in. gum tree; spike-----	504.44

⁴⁶ The figures of elevation in this line may be 1 ft. in error.

Dutch Mills, 0.3 mi. NW. thence 2.4 mi. SW. from, near NW. cor. sec. 14, T. 13 S., R. 2 W., near top of Plank Hill, 80 ft. S. of rd., in root of 36-in. oak tree; spike-----	Feet 596.95
Dutch Mills, 0.3 mi. NW. thence 2.4 mi. SW. from, near NW. cor. sec. 14, T. 13 S., R. 2 W., on S. side of rd., 10 ft. from fence; standard iron post with bronze cap stamped "593"-----	592.546
Dutch Mills, 0.3 mi. NW. of, 2.7 mi. SW. of Jonesboro, at bridge over Dutch Creek, on Jonesboro-McClure rd., on SW. corner of SE. wing wall; nature of mark not reported-----	416.50 or 417.50
2. From bridge 0.3 mile northwest of Dutch Mills north and north-east along road and Mobile & Ohio Railroad to Jonesboro (by L. H. Williams in 1918; leveled twice)	
Dutch Mills, 0.3 mi. NW. of, 2.7 mi. SW. of Jonesboro, about 0.2 mi. N. of center of sec. 1, T. 13 S., R. 2 W., at bridge over Dutch Creek, in SW. wing wall, 1 ft. from S. end of truss; standard tablet stamped "417"-----	417.650
Jonesboro, in front of pump house, 100 ft. E. of M. & O. R. R. track, 300 ft. S. of trestle, 2 ft. above ground, on SE. corner of concrete stand for water trough; chiseled circle-----	506.93
Jonesboro, 200 ft. NW. of sta., on E. side of rd., in front of feed store; end of concrete walk-----	528.02
Jonesboro, 250 ft. NW. of sta., 40 ft. N. of tracks at crossing, on W. side of street, in front of lumber yard office; standard iron post with bronze cap stamped "528" (recovered in 1921) ⁴⁶ -----	529.184
Jonesboro, 1 block N. of sta., on concrete walk; nature of mark not reported-----	552.36
3. From Jonesboro northeast along road to Anna, thence northwest 1.7 miles along Illinois Central Railroad, thence alternately west and north along roads 1.2 miles (by L. H. Williams in 1918; leveled by Crawford Dickey in 1919)	
Anna, at summit of hill, on South Main Street, in front of white house, on top of fire plug; top of 1/2-in. bolt-----	688.79
Anna, on South Main Street, at entrance to library, at property line curb; top of E. corner-----	661.30
[Jogs into Dongola quadrangle, line 3]	
Anna, 1.0 mi. NW. of, near center of sec. 18, T. 12 S., R. 1 W., at SW. corner of crossing of rd. to Kratzinger Hollow, at mile post 327.8; top of post-----	631.90
Anna, about 3 mi. NW. of, about 0.2 mi. E. of center of sec. 12, T. 12 S., R. 2 W., opposite mail box of J. L. Renemen, on inside bend of rd., in root of 10-in. oak tree; spike-----	652.47
4. From Jonesboro along roads north to Kratzinger Hollow, thence southwest to Mobile & Ohio Railroad, thence southeast to Jonesboro (by L. H. Williams in 1918)	
Jonesboro, at NE. corner of county fair grounds, under rd. at bend W.; N. end of tile-----	555.85

⁴⁶ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "L 106 1935," elevation 568.001 ft.

240 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Jonesboro, 1.1 mi. N. of, near NW. cor. sec. 19, T. 12 S., R. 1 W., on summit of hill, 200 ft. NE. of unpainted house, 15 ft. E. of rd., in root of 10-in. hickory tree; spike-----	<i>Feet</i> 607.85
Jonesboro, 1.6 mi. NW. of, 0.2 mi. S. of N. cor. secs. 23 and 24, T. 12 S., R. 2 W., 100 ft. SE. of crossing of Jonesboro-Ware rd. and R. R., on top of N. end of concrete culvert; chiseled square-----	430.12
Jonesboro, 1.0 mi. NW. of, 1.5 mi. NE. of Lockard Chapel, about 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 24, T. 12 S., R. 2 W., 600 ft. N. of West store, at crossing of lane to house, in R. R. right-of-way, in W. end of plank bridge; spike-----	463.69
5. From crossing of Jonesboro-Ware road and Mobile & Ohio Railroad northwest and southwest along road through Green Creek Valley to Hamburg road, thence southeast by way of Lockard Chapel and McClure School to point on Mobile & Ohio Railroad (by L. H. Williams in 1918)	
Jonesboro, 2.6 mi. NW. of, in rear of Tripp School, on E. side of bridge over creek; top of NE. corner of wing wall-----	400.87
Jonesboro, 2.6 mi. NW. of, 5.5 mi. NE. of Ware, about 0.3 mi. E. of SW. cor. sec. 14, T. 12 S., R. 2 W., 3 ft. N. of NE. corner of Tripp School; standard iron post with bronze cap stamped "404" (recovered by U. S. C. & G. S. in 1935)-----	405.114
Ware, 4.3 mi. NE. of, about 0.2 mi. SW. of center of sec. 22, T. 12 S., R. 2 W., at bridge over Green Creek, on top of W. end of N. wing wall; chiseled square-----	382.23
Ware, 3.7 mi. NE. of, 1.9 mi. NW. of Lockard Chapel, 1.0 mi. E. of Morgan School, near center of SE $\frac{1}{4}$ sec. 21, T. 12 S., R. 2 W., 0.5 mi. above junction of Green and Dutch Creeks, 200 ft. W. of junction of Hamburg rd. through Dutch Creek valley, in SW. corner of bridge over Green Creek; top of S. bolt in bedplate-----	370.64
Lockard Chapel, 1.3 mi. W. of, in NW $\frac{1}{4}$ sec. 27, T. 12 S., R. 2 W., at edge of rd. at Hog Pond, in 10-in. elm tree; spike-----	374.70
6. From point 1 mile northwest of Jonesboro southwest along Hamburg road to Lockard Chapel (by L. H. Williams in 1918)	
Lockard Chapel, near front steps of, about 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 26, T. 12 S., R. 2 W., on Hamburg rd., in root of 20-in. pignut tree; spike-----	394.97
7. From junction of Jonesboro-Ware and Hamburg roads southwest and west along road to Ware (by L. H. Williams in 1918)	
Ware, 2.8 mi. NE. of, about 0.2 mi. SW. of E $\frac{1}{4}$ cor. sec. 20, T. 12 S., R. 2 W., at Morgan School, near junction of Cany and Dutch Creeks, at NW. corner of bridge over Dutch Creek; top of concrete around end girder-----	365.07
Ware, 2.8 mi. NE. of, 2 ft. from SW. corner of Morgan School; standard iron post with bronze cap stamped "374"-----	374.321
Ware, 1.8 mi. NE. of, 0.5 mi. W. of Dog Hill, on SE. end of E. wing wall of bridge over ditch, at word "Trowell"; center of letter "O"-----	348.23
Ware, 1.8 mi. NE. of, 0.5 mi. W. of Dog Hill, about 0.2 mi. S. of NE. cor. sec. 30, T. 12 S., R. 2 W., in concrete wing wall; standard tablet stamped "347" ⁴⁷ -----	356.154

⁴⁷ In 1931 this bench mark was reset at an elevation 8.078 ft. higher than that originally determined. The figures given represent the new elevation.

Ware, 100 ft. N. of Missouri Pacific R. R. sta., 30 ft. N. of switch, on north-bound main-line track; top of rail-----	Feet 349.9
8. From Ware generally northwest along roads to point about 0.5 mile east of Willard Landing on Mississippi River (by B. H. Oakley in 1918; spur line leveled twice)	
Ware, 1.2 mi. W. of, on N. side of plank rd., 60 ft. N. of mail box 48, in root of pecan tree; spike-----	340.33
Ware, 2.1 mi. NW. of, in SW¼ sec. 22, T. 12 S., R. 3 W., 100 ft. NE. of Walton House, in SE. angle of junction of T-rd. S., 30 ft. SW. of sign "Anna 11.7 mi.," in root of 48-in. elm tree; spike-----	346.95
Ware, about 2.6 mi. W. of, on N. side of levee, about 400 ft. W. of small house, in root of 48-in. elm tree; spike-----	346.53
Ware, 2.6 mi. NW. thence 0.5 mi. N. from, in NE¼ sec. 21, T. 12 S., R. 3 W., 0.5 mi. from Willard Landing, on NE. side of long field belonging to Willard heirs, 550 ft. above E. corner of field, 5 ft. in front of fence, 5.1 ft. above flat stone subsurface mark; Mississippi River Comm. stone line B. M. 17/1 cap on iron pipe-----	348.377
9. From road junction 2.1 miles northwest of Ware along roads southeast and east to point on Missouri Pacific Railroad 0.4 mile north of Vineland (by B. H. Oakley in 1918; single spur line)	
Ware, 2.1 mi. NW. thence 0.5 mi. SE. from, 400 ft. S. of shack, on E. bank of old slough, in root of 48-in. elm tree; bench-----	346.03
Ware, 2.1 mi. NW. thence 1.3 mi. SE. from, 400 ft. S. of house of Sam Davis, on E. side of river rd., in root of 36-in. walnut tree; bench-----	345.73
Ware, 2.1 mi. NW. thence 2.5 mi. SE. from, 0.8 mi. W. thence 3.4 mi. NW. from Reynoldsville, 250 ft. W. of levee, 30 ft. N. of mail box of I. W. Dotson, in root of 24-in. pecan tree; bench-----	343.68
Vineland, 0.4 mi. N. thence 1.0 mi. SW. from, near N¼ cor. sec. 11, T. 13 S., R. 3 W., 1,300 ft. E. of levee, 600 ft. W. of unpainted house, on N. side of rd., in root of 30-in. pecan tree; bench-----	342.52
Vineland, 0.4 mi. N. of, at crossing of Illinois Central R. R.; top of E. rail-----	345.5
Vineland, 0.4 mi. N. of, at crossing of Missouri Pacific R. R.; top of E. rail-----	343.8
10. From road junction 2.1 miles northwest of Ware northwest along Wolf Lake road (by B. H. Oakley in 1918) ⁴⁸	
Ware, 2.8 mi. NW. of, 0.7 mi. N. of levee, on SW. side of rd., directly across rd. from huge hollow sycamore tree, in root of 48-in. oak tree; spike-----	347.32
Ware, 3.4 mi. NW. of, 250 ft. N. of junction of T-rd., 150 ft. N. of shack on E. side of rd., on W. side of rd., on E. side of slough, in root of 42-in. elm tree; bench-----	348.82
Ware, 5.1 mi. NW. of, on NE. side of rd., 20 ft. E. of slough, in root of 24-in. pecan tree; bench-----	349.73
Ware, 6.2 mi. NW. of, about 0.7 mi. E. of river, 100 ft. NW. of small white house, on SW. side of rd., in root of large topless hollow oak tree; bench-----	348.99

[Continued in Alto Pass quadrangle, line 2]

⁴⁸ Mileage to towns along this line is doubtful.

11. From point about 1.7 miles southeast of Wolf Lake southeast along road to Morgan School (by B. H. Oakley in 1918)

[Continued from Alto Pass quadrangle, line 2]

Wolf Lake, 2.8 mi. SE. of, in NW $\frac{1}{4}$ sec. 12, T. 12 S., R. 3 W., about 0.6 mi. NW. of rd. fork, 200 ft. W. of small house on hillside, on W. side of springhouse, in root of 18-in. mulberry tree; bench-----	<i>Feet</i> 359. 65
Wolf Lake, 3.4 mi. SE. of, 3.4 mi. NW. of Morgan School, near center of SE $\frac{1}{4}$ sec. 12, T. 12 S., R. 3 W., at rd. fork, on N. side of rd., in root of 36-in. oak tree; bench-----	364. 40
Morgan School, 2.8 mi. NW. of, about 0.2 mi. S. of NE. cor. sec. 13, T. 12 S., R. 3 W., on NE. abutment of bridge over drainage ditch; top of rock-----	356. 11
Morgan School, 1.0 mi. NW. of, about 0.4 mi. SW. of center of sec. 17, T. 12 S., R. 2 W., 100 ft. W. of bend in rd., 150 ft. W. of small unpainted house, on N. side of rd., in root of 24-in. walnut tree; bench-----	369. 05

12. From road junction 0.3 mile northwest of Dutch Mills southeast and south along road and Mobile & Ohio Railroad to Elco, thence alternately northwest and southwest through Dry Hollow and Sexton Creek valley to crossing of Missouri Pacific Railroad, thence northeast to McClure station (by F. B. Barrett in 1918)⁴⁹

Dutch Mills, 2.6 mi. SE. of, 0.4 mi. N. of Springville, about 0.2 mi. SE. of NW. cor. sec. 19, T. 13 S., R. 1 W., 360 ft. SE. of trestle 523-02, in sharp point of triangle of rd. forks; standard iron post with bronze cap stamped "Prim Trav Sta No 3 1916"-----	420. 337
Mill Creek, at N. end of E. switch, in E. end of switch block; top of S. spike-----	383. 28
Mill Creek, about 75 ft. S. of sta., in SE $\frac{1}{4}$ sec. 31, T. 13 S., R. 1 W., on W. side of track; standard iron post with bronze cap stamped "1918 374"-----	375. 914
Elco, about 150 ft. SW. of sta., in NW $\frac{1}{4}$ sec. 18, T. 14 S., R. 1 W., on N. side of wagon rd., near fence corner; standard iron post with bronze cap stamped "1918 367" (recovered in 1919)-----	368. 104
Elco, 1.2 mi. NW. of, about 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 12, T. 14 S., N. side of wagon rd., near fence corner; standard iron post with oak tree; nail-----	447. 39
Elco, 3.2 mi. NW. of, 2.0 mi. NE. of Delta, near N $\frac{1}{4}$ cor. sec. 15, T. 14 S., R. 2 W., at NW. corner of rd. fork, 1,000 ft. S. of Gifford residence, on W. side of creek; standard iron post with bronze cap stamped "1918 605"-----	605. 345
Delta, 0.3 mi. N. of, about 550 ft. N. of SW. cor. sec. 16, T. 14 S., R. 2 W., about 50 ft. NW. of residence of John Abercrombie, in root of large walnut tree; nail-----	503. 51
Delta, 1.0 mi. SW. of, about 0.2 mi. W. of center of sec. 20, T. 14 S., R. 2 W., in front of residence of Joe Parish, on N. side of rd., in root of sugar-maple tree; nail-----	472. 73
Delta, 1.5 mi. SW. of, about 0.2 mi. SW. of E $\frac{1}{4}$ cor. sec. 19, T. 14 S., R. 2 W., 500 ft. S. of residence of William Vicks, at rd. fork, on E. side of rd., 10 ft. N. of well; standard iron post with bronze cap stamped "1918 431" (recovered in 1927)-----	431. 018

⁴⁹ The figures of elevation in this line to the point 1.5 miles southwest of Delta may be 1 ft. too low.

Delta, 2.6 mi. SW. of, near SE cor. sec. 24, T. 14 S., R. 3 W., 0.2 mi. W. of residence of Fred Douglas, just S. of point where rd. crosses creek, in root of 20-in. walnut tree; nail-----	<i>Feet</i> 392. 11
Delta, 3.6 mi. SW. of, in NW¼ sec. 25, T. 14 S., R. 3 W., 1,000 ft. E. of residence of John Hill, on N. end of concrete culvert; highest point-----	363. 36
Delta, 4.4 mi. SW. of, 0.2 mi. W. of McCavens School, near center of sec. 26, T. 14 S., R. 3 W., in SE. corner of iron bridge over Sexton Creek; top of SE. rivet head-----	347. 54
Delta, 5.3 mi. SW. of, 3.0 mi. SE. of McClure, near NE. cor. sec. 27, T. 14 S., R. 3 W., 0.2 mi. SE. of bridge over dredge ditch, 150 ft. S. of old sawdust pile, on S. side of rd., in root of large sycamore tree; nail-----	336. 80
McClure, 2.5 mi. SE. of, near center of sec. 22, T. 14 S., R. 3 W., 100 ft. NW. of small dredge ditch, on W. side of rd., in root of 30-in. red-oak tree; nail-----	332. 94
McClure, 1.8 mi. S. of, about 0.2 mi. E. of NW. cor. sec. 22, T. 14 S., R. 3 W., about 1,000 ft. SE. of crossing of Missouri Pacific R. R., on E. side of rd., in root of pecan tree; nail-----	332. 97
McClure, 0.8 mi. E. of, about 330 ft. N. of M. P. R. R. sta., 820 ft. SE. of bridge over Clear Creek, 26 ft. S. of rd. crossing; 8 ft. W. of track, iron post (Board on Examination and Survey of Mississippi River 1908 B. M. 11 H; recovered in 1927)-----	343. 173
13. From point 2.5 miles south of Cobden southeast along Illinois Central Railroad to Anna (by R. G. Clinite in 1920)	
[Continued from Alto Pass quadrangle, line 5]	
Coben, 3.5 m. SW. of, 2.9 mi. NW. of Anna sta., on E. side of track, 65 ft. N. of rd. crossing, at semaphore 3264, on NW. corner of concrete base; chiseled square-----	628. 30
Anna, 2.4 mi. NW. of, 800 ft. S. and 1,600 ft. E. from W¼ cor. sec. 7, T. 12 S., R 1 W., on E. side of angle in rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 155 1911 637"-----	636. 632
Anna, 1.0 mi. NW. of, on W. side of track, at semaphore 3273, on NE. corner of concrete base; chiseled square-----	631. 82
[Continued in Dongola quadrangle, line 12]	
14. From point about 1 mile south of Kaolin south and southeast along Mobile & Ohio Railroad to Jonesboro (by C. B. Schmeltzer in 1921)	
[Continued from Alto Pass quadrangle, line 7]	
Kaolin, 1.3 mi. S. of, at trestle 532-64, in N. end of E. side of lower foundation timber; copper nail and washer-----	490. 94
15. From Gale northeast along Illinois Central and Missouri Pacific Railroads to point 0.7 mile northeast of Reynoldsville (by S. R. Archer in 1927)	
[Continued from Thebes quadrangle, line 1]	
Gale, 15.8 ft. N. of N. end of I. C. R. R. sta., 25 ft. E. of main track, at S. end of main side tracks; iron post (Board on Examination and Survey of Mississippi River 1908 B. M. 1 H)-----	336. 865
Gale, 1.2 mi. NE. of, 50 ft. W. of track, 65 ft. S. of transfer switch to M. P. R. R., in root on S. side of 24-in. oak tree; copper nail and washer-----	333. 44

Gale, 1.8 mi. NE. of, 3.2 mi. SW. of M. P. R. R. sta. for McClure, opposite and 80 ft. N. of telegraph pole 116.20, 270 ft. N. of N. cross-over switch 2-A, 4 ft. W. of W. right-of-way fence line of M. P. R. R., in woods, in root on E. side of 36-in. oak tree; copper nail and washer-----	<i>Feet</i> 330. 59
McClure, 2.0 mi. SW. of sta., at rd. crossing, 65 ft. SE. of SE. rail, 25 ft. E. of NE. right-of-way corner, on N. side of main rd., on E. side of private rd. NE., in root 1 ft. from trunk on N. side of small triple-forked locust tree; copper nail and washer-----	333. 85
McClure, 1.0 mi. SW. of, 60 ft. S. and 60 ft. E. from point where R. R. crosses line between secs. 10 and 15, T. 14 S., R. 3 W., in line E. from sign "McClure 1.0 mi.," in field, 25 ft. E. of SE. right-of-way fence line, in root on NW. side of 24-in. pecan tree; copper nail and washer-----	335. 29
McClure, about 330 ft. N. of sta., 100 ft. N. and 80 ft. W. from rd. crossing, at SW. corner of brick cannery building, on W. side of main brick building, on top of E. corner at S. end of concrete flooring of shed; chiseled square (recovered by U. S. C. & G. S. in 1935)-----	343. 047
McClure, about 330 ft. N. of sta., 40 ft. S. and 40 ft. E. from rd. crossing, 18 ft. N. of N. end of residence of section foreman, in root on NE. side of 12-in. boxelder tree; copper nail and washer-----	342. 34
McClure, about 0.8 mi. NE. of sta., 2.7 mi. SW. of Reynoldsville, 0.6 mi. NE. of bridge over Clear Creek, near point of curve of I. C. R. R. where it leaves M. P. R. R. track, 25 ft. E. of track; iron post (Board on Examination and Survey of Mississippi River 1908 B. M. 13 H)-----	344. 483
Reynoldsville, 0.8 mi. SW. of, 45 ft. E. of crossing of rd. and I. C. R. R., on N. side of rd., in root on NW. side of 48-in. sycamore tree; copper nail and washer-----	341. 84
Reynoldsville, just N. of I. C. R. R. sta., 140 ft. W. of rd. crossing, on N. side of rd., at entrance to Missionary Baptist Church, on top of E. end of lower concrete step; chiseled square (recovered by U. S. C. & G. S. in 1935)-----	345. 047
Reynoldsville, 60 ft. N. and 55 ft. E. from crossing just N. of sta., in root on N. side of 24-in. cottonwood tree; copper nail and washer-----	344. 51
Reynoldsville, 0.7 mi. NE. of, about midway between I. C. and M. P. R. R. tracks, about 440 ft. S. of B. M. 16 H of Board on Examination and Survey of Mississippi River, 75 ft. S. of farmhouse, on E. side of private rd. S. in root on N. side of 24-in. pecan tree; copper nail and washer-----	343. 51
16, From point 2 miles northwest of Diswood along roads alternately northwest and northeast to point 0.3 mile southwest of Delta, thence southwest 1.2 miles (by S. R. Archer in 1927)	
[Continued from Thebes quadrangle, line 5]	
Diswood, 2.1 mi. NW. of, 0.25 mi. S. of center of sec. 33, T. 14 S., R. 2 W., 65 ft. N. of private rd. E., at angle in rd. NW., on top of N. end of E. head wall of concrete culvert; chiseled square-----	399. 23
Diswood, 3.2 mi. NW. of 2.1 mi. SE. of Delta, 0.2 mi. N. and 0.1 mi. E. from SW. cor. sec. 28, T. 14 S., R. 2 W., 60 ft. S. of T-rd. NW., on W. side of rd., in root on NW. side of 15-in. walnut tree; copper nail and washer-----	440. 49

Delta, 1.0 mi. SE. of, about 800 ft. NW. of quarter corner between secs. 21 and 28, T. 14 S., R. 2 W., 480 ft. NW. of rd. fork, 210 ft. SE. of farmhouse, 30 ft. SE. of shed, on SW. side of rd. NW, in root on E. side of forked hickory tree; copper nail and washer-----	<i>Feet</i> 476.37
Delta, 0.3 mi. SE. of, about 800 ft. NW. of quarter corner between secs. 20 and 21, T. 14 S., R. 2 W., 90 ft. SE. of rd. fork, in root on N. side of 36-in. sycamore tree; copper nail and washer-----	477.11
Delta, 1.5 mi. SW. of, SE. of and opposite residence of J. W. Vick, at N. corner of triangle of rd. forks, on E. side of main rd., in root on W. side of 48-in. elm tree; copper nail and washer ⁵⁰ -----	431.84

⁵⁰ This bench mark was set as a reference mark to the iron post set in 1918 and stamped "431," described in line 12.

KIMMSWICK QUADRANGLE

[Latitude 38°15'–38°30'; longitude 90°15'–90°30']

MONROE COUNTY

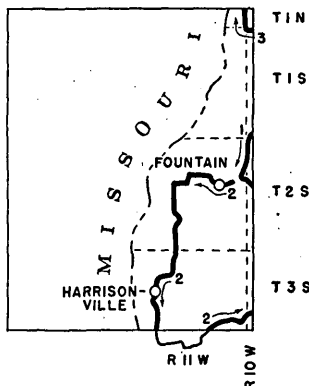


FIGURE 44.—Lines of leveling in Kimmswick quadrangle.

1. From crossing of Long Slash 1.3 miles northeast of Fountain Gap southwest along road at foot of bluffs to road junction 1.3 miles northeast of Fountain, thence east 0.7 mile (by S. R. Archer in 1910)

[A jog from Waterloo quadrangle, line 1]

Warnock, 0.6 mi. NE. of, at SE. cor. sec. 36, T. 1 S., R. 11 W., on property of Anton Dietz, beside stone marking township corner, 0.3 mi. W. of rd., in field; standard iron post with bronze cap stamped "399" (probably disturbed) ⁵¹ -----	Feet 398.394
Fountain Gap, in SW¼ sec. 6, T. 2 S., R. 10 W., 120 ft. S. of cross-roads, at S. abutment of bridge over Fountain Creek, on W. end of stone bridge seat; chiseled square-----	410.77
Fountain Gap, 1.5 mi. S. of, 1.3 mi. E. of Fountain, near center of NE¼ sec. 13, T. 2 S., R. 11 W., 15 ft. NW. of rd. fork, 10 ft. S. of plank culvert, on stone; chiseled square-----	413.22
Fountain, 2.0 mi. E. of, in NW¼ sec. 18, T. 2 S., R. 10 W., in SE. angle of junction of rd. SW., near mail-box post, in root of tree; spike-----	592.00

[Continued in Waterloo quadrangle, line 1]

2. From road junction 1.3 miles east of Fountain generally west along roads to point 0.7 mile south of Merrimac, thence south to point 2.7 miles south of Harrisonville, thence east and northeast by way of Monroe City to point near Madonnville (by S. R. Archer in 1910)

Fountain, 200 ft. W. of St. L. I. M. & S. R. R. crossing, on S. side of rd., at foot of levee, 100 ft. NW. of saloon, at fence corner; standard iron post stamped "406" (recovered by U. S. C. & G. S. in 1935)-----	405.327
--	---------

⁵¹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "P 115 1935," elevation 407.096 ft.

Fountain, 1.9 mi. NW. of, 0.2 mi. S. thence 1.0 mi. E. from Merrimac, near SE. cor. sec. 9, T. 2 S., R. 11 W., in center of junction of T-rd. S., on stone; chiseled square-----	<i>Feet</i> 399.86
Merrimac, 0.7 mi. S. and 0.3 mi. E. from, 0.25 mi. W. of center of sec. 16, T. 2 S., R. 11 W., on S. side of third-class rd., in cultivated field, at foot of 30-in. elm tree; Mississippi River Comm. B. M. 47/1 cap on iron pipe-----	399.655
Merrimac, 0.7 mi. S. of, at W $\frac{1}{4}$ cor. sec. 16, T. 2 S., R. 11 W., at center of T-junction of N.-S. rd. and third-class rd. E.; highest point on stone-----	397.04
Merrimac, 4.0 mi. S. of, 3.7 mi. NE. of Harrisonville, near E $\frac{1}{4}$ cor. sec. 32, T. 2 S., R. 11 W., on W. side of rd., at junction of rd. NE; standard iron post with bronze cap stamped "403"-----	402.255
Harrisonville, 1.8 mi. NE. of, 1.0 mi. in air line W. of Valmeyer, in NE $\frac{1}{4}$ sec. 8, T. 3 S., R. 11 W., in SW. angle of junction of rd. W., in root on N. side of 30-in. butternut tree; spike-----	395.29
Harrisonville, 0.5 mi. N. of main crossroads, 410 ft. N. of cross rd., on property of Patrick Murray, 279 ft. N. of Murray dwelling, 13 ft. from 24-in. walnut tree, 33 ft. from 48-in. walnut tree; Mississippi River Comm. B. M. 45/1 cap on iron pipe-----	398.132
flat stone at bottom of pipe-----	393.035
[Jogs into Crystal City quadrangle, line 1]	
Monroe City, 1.8 mi. SW. of, 3.2 mi. SE. of Valmeyer, at center of junction of rd. NE., in root on E. side of 36-in. tree; spike-----	397.60
Monroe City, 0.5 mi. W. of, near center of SW $\frac{1}{4}$ sec. 24, T. 3 S., R. 11 W., at NW. corner of stone culvert, on wing wall; chiseled square	438.59
Monroe City, in SE $\frac{1}{4}$ sec. 24, T. 3 S., R. 11 W., 160 ft. W. of junction of rd. SE., on S. side of rd., 2.5 ft. from fence; standard iron post with bronze cap stamped "Prim Trav Sta No 13 1909 467"	466.403
[Connects with line 2 in Waterloo quadrangle]	
3. West and north along roads from point near Fish Lakes to point near Riverview School (by E. W. Gouchenour in 1929)	
[Continued from Waterloo quadrangle, line 4]	
Bixby, 0.4 mi. N. and 1.8 mi. W. from, at Riverview School, 15 ft. S. and 2 ft. E. from NE. corner of fence around schoolyard, in concrete post; standard tablet stamped "T T Sta No 40 F 1928"-----	411.869
Reference mark, 40 ft. S. of tablet, in root on E. side of first maple tree to S.; copper nail and washer-----	412.66
[Continued in West St. Louis quadrangle, line 1]	

KINMUNDY QUADRANGLE

[Latitude 38°45'–39°00'; longitude 88°45'–89°00']

EFFINGHAM, FAYETTE, AND MARION COUNTIES

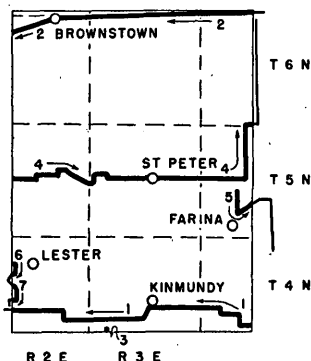


FIGURE 45.—Lines of leveling in Kinmundy quadrangle. °

1. From point 1.5 miles south and 6 miles east from Kinmundy generally west along roads by way of Kinmundy to point 2.5 miles south and 1.2 miles west from Lester (by S. R. Archer in 1928)

[Continued from Edgewood quadrangle, line 1]

Kinmundy, 1.5 mi. S. and 5.2 mi. E. from, near NE. cor. sec. 33, T. 4 N., R. 4 E., in SW. corner of crossroads, at NE. corner of yard of farmhouse, in root on N. side of large forked oak tree; copper nail and washer-----	Feet 582.82
Kinmundy, 1.5 mi. S. and 4.7 mi. E. from, near quarter corner between secs. 28 and 33, T. 4 N., R. 4 E., 25 ft. N. and 55 ft. W. from crossroads, in root on S. side of 30-in. oak tree; copper nail and washer-----	576.32
Kinmundy, 1.3 mi. S. and 4.2 mi. E. from, 0.2 mi. N. of S. cor. secs. 28 and 29, T. 4 N., R. 5 E., 0.2 mi N. of T-rd. E., 40 ft. E. of rd., 60 ft. N. of farmhouse on E. side of rd., in root on W. side of 30-in. oak tree; copper nail and washer-----	570.65
Kinmundy, 0.7 mi. S. and 4.2 mi. E. from, 0.25 mi. N. of quarter corner between secs. 28 and 29, T. 4 N., R. 4 E., 85 ft. S. of right-angle turn W. in rd., 40 ft. N. of farmhouse on E. side of rd., in line with S. side of garage, in root on W. side of 15-in. maple tree; copper nail and washer-----	581.80
Kinmundy, 0.7 mi. S. and 3.4 mi. E. from, near center of NW¼ sec. 29, T. 4 N., R. 4 E., 25 ft. N. and 25 ft. E. from junction of T-rd. S., 8 ft. N. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "79 S 1928"-----	578.078
Reference mark, 6 ft. S. of tablet, 20 ft. N. and 25 ft. E. from rd. junction, in fence corner, in root on E. side of 24-in. oak tree; copper nail and washer-----	578.26

Kinmundy, 0.5 mi. S. and 2.9 mi. E. from, 0.2 mi. E. of quarter corner between secs. 19 and 30, T. 4 N., R. 4 E., 80 ft. W. of farmhouse on N. side of rd., inside fence on N. side of rd., in root on S. side of 36-in. elm tree; copper nail and washer-----	<i>Feet</i> 561.67
Kinmundy, 0.5 mi. S. and 2.2 mi. E. from, near SE. cor. sec. 24, T. 4 N., R. 3 E., at crossroads, 150 ft. N. of rd. E. on W. side of rd., at fence, in root on E. side of 24-in. elm tree; copper nail and washer-----	582.31
Kinmundy, 0.5 mi. S. and 1.2 mi. E. from, near cor. secs. 23, 24, 25, and 26, T. 4 N., R. 3 E., on N. side of rd., at W. end of hedge row, 10 ft. E. of fence corner, in root 4 in. underground on W. side of triple-forked hedge tree; copper nail and washer-----	589.85
Kinmundy, 0.5 mi. S. and 0.4 mi. E. from, 0.25 mi. E. of NW. cor. sec. 26, T. 4 N., R. 3 E., 145 ft. W. of private rd. N., 29 ft. S. of E.-W. rd., 8 ft. S. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "80 S 1928"-----	618.894
Kinmundy, in SE. part of, near NE. cor. sec. 27, T. 4 N., R. 3 E., in SW. corner of crossroads, on top of S. end of W. head wall of concrete drain under rd. S.; chiseled square-----	626.57
Kinmundy, in S. part of, at SSW. corner of crossing of Illinois Central R. R. and Chicago & Eastern Illinois Ry., on top of foundation of signal relay box, on top of NE. bolt (thread end); filed cross-----	610.83
Kinmundy, 1.0 mi. S. and 0.8 mi. W. from, near quarter corner between secs. 27 and 28, T. 4 N., R. 3 E., 300 ft. NW. of rd. fork, 180 ft. NW. of I. C. R. R. crossing, 100 ft. SW. of rd. W., 75 ft. NW. of NW. R. R. right-of-way fence, in field, in root on N. side of forked oak tree; copper nail and washer-----	603.72
Kinmundy, 1.0 mi. S. and 1.3 mi. W. from, near center of sec. 28, T. 4 N., R. 3 E., 170 ft. W. of T-rd. N., on N. side of rd., in field, in root on SW. side of 36-in. tree, easternmost of two oak trees 50 ft. apart; copper nail and washer-----	575.37
Kinmundy, 1.0 mi. S. and 1.8 mi. W. from, near E $\frac{1}{4}$ cor. sec. 29, T. 4 N., R. 3 E., near NW. corner of crossroads, in SE corner of yard of farmhouse, in root on N. side of 24-in. forked maple tree; copper nail and washer-----	582.42
Kinmundy, 1.0 mi. S. and 2.2 mi. W. from, about 740 ft. E. of center of sec. 29, T. 4 N., R. 3 E., on N. side at end of concrete highway bridge, at foot of side wall, on top of E. end of ledge; chiseled square-----	546.34
Kinmundy, 1.0 mi. S. and 2.8 mi. W. from, 2.5 mi. N. and 0.5 mi. E. from Alma, near E $\frac{1}{4}$ cor. sec. 30, T. 4 N., R. 3 E., 20 ft. S. and 25 ft. W. from crossroads, 2 ft. S. and 9 ft. W. from fence corner, in concrete post; standard tablet stamped "81 S 1928" (recovered in 1932)-----	542.509
Reference mark, 200 ft. W. of crossroads, at concrete abutment of bridge, on top of W. end of N. wing wall; chiseled square (recovered in 1932)-----	541.33
Kinmundy, 1.0 mi. S. and 3.6 mi. W. from, 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 30, T. 4 N., R. 3 E., 650 ft. W. of T-rd. S., on N. side of rd., 40 ft. S. and 3 ft. W. from SE. corner of farmhouse, in yard, in root on SE. side of 12-in. oak tree; copper nail and washer-----	585.07
Kinmundy, 1.0 mi. S. and 4.3 mi. W. from, near center of sec. 25, T. 4 N., R. 2 E., 310 ft. W. of T-rd. N., on S. side of rd., in yard of farmhouse, in root on SW. side of 36-in. oak tree; copper nail and washer-----	576.94

250 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Kinmundy, 0.7 mi. S. and 5.3 mi. W. from, 0.3 mi. N. of center of sec. 26, T. 4 N., R. 2 E., 125 ft. N. of T-rd. E., at SE. corner of concrete bridge over East Fork of Kaskaskia River, on inside at foot of S. end of E. side wall, on top of S. end of concrete ledge; chiseled square -----	Feet 521. 27
Kinmundy, 0.5 mi. S. and 5.6 mi. W. from, 2.5 mi. S. thence 1.3 mi. E. from Lester, 0.25 mi. E. of SW. cor. sec. 23, T. 4 N., R. 2 E., 25 ft. N. and 20 ft. W. from junction of T-rd. N., in concrete post; standard tablet stamped "82 S 1928" ⁵² -----	571. 727
Reference mark, 22 ft. N. and 35 ft. E. from rd. junction, in root on S. side of 18-in. oak tree; copper nail and washer -----	570. 70
Lester, 2.5 mi. S. thence 0.8 mi. E. from, 0.25 mi. W. of NE. cor. sec. 27, T. 4 N., R. 2 E., on S. side of rd., on top of E. end of S. head wall of concrete culvert; chiseled square -----	545. 77
Lester, 2.5 mi. S. of, near NE. cor. sec. 28, T. 4 N., R. 2 E., 85 ft. S. and 75 ft. W. from crossroads, in yard of farmhouse, in root on NE. side of 24-in. elm tree; copper nail and washer -----	549. 35
Lester, 2.5 mi. S. thence 0.8 mi. W. from, 1.0 mi. N. thence 5.5 mi. E. from Patoka, 0.25 mi. E. of SW. cor. sec. 21, T. 4 N., R. 2 E., near NW. cor. of junction of T-rd. N., in root on S. side of 24-in. oak tree; copper nail and washer -----	544. 11

[Continued in Vandalia quadrangle, line 2]

2. From point 4 miles south and 0.2 mile west from Altamont west along road to Brownstown, thence southwest along Pennsylvania Railroad (by E. E. Harris in 1929; leveled twice)

[Connects with line 4 in Effingham quadrangle]

Altamont, 4.0 mi. S. thence 1.0 mi. W. from, near SE. cor. sec. 32, T. 7 N., R. 4 E., at NW. corner of crossroads, at jog in N.-S. rd., in center of top of head wall of concrete culvert; chiseled square -----	611. 44
Altamont, 4.0 mi. S. thence 2.0 mi. W. from, near SE. cor. sec. 31, T. 7 N., R. 4 E., in NW. corner of crossroads, at jog in N.-S. rd., in center of top of head wall of concrete culvert; chiseled square -----	613. 08
Altamont, 4.0 mi. S. thence 3.1 mi. W. from, 8.0 mi. E. of Brownstown, near SE. cor. sec. 36, T. 7 N., R. 3 E., 24 ft. N. of E.-W. rd., 25 ft. W. of Effingham-Fayette county-line rd., in L-angle in fence line, 3 ft. from each fence, in concrete post; standard tablet stamped "41 H 1929" -----	622. 239
Brownstown, 7.0 mi. E. of, near SE. cor. sec. 35, T. 7 N., R. 3 E., at NW. corner of offset crossroads, on top of 15-in. drain pipe; chiseled square -----	619. 18
Brownstown, 6.5 mi. E. of, near N $\frac{1}{4}$ cor. sec. 2, T. 6 N., R. 3 E., 160 ft. E. of crossroads, on S. side of rd., in root on N. side of 30-in. locust tree; copper nail and washer -----	614. 71
Brownstown, 5.9 mi. E. of, 2.0 mi. S. of St. Elmo, near SE. cor. sec. 34, T. 7 N., R. 3 E., 230 ft. E. of crossing of C. & E. I. Ry., on N. side of rd., in center of top of head wall of concrete culvert; chiseled square -----	611. 43

⁵² In 1937 this bench mark was moved 28 ft. north of this position on a diagonal fence line between two concrete right-of-way markers and reset at an elevation 1.004 ft. higher than that originally determined. The figures given represent the new elevation.

Brownstown, 5.2 mi. E. of, in NW $\frac{1}{4}$ sec. 3, T. 6 N., R. 3 E., 24 ft. S. and 48 ft. E. from junction of T-rd. N. to St. Elmo, 3 ft. S. of fence line, in concrete post; standard tablet stamped "42 H 1929"-----	<i>Feet</i> 617. 777
Reference mark, 312 ft. N.89°E. from tablet, in SW. corner of apple orchard, in root on SE. side of tree; copper nail and washer-----	617. 97
Brownstown, 4.5 mi. E. of, near S $\frac{1}{4}$ cor. sec. 33, T. 7 N., R. 3 E., 69 ft. N. and 21 ft. W. from crossroads, at jog in N.-S. rd., in root on SE. side of 40-in. maple tree; copper nail and washer-----	608. 93
Brownstown, 4.0 mi. E. of, near NE. cor. sec. 5, T. 6 N., R. 3 E., at SW. corner of crossroads, in center of top of parapet of concrete culvert; bottom of chiseled hole-----	601. 13
Brownstown, 3.1 mi. E. of, near SW. cor. sec. 32, T. 7 N., R. 3 E., in NE. angle of junction of rd. NW., in root on NW. side of 15-in. maple tree; copper nail and washer-----	608. 51
Brownstown, 2.5 mi. E. of, 0.5 mi. S. thence 0.5 mi. E. from Avena, near S $\frac{1}{4}$ cor. sec. 31, T. 7 N., R. 3 E., at jog in N.-S. rd., 30 ft. N. of fence line, 27 ft. E. of rd. N., 39 ft. W. of rd. S., in concrete post; standard tablet stamped "43 H 1929" ⁶³ -----	598. 133
Brownstown, 1.5 mi. E. of, near S $\frac{1}{4}$ cor. sec. 36, T. 7 N., R. 2 E., at SW. corner of intersection of highway and N.-S. rd., on top of angle in head wall of concrete culvert; chiseled square-----	599. 36
Brownstown, 0.3 mi. NE. of P. R. R. sta., in SE $\frac{1}{4}$ sec. 35, T. 7 N., R. 2 E., on N. side of track, just W. of Illinois pumping sta., in center of top of concrete culvert 163-72; chiseled square-----	582. 38
Brownstown, in front of sta.; top of rail-----	590. 1
Brownstown, 400 ft. SW. of sta., 24 ft. N. of main-line track, 20 ft. W. of rd., in center of ground formerly occupied by crossing watchman's tower, in concrete post; standard tablet stamped "44 H 1929"-----	588. 434
Reference mark, 61 ft. E. of tablet, on NW. corner of concrete block foundation of signal box; chiseled square ⁶⁴ -----	588. 91
Brownstown, 0.6 mi. SW. of, on N. side of track, in center of top of concrete culvert 164-67; chiseled square-----	560. 17
Brownstown, 1.1 mi. SW. of, on N. side of track, 1,000 ft. W. of mile-post 165, in center of top of concrete culvert 165-19; chiseled square-----	556. 39
Brownstown, 1.7 mi. SW. of, 3.4 mi. NE. of Bluff, in SE. corner of crossing, on top of 15-in. drain pipe; chiseled square-----	551. 79
Bluff, 2.5 mi. NE. of, 55 ft. N. of track, 9 ft. S. of farm rd. W., in concrete post; standard tablet stamped "45 H 1929" (recovered in 1937; recovered also by U. S. C. & G. S. in 1935)-----	534. 343

[Continued in Vandalia quadrangle, line 5]

3. From road junction 1 mile south and 2.8 miles west from Kinmundy along road south 0.6 mile (by S. R. Archer in 1932)

Kinmundy, 1.5 mi. S. and 2.8 mi. W. from, 2.0 mi. N. and 0.5 mi. E. from Alma, near NE. cor. sec. 31, T. 4 N., R. 3 E., 30 ft. S. and 15 ft. W. from crossroads, in root on E. side of 15-in. elm tree; copper nail and washer-----	574. 05
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[Continued in Salem quadrangle, line 7]

⁶³ In 1939 it was reported that this bench mark had been destroyed.

⁶⁴ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "T 88 1935," elevation 585.560 ft.

4. From point 0.5 mile east of Augsburg generally east along roads to point 5 miles east of St. Peter, thence north 3 miles and east 0.4 mile to point 0.5 mile south and 4.6 miles west from Edgewood (by Caryl York in 1934)

[Connects with line 8 in Vandalia quadrangle]

Augsburg, 1.2 mi. E. of, 0.25 mi. E. of W. cor. secs. 16 and 21, T. 5 N., R. 2 E., in top of W. end of SW. wing wall of bridge; monel-metal rivet-----	Feet 546.81
Augsburg, 2.0 mi. E. thence 0.2 mi. N. from, 1.2 mi. N. and 1.3 mi. W. from St. Paul, 0.25 mi. N. of SW. cor. sec. 15, T. 5 N., R. 2 E., 18 ft. N. and 20 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 3 1934"-----	555.943
St. Paul, 1.2 mi. N. and 0.3 mi. W. from, 0.25 mi. N. of S. cor. secs. 14 and 15, T. 5 N., R. 2 E., 0.25 mi. W. of crossroads, 20 ft. S. of rd., in farmyard, in root of 30-in. catalpa tree; square-headed bolt-----	576.75
St. Paul, 1.2 mi. N. of, 5.2 mi. W. and 0.25 mi. N. from St. Peter, near center of SW $\frac{1}{4}$ sec. 14, T. 5 N., R. 2 E., 30 ft. S. and 20 ft. E. from crossroads, 9 ft. S. and 1 ft. E. from corner fence post, in concrete post; standard tablet stamped "T T Sta No 44 L 1929"-----	564.009
St. Peter, 4.6 mi. W. and 0.3 mi. N. from, in SE $\frac{1}{4}$ sec. 14, T. 5 N., R. 2 E., at N. end of concrete bridge, in W. wing wall; monel-metal rivet-----	535.16
St. Peter, 4.0 mi. W. and 0.1 mi. N. from, near S $\frac{1}{4}$ cor. sec. 13, T. 5 N., R. 2 E., on E. end of S. wall of concrete bridge; chiseled square-----	540.62
St. Peter, 3.6 mi. W. and 0.1 mi. S. from, in NE $\frac{1}{4}$ sec. 24, T. 5 N., R. 2 E., on N. side of concrete bridge, in W. end of W. wing wall; monel-metal rivet-----	559.26
St. Peter, 2.8 mi. W. and 0.2 mi. N. from, near center of SE $\frac{1}{4}$ sec. 18, T. 5 N., R. 3 E., 16 ft. S. and 25 ft. E. from junction of T-rd. N., in concrete post; standard tablet stamped "T T Sta No 45 L 1929"-----	595.665
St. Peter, 2.5 mi. W. of, near SW. cor. sec. 17, T. 5 N., R. 3 E., 250 ft. E. of junction of T-rd. E., on W. end of N. head wall of concrete culvert; chiseled square-----	587.91
St. Peter, 2.0 mi. W. of, near quarter corner between secs. 17 and 20, T. 5 N., R. 3 E., 25 ft. W. of hedge row N., 10 ft. W. of hedge row S., on N. side of rd., in top of E. head wall of culvert under private driveway; monel-metal rivet-----	596.75
St. Peter, 1.5 mi. W. of, near NE. cor. sec. 20, T. 5 N., R. 3 E., at SW. corner of crossroads, on W. end of S. head wall of concrete culvert; chiseled square-----	600.57
St. Peter, 0.8 mi. W. of, 0.2 mi. E. of quarter corner between secs. 16 and 21, T. 5 N., R. 3 E., 0.3 mi. W. of crossroads, in top of W. end of S. wall of concrete bridge; monel-metal rivet-----	587.86
St. Peter, about 60 ft. W. of quarter corner between secs. 15 and 22, T. 5 N., R. 3 E., 198 ft. S. of S. end of R. R. sta., 33 ft. S. and 30 ft. W. from center of main-line track at C. & E. I. Ry. crossing, 3 ft. S. of concrete sidewalk, in concrete post; standard tablet stamped "T T Sta No 46 L 1929"-----	595.415
St. Peter, in E. part of, near cor. secs. 14, 15, 22, and 23, T. 5 N., R. 3 E., at SW. corner of crossroads, at S. end of culvert, in SW. end of W. wing wall; monel-metal rivet-----	590.61

St. Peter, 1.5 mi. E. of, near NE. cor. sec. 23, T. 5 N., R. 3 E., 57 ft. S. and 30 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 4 1934"-----	<i>Feet</i> 574.656
St. Peter, 2.0 mi. E. of, near quarter corner between secs. 13 and 24, T. 5 N., R. 3 E., at concrete culvert under driveway on N. side of rd., in top of N. end of E. head wall; monel-metal rivet-----	577.19
St. Peter, 2.5 mi. E. of, 2.5 mi. N. and 1.8 mi. W. from Farina, 25 ft. S. and 29 ft. W. from junction of T-rd. W. at E. cor. secs. 13 and 24, T. 5 N., R. 3 E., 380 ft. S. and 29 ft. W. from junction of T-rd. E. at W. cor. secs. 18 and 19, T. 5 N., R. 4 E., in NE. corner of yard of Ambuehl School, in concrete post; standard tablet stamped "T T Sta No 47 L 1929"-----	581.785
Farina, 2.5 mi. N. and 0.5 mi. W. from, 740 ft. W. of quarter corner between secs. 17 and 20, T. 5 N., R. 4 E., on S. side of iron highway bridge, on top of W. wing wall; chiseled square-----	579.71
Farina, 2.5 mi. N. and 0.3 mi. W. from, near S $\frac{1}{4}$ cor. sec. 17, T. 5 N., R. 4 E., 30 ft. N. and 33 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 5 1934"-----	578.957
Farina, 2.5 mi. N. and 0.3 mi. E. from, 450 ft. E. of SW. cor. sec. 16, T. 5 N., R. 4 E., on N. side of rd., in barnyard, in root on S. side of 24-in. elm tree; spike-----	583.02
Farina, 2.5 mi. N. and 0.8 mi. E. from, 41 ft. N. and 44 ft. E. from crossroads, 18 ft. SW. of Wolf School, in concrete post; standard tablet stamped "T T Sta. 8 L 1929 Reset 1940" (recovered in 1939) ⁶⁵ -----	581.773
Farina, 3.0 mi. N. and 0.8 mi. E. from, near center of sec. 16, T. 5 N., R. 4 E., at NE. corner of T-rd. E., on top of W. end of N. head wall of concrete culvert under rd. E.; chiseled square (recovered in 1939)-----	580.38
Farina, 3.2 mi. N. and 0.8 mi. E. from, 0.25 mi. N. of center of sec. 16, T. 5 N., R. 4 E., on E. side of concrete bridge, on N. end of N. wing wall; chiseled square-----	579.12
Farina, 3.5 mi. N. and 0.8 mi. E. from, 2.5 mi. S. and 5.0 mi. W. from Edgewood, near quarter corner between secs. 9 and 16, T. 5 N., R. 4 E., 25 ft. N. and 50 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 6 1934"-----	577.686
Edgewood, 2.3 mi. S. and 5.0 mi. W. from, 0.3 mi. S. of center of sec. 9, T. 5 N., R. 4 E., on top of S. end of W. head wall of concrete culvert; chiseled square-----	571.60
Edgewood, 1.8 mi. S. and 5.0 mi. W. from, 0.25 mi. N. of center of sec. 9, T. 5 N., R. 4 E., on S. end of W. head wall of concrete culvert; chiseled square-----	578.28
Edgewood, 1.1 mi. S. and 5.0 mi. W. from, 5.0 mi. E. of Loogootee, about 630 ft. S. of T-rd. W. at center of sec. 4, T. 5 N., R. 4 E., on top of S. end of W. head wall of concrete bridge; monel-metal rivet-----	567.15
Edgewood, 0.5 mi. S. and 5.0 mi. W. from, 10.0 mi. S. thence 0.5 mi. E. from Altamont, 2 ft. N. of angle in rd. at quarter corner between secs. 4 and 33, Tps. 5 and 6 N., R. 4 E., in concrete post; standard tablet stamped "T T Sta No 7 L 1929"-----	582.725

[Continued in Edgewood quadrangle, line 2]

⁶⁵ This bench mark was originally set 9 ft. south and 16 ft. west from this position and at an elevation 0.032 ft. higher. The figures given represent the new elevation.

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5. From crossroads 2.5 miles north and 0.8 mile east from Farina along roads south 1.8 miles, thence northeast (by Caryl York in 1934)

Farina, 2.2 mi. N. and 0.8 mi. E. from, 0.25 mi. N. of center of sec. 21, T. 5 N., R. 4 E., on W. side of rd., on top of E. end of S. head wall of concrete culvert under farm entrance; chiseled square.	<i>Feet</i> 583.14
Farina, 1.9 mi. N. and 0.8 mi. E. from, near center of sec. 21, T. 5 N., R. 4 E., 20 ft. N. and 35 ft. E. from junction of T-rd. E., in blaze in root of 24-in. Osage-orange tree; spike.	585.32
Farina, 1.2 mi. N. and 0.8 mi. E. from, 0.25 mi. N. of center of sec. 28, T. 5 N., R. 4 E., on S. end of W. wall of concrete culvert; chiseled square.	580.93
Farina, 0.7 mi. N. and 0.8 mi. E. from, 3.5 mi. SW. of LaClede, 0.25 S. of center of sec. 28, T. 5 N., R. 4 E., 50 ft. N. and 25 ft. E. from junction of T-rd. N., in line with fence NE., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 9 1934"	576.390

[Continued in Edgewood quadrangle, line 3]

6. From point 1.3 miles west of Lester along road south 0.3 mile (by Caryl York in 1934; releveled by S. R. Archer in 1937)

[A jog from Vandalia quadrangle, line 9]

Lester, 1.2 mi. W. of, 0.25 mi. E. of center of sec. 8, T. 4 N., R. 2 E., 42 ft. N. and 21 ft. E. from junction of T-rd. E., 470 ft. S. of rd. W., in concrete post; standard tablet stamped "T T Sta No 27 L 1929 538"	538.548
Lester, 1.2 mi. W. and 0.2 mi. S. from, near center of SE¼ sec. 8, T. 4 N., R. 2 E., on E. side of bridge, on S. end of N. wing wall; chiseled square.	516.91

[Continued in Vandalia quadrangle, line 9]

7. From point 1.3 miles south and 1.3 miles west from Lester along roads southeast, south, and west (by Caryl York in 1934; releveled by S. R. Archer in 1937)

[A jog from Vandalia quadrangle, line 9]

Lester, 1.2 mi. W. and 1.5 mi. S. from, 0.25 mi. E. of quarter corner between secs. 17 and 20, T. 4 N., R. 2 E., 30 ft. S. of T-rd. N., in root on N. side of 20-in. hackberry tree; spike.	544.71
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[Continued in Vandalia quadrangle, line 9]

LA CENTER QUADRANGLE

[Latitude 37°00'–37°15'; longitude 88°45'–89°00']

MASSAC AND PULASKI COUNTIES

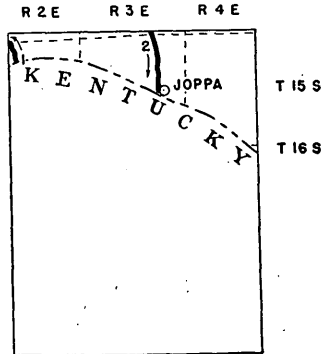


FIGURE 46.—Lines of leveling in La Center quadrangle.

1. From Grand Chain Landing on Ohio River northwest 1.2 miles along road (by R. G. Clinite in 1915)

Grand Chain Landing on Ohio River, about 300 ft. above shore end of current-deflecting crib and rock dike, about 60 ft. below nearest corner of white frame house on slope of hill, about 150 ft. back from top of river bank, in small ravine at corner of orchard, about 25 ft. from riverward corner of shed and privy respectively; top of cap on 2-in. iron pipe (U. S. C. E. B. M. 46)-----	Feet 337.76
Grand Chain Landing, 1.1 mi. NW. of, 150 ft. E. of rd junction with mileboard "Grand Chain 1½ mi., Metropolis 24 mi., Cairo 20 mi.," 80 ft. W. of one-story frame house, in root of 16-in. white-oak tree; copper nail-----	461.26

[Continued in Cairo quadrangle, line 1]

2. From point 3.3 miles north of Joppa south along Chicago & Eastern Illinois Railway to Joppa (by R. G. Clinite in 1915)

[Continued from Vienna quadrangle, line 4]

Grinnell, 2.9 mi. SE. of, 2.5 mi. N. of Joppa, 30 ft. N. and 50 ft. E. from rd. crossing, just N. of milepost 360.20, in field, 9 ft. N. of fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 16 1915 352"-----	351.083
Joppa, 1.3 mi. N. of, on E. side of track, on N. side of wagon rd.; top of N. end of tile drain-----	364.38
Joppa, at R. R. pumping sta. reservoir; surface of water Nov. 22, 1915-----	334.3
Joppa, 1,000 ft. below Main Street, 200 ft. below R. R. scale house, about 50 ft. back of and 60 ft. above upper end of trestle of lower incline track, about 50 ft. from left track on left bank of draw; top of 4-in. iron pipe with cap (U. S. C. E. B. M. 34)-----	329.48

MCLEANSBORO QUADRANGLE

[Latitude 38°00'–38°15'; longitude 88°30'–88°45']

FRANKLIN, HAMILTON, AND JEFFERSON COUNTIES

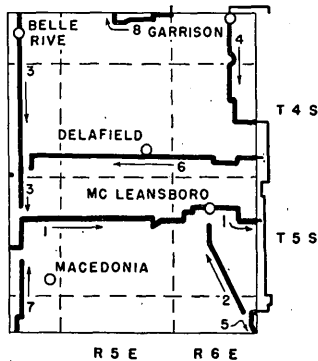


FIGURE 47.—Lines of leveling in McLeansboro quadrangle.

1. From point 0.8 mile north and 2.5 miles west from Macedonia alternately east and north along roads to point 0.5 mile south and 2 miles east from McLeansboro (by H. E. Wessman in 1921; leveled twice)

[Continued from Ina quadrangle, line 1]

Macedonia, 0.8 mi. N. and 2.0 mi. W. from, 0.25 mi. S. of NE. cor. sec. 27, T. 5 S., R. 4 E., 150 ft. W. of crossroads, 7 ft. S. of S. fence line, in root on W. side of 21-in. white-oak tree; copper nail and washer	<i>Feet</i> 425.35
Macedonia, 0.8 mi. N. and 2.0 mi. W. from, 0.25 mi. S. of NW. cor. sec. 26, T. 5 S., R. 4 E., 30 ft. E. of crossroads, 3 ft. N. of N. fence line; standard iron post stamped "4 W 1921" (recovered in 1939)	425.953
Reference mark, 62 ft. S. 75°15' W. from iron post, 40 ft. NW. of crossroads, in root on N. side of 30-in. white-oak tree; copper nail and washer	426.21
Macedonia, 1.5 mi. N. and 2.0 mi. W. from, 150 ft. S. of W¼ cor. sec. 23, T. 5 S., R. 4 E., on E. wing of S. abutment of bridge over creek; chiseled square (recovered in 1928)	441.26
Macedonia, 2.0 mi. N. thence 2.0 mi. W. from, near NW. cor. sec. 23, T. 5 S., R. 4 E., 25 ft. SE. of junction of T-rd. E., in root on N. side of 40-in. black-oak tree; copper nail and washer (recovered in 1928)	467.62
Macedonia, 2.0 mi. N. thence 1.0 mi. W. from, 50 ft. E. of NW. cor. sec. 24, T. 5 S., R. 4 E., on S. side of rd., 5 ft. N. of fence line, in root on N. side of hackberry tree; copper nail and washer	472.82
Macedonia, 2.0 mi. N. of, near NW. cor. sec. 19, T. 5 S., R. 5 E., at Franklin-Hamilton county line, 60 ft. SE. of crossroads, opposite Corinth Church, 4 ft. N. of S. fence line, in root on W. side of 15-in. black-oak tree; copper nail and washer	443.07
Macedonia, 2.0 mi. N. of, near NW. cor. sec. 19, T. 5 S., R. 5 E., 35 ft. S. of crossroads, opposite Corinth Church, 5 ft. E. of E. fence line, in corner of cemetery lot; standard iron post with bronze cap stamped "5 W 1921"	443.353

Reference mark, 186 ft. N. 80° E. from iron post, 225 ft. E. of crossroads, 2 ft. N. of S. fence line, in root on N. side of 12-in. hickory tree; copper nail and washer-----	<i>Feet</i> 442.88
Macedonia, 2.0 mi. N. thence 1.0 mi. E. from, near NW. cor. sec. 20, T. 5 S., R. 5 E., 50 ft. SE. of junction of T-rd. S., opposite Boster School, in S. fence line, in root on W. side of 12-in. elm tree; copper nail and washer-----	438.14
Macedonia, 2.0 mi. N. thence 2.0 mi. E. from, near SW. cor. sec. 16, T. 5 S., R. 5 E., 350 ft. E. of junction of T-rd. S., 15 ft. N. of N. fence line, in root on S. side of 27-in. white-oak tree; copper nail and washer-----	504.98
Macedonia, 2.0 mi. N. thence 3.0 mi. E. from, 0.5 mi. S. and 6.1 mi. W. from McLeansboro, near NW. cor. sec. 22, T. 5 S., R. 5 E., 55 ft. SE. of crossroads, in yard of Seminary School; standard iron post with bronze cap stamped "6 W 1921"-----	515.566
Reference mark 1, 65 ft. S. of crossroads, on W. side of rd., 1 ft. W. of fence line, in root on E. side of 30-in. double oak tree; copper nail and washer-----	515.30
Reference mark 2, 140 ft. N.75°E. from iron post, 170 ft. E. of crossroads, on S. side of rd., in root on W. side of 10-in. white-oak tree; copper nail and washer-----	516.32
McLeansboro, 0.5 mi. S. and 5.0 mi. W. from, 1.3 mi. N. and 0.2 mi. W. from Flint, near NW. cor. sec. 23, T. 5 S., R. 5 E., 25 ft. S. of junction of T-rd. N., in root on E. side of 12-in. black-oak tree; copper nail and washer-----	503.50
McLeansboro, 0.5 mi. S. and 4.1 mi. W. from, 200 ft. W. of SE. cor. sec. 14, T. 5 S., R. 5 E., on N. side of rd., at bridge over Tenmile Creek, on N. wing of E. abutment; chiseled square-----	444.00
McLeansboro, 0.5 mi. N. and 3.1 mi. W. from, near NE. cor. sec. 24, T. 5 S., R. 5 E., 300 ft. W. of junction of N.-S. rd., on N. side of rd., 8 ft. N. of fence line, in root on W. side of 18-in. sassafras tree; copper nail and washer-----	449.63
Reference mark, 17 ft. N.19°30'E. from iron post, 20 ft. W. of junction of rd. E., 430 ft. S. of T-rd. W., in root on N. side of 30-in. oak tree; copper nail and washer-----	426.57
McLeansboro, 0.5 mi. N. and 3.1 mi. W. from, near NE. cor. sec. 24, T. 5 S., R. 5 E., 430 ft. S. of T-rd. W., 35 ft. SW. of junction of T-rd. E., 5 ft. W. of W. fence line; standard iron post with bronze cap stamped "7 W 1921"-----	426.213
McLeansboro, 0.5 mi. S. and 2.1 mi. W. from, 210 ft. E. of NW. cor. sec. 20, T. 5 S., R. 6 E., on S. side of rd., 1 ft. S. of fence line, in root on W. side of 12-in. catalpa tree; copper nail and washer---	460.67
McLeansboro, 0.5 mi. S. and 1.7 mi. W. from, 650 ft. W. of S¼ cor. sec. 17, T. 5 S., R. 6 E., 55 ft. N. of junction of T-rd. N., on E. side of rd., in fence line, in root on SW. side of 24-in. white-oak tree; copper nail and washer-----	464.00
McLeansboro, 0.3 mi. S. and 1.1 mi. W. from, 0.25 mi. S. of W¼ cor. sec. 16, T. 5 S., R. 6 E., 15 ft. E. of junction of T-rd. W., in root on W. side of 30-in. black-oak tree; copper nail and washer-----	448.08
McLeansboro, 0.6 mi. W. of, near center of sec. 16, T. 5 S., R. 6 E., at T-rd. S., on S. wing of E. abutment of bridge over small drainage ditch; chiseled square-----	422.04
McLeansboro, at crossing of Louisville & Nashville R. R.; top of rail-----	453.6

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McLeansboro, at NE. corner of intersection of E.-W. rd. and Washington Street, in root on N. side of 18-in. maple tree; copper nail and washer-----	<i>Feet</i> 452.73
McLeansboro, 100 ft. SW. of Hamilton County courthouse, on SE. corner of well foundation; chiseled square-----	491.40
McLeansboro, at SW. corner of public square, 15 ft. N. and 15 ft. E. from curb lines; standard iron post with bronze cap stamped "8. W 1921" ⁵⁸ -----	481.794
McLeansboro, at W. entrance to courthouse, in S. end of bottom step; standard tablet stamped "8 W 1921 Reset 1937"-----	493.614
Reference mark, 132 ft. N.83°30'E. from iron post, 175 ft. E. of SW. corner of square, 27 ft. N. of curb, in root on W. side of 12-in. apple tree; copper nail and washer-----	483.41
McLeansboro, at Odd Fellows Cemetery, 100 ft. W. of T-rd. S., on S. side of rd., in root on N. side of 30-in. white-oak tree; copper nail and washer-----	460.12
McLeansboro, 1.4 mi. E. of, near center of sec. 14, T. 5 S., R. 6 E., 60 ft. N. of rd. junction, on W. side of rd., 2 ft. E. of fence line, in root on S. side of 10-in. wild-cherry tree; copper nail and washer--	432.69

[Continued in Enfield quadrangle, line 2]

2. Northwest along Louisville & Nashville Railroad to McLeansboro (by H. E. Wessman in 1921)

[Continued in Enfield quadrangle, line 3]

Dale, 5.0 mi. NW. of, at NW. corner of R. R. bridge 336, in timber; copper nail and washer-----	400.61
---	--------

3. From point 1.4 miles north of Belle Rive south along road to point 0.8 mile north and 2 miles west from Macedonia' (by E. W. Gouchenour in 1928)

[Connects with line 2 in Wayne City quadrangle]

Belle Rive, 63 ft. N. of post office door, on sidewalk; chiseled square.	479.45
Belle Rive, 1.5 mi. S. of, 3.0 mi. W. thence 1.0 mi. N. from Dahlgren, near SE. cor. sec. 34, T. 3 S., R. 4 E., 25 ft. W. of rd., at fence line W., in concrete post; standard tablet stamped "62 S 1928"---	458.514
Reference mark, 35 ft. S. of tablet, in root on E. side of 30-in. red-oak tree; copper nail and washer-----	458.17
Belle Rive, 4.5 mi. S. of, near SW. cor. sec. 14, T. 4 S., R. 4 E., 20 ft. N. and 35 ft. E. from crossroads, in concrete post; standard tablet stamped "63 S 1928"-----	514.262
Reference mark, 20 ft. N. and 330 ft. W. from tablet, in root on E. side of 15-in. elm tree; copper nail and washer-----	515.58
Belle Rive, 5.7 mi. S. of, 1,050 ft. S. of cor. secs. 22, 23, 26, and 27, T. 4 S., R. 4 E., 45 ft. N. and 10 ft. W. from crossroads, in root on E. side of 30-in. maple tree; copper nail and washer-----	519.97
Belle Rive, 6.3 mi. S. of, 0.2 mi. N. of cor. secs. 26, 27, 34, and 35, T. 4 S., R. 4 E., 25 ft. N. and 40 ft. W. from junction of T-rd. W., in root on E. side of twin oak tree; copper nail and washer--	519.97
Belle Rive, 7.0 mi. S. of, near E¼ cor. sec. 34, T. 4 S., R. 4 E., 40 ft. N. and 20 ft. W. from junction of T-rd. W., in concrete post; standard tablet stamped "64 S 1928" (recovered in 1939)-----	499.542

⁵⁸ In 1937 this bench mark was destroyed and a new mark was set. Its location and elevation are given in the following description.

Reference mark, 200 ft. S. and 15 ft. W. from rd. junction, in root on E. side of 36-in. black-oak tree; copper nail and washer-----	<i>Feet</i> 494. 08
Belle Rive, 9.8 mi. S. of, 0.25 mi. S. of cor. secs. 10, 11, 14, and 15, T. 5 S., R. 4 E., 30 ft. N. and 25 ft. E. from crossroads, in root on SW. side of 12-in. walnut tree; copper nail and washer-----	501. 98
Belle Rive, 10.5 mi. S. of, 2.0 mi. N. thence 2.0 mi. W. from Macedonia, near NW. cor. sec. 23, T. 5 S., R. 4 E., 35 ft. S. and 20 ft. E. from junction of T-rd. E., in concrete post; standard tablet stamped "65 S 1928" (recovered in 1939)-----	465. 982

4. From point near Garrison south and east along roads to point 1.8 miles west of Blairsville (by W. C. Elledge in 1939; leveled twice)

[Continued from Wayne City quadrangle, line 4]

Garrison, 0.7 mi. S. of, near cor. secs. 22, 23, 26, and 27, T. 3 S., R. 6 E., in SW. angle of crossroads, on NE. concrete base of Aden fire tower; chiseled square-----	435. 46
Garrison, 2.2 mi. S. of, 2.0 mi. E. of Belle Prairie, near E $\frac{1}{4}$ cor. sec. 34, T. 3 S., R. 6 E., 38 ft. N. and 50 ft. W. from crossroads, 38 ft. N. and 30 ft. E. from center of bridge, in concrete post; standard tablet stamped "T T 9 C 1939"-----	400. 901
Garrison, 2.7 mi. S. of, near SW. cor. sec. 34, T. 3 S., R. 6 E., 21 ft. N. and 24 ft. W. from junction of T-rd. S., in root on N. side of 21-in. catalpa tree; copper nail and washer-----	425. 64
Garrison, 3.7 mi. S. of, near SE. cor. sec. 3, T. 4 S., R. 6 E., 75 ft. N. and 20 ft. W. from junction of T-rd. W., in root on NE. side of 12-in. oak tree; copper nail and washer-----	385. 43
Garrison, 4.7 mi. W. of, 3.0 mi. W. and 1.0 mi. N. from Blairsville, 2.2 mi. E. of Piopolis, near cor. secs. 10, 11, 14, and 15, T. 4 S., R. 6 E., 43 ft. S. and 38 ft. W. from center of bridge over drainage ditch, on top of W. bank of ditch, in concrete post; standard tablet stamped "T T 8 C 1939"-----	387. 096
Blairsville, 2.5 mi. W. of, near quarter corner between secs. 14 and 23, T. 4 S., R. 6 E., in SW. corner of schoolyard, in root on W. side of double oak tree; copper nail and washer-----	404. 59

[Continued in Enfield quadrangle, line 7]

5. Generally west and southeast along roads near southeast corner of quadrangle (by W. C. Elledge in 1939)

[A jog from Enfield quadrangle, line 7]

Dale, 1.0 mi. along L. & N. R. R. NW. of, on line between secs. 11 and 14, T. 6 S., R. 6 E., 80 ft. S. and 70 ft. E. from center of crossing of rd. and R. R., 80 ft. S. and 57 ft. W. from center of intersection of rd. and State Highway 142, in concrete post; standard tablet stamped "T T 3 C 1939"-----	392. 234
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[Continued in Enfield quadrangle, line 7]

6. From point 2 miles south and 1.8 miles west from Blairsville west along roads to point 7 miles south of Belle Rive (by W. C. Elledge in 1939)

[Continued from Enfield quadrangle, line 8]

Blairsville, 2.0 mi. S. thence 2.0 mi. W. from, 3.3 mi. N. and 2.0 mi. E. from McLeansboro, near cor. secs. 25, 26, 35, and 36, T. 4 S., R. 6 E., on N. side of rd., at entrance to Mason School, on SW. cor. of concrete platform; chiseled square-----	474. 22
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260 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

McLeansboro, 3.0 mi. N. thence 1.0 mi. E. from, 0.25 mi. S. of NE. cor. sec. 34, T. 4 S., R. 6 E., 27 ft. S. and 340 ft. W. from junction of T-rd. W., in root on N. side of 20-in. catalpa tree; copper nail and washer-----	Feet 428.44
McLeansboro, 3.3 mi. N. of, near W. cor. secs. 27 and 34, T. 4 S., R. 6 E., 34 ft. N. and 32 ft. E. from junction of State Highway 142-A and T-rd. W., 34 ft. N. of corner fence post, in concrete post; standard tablet stamped "T T 13 C 1939"-----	446.236
McLeansboro, 3.3 mi. N. thence 1.0 mi. W. from, 0.2 mi. E. and 3.0 mi. S. from Piopolis, in SW. cor. sec. 28, T. 4 S., R. 6 E., about 200 ft. E. of crossroads, on N. side of rd., at SW. corner of farmyard, in root on S. side of 20-in. maple tree; copper nail and washer-----	422.97
McLeansboro, 3.3 mi. N. thence 2.0 mi. W. from, 0.5 mi. S. thence 1.5 mi. E. from Delafield, T. 4 S., R. 6 E., about 500 ft. E. of W. cor. secs. 29 and 32, on NW. wing wall of small steel bridge over drainage ditch; chiseled square-----	403.54
Delafield, 0.5 mi. S. thence 0.5 mi. E. from, 16 ft. S. and 29 ft. W. from junction of T-rd. E. at W. cor. secs. 30 and 31, T. 4 S., R. 6 E., 50 ft. S. and 29 ft. W. from junction of T-rd. W. at E. cor. secs. 25 and 36, T. 4 S., R. 5 E., 20 ft. S. of NE. corner of yard of Texas Grove School, in concrete post; standard tablet stamped "T T 14 C 1939"-----	434.779
Delafield, 0.5 mi. S. thence 0.8 mi. W. from, 0.25 mi. W. of E. cor. secs. 26 and 35, T. 4 S., R. 5 E., 200 ft. E. of junction of old T-rd. S., on N. side of rd., outside of SE. corner of farmyard, in root on W. side of 12-in. maple tree; copper nail and washer-----	429.62
Delafield, 0.5 mi. S. thence 1.6 mi. W. from, near E. cor. secs. 27 and 34, about 300 ft. W. of crossroads, on S. side of diagonal rd., at E. entrance to Middle Creek Church, on NW. corner of platform; chiseled square-----	451.16
Delafield, 0.5 mi. S. thence 2.5 mi. W. from, 4.0 mi. S. thence 2.0 mi. E. from Dahlgren, near NW. cor. sec. 34, T. 4 S., R. 5 E., 21 ft. S. and 34 ft. E. from crossroads, 11 ft. E. of corner fence post, in concrete post; standard tablet stamped "T T 15 C 1939"-----	549.120
Dahlgren, 4.0 mi. S. thence 1.0 mi. E. from, near SE. cor. sec. 29, T. 4 S., R. 5 E., about 200 ft. W. of crossroads, on N. side of rd., at SE. corner of farmyard, in root on S. side of 20-in. hickory tree; copper nail and washer-----	514.38
Dahlgren, 4.0 mi. S. of, near NE. cor. sec. 31, T. 4 S., R. 5 E., 20 ft. S. and 45 ft. W. from crossroads, in root on S. side of 20-in. catalpa tree; copper nail and washer-----	523.54
Dahlgren, 4.0 mi. S. thence 1.0 mi. W. from, 21 ft. W. of junction of rd. E. at W. cor. secs. 30 and 31, T. 4 S., R. 5 E., 75 ft. N. and 21 ft. W. from junction of T-rd. W. at E. cor. secs. 25 and 36, T. 4 S., R. 4 E., at Hamilton-Jefferson county line, in concrete post; standard tablet stamped "T T 16 C 1939"-----	512.610
Dahlgren, 4.0 mi. S. thence 2.0 mi. W. from, 6.5 mi. S. and 1.0 mi. E. from Belle Rive, near cor. secs. 25, 26, 35, and 36, T. 4 S., R. 4 E., on N. side of rd., 10 ft. S. and 6 ft. W. from SE. corner of school-house, on concrete sidewalk; chiseled square-----	509.25
Belle Rive, 6.7 mi. S. thence 0.5 mi. E. from, 0.25 mi. S. of center of sec. 35, T. 4 S., R. 4 E., 11 ft. N. and 5 ft. W. from crossroads, in root on NE. side of 15-in. locust tree; copper nail and washer-----	500.68

7. From point about 0.7 mile north of Akin along roads generally north to point 10.5 miles south of Belle Rive (by W. C. Elledge in 1939)

[Continued from Galatia quadrangle, line 6]

Akin, 1.5 mi. N. thence 0.2 mi. E. from, near cor. secs. 10, 11, 14, and 15, T. 6 S., R. 4 E., 40 ft. S. and 20 ft. W. from intersection of rd. tangents N. and W., in root on W. side of 15-in. oak tree; copper nail and washer-----	Feet 425. 05
Akin, 2.7 mi. N. and 0.2 mi. E. from, 0.25 mi. N. of SE. cor. sec. 3, T. 6 S., R. 4 E., on W. side of rd., in NE. corner of farmyard, in root on NE. side of 12-in. maple tree; copper nail and washer-----	488. 76
Akin, 3.5 mi. N. and 0.2 mi. E. from, 13.5 mi. S. of Belle Rive, 30 ft. S. and 20 ft. E. from NW. cor. sec. 2, T. 6 S., R. 4 E., at SE. corner of crossroads, in concrete post; standard tablet stamped "66 S 1928"-----	510. 420
Belle Rive, 12.5 mi. S. of, near cor. secs. 26, 27, 34, and 35, T. 5 S., R. 4 E., 40 ft. S. and 60 ft. E. from center of old wooden bridge over creek, in root on SW. side of large double elm tree; copper nail and washer-----	415. 90

8. From point 1.2 miles south and 2.2 miles west from Mayberry along roads south, west, and north to point 3.8 miles north and 1 mile east from Dahlgren (by W. C. Elledge in 1939)

[A jog from Wayne City quadrangle, line 5]

Mayberry, 1.5 mi. S. and 3.7 mi. W. from, about 0.4 mi. W. of E $\frac{1}{4}$ cor. sec. 23, T. 3 S., R. 5 E., on S. side of rd., at NW. corner of barnyard, in root on NW. side of 30-in. oak tree; copper nail and washer--	412. 01
Mayberry, 1.5 mi. S. and 4.3 mi. W. from, 3.5 mi. N. and 3.0 mi. E. from Dahlgren, near quarter corner between secs. 22 and 23, T. 3 S., R. 5 E., 100 ft. N. and 40 ft. W. from junction of T-rd. E., in NE. corner of yard, in root on S. side of 24-in. cottonwood tree; copper nail and washer-----	421. 81
Dahlgren, 3.2 mi. N. and 2.2 mi. E. from, in SW $\frac{1}{4}$ sec. 22, T. 3 S., R. 5 E., 100 ft. S. and 19 ft. E. from junction of T-rd. E., 19 ft. E. of center of junction of T-rd. W., in concrete post; standard tablet stamped "T T 11 C 1939"-----	448. 238
Dahlgren, 3.0 mi. N. and 1.0 mi. E. from, near SW. cor. sec. 21, T. 3 S., R. 5 E., 30 ft. W. of T-rd. E., in root on NW. side of 24-in. oak tree; copper nail and washer-----	427. 43

[Continued in Wayne City quadrangle, line 5]

MARION QUADRANGLE

[Latitude 37°30'–37°45'; longitude 88°45'–89°00']

JOHNSON AND WILLIAMSON COUNTIES

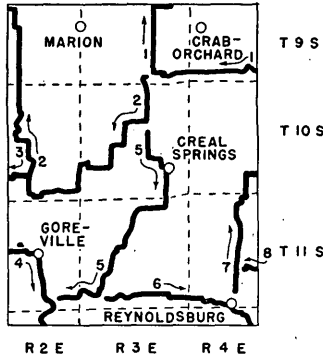


FIGURE 48.—Lines of leveling in Marion quadrangle.

1. From point 0.7 mile northwest of Absher along roads west to New Denison, thence north and east to point 5 miles east and 1.3 miles north from Marion (by R. G. Clinite in 1911)

[Continued from Harrisburg quadrangle, line 1]

Absher, 1.2 mi. NW. thence 0.4 mi. SW. from, 5.6 mi. E. of New Denison, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 34, T. 9 S., R. 4 E., on S. side of rd. at sharp angle from SW. to W., 1 ft. N. of fence; standard iron post with bronze cap stamped "449"	<i>Feet</i> 448.700
New Denison, 4.9 mi. E. of, near center of sec. 33, T. 9 S., R. 4 E., in SW. angle of junction of private rd. S., in root of white-oak tree; nail	449.48
New Denison, 4.4 mi. E. of, at quarter corner between secs. 32 and 33, T. 9 S., R. 4 E., on stone marking quarter corner; chiseled circle	465.13
New Denison, 3.2 mi. E. of, 0.25 mi. E. of center of sec. 31, T. 9 S., R. 4 E., in NE. angle of crossroads, 10 ft. E. of fence corner, 16 in. outside rail fence; standard iron post with bronze cap stamped "473"	472.535
New Denison, 2.4 mi. E. of, at quarter corner between secs. 31 and 36, Tps. 9 and 10 S., on stone marking quarter corner; chiseled circle	463.40
New Denison, 2.0 mi. E. of, 0.2 mi. E. of center of sec. 36, T. 9 S., R. 3 E., on S. side of junction of rd. SE., on stone; chiseled circle	474.66
New Denison, 190 ft. SE. of Illinois Central R. R. sta., on S. side of rd., on E. side of R. R. right-of-way, 108 ft. NW. of church, at NW. corner of small warehouse of E. L. Welborn; standard iron post with bronze cap stamped "439" (recovered by U. S. C. & G. S. in 1935)	438.300
New Denison, 2.7 mi. N. of, 4.0 mi. E. of Marion, near NE. cor. sec. 22, T. 9 S., R. 3 E., 11 ft. W. of corner fence post, 16 in. N. of fence; standard iron post with bronze cap stamped "Prim Trav Sta No 11 1906 458"	457.802

Marion, 4.0 mi. E. thence 1.3 mi. N. from, 1.8 mi. S. and 0.3 mi. W. from Pittsburg, 0.25 mi. N. of S. cor. secs. 10 and 11, T. 9 S., R. 3 E., on N. side of E.-W. rd., 1 ft. SW. of corner post of garden fence; standard iron post with bronze cap stamped "451"-----

Feet
450. 532

[Continued in West Frankfort quadrangle, line 6]

2. From New Denison along roads alternately south and west to Pulleys Mill, thence generally north and west to point 1 mile north and 4 miles west from Marion (by R. G. Clinite in 1911)

New Denison, 2.4 mi. S. of, 0.5 mi. W. thence 0.5 mi. N. of Willeford, 0.25 mi. E. of center of sec. 10, T. 10 S., R. 3 E., in NW. angle at junction of rd. W., in root of oak tree; copper nail----- 454. 16

Willeford, 0.5 mi. W. of, 0.25 mi. E. of N $\frac{1}{4}$ cor. sec. 15, T. 10 S., R. 3 E., in SW. angle of crossroads, 200 ft. W. of church, 6 ft. W. of telephone pole; standard iron post with bronze cap stamped "460" (recovered in 1923)----- 459. 601

Willeford, 1.7 mi. W. of, at quarter corner between secs. 9 and 16, T. 10 S., R. 3 E., at T-rd. S., on stone marking quarter corner; chiseled square----- 461. 41

Willeford, 1.7 mi. W. thence 1.0 mi. S. from, at quarter corner between secs. 16 and 21, T. 10 S., R. 3 E., at crossroads, on stone marking quarter corner; chiseled square----- 537. 05

Willeford, 1.7 mi. W. thence 1.3 mi. S. from, 0.25 mi. S. of N $\frac{1}{4}$ cor. sec. 21, T. 10 S., R. 3 E., at crossroads, on stone marking sixteenth corner; chiseled square----- 528. 70

Willeford, 2.5 mi. W. and 1.4 mi. S. from, 3.0 mi W. thence 1.2 mi. N. from I. C. R. R. sta. at Creal Springs, near center of NE $\frac{1}{4}$ sec. 20, T. 10 S., R. 3 E., on E. side of rd., opposite junction of rd. W., 2 ft. W. of hedge fence; standard iron post with bronze cap stamped "534"----- 533. 601

Creal Springs, 3.0 mi. W. thence 0.9 mi. N. from, about 500 ft. S. of center of E $\frac{1}{2}$ sec. 20, T. 10 S., R. 3 E., in NE. angle of junction of rd. E., in root of hickory tree; copper nail----- 526. 72

Creal Springs, 4.3 mi. W. thence 0.3 mi. N. from, 0.25 mi. N. of center of sec. 30, T. 10 S., R. 3 E., in SW. angle at jog from N. to W. in rd., in elm tree; copper nail----- 533. 57

Creal Springs, 4.8 mi. W. and 0.3 mi. N. from, 7.5 mi. S. of Marion, 0.25 mi. S. of NW. cor. sec. 30, T. 10 S., R. 3 E., 54 ft. S. of sixteenth corner, on E. side of range-line rd., in sandstone rock; aluminum tablet stamped "550"----- 549. 624

Marion, 8.5 mi. S. of, 0.25 mi. S. of NW. cor. sec. 31, T. 10 S., R. 3 E., in NE. angle of junction of T-rd. E., in root of tree; spike----- 466. 99

Marion, 9.6 mi. S. of, 3.1 mi. NE. of Pulleys Mill, in NE $\frac{1}{4}$ sec. 36, T. 10 S., R. 2 E., at bridge over South Fork of Saline River, on NE. wing wall; chiseled square----- 471. 48

Pulleys Mill, 2.2 mi. NE. of, 0.3 mi. W. of center of sec. 36, T. 10 S., R. 2 E., at foot of bluff, opposite private rd. S., on large boulder; chiseled square----- 483. 20

Pulleys Mill, 0.25 mi. E. of center of sec. 35, T. 10 S., R. 2 E., on N. side of rd., 4 ft. S. of stone fence, at drain, on rock; chiseled square----- 540. 48

Pulleys Mill, 1.5 mi. NE. of, 3.5 mi. along C. & E. I. Ry. NE. of Goreville, 0.3 mi. E. of Kelleys, near center of sec. 25, T. 10 S., R. 2 E., at junction of rd. N., at jog, 26 ft. W. of rd.; standard iron post with bronze cap stamped "583"-----	<i>Feet</i> 582.240
Pulleys Mill, 0.3 mi. E. of, in SW¼ sec. 34, T. 10 S., R. 2 E., near center of rd. fork, 2 ft. NE. of mail boxes, on rock; chiseled square-----	575.36
Pulleys Mill, near center of SW¼ sec. 34, T. 10 S., R. 2 E., 360 ft. W. of store, near NW. corner of junction of rd. N., 3 ft. SW. of corner fence post; top of rock-----	595.27
Pulleys Mill, 1.0 mi. N. of, near center of SW¼ sec. 27, T. 10 N., R. 2 E., in NW. angle of crossroads, in root of oak tree; nail-----	542.68
Pulleys Mill, 1.5 mi. N. of, in NW¼ sec. 27, T. 10 S., R. 2 E., in SW. angle of rd. fork, 27 ft. SE. of small plank culvert; standard iron post with bronze cap stamped "538" (recovered in 1920)-----	538.087
Pulleys Mill, 2.2 mi. NE. of, 0.3 mi. W. of center of sec. 36, T. 10 S., R. 2 E., on N. side of rd. at jog W., in root of small hickory tree; nail-----	509.78
Pulleys Mill, 2.9 mi. N. thence 0.8 mi. W. from, 0.3 mi. E. thence 3.1 mi. by rd. S. from Chamness, near S¼ cor. sec. 16, T. 10 S., R. 2 E., 250 ft. N. of crossroads, 5 ft. NE. of NE. corner of yard of J. W. Moulton; standard iron post with bronze cap stamped "Prim Trav Sta No 12 1911 509" (recovered in 1920)-----	508.500
Chamness, 0.3 mi. E. thence 2.6 mi. S. from, at center of sec. 16, T. 10 S., R. 2 E., at crossroads, on stone marking quarter corner; chiseled square-----	527.68
Chamness, 0.3 mi. E. thence 2.3 mi. S. from, 0.3 mi. E. of center of sec. 16, T. 10 S., R. 2 E., in NE. angle of junction of rd. NW., in root of 32-in. white-oak tree; nail-----	548.41
Chamness, 0.3 mi. E. thence 1.1 mi. S. from, 0.3 mi. E. of center of sec. 9, T. 10 S., R. 2 E., on W. side of rd., opposite rd. E., in root of small oak tree; copper nail-----	540.18
Chamness, 0.3 mi. E. of, 3.3 mi. W. thence 3.6 mi. S. from Marion, 0.25 mi. E. of center of sec. 4, T. 10 S., R. 2 E., in SE. angle of crossroads, in NW. corner of churchyard; standard iron post with bronze cap stamped "457"-----	456.463
Marion, 3.3 mi. W. thence 3.0 mi. S. from, 0.25 mi. E. of quarter corner between secs. 4 and 33, Tps. 9 and 10 S., R. 2 E., at crossroads, on stone marking sixteenth corner; chiseled square-----	429.18
Marion, 3.3 mi. W. thence 2.3 mi. S. from, near center of NE¼ sec. 33, T. 9 S., R. 2 E., at iron bridge over Craborchard Creek, on NW. wing wall, projecting 2 in. above concrete; iron plug (recovered in 1940)-----	412.31
Marion, 3.3 mi. W. thence 1.8 mi. S. from, near center of SE¼ sec. 28, T. 9 S., R. 2 E., 25 ft. E. of SE. corner of junction of dim rds. E. and W., on small rock; chiseled square-----	426.41
Marion, 3.3 mi. W. thence 1.0 mi. S. from, 0.25 mi. W. of SE. cor. sec. 21, T. 9 S., R. 2 E., in NW. angle of junction of T-rd. W., 11 ft. N. of corner fence post; standard iron post with bronze cap stamped "431" (recovered in 1940) ⁵⁷ -----	430.697

⁵⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "E 120 1935," elevation 432.151 ft.

Marion, 3.3 mi. W. of, 0.25 mi. W. of NE. cor. sec. 21, T. 9 S., R. 2 E.,
at junction of Carbondale rd., on stone marking sixteenth corner;
chiseled square----- *Feet*
418. 59

Marion, 3.3 mi. W. of, 0.25 mi. W. of NE. cor. sec. 21, T. 9 S., R. 2 E.,
18 ft. S. and 20 ft. E. from junction of E.-W. rd., on S. end of W.
abutment of bridge over ditch; chiseled square (established in
1936)----- 420. 26

Marion, 3.5 mi. W. thence 1.3 mi. N. from, 0.7 mi. N. of Bainbridge,
near N $\frac{1}{4}$ cor. sec. 16, T. 9 S., R. 2 E., near SW. corner of junction
of E.-W. rd., in root of wild-cherry tree; copper nail----- 447. 72

[Continued in Carbondale quadrangle, line 1]

3. From crossroads 2.9 miles north and 0.8 mile west from Pulleys
Mill along roads east, south, and west to point 0.9 mile north
and 1.1 miles west from Pulleys Mill (by R. G. Clinite in 1920)

Pulleys Mill, 1.0 mi. N. of, near center of SW $\frac{1}{4}$ sec. 27, T. 10 S., R.
2 E., in NW. angle of crossroads, in root of oak tree; nail----- 542. 61

Pulleys Mill, 0.9 mi. N. and 0.9 mi. W. from, in SW $\frac{1}{4}$ sec. 28, T. 10
S., R. 2 E., 80 ft. NE. of sharp turn in rd., in farmyard, in root of
28-in. black-oak tree; copper nail and washer----- 634. 13

[Continued in Carbondale quadrangle, line 8]

4. From point 1.7 miles west of Goreville along road east to Gore-
ville, thence south along Chicago & Eastern Illinois Railway
(by R. G. Clinite in 1920)

[Continued from Carbondale quadrangle, line 8]

Goreville, 1.0 mi. W. of, in SW. angle of crossroads, on rock;
chiseled square----- 693. 67

Goreville, 0.5 mi. W. of, in SE. angle of junction of T.-rd. E., 400 ft.
N. of schoolhouse; standard iron post with bronze cap stamped
"1920 742"----- 741. 392

Goreville, in front of S. end of C. & E. I. Ry. sta., at SW. corner of
concrete base of water filler; unmarked point----- 721. 01

Goreville, 1.3 mi. S. of, on E. side of track, at overhead rd. crossing,
on concrete foundation for bridge support; chiseled square----- 719. 04

Goreville, 2.7 mi. S. of, on W. side of track, at concrete milepost
332; top of post (recovered in 1923)----- 662. 56

Goreville, 3.8 mi. S. of, 300 ft. S. of crossing of Logan-Lee highway,
in pasture lot, 120 ft. S. of old log barn, in rock outcrop;
aluminum tablet stamped "1920 607" (recovered in 1923)----- 606. 198

Omar, in front of sta. sign; top of rail of main track----- 594. 8

Omar, 420 ft. SW. of sta. sign, 2.5 mi. N. of Buncombe, on W. edge of
right-of-way, about 40 ft. W. of milepost 334, at 5- by 5-in. concrete
post projecting 1 ft. above ground and having small rectangular
bronze plate in top; top of post (C. & E. I. Ry. P. B. M.)----- 597. 518

[Continued in Vienna quadrangle, line 7]

5. From point 0.5 mile west of Willeford along roads south and east
to Creal Springs, thence south, west, and southwest to point 3.8
miles south of Goreville (by S. R. Archer in 1923)

Willeford, 0.5 mi. W. thence 1.3 mi. S. from, 1.3 mi. W. and 1.3 mi. N.
from Creal Springs, near center of NE $\frac{1}{4}$ sec. 22, T. 10 S., R. 3 E.,
40 ft. S. of T.-rd. W., on E. side of rd., at fence line, on S. side of
gate to field, in root on W. side of 15-in. oak tree; copper nail and
washer----- 459. 59

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Creal Springs, 1.3 mi. W. and 0.5 mi. N. from, 0.25 mi. E. of quarter corner between secs. 22 and 27, T. 10 S., R. 3 E., 80 ft. E. of right-angle turn E. in rd., on N. side of rd., in fence line, in root on N. side of 8-in. oak tree; copper nail and washer-----	Feet 536.82
Creal Springs, 0.5 mi. W. thence 0.5 mi. N. from, near quarter corner between secs. 23 and 26, T. 10 S., R. 3 E., 40 ft. S. and 40 ft. W. from junction of T-rd. S., 25 ft. S. and 20 ft. W. from NE. corner of yard of dwelling, in root on NE. side of 6-in. maple tree; copper nail and washer-----	501.63
Creal Springs, at W. limits of, near center of sec. 26, T. 10 S., R. 3 E., on S. side of rd., opposite rd. N., in root on NW. side of 15-in. oak tree; copper nail and washer-----	480.20
Creal Springs, in SW. part of, 30 ft. N. and 30 ft. E. from junction of T-rd. S., 30 ft. N. and 18 ft. W. from W. end of overpass over I. C. R. R., on N. side of street, in yard, 15 ft. S. and 5 ft. E. from SE. corner of house, in root on S. side of 6-in. maple tree; copper nail and washer-----	545.40
Creal Springs, on E. side of South Line Street, at school grounds, 8 ft. SW. of SW. corner of schoolhouse, inside sidewalk, at corner of concrete walk around building, in concrete post; standard tablet stamped "55 A 1923" ⁵⁸ -----	539.775
Reference mark, at W. entrance to schoolhouse, on top of N. end of concrete doorsill; chiseled square (recovered in 1936)-----	539.67
Creal Springs, 0.2 mi. W. and 0.9 mi. S. from, 0.25 mi. E. of center of sec. 35, T. 10 S., R. 3 E., in NE. angle of crossroads, in root on S. side of 30-in. oak tree; copper nail and washer-----	510.70
Creal Springs, 0.2 mi. W. and 2.0 mi. S. from, N. of center of SE $\frac{1}{4}$ sec. 2, T. 11 S., R. 3 E., 110 ft. W. of crossroads, on S. side of rd., inside field fence, 12 ft. E. of small birch tree, in root on NE. side of 5-in. oak tree; copper nail and washer-----	485.03
Creal Springs, 1.0 mi. W. and 2.0 mi. S. from, 0.25 mi. N. of SW. cor. sec. 2, T. 11 S., R. 3 E., 15 ft. N. and 45 ft. E. from crossroads, 25 ft. E. of fence corner, in concrete post; standard tablet stamped "56 A 1923"-----	568.265
Reference mark, 75 ft. N. of crossroads, on E. side of rd., at fence line, in root 10 in. underground on E. side of 5-in. persimmon tree; copper nail and washer-----	562.65
T. 11 S., R. 3 E., near center of SW $\frac{1}{4}$ sec. 3, 160 ft. E. of rd. fork, on S. side of rd., in root on SW. side of 5-in. persimmon tree; copper nail and washer-----	557.42
T. 11 S., R. 3 E., about 500 ft. N. and 500 ft. W. from E $\frac{1}{4}$ cor. sec. 9, 100 ft. S. of summit of hill, on E. side of rd., in front of house, on sandstone outcrop; chiseled square-----	590.81
T. 11 S., R. 3 E., about 500 ft. SW. of crossing of line between secs. 9 and 16, 70 ft. W. of rd., 8 ft. N. and 20 ft. E. from NE. corner of old house, in root on SE. side of 24-in. maple tree; copper nail and washer-----	569.89
T. 11 S., R. 3 E., 0.25 mi. N. of SE. cor. sec. 17, 30 ft. S. and 20 ft. W. from junction of T-rd. E., 12 ft. S. and 20 ft. W. from junction of private rd. W., on S. side of private rd., in concrete post; standard tablet stamped "57 A 1923"-----	684.722

⁵⁸ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "R 120 1935," elevation 504.300 ft.

Reference mark, 15 ft. W. of tablet, 35 ft. W. of N.-S. rd., on S. side of private rd. W., in root on SW. side of 8-in. oak tree; copper nail and washer-----	<i>Feet</i> 683.88
T. 11 S., R. 3 E., 400 ft. W. of SE. cor. sec. 17, 40 ft. E. of T-rd. S., on N. side of rd., inside fence, in root on N. side of 6-in. walnut tree; copper nail and washer-----	674. 48
T. 11 S., R. 3 E., about 500 ft. S. and 800 ft. E. from N $\frac{1}{4}$ cor. sec. 29, in NE. angle of junction of T-rd. E., in SW. corner of churchyard, in root on S. side of 36-in. oak tree; copper nail and washer-----	720. 12
T. 11 S., R. 3 E., just S. of center of NW $\frac{1}{4}$ sec. 29, 65 ft. S. of junction of rd. S., on E. side of rd., inside fence, in root on E. side of 6-in. cedar tree; copper nail and washer-----	694. 78
T. 11 S., R. 3 E., about 500 ft. N. and 500 ft. E. from W $\frac{1}{4}$ cor. sec. 32, 4.5 mi. W. of Tunnel Hill, in NE. corner of crossroads, 5 ft. W. of fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 14 1915 58 A"-----	790. 491
Reference mark, 20 ft. S. and 20 ft. W. from crossroads, opposite and 35 ft. N. of house in SE. angle of crossroads, in root on N. side of 12-in. hickory tree; copper nail and washer-----	789. 40
T. 11 S., R. 3 E., in SW $\frac{1}{4}$ sec. 30, in S. angle of junction of T-rd. SW., in root 6 in. underground on N. side of 8-in. hickory tree; copper nail and washer-----	762. 14
T. 11 S., R. 2 E., about 0.25 mi. NE. of center of sec. 36, on N. side of rd., on W. side of walk to house, in root on SW. side of triple-forked tree, westernmost of two maple trees in front yard; copper nail and washer-----	620. 43
T. 11 S., R. 2 E., 0.25 mi. S. of NE. cor. sec. 35, 2.7 mi. S. thence 0.6 mi. NE. from Goreville, in NW. angle of junction of T-rd. N., at fence corner, in root on SE. side of 12-in. oak tree; copper nail and washer-----	616. 35
Goreville, 2.9 mi. S. of, near center of sec. 35, T. 11 S., R. 2 E., 10 ft. S. and 15 ft. W. from C. & E. I. Ry. crossing, 3 ft. SE. of "Stop" sign, on sandstone outcrop; chiseled square-----	650. 82
Goreville, 3.8 mi. S. of, 75 ft. S. and 20 ft. W. from crossing of Logan-Lee highway, on W. side of rd., 10 ft. S. of R. R. right-of-way corner, in root on NW. side of 30-in. oak tree; copper nail and washer ^{58a} -----	611. 36
6. From crossroads 4.5 miles west of Tunnel Hill along roads generally east and southeast by way of Tunnel Hill and Reynoldsburg to point near Double Bridges School (by S. R. Archer in 1923)	
Tunnel Hill, 3.5 mi. W. of, near E $\frac{1}{4}$ cor. sec. 32, T. 11 S., R. 3 E., 175 ft. NW. of residence of Albert Schierbaum, 10 ft. S. and 10 ft. W. from SE. corner of barn, on top of NE. corner of square concrete foundation of E. pillar of shed; chiseled square-----	628. 16
Tunnel Hill, 2.7 mi. W. of, about 800 ft. N. of center of sec. 33, T. 11 S., R. 3 E., 10 ft. S. and 5 ft. W. from SW. corner of residence of Lutitia Harris, in root on SW. side of 15-in. cedar tree; copper nail and washer-----	612. 74

^{58a} Established as a reference mark to aluminum tablet stamped "1920 607," described in line 4.

Tunnel Hill, 2.1 mi. W. of, about 800 ft. N. and 250 ft. W. from E $\frac{1}{4}$ cor. sec. 33, T. 11 S., R. 3 E., 30 ft. S. and 30 ft. W. from deserted farmhouse belonging to Edward Webb, 55 ft. N. of trail, 35 ft. S. of 36-in. oak tree, in root on E. side of another 36-in. oak tree; copper nail and washer-----	Feet 621. 08
Tunnel Hill, 1.8 mi. W. of, about 500 ft. S. of center of NW $\frac{1}{4}$ sec. 34, T. 11 S., R. 3 E., at ford across Little Cache Creek, 10 ft. W. of center of creek bed, on S. side of rd., in root on S. side of 5-in. sycamore tree; copper nail and washer-----	441. 67
Tunnel Hill, 1.3 mi. W. of, 0.25 mi. N. of center of sec. 34, T. 11 S., R. 3 E., 40 ft. N. and 20 ft. E. from right-angle in main rd. and junction of private rds. N. and W., 80 ft. S. of residence of Walter Vinson, on E. side of rd. N., 30 ft. N. of intersection of fence lines, at fence line, in concrete post; standard tablet stamped "59 A 1923"-----	637. 635
Reference mark, 140 ft. N. of rd. junction, on W. side of rd. N., 5 ft. N. and 25 ft. E. from NE. corner of residence, in root on E. side of southernmost of two walnut trees 10 ft. apart; copper nail and washer-----	640. 71
Tunnel Hill, 0.5 mi. W. of, about 500 ft. E. of center of NW $\frac{1}{4}$ sec. 35, T. 11 S., R. 3 E., on S. side of rd., 35 ft. N. and 5 ft. W. from NW. corner of deserted house, inside fence, in root 6 in. underground on N. side of 6-in. cedar tree; copper nail and washer-----	708. 45
Tunnel Hill, 0.3 mi. S. of, just W. of E $\frac{1}{4}$ cor. sec. 35, T. 11 S., R. 3 E., 150 ft. S. and 30 ft. E. from junction of T-rd. E., on E. side of rd., 20 ft. S. and 100 ft. W. from SW. corner of house owned by Guy Bowman, at fence corner (jog in rd. fence line to W.), in concrete post; standard tablet stamped "60 A 1923" ⁵⁹ -----	723. 524
Tunnel Hill, 0.3 mi. S. thence 0.7 mi. E. from, about 500 ft. E. of center of sec. 36, T. 11 S., R. 3 E., on N. side of rd., 20 ft. S. of SE. corner of residence of H. C. McCoy, in root on SW. side of 24-in. locust tree; copper nail and washer-----	754. 98
Tunnel Hill, 0.3 mi. S. thence 1.4 mi. E. from, 2.4 mi. NW. of Reynoldsburg, 0.25 mi. W. of center of sec. 31, T. 11 S., R. 4 E., 20 ft. S. and 25 ft. E. from crossing of U. S. Highway 45, 1 ft. S. of fence corner, in concrete post; standard tablet stamped "61 A 1923" ⁶⁰ -----	732. 830
Reference mark, 80 ft. W. of crossroads, on S. side of rd. W., at fence line, in root 4 in. underground on NW. side of 10-in. sassafras tree; copper nail and washer-----	729. 68
Reynoldsburg, 1.4 mi. W. of, about 0.3 mi. N. and 250 ft. E. from SW. cor. sec. 32, T. 11 S., R. 4 E., 420 ft. E. of angle to E. in rd., 45 ft. S. of rd., 60 ft. S. of 42-in. oak tree in rd., about 400 ft. N. of deserted dwelling on S. side of rd., on N. bank of Cedar Creek, in root 8 in. underground on NW. side of 10-in. hickory tree; copper nail and washer-----	506. 42

⁵⁹ In 1939 it was reported that this bench mark had been moved 61 ft. northeast of this location and reset at the same elevation. It is now 430 ft. northeast of milepost 215 of the Cleveland, Cincinnati, Chicago & St. Louis Ry., 250 ft. south of the north portal of tunnel, and 68 ft. northeast of the gravel road.

⁶⁰ In 1940 this bench mark was reported missing.

Reynoldsburg, 0.4 mi. W. of, 0.25 mi. N. of SE. cor. sec. 32, T. 11 S., R. 4 E., 40 ft. N. and 35 ft. W. from junction of T-rd. S., in front yard of house on N. side of rd., in root on E. side of 30-in. pine tree; copper nail and washer-----	Feet 621.08
Reynoldsburg, at rd. fork, in SW $\frac{1}{4}$ sec. 33, T. 11 S., R. 4 E., at N. corner of triangular grass plot; standard iron post with bronze cap stamped "Prim Trav Sta No 4 1913 62 A" ^{a1} -----	577.561
Reynoldsburg, 1.0 mi. SE. of, about 800 ft. NW. of center of E. side NE $\frac{1}{4}$ sec. 4, T. 12 S., R. 4 E., about 450 ft. W. of angle to S. in rd., on N. side of rd., in SE. corner of yard of residence of Walter Keener, in root on NE. side of 30-in. oak tree; copper nail and washer-----	587.39
Reynoldsburg, 1.8 mi. SE. of, 0.5 mi. NW. of Double Bridges School, about 500 ft. E. of center of SW $\frac{1}{4}$ sec. 3, T. 12 S., R. 4 E., 600 ft. NW. of summit of hill, at angle in rd., on E. side of rd., at fence line, in root on SW. side of 24-in. maple tree; copper nail and washer-----	503.36

[Continued in Vienna quadrangle, line 8]

7. From Reynoldsburg north along road to point about 4.5 miles east of Greal Springs, thence east to point 2.6 miles west of Stonefort (by S. R. Archer in 1923)

Reynoldsburg, 0.8 mi. N. of, 0.7 mi. W. thence 1.0 mi. S. from Ozark, near N $\frac{1}{4}$ cor. sec. 33, T. 11 S., R. 4 E., 30 ft. S. and 25 ft. W. from crossing of section line, on W. side of rd., in front yard of residence of R. Hawkins, in root on E. side of 24-in. oak tree; copper nail and washer-----	688.01
Ozark, 0.7 mi. W. of, 2.8 mi. S. of New Burnside, 270 ft. N. of S $\frac{1}{4}$ cor. sec. 21, T. 11 S., R. 4 E., 270 ft. N. of crossroads, on top of E. head wall of concrete culvert; chiseled square-----	636.04
New Burnside, 2.2 mi. S. of, about 800 ft. E. of center of sec. 21, T. 11 S., R. 4 E., 160 ft. E. of I. C. R. R. crossing, 90 ft. E. of junction of T-rd. N., on S. side of rd., in root 8 in. underground on SW. side of 6-in. sycamore tree; copper nail and washer-----	631.44
New Burnside, 1.4 mi. S. of, about 800 ft. W. of center of SE $\frac{1}{4}$ sec. 16, T. 11 S., R. 4 E., 120 ft. N. of point where new highway crosses old N.-S. rd., 25 ft. S. of E.-W. sixteenth line crossing highway, on E. side of old rd., on W. side of highway, in root on E. side of 18-in. maple tree; copper nail and washer-----	579.48
New Burnside, 0.4 mi. SE. of, near center of SE $\frac{1}{4}$ sec. 9, T. 11 S., R. 4 E., 25 ft. N. and 50 ft. E. from junction of rd. SE., at summit of hill, on N. side of rd. to E., in fence line, in root on SW. side of forked 8-in. elm tree; copper nail and washer-----	650.98
New Burnside, in SW. part of town, at SE. corner of schoolhouse, in E. side of concrete foundation; standard tablet stamped "63 A 1923"-----	588.418
Reference mark, 180 ft. N. of tablet, 140 ft. N. of NE. corner of schoolhouse, at NE. corner of schoolyard, in root on E. side of 24-in. oak tree; copper nail and washer-----	576.26
New Burnside, in front of C. C. C. & St. L. Ry. sta., on SE. side of track, on top of NW. part of concrete foundation of signal block; chiseled square-----	560.10
New Burnside, in front of sta.; top of rail-----	559.2

^{a1} In 1940 it was reported that this bench mark was almost destroyed by erosion.

270 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

New Burnside, 1.1 mi. N. of, 0.2 mi. E. of center of sec. 4, T. 11 S., R. 4 E., 300 ft. W. of right-angle turn N. in rd., 110 ft. W. of drain crossing, on S. side of rd., in root on NE. side of 24-in. walnut tree; copper nail and washer-----	<i>Feet</i> 469. 70
New Burnside, 2.2 mi. NE. of, about 900 ft. S. of E $\frac{1}{4}$ cor. sec. 33, T. 10 S., R. 4 E., about 425 ft. N. of T-rd. W., 120 ft. S. of stream crossing, 40 ft. W. of rd., in point of land at junction of drain and Grassy Creek, on S. bank of creek, on W. bank of drain, in root on E. side of 24-in. sycamore tree; copper nail and washer-----	436. 28
New Burnside, 2.9 mi. NE. of, 3.3 mi. W. of Bolton (Stonefort), near NW. cor. sec. 34, T. 10 S., R. 4 E., 25 ft. S. and 25 ft. E. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 10 1911 Reset 1938" ⁶² -----	482. 160
Reference mark, in SE. angle of crossroads, in root on E. side of 24-in. oak tree; copper nail and washer-----	482. 44

[Continued in Harrisburg quadrangle, line 5].

8. From point 0.6 mile east of Ozark west along road 1.3 miles (by S. R. Archer in 1933)

[Continued from Harrisburg quadrangle, line 7]

Ozark, 0.6 mi. E. of, in SE $\frac{1}{4}$ sec. 22, T. 11 S., R. 4 E., 15 ft. N. of rd., in root 12 in. underground on N. side of 18-in. persimmon tree; copper nail and washer-----	695. 18
Ozark, just E. of, in SW $\frac{1}{4}$ sec. 22, T. 11 S., R. 4 E., 30 ft. S. of rd., 95 ft. NW. of Hopewell Church, at churchyard, in fence line; in concrete post; standard tablet stamped "7 WA 1923" ⁶³ -----	724. 662
Reference mark, 10 ft. S. of rd., 100 ft. NW. of church, in root on N. side of 28-in. oak tree; copper nail and washer-----	724. 49

⁶² This bench mark replaces a standard iron post with bronze cap stamped "Prim Trav Sta No 10 1911" which was set in the northwest angle of the crossroads at an elevation 1.078 ft. higher than the elevation of the tablet.

⁶³ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Y 110 1935," elevation 660.084 ft.

MEROM QUADRANGLE

[Latitude 39°00'–39°15'; longitude 87°30'–87°45']

CLARK AND CRAWFORD COUNTIES

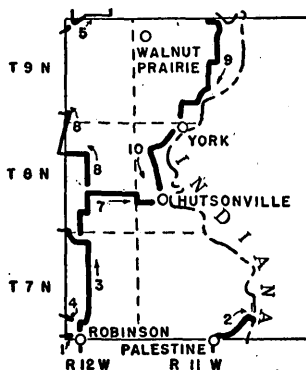


FIGURE 49.—Lines of leveling in Merom quadrangle.

1. From point 0.5 mile west of Robinson east along Illinois Central Railroad to Robinson, thence south along road (by Henry Bücher in 1907)

[Continued from Moonshine quadrangle, line 1]

Robinson, on S. side of Crawford County courthouse, on W. side of concrete walk, at edge of wall, in concrete post; aluminum tablet stamped "Prim Trav Sta No. 13 534 Adj" (recovered in 1939; recovered also by U. S. C. & G. S. in 1935)-----

Feet
534. 228

[Continued in Birds quadrangle, line 1]

2. From Palestine northeast along Illinois Central Railroad into Indiana at Riverton (by G. W. Lucas in 1914)

[Continued from Birds quadrangle, line 5]

Riverton, 150 ft. from Wabash River, 600 ft. below E. abutment of I. C. R. R. drawbridge, on E. slope of levee, on property of P. H. Blue, 35 ft. NE. of houseboat of Richard Meek, 50 ft. SE. of houseboat of Arthur Meek; iron post (U. S. C. E. B. M.)⁶⁴-----

442. 47

3. From Robinson along roads generally north and west to point 0.4 mile south and 2.6 miles east from Eaton (by J. M. Lawson in 1926)

Robinson, 0.9 mi. N. of courthouse, 0.25 mi. N. of SE. cor. sec. 28, T. 7 N., R. 12 W., 45 ft. S. and 35 ft. W. from junction of street S., 65 ft. S. and 35 ft. W. from entrance to yard of Robinson Township High School, 20 ft. SW. of corner fence post, in vacant lot, in root on NE. side of 24-in. oak tree; copper nail and washer-----

536. 48

⁶⁴ This bench mark is in Indiana.

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Robinson, 0.9 mi. N. thence 0.4 mi. E. from, 0.3 mi. S. of center of sec. 27, T. 7 N., R. 12 W., 30 ft. S. and 15 ft. W. from crossroads, on S. corner of W. concrete head wall of culvert under rd. S.; chiseled square-----	Feet 517.68
Robinson, 2.5 mi. N. and 0.5 mi. E. from, 0.25 mi. N. of center of sec. 22, T. 7 N., R. 12 W., 20 ft. S. and 40 ft. E. from junction of T-rd. E., 5 ft. S. of edge of bank, in concrete post; standard tablet stamped "26 L 1926"-----	525.000
Reference mark, 50 ft. NW. of tablet, 10 ft. N. and 20 ft. E. from rd. junction, on NE. corner of concrete floor of box culvert; chiseled square-----	521.12
Robinson, 3.0 mi. N. and 0.5 mi. E. from, 0.8 mi. S. and 2.5 mi. W. from Trimble, 0.25 mi. S. of center of sec. 15, T. 7 N., R. 12 W., 20 ft. N. and 30 ft. W. from junction of T-rd. W., 4 ft. N. and 8 ft. W. from fence corner, in exposed root on E. side of 24-in. oak tree; copper nail and washer-----	533.26
Robinson, 4.0 mi. N. and 0.5 mi. E. from, 0.2 mi. N. and 2.5 mi. W. from Trimble, 0.3 mi. S. of center of sec. 10, T. 7 N., R. 12 W., 130 ft. N. and 20 ft. W. from junction of T-rd. E., 40 ft. S. and 6 ft. E. from NE. corner of cemetery fence, in root on W. side of 12-in. hickory tree; copper nail and washer-----	556.23
Robinson, 4.2 mi. N. and 0.5 mi. E. from, near center of sec. 10, T. 7 N., R. 12 W., 175 ft. W. of rd., at large pipe for well, on pump; top of set screw ⁶⁵ -----	545.34
Robinson, 4.3 mi. N. and 0.5 mi. E. from, near center of sec. 10, T. 7 N., R. 12 W., 12 ft. S. and 40 ft. W. from junction of T-rd. W., on S. side of culvert, on top of junction of head wall and wing wall; chiseled square-----	536.42
Robinson, 5.1 mi. N. and 0.5 mi. E. from, about 800 ft. S. of center of sec. 3, T. 7 N., R. 12 W., 15 ft. N. and 15 ft. W. from junction of T-rd. W., on top of N. head wall of culvert under rd. W., 6 ft. S. of N. end and 6 in. N. of wing wall junction; chiseled square (recovered in 1939)-----	577.19
Robinson, about 5.2 mi. in air line N. of, 1.0 mi. S. and 3.8 mi. E. from Eaton, near quarter corner between secs. 3 and 4, T. 7 N., R. 12 W., 150 ft. N. and 160 ft. W. from junction of T-rd. N., 8 in. S. and 12 ft. W. from SE. corner of Grand Prairie Church, at corner of vestibule projection, in concrete porch; standard tablet stamped "27 L 1926" (recovered in 1939)-----	582.612
Reference mark, 50 ft. SE. of tablet, in trunk near root on SW. side of 24-in. oak tree; copper nail and washer (recovered in 1939)-----	582.69
Eaton, 0.4 mi. S. and 2.7 mi. E. from, 350 ft. N. of S $\frac{1}{4}$ cor. sec. 33, T. 8 N., R. 12 W., 30 ft. S. and 85 ft. W. from angle to W. in rd., 10 ft. S. and 55 ft. W. from fence corner, in root on N. side of 48-in. oak tree; copper nail and washer-----	576.54

[Continued in Moonshine quadrangle, line 3]

⁶⁵ The elevation of State Geological Survey B. M. 1, which is the top of the pipe, is 0.780 ft. lower than the top of the set screw.

4. From point 0.9 mile north of Robinson northwest along road 0.7 mile (by J. M. Lawson in 1926)

Robinson, 0.9 mi. N. thence 0.7 mi. NW. from, near center of sec. 28, T. 7 N., R. 12 W., 50 ft. N. and 15 ft. W. from junction of rd. N., on top of S. corner of W. concrete head wall of culvert under rd. N.; chiseled square-----

Feet
553.74

[Continued in Moonshine quadrangle, line 4]

5. From point 3.2 miles south of Allright along roads south and southwest about 0.8 mile, thence northeast 1.6 miles (by S. R. Archer in 1932)

[Continued from Marshall quadrangle, line 8]

Allright, 3.7 mi. S. of, 0.9 mi. E. and 1.3 mi. N. from Melrose, 0.25 mi. S. of quarter corner between secs. 8 and 9, T. 9 N., R. 12 W., 160 ft. SW. of junction of NE.-SW. rd., in front of farmhouse, in root on N. side of 30-in. maple tree; copper nail and washer (recovered in 1939)-----

588.29

[Jogs into Moonshine quadrangle, line 7]

Allright, 3.3 mi. S. and 0.5 mi. E. from, 0.2 mi. N. of center of sec. 9, T. 9 N., R. 12 W., 0.3 mi. SW. of crossing of Indian boundary line, 50 ft. S. of rd., on E. side of N.-S. quarter-line fence, in root on N. side of 10-in. persimmon tree; copper nail and washer-----

583.76

[Continued in Marshall quadrangle, line 9]

6. Along streets in Robinson (by W. C. Elledge in 1939)

[Continued from Birds quadrangle, line 8]

U. S. C. & G. S. standard disk stamped "P 90 1935"-----

535.839

7. From point 5.1 miles north and 0.5 mile east from Robinson along roads west 0.5 mile, thence generally north and east to Hutsonville (by W. C. Elledge in 1939)

Robinson, 6.0 mi. N. of, 1.0 mi. S. and 4.5 mi. W. from Hutsonville, near quarter corner between secs. 33 and 34, T. 8 N., R. 12 W., on W. side of rd., at NE. corner of grounds of Lone Elm School, on N. head wall of concrete culvert; chiseled square-----

534.72

Hutsonville, 0.5 mi. S. and 4.0 mi. W. from, near quarter corner between secs. 27 and 34, T. 8 N., R. 12 W., 15 ft. S. and 75 ft. W. from crossroads, on SE. wing wall of concrete bridge; chiseled square-----

497.05

Hutsonville, 0.5 mi. N. and 4.0 mi. W. from, near quarter corner between secs. 22 and 27, T. 8 N., R. 12 W., 72 ft. N. and 25 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "36 E 1939"-----

515.117

Hutsonville, 0.5 mi. N. and 2.6 mi. W. from, near cor. secs. 23, 24, 25, and 26, T. 8 N., R. 12 W., on SE. wing wall of Ball bridge; chiseled square-----

481.88

Hutsonville, 0.5 mi. N. and 1.5 mi. W. from, near cor. secs. 19, 24, 25, 30, T. 8 N., Rs. 11 and 12 W., 15 ft. N. and 21 ft. W. from crossing of State Highway 1, on N. head wall of concrete culvert; chiseled square-----

489.26

Hutsonville, 1.5 mi. W. of, near center of sec. 30, T. 8 N., R. 11 W., at T-lane N., on N. head wall of concrete culvert; chiseled square-----

484.59

Hutsonville, about 2 blocks W. and ½ block S. from ferry landing, in SW. corner of yard of public school, 3 ft. E. of sidewalk; top of cap on pipe (Wabash River Survey P. B. M. 12; recovered in 1940, also recovered by U. S. C. & G. S. in 1935)-----	Feet 450.511
Hutsonville, at main entrance to schoolhouse, on N. end of lowest stone step; chiseled square with "U S B M" chiseled nearby (Wabash River Survey P. B. M. "Hutsonville"; recovered in 1940, also recovered by U. S. C. & G. S. in 1935)-----	450.665
8. From road junction 0.5 mile north and 4 miles west from Hutsonville along roads generally north and west to point 0.7 mile east and 3 miles south from Melrose (by W. C. Elledge in 1939)	
Hutsonville, 1.5 mi. N. and 4.0 mi. W. from, 4.5 mi. E. thence 1.0 mi. S. from Annapolis, near quarter corner between secs. 15 and 22, T. 8 N., R. 12 W., 22 ft. N. and 16 ft. E. from junction of T-rd. E., on N. head wall of concrete culvert; chiseled square-----	513.70
Annapolis, 4.5 mi. E. from, 15 ft. N. of S¼ cor. sec. 10, T. 8 N., R. 12 W., 2 ft. inside and N. of fence line opposite rd. S.; standard iron post with bronze cap stamped "Prim Trav Sta No 40 1919"-----	522.549
Reference mark, 230 ft. W. of iron post, on S. head wall of concrete culvert; chiseled square-----	522.07
[Jogs into Moonshine quadrangle, line 9]	
Annapolis, 3.4 mi. E. thence 2.3 mi. NE. from, 1.0 mi. E. and 3.0 mi. S. from Melrose, near SE. cor. sec. 32 ⁰⁰ T. 7 N., R. 12 W., 14 ft. N. and 22 ft. E. from intersection of rd. tangents W. and SW., in root on SW. side of 12-in. oak tree; copper nail and washer-----	541.38
[Continued in Moonshine quadrangle, line 10]	
9. From point 2.5 miles south of Darwin along roads east 0.5 mile, thence generally south and west to York (by W. C. Elledge in 1939; releveled in 1940)	
[Connects with line 9 in Marshall quadrangle]	
Darwin, 3.0 mi. S. and 0.5 mi. E. from, 5.0 mi. N. and 2.1 mi. E. from York, 500 ft. from top of Wabash River bank, in barnyard of R. McCrory, 50 ft. NE. of house, 30 ft. W. of N.-S. fence, 2 ft. N. of E.-W. fence; top of iron pipe (Wabash River Survey B. M. 17)-----	456.680
York, 4.0 mi. N. and 2.0 mi. E. from, near S¼ cor. sec. 11, T. 9 N., R. 11 W., in NW. angle of crossroads, at SW. corner of schoolhouse, on W. end of concrete step; chiseled square-----	454.51
York, 3.0 mi. N. and 2.0 mi. E. from, near S¼ cor. sec. 14, T. 9 N., R. 11 W., 34 ft. N. and 17 ft. E. from junction of E.-W. rd., in root on SW. side of 24-in. thorn tree; copper nail and washer-----	449.64
York, 3.0 mi. N. and 1.5 mi. E. from, 3.0 mi. E. of West Union, near S. cor. secs. 14 and 15, T. 9 N., R. 11 W., NW. of junction of T-rd. S., in yard of No. 6 School, on SE. corner of concrete well platform; chiseled square-----	449.61
York, 2.0 mi. N. and 1.5 mi. E. from, near cor. secs. 22, 23, 26, and 27, T. 9 N., R. 11 W., 150 ft. N. of T-rd. W., on E. side of rd., in root on W. side of 24-in. oak tree; copper nail and washer-----	442.02

⁰⁰ County maps do not agree as to the fractional sections formed by the Indian boundary line.

York, 1.0 mi. N. thence 1.1 mi. E. from, about 500 ft. N. of S $\frac{1}{4}$ cor. sec. 27, T. 9 N., R. 11 W., 100 ft. W. of intersection of rd. tangents N. and W., on S. side of rd., in root on NE. side of 24-in. elm tree; copper nail and washer-----	<i>Feet</i> 439.76
York, 1.0 mi. N. thence 1.1 mi. E. from, about 500 ft. N. of S $\frac{1}{4}$ cor. sec. 27, T. 9 N., R. 11 W., 10 ft. S. of rd., 6 ft. N. and 3 ft. W. from 60-in. tree, second tree from W. end of clump of cottonwood trees; top of iron pipe (probably Wabash River Survey B. M.)-----	442.832
York, 1.0 mi. N. of, near N $\frac{1}{4}$ cor. sec. 33, T. 9 N., R. 11 W., 600 ft. S. of crossroads, on E. side of rd, opposite house, in root on W. side of 60-in. elm tree; copper nail and washer-----	455.59
York, 165 ft. N. of top of right bank of Wabash River, 50 ft. SW. of intersection of ferry rd. and first street parallel to river, in NE. corner of vacant lot, property of Mrs. J. H. Rook; top of cap on iron pipe (Wabash River Survey P. B. M. 10; recovered in 1940, also recovered by U. S. C. & G. S. in 1935)-----	449.635
York, in SW. quarter of, at W. end of street passing post office, 300 ft. N. of residence of S. R. Freeman, 350 ft. NE. of residence of Nellie Dudley; top of cap on iron pipe (U. S. C. E. B. M. 22; recovered in 1940)-----	447.535
10. From York southwest and southeast along roads to Hutsonville (by W. C. Elledge in 1940)	
York, 1.1 mi. SW. of, near quarter corner between secs. 5 and 8, T. 8 N., R. 11 W., 8 ft. S. and 45 ft. W. from crossing of private rd., in root on N. side of 24-in. wild-cherry tree; copper nail and washer-----	449.26
York, 2.4 mi. SW. of, 1.5 mi. S. of West York, 3.0 mi. NW. of Hutsonville, 0.25 mi. E. of center of sec. 7, T. 8 N., R. 11 W., 35 ft. S. and 57 ft. E. from rd. fork, in root on NE. side of 20-in. oak tree; copper nail and washer-----	463.82
Hutsonville, 1.6 mi. NW. of, near cor. secs. 7, 8, 17, and 18, T. 8 N., R. 11 W., at main entrance to property of Central Illinois Public Service Co., on base of corner post at fence E.; chiseled square-----	451.80
Hutsonville, 1.2 mi. NW. of, on property of power company, about 600 ft. NW. of main building, 200 ft. N. of parking space, 40 ft. SE. of SE. corner of old log cabin; top of cap on pipe (Wabash River Survey P. B. M. 11)-----	454.763
Hutsonville, near N. limits of, near quarter corner between secs. 20 and 29, T. 8 N., R. 11 W., 6 ft. N. and 21 ft. E. from junction of T-rd. W., on concrete sidewalk; chiseled square-----	455.28

MOONSHINE QUADRANGLE

[Latitude 39°00'–39°15'; longitude 87°45'–88°00']

CLARK, CRAWFORD, AND JASPER COUNTIES

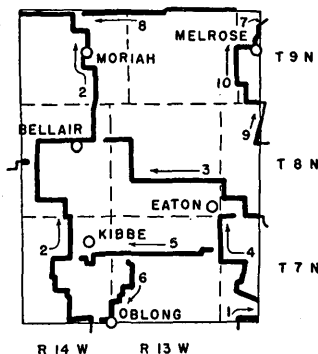


FIGURE 50.—Lines of leveling in Moonshine quadrangle.

1. From point 1.9 miles west and 0.3 mile south from Robinson north along road to Illinois Central Railroad, thence east 1.4 miles (by Henry Bücher in 1907)

[Continued from Hardinville quadrangle, line 2]

Robinson, 1.9 mi. W. thence 0.2 mi. S. from, near line between secs. 31 and 32, T. 7 N., R. 12 W., on S. side of track, on E. side of rd., in field, in root on W. side of wild-cherry tree; nail-----

Feet
529. 83

[Continued in Merom quadrangle, line 1]

2. From point 1 mile west of Oblong along roads north 0.1 mile and west 1.3 miles, thence generally north by way of Bellair to point 2 miles north and 0.8 mile west from Moriah, thence west 2.8 miles (by R. G. Clinite in 1911)

[Continued from Hardinville quadrangle, line 5]

Oblong, 2.0 mi. W. of, 0.25 mi. N. of SW. cor. sec. 35, T. 7 N., R. 14 W., at steel bridge over North Fork of Embarrass River, on SE. wing wall; chiseled square-----

478. 55

[Jogs into Hardinville quadrangle, line 6]

Oblong, 2.3 mi. W., thence 0.8 mi. N. from, 1.0 mi. N. thence 3.7 mi. E. from Willow Hill, at junction of T-rd., W., on E. side of rd., in root of oak tree; copper nail-----

477. 77

T. 7 N., R. 14 W., near N¼ cor. sec. 27, 100 ft. W. of junction of E.-W. rd., on S. side of rd., 8 ft. inside fence, in root of 36-in. oak tree; copper nail-----

478. 79

T. 7 N., R. 14 W., near SW. cor. sec. 22, in NE. angle of crossroads, 3 ft. E. of corner fence post, 1 ft. outside orchard fence; standard iron post with bronze cap stamped "492"-----

491. 531

T. 7 N., R. 14 W., 0.25 mi. S. of NE. cor. sec. 21, at NE. corner of right-angle turn in rd., at foot of N.-S. rd., in root of small ash tree; copper nail-----

476. 96

T. 7 N., R. 14 W., 0.25 mi. W. and about 225 ft. S. from NE. cor. sec. 21, in center of crossroads, on stone; chiseled circle-----	Feet 489. 40
T. 7 N., R. 14 W., near center of NE¼ sec. 16, 0.2 mi. S. and 2.8 mi. E. from Hunt, 1.0 mi. S. and 2.0 mi. W. from Kibbe, in SE. angle of junction of E.-W. rd., in root of oak tree; copper nail-----	499. 63
Kibbe, 1.0 mi. S. and 1.0 mi. W. from, near center of NE¼ sec. 15, T. 7 N., R. 14 W., on E. side of N.-S. rd., directly opposite rd. W., 1 ft. W. of fence; standard iron post with bronze cap stamped "487" (recovered in 1926)-----	486. 654
T. 7 N., R. 14 W., 0.25 mi. W. of SE. cor. sec. 3, at jog W. in rd., on stone marking sixteenth corner; chiseled square-----	516. 03
T. 8 N., R. 14 W., near S¼ cor. sec. 27, 1.5 mi. S. thence 3.5 mi. E. from Yale, in NE. angle of crossroads, 6 ft. E. of corner fence post, 16 in. outside fence; standard iron post with bronze cap stamped "525"-----	525. 173
Yale, 1.5 mi. S. thence 3.2 mi. E. of, about 350 yd. W. of N¼ cor. sec. 34, T. 8 N., R. 14 W., on S. side of rd., 30 ft. E. of culvert, in root of 20-in. oak tree; copper nail-----	493. 13
Yale, 1.5 mi. S. thence 2.0 mi. E. from, near SW. cor. sec. 28, T. 8 N., R. 14 W., 300 ft. E. of Panther Creek, on top of bluff, on N. side of rd., in front of house, in root of small elm tree; copper nail-----	529. 16
Yale, 0.5 mi. S. and 2.0 mi. E. from, near NW. cor. sec. 28, T. 8 N., R. 14 W., near SE. corner of crossroads, opposite Palmersburg store, on concrete ballast of fence post; chiseled circle-----	530. 10
Yale, 2.0 mi. E. of, near W¼ cor. sec. 21, T. 8 N., R. 14 W., on E. side of rd., in SW. corner of yard of Roy Steator, in oak tree; copper nail-----	538. 26
Yale, 2.0 mi. E. and 0.5 mi. N. from, 2.1 mi. W. thence 1.0 mi. S. from Bellair, near NW. cor. sec. 21, T. 8 N., R. 14 W., 10 ft. S. of SE. corner of rd. fork, 9 in. outside fence; standard iron post with bronze cap stamped "546" (recovered in 1932)-----	545. 781
Bellair, 0.3 mi. W. of, 500 ft. W. of NE cor. sec. 15, T. 8 N., R. 14 W., at steel bridge over North Fork, in top of SE. cylindrical support; bolt head-----	512. 91
Bellair, at NW. corner of, NW. corner of rd. junction, 2 ft. W. of corner fence post; standard iron post with bronze cap stamped "550" (recovered in 1926)-----	549. 319
Bellair, 0.9 mi. E. thence 1.0 mi. N. from, at cor. secs. 1, 2, 11, and 12, T. 8 N., R. 14 W., on stone marking section corner; chiseled circle (recovered in 1926)-----	555. 38
Bellair, 0.9 mi. E. thence 2.5 mi. N. from, 1.8 mi. W. thence 0.8 mi. S. from Moonshine, near center of SW¼ sec. 35, T. 9 N., R. 14 W., 15 ft. SE. of center line of rd. at jog, 1 ft. N. of E.-W. fence line; standard iron post with bronze cap stamped "568"-----	567. 318
Moonshine, 1.9 mi. W. and 1.0 mi. N. from, 1.0 mi. S. and 0.3 mi. E. from Moriah, near NW. cor. sec. 26, T. 9 N., R. 19 W., at steel bridge over North Fork, in NE. cylindrical support; bolt head-----	532. 63
Moriah, 1.0 mi. SW. of, near S¼ cor. sec. 22, T. 9 N., R. 14 W., on S. side of rd., at right-angle turn N., in root of 28-in. oak tree; spike-----	592. 46

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Moriah, 0.3 mi. SW. of, in SW. angle of rd. junction, in root of walnut tree; spike-----	Feet 593.09
Moriah, opposite post office, at SE. corner of Weaver & Sons store, in root of 24-in. oak tree; spike-----	597.31
Moriah, 16 ft. S. of post office, 20 ft. NE. of junction of T-rd. E.; standard iron post with bronze cap stamped "598"-----	597.451
Moriah, 0.6 mi. N. of, in NE. angle of crossroads, in root of maple tree; spike-----	600.69
Moriah, 1.1 mi. N. of, 0.25 mi. W. of NE. cor. sec. 15; T. 9 N., R. 14 W., on stone marking sixteenth corner; chiseled square-----	602.00
Moriah, 2.0 mi. N. and 1.3 mi. W. from, 3.7 mi. S. thence 1.5 mi. E. from Casey, near S¼ cor. sec. 4, T. 9 N., R. 14 W., in NW. angle of junction of T-rd. N., 100 ft. E. of church, 12 ft. W. of small iron bridge, in root of 22-in. elm tree; spike-----	608.59
Casey, 3.7 mi. S. thence 1.5 mi. E. from, near N¼ cor. sec. 9, T. 9 N., R. 14 W., on S. side of rd., opposite T-rd. N., 120 ft. SE. of church, 70 ft. S. of small iron bridge, 1 ft. outside fence; standard iron post with bronze cap stamped "609" (recovered in 1932)---	608.454
Casey, 3.7 mi. S. thence 0.5 mi. E. from, near N¼ cor. sec. 8, T. 9 N., R. 14 W., in SE. angle of crossroads, in root of small walnut tree; spike-----	615.66
Casey, 3.7 mi. S. of, near SW. cor. sec. 5, T. 9 N., R. 14 W., in NE. angle of crossroads, at E. end of culvert, on large rock; chiseled square-----	623.87

[Continued in Rose Hill quadrangle, line 3]

3. From point 0.4 mile south and 2.6 miles east from Eaton along roads alternately west and north to Bellair (by J. M. Lawson in 1926)

[Continued from Merom quadrangle, line 3]

Eaton, 0.4 mi. S. and 1.7 mi. E. from, near S¼ cor. sec. 32, T. 8 N., R. 12 W., 8 ft. N. and 60 ft. E. from junction of T-rd. N., on top of NW. corner of N. concrete head wall of culvert; chiseled square-----	562.63
Eaton, 0.6 mi. N. and 1.7 mi. E. from, near N¼ cor. sec. 32, T. 8 N., R. 12 W., 20 ft. S. and 10 ft. E. from junction of E.-W. rd., on top 1 ft. N. of S. corner of E. head wall of concrete culvert; chiseled square-----	573.08
Eaton, 0.6 mi. N. and 1.5 mi. E. from, 0.25 mi. E. of NW. cor. sec. 32, T. 8 N., R. 12 W., 25 ft. S. of T-rd. N., 2 ft. N. of fence, in concrete post; standard tablet stamped "28 L 1926"-----	581.878
Eaton, 0.6 mi. N. and 0.4 mi. E. from, 0.25 mi. W. of S¼ cor. sec. 30, T. 8 N., R. 12 W., 25 ft. N. and 18 ft. W. from junction of T-rd. N., at fence corner, at iron gas pipe line; top of elbow-----	549.92
Eaton, 1.1 mi. N. and 0.4 mi. E. from, 0.25 mi. W. of center of sec. 30, T. 8 N., R. 12 W., 220 ft. E. of rd., at well; top of large pipe (State Geological Survey B. M. 11)-----	555.59
Eaton, 1.6 mi. N. and 0.4 mi. E. from, 2.0 mi. S. thence 1.1 mi. E. from Annapolis, 500 ft. E. of W. cor. secs. 19 and 30, T. 8 N., R. 12 W., 850 ft. W. of crossroads, 20 ft. S. of rd., 100 ft. N. and 25 ft. E. from NE. corner of farmhouse of J. A. Newlin, 10 ft. N. of fence, in root on NE. side of 18-in. elm tree with mail box attached; copper nail and washer-----	546.78

Annapolis, 2.0 mi. S. thence 0.8 mi. E. from, 0.2 mi. W. of E. cor. secs. 24 and 25, T. 8 N., R. 13 W., on top of E. corner of S. head wall of concrete culvert; chiseled square-----	<i>Feet</i> 535.11
Annapolis, 2.0 mi. S. of, near SE. cor. sec. 23, T. 8 N., R. 13 W., 27 ft. N. and 25 ft. W. from crossroads, 5 ft. N. of telephone pole, in concrete post; standard tablet stamped "29 L 1926"-----	536.060
Reference mark, 15 ft. S. and 20 ft. W. from crossroads, on top of SW. corner of SW. head wall of concrete culvert; chiseled square-----	536.75
Annapolis, 2.0 mi. S. thence 0.8 mi. W. from, 0.25 mi. E. of SW. cor. secs. 23, T. 8 N., R. 13 W., 80 ft. N. and 15 ft. W. from crossroads, in root on W. side of 30-in. locust tree; copper nail and washer-----	565.52
Annapolis, 2.0 mi. S. thence 1.8 mi. W. from, about 0.2 mi. W. of quarter corner between secs. 22 and 27, T. 8 N., R. 13 W., on top of S. head wall of concrete culvert; chiseled square-----	533.18
Annapolis, 2.0 mi. S. thence 2.1 mi. W. from, near cor. secs. 21, 22, 27, and 28, T. 8 N., R. 13 W., 20 ft. S. and 100 ft. E. from junction of T-rd. S., 2 ft. S. of fence line, on top of bank, in field, in root on NW. side of 20-in. walnut tree; copper nail and washer-----	535.60
Annapolis, 2.0 mi. S. thence 3.0 mi. W. from, 3.9 mi. E. thence 2.0 mi. S. from Bellair, near cor. secs. 20, 21, 28, and 29, T. 8 N., R. 13 W., 30 ft. N. and 15 ft. W. from crossroads, 15 ft. N. and 1 ft. E. from fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 12 1910 30 L 1926"-----	536.800
Bellair, 3.1 mi. E. thence 2.0 mi. S. from, 0.25 mi. of SW. cor. sec. 20, T. 8 N., R. 13 W., 20 ft. N. and 55 ft. E. from crossroads, in root on W. side of 18-in. oak tree; copper nail and washer-----	525.67
Bellair, 3.1 mi. E. thence 1.0 mi. S. from, 0.25 mi. E. of NW. cor. sec. 20, T. 8 N., R. 14 W., 15 ft. S. and 20 ft. E. from crossroads, in front of residence of Charles Week, in root on W. side of 15-in. maple tree, northernmost tree of row of trees; copper nail and washer-----	541.09
Bellair, 3.1 mi. E. of, 0.25 mi. E. of NW. cor. sec. 7, T. 8 N., R. 13 W., 25 ft. S. and 20 ft. W. from crossroads, 4 ft. S. and 1 ft. E. from corner fence post, in concrete post; standard tablet stamped "31 L 1926"-----	556.358
Bellair, 1.6 mi. E. of, 0.25 mi. W. of E. cor. secs. 12 and 13, T. 8 N., R. 14 W., 25 ft. N. of roadway, 30 ft. S. of house, on top of SW. corner of concrete walk to house; chiseled square-----	550.18
Bellair, 0.9 mi. E. of, near SW. cor. sec. 12, T. 8 N., R. 14 W., 20 ft. N. and 10 ft. E. from junction of T-rd. N., on top of NE. wing wall of concrete culvert under rd. N.; chiseled square-----	546.32
4. From point 0.9 mile north, thence 0.7 mile northwest from Robinson generally northwest along roads to point 0.4 mile south and 0.2 mile east from Eaton, thence east 1.5 miles (by J. M. Lawson in 1926)	

[Continued from Merom quadrangle, line 4]

Robinson, 0.9 mi. N. thence 1.5 mi. NW. from, near center of NE $\frac{1}{4}$ sec. 29, T. 7 N., R. 12 W., 500 ft. W. of second-class T-rd. N., 25 ft. S. of rd., 6 ft. E. of entrance to farmyard lot, 4 ft. N. of fence, in root on S. side of 24-in. oak tree; copper nail and washer-----	552.25
--	--------

Robinson, 0.9 mi. N. thence 2.2 mi. NW. from, 900 ft. E. of cor. secs. 19, 20, 29, and 30, T. 7 N., R. 12 W., 15 ft. N. and 30 ft. E. from junction of T-rd. W., 4 ft. E. of fence, in root on S. side of 30-in. elm tree, southernmost of three large trees in field; copper nail and washer-----	Feet 553.92
Robinson, 0.9 mi. N. thence 2.4 mi. NW. from, near cor. secs. 19, 20, 29, and 30, T. 7 N., R. 12 W., at crossroads, on top of NW. concrete culvert; State Geological Survey B. M. 3-----	545.25
Robinson, 0.9 mi. N. thence 3.2 mi. NW. from, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 20, T. 7 N., R. 12 W., 200 ft. S. and 100 ft. W. from junction of rd. W. and NE-SW. rd.; top of large pipe in well (State Geological Survey B. M. 4)-----	556.36
Robinson, 0.9 mi. N. thence 3.2 mi. NW. from, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 20, T. 7 N., R. 12 W., 15 ft. N. and 40 ft. W. from rd. junction, 1 ft. S. and 20 ft. W. from corner fence post, in concrete post; standard tablet stamped "32 L 1926"-----	557.947
Robinson, 0.9 mi. N. thence 3.9 mi. NW. from, about 200 ft. W. of S $\frac{1}{4}$ cor. sec. 17, T. 7 N., R. 12 W., 10 ft. N. and 20 ft. E. from junction of T-rd. E., on top of NW. corner of wing wall of N. head wall of concrete culvert; chiseled square-----	564.91
Robinson, 2.7 mi. N. and 1.0 mi. W. from, near cor. secs. 16, 17, 20, and 21, T. 7 N., R. 12 W., 20 ft. N. and 20 ft. W. from angle N. in rd., on concrete base of iron fence post; chiseled cross (State Geological Survey B. M.)-----	595.01
Robinson, 3.2 mi. N. and 2.0 mi. W. from, 1.2 mi. E. and 2.9 mi. S. from Eaton, near quarter corner between secs. 17 and 18, T. 7 N., R. 12 W., 200 ft. S. of E-W. rd.; top of large pipe in well (State Geological Survey B. M. 6)-----	552.88
Eaton, 0.2 mi. E. thence 2.9 mi. S. from, near W $\frac{1}{4}$ cor. sec. 18, T. 7 N., R. 12 W., at offset crossroads, 250 ft. S. and 200 ft. E. from junction of rd. N.; top of large pipe in well (State Geological Survey B. M. 7)-----	540.45
Eaton, 0.2 mi. E. thence 2.9 mi. S. from, near quarter corner between secs. 13 and 18, T. 7 N., Rs. 12 and 13 W., at crossroads, on top of S. head wall of concrete culvert; chiseled cross-----	537.76
Eaton, 0.2 mi. E. thence 2.3 mi. S. from, about 500 ft. N. of SE. cor. sec. 12, T. 7 N., R. 13 W., 30 ft. N. and 15 ft. W. from junction of T-rd. W., 12 ft. N. and 1 ft. E. from fence corner, in concrete post; standard tablet stamped "33 L 1926"-----	534.226
Reference mark, 20 ft. S. and 15 ft. E. from junction of rd. W., at top of iron pipe casing serving as tube across rd.; top of elbow-----	533.35
Eaton, 0.2 mi. E. thence 1.2 mi. S. from, near NW. cor. sec. 7, T. 7 N., R. 12 W., 60 ft. N. and 20 ft. E. from junction of T-rd. W., 90 ft. S. and 20 ft. E. from junction of T-rd. E., 2 ft. W. of fence line, in root on NW. side of 24-in. oak tree; copper nail and washer-----	537.40
Eaton, 0.2 mi. E. thence 0.4 mi. S. from, near SW. cor. sec. 31, T. 8 N., T. 12 W., 200 ft. N. and 200 ft. E. from junction of T-rd. E.; top of large pipe in well (State Geological Survey B. M. 9)-----	549.09
Eaton, 1.2 mi. E. and 0.4 mi. S. from, just W. of cor. secs. 5, 6, 31, and 32, Tps. 7 and 8 N., R. 12 W., 30 ft. S. and 15 ft. W. from short angle S. in rd., at large concrete culvert across rd. at angle in rd. W., on top of S. corner of W. head wall; chiseled square-----	556.54

5. From point 0.2 mile east and 2.3 miles south from Eaton along roads generally west to point 1 mile south and 1 mile west from Kibbe (by J. M. Lawson in 1926)

Eaton, 0.8 mi. W. and 2.4 mi. S. from, near cor. secs. 11, 12, 13, and 14, T. 7 N., R. 13 W., 40 ft. S. and 180 ft. E. from junction of T-rd. W., 35 ft. N. of N. side of schoolhouse, on top of NW. corner of concrete base of pump; chiseled square-----	<i>Feet</i> 527. 01
Eaton, 1.3 mi. W. and 2.4 mi. S. from, 4.0 mi. N. and 0.5 mi. E. from Stoy, near quarter corner between secs. 11 and 14, T. 7 N., R. 13 W., 220 ft. N. and 175 ft. E. from junction of T-rd. N.; top of large pipe in well (State Geological Survey B. M. 12)-----	489. 83
Stoy, 4.0 mi. N. of, near cor. secs. 10, 11, 14, and 15, T. 7 N., R. 13 W., 250 ft. N. of rd.; top of large pipe in well (State Geological Survey B. M. 13)-----	523. 97
Stoy, 4.0 mi. N. of, near cor. secs. 10, 11, 14 and 15, T. 7 N., R. 13 W., on top of S. head wall of concrete culvert; cross-----	521. 72
Stoy, 4.0 mi. N. and 0.8 mi. W. from, 3.7 mi. N. thence 3.2 mi. E. from Oblong, 0.25 mi. W. of quarter corner between secs. 10 and 15, T. 7 N., R. 13 W., 200 ft. N. and 150 ft. W. from crossroads, at pump head of well; top of set screw ⁷⁷ -----	522. 25
Oblong, 3.7 mi. N. thence 3.0 mi. E. from, 0.25 mi. E. of NW. cor. sec. 15, T. 7 N., R. 13 W., 35 ft. E. of Prairie Chapel, 200 ft. S. and 35 ft. W. from crossroads, at concrete walk to church, on top of N. corner of second concrete step; standard tablet stamped "1 L 1927"-----	514. 286
Reference mark, at SE. corner of crossroads, on top of head wall of concrete culvert; chiseled square-----	513. 64
Oblong, 3.7 mi. N. thence 2.5 mi. E. from, near N¼ cor. sec. 16, T. 7 N., R. 13 W., 20 ft. S. and 60 ft. W. from crossroads, in root on NW. side of 30-in. oak tree; copper nail and washer-----	529. 92
Oblong, 3.7 mi. N. thence 2.5 mi. E. from, near N¼ cor. sec. 16, T. 7 N., R. 13 W., 200 ft. S. and 175 ft. W. from crossroads; top of large pipe in well (State Geological Survey B. M. 15)-----	531. 53
Oblong, 3.7 mi. N. thence 1.5 mi. E. from, near S¼ cor. sec. 8, T. 7 N., R. 13 W., 175 ft. N. of rd.; top of large pipe in well (State Geological Survey B. M. 17)-----	520. 68
Oblong, 3.7 mi. N. thence 1.0 mi. E. from, near NW. cor. sec. 17, T. 7 N., R. 13 W., 20 ft. S. and 39 ft. E. from crossroads, 10 ft. S. and 1 ft. W. from fence corner, in concrete post; standard tablet stamped "2 L 1927"-----	508. 786
Reference mark, at NW. corner of crossroads, at gas pipe; top of elbow-----	506. 86
Oblong, 3.7 mi. N. thence 1.0 mi. E. from, near SE. cor. sec. 7, T. 7 N., R. 13 W., 150 ft. N. and 175 ft. W. from crossroads; top of pipe in well (State Geological Survey B. M. 18)-----	508. 82
Oblong, 3.7 mi. N. of, 1.2 mi. E. and 0.8 mi. S. from Kibbe, near SW. cor. sec. 7, T. 7 N., R. 13 W., 10 ft. N. and 15 ft. E. from crossroads, on top of concrete head wall of culvert, 1 ft. E. of SW. corner of right angle; chiseled square-----	500. 88

⁷⁷ The elevation of State Geological Survey B. M. 14, which is the top of the pipe, is 0.390 ft. lower than the elevation of the set screw.

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Kibbe, 0.2 mi. E. thence 1.0 mi. S. from, 0.3 mi. N. of quarter corner between secs. 13 and 14, T. 7 N., R. 14 W., 8 ft. S. and 70 ft. W. from junction of T-rd. W., on top 1 ft. W. of center of S. concrete head wall of culvert; chiseled square-----	<i>Feet</i> 481.97
Kibbe, 0.3 mi. W. thence 1.0 mi. S. from, 0.25 mi. S. of N $\frac{1}{4}$ cor. sec. 14, T. 7 N., R. 14 W., 20 ft. N. and 15 ft. W. from junction of T-rd. N., on top of SW. corner of W. concrete head wall of culvert under rd. N.; chiseled square-----	497.24
6. From crossroads 3.7 miles north and 1 mile east from Oblong generally south and west along roads and State Highway 33 to point 2.3 miles west of Oblong (by J. M. Lawson in 1926)	
Oblong, 3.2 mi. N. thence 1.0 mi. E. from, near quarter corner between secs. 17 and 18, T. 7 N., R. 13 W., at junction of E-W. rd.; top of N. side of W. end of concrete culvert (State Geological Survey B. M. 18)-----	505.70
Oblong, 2.5 mi. N. and 1.2 mi. E. from, near center of NW $\frac{1}{4}$ sec. 20, T. 7 N., R. 13 W., 250 ft. N. and 250 ft. W. from junction of T-rd. E.; top of large pipe in well (State Geological Survey B. M. 20)---	513.42
Oblong, 2.5 mi. N. and 1.2 mi. E. from, near center of NW $\frac{1}{4}$ sec. 20, T. 7 N., R. 13 W., 15 ft. N. and 20 ft. E. from junction of T-rd. E., on top of N. concrete head wall of culvert under rd. E.; chiseled square-----	512.06
Oblong, 2.0 mi. N. and 1.2 mi. E. from, near center of SW $\frac{1}{4}$ sec. 20, T. 7 N., R. 13 W., 15 ft. N. and 15 ft. W. from junction of T-rd. N., on top of S. corner of W. concrete head wall of culvert; chiseled square-----	507.06
Oblong, 2.0 mi. N. and 1.2 mi. E. from, near center of SW $\frac{1}{4}$ sec. 20, T. 7 N., R. 13 W., 300 ft. S. and 300 ft. E. from junction of T-rd. N., on pump of well; top of set screw ⁶⁸ -----	504.59
Oblong, 2.0 mi. N. and 0.8 mi. E. from, near center of SE $\frac{1}{4}$ sec. 19, T. 7 N., R. 13 W., 225 ft. N. and 300 ft. W. from junction of T-rd. S.; top of pump head of well ⁶⁹ -----	503.92
Oblong, 1.9 mi. N. and 0.8 mi. E. from, near center of SE $\frac{1}{4}$ sec. 19, T. 7 N., R. 13 W., 25 ft. N. and 20 ft. E. from junction of T-rd. S., 2 ft. S. of fence, in concrete post; standard tablet stamped "3 L 1927"-----	499.953
Reference mark, 7 ft. W. of tablet, 27 ft. N. and 13 ft. E. from junction of rd. S., on top of SW. corner of concrete base of iron gate-post; chiseled square-----	499.62
Oblong, 1.5 mi. N. and 0.8 mi. E. from, near center of NE $\frac{1}{4}$ sec. 30, T. 7 N., R. 13 W., 225 ft. S. and 200 ft. E. from junction of T-rd. N.; top of large pipe of well (State Geological Survey B. M. 23)-----	502.62
Oblong, 1.2 mi. N. thence 0.4 mi. E. from, about 400 ft. W. of center of sec. 30, T. 7 N., R. 13 W., at N. corner of W. abutment of steel highway bridge over Big Creek, 1 ft. NW. of steel girder at NW. corner of bridge, at junction of wing wall, on top of concrete abutment; chiseled square-----	475.70

⁶⁸ The elevation of State Geological Survey B. M. 21, which is the top of the pipe, is about 1 ft. lower than the top of the set screw.

⁶⁹ The elevation of State Geological Survey B. M. 22, which is the top of the pipe, is about 1.3 ft. lower than the top of the pump head.

Oblong, 1.2 mi. N. of, 100 ft. S. of W $\frac{1}{4}$ cor. sec. 30, T. 7 N., R. 13 W., 25 ft. S. and 15 ft. E. from junction of T-rd. W., 1 ft. S. of N. edge of E. head wall of concrete culvert; chiseled square-----	Feet 501.54
Oblong, near center of, at intersection of main streets, on top of center of iron guide signal block set in pavement; chiseled cross----	515.12
Oblong, on W. side of, 37 ft. S. and 22 ft. W. from intersection of street and State Highway 33, at grade schoolhouse, 10 ft. S. and 1 ft. E. from NE. corner of fence, in concrete post; standard tablet stamped "4 L 1927" ⁷⁰ -----	508.617
Reference mark, 6 ft. N. of NW. entrance to schoolyard, at junction of sidewalks; chiseled square-----	506.82
Oblong, 1.0 mi. W. of, 0.25 mi. N. of S. cor. secs. 35 and 36, T. 7 N., R. 14 W., 30 ft. S. and 10 ft. E. from junction of T-rd. S., on top of N. corner of E. headwall of concrete culvert; chiseled square-----	492.24

[Connects with line 6 in Hardinville quadrangle]

7. Southwest and northeast along road near northeast corner of quadrangle (by S. R. Archer in 1931; spur line leveled twice)

[A jog from Merom quadrangle, line 5]

Melrose, 1.1 mi. N. and 0.7 mi. E. from, 0.25 mi. W. and 0.1 mi. N. from SE. cor. sec. 8, T. 9 N., R. 12 W., in S. angle of crossroads, 5 ft. SE. of N. corner of yard of farmhouse, in concrete post; standard tablet stamped "16 A 1931"-----	580.569
---	---------

[Continued in Merom quadrangle, line 5]

8. From point near Neadmore generally west along roads to point 3.7 miles south and 1.5 miles east from Casey (by S. R. Archer in 1932)

[Continued from Casey quadrangle, line 3]

Neadmore, in NW. angle of crossroads, 25 ft. NW. of SE. cor. sec. 5, T. 9 N., R. 13 W., in SE. corner of front yard of H. L. Atkins; standard iron post with bronze cap stamped "Prim Trav Sta No 13 1910"-----	592.650
Reference mark, 25 ft. S. and 55 ft. W. from crossroads, 5 ft. N. of junction of NW. corner of store and NE. corner of warehouse, in front of store, on top of NW. corner of concrete floor of porch; chiseled square-----	593.44
Neadmore, 0.9 mi. W. of, 500 ft. E. of cor. secs. 5, 6, 7, and 8, T. 9 N., R. 13 W., on top of S. bridge seat of E. concrete abutment of bridge; chiseled square-----	572.82
Neadmore, 1.2 mi. W. of, 0.25 mi. W. of NE. cor. sec. 7, T. 9 N., R. 13 W., 145 ft. W. of crossroads, on S. side of rd., in field, in root on N. side of 15-in. tree, easternmost of four oak trees; copper nail and washer-----	591.64
Neadmore, 2.0 mi. W. thence 0.2 mi. S. from, 1.8 mi. N. and 2.2 mi. E. from Moriah, 0.25 mi. N. of quarter cor. between secs. 7 and 12, T. 9 N., Rs. 13 and 14 W., 25 ft. S. of T-rd. SW., on top of E. head wall of concrete culvert under rd. S; chiseled square-----	578.03

⁷⁰ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Oblong 1935," elevation 517.512 ft.

Moriah, 1.7 mi. N. and 1.7 mi. E. from, 800 ft. N. of center of sec. 12, T. 9 N., R. 14 W., at NE. corner of crossroads, on top of E. head wall of concrete culvert under rd. N.; chiseled square-----	<i>Feet</i> 592.43
Moriah, 1.5 mi. N. and 1.2 mi. E. from, near quarter corner between secs. 11 and 12, T. 9 N., R. 14 W., 75 ft. S. and 30 ft. W. from crossroads, in front of school, at SW. corner of concrete porch; standard tablet stamped "20 A 1932"-----	605.975
Moriah, 1.4 mi. N. and 0.7 mi. E. from, about 800 ft. S. of center of sec. 11, T. 9 N., R. 14 W., at E. end of steel bridge over North Fork, on bridge end of S. concrete wing wall of E. approach; chiseled square-----	544.46
Moriah, 1.6 mi. N. and 0.1 mi. W. from, 0.25 mi. E. of center of sec. 10, T. 9 N., R. 14 W., 45 ft. E. of right angle in rd., on S. side of rd., in line with W. end of house, in root on N. side of 30-in. oak tree; copper nail and washer-----	611.60
Moriah, 2.0 mi. N. and 0.3 mi. W. from, 3.7 mi. S. thence 2.5 mi. E. from Casey, 140 ft. E. of quarter corner between secs. 3 and 10, T. 9 N., R. 14 W., on N. side of rd., at S. end of W. side of entrance to schoolhouse, on top of W. end of concrete step, 6 in. above porch floor; chiseled square-----	619.94
Casey, 3.7 mi. S. thence 2.0 mi. E. from, near SW. cor. sec. 3, T. 9 N., R. 14 W., 25 ft. E. of junction of T-rd. S., on N. side of rd., in root on SW. side of 24-in. elm tree; copper nail and washer-----	625.42
Casey, 3.7 mi. S. thence 1.5 mi. E. from, near S¼ cor. sec. 4, T. 9 N., R. 14 W., 75 ft. N. of junction of T-rd. N., on W. side of rd., on top of W. end of N. head wall of concrete culvert under driveway to church; chiseled square ¹¹ -----	610.02
9. From point 3.6 miles east of Annapolis along roads west 0.2 mile and northeast 1.2 miles (by W. C. Elledge in 1939)	
[A jog from Merom quadrangle, line 8]	
Annapolis, 3.3 mi. E. of, on line between secs. 9 and 16, T. 8 N., R. 12 W., at diagonal rd., 450 ft. N. of rd. E., 200 ft. S. of rd. W., on W. head wall of concrete culvert; chiseled square-----	550.82
Annapolis, 3.3 mi. E. thence 1.1 mi. NE. from, near quarter corner between secs. 4 and 9, T. 8 N., R. 12 W., on E. side of diagonal rd., at entrance to Maddox School, on W. end of bottom step; chiseled square-----	525.03
[Continued in Merom quadrangle, line 8]	
10. From point 0.7 mile east and 3 miles south from Melrose along roads alternately west and north to point 1.2 miles west of Melrose, thence east and northeast 3.2 miles (by W. C. Elledge in 1939)	
[Continued from Merom quadrangle, line 8]	
Melrose, 0.5 mi. W. and 3.0 mi. S. from Melrose, near quarter corner between secs. 5 and 31, Tps. 8 and 9 N., R. 12 W., 65 ft. N. and 20 ft. W. from junction of T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "37 E 1939"-----	570.781

¹¹ This bench mark was established as a reference mark for the standard iron post with bronze cap stamped "609," described in line 2.

Melrose, 0.5 mi. W. and 2.0 mi. S. from, near quarter corner between secs. 30 and 31, T. 9 N., R. 12 W., 22 ft. N. and 30 ft. E. from junction of T-rd. S., in root on S. side of 12-in. thorn tree; copper nail and washer-----	<i>Feet</i> 570.32
Melrose, 1.0 mi. W. thence 2.0 mi. S. from, near NE. cor. sec. 36, T. 9 N., R. 13 W., 13 ft. S. and 48 ft. W. from junction of T-rd. N., in root on W. side of 10-in. wild-cherry tree; copper nail and washer-----	586.05
Melrose, 1.0 mi. W. thence 1.0 mi. S. from, 2.0 mi. E. of Orange, near SE. cor. sec. 24, T. 9 N., R. 13 W., 15 ft. N. and 15 ft. W. from junction of T-rd. E., on W. head wall of concrete culvert; chiseled square-----	606.41
Melrose, 0.9 mi. W. of, 600 ft. E. of junction of T-rd. E., near cor. secs. 13, 18, 19, and 24, T. 9 N., Rs. 12 and 13 W., 27 ft. S. and 14 ft. W. from driveway S. to barnyard, in root on E. side of 10-in. locust tree; copper nail and washer-----	603.46
Melrose, in SE. corner of schoolyard, 10 ft. N. of corner fence post, 2 ft. W. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "38 E 1939"-----	594.391
Melrose, 0.5 mi. N. of, in NW $\frac{1}{4}$ sec. 17, T. 9 N., R. 12 W., on E. side of rd., 10 ft. S. of fence E., in root on W. side of 30-in. oak tree; copper nail and washer-----	536.12

[Connects with line 5 in Merom quadrangle]

MOUNT CARMEL QUADRANGLE

[Latitude 38°15'–38°30'; longitude 87°45'–88°00']

EDWARDS, WABASH, AND WHITE COUNTIES

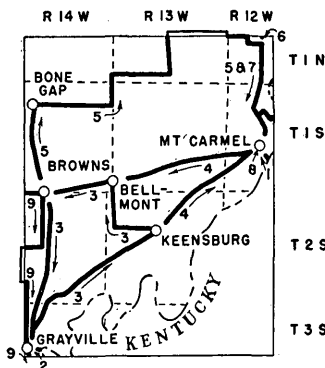


FIGURE 51.—Lines of leveling in Mount Carmel quadrangle.

1. At Mount Carmel (by D. D. Doty in 1901; leveled twice)

[Continued from Indiana]

Mount Carmel, on SW. side of Wabash County courthouse, at wall of SE. wing, in W. sill; standard tablet stamped "465 Vin" (recovered in 1939)-----

Feet
464.307

2. At Grayville (by D. D. Doty in 1901; leveled twice)

[Continued from Indiana]

Grayville, 100 ft. S. of R. R. sta., 6 ft. E. of Illinois Central R. R. tracks; standard iron post with bronze cap stamped "392 Vin" (recovered in 1939)-----

391.063

3. From Grayville northeast along Cleveland, Cincinnati, Chicago & St. Louis Railway to Keensburg, thence west and north along roads to Bellmont, thence west along Southern Railway to Browns, thence south along Illinois Central Railroad to junction north of Grayville (by H. G. Lowe in 1902)

Grayville, 1.0 mi. N. of, at junction of C. C. C. & St. L. Ry. and I.

C. R. R., 18 in. above ground; top of T-rail----- 397.28

Grayville, 2.0 mi. NE. of, at milepost Dan-141; top of post----- 401.79

Grayville, 3.8 mi. NE. of, 1.2 mi. SW. of Cowling, on NE. side of R. R. bridge over Bonpas Creek, on top of NE. abutment; chiseled cross----- 393.12

Cowling, 8 in. N. of NE. corner of sta., projecting 6 in. above ground; standard iron post with bronze cap stamped "397 Vin"----- 395.920

Keensburg, at NW. corner of frame Methodist Episcopal Church, in N. foundation wall; aluminum tablet stamped "430 Vin"----- 428.949

Bellmont, at town hall, on SE. window sill; chiseled cross----- 426.02

Bellmont, at SW. corner of town hall, in S. wall, 3 ft. above ground; aluminum tablet stamped "431 Vin" (recovered by U. S. C. & G. S. in 1935) ⁷² -----	Feet 430. 019
Browns, at SE. corner of red brick Methodist Episcopal Church, in S. wall, 3 ft. above ground; standard tablet stamped "402 Vin" (recovered by U. S. C. & G. S. in 1935) ⁷³ -----	400. 88
4. From Keensburg northeast along Cleveland, Cincinnati, Chicago & St. Louis Railway to Mount Carmel, thence southwest along Southern Railway to Bellmont (by H. G. Lowe in 1902)	
Sugar Creek (Schrodts Station), 1 ft. N. of NE. corner of store of Peter Schrodts; standard iron post with bronze cap stamped "458 Vin" ^{73a} -----	457. 374
Mount Carmel, 25 ft. W. of junction of C. C. C. & St. L. and Southern Rys., at fence post, 6 in. under ground; iron bolt-----	415. 80
Maud, at NE. corner of Christian Church, in E. foundation wall; standard tablet stamped "442 Vin" (recovered by U. S. C. & G. S. in 1935)-----	440. 741
5. From Browns northwest along Illinois Central Railroad to Bone Gap, thence along roads alternately east and north to cross-roads 1 mile east of Friendsville, thence alternately south and east along roads and Cleveland, Cincinnati, Chicago & St. Louis and Southern Railways into Indiana at Mount Carmel (by H. G. Lowe in 1902)	
Bone Gap, at NW. corner of red brick building, in N. foundation wall; standard tablet stamped "459 Vin" (recovered in 1939) ⁷⁴ -----	457. 915
Gards Point, on E. side near NE. corner of Lick Prairie Church; standard iron post with bronze cap stamped "434 Vin"-----	432. 709
[Jogs into Sumner quadrangle, line 1]	
Patton, 1 ft. SW. of SE. corner of frame building of J. W. Elliott, projecting 8 in. above ground; standard iron post with bronze cap stamped "416 Vin" (recovered in 1908)-----	415. 597
[Continued in Indiana]	
6. From point 7 miles north of Mount Carmel along roads south 0.4 mile, thence alternately west and north (by W. E. Gelbach in 1908)	
[A jog from Sumner quadrangle, line 5]	
Mount Carmel, 6.6 mi. N. of, 0.6 mi. S. and 3.0 mi. E. from Friendsville, near cor. secs. 20, 21, 28, and 29, T. 1 N., R. 12 W., opposite T-rd. W.; standard iron post with bronze cap stamped "1908 416"-----	416. 046
[Continued in Sumner quadrangle, line 5]	

⁷² In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Y 91 1935," elevation 416.210 ft.

⁷³ In 1939 this bench mark was reported destroyed.

^{73a} In 1941 it was reported that this bench mark had rusted out above ground.

⁷⁴ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "N 91 1935," elevation 460.678 ft.

7. From road junction 6.6 miles north of Mount Carmel south along road and Cleveland, Cincinnati, Chicago & St. Louis Railway to Mount Carmel, thence southeast across Southern Railway bridge over Wabash River (by W. E. Gelbach in 1908)

Mount Carmel, on pier of Southern Ry. bridge over Wabash River; zero of government water gauge-----	Feet 371.53
--	----------------

[Continued in Princeton quadrangle, line 1]

8. At Mount Carmel (by W. C. Elledge in 1939)

Mount Carmel, in SW. corner of yard of Wabash County court- house, in concrete post; iron pin with chiseled cross marked "B M 1914"-----	459.777
U. S. C. & G. S. stamped "R 91 1935"-----	450.075

9. East along State Highway 15 to Browns, thence generally south along roads to Grayville (by W. C. Elledge in 1939)

[Continued from Golden Gate quadrangle, line 6]

U. S. C. & G. S. standard disk stamped "A 108 1935"-----	399.530
U. S. C. & G. S. monel-metal rivet designated "Rv 157"-----	399.261
Browns, 1.0 mi. S. of, in N½ sec. 9, T. 2 S., R. 14 W., 35 ft. S. and 21 ft. W. from junction of private T-rd. W. to residence of Lloyd A. Chambers, in root on SE. side of 36-in. cottonwood tree; copper nail and washer-----	401.70
Browns, 2.3 mi. S. of, near center of sec. 16, T. 2 S., R. 14 W., 30 ft. S. and 65 ft. E. from center of steel bridge over drainage ditch, in root on W. side of 30-in. oak tree; copper nail and washer----	393.62
Browns, 2.8 mi. S. of, near N¼ cor. sec. 21, T. 2 S., R. 14 W., 20 ft. S. and 25 ft. W. from crossroads, in concrete post; standard tablet stamped "T T 44 C 1939"-----	417.868

[Jogs into Golden Gate quadrangle, line 7]

Grayville, 2.5 mi. N. of, 0.2 mi. E. of N¼ cor. fractional sec. 5, T. 3 S., R. 14 W., 18 ft. S. and 75 ft. W. from jog from S. to W. in rd., in root on SE. side of twin catalpa tree; copper nail and washer-----	412.12
Grayville, 1.5 mi. N. of, near center of SE¼ sec. 8, T. 3 S., R. 14 W., at N. edge of golf course, on E. head wall of concrete culvert; chiseled square-----	400.74
Grayville, 100 ft. W. of I. C. R. R. sta., 27 ft. N. and 18 ft. E. from intersection of rd. and C. C. C. & St. L. Ry track, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	397.720

MOUNT OLIVE QUADRANGLE

[Latitude 39°00'–39°15'; longitude 89°30'–89°45']

BOND, MACOUPIN, AND MONTGOMERY COUNTIES

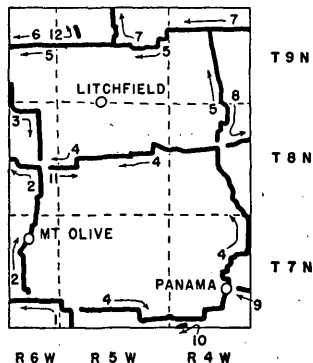


FIGURE 52.—Lines of leveling in Mount Olive quadrangle.

1. From point 2 miles north and 1 mile west from New Douglas along roads north and west to point 2.3 miles northeast of Staunton (by R. G. Clinite in 1912)

[Continued from New Douglas quadrangle, line 1]

New Douglas, 2.8 mi. N. and 1.0 mi. W. from, 4.0 mi. S. and 2.2 mi. E. from Mount Olive, 0.25 mi. W. of NE. cor. sec. 31, T. 7 N., R. 5 W., in NE. angle of crossing of Cleveland, Cincinnati, Chicago & St. Louis Ry.; top of N. end of tile drain-----	Feet 630.41
Mount Olive, 3.5 mi. S. and 0.2 mi. W. from center of, 0.6 mi. N. and 3.0 mi. E. from Staunton, 0.2 mi. W. of center of sec. 26, T. 7 N., R. 6 W., 20 ft. S. and 16 ft. W. from crossroads; standard iron post with bronze cap stamped "1912 636" ⁷⁵ -----	635.110

[Continued in Gillespie quadrangle, line 1]

2. From crossroads 3.5 miles south and 0.2 mile west from Mount Olive generally north and west along roads by way of Mount Olive to point 0.2 mile north and 3.5 miles east from Gillespie (by R. G. Clinite in 1912)

Mount Olive, 1.7 mi. S. and 0.5 mi. W. from center of, 0.25 mi. S. of NW. cor. sec. 14, T. 7 N., R. 6 W., 400 ft. S. of crossing of Wabash Ry. track, 300 ft. W. of house, in center of rd., on stone; chiseled circle-----	666.41
Mount Olive, in SW. part of town, in SE. corner of schoolyard; standard iron post with bronze cap stamped "1912 681" ⁷⁶ -----	681.067

⁷⁵ In 1940 it was reported that this bench mark had apparently been disturbed as it was found in the southeast angle of the crossroads. The figures given represent the elevation of the post in its present position.

⁷⁶ In 1936 and again in 1940 this bench mark was tied to U. S. C. & G. S. standard disk stamped "H 94 1935," elevation 682.007 ft.

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Mount Olive, 1.0 mi. N. and 0.3 mi. E. from, 0.2 mi. E. of NE. cor. sec. 2, T. 7 N., R. 6 W., 40 ft. E. of jog in rd. at township line, in stubble field, in root of 15-in. cherry tree; copper nail-----	Feet 686.73
Mount Olive, 3.5 mi. N. and 0.5 mi. E. from, near E $\frac{1}{4}$ cor. sec. 23, T. 8 N., R. 6 W., in SW. corner of crossroads, 18 ft. S. and 15 ft. W. from stone marking quarter corner; standard iron post with bronze cap stamped "Prim Trav Sta No. 63 1911 675" (recovered in 1936)-----	674.710
[Continued in Gillespie quadrangle, line 2]	
3. From point 1.3 miles north and 0.3 mile west from Hornsby along roads alternately east and south to crossroads 3.5 miles north and 0.5 mile east from Mount Olive (by R. G. Clinite in 1912)	
[Continued from Gillespie quadrangle, line 3]	
Hornsby, 1.3 mi. N. and 0.1 mi. W. from, 0.8 mi. N. and 5.0 mi. W. from Litchfield, near N $\frac{1}{4}$ cor. sec. 34, T. 9 N., R. 6 W., 32 ft. S. and 24 ft. E. from crossroads; standard iron post with bronze cap stamped "1912 664"-----	663.886
Litchfield, 0.7 mi. S. and 3.4 mi. W. from, near W $\frac{1}{4}$ cor. sec. 1, T. 8 N., R. 6 W., 20 ft. N. and 4 ft. E. from junction of T-rd. S.; standard iron post with bronze cap stamped "1912 670"-----	669.781
Litchfield, 1.7 mi. S. and 3.4 mi. W. from, 4.6 mi. S. and 0.5 mi. E. from Mount Olive, near quarter corner between secs. 13 and 14, T. 8 N., R. 6 W., at T-rd. W., on stone marking quarter corner; chiseled square-----	669.46
4. From crossroads 2.8 miles north and 1 mile west from New Douglas along roads generally east and northeast by way of Panama to point about 3.3 miles south and 0.3 mile west from Taylor Springs, thence northwest and west to crossroads 3.5 miles north and 0.5 mile east from Mount Olive (by R. G. Clinite in 1912)	
New Douglas, 2.8 mi. N. and 0.3 mi. E. from, 1.0 mi. N. and 4.7 mi. W. from Sorento, near NW. cor. sec. 33, T. 7 N., R. 5 W., in SE. angle of junction of T-rd. S., at fence corner; standard iron post with bronze cap stamped "618" (recovered in 1940)-----	617.970
Sorento, 2.8 mi. N. and 3.0 mi. W. from, 120 ft. W. of center of S. side SE $\frac{1}{4}$ sec. 27, T. 7 N., R. 5 W., on N. side of rd., at W. end of hedge fence, in root of 12-in. hedge tree; copper nail and washer-----	603.06
Sorento, 0.3 mi. N. and 2.2 mi. W. from, about 650 ft. S. of center of sec. 35, T. 7 N., R. 5 W., in SE. angle of junction of T-rd. E., at fence corner; standard iron post with bronze cap stamped "588" (recovered in 1940)-----	588.150
Sorento, 0.4 mi. N. and 1.0 mi. W. from, 0.25 mi. W. of center of sec. 36, T. 7 N., R. 5 W., in center of rd., on stone marking quarter section; chiseled square-----	584.83
Sorento, 0.4 mi. N. and 0.2 mi. W. from, near center of sec. 31, T. 7 N., R. 4 W., 30 ft. E. of junction of T-rd. S., on N. side of rd., in root of tree; copper nail-----	584.86
Sorento, 0.4 mi. N. and 1.4 mi. E. from, 1.4 mi. S. and 1.2 mi. W. from schoolhouse in Panama, near E $\frac{1}{4}$ cor. sec. 32, T. 7 N., R. 4 W., at NW. corner of turn N. in rd., at fence corner; standard iron post with bronze cap stamped "584" (recovered in 1935)-----	584.073

Panama, at schoolhouse, on S. side of E. entrance; standard iron post with bronze cap stamped "595" (recovered in 1935)-----	Feet 595.511
Panama, 2.1 mi. N. and 1.0 mi. E. from schoolhouse, 5.2 mi. S. and 0.6 mi. W. from Taylor Springs, 0.2 mi. E. of SW. cor. sec. 11, T. 7 N., R. 4 W., 30 ft. NW. of junction of T-rd. S., at fence line; standard iron post with bronze cap stamped "615"-----	614.893
Taylor Springs, 2.5 mi. S. and 1.1 mi. W. from, 0.2 mi. N. and 0.2 mi. E. from center of sec. 34, T. 8 N., R. 4 W., in NW. angle of rd. fork, 30 ft. N. of rd., in line with N-S. rail fence, 2 ft. E. of small walnut sapling; standard iron post with bronze cap stamped "1912 607"-----	607.494
Taylor Springs, 0.5 mi. N. and 2.0 mi. W. from, about 2.8 mi. SW. of Hillsboro, 0.2 mi. NE. of center of sec. 16, T. 8 N., R. 4 W., 60 ft. N. and 75 ft. E. from crossroads, 3 ft. SW. of hedge corner; standard iron post with bronze cap stamped "1912 626" (recovered in 1937)-----	625.992
Hillsboro, 3.5 mi. SW. of, at quarter corner between secs. 16 and 17, T. 8 N., R. 4 W., in center of crossroads, on stone marking quarter corner; chiseled square-----	634.00
Shoal Creek, under bridge; surface of water Sept. 12, 1912-----	536.0
Hillsboro, 5.7 mi. SW. of, 2.7 mi. S. and 3.7 mi. E. from Litchfield, near E $\frac{1}{4}$ cor. sec. 13, T. 8 N., R. 5 W., 45 ft. S. and 20 ft. W. from rd. junction, on W. side of township line, 2 ft. S. of telephone pole; standard iron post with bronze cap stamped "1912 549"-----	549.632
Litchfield, 2.9 mi. S. and 2.5 mi. E. from, near center of SE $\frac{1}{4}$ sec. 14, T. 8 N., R. 5 W., at small iron bridge over Long Branch, on SW. concrete wing wall; bottom of chiseled square-----	577.88
Litchfield, 3.1 mi. S. and 1.7 mi. E. from, near SW. cor. sec. 14, T. 8 N., R. 5 W., 5 ft. N. and 30 ft. E. from junction of T-rd. W.; standard iron post with bronze cap stamped "Prim Trav Sta No 73 1911 654"-----	653.808
Litchfield, 3.1 mi. S. and 0.6 mi. W. from, 0.25 mi. W. of NE. cor. sec. 20, T. 8 N., R. 5 W., opposite T-rd. N., 14 ft. S. and 25 ft. E. from stone marking sixteenth corner; standard iron post with bronze cap stamped "1912 671" ⁷⁷ -----	671.054
5. From crossroads 2.8 miles southwest of Hillsboro along roads generally north to point 2.2 miles northwest of Butler, thence alternately west and south to point 3 miles north and 5 miles west from Litchfield (by R. G. Clinite in 1912)	
Hillsboro, about 2.5 mi. N. and 2.0 mi. W. from, 0.9 mi. SE. of crossing of C. C. C. & St. L. Ry. in Butler, near SW. cor. sec. 27, T. 9 N., R. 4 W., in NE. angle of rd. fork, 14 ft. N. and 27 ft. E. from stone marking section corner; standard iron post with bronze cap stamped "1912 734" ⁷⁸ -----	733.850
Butler, on main N-S. street, opposite scales in front of two-story frame building, under concrete sidewalk crossing; top of S. end of tile drain (reported destroyed)-----	628.23

⁷⁷In 1940 this bench mark was pulled out by a road grader. It was reset without leveling, so the elevation is doubtful.

⁷⁸In 1937 this bench mark was tied to U. S. C. & G. S. standard disk stamped "W 93 1935," elevation 631.770 ft.

Butler, 2.2 mi. N. of, about 600 ft. W. of N $\frac{1}{4}$ cor. sec. 16, T. 9 N., R. 4 W., 120 ft. S. and 28 ft. E. from junction of E-W. rd; standard iron post with bronze cap stamped "1912 649" (recovered in 1923)-----	Feet 649.280
Butler, 2.2 mi. N. thence 2.3 mi. W. from, at cor. secs. 7, 12, 13, and 18, T. 9 N., Rs. 4 and 5 W., at center of right-angle turn from W. to S. in rd., on stone marking section corner; chiseled square (recovered in 1923)-----	668.94
Butler, 1.2 mi. N. and 3.1 mi. W. from, 2.9 mi. N. and 3.3 mi. E. from Litchfield, near N $\frac{1}{4}$ cor. sec. 24, T. 9 N., R. 5 W., 15 ft. S. and 18 ft. E. from crossroads, opposite Victory School; standard iron post with bronze cap stamped "1912 665"-----	665.084
Litchfield, 2.9 mi. N. and 0.7 mi. E. from, 0.9 mi. W. and 2.5 mi. S. from Honey Bend, near NE. cor. sec. 21, T. 9 N., R. 5 W., 22 ft. S. and 30 ft. W. from crossroads; standard iron post with bronze cap stamped "1912 668" (recovered in 1923)-----	668.620
Litchfield, 2.9 mi. N. and 2.4 mi. W. from, near SE. cor. sec. 13, T. 9 N., R. 6 W., on W. side of Macoupin-Montgomery county line, in NW. angle of offset crossroads, 4 feet W. of corner fence post, 2 ft. S. of fence; standard iron post with bronze cap stamped "1912 668" (recovered in 1936)-----	667.856
[Connects with line 3 in Gillespie quadrangle]	
6. From crossroads 2.9 miles north and 2.4 miles west from Litchfield along road west 2.6 miles (by S. R. Archer in 1922)	
Litchfield, 2.9 mi. N. and 3.4 mi. W. from, near SE. cor. sec. 14, T. 9 N., R. 6 W., 60 ft. W. of section-line fence, on N. side of rd., in fence line, in root on NE. side of easternmost of three small walnut trees; copper nail and washer-----	666.24
Litchfield, 2.9 mi. N. and 4.5 mi. W. from, near SE. cor. sec. 15, T. 9 N., R. 6 W., 660 ft. W. of T-rd. N., on N. side of rd., in fence line, in root on SW. side of 12-in. hedge tree; copper nail and washer----	666.88
[Continued in Gillespie quadrangle, line 4]	
7. From point 2.2 miles north and 2.2 miles east from Butler generally west and north along roads to point 0.9 mile west and 0.4 mile south from Honey Bend (by E. O. Brooks in 1923)	
[Continued from Coffeen quadrangle, line 1]	
Butler, 2.2 mi. N. thence 1.1 mi. E. from, near N $\frac{1}{4}$ cor. sec. 15, T. 9 N., R. 4 W., at SE. angle of crossroads, at E. end of culvert, in center of top of concrete head wall; chiseled square-----	718.25
Butler, 2.2 mi. N. of, at gate to farmhouse, at W. end of culvert, on top of concrete wing wall; chiseled square ⁷⁰ -----	653.19
Butler, 1.2 mi. N. and 3.1 mi. W. from, 2.9 mi. N. and 3.3 mi. E. from Litchfield, near quarter corner between secs. 13 and 24, T. 9 N., R. 5 W., in root on W. side of 36-in. black-oak tree; copper nail and washer ⁸⁰ -----	662.73

⁷⁰ This bench mark is 180 ft. north of the standard iron post with bronze cap stamped "1912 649," described in line 5, for which it was established as a reference mark.

⁸⁰ This bench mark is 60 ft. north and 30 ft. east from the standard iron post with bronze cap stamped "1912 665," described in line 5, for which it was established as a reference mark.

Litchfield, 2.8 mi. N. and 2.1 mi. E. from, 0.4 mi. N. and 0.2 mi. E. from center of sec. 23, T. 9 N., R. 5 W., 150 ft. N. of rd. fork, 90 ft. SW. of right bank of ford across Shoal Creek, in root on S. side of 24-in. cottonwood tree; copper nail and washer-----	<i>Feet</i> 571. 72
Litchfield, 2.9 mi. N. and 1.5 mi. E. from, 0.25 mi. W. of SE. cor. sec. 15, T. 9 N., R. 5 W., at T-rd. N., in center of rd., on stone marking sixteenth corner; chiseled square-----	673. 60
Litchfield, 3.9 mi. N. and 0.7 mi. E. from, 0.9 mi. W. and 2.5 mi. S. from Honey Bend, at W. end of culvert under rd., in center of top of concrete head wall; chiseled square ⁸¹ -----	668. 95
Honey Bend, 0.8 mi. W. and 1.5 mi. S. from, 330 ft. S. and 680 ft. E. from NW. cor. sec. 15, T. 9 N., R. 5 W., 70 ft. N. of crossing of Wabash Ry., at E. end of culvert, in center of top of concrete head wall; chiseled square-----	662. 52
Honey Bend, 0.9 mi. W. and 0.5 mi. S. from, near SE. cor. sec. 4, T. 9 N., R. 5 W., in NW. angle of crossroads, 10 ft. N. and 2 ft. E. from corner of hedge fence, in concrete post; standard tablet stamped "16 EB 1923"-----	631. 308
Reference mark, 30 ft. S. and 45 ft. E. from tablet, in NE. angle of crossroads, at N. end of culvert, on top of W. end of concrete head wall; chiseled square-----	634. 62

[Continued in Raymond quadrangle, line 4]

8. From road junction 0.9 mile southeast of Butler generally south along roads to crossroads 2.8 miles southwest of Hillsboro, thence northeast to Hillsboro (by Robert Rinaker in 1934; releveled by S. R. Archer in 1937)

Butler, 0.9 mi. SE. of, 110 ft. NW. of rd. fork, on top of N. end of W. head wall of concrete culvert; chiseled square ⁸² -----	732. 70
Butler, 1.9 mi. SE. of, 1.6 mi. N. and 2.0 mi. W. from Hillsboro, 21 ft. N. and 260 ft. E. from SW. cor. sec. 34, T. 9 N., R. 4 W., at SE. corner of triangular plot at junction of E.-W. rd., on top of SW. head wall of concrete culvert along NE. side of triangle; chiseled square-----	624. 63
Hillsboro, 0.6 mi. N. and 1.7 mi. W. from, 0.25 mi. E. of NW. cor. sec. 3, T. 8 N., R. 4 W., 160 ft. W. of T-rd. N., in center of top of S. head wall of concrete culvert under rd. W.; chiseled square-----	626. 38
Hillsboro, 2.8 mi. SW. thence 0.7 mi. N. from, near center of SE $\frac{1}{4}$ sec. 9, T. 8 N., R. 4 W., on top of S. end of E. head wall of concrete bridge; chiseled square-----	605. 89
Hillsboro, 2.8 mi. SW. of, 0.2 mi. NE. of center of sec. 16, T. 8 N., R. 4 W., 40 ft. N. and 50 ft. W. from crossroads, in root on NE. side of 12-in. maple tree; copper nail and washer ⁸³ -----	623. 66
Hillsboro, 1.7 mi. SW. of, near center of NE $\frac{1}{4}$ sec. 15, T. 8 N., R. 4 W., on N. side at W. end of steel bridge over Middle Fork, 7 ft. W. of W. end of N. truss, 1 ft. W. of E. end of concrete retaining wall running W.; chiseled square-----	551. 34

⁸¹ This bench mark is 30 ft. south and 20 ft. east from the standard iron post with bronze cap stamped "1912 668," described in line 5, for which it was established as a reference mark.

⁸² This bench mark was established as a reference mark to the standard iron post with bronze cap stamped "1912 734," described in line 5.

⁸³ This bench mark was set as a reference mark for the standard iron post with bronze cap stamped "1912 626," described in line 4.

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Hillsboro, 1.7 mi. SW. of, near center of NE $\frac{1}{4}$ sec. 15, T. 8 N., R. 4 W., at steel bridge over Middle Fork, on top of SW. end of S. wing wall of W. concrete abutment; chiseled square-----*Feet*
548.84
Hillsboro, at W. edge of, in NW. corner of intersection of West Fairground Street and Seymour Avenue, 8 ft. E. of center of rd. S., in top of curved corner of concrete curb; monel-metal rivet-----
635.02

[Continued in Coffeen quadrangle, line 4]

9. From point 1.5 miles east of Panama generally west along road to Panama (by S. R. Archer in 1935)

[Continued from Coffeen quadrangle, line 5]

Panama, 0.3 mi. N. and 0.6 mi. E. from schoolhouse, 240 ft. W. of E. side SE $\frac{1}{4}$ sec. 22, T. 7 N., R. 4 W., on N. side of rd., in SW. corner of yard of farmhouse, in root on SE. side of 15-in. maple tree, westernmost tree in front of yard; copper nail and washer---
593.78

10. From point 0.4 mile north and 1.4 miles east from Sorento west and south along road to Sorento (by S. R. Archer in 1935)

Sorento, 0.4 mi. N. and 0.3 mi. E. from, near E $\frac{1}{4}$ cor. sec. 31, T. 7 N., R. 4 W., in NW. angle of junction of T-rd. N., at SE. corner of yard of residence, in root on W. side of triple-forked maple tree; copper nail and washer-----
586.71
U. S. C. & G. S. standard disk stamped "E 113 1935"-----
587.049

11. From crossroads 3.5 miles north and 0.5 mile east from Mount Olive along road east to Wabash Railway (by W. C. Elledge in 1936; leveled twice)

Mount Olive, 3.5 mi. N. and 1.0 mi. E. from, 3.7 mi. S. and 2.3 mi. W. from Litchfield, near W $\frac{1}{4}$ cor. sec. 19, T. 8 N., R. 5 W., 150 ft. E. of Macoupin-Montgomery county line, 40 ft. N. of rd., in root on S. side of 18-in. maple tree; copper nail and washer-----
685.43
Litchfield, 3.7 mi. S. and 1.4 mi. W. from, 600 ft. W. of E $\frac{1}{4}$ cor. sec. 19, T. 8 N., R. 5 W., 21 ft. S. and 26 ft. W. from crossroads, on N. end of W. head wall of concrete culvert; chiseled square-----
678.58
U. S. C. & G. S. standard disk stamped "F 94 1935"-----
679.467

12. From crossroads 2.9 miles north and 2.4 miles west from Litchfield along road east to Chicago, Burlington, & Quincy Railroad, thence northwest 0.8 mile (by W. C. Elledge in 1936; leveled twice)

Litchfield, 2.9 mi. N. and 1.3 mi. E. from, near SE. cor. sec. 18, T. 9 N., R. 5 W., 22 ft. N. and 10 ft. W. from crossroads, on W. head wall of concrete culvert; chiseled square-----
663.11
U. S. C. & G. S. standard disk stamped "V 96 1935"-----
665.373

MOUNT VERNON QUADRANGLE

[Latitude 38°15'–38°30'; longitude 88°45'–89°00']

JEFFERSON AND MARION COUNTIES

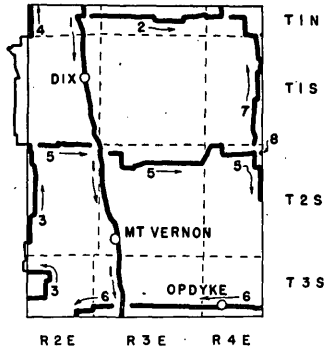


FIGURE 53.—Lines of leveling in Mount Vernon quadrangle.

1. From point 2 miles west and 0.6 mile north from Kell generally southeast along State Highway 37 to point 0.6 mile south of Bakerville (by E. W. Gouchenour in 1928)

[Continued from Salem quadrangle, line 5]

Kell, 2.0 mi. W. of, near NE. cor. sec. 35, T. 1 N., R. 2 E., 30 ft. S. and 160 ft. W. from crossroads, at Little Prairie School, on N. edge of yard, in root on E. side of 30-in. jack-oak tree; copper nail and washer-----	Feet 570.91
Kell, 2.5 mi. W. of, 425 ft. E. of quarter corner between secs. 26 and 35, T. 1 N., R. 2 E., 25 ft. N. and 30 ft. W. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No. 61 S 1928"-----	565.357
Reference mark, 30 ft. N. and 10 ft. E. from crossroads, on concrete culvert; chiseled square-----	566.64
Kell, 1.0 mi. S. and 2.1 mi. W. from, 2.5 mi. NW. of Dix, W. of SE. cor. sec. 35, T. 1 N., R. 2 E., 30 ft. N. and 30 ft. W. from crossroads, at Jefferson-Marion county line, in root on NE. side of 30-in. hickory tree; copper nail and washer-----	614.08
Dix, 1.5 mi. NW. of, 600 ft. W. of SE. cor. sec. 2, T. 1 S., R. 2 E., 20 ft. N. and 25 ft. E. from crossroads, in root on S. side of 26-in. hickory tree; copper nail and washer-----	602.88
Dix, 0.4 mi. N. of, about 500 ft. E. of SW. cor. sec. 12, T. 1 S., R. 2 E., 10 ft. N. and 20 ft. W. of crossroads, on concrete culvert; chiseled square-----	576.19
Dix, on E. side of Main Street, 20 ft. S. and 40 ft. E. from street intersection, 200 ft. W. of Christian Church, in NW. corner of vacant lot, in concrete post; standard tablet stamped "G 603"-----	602.832
Reference mark, 45 ft. N. of tablet, on step of concrete store building; chiseled square-----	603.74
Dix, 1.1 mi. SE. of, about 600 ft. W. of center of sec. 24, T. 1 S., R. 2 E., 15 ft. N. and 60 ft. E. from crossroads, in root on SW. side of 20-in. wild-cherry tree; copper nail and washer-----	558.85

Dix, 1.7 mi. SE. of, 0.3 mi. E. of Williams School, near N $\frac{1}{4}$ cor. sec. 25, T. 1 S., R. 2 E., 200 ft. S. and 25 ft. W. from crossroads, in root on NE. side of maple tree; copper nail and washer-----	Feet 564. 21
Dix, 2.4 mi. SE. of, 0.3 mi. SE. of United Baptist Church, 175 ft. S. of junction of rd. NE., on concrete culvert; chiseled square-----	513. 70
Dix, 3.0 mi. SE. of, 0.3 mi. W. thence 1.4 mi. NW. from Idlewood, near center of NE $\frac{1}{4}$ sec. 36, T. 1 S., R. 2 E., about 400 ft. E. of new rd., 15 ft. S. and 25 ft. E. from junction of old rd. W., in concrete post; standard tablet stamped "G 489"-----	487. 956
Reference mark, 45 ft. S. and 30 ft. W. from tablet, on W. wing wall of concrete culvert; chiseled square-----	489. 69
Idlewood, 0.3 mi. W. thence 0.5 mi. NW. from; 5.2 mi. NW. of Mount Vernon, at Southern Ry. bridge over highway, 50 ft. S. of milepost 82, on top of W. end of N. abutment; chiseled square-----	520. 38
Idlewood, 0.3 mi. W. of, 4.7 mi. NW. of Mount Vernon, near W $\frac{1}{4}$ cor. sec. 6, T. 2 S., R. 3 E., 55 ft. S. and 50 ft. E. from crossroads, in root on E. side of 24-in. maple tree; copper nail and washer-----	547. 58
Mount Vernon, 3.7 mi. NW. of post office, 0.2 mi. E. of W $\frac{1}{4}$ cor. sec. 7, T. 2 S., R. 3 E., 50 ft. S. and 25 ft. E. from crossroads, at Pleasant Grove School, on W. edge of yard, in root on NW. side of 28-in. hickory tree; copper nail and washer-----	555. 47
Mount Vernon, 3.1 mi. NW. of, 958 ft. E. of W. cor. secs. 7 and 18, T. 2 S., R. 3 E., 10 ft. S. and 35 ft. W. from center line of highway at section line, at residence of C. F. Anderson, in NE. corner of yard, in concrete post; standard tablet stamped "G 524" ⁸⁴ -----	523. 045
Reference mark, 60 ft. S. and 15 ft. W. from tablet, in E. edge of yard at Anderson farmhouse, in root on E. side of maple tree; copper nail and washer-----	522. 92
Mount Vernon, 2.1 mi. NE. of, 0.2 mi. W. of quarter corner between secs. 18 and 19, T. 2 S., R. 3 E., 50 ft. W. of junction of T-rd. E., in root on SE. side of 48-in. white-oak tree; copper nail and washer-----	489. 22
Mount Vernon, 1.3 mi. NW. of, 0.25 mi. N. of quarter corner between secs. 19 and 30, T. 2 S., R. 3 E., 30 ft. N. and 10 ft. E. from junction of rd. W., in root on W. side of 18-in. maple tree; copper nail and washer-----	529. 37
Mount Vernon, 1.0 mi. NW. of, 45 ft. S. and 30 ft. E. from junction of T-rd. E., at First and Last Chance Grocery Store, on concrete step; chiseled square-----	498. 95
Mount Vernon, at front entrance to post office, in W. end of top step; standard tablet stamped "G 516" (recovered by U. S. C. & G. S. in 1935)-----	515. 399
Reference mark, 20 ft. N. and 60 ft. E. from tablet, 20 ft. S. and 15 ft. W. from intersection of Main and Eleventh Streets, on NE. corner of sidewalk; chiseled square-----	512. 60
Mount Vernon, in S. part of, 500 ft. W. of main entrance to State fair grounds, at service sta., on concrete driveway; chiseled square-----	458. 43
Mount Vernon, 1.1 mi. S. of post office, 115 ft. N. and 15 ft. W. from crossing of Jefferson & Southwestern R. R., on concrete culvert; chiseled square-----	459. 36

⁸⁴ In 1930 this bench mark was moved 12 ft. west of this location and reset at an elevation 0.177 ft. lower than that originally determined. The figures given represent the new elevation.

Mount Vernon, 2.2 mi. S. of, 0.4 mi. N. of Morganville, N. of center of NW $\frac{1}{4}$ sec. 8, T. 3 S., R. 3 E., 20 ft. N. and 20 ft. W. from crossroads, on concrete culvert; chiseled square-----	<i>Feet</i> 445. 65
Mount Vernon, 3.1 mi. S. of, 0.5 mi. S. of Morganville, about 850 ft. W. of S $\frac{1}{4}$ cor. sec. 8, T. 3 S., R. 3 E., 15 ft. N. and 135 ft. W. from junction of T-rd. W., in concrete post; standard tablet stamped "G 426"-----	425. 451
Reference mark, 50 ft. S. of tablet, on concrete culvert; chiseled square-----	422. 97
Mount, Vernon, 3.4 mi. S. of, 0.7 mi. N. of Bakerville, at steel girder bridge over Casey Fork, on concrete balustrade; chiseled square-----	437. 49
Bakerville, near quarter corner between secs. 17 and 20, T. 3 S., R. 3 E., 275 ft. W. of T-rd. S., 72 ft. S. of crossing of E-W. rd., 36 ft. W. of track, in concrete post; standard tablet stamped "45 S 1928" (recovered by U. S. C. & G. S. in 1935)-----	426. 840
Reference mark, 72 ft. N. of E-W. rd., on E. edge of highway; chiseled square-----	427. 84

[Continued in Ina quadrangle, line 3]

2. From crossroads 2.5 miles west of Kell generally east along roads to Donahoe Prairie School, thence north 0.7 mile (by S. R. Archer in 1928)

Kell, 1.8 mi. W. of Baptist Church, about 0.2 mi. E. of SW. cor. sec. 25, T. 1 N., R. 2 E., on top of N. wing wall of W. abutment of concrete bridge; chiseled square-----	560. 12
Kell, 1.0 mi. W. of, near NE. cor. sec. 36, T. 1 N., R. 2 E., at SW. corner of crossroads, on top of W. concrete head wall of culvert under rd. S.; chiseled square-----	587. 47
Kell, at crossing of Main Street and Chicago & Eastern Illinois Ry.; top of W. rail-----	611. 1
Kell, on S. side of Main Street, 150 ft. E. of R. R. track, on N. side at NW. corner of Kell State Bank, at entrance, on top of E. end of lower concrete step; chiseled square-----	610. 09
Kell, 30 ft. S. and 18 ft. W. from crossroads, at Baptist Church, in NE. corner of yard, in concrete post; standard tablet stamped "Prim Trav Sta No 56 S 1928"-----	614. 535
Kell, 1.0 mi. E. of, in SE. cor. sec. 29, T. 1 N., R. 3 E., in NW. angle of crossroads, in SE. corner of yard of farmhouse, in root on SW. side of 24-in. maple tree; copper nail and washer-----	580. 20
Kell, 1.4 mi. E. of, about 800 ft. W. of quarter corner between secs. 28 and 33, T. 1 N., R. 3 E., on top of N. wing wall of W. concrete abutment of bridge; chiseled square-----	547. 72
Kell, 2.0 mi. E. of, in SW. cor. sec. 27, T. 1 N., R. 3 E., 25 ft. N. and 25 ft. E. from junction of T-rd. W., in yard at Beard School, in root on E. side of 24-in. oak tree; copper nail and washer-----	574. 74
Kell, 3.0 mi. E. and 0.2 mi. S. from, 0.25 mi. S. of NW. cor. sec. 35, T. 1 N., R. 3 E., 18 ft. N. and 15 ft. E. from crossroads, 2.5 ft. N. and 2.5 ft. E. from fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 55 S 1928"-----	534. 453
Reference mark, 25 ft. S. and 50 ft. E. from crossroads, in NW. corner of yard of farmhouse, in root on E. side of 12-in. maple tree; copper nail and washer-----	533. 99
Kell, 3.5 mi. E. and 0.2 mi. S. from, at concrete bridge over Horse Creek, on top of N. wing wall of E. abutment; chiseled square-----	496. 60

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Kell, 4.0 mi. E. of, 3.0 mi. N. of Divide, near NW. cor. sec. 36, T. 1 N., R. 3 E., 35 ft. S. and 140 ft. E. from crossroads, at Byars School, 15 ft. S. and 25 ft. W. from NW. corner of yard, in root on NW. side of 12-in. hickory tree; copper nail and washer-----	Feet 528. 85
Kell, 5.0 mi. E. of, 8.7 mi. S. thence 1.0 mi. W. from Iuka, near NE. cor. sec. 36, T. 1 N., R. 3 E., at crossroads, 110 ft. S. of rd. W., opposite and 15 ft. N. of rd. E., on W. side of N.-S. rd., in root on SW. side of small forked oak tree; copper nail and washer-----	539. 37
Iuka, 8.7 mi. S. of, near SW. cor. sec. 29, T. 1 N., R. 4 E., 18 ft. N. and 25 ft. E. from crossroads, at Donahoe Prairie School, in SW. corner of yard, in concrete post; standard tablet stamped "54 S 1928"-----	531. 932
Reference mark, in SE. angle of crossroads, 4 ft. S. and 13 ft. E. from fence corner, in field, in root on N. side of 12-in. elm tree; copper nail and washer-----	532. 48

[Continued in Salem quadrangle, line 4]

3. From point 3.4 miles south and 5.2 miles west from Mount Vernon generally north along roads by way of Drivers to point 5 miles north and 5.2 miles west from Mount Vernon (by E. W. Gouchenour in 1928)

[Continued from Richview quadrangle, line 4]

Mount Vernon, 3.4 mi. S. and 4.5 mi. W. from, 30 ft. N. of quarter corner between secs. 15 and 16, T. 3 S., R. 2 E., on N. side of rd., at T-rd. S.; standard iron post with bronze cap stamped "Prim Trav Sta No 161 1911"-----	431. 569
Reference mark, 100 ft. E. of tablet, in root on S. side of 30-in. white-oak tree; copper nail and washer-----	431. 06
Mount Vernon, 2.9 mi. S. and 4.3 mi. W. from, 0.4 mi. N. thence 0.8 mi. W. from Marcoe, near center of N. side NW $\frac{1}{4}$ sec. 15, T. 3 S., R. 2 E., 10 ft. S. and 5 ft. E. from stone marking corner, in root on E. side of 30-in. white-oak tree; copper nail and washer-----	439. 19
Mount Vernon, 1.9 mi. S. and 4.0 mi. W. from, near quarter corner between secs. 3 and 10, T. 3 S., R. 2 E., 15 ft. E. of center line of T-rd. W., in root on SW. side of 30-in. pin-oak tree; copper nail and washer-----	444. 72
Mount Vernon, 1.9 mi. S. and 5.1 mi. W. from, 125 ft. S. of line between secs. 4 and 9, T. 3 S., R. 2 E., on W. bank of Big Muddy River, in 30 in. tree; copper nail and washer-----	430. 30

[Jogs into Richview quadrangle, line 5]

Drivers, at SW. edge of, 75 ft. N. and 10 ft. W. from crossing of Louisville & Nashville R. R., in root on S. side of 45-in. pin-oak tree; copper nail and washer ⁸⁵ -----	438. 74
Drivers, 0.4 mi. N. of, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 21, T. 2 S., R. 2 E., 25 ft. S. and 20 ft. E. from crossroads, in concrete post; standard tablet stamped "14 G 1928"-----	447. 096
Reference mark, 45 ft. N. and 30 ft. W. from crossroads, at residence of W. H. Miller, in yard, in root on NW. side of 12-in. white-oak tree; copper nail and washer-----	447. 88

⁸⁵ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "K 109 1935," elevation 449.363 ft.

Drivers, 2.0 mi. N. of, 0.25 mi. E. of NW. cor. sec. 16, T. 2 S., R. 2 E., 30 ft. N. and 25 ft. E. from crossroads, in root on NW. side of 20-in. maple tree; copper nail and washer-----	Feet 480. 11
Drivers, 2.5 mi. N. of, near center of NW $\frac{1}{4}$ sec. 9, T. 2 S., R. 2 E., 50 ft. S. and 15 ft. E. from junction of NW.-SE. rd., in root on NW. side of 30-in. white-oak tree; copper nail and washer-----	491. 39
Drivers, 3.6 mi. N. and 0.4 mi. W. from, 4.8 mi. N. and 5.2 mi. W. from Mount Vernon, at Webb, 30 ft. W. of Boyd Church, in line with S. side of building; standard iron post with bronze cap stamped "Prim Trav Sta No 162 1911" (recovered in 1930)-----	512. 710
Reference mark, 50 ft. N. of and in line with W. side of church, in root on W. side of 30-in. white-oak tree; copper nail and washer-----	512. 64

[Continued in Richview quadrangle, line 6]

4. From point 1 mile south and 5.2 miles west from Kell east 0.1 mile along Jefferson-Marion county-line rd., thence north along road 1.7 miles (by E. W. Gouchenour in 1928)

[Continued from Richview quadrangle, line 6]

Kell, 1.0 mi. S. and 5.1 mi. W. from, 75 ft. S. and 20 ft. E. from stone marking cor. secs. 28, 29, 32, and 33, T. 1 N., R. 2 E., in root on W. side of 12-in. maple tree; copper nail and washer-----	546. 62
Kell, 0.4 mi. N. and 5.1 mi. W. from, 1.0 mi. N. and 2.6 mi. E. from Walnut Hill, S. of quarter corner between secs. 28 and 29, T. 1 N., R. 2 E., 20 ft. S. and 90 ft. W. from crossroads, in root on S. side of 20-in. wild-cherry tree; copper nail and washer-----	546. 91

[Continued in Salem quadrangle, line 6]

5. From point 4.8 miles north and 5.2 miles west from Mount Vernon generally east along roads to point 1 mile south of Pigeon, thence alternately south and east to point 1.2 miles north and 0.2 mile west from Bluford (by E. W. Gouchenour in 1928)

Mount Vernon, 5.2 mi. NW. thence 2.6 mi. W. from, near N $\frac{1}{4}$ cor. sec. 3, T. 2 S., R. 2 E., 15 ft. S. and 85 ft. E. from junction of T-rd. S., in root on N. side of 30-in. white-oak tree; copper nail and washer-----	524. 31
Mount Vernon, 5.2 mi. NW. thence 2.3 mi. W. from, 0.3 mi. W. of NE. cor. sec. 3, T. 2 S., R. 2 E., 65 ft. S. and 60 ft. E. from junction of T-rd. S., in root on SE. side of 18-in. oak tree; copper nail and washer-----	533. 51
Mount Vernon, 5.2 mi. NW. thence 1.9 mi. W. from, near S. side SW $\frac{1}{4}$ sec. 35, T. 1 S., R. 2 E., 10 ft. N. and 40 ft. E. from junction of rd. E., in root on W. side of 20-in. hickory tree; copper nail and washer-----	530. 57
Mount Vernon, 5.2 mi. NW. thence 1.0 mi. W. from, 0.5 mi. N. and 1.3 mi. W. from Idlewood, in SW. cor. sec. 36, T. 1 S., R. 2 E., 18 ft. N. and 35 ft. E. from junction of T-rd. N., in concrete post; standard tablet stamped "57 S 1928"-----	581. 126
Reference mark, 5 ft. N. and 30 ft. E. from tablet, in root on S. side of 15-in. maple tree; copper nail and washer-----	581. 68
Idlewood, 1.0 mi. E. thence 0.5 mi. S. from, 4.0 mi. N. of Mount Vernon, on W. side of Mount Vernon reservoir, 0.25 mi. E. of NW. cor. sec. 8, T. 2 S., R. 3 E., 30 ft. S. and 20 ft. E. from junction of T-rd. W., in concrete post; standard tablet stamped "58 S 1928"-----	500. 663
Reference mark, 20 ft. S. of tablet, in root on W. side of 15-in. tree; copper nail and washer-----	500. 14

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Mount Vernon, 3.8 mi. N. of, 0.25 mi. N. of center of sec. 8, T. 2 S., R. 3 E., at concrete bridge over reservoir spillway, on SE. wing wall of abutment; chiseled square-----	Feet 501.26
Mount Vernon, 3.9 mi. N. and 0.6 mi. E. from, about 750 ft. S. of NW. cor. sec. 9, T. 2 S., R. 3 E., 15 ft. N. and 105 ft. E. from junction of T-rd. E., in root on S. side of 25-in. white-oak tree; copper nail and washer-----	550.14
Mount Vernon, 3.9 mi. N. and 2.7 mi. E. from, in SE. cor. sec. 3, T. 2 S., R. 3 E., 20 ft. N. and 20 ft. W. from crossroads, in concrete post; standard tablet stamped "59 S 1928"-----	518.267
Reference mark, 20 ft. N. and 85 ft. E. from crossroads, in root on S. side of 25-in. white-oak tree; copper nail and washer-----	519.18
Mount Vernon, 3.9 mi. N. and 3.5 mi. E. from, 500 ft. W. of SE. cor. sec. 2, T. 2 S., R. 3 E., 20 ft. N. and 140 ft. E. from junction of T-rd. S., in SW. corner of yard at Harlow School, in root on S. side of white-oak tree; copper nail and washer-----	548.40
Mount Vernon, 3.9 mi. N. and 4.6 mi. E. from, 2.4 mi. S. thence 1.0 mi. W. from Harmony, near SE. cor. sec. 1, T. 2 S., R. 3 E., 70 ft. N. and 20 ft. E. from junction of NE-SW. rd., in root on W. side of 20-in. elm tree; copper nail and washer-----	561.13
Harmony, 1.4 mi. S. thence 0.7 mi. W. from, 0.25 mi. E. of NW. cor. sec. 6, T. 2 S., R. 4 E., 18 ft. S. and 30 ft. W. from crossroads, in fence corner, in concrete post; standard tablet stamped "60 S 1928"	538.989
Reference mark, 10 ft. S. and 260 ft. E. from crossroads, in root on N. side of 10-in. oak tree; copper nail and washer-----	543.52
Harmony, 1.4 mi. S. of, near NW. cor. sec. 5, T. 2 S., R. 4 E., 375 ft. S. and 15 ft. E. from crossroads, in root on W. side of 20-in. hickory tree; copper nail and washer-----	533.72
Harmony, 2.0 mi. S. of, near W $\frac{1}{4}$ cor. sec. 5, T. 2 S., R. 4 E., 35 ft. N. and 25 ft. E. from junction of T-rd. E., in root on S. side of 30-in. white-oak tree; copper nail and washer-----	503.78
Harmony, 2.0 mi. S. thence 1.1 mi. E. from, 1.1 mi. SW. thence 0.4 mi. W. from Pigeon, 600 ft. E. of W $\frac{1}{4}$ cor. sec. 4, T. 2 S., R. 4 E., inside rd. line, in root on N. side of white-oak tree; copper nail and washer-----	499.60
Pigeon, 1.1 mi. SW. of, near center of sec. 4, T. 2 S., R. 4 E., 18 ft. N. and 20 ft. W. from crossroads, in concrete post; standard tablet stamped "51 S 1928" (recovered in 1939)-----	492.886
Reference mark, 35 ft. S. and 55 ft. W. from crossroads, in root on S. side of 20-in. walnut tree; copper nail and washer-----	495.00
Pigeon, 2.2 mi. S. and 0.3 mi. E. from, 2.4 mi. N. and 0.3 mi. W. from Bluford, near center of SW $\frac{1}{4}$ cor. sec. 10, T. 2 S., R. 4 E., 25 ft. N. and 20 ft. E. from junction of T-rd. E., in root on S. side of 30-in. white-oak tree; copper nail and washer-----	482.29

[Continued in Wayne City quadrangle, line 1]

6. From point 1.5 miles north and 0.5 mile west from Belle Rive generally east along road to point 0.6 mile south and 2.7 miles west from Bakerville (by E. W. Gouchenour in 1928)

[Continued from Wayne City quadrangle, line 1]

Belle Rive, 1.5 mi. N. thence 1.1 mi. W. from, 0.2 mi. S. and 1.7 mi. E. from Opdyke, 340 ft. S. of NE. cor. sec. 22, T. 3 S., R. 4 E., 15 ft. N. and 15 ft. E. from junction of N-S. rd., on wing of concrete culvert; chiseled square-----	465.98
--	--------

Opdyke, 0.2 mi. S. thence 0.5 mi. E. from, 10 ft. S. and 150 ft. W. from junction of T-rd. S., 10 ft. S. and 7 ft. E. from center of steel girder bridge, on concrete wing wall; chiseled square-----	<i>Feet</i> 479. 41
Opdyke, 0.2 mi. S. and 0.3 mi. W. from, near SE. cor. sec. 18, T. 3 S., R. 4 E., 18 ft. N. and 35 ft. W. from crossroads, in concrete post; standard tablet stamped "47 S 1923"-----	520. 025
Reference mark, 45 ft. S. and 95 ft. E. from crossroads, in root on N. side of 20-in. oak tree; copper nail and washer-----	519. 24
Opdyke, 0.2 mi. S. and 1.3 mi. W. from, near SE. cor. sec. 13, T. 3 S., R. 3 E., 60 ft. N. and 20 ft. W. from junction of rd. E. at offset crossroads, in root on E. side of 36-in. red-oak tree; copper nail and washer-----	512. 62
Opdyke, 0.2 mi. S. and 3.2 mi. W. from, 2.7 mi. E. of Bakerville, 665 ft. E. of NW. cor. sec. 23, T. 3 S., R. 3 E., at Pleasant View Church, 25 ft. S. and 30 ft. W. from crossroads, in concrete post; standard tablet stamped "46 S 1923"-----	477. 698
Reference mark, 15 ft. N. and 310 ft. W. from crossroads, in root on S. side of twin-oak tree; copper nail and washer-----	472. 66
Bakerville, 1.6 mi. E. of, near NE. cor. sec. 21, T. 3 S., R. 3 E., 25 ft. S. and 35 ft. W. from crossroads, at Dodds Center School, in NE. corner of yard, in root on N. side of 12-in. hickory tree; copper nail and washer-----	456. 80
Bakerville, 0.6 mi. E. of, 4.0 mi. S. thence 0.6 mi. E. from Mount Vernon, near SE. cor. sec. 17, T. 3 S., R. 3 E., 20 ft. N. and 25 ft. W. from crossroads, in root on E. side of small persimmon tree; copper nail and washer-----	460. 78
Bakerville, 1.0 mi. W. of, 4.0 mi. S. thence 0.9 mi. W. from Mount Vernon, near N $\frac{1}{4}$ cor. sec. 19, T. 3 S., R. 3 E., 20 ft. S. and 20 ft. W. from crossroads, in root on S. side of 6-in. wild-cherry tree; copper nail and washer-----	430. 79
Bakerville, 1.6 mi. W. of, near NW. cor. sec. 19, T. 3 S., R. 3 E., 17 ft. S. and 50 ft. E. from junction of N.-S. rd., in root on E. side of 5-in. hickory tree; copper nail and washer-----	439. 04

[Continued in Ina quadrangle, line 4]

7. From crossroads 1.1 miles southwest of Pigeon along roads generally north to Jefferson-Marion county line, thence alternately west and north to Donahoe Prairie School (by E. W. Gouche-nour in 1928)

Pigeon, 20 ft. S and 20 ft. E. from junction of E.-W. rd., near E $\frac{1}{4}$ cor. sec. 33, T. 1 S., R. 4 E., on concrete base of abandoned service sta.; chiseled square-----	536. 74
Pigeon, 1.2 mi. N. of, 1.8 mi. E. of Harmony, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 28, T. 1 S., R. 4 E., 100 ft. N. and 10 ft. E. from crossroads, in root on W. side of 30-in. white-oak tree; copper nail and washer-----	511. 55
Harmony, 1.0 mi. N. thence 1.8 mi. E. from, 1.5 mi. S. and 3.8 mi. E. from Divide, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 21, T. 1 S., R. 4 E., 35 ft. S. and 15 ft. E. from junction of T-rd. S., in concrete post; standard tablet stamped "52 S 1928"-----	444. 753
Divide, 1.5 mi. S. and 4.0 mi. E. from, near E $\frac{1}{4}$ cor. sec. 21, T. 1 S., R. 4 E., 10 ft. N. and 100 ft. W. from junction of T-rd. N., at steel girder bridge over Horse Creek, on NE. abutment; chiseled square-----	446. 38

302 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Divide, 0.5 mi. S. and 4.0 mi. E. from, near W $\frac{1}{4}$ cor. sec. 15, T. 1 S., R. 4 E., 60 ft. S. and 40 ft. E. from junction of T-rd. E., in root of SW. side of 25-in. elm tree; copper nail and washer-----	<i>Feet</i> 460. 84
[Jogs into Wayne City quadrangle, line 2]	
Divide, 0.7 mi. N. and 4.0 mi. E. from, 0.25 mi. S. of NE. cor. sec. 9, T. 1 S., R. 4 E., 45 ft. N. and 75 ft. W. from junction of T-rd. N., in root on S. side of 30-in. black-oak tree; copper nail and washer--	490. 64
Divide, 2.0 mi. N. thence 4.0 mi. E. from, 1.0 mi. S. thence 0.5 mi. W. from Hickory Hill, near S. cor. secs. 33 and 34, T. 1 N., R. 4 E., 15 ft. N. and 35 ft. E. from junction of Jefferson-Marion county- line rd., in concrete post; standard tablet stamped "53 S 1928" (re- covered in 1939)-----	507. 835
Reference mark, 10 ft. N. and 175 ft. W. from rd. junction, in root on W. side of 8-in. persimmon tree; copper nail and washer-----	515. 13
Hickory Hill, 0.5 mi. S. and 1.3 mi. W. from, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 33, T. 1 N., R. 4 E., 115 ft. N. and 20 ft. W. from junction of T-rd. W., in root on S. side of 8-in. hickory tree; copper nail and washer-----	550. 41
Hickory Hill, 2.3 mi. W. of, 0.4 mi. E. of NW. cor. sec. 32, T. 1 N., R. 4 E., 10 ft. S. and 30 ft. E. from center line of rd. at fence N., in root on S. side of black-oak tree; copper nail and washer-----	520. 48
8. From point 0.4 mile east and 1 mile south from Pigeon along road west 0.8 mile (by W. C. Elledge in 1939)	
[Continued from Wayne City quadrangle, line 6]	
Pigeon, 1.0 mi. in air line S. of, near E $\frac{1}{4}$ cor. sec. 4, T. 2 S., R. 4 E., 40 ft. S. and 35 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	489. 250

MULBERRY GROVE QUADRANGLE

[Latitude 38°45'–39°00'; longitude 89°15'–89°30']

BOND AND FAYETTE COUNTIES

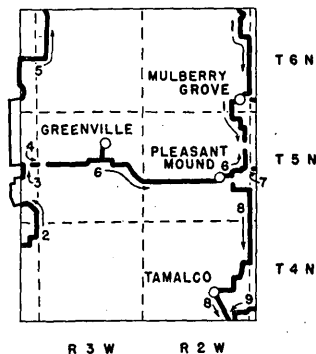


FIGURE 54.—Lines of leveling in Mulberry Grove quadrangle.

1. From point about 6.5 miles north of Mulberry Grove generally south along roads to point 2.8 miles south of Mulberry Grove (by Walton Thomson in 1934; releveled from Mulberry Grove by S. R. Archer in 1937)

[Continued from Coffeen quadrangle, line 2]

Mulberry Grove, 6.2 mi. N. of, near center of NE¼ fractional sec. 1, T. 6 N., R. 2 W., 700 ft. S. of right-angle turn in rd., on E. side of rd., 200 ft. N. of residence of Louis Donaldson, 3 ft. S. of fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 5 1934"	Feet 576.981
Mulberry Grove, 5.8 mi. N. of, about 0.2 mi. E. of center of fractional sec. 1, at concrete bridge over Gillon Creek, in top of E. wing wall of S. concrete abutment; monel-metal rivet	524.62
Mulberry Grove, 5.5 mi. N. of, near N¼ cor. sec. 12, T. 6 N., R. 2 W., 40 ft. S. and 10 ft. W. from junction of rd. S., on W. head wall of concrete culvert; chiseled square	541.24
Mulberry Grove, 5.2 mi. N. of, about 500 ft. N. of center of sec. 12, T. 6 N., R. 2 W., 6 ft. S. of center of E. head wall of concrete culvert; monel-metal rivet	562.22
Mulberry Grove, 4.6 mi. N. of, 650 ft. E. of N¼ cor. sec. 13, 650 ft. E. of junction of E-W. rd., on S. side of rd., 60 ft. E. of forked hedge tree, in root on N. side of 18-in. hedge tree; spike with "16" on head	573.50
Mulberry Grove, 4.2 mi. N. of, 29 ft. N. and 19 ft. W. from SE. cor. sec. 12, T. 6 N., R. 2 W., 540 ft. N. of SW. cor. sec. 7, T. 6 N., R. 1 W., in NW angle of offset crossroads, 11 ft. N. and 1 ft. E. from fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T Sta No 35 L 1929"	573.671
Mulberry Grove, 3.9 mi. N. of, 0.25 mi. S. of NW. cor. sec. 18, T. 6 N., R. 1 W., near Bond-Fayette county line, on E. side of rd., 50 ft. W. of farmhouse, in root on W. side of 20-in. soft-maple tree, southernmost tree in row of four; spike with "16" on head	569.59

Mulberry Grove, 3.0 mi. N. of, near W. cor. secs. 18 and 19, T. 6 N., R. 1 W., 225 ft. S. of T-rd. E., near Bond-Fayette county line, in center of E. head wall of concrete culvert; monel-metal rivet-----	<i>Feet</i> 528.85
Mulberry Grove, 2.6 mi. N. of, 0.3 mi. S. of NW. cor. sec. 19, T. 6 N., R. 1 W., near Bond-Fayette county line, at southernmost of two culverts in bottoms, on E. head wall; chiseled square-----	523.26
Mulberry Grove, 2.0 mi. N. of, near SW. cor. sec. 19, T. 6 N., R. 1 W., 350 ft. N. of T-rd. E., 70 ft. N. and 21 ft. W. from junction of T-rd. W., on E. side of rd., near Bond-Fayette county line, 45 ft. NW. of Evans farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 6 1934"-----	554.543
Mulberry Grove, 1.7 mi. NE. of, 0.25 mi. N. of E $\frac{1}{4}$ cor. sec. 25, T. 6 N., R. 2 W., 870 ft. S. of NW. cor. sec. 30, T. 6 N., R. 1 W., 870 ft. S. of junction of T-rd. E., near Bond-Fayette county line, on top of center of W. head wall of concrete culvert; chiseled square---	533.23
Mulberry Grove, 1.4 mi. NE. of, near W $\frac{1}{4}$ cor. sec. 30, T. 6 N., R. 1 W., 200 ft. N. of fence line E., 750 ft. N. of crossing of American Telephone & Telegraph cable line, on E. side of rd., in root on W. side of 20-in. elm tree; spike with "16" on head-----	547.42
Mulberry Grove, 1.1 mi. NE. of, about 0.25 mi. N. of SW. cor. sec. 30, T. 6 N., R. 1 W., near Bond-Fayette county line, 20 ft. N. and 37 ft. E. from junction of T-rd. E., in concrete post; standard tablet stamped "T T Sta No 34 L 1929"-----	549.901
Mulberry Grove, near NE. limits of, near cor. secs. 25, 30, 31, and 36, T. 6 N., Rs. 1 and 2 W., at concrete bridge over Owl Creek, on top of W. end of S. abutment; chiseled square-----	502.79
Mulberry Grove, 95 ft. E. of E. limits of, 130 ft. W. of junction of U. S. Highway 40 and T-rd. N. along Bond-Fayette county line, on top of center of S. head wall of concrete culvert; monel-metal rivet-----	549.29
Mulberry Grove, on Maple Street, 150 ft. S. of right-angle turn S. in highway, 33 ft. N. of Beesley Garage, on top of W. head wall of concrete culvert; monel-metal rivet-----	555.50
Mulberry Grove, at W. edge of, near W $\frac{1}{4}$ cor. sec. 35, T. 6 N., R. 2 W., 125 ft. S. and 27 ft. W. from junction of rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 7 1934"-----	558.920
Mulberry Grove, 1.0 mi. S. of, near center of sec. 1, T. 5 N., R. 2 W., 25 ft. N. and 55 ft. W. from junction of N-S. rd., in root on SE. side of 12-in. elm tree; spike with "16" on head-----	552.74
Mulberry Grove, 1.6 mi. S. of, near S $\frac{1}{4}$ cor. sec. 1, T. 5 N., R. 2 W., 12 ft. N. and 26 ft. W. from junction of T-rd. E., 140 ft. SW. of residence of Clyde Paulin, 1 ft. E. of fence line, in concrete post; standard tablet stamped "T T Sta No 33 L 1929"-----	530.105
Mulberry Grove, 2.0 mi. S. of, near center of NE $\frac{1}{4}$ sec. 12, T. 5 N., R. 2 W., on E. side of rd., 80 ft. W. of farmhouse of H. S. Johnson, in root on W. side of 24-in. hackberry tree; spike with "16" on head-----	513.08
Mulberry Grove, 2.2 mi. S. of, about 0.25 mi. E. of center of sec. 12, T. 5 N., R. 2 W., 250 ft. S. of junction of private rd., on top of E. wing wall of S. abutment of concrete bridge; chiseled square-----	478.52
Mulberry Grove, 2.6 mi. S. of, near center of SE $\frac{1}{4}$ sec. 12, 0.2 mi. N. of crossroads, on W. side of rd., at residence of C. E. Borrer, on top of SE. corner of concrete cistern wall; U. S. C. & G. S. and State Survey standard disk stamped "31 8 1934"-----	514.500

Mulberry Grove, 2.8 mi. S. of, 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 12, T. 5 N., R. 2 W., 22 ft. N. and 35 ft. E. from crossroads, 50 ft. SW. of residence of Tallie Johnson, 16 ft. W. of 30-in. maple tree in fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 SA 1934"	Feet 512. 803
Reference mark, 48 ft. W. of tablet, 23 ft. N. and 13 ft. W. from crossroads, in root on S. side of 30-in. white-oak tree; spike with "16" on head	511. 41
2. From point 1.5 miles south and 2.2 miles east from Pocahontas along roads alternately east and north to west quarter corner sec. 36, T. 5 N., R. 4 W., thence northwest and west to point 0.8 mile north and 2.2 miles east from Pocahontas (by H. A. Drake in 1934; releveled by S. R. Archer in 1935)	
[A jog from New Douglas quadrangle, line 4]	
Pocahontas, 1.2 mi. S. and 2.8 mi. E. from, near center of NE $\frac{1}{4}$ sec. 12, T. 4 N., R. 4 W., 0.25 mi. N. of junction of T-rd. N., in NW. angle of junction of private rd. W., in root on SE. side of 24-in. oak tree; copper nail and washer (established in 1935)	531. 08
Pocahontas, 0.4 mi. S. and 3.0 mi. E. from, about 3 mi. W. of Dudleyville, 740 ft. N. of E $\frac{1}{4}$ cor. sec. 1, T. 4 N., R. 4 W., 120 ft. N. and 25 ft. W. from junction of T-rd. E., at fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 5 1934"	540. 136
Pocahontas, 0.5 mi. N. and 3.0 mi. E. from, near E $\frac{1}{4}$ cor. sec. 36, T. 5 N., R. 4 W., 115 ft. S. of junction of T-rd. E., on top of N. end of W. head wall of concrete culvert under rd. S.; chiseled square	494. 92
Pocahontas, 0.8 mi. N. and 2.7 mi. E. from, near center of NE $\frac{1}{4}$ sec. 36, T. 5 N., R. 4 W., about 2.5 mi. SW. of Stubblefield, 200 ft. SE. of junction of U. S. Highway 40, on top of NW. end of SW. head wall of concrete culvert under rd. SE.; chiseled square	472. 13
[Continued in New Douglas quadrangle, line 4]	
3. From point 2.2 miles south and 3.7 miles east from Old Ripley along roads east, north, and west 0.8 mile to point 1.5 miles south and 3.7 miles east from Old Ripley (by H. A. Drake in 1934; releveled by S. R. Archer in 1935)	
[A jog from New Douglas quadrangle, line 4]	
Old Ripley, 1.5 mi. S. and 3.8 E. from, 1.1 mi. S. thence 5.0 mi. W. from Greenville, 0.25 mi. W. of N $\frac{1}{4}$ cor. sec. 24, T. 5 N., R. 4 W., 400 ft. S. of junction of E.-W. rd., on top of S. end of W. head wall of concrete culvert under highway; chiseled square	529. 39
[Continued in New Douglas quadrangle, line 4]	
4. From point 1.5 miles south and 3.8 miles east from Old Ripley east along road 0.75 mile (by S. R. Archer in 1935; spur line leveled twice)	
Old Ripley, 1.5 mi. S. and 4.5 mi. E. from, 1.5 mi. S. and 4.0 mi. W. from Greenville, 30 ft. N. and 15 ft. W. from E. cor. secs. 13 and 24, T. 5 N., R. 4 W., 140 ft. N. and 15 ft. W. from W. cor. secs. 18 and 19, T. 5 N., R. 3 W., near NW. corner of T-rd. W., just N. of junction of T-rd. E.; standard iron post with bronze cap stamped "Prim Trav Sta No 75 1911 543" (recovered in 1937)	542. 532
Reference mark, in SW. angle of junction of T-rd., in root on NW. side of large forked wild-cherry tree; copper nail and washer	543. 22

5. From point 0.25 mile east of west quarter corner sec. 36, T. 6 N., R. 4 W., alternately north and east along roads to junction of State Highway 127, thence north along highway to point 2.2 miles south of Donnellson (by S. R. Archer in 1935)⁸⁶

[Continued from New Douglas quadrangle, line 5]

T. 6 N., R. 4 W., 0.25 mi. W. of N $\frac{1}{4}$ cor. sec. 36, 110 ft. E. of rd. S., 150 ft. W. of junction of rd. N., on S. side of E.-W. rd., at fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "575"-----	Feet 574.686
T. 6 N., R. 4 W., near center of NW $\frac{1}{4}$ sec. 24, 125 ft. S. of junction of E.-W. rd., on W. side of rd., at fence line, in concrete post; U. S. C. & G. S. standard disk stamped "586"-----	585.517
T. 6 N., R. 3 W., 0.25 mi. N. of W $\frac{1}{4}$ cor. sec. 19, 110 ft. E. of junction of rd. N., on S. side of rd., at fence line, in root on NW. side of 10-in. elm tree; copper nail and washer-----	594.38
T. 6 N., R. 3 W., near center of NE $\frac{1}{4}$ sec. 19, 170 ft. W. of junction of State Highway 127 and T-rd. W., on S. side of rd., at fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "592"-----	592.284 601.702
U. S. C. & G. S. standard disk stamped "H 113 1935"-----	
T. 6 N., R. 3 W., about 0.25 mi. E. of center of sec. 18, 1.25 mi. NW. of Ayers, on N. side of Chicago, Burlington & Quincy R. R. tracks, on W. side of highway, on top of SE. corner of concrete foundation of electric crossing-signal; chiseled square ⁸⁷ -----	602.40
T. 6 N., R. 3 W., 0.25 mi. E. of center of sec. 7, 3.6 mi. S. of Donnellson, at offset crossroads, on W. side of highway, 150 ft. S. of rd. W., 185 ft. S. of junction of rd. E., at fence line, in concrete post; U. S. C. & G. S. standard disk stamped "602"-----	602.048
Donnellson, 3.1 mi. S. of, about 0.2 mi. E. of quarter corner between secs. 6 and 7, at angle in highway and point where old rd. made jog W., on E. side of highway, on top of S. end of E. head wall of concrete culvert; chiseled square-----	605.99
Donnellson, 2.6 mi. S. of, about 0.25 mi. SE. of N $\frac{1}{4}$ cor. fractional sec. 6, T. 6 N., R. 3 W., 165 ft. S. of T-rd. E., on top of N. end of E. head wall of concrete culvert; chiseled square-----	594.85

[Continued in Coffeen quadrangle, line 5]

6. From crossroads 1.5 miles south and 4 miles west from Greenville along roads generally east to point 1.9 miles northeast of Pleasant Mound, thence north to crossroads 2.8 miles south of Mulberry Grove (by S. R. Archer in 1937)

Greenville, 1.5 mi. S. and 3.3 mi. W. from, 470 ft. E. of junction of T-rd. N. and N $\frac{1}{4}$ cor. sec. 19, T. 5 N., R. 3 W., on S. side of rd., on E. side of driveway, 100 ft. E. of farmhouse, in root on W. side of 12-in. elm tree; copper nail and washer-----	545.00
Greenville, 1.5 mi. S. and 2.5 mi. W. from, near quarter corner between secs. 17 and 20, T. 5 N., R. 3 W., at concrete bridge over East Branch of Shoal Creek, on top of N. wing wall of E. abutment; chiseled square-----	481.75

⁸⁶ The first part of this line appears also in New Douglas quadrangle.

⁸⁷ Established as a reference mark to U. S. C. & G. S. standard disk stamped "H 113 1935."

Greenville, 1.5 mi. S. and 2.0 mi. W. from, near N. cor. secs. 20 and 21, T. 5 N., R. 3 W., on S. side of rd., on W. side of gate to field, inside and on W. side of fence corner, in concrete post; U. S. C. & G. S. and State Survey standard tablet stamped "507"-----	<i>Feet</i> 506. 739
Greenville, 1.5 mi. S. and 1.0 mi. W. from, near SE. cor. sec. 16, T. 5 N., R. 3 W., 770 ft. NE. of junction of U. S. Highway 40, 980 ft. SW. of junction of T-rd. E., on top of N. end of W. head wall of concrete culvert; chiseled square-----	568. 87
Greenville, 0.25 mi. W. thence 1.2 mi. S. from post office, near center of SE $\frac{1}{4}$ sec. 15, T. 5 N., R. 3 W., 18 ft. S. and 25 ft. W. from junction of T-rd. E., 160 ft. S. and 25 ft. W. from junction of T-rd. W., in concrete post; standard tablet stamped "T T Sta No 40 L 1929 550"-----	550. 440
Greenville, in SW. part of, at NW. corner of intersection of Fourth and Willard Streets, on top of concrete curb; chiseled square-----	564. 54
Greenville, at SW. corner of Bond County courthouse grounds, midway of curved corner of concrete terrace curb, 2 ft. N. of inside edge of curb, 4 ft. E. of S. corner of concrete base of light pedestal, in concrete post, flush with ground; U. S. C. & G. S. and State Survey standard disk stamped "619"-----	619. 331
Greenville, 1.5 mi. S. and 0.2 mi. E. from, 0.25 mi. E. of NW. cor. sec. 23, T. 5 N., R. 3 W., on S. side of rd., at right-angle turn E. in rd., on E. side of private rd. S., in root on NW. side of 30-in. cottonwood tree; copper nail and washer-----	536. 99
Greenville, 1.5 mi. S. and 1.0 mi. E. from, 585 ft. E. of W. cor. secs. 13 and 24, T. 5 N., R. 3 W., 585 ft. E. of junction of T-rd. S., 280 ft. W. of junction of State Highway 127, 230 ft. E. of E. end of highway bridge over fork of Beaver Creek, on top of E. end of N. head wall of concrete culvert under rd. W.; chiseled square-----	520. 83
Greenville, 2.5 mi. S. and 2.0 mi. E. from, 0.3 mi. S. and 4.4 mi. W. from Pleasant Mound, 27 ft. S. and 46 ft. E. from NW. cor. sec. 30, T. 5 N., R. 2 W., in SE. angle of junction of rd. E., 15 ft. S. and 46 ft. E. from intersection of angle in State Highway 127, in concrete post; standard tablet stamped "T T Sta No 39 L 1929 534"-----	534. 052
Pleasant Mound, 0.3 mi. S. and 3.2 mi. W. from, near NW. cor. sec. 29, T. 5 N., R. 2 W., 100 ft. E. of crossroads, on S. side of rd., at fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "543"-----	543. 524
U. S. C. & G. S. standard disk stamped "R 113 1935"-----	537. 863
Pleasant Mound, 0.3 mi. S. and 1.0 mi. W. from, 0.25 mi. E. of NW. cor. sec. 27, T. 5 N., R. 2 W., 16 ft. S. and 60 ft. E. from crossroads, 1 ft. N. of fence line, in concrete post; standard tablet stamped "T T Sta No 38 L 1929 538"-----	538. 239
Pleasant Mound, 0.2 mi. W. thence 0.3 mi. S. from, near NW. cor. sec. 26, T. 5 N., R. 2 W., 33 ft. S. and 60 ft. E. from junction of N.-S. rd., 14 ft. S. and 38 ft. E. from NW. corner of yard of farmhouse, in root on S. side of 24-in. maple tree; copper nail and washer-----	565. 27

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Pleasant Mound, 0.2 mi. W. of center of, 0.3 mi. N. of SW. cor. sec. 23, T. 5 N., R. 2 W., 30 ft. S. and 115 ft. E. from junction of T-rd. E., 50 ft. N. and 15 ft. W. from NW. corner of school, 10 ft. S. of telephone pole, in schoolyard, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "585"-----	Feet 584.667
Pleasant Mound, 0.8 mi. E. of, 0.25 mi. N. of SW. cor. sec. 24, 55 ft. N. and 30 ft. W. from junction of N-S. rd., in yard in front of farmhouse, in root on NE. side of 30-in. maple tree; copper nail and washer-----	506.01
Pleasant Mound, 1.9 mi. NE. of, 4.2 mi. S. of Mulberry Grove, in S. part of NE¼ sec. 24, T. 5 N., R. 2 W., 54 ft. N. and 30 ft. E. from junction of T-rd. N., in concrete post; standard tablet stamped "T T Sta No 32 L 1929 485"-----	484.936
Mulberry Grove, 3.8 mi. S. of, about 0.25 mi. E. of S¼ cor. sec. 13, T. 5 N., R. 2 W., at highway bridge, on top of SE. end of E. wing wall of S. concrete abutment; chiseled square-----	470.91
7. From road junction 1.9 miles northeast of Pleasant Mound east along road to point 1.8 miles west thence 0.6 mile southwest from Pittsburg (by S. R. Archer in 1937)	
Pleasant Mound, 2.4 mi. NE. of, 1.8 mi. W. thence 0.7 mi. SW. from Pittsburg, near center of NW¼ sec. 19, T. 5 N., R. 1 W., at E. end of bridge over Hurricane Creek, on top of S. side of S. circular steel pier, on top of nut and thread end of westernmost of two bolts; chiseled square-----	468.69
[Continued in Vandalia quadrangle, line 12]	
8. From road junction 0.8 mile east of Pleasant Mound along roads south and east 1.8 miles to Bond-Fayette county line, thence south 4 miles, thence southwest to Tamalco, thence southeast along Chicago, Burlington & Quincy Railroad to point 0.7 mile northwest of Keyesport (by S. R. Archer in 1937)	
Pleasant Mound, 0.8 mi. S. and 1.7 mi. E. from, 500 ft. W. of E¼ cor. sec. 25, T. 5 N., R. 2 W., 500 ft. W. of right-angle turn from E. to S. in rd., on N. side of rd., 130 ft. E. of farmhouse, in root on S. side of 10-in. tree, easternmost of two hickory trees; copper nail and washer-----	495.34
T. 5 N., R. 2 W., near SE. cor. sec. 25, 5.5 mi. S. and 0.6 mi. E. from Mulberry Grove, 1.3 mi. N. and 3.0 mi. E. from Hookdale, near Bond-Fayette county line, 43 ft. N. and 24 ft. W. from crossroads, 14 ft. N. and 1 ft. E. from fence corner, in concrete post; standard tablet stamped "T T Sta No 36 L 1929 494"-----	493.581
T. 5 N., R. 2 W., near E¼ cor. sec. 36, at steel highway bridge, on top of W. end of S. concrete abutment; chiseled square-----	466.20
T. 4 N., R. 2 W., near NE. cor. sec. 1, 0.3 mi. N. thence 3.0 mi. E. from Hookdale, in SW. angle of crossroads, on top of S. end of W. head wall of concrete culvert under rd. S.; chiseled square-----	491.21
T. 4 N., R. 1 W., near SW. cor. sec. 6, 4.9 mi. NE. of Tamalco, 25 ft. N. and 18 ft. E. from crossroads, 3 ft. NE. of telephone pole, inside fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "493"-----	493.163
Tamalco, 4.4 mi. NE. of, near quarter corner between secs. 7 and 12, T. 4 N., Rs. 1 and 2 W., 90 ft. S. of crossroads, on top of N. end of E. head wall of concrete culvert; chiseled square-----	484.91

Tamalco, 3.4 mi. NE. of, 2.2 mi. S. and 3.0 mi. E. from Hookdale, 3.5 mi. N. thence 1.0 mi. E. from Keyesport, near W $\frac{1}{4}$ cor. sec. 18, T. 4 N., R. 1 W., 6 ft. N. and 19 ft. E. from center of right-angle turn from S. to W. in rd., 19 ft. N. of fence corner and fence E., in concrete post; standard tablet stamped "T T Sta No 37 L 1929 507"-----	Feet 507.000
Tamalco, 2.6 mi. NE. of, about 650 ft. NE. of S $\frac{1}{4}$ cor. sec. 13, T. 4 N., R. 2 W., at summit of hill, on W. side of rd., 100 ft. S. of farmhouse, on S. side of driveway, in root on NE. side of 24-in. hackberry tree; copper nail and washer-----	496.05
Tamalco, 2.2 mi. NE. of, 0.25 mi. N. of center of sec. 24, T. 4 N., R. 2 W., in NE. angle of rd. junction, 140 ft. E. of E. end of bridge, on top of W. end of N. head wall of concrete culvert; chiseled square-----	451.93
Tamalco, 1.0 mi. E. thence 0.5 mi. N. from, near E $\frac{1}{4}$ cor. sec. 23, T. 4 N., R. 2 W., 25 ft. N. of junction of private lane W., on top of S. end of W. head wall of concrete culvert; chiseled square-----	467.48
Tamalco, 1.0 mi. E. of, near SE. cor. sec. 23, T. 4 N., R. 2 W., 20 ft. N. and 40 ft. W. from crossroads, in SE. corner of schoolyard, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "473"-----	472.858
U. S. C. & G. S. standard disk stamped "U 113 1935"-----	479.468
Tamalco, 1.1 mi. SE. of, 1.2 mi. NW. of Keyesport, near quarter corner between secs. 26 and 35, T. 4 N., R. 2 W., 21 ft. N. of center line of E.-W. rd., 42 ft. W. of center line of W. track; standard iron post with bronze cap stamped "Prim Trav Sta No 6 1907 465" (elevation determined by U. S. C. & G. S. in 1935)-----	464.786

[Continued in Carlyle quadrangle, line 9]

9. From point 0.8 mile north and 1.2 miles east from Keyesport along roads west and south to point 0.5 mile north of Keyesport (by S. R. Archer in 1937)

[Continued from Vandalia quadrangle, line 13]

Keyesport, 0.8 mi. N. thence 0.5 mi. E. from, 0.25 mi. N. of center of sec. 36, T. 4 N., R. 2 W., on N. side of rd., in front yard of farmhouse, in root on S. side of 24-in. elm tree; copper nail and washer-----	453.08
Keyesport, 0.8 mi. N. of, 0.25 mi. S. of NW. cor. sec. 36, T. 4 N., R. 2 W., 50 ft. E. of junction of N.-S. rd., on S. side of rd., at fence, in root on E. side of 30-in. elm tree; copper nail and washer----	464.37

[Connects with line 3 in Carlyle quadrangle]

MURPHYSBORO QUADRANGLE

[Latitude 37°45'–38°00'; longitude 89°15'–89°30']

JACKSON AND PERRY COUNTIES

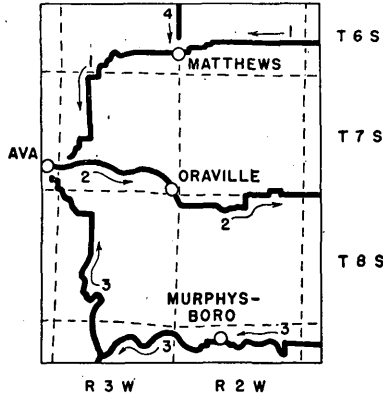


FIGURE 55.—Lines of leveling in Murphysboro quadrangle.

1. From point 4.2 miles north and 0.6 mile west from Elkhville, along roads alternately west and south to Ava (by Henry Bücher in 1907)

[Connects with line 4 in Herrin quadrangle]

Elkhville, 4.2 mi. N. thence 3.0 mi. W. from, 4.8 mi. E. of Matthews, 0.25 mi. E. of W¼ cor. sec. 26, T. 6 S., R. 2 W., on S. side of rd., at junction of T-rd. N., 38.5 ft. W. of field fence, 1 ft. N. of fence; standard iron post with bronze cap stamped "451 Adj"-----	Feet 450.548
Matthews, 1.8 mi. E. of, 0.25 mi. S. of center of sec. 29, T. 6 S., R. 2 W., at junction of T-rd. W., on S. side of rd., 2 ft. N. of fence, 2.2 ft. W. of fence corner; standard iron post with bronze cap stamped "405 Adj"-----	404.628
Matthews, 1.0 mi. W. of, near S. cor. secs. 25 and 26, T. 6 S., R. 3 W., on N. side of rd., opposite T-rd. S., 21 ft. E. of small gate in fence, 1 ft. S. of fence, 8 ft. W. of telephone pole; standard iron post with bronze cap stamped "409 Adj"-----	408.730
Matthews, 5.0 mi. SW. of, 6.5 mi. NW. of Mobile & Ohio R. R. sta. at Ava, 0.25 mi. S. of NE. cor. sec. 5, T. 7 S., R. 3 W., near SW. corner of junction of rd. W., on S. side of rd., 11 ft. W. of fence corner; standard iron post with bronze cap stamped "396 Adj"-----	396.123
Ava, 3.8 mi. NE. of, near center of sec. 17, T. 7 S., R. 3 W., in SE. angle of junction of secondary rd. E., W. of fence, S. of fence corner; standard iron post with bronze cap stamped "522 Adj"-----	522.211
Ava, at SE. corner of lot of Mobile & Ohio R. R. sta., 1 ft. W. of sidewalk; standard iron post with bronze cap stamped "Prim Trav Sta No 37 1906 604 Adj" (recovered in 1915)-----	604.427

2. From point 1.1 miles east of Ava east and southeast along Mobile & Ohio Railroad to point 0.7 mile southeast of Oraville, thence east along road to Finney, thence north along Illinois Central Railroad 0.5 mile, thence east along road to point 1.8 mile south and 1 mile west from Hallidayboro (by Henry Bücher in 1907)

Ava, 2.0 mi. E. of, 2.6 mi. W. of Bryden, 0.25 mi. S. of N $\frac{1}{4}$ cor. sec. 29, T. 7 S., R. 3 W., on E. side of rd. crossing, 70 ft. N. of track, 25 ft. N. of N. right-of-way fence, 1 ft. W. of fence; standard iron post with bronze cap stamped "521 Adj"-----	Feet 521.284
Bryden, at rd. crossing, 2.2 mi. NW. of Oraville, in NE. angle of rd. crossing, E. of trestle 564-A, 35 ft. N. of track, 1 ft. W. of fence, within limits of right-of-way; standard iron post with bronze cap stamped "415 Adj"-----	414.943
Oraville, at sta., in SE. corner of rd. crossing, on E. side of rd. and track, 1 ft. W. of fence, 4 ft. S. of fence corner; standard iron post with bronze cap stamped "396 Adj"-----	395.470
Oraville, 0.7 mi. SE. thence 1.0 mi. E. from, 2.2 mi. W. of Finney, near E $\frac{1}{4}$ cor. sec. 6, T. 8 S., R. 2 W., in NW. angle of crossroads, 1 ft. E. of fence, 3 ft. N. of fence corner; standard iron post with bronze cap stamped "396 Adj"-----	396.340
Finney, at sta.; top of rail-----	397.3
Finney, 0.5 mi. N. of, near NE. cor. sec. 4, T. 8 S., R. 2 W., in SW. angle of crossroads, 1 ft. E. of fence, 4 ft. S. of fence corner; standard iron post with bronze cap stamped "396 Adj"-----	395.786
Finney, 0.5 mi. N. thence 2.4 mi. E. from, 1.8 mi. S. and 2.8 mi. W. from Hallidayboro, near E. cor. secs. 2 and 35, Tps. 7 and 8 S., R. 2 W., on W. side of rd., opposite T-rd. E., 5 ft. N. of telephone pole; standard iron post with bronze cap stamped "404 Adj"-----	404.290

[Connects with line 3 in Herrin quadrangle]

3. From point 5.7 miles east of Murphysboro along roads and railroads west to Grimsby, thence generally northwest to Ava (by Henry Bücher in 1907)

[Continued from Herrin quadrangle, line 2]

Murphysboro, 3.6 mi. E. of Jackson County courthouse at, in NW $\frac{1}{4}$ sec. 12, T. 9 S., R. 2 W., in SW. angle of intersection of Illinois Central R. R., 43 ft. S. of track, 1 ft. E. of fence, in line with S. right-of-way fence; standard iron post with bronze cap stamped "397 Adj" ⁸⁸ -----	396.484
Murphysboro, 2.0 mi. E. of, at concrete culvert G 86-09, on top of N. wall, on brass plate "J. L. Fulton Co. Chicago 1898"; middle "c" in "Chicago"-----	378.445
Murphysboro, 0.7 mi. E. of, at NE. corner of I. C. R. R. bridge 84-85 over Big Muddy River, on top of concrete abutment; chiseled square-----	389.00
Murphysboro, at Jackson County courthouse, in NW. corner of courthouse lot; standard iron post with bronze cap stamped "Prim Trav Sta No. 29 1906 419 Adj" (recovered in 1921) ⁸⁹ -----	419.060
Murphysboro, at Walnut Street crossing of Mobile & Ohio R. R.; top of rail-----	418.0

⁸⁸ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "M 119 1935," elevation 393.523 ft.

⁸⁹ In 1936 this bench mark was reported destroyed.

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Murphysboro, at St. Louis, Iron Mountain & Southern R. R. sta., at rd. crossing; top of rail-----	<i>Feet</i> 409.1
Murphysboro, 2.2 mi. W. of St. L. I. M. & S. R. R. sta. at, 4.6 mi. NE. of St. L. I. M. & S. R. R. sta. in Grimsby, at water tank, in W. face of northernmost of W. concrete foundation piers; aluminum tablet stamped "367 Adj" ⁹⁰ -----	367.154
Grimsby (Sand Ridge), at intersection of Illinois Central R. R.; top of rail-----	364.0
Grimsby, on N. side of St. L. I. M. & S. R. R. sta., in NW. angle of junction of T-rd., 1.5 ft. S. of fence, 6.5 ft. W. of fence corner; standard iron post with bronze cap stamped "361 Adj" ⁹¹ -----	361.143
Grimsby, 3.0 mi. N. of, 9.9 mi. by rd. SE. of Ava, in NW¼ sec. 33, T. 8 S., R. 3 W., at intersection of I. C. R. R. and Murphysboro-Ava rd., on E. side of rd., 50 ft. S. of track, 30 ft. N. of SE. corner of right-of-way fence, 1 ft. W. of fence; standard iron post with bronze cap stamped "374 Adj" (recovered in 1921)-----	374.150
Ava, 6.1 mi. SE. of, in SE¼ sec. 17, T. 8 S., R. 3 W., at point where rd. jogs E., then N., near junction of private rd. S., on E. side of rd., 1 ft. W. of fence, 4 ft. N. of telephone pole; standard iron post with bronze cap stamped "707 Adj"-----	707.300
Ava, 3.6 mi. SE. of, about 800 ft. E. of SW. cor. sec. 5, T. 8 S., R. 3 W., 40 ft. N. of rd. junction, on W. side of rd., just S of Jones farmhouse, near old rail fence; standard iron post with bronze cap stamped "641 Adj"-----	641.203

4. From point 0.2 mile south of Pyatts south along Illinois Central Railroad to Matthews, thence west along road 1 mile (by H. E. Wessman in 1921)

[Continued from Pinckneyville quadrangle, line 1]

Pyatts, 0.3 mi. S. of, 2.2 mi. N. of Matthews, 0.25 mi. S. of E¼ cor. sec. 13, T. 6 S., R. 3 W., on NE. corner of concrete base of semaphore G-663; chiseled square-----	402.39
--	--------

⁹⁰ In 1936 this bench mark was reported destroyed.

⁹¹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "C 119 1935," elevation 368.941 ft.

NASHVILLE QUADRANGLE

[Latitude 38°15'–38°30'; longitude 89°15'–89°30']

CLINTON AND WASHINGTON COUNTIES

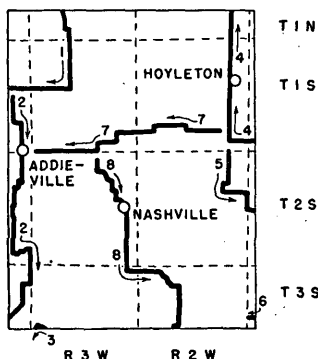


FIGURE 56.—Lines of leveling in Nashville quadrangle.

1. From point 1 mile east thence 2.5 miles south from Bartleso south along roads to center of sec. 16, T. 1 S., R. 3 W., thence west along State Highway 177 to point 3.3 miles east of Okawville (by W. A. Gelbach in 1907)

[Connects with line 1 in Carlyle quadrangle]

Frogtown (Washington County), 0.3 mi. W. of, 3.5 mi. E. of Okawville, 4.0 mi. N. of Addieville, near E $\frac{1}{4}$ cor. sec. 14, T. 1 S., R. 4 W., in SW. angle of crossroads; standard iron post with bronze cap stamped "1907 448"-----

Feet
447.983

[Continued in Okawville quadrangle, line 1]

2. From crossroads 4 miles north of Addieville generally south along roads to point on Missouri-Illinois Railroad 0.9 mile northeast of Oakdale, thence southwest along railroad 1.4 miles (by W. A. Gelbach in 1908)

Addieville, 0.8 mi. N. of, 0.25 mi. N. of center of sec. 36, T. 1 S., R. 4 W., in SW. angle of junction of T-rd. W.; standard iron post with bronze cap stamped "Prim Trav Sta No. 15 1907 461" (recovered in 1930)-----

460.675

Addieville, 200 ft. E. of Louisville & Nashville R. R. sta., at R. R. crossing; top of rail-----

468.3

Addieville, 2.6 mi. S. of, near SW. cor. sec. 12, T. 2 S., R. 4 W., opposite T-rd. S., 2 ft. S. of garden fence of J. H. Sachteleben; standard iron post with bronze cap stamped "1908 499"-----

498.500

T. 2 S., R. 4 W., at cor. secs. 25, 26, 35, and 36; top of stone marking section corner-----

490.91

T. 2 S., R. 4 W., near W $\frac{1}{4}$ cor. sec. 36, in NE. angle of junction of E.-W. rd.; standard iron post with bronze cap stamped "1908 504"-----

503.300

T. 3 S., R. 4 W., near S $\frac{1}{4}$ cor. sec. 1, 0.9 mi. NE. along R. R. thence 1.1 mi. N. from Oakdale, near NE. corner of crossroads; standard iron post with bronze cap stamped "1908 511"-----

509.982

314 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Oakdale, 0.9 mi. NE. thence 0.6 mi. N. from, at center of sec. 12, T. 3 S., R. 4 W.; top of stone marking center of section----- *Feet*
498. 13
Oakdale, 300 ft. N. of M. I. R. R. sta., on W. side of rd. crossing,
10 ft. SW. of warning post; standard iron post with bronze cap
stamped "Prim Trav Sta No 16 1907 523" (recovered by U. S. C.
& G. S. in 1935)----- 522. 617

[Continued in Coulterville quadrangle, line 2]⁶²

3. Along roads northwest and south 0.4 mile in sec. 19, T. 3 S.,
R. 3 W. (by C. E. Walker in 1923)

[A jog from Pinckneyville quadrangle, line 2]

T. 3 S., R. 3 W., near center of sec. 19, 15 ft. W. of junction of rd.
S., on N. side of rd., 15 ft. N. of E.-W. rd., in fence corner, in
concrete post; standard tablet stamped "12 WA 1923"----- 530. 186
Reference mark, 80 ft. W. of rd. S., 15 ft. S. of center line of rd.,
on land of Henry Brammier, in root on S. side of 24-in. locust tree;
copper nail and washer----- 529. 94

[Continued in Pinckneyville quadrangle, line 2]

4. From point 3 miles south and 1.3 miles east from Hoyleton west
and north along roads to point 4 miles north of Hoyleton (by
L. V. Johnson in 1930; leveled twice to point 3 miles south of
Hoyleton)

[Continued from Richview quadrangle, line 9]

Hoyleton, 3.0 mi. S. thence 1.0 mi. E. from, near E $\frac{1}{4}$ cor. sec. 36, T. 1 S.,
R. 2 W., 30 ft. S. and 50 ft. W. from crossroads, 10 ft. NW. of NW.
corner of farmhouse, in root on N. side of 30-in. maple tree; copper
nail and washer----- 545. 56
Hoyleton, 3.0 mi. S. of, near W $\frac{1}{4}$ cor. sec. 36, T. 1 S., R. 2 W., 26 ft. S.
and 35 ft. E. from crossroads, in NW. corner of farmyard, in root on
NW. side of 12-in. maple tree; copper nail and washer----- 512. 14
Hoyleton, 2.5 mi. S. of, near SE. cor. sec. 26, T. 1 S., R. 2 W., 30 ft. N.
and 25 ft. W. from junction of T-rd. W., in concrete post; standard
tablet stamped "T T 85 S 1928"----- 504. 490
Reference mark, 120 ft. S. and 40 ft. E. from rd. junction; 40 ft. E.
of small wooden bridge over creek, in root on NE. side of 15-in.
maple tree; copper nail and washer----- 503. 97
Hoyleton, 1.5 mi. S. of, near SE. cor. sec. 23, T. 1 S., R. 2 W., 48
ft. N. and 25 ft. W. from junction of T-rd. W., 28 ft. N. and 25 ft.
W. from junction of T-rd. E., in root on SE. side of 6-in. hedge tree;
copper nail and washer----- 507. 81
Hoyleton, 0.5 mi. S. of, near SW. cor. sec. 13, T. 1 S., R. 2 W., 23 ft.
N. and 15 ft. E. from junction of T-rd. W., 1 ft. E. of N. end of E.
head wall of concrete bridge over creek, on concrete wing wall;
chiseled square----- 508. 83
Hoyleton, 43 ft. S. and 22 ft. E. from crossroads, 85 ft. S. of store of
Reinkens & Myers, 7 ft. S. of signpost, on concrete head wall of cul-
vert under E.-W. rd.; chiseled square----- 520. 73

⁶² This line cuts the southeast corner of Okawville quadrangle, but no bench marks were set in that portion of the line.

Hoyleton, in NW. corner of schoolyard, 70 ft. S. and 40 ft. E. from NW. cor. sec. 13, T. 1 S., R. 2 W., in concrete post; standard tablet stamped "T T 84 S 1928" ⁹³ -----	<i>Feet</i> 519. 667
Reference mark, at schoolhouse, on first concrete step; chiseled square-----	520. 86
Hoyleton, 1.0 mi. N. of, near E $\frac{1}{4}$ cor. sec. 11, T. 1 S., R. 2 W., 25 ft. N. and 10 ft. W. from crossroads, on W. concrete head wall of culvert under E.-W. rd.; chiseled square-----	509. 28
Hoyleton, 2.0 mi. N. of, near W $\frac{1}{4}$ cor. sec. 1, T. 1 S., R. 2 W., 120 ft. N. of E.-W. fence lines, 11 ft. E. of center line of rd., on top of E. concrete head wall of culvert over drain; chiseled square-----	480. 98
Hoyleton, 2.5 mi. N. of, near SW. cor. sec. 36, T. 1 N., R. 2 W., in NE. angle of crossroads, 1 ft. SW. of SW. beam of airplane beacon, on concrete base of beacon; chiseled square-----	474. 59
Hoyleton, 3.5 mi. N. of, near SE. cor. sec. 26, T. 1 N., R. 2 W., 25 ft. N. and 25 ft. W. from crossroads, in concrete post; standard tablet stamped "T T 83 S 1928"-----	454. 914
Reference mark, 25 ft. S. and 50 ft. E. from crossroads, in root on W. side of 18-in. locust tree; copper nail and washer-----	449. 36

[Continued in Carlyle quadrangle, line 5]

5. From crossroads 3 miles south of Hoyleton along roads generally south 2.8 miles, thence east and south to State Highway 15, thence east to point 7.2 miles east of Nashville (by L. V. Johnson in 1930)

Hoyleton, 3.5 mi. S. of, near SW. cor. sec. 36, T. 1 S., R. 2 W., 110 ft. N. and 25 ft. E. from junction of T-rd. W., 120 ft. SW. of farmhouse, in root on S. side of 18-in. walnut tree; copper nail and washer-----	518. 91
Hoyleton, 4.5 mi. S. of, near SE. cor. sec. 2, T. 2 S., R. 2 W., 135 ft. N. and 38 ft. W. from crossroads, 45 ft. NE. of NE. corner of church, 15 ft. W. of 36-in. oak tree, in root on SE. side of 12-in. maple tree; copper nail and washer-----	517. 37
T. 2 S., R. 2 W., 0.25 mi. W. of NE. cor. sec. 14, at junction of E.-W. rd., 30 ft. S. of rd. N., on W. side of fence, in concrete post; standard tablet stamped "T T 86 S 1928"-----	548. 713
T. 2 S., R. 1 W., near SW. cor. sec. 7, 27 ft. N. and 18 ft. E. from crossroads, in root on S. side of 20-in. wild-cherry tree; copper nail and washer-----	539. 45
T. 2 S., R. 2 W., about 0.3 mi. N. of SE. cor. sec. 13, 30 ft. N. and 12 ft. W. from center of steel bridge over Beaucoup Creek, on N. end of NW. wing wall of bridge; chiseled square-----	522. 60
T. 2 S., R. 1 W., about 0.25 mi. S. of NW. cor. sec. 19, 6.8 mi. E. of Nashville, 25 ft. N. and 13 ft. E. from intersection of State Highway 15, on N. end of E. concrete head wall of culvert under N.-S. rd.; chiseled square-----	551. 42

[Continued in Richview quadrangle, line 10]

6. West 0.4 mile along road between secs. 18 and 19, T. 3 S., R. 1 W. (by L. V. Johnson in 1930; spur line leveled twice)

[Continued from Richview quadrangle, line 11]

T. 3 S., Rs. 1 and 2 W., 1 ft. W. of cor. secs. 13, 18, 19, and 24; standard iron post with bronze cap stamped "Prim Trav Sta No 159 1911"-----	511. 174
---	----------

⁹³ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "K 104 1935," elevation 521.420 ft.

Reference mark, 23 ft. N. of post, in root on E. side of 20-in. oak tree; copper nail and washer-----	Feet 511. 28
7. From road junction 2.5 miles south of Hoyleton generally west along roads to road junction 0.8 mile north of Addieville (by L. V. Johnson in 1930)	
Hoyleton, 2.5 mi. S. thence 1.0 mi. W. from, 1.4 mi. E. of Huegely, near SW. cor. sec. 26, T. 1 S., R. 2 W., 23 ft. N. and 38 ft. E. from crossroads, in root on S. side of second Osage-orange tree from W.; copper nail and washer-----	496. 18
Huegely, 0.9 mi. E. of, near S $\frac{1}{4}$ cor. sec. 27, T. 1 S., R. 2 W., 22 ft. N. and 230 ft. W. from crossroads, in root on SE. side of 24-in. maple tree; copper nail and washer-----	495. 74
Huegely, 70 ft. N. of N. corner of Missouri-Illinois R. R. sta., 16 ft. N. and 25 ft. W. from center of main track at rd. crossing, 9 ft. SW. of 16-in. ash tree, on E. end of concrete culvert; chiseled square-----	495. 26
Huegely, 0.9 mi. NW. of, 0.25 mi. N. of SE. cor. sec. 29, T. 1 S., R. 2 W., on S. side of rd., 40 ft. W. of junction of T-rd. N., in concrete post; standard tablet stamped "T T 91 S 1928"-----	482. 027
Reference mark, 10 ft. W. of tablet, in root on N. side of 10-in. wild-cherry tree; copper nail and washer-----	482. 01
T. 1 S., R. 2 W., 0.25 mi. N. of S $\frac{1}{4}$ cor. sec. 29, 22 ft. S. and 180 ft. W. from crossroads, in knot on NE. side of 12-in. locust tree; copper nail and washer-----	475. 17
T. 1 S., R. 2 W., near center of SE $\frac{1}{4}$ sec. 30, 30 ft. S. and 15 ft. W. from intersection of center lines of rds. S. and E., 13 ft. S. of mail box post, in root on W. side of 8-in. locust tree; copper nail and washer-----	455. 47
T. 1 S., R. 3 W., near SE. cor. sec. 25, at intersection of State Highway 153, 150 ft. S. and 20 ft. W. from junction of T-rd. E., 13 ft. N. and 20 ft. W. from junction of T-rd. W., on W. end of N. concrete head wall of culvert; chiseled square-----	453. 42
T. 1 S., R. 3 W., near E. cor. secs. 26 and 35, 5.0 mi. E. and 1.0 mi. N. from Addieville, at junction of N.-S. rd., 17 ft. W. of T-rd. E., 4 ft. NE. of NE. corner of barn, in concrete post; standard tablet stamped "T T 92 S 1928"-----	453. 873
Addieville, 5.0 mi. E. and 0.5 mi. N. from, near quarter corner between secs. 35 and 36, T. 1 S., R. 3 W., 20 ft. S. of junction of E.-W. rd., in line with T-rd. N., in NE. corner of large patch of timber, in root on N. side of 24-in. black-oak tree; copper nail and washer-----	462. 84
Addieville, 4.0 mi. E. of, 4.4 mi. NW. of Washington County courthouse in Nashville, near SE. cor. sec. 34, T. 1 S., R. 3 W., 25 ft. N. and 80 ft. W. from junction of T-rd. N., 25 ft. N. of junction of T-rd. S., in root on W. side of 18-in. elm tree; copper nail and washer-----	457. 26
Addieville, 2.8 mi. E. of, 0.25 mi. W. of SE. cor. sec. 33, T. 1 S., R. 3 W., 25 ft. N. and 25 ft. E. from junction of T-rd. N., in concrete post; standard tablet stamped "T T 93 S 1928"-----	452. 583
Reference mark, 15 ft. SW. of tablet, on S. end of E. concrete head wall of culvert; chiseled square-----	453. 33
Addieville, 1.5 mi. E. of, near S $\frac{1}{4}$ cor. sec. 32, T. 1 S., R. 3 W., 18 ft. N. and 15 ft. W. from junction of T-rd. N., on SW. end of W. concrete head wall of culvert; chiseled square-----	451. 72

Addieville, 1.1 mi. E. of, near NE. cor. sec. 6, T. 2 S., R. 3 W., 18 ft. S. and 13 ft. W. from junction of T-rd. S., on W. concrete head wall of culvert; chiseled square-----	<i>Feet</i> 453.50
Addieville, 0.5 mi. E. of, 0.2 mi. E. of NW. cor. sec. 6, T. 2 S., R. 3 W., 18 ft. S. and 18 ft. W. from junction of T-rd. N., on S. concrete head wall of culvert; chiseled square-----	458.93
Addieville, 110 ft. E. of intersection of sidewalk and main track of Louisville & Nashville R. R., 28 ft. S. of intersection of E.-W. rd. and rd. NW. along R. R., 8 ft. N. of right-of-way fence, on concrete sidewalk; chiseled square-----	466.39
8. From point 4.4 miles northwest of Nashville alternately south and east along roads to east quarter corner sec. 20, T. 3 S., R. 2 W. (by L. V. Johnson in 1930)	
Nashville, 3.4 mi. NW. of, near SE. cor. sec. 3, T. 2 S., R. 3 W., 5 ft. N. and 16 ft. W. from crossroads, on E. end of N. concrete head wall of culvert; chiseled square-----	460.07
Nashville, 2.5 mi. NW. of, about 500 ft. E. of center of sec. 11, T. 2 S., R. 3 W., 90 ft. NW. of rd. junction, in row of five oak trees, in root on E. side of southernmost tree; copper nail and washer-----	458.23
Nashville, 1.9 mi. NW. of, 0.25 mi. W. of NE. cor. sec. 14, T. 2 S., R. 3 W., 15 ft. S. and 50 ft. E. from intersection of center lines of rds. N. and E., 150 ft. NW. of farmhouse, on E. concrete head wall of culvert under rd. S. to farmhouse; chiseled square-----	476.91
Nashville, 1.1 mi. NW. of, near W $\frac{1}{4}$ cor. sec. 13, T. 2 S., R. 3 W., 12 ft. S. and 10 ft. E. from junction of T-rd. E., on S. end of E. concrete head wall of culvert; chiseled square-----	483.32
Nashville, in SE. corner of courthouse yard, 1 ft. NW. of corner post of iron fence, in concrete post; standard tablet stamped "11 J 1930" ⁶⁴ -----	531.947
Reference mark, 15 ft. E. of tablet, on SE. corner of concrete base of city pump; chiseled square-----	531.65
Nashville, 0.9 mi. S. of courthouse, near S $\frac{1}{4}$ cor. sec. 24, T. 2 S., R. 3 W., 105 ft. N. and 40 ft. W. from junction of T-rd. W., near SE. corner of cemetery, in root on NE. side of 30-in. maple tree; copper nail and washer-----	559.43
Nashville, 2.0 mi. S. of, about 500 ft. S. of N $\frac{1}{4}$ cor. sec. 36, T. 2 S., R. 3 W., on E. side of rd., 500 ft. S. of T-rd. E., in root on W. side of double-trunked cottonwood tree; copper nail and washer--	522.50
Nashville, 3.2 mi. S. of, about 0.25 mi. S. of N $\frac{1}{4}$ cor. sec. 1, T. 3 S., R. 3 W., 3 ft. N. and 27 ft. W. from junction of T-rd. E., 11 ft. W. of fence corner, in concrete post; standard tablet stamped "12 J 1930"-----	509.621
Reference mark, 40 ft. S. of tablet, in root on NE. side of 36-in. locust tree; copper nail and washer-----	509.21
Nashville, 3.2 mi. S. thence 1.1 mi. E. from, about 0.25 mi. N. of center of sec. 6, T. 3 S., R. 2 W., 110 ft. S. and 6 ft. E. from intersection of dim cross rd., 400 ft. E. of corner of N.-E. fence, in root on NE. side of 14-in. walnut tree; copper nail and washer----	511.61

⁶⁴ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "D 104 1935," elevation 494.907 ft.

318 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Nashville, 3.2 mi. S. thence 1.9 mi. E. from, near center of NW $\frac{1}{4}$ sec. 5, T. 3 S., R. 2 W., 200 ft. S. of rd. junction, 4 ft. NE. of NE. corner of wooden bridge over creek, on knob on SW. side of 30-in. sycamore tree; copper nail and washer-----	<i>Feet</i> 481.25
T. 3 S., R. 2 W., 0.2 mi. W. of SE. cor. sec. 5, 21 ft. N. and 8 ft. E. from junction of T-rd. E., 52 ft. E. of double-trunked oak tree used as corner fence post, in concrete post; standard tablet stamped "13 J 1930"-----	506.484
Reference mark, 52 ft. W. of tablet, in root on S. side of double-trunked oak tree used as corner fence post; copper nail and washer-----	503.48
T. 3 S., R. 2 W., about 0.25 mi. E. of NW. cor. sec. 9, 160 ft. S. and 70 ft. E. from junction of T-rd. S., about 400 ft. W. of farmhouse, in root on S. side of 42-in. oak tree; copper nail and washer---	518.85
T. 3 S., R. 2 W., about 0.25 mi. E. of SW. cor. sec. 16, 25 ft. N. and 38 ft. W. from crossroads, 17 ft. W. of fence corner, inside fence, in concrete post; standard tablet stamped "14 J 1930"-----	499.487
Reference mark, in SE. angle of crossroads, in root on E. side of 10-in. Osage-orange tree; copper nail and washer-----	499.96
T. 3 S., R. 2 W., near E $\frac{1}{4}$ sec. 20, 50 ft. S. and 8 ft. W. from junction of T-rd. E., on W. concrete head wall of culvert; chiseled square-----	475.55

[Continued in Pinckneyville quadrangle, line 6]

NEW ATHENS QUADRANGLE

[Latitude 38°15'–38°30'; longitude 89°45'–90°00']

MONROE AND ST. CLAIR COUNTIES

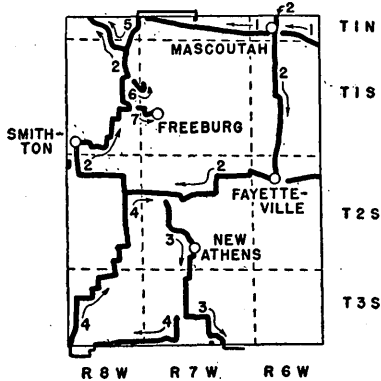


FIGURE 57.—Lines of leveling in New Athens quadrangle.

1. Northwest along Louisville & Nashville Railroad (by W. A. Gelbach in 1907)

[Continued from Okawville quadrangle, line 1]

Mascoutah, 0.2 mi. E. of sta., in NW. angle of rd. crossing, 4 ft. N. of right-of-way; standard iron post with bronze cap stamped "1907 424"-----	Feet 424. 242
Rentchler, 0.2 mi. E. of sta., 40 ft. N. of track, on E. side of wagon rd.; standard iron post with bronze cap stamped "1907 458" (recovered in 1930) ^{94a} -----	457. 950
Rentchler, 1.5 mi. NW. of sta., at Plum Hill School, in SE. angle of rd. crossing, in N. part of schoolyard, 30 ft. from corner, 2 ft. from R. R. right-of-way fence; standard iron post with bronze cap stamped "1907 464"-----	464. 130

[Continued in Belleville quadrangle, line 5]

2. From point 0.7 mile north of Mascoutah south along road to Fayetteville, thence generally west to sec. 4, T. 2 S., R. 8 W., thence alternately north and east by way of Smith-ton to Wilderman, thence northwest to point 1 mile south of Belleville (by W. A. Gelbach in 1907)

[Continued from Belleville quadrangle, line 4]

Mascoutah, 3.5 mi. S. of, 4.2 mi. N. of Fayetteville, at Engelmann School, in SE. corner of schoolyard; standard iron post with bronze cap stamped "1907 442"-----	441. 720
Fayetteville, 1.1 mi. N. of, in NW. angle of junction of township-line rd.; standard iron post with bronze cap stamped "1907 417"-----	416. 826
Fayetteville, 1.5 mi. NW. of, on SW. side of Fayetteville-Freeburg rd., at junction of rd. S., on E. side of N.-S. rd.; standard iron post with bronze cap stamped "1907 412"-----	411. 885
Fayetteville, 3.3 mi. W. thence 1.0 mi. S. from, 3.0 mi. E. of Five Points School, in SW. angle of junction of T-rd. W.; standard iron post with bronze cap stamped "1907 405"-----	404. 451

^{94a} In 1941 this bench mark was replaced by a standard tablet, stamped "Reset 1941," in a concrete post, set 24 ft. east of this position at the same elevation.

320 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Five Points School, 3.5 mi. NW. of New Athens, in SE. corner of schoolyard; standard iron post with bronze cap stamped "1907 446" ⁹⁵ -----	<i>Feet</i> 445.747
Five Points School, 2.0 mi. W. of, 5.2 mi. along rds. SE. of Smithton, near SE. cor. sec. 11, T. 2 S., R. 8 W., in NW. angle of crossroads; standard iron post with bronze cap stamped "1907 440"-----	439.598
Smithton, 1.8 mi. S. of, 15 ft. N. and 5 ft. E. from stone marking S¼ cor. sec. 4, T. 2 S., R. 8 W., in NE. angle of junction of T-rd. E.; standard iron post with bronze cap stamped "Prim Trav Sta No 22 1907 467"-----	465.976
Smithton, 0.3 mi. S. and 1.7 mi. E. from, 0.2 mi. SE. of W¼ cor. sec. 35, T. 1 S., R. 8 W., on E. side of N-S. rd., near junction of rd. W., 500 ft. S. of junction of rd. E., standard iron post with bronze cap stamped "1907 431"-----	430.812
Smithton, 4.3 mi. by rds. NE. of, 1.5 mi. W. of Freeburg, near center of sec. 24, T. 1 S., R. 8 W., in NE. angle of junction of T-rd. N.; standard iron post with bronze cap stamped "1907 513"-----	512.112
Freeburg, 2.7 mi. NW. of along Belleville-Freeburg plank rd., at Mount Pleasant School, in NW. corner of schoolyard; standard iron post with bronze cap stamped "1907 483"-----	481.959

[Connects with line 5 in Belleville quadrangle]

3. From Five Points School southeast along roads to New Athens, thence alternately south and east to sec. 23, T. 3 S., R. 7 W. (by W. A. Gelbach in 1907)

New Athens, at NW. corner of schoolyard; standard iron post with bronze cap stamped "1907 430" ⁹⁶ -----	429.375
New Athens, 1.8 mi. along rd. S. of, 0.25 mi. W. of center of sec. 4, T. 3 S., R. 7 W., at junction of T-rd. S., on N. side of E-W. rd.; standard iron post with bronze cap stamped "1907 415"-----	414.180
New Athens, 3.8 mi. along rd. S. of, 0.25 mi. W. of center of sec. 16, T. 3 S., R. 7 W., in SW. angle of crossroads; standard iron post with bronze cap stamped "1907 414"-----	413.533
New Athens, 4.5 mi. S. and 0.7 mi. E. from, about 6 mi. W. of Marissa, near center of sec. 22, T. 3 S., R. 7 W., 6 ft. S. and 25 ft. E. from center of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 20 1907 406" ⁹⁷ -----	405.655

[Continued in Baldwin quadrangle, line 3]

4. From crossroads 3.8 miles south of New Athens alternately west and south to Redbud, thence alternately north and east to crossroads 2 miles west of Five Points School (by W. A. Gelbach in 1907)

T. 3 S., R. 8 W., 0.25 mi. S. of center of sec. 23, in NE. angle of crossroads, standard iron post with bronze cap stamped "1907 391"-----	390.223
--	---------

[Jogs into Baldwin quadrangle, line 2]

⁹⁵ In 1935 this bench mark was replaced by an unstamped standard tablet in a concrete post. The new mark was set 35 ft. N. 57° W. from the old bench mark and at the same elevation. In 1936 this tablet was tied to U. S. C. & G. S. standard disk stamped "Y 99 1935," elevation 451.830 ft.

⁹⁶ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "W 99 1935," elevation 401.984 ft.

⁹⁷ In 1917 this mark was moved 17 ft. south and 6 ft. west from this position and reset at same elevation. In 1921 it was again moved 13 ft. east, and reset at same elevation. In 1941 the mark was moved about 5 ft. east. The elevation of the bench mark in its new position has not been determined.

Hecker, 1.2 mi. S. thence 1.0 mi. E. from, 0.25 mi. W. of center of sec. 10, T. 3 S., R. 8 W., in NW. angle of junction of T-rd. N.; standard iron post with bronze cap stamped "1907 438"----- *Feet*
437.664

Hecker, 4.5 mi. along rds. NE. of, 3.5 mi. in air line W. of New Athens, at Klein School, near center of Spanish Survey 607, at SW. corner of schoolyard; standard iron post with bronze cap stamped "1907 429"⁶⁸----- 428.651

5. From sec. 25, T. 1 N., R. 8 W., southwest along roads to State Highway 13, thence northwest along highway to point near west corner of Walnut Hill Cemetery in sec. 27, T. 1 N., R. 8 W. (by L. V. Johnson in 1930)

[A jog from Belleville quadrangle, line 16]

Grange Hall School, 1.2 mi. NE. of, 3.0 mi. in air line W. of Rentchler, 15 ft. S. and 10 ft. E. from junction of rd. NW., 500 ft. E. of farmhouse, on E. end of 12-in. iron culvert; chiseled square----- 505.44

Grange Hall School, 170 ft. SE. of, in NW. angle of crossroads, on concrete head wall of culvert; chiseled square----- 505.42

Grange Hall School, 1.0 mi. NW. of, 2.8 mi. SE. of city square in Belleville, 35 ft. N. and 35 ft. W. from junction of private rd. NE., 160 ft. NE. of tracks of Illinois Central R. R., in concrete post; standard tablet stamped "T T Sta No 10 F 1928"----- 464.615

Reference mark, 50 ft. S. and 50 ft. E. from tablet, on S. concrete head wall of culvert; chiseled square----- 469.47

Belleville, 2.4 mi. SE. of, near center of sec. 35, T. 1 N., R. 8 W., along State Highway 13, 200 ft. SE. of rd. junction, at culvert under private rd. to field, on W. concrete head wall; chiseled square----- 462.61

Belleville, 1.6 mi. SE. of city square, 0.2 mi. SE. of S. corner of Walnut Hill Cemetery, 40 ft. W. of rd. junction, on S. concrete head wall of culvert; chiseled square----- 470.91

[Continued in Belleville quadrangle, line 16]

6. From road junction 2.7 miles northwest of Freeburg southeast along plank road to Illinois Central Railroad, thence northwest 0.4 mile (by Harry McDermith in 1936)

Freeburg, 1.8 mi. along Belleville-Freeburg plank rd. NW. of, 0.5 mi. NW. of Mulberry Hill coal mine, on S. head wall of concrete culvert; chiseled square----- 523.72

U. S. C. & G. S. standard disk stamped "B 100 1935"----- 533.073

7. From road junction 1.5 miles west of Freeburg generally east along road to Freeburg (by Harry McDermith in 1936)

Freeburg, 0.5 mi. W. of, in SW $\frac{1}{4}$ sec. 19, T. 1 S., R. 7 W., at concrete culvert over Kinney Branch, on W. end of N. head wall; chiseled square----- 484.06

U. S. C. & G. S. standard disk stamped "A 100 1935"----- 514.343

⁶⁸ In 1934 this bench mark was replaced by a standard tablet in a concrete post. The new mark is 54 ft. north of center line of State Highway 156, and is 38 ft. N.9°26'W. from the old bench mark and 0.250 ft. higher. The figures given represent the new elevation.

NEW DOUGLAS QUADRANGLE

[Latitude 38°45'–39°00'; longitude 89°30'–89°45']

BOND AND MADISON COUNTIES

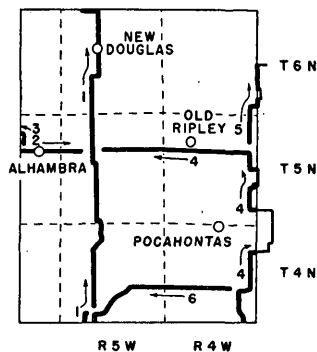


FIGURE 58.—Lines of leveling in New Douglas quadrangle.

1. From point about 0.5 mile north of Highland generally north along roads to point 2 miles north and 1 mile west from New Douglas (by R. G. Clinite in 1912)

[Connects with line 2 in Breese quadrangle]

Highland, 2.5 mi. N. and 0.5 mi. E. from, 3.8 mi. S. of Grant Fork, 10 ft. S. and 20 ft. E. from W $\frac{1}{4}$ cor. sec. 21, T. 4 N., R. 5 W., on E. side of rd., opposite T-rd. W.; standard iron post with bronze cap stamped "1912 535" ⁹⁹ -----	Feet 535. 266
Grant Fork, 0.9 mi. S. of, about 0.3 mi. S. of center of sec. 4, T. 4 N., R. 5 W., about 800 ft. S. of small creek, on E. side of rd., in root of 20-in. oak tree; copper nail and washer-----	579. 95
Grant Fork, opposite post office, at NE. corner of street intersection, 1 ft. S. of telephone pole; standard iron post with bronze cap stamped "1912 538"-----	537. 525
Grant Fork, 1.1 mi. N. of, about 0.25 mi. E. of SW. cor. sec. 28, T. 5 N., R. 5 W., on E. side of rd., opposite T-rd. W., in root of 30-in. cottonwood tree; copper nail and washer-----	555. 62
Grant Fork, 3.1 mi. N. of, 6.5 mi. S. and 0.2 mi. W. from New Douglas, 1.0 mi. S. and 3.5 mi. E. from Alhambra, about 0.25 mi. E. of W. cor. secs. 16 and 21, T. 5 N., R. 5 W., on section line, opposite T-rd. W.; standard iron post with bronze cap stamped "1912 560" (recovered in 1935)-----	559. 950
New Douglas, 3.5 mi. S. and 0.5 mi. W. from, 25 ft. S. and 35 ft. E. from NW. cor. sec. 4, T. 5 N., R. 5 W., near SE. corner of cross-roads; standard iron post with bronze cap stamped "1912 602" (recovered in 1934)-----	601. 570
New Douglas, at crossing of Toledo, St. Louis & Western R. R. ¹ 180 ft. E. of sta.; top of rail of siding-----	608. 5

⁹⁹ In 1935 this bench mark was reported destroyed.

¹ Now the New York, Chicago & St. Louis R. R.

New Douglas, at SE. corner of intersection of main N.-S. street and E.-W. alley, 30 ft. S. of building (saloon) owned by Chris Schallenberg; standard iron post with bronze cap stamped "1912 619" ----- Feet
618. 818

New Douglas, 1.0 mi. N. of, at center of sec. 9, T. 6 N., R. 5 W., at center of crossroads, on stone marking center of section; chiseled square -----
608. 39

[Continued in Mount Olive quadrangle, line 1]

2. From point 0.9 mile west of Alhambra east along State Highway 140 to crossroads 3.2 miles east of Alhambra, thence south along roads to point 3.1 miles north of Grant Fork (by J. A. Shumate in 1927)

[Continued from Edwardsville quadrangle, line 4]

Alhambra, 0.9 mi. W. of, 0.25 mi. E. of N $\frac{1}{4}$ cor. sec. 15, T. 5 N., R. 6 W., 300 ft. E. of crossroads, on S. side of rd., in root on SW. side of 24-in. wild-cherry tree; copper nail and washer -----
552. 08

Alhambra, at intersection of main line of New York, Chicago & St. Louis R. R.; top of rail -----
563. 2

Alhambra, at intersection of Illinois Central R. R.; top of rail -----
565. 8

Alhambra, in E. part of, near NW. cor. sec. 13, T. 5 N., R. 6 W., 40 ft. S. and 35 ft. E. from crossroads, in concrete post; standard tablet stamped "Prim Trav. Sta No. 29 1924 LS" -----
571. 221

Reference mark, 63 ft. N. and 128 ft. W. from tablet, on N. side of rd., in root on S. side of 24-in. cottonwood tree -----
572. 33

Alhambra, 1.3 mi. E. of, near NE. cor. sec. 13, T. 5 N., R. 6 W., in SW. angle of junction of T-rd. S., on top of W. head wall of concrete culvert; chiseled square -----
581. 41

Alhambra, 2.2 mi. E. of, near SW. cor. sec. 8, T. 5 N., R. 5 W., 28 ft. N. and 170 ft. E. from junction of T-rd. S., in root on S. side of 10-in. walnut tree; copper nail and washer -----
596. 63

3. From point 0.9 mile west of Alhambra north and northwest along road to point 1.1 miles north and 0.9 mile west from Alhambra (by J. A. Shumate in 1927)

Alhambra, 0.9 mi. W. thence 1.0 mi. N. from, about 0.25 mi. E. of quarter corner between secs. 3 and 10, T. 5 N., R. 6 W., on section line, 15 ft. S. and 20 ft. W. from junction of private rd. N., in root on E. side of 12-in. elm tree; copper nail and washer -----
559. 82

[Continued in Edwardsville quadrangle, line 5]

4. From point 1.2 miles north of Jamestown generally north along roads to point 0.5 mile south and 3.2 miles east from Old Ripley, thence west along State Highway 140 to point 3.2 miles east of Alhambra, thence south along roads to point 3.1 miles north of Grant Fork (by H. A. Drake in 1934; releveled by S. R. Archer in 1935)

[Continued from Breese quadrangle, line 3]

Jamestown, 1.8 mi. N. of, 1.4 mi. S. of Baden Baden, near NW. cor. sec. 35, T. 4 N., R. 4 W., 20 ft. S. and 25 ft. W. from junction of rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 2 1934" -----
483. 264

Baden Baden, 0.9 mi. S. of, near W $\frac{1}{4}$ cor. sec. 26, T. 4 N., R. 4 W., 10 ft. S. and 20 ft. E. from junction of T-rd. W., in root on E. side of 30-in. elm tree; 40-penny spike -----
498. 69

324 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Baden Baden, at junction of State Highway 143, 30 ft. N. of T-rd. S., on N. side of driveway N., 3 ft. W. of fence corner, 2 ft. N. of center line of sidewalk, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 3 1934"-----	Feet 516. 351
Baden Baden, 0.8 mi. E. thence 0.1 mi. N. from, 0.25 mi. E. of center of sec. 23, T. 4 N., R. 4 W., 30 ft. S. and 175 ft. W. from old crossroads, in root on N. side of 24-in. elm tree; 40-penny spike (established in 1935)-----	457. 38
Baden Baden, 0.8 mi. E. thence 0.8 mi. N. from, near center of SE¼ sec. 14, T. 4 N., R. 4 W., on top of NW. end of NW. wing wall of concrete highway bridge; chiseled square-----	458. 31
Baden Baden, 0.8 mi. E. thence 1.2 mi. N. from, 0.1 mi. N. and 0.25 mi. E. from center of sec. 14, at steel bridge over drainage ditch, on NW. end of NW. wing wall of N. stone abutment; chiseled square (established in 1935)-----	461. 09
Baden Baden, 0.8 mi. E. thence 2.1 mi. N. from, 1.5 mi. S. and 1.8 mi. E. from Pocahontas, 0.25 mi. E. of center of sec. 11, at junction of E.-W. rd., 25 ft. N. of T-rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 4 1934"-----	460. 317
[Jogs into Mulberry Grove quadrangle, line 2]	
Pocahontas, 0.8 mi. N. and 1.9 mi. E. from, about 0.25 mi. SW. of NE. cor. sec. 35, T. 5 N., R. 4 W., 100 ft. NE. of junction of rd. N., on S. side of U. S. Highway 40, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 6 1934"-----	493. 968
Pocahontas, 1.6 mi. N. and 1.8 mi. E. from, about 700 ft. S. of center of NE¼ sec. 26, T. 5 N., R. 4 W., in top of N. end of E. head wall of concrete culvert under highway; monel-metal rivet-----	518. 37
Pocahontas, 2.0 mi. N. and 2.0 mi. E. from, 2.5 mi. S. and 3.5 mi. E. from Old Ripley, near N. cor. secs. 25 and 26, T. 5 N., R. 4 W., 25 ft. S. of junction of T-rd. N., at fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 7 1934"-----	556. 820
[Jogs into Mulberry Grove quadrangle, line 3]	
Old Ripley, 1.5 mi. S. and 3.2 mi. E. from, 0.25 mi. E. of quarter corner between secs. 14 and 23, T. 5 N., R. 4 W., 80 ft. W. of junction of T-rd. N., on N. side of rd., in root on SW. side of 30-in. sycamore tree; copper nail and washer (established in 1935)-----	495. 77
Old Ripley, 0.5 mi. S. thence 3.2 mi. E. from, 0.25 mi. E. of N¼ cor. sec. 14, T. 5 N., R. 4 W., 15 ft. S. and 30 ft. W. from junction of T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 8 1934"-----	491. 736
Reference mark, 270 ft. E. of tablet, at concrete bridge over Indian Creek, on top of N. parapet of W. abutment; chiseled square (established in 1935)-----	491. 67
Old Ripley, 0.5 mi. S. thence 2.5 mi. E. from, near SW. cor. sec. 11, T. 5 N., R. 4 W., 17 ft. E. of W. end of concrete bridge over Shoal Creek, on top of N. wheel guard or curb; chiseled square-----	492. 91
Old Ripley, 0.5 mi. S. thence 1.7 mi. E. from, about 0.2 mi. E. of SW. cor. sec. 10, T. 5 N., R. 4 W., on top of E. end of N. head wall of concrete culvert under highway; chiseled square-----	498. 71
Old Ripley, 0.5 mi. S. thence 1.0 mi. E. from, near S¼ cor. sec. 9, T. 5 N., R. 4 W., 38 ft. N. and 140 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 9 1934"-----	548. 776

Old Ripley, 0.5 mi. S. of, near S $\frac{1}{4}$ cor. sec. 8, T. 5 N., R. 4 W., near NW. corner of junction of T-rd. N., on top of S. end of W. head wall of concrete culvert under rd. N.; chiseled square-----	<i>Feet</i> 556.50
Old Ripley, 0.5 mi. S. thence 0.5 mi. W. from, near S. cor. secs. 7 and 8, T. 5 N., R. 4 W., on N. side of highway, on top of N. head wall of concrete culvert; chiseled square-----	550.15
Old Ripley, 0.5 mi. S. thence 1.6 mi. W. from, near SE. cor. sec. 12, T. 5 N., R. 5 W., 40 ft. N. and 160 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 10 1934"-----	549.492
Old Ripley, 0.5 mi. S. thence 2.2 mi. W. from, about 0.2 mi. W. of S $\frac{1}{4}$ cor. sec. 12, at concrete bridge over Silver Creek, on top of E. end of N. wheel guard or curb; chiseled square-----	548.42
Old Ripley, 0.5 mi. S. thence 2.8 mi. W. from, 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 11, T. 5 N., R. 5 W., near NW. corner of junction of T-rd. N., on top of S. end of W. head wall of concrete culvert under rd. N.; chiseled square-----	557.48
Old Ripley, 0.5 mi. S. thence 3.6 mi. W. from, 5.2 mi. E. of Alhambra, near N. cor. secs. 14 and 15, T. 5 N., R. 5 W., near Bond-Madison county line, on S. side of highway, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 11 1934"-----	567.339
Alhambra, 4.4 mi. E. of, 0.25 mi. E. of SW. cor. sec. 10, T. 5 N., R. 5 W., in NW. corner of crossroads, on top of E. end of N. head wall of concrete culvert; chiseled square-----	567.74
Alhambra, 3.8 mi. E. of, about 500 ft. E. of S $\frac{1}{4}$ cor. sec. 9, T. 5 N., R. 5 W., on top of E. end of N. head wall of concrete culvert; chiseled square-----	565.11
Alhambra, 3.2 mi. E. of, 4.0 mi. N. and 0.4 mi. W. from Grant Fork, near SW. cor. sec. 9, T. 5 N., R. 5 W., 58 ft. N. and 25 ft. E. from crossroads, in yard of Rockwell School, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "29 12 1934"-----	583.263
5. From crossroads 0.5 mile south and 3.2 miles east from Old Ripley along roads alternately north and east to center of northwest quarter sec. 24, T. 6 N., R. 4 W. (by S. R. Archer in 1935) ²	
Old Ripley, 0.5 mi. N. and 3.2 mi. E. from, 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 2, T. 5 N., R. 4 W., in NW. angle of junction of T-rd. W., in SE corner of yard of Terrapin Ridge School, in root on E. side of 15-in. elm tree; copper nail and washer-----	554.56
T. 6 N., R. 4 W., 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 35, 110 ft. N. of junction of T-rd. E., on W. side of rd., at fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "553"-----	552.961
T. 6 N., R. 4 W., near quarter corner between secs. 35 and 36, on N. side of E.-W. rd., at fence corner, in root on NE. side of forked locust tree; copper nail and washer-----	575.21
T. 6 N., R. 4 W., 0.25 mi. W. of N $\frac{1}{4}$ cor. sec. 36, 110 ft. E. of rd. S., 150 ft. W. of junction of rd. N., on S. side of E.-W. rd., at fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "575"-----	574.686
T. 6 N., R. 4 W., near center of NW $\frac{1}{4}$ sec. 24, 125 ft. S. of junction of E.-W. rd., on W. side of rd., at fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "586"-----	585.517

[Continued in Mulberry Grove quadrangle, line 5]

² The latter part of this line appears also in Mulberry Grove quadrangle.

6. From Baden Baden west along State Highway 143 to junction of U. S. Highway 40, thence southwest along highway and other roads to point 0.5 mile north and 0.5 mile east from Highland (by S. R. Archer in 1935)

Baden Baden, 1.0 mi. W. of, near E $\frac{1}{4}$ cor. sec. 21, T. 4 N., R. 4 W., in SW angle of crossroads, on top of W. end of S. head wall of concrete culvert; chiseled square-----	Feet 517.48
Baden Baden, 2.0 mi. W. of, 2.2 mi. E. of Pierron, near W $\frac{1}{4}$ cor. sec. 21, T. 4 N., R. 4 W., 28 ft. N. and 10 ft. E. from junction of private rd. N., on E. side of highway right-of-way, in concrete post; standard tablet stamped "522"-----	521.549
Pierron, 1.2 mi. E. of, near quarter corner between secs. 19 and 20, T. 4 N., R. 4 W., on S. side of rd., opposite T-rd. N., on top of N. end of W. head wall of concrete culvert under private rd. S.; chiseled square-----	523.77
Pierron, 0.2 mi. E. of main street intersection and Bond-Madison county line, on N. side of highway, 140 ft. W. of walk to main entrance of public school, near SW. corner of schoolyard, inside sidewalk, on E. side of fence N., in concrete post; standard tablet stamped "535"-----	535.086
Pierron, near SE. corner of main street intersection which is Bond-Madison county line, at NW. corner of store building, on top of NE. end of lowest of three concrete steps; chiseled square-----	523.40
Pierron, 0.9 mi. W. of, 375 ft. E. of W $\frac{1}{4}$ cor. sec. 24, T. 4 N., R. 5 W., at concrete bridge over Sugar Creek, on top of S. wing wall of W. abutment; chiseled square-----	504.09
Pierron, 1.9 mi. W. of, about 0.4 mi. W. of center of sec. 23, T. 4 N., R. 5 W., on W. side of junction of U. S. Highway 40, 30 ft. NE. of center line of highway E. extended, 20 ft. S. of SE. corner of yard of residence, 5 ft. S. of S. gatepost of driveway to barn lot, outside fence line, in concrete post; standard tablet stamped "535"-----	534.894
Reference mark, at S. corner of triangle at rd. junction, at culvert under rd. along SE. side of triangle, on top of NE. end of SE. head wall; chiseled square-----	534.14
Pierron, 1.9 mi. W. thence 1.0 mi. SW. from, near quarter corner between secs. 22 and 27, T. 4 N., R. 5 W., on top of NW. end of SW. abutment of concrete bridge; chiseled square-----	500.81
Pierron, 1.9 mi. W. thence 1.8 mi. SW. from, near center of SW $\frac{1}{4}$ sec. 28, T. 4 N., R. 5 W., near NE. corner of junction of rd. N., on top of angle in NE. head wall of concrete culvert under rd. N.; chiseled square-----	535.21
Pierron, 1.9 mi. W. thence 2.2 mi. SW. from, 1.0 mi. N. and 1.1 mi. E. from Highland, near S $\frac{1}{4}$ cor. sec. 28, 20 ft. N. and 85 ft. W. from junction of rd. W., 4 ft. SW. of 12-in. mulberry tree, in concrete post; standard tablet stamped "535"-----	534.478
Reference mark, 50 ft. W. of tablet, on N. side of rd., in root on SE. side of 30-in. elm tree; copper nail and washer-----	534.48
Highland, 0.5 mi. E. thence 1.0 mi. N. from, near NE. cor. sec. 32, T. 4 N., R. 5 W., 60 ft. S. of crossroads, on W. side of rd., in root on E. side of 24-in. elm tree; copper nail and washer-----	535.15

[Continued in Breese quadrangle, line 4]

NEW HARMONY QUADRANGLE

[Latitude 38°00'–38°15'; longitude 87°45'–88°00']

WHITE COUNTY

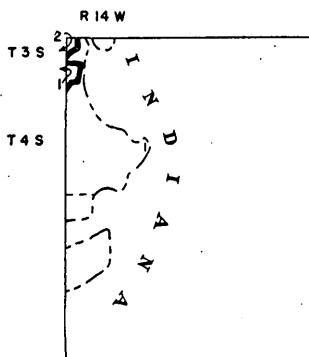


FIGURE 59.—Lines of leveling in New Harmony quadrangle.

1. At Illinois Central Railroad bridge over Wabash River south of Grayville (by W. A. Gelbach in 1908)

[A jog from Carmi quadrangle, line 3]

Calvin, 1.5 mi. N. and 2.0 mi. E. from, 1.5 mi. S. of Grayville, at I. C. R. R. bridge over Wabash River, on SE. end of E. bank pier; chiseled square (Wabash River Survey P. B. M. 25 1903; recovered by U. S. C. & G. S. in 1935)³-----

Feet
388.369

[Continued in Carmi quadrangle, line 3]

2. From Grayville south and southwest along State Highway 1 (by W. C. Elledge in 1939)

[Connects with line 2 in Mount Carmel quadrangle]

Grayville, 0.5 mi. S. of, 1.8 mi. NE. of Calvin, about 500 ft. W. of E. cor. secs. 20 and 29, T. 3 S., R. 14 W., 200 ft. S. of last curve out of Grayville, on W. side of rd., at drive into field about half way down hill, on S. head wall of concrete culvert; chiseled square... 418.18

[Continued in Carmi quadrangle, line 11]

³This bench mark is in Indiana.

NEW HAVEN QUADRANGLE

[Latitude 37°45'–38°00'; longitude 88°00'–88°15']

GALLATIN AND WHITE COUNTIES

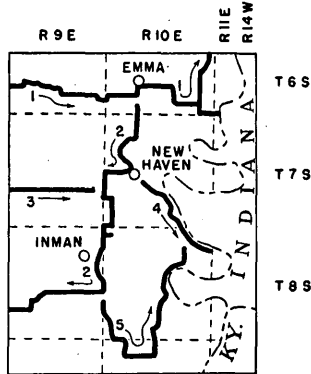


FIGURE 60.—Lines of leveling in New Haven quadrangle.

1. From point 0.5 mile west of Iron along roads generally east to Emma, thence alternately east and south to point near Little Chain, thence generally north along west side of Dogtown Hills (by C. S. Blair in 1905)

[Continued from Eldorado quadrangle, line 1]

Iron, in NE. angle of crossroads, 5 ft. W. of SW corner of warehouse; standard iron post with bronze cap stamped "463 Adj"-----	462.203
Herald, 3 ft. E. of NE. corner of schoolhouse; standard iron post with bronze cap stamped "430 Adj"-----	429.308
Emma, 0.5 mi. S. of, in SE. angle of crossroads; standard iron post with bronze cap stamped "366 Adj"-----	365.457
Little Chain, 1.0 mi. W. of, in SW. corner of rd. fork; standard iron post with bronze cap stamped "367 Adj"-----	366.010

[Continued in Carmi quadrangle, line 2]

2. From crossroads 0.5 mile south of Emma along roads generally south by way of New Haven to crossroads 2 miles south and 1 mile east from Inman, thence west and southwest to Ridgway (by C. S. Blair in 1905)

New Haven, in NW. corner of Scudmore & Mathis bank; aluminum tablet stamped "370 Adj"-----	369.572
Inman, 0.7 mi. E. of, at SW. corner of junction of rd. W.; standard iron post with bronze cap stamped "379 Adj"-----	377.644

[Continued in Eldorado quadrangle, line 2]

3. From point 2.8 miles east of Omaha east along road to crossroads 1.5 miles west and 1 mile south from New Haven (by C. S. Blair in 1905)

[Continued from Eldorado quadrangle, line 3]

Omaha, 6.5 mi. E. of, 0.4 mi. N. thence 1.5 mi. E. from Cottonwood, at NE. corner of junction of T-rd. S., 12 ft. W. of 24-in hickory tree; standard iron post with bronze cap stamped "387 Adj"-----	386.385
---	---------

4. From New Haven southeast 6.5 miles along west bank of Little Wabash and Wabash Rivers (by C. S. Blair in 1905; leveled twice)

New Haven, 1.8 mi. SE. of, at mouth of Little Wabash River, in root of oak tree; nail-----	<i>Feet</i> 348.93
New Haven, 4.6 mi. SE. of, opposite schoolhouse, in root of locust tree; nail-----	351.73
New Haven, 6.5 mi. SE. of, just above Loop Slough, 75 ft. S. of large high-water barn; top of iron pipe (Wabash River Survey P. B. M. 38 1903)-----	345.673
New Haven, 6.5 mi. SE. of, 3 ft. E. of U. S. C. E. B. M. 38; standard iron post with bronze cap stamped "346 Adj"-----	345.542

5. From road junction 2 miles south and 1 mile east from Inman along roads alternately south and east to Round Pond School, thence generally north to road junction 4.6 miles southeast of New Haven (by C. S. Blair in 1905)

Inman, 2.8 mi. S. and 1.0 mi. E. from, 0.8 mi. S. of St. Patrick's Church, in NE. corner of junction of T-rd. W.; standard iron post with bronze cap stamped "366 Adj"*-----	367.888
Round Pond School, at NE. corner of; standard iron post with bronze cap stamped "362 Adj"-----	361.651

* As reset in 1934, when the bench mark was moved and raised 2.570 ft. above its original elevation. The figures given represent the new elevation.

NEWTON QUADRANGLE

[Latitude 38°45'–39°00' ; longitude 88°00'–88°15']

JASPER AND RICHLAND COUNTIES

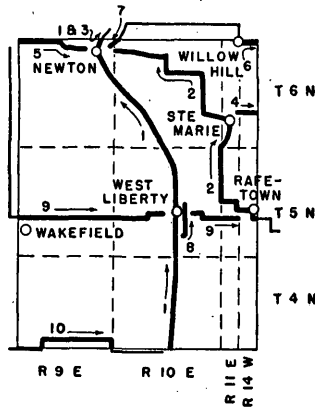


FIGURE 61.—Lines of leveling in Newton quadrangle.

1. From Olney north and northwest along Illinois Central Railroad to Newton (by T. A. Green in 1906; first-order leveling)

[Continued from Olney quadrangle, line 1]

Olney, 2.9 mi. N. of, 45 ft. W. of rd. crossing, 40 ft. N. of rd., in SE. corner of lot owned by J. M. Fleming; standard iron post with bronze cap stamped "1906 465" and designated "B _s " (recovered by U. S. C. & G. S. in 1938)	Feet 465.294
Olney, 5.4 mi. N. of, 1.9 mi. S. of Dundas, 40 ft. SE. of crossing of private rd., 30 ft. E. of tracks, 50 ft. SE. of whistle post, 10 ft. S. of gate to house; standard iron post with bronze cap stamped "1906 475" and designated "C _s " (recovered by U. S. C. & G. S. in 1938)	474.835
Dundas, 439 ft. N. of sta., 50 ft. NE. of rd. crossing, 30 ft. E. of track, at Dundas Rolling Mill, in W. side near SW. corner of building; aluminum tablet stamped "1906 480" and designated "D _s " (reported destroyed)	480.874
West Liberty, 1.6 mi. N. of, 160 ft. N. of milepost 169–78, 70 ft. S. of bridge B–168–93, 590 ft. S. of rd. crossing, 30 ft. E. of tracks, E. of right-of-way line; standard iron post with bronze cap stamped "1906 480" and designated "E _s " (recovered by U. S. C. & G. S. in 1938)	480.914
West Liberty, 4.5 mi. NW. of, 1.1 mi. SE. of Boos, 8 ft. W. of milepost 166–81; standard iron post with bronze cap stamped "1906 506" and designated "F _s " (recovered by U. S. C & G. S. in 1938)	506.777
Boos, 1.8 mi. NW. of, 3.0 mi. SE. of Newton, 40 ft. NE. of milepost 163–84, 50 ft. SE. of rd. crossing, 25 ft. E. of track, 15 ft. E. of warning post, in fence corner; standard iron post with bronze cap stamped "1906 524" and designated "G _s " (recovered by U. S. C. & G. S. in 1935)	524.858

Newton, 180 ft. NW. of sta., 70 ft. W. of R. R. crossing, 20 ft. W. of water plug on S. side of rd.; standard iron post with bronze cap stamped "1906 512" and designated "H₃" (recovered in 1936; recovered also by U. S. C. & G. S. in 1935)----- *Feet*
512.853

[Continued in Rose Hill quadrangle, line 1]

2. From point 0.5 mile south and 0.1 mile east from Rafetown alternately west and north along roads and Illinois Central Railroad by way of Ste. Marie to Newton (by H. W. Peabody, Jr., in 1910)

[Continued from Hardinville quadrangle, line 4]

Rafetown, near E $\frac{1}{4}$ cor. sec. 19, T. 5 N., R. 14 W., 0.2 mi. W. of iron bridge over Embarrass River, in SW. angle of crossroads; standard iron post with bronze cap stamped "1910 470"⁵----- 469.844

Ste. Marie, 3.0 mi. S. of, in SE. angle of crossroads; standard iron post with bronze cap stamped "1910 474"⁶----- 473.698

Ste. Marie, 300 ft. S. of Cincinnati, Hamilton & Dayton Railroad⁷ sta., 40 ft. E. of track, in yard of T. L. Britton; standard iron post with bronze cap stamped "1910 482" (recovered in 1911)----- 482.039

Ste. Marie, 3.0 mi. N. and 1.4 mi. W. from, 1.0 mi. S. and 5.5 mi. E. from Newton, near quarter corner between secs. 11 and 12, T. 6 N., R. 11 E., at rd. fork, on N. side of rd., 3 ft. from SE. corner of cabin; standard iron post with bronze cap stamped "1910 472"----- 471.440

3. From Newton north along Illinois Central Railroad (by R. G. Clinite in 1911)

Newton, 0.3 mi. N. of sta., at R. R. bridge over Embarrass River, on SW. abutment; chiseled square----- 495.53

[Continued in Rose Hill quadrangle, line 2]

4. From Ste. Marie along roads northeast and east about 1.5 miles (by R. G. Clinite in 1911)

Ste. Marie, 0.3 mi. NE. of, at SE. corner of steel highway bridge over Embarrass River, on top of cylindrical pier; chiseled square----- 472.33

[Continued in Hardinville quadrangle, line 5]

5. From point 3 miles south and 3.5 miles west from Wheeler southeast along road to Newton (by E. E. Harris in 1929)

[Continued from Sailor Springs quadrangle, line 1]

Wheeler, 3.0 mi. S. thence 3.8 mi. E. from, 4.6 mi. NW. of Jasper County courthouse at Newton, near SE. cor. sec. 31, T. 7 N., R. 9 E., at jog in N-S. rd., in NW. angle of junction of T-rd. N., on angle of head wall of concrete culvert; chiseled square (recovered in 1934)----- 551.05

Newton, 3.8 mi. NW. of, near center of S. side-SE $\frac{1}{4}$ sec. 32, T. 7 N., R. 9 E., 28 ft. N. and 82 ft. W. from junction of T-rd. N., in root on S. side of 36-in. maple tree; copper nail and washer----- 555.94

⁵In 1934 this bench mark was moved 4 ft. south and 10 ft. west and reset at an elevation 0.268 ft. higher than that originally determined. The figures given represent the new elevation.

⁶In 1934 this bench mark was moved 8 ft. south and 16 ft. east and reset at an elevation 0.015 ft. lower than that originally determined. The figures given represent the new elevation.

⁷This line has been abandoned.

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Newton, 3.1 mi. NW. of, near S $\frac{1}{4}$ cor. sec. 33, T. 7 N., R. 9 E., at NW. corner of junction of T-rd. N., on angle of head wall of concrete culvert; chiseled square-----	Feet 552.66
Newton, 2.7 mi. NW. of, 133 ft. E. of intersection of I. C. R. R., E.-W. rd., and State Highway 33, 43 ft. S. of intersection of highway and dirt rd., 39 ft. N. of track, 8 ft. NW. of and in line with telegraph poles, in concrete post; standard tablet stamped "29 H 1929" ⁸ -----	552.733
Reference mark, 192 ft. N.60°W. from tablet, on N. side of dirt rd., in center of top of parapet of concrete culvert; chiseled square.---	553.65
Newton, 1.6 mi. NW. of, in NE $\frac{1}{4}$ sec. 3, T. 6 N., R. 9 E., 550 ft. W. of angle in State Highway 33, on S. side of highway, in center of top of head wall of concrete culvert; chiseled square-----	556.15
Newton, 0.9 mi. NW. of, near center of sec. 2, T. 6 N., R. 9 E., 50 ft. E. of crossroads, on S. side of highway, in center of large concrete culvert; chiseled square-----	521.76
Newton, near NE. corner of courthouse square, 30 ft. NW. of pump; standard iron post with bronze cap stamped "Prim Trav Sta No 8 1910" ⁹ -----	534.513

6. From point in Willow Hill along roads south 0.3 mile and east 1.1 miles (by S. R. Archer in 1932)

[Continued from Rose Hill quadrangle, line 9]

Willow Hill, 55 ft. S. and 25 ft. W. from street intersection, on E. side of First State Bank building, in stone window sill; standard tablet stamped "1932 501" ¹⁰ -----	501.953
Reference mark, 14 ft. N. of tablet, at main entrance to bank, on N. end of stone doorsill; chiseled square-----	500.08
Willow Hill, 1.0 mi. E. of, 150 ft. W. of S. cor. secs. 31 and 32, T. 7 N., R. 14 W., 150 ft. W. of T-rd. N., 100 ft. E. of T-rd. S., on N. side of rd., inside fence, in root on W. side of 10-in. hickory tree; copper nail and washer-----	488.48

[Continued in Hardinville quadrangle, line 7]

7. From point about 1.6 miles northeast of Newton southwest along highway to Newton (by S. R. Archer in 1932)

[Continued from Rose Hill quadrangle, line 10]

Newton, 1.4 mi. NE. of, in S. part SW $\frac{1}{4}$ sec. 31, T. 7 N., R. 10 E.; 370 ft. SW. of crossroads, at N. approach to bridge over Embarrass River, on E. parapet of N. abutment; chiseled square-----	493.73
Newton, 1.2 mi. NE. of, in S. part SW $\frac{1}{4}$ sec. 31, T. 7 N., R. 10 E., at steel bridge over Embarrass River, on top of W. end of S. concrete abutment; chiseled square-----	491.71
Newton, 0.8 mi. NE. of, in NW $\frac{1}{4}$ sec. 6, T. 6 N., R. 10 E., at junction of rd. E., on N. side of highway, on top of W. end of N. head wall of concrete culvert; chiseled square-----	492.74

⁸ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Y 89 1935," elevation 554.733 ft.

⁹ In 1932 this bench mark was reported destroyed and a new mark, stamped "T T No 3 34 A 1932," was set in the same position. For the description and elevation of the new mark, see line 7.

¹⁰ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "F 90 1935," elevation 494.435 ft.

Newton, near NE. corner of courthouse square, 30 ft. NW. of pump, in concrete post; standard tablet stamped "T T No 8 34 A 1932" (recovered by U. S. C. & G. S. in 1935) ¹¹ -----	<i>Feet</i> 534. 800
Reference mark 1, 6 ft. E. of tablet, on SW. corner of concrete well platform; chiseled square (established in 1936)-----	534. 64
Reference mark 2, at N. entrance to courthouse, on NE. corner of E. banister; chiseled square (established in 1936)-----	537. 77

8. From point 5.4 miles north of Olney generally north along Illinois Central Railroad and roads to point 1.6 miles north of West Liberty (by L. L. Newlin in 1934)

Olney, 6.1 mi. N. of, 1.1 mi. S. of Dundas, at R. R. bridge B-172.9, on E. side of track, 1 ft. from S. end of timber holding ballast of rd. bed; rail spike-----	460. 36
Dundas, 67 ft. N. of N. side of sta., 40 ft. E. of track, 4 ft. W. of E. right-of-way line, 4 ft. E. of telegraph pole. in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered by U. S. C. & G. S. in 1938)-----	478. 103
Dundas, 0.2 mi. N. of, 35 ft. S. of rd. crossing, 40 ft. E. of track, 4 ft. W. of E. right-of-way line, 4 ft. E. of telegraph pole, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	474. 710
Dundas, 0.2 mi. N. thence 0.5 mi. E. from, 0.5 mi. E. thence 0.6 mi. S. from West Liberty, about 500 ft. S. of quarter corner between secs. 26 and 27, T. 5 N., R. 10 E., 850 ft. N. of T-rd. W., in SE. concrete wing wall of wooden bridge; monel-metal rivet inside chiseled square-----	463. 65
West Liberty, 0.5 mi. E. thence 0.2 mi. S. from, near cor. secs. 22, 23, 26, and 27, T. 5 N., R. 10 E., 35 ft. E. of rd., 2 ft. N. of Jasper-Richland county line, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	477. 842
West Liberty, 0.5 mi. E. of, 0.25 mi. N. of cor. secs. 22, 23, 26, and 27, T. 5 N., R. 10 E., 45 ft. S. and 25 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	480. 525
West Liberty, 0.5 mi. E. thence 0.8 mi. N. from, near cor. secs. 14, 15, 22, and 23, T. 5 N., R. 10 E., in center of top of E. wing wall of concrete culvert; monel-metal rivet inside chiseled square-----	481. 59

9. From point 0.5 mile north and 0.3 mile west from Wakefield generally east by way of West Liberty to Rafetown (by L. L. Newlin in 1934)

[Continued from Sallor Springs quadrangle, line 2]

Wakefield, 0.5 mi. N. of, near NE. cor. sec. 30, T. 5 N., R. 9 E., in SW. angle of crossroads, in root of 30-in. oak tree; nail with "13" on head-----	494. 31
T. 5 N., R. 9 E., near NW. cor. sec. 28, at Jasper-Richland county line, 90 ft. S. of crossroads, on E. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 12 4 1934"-----	505. 857
T. 5 N., R. 9 E., 0.25 mi. E. of W. cor. secs. 21 and 28, at county line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 12 4 1934"-----	504. 442

¹¹ In 1936 this bench mark was reset at an elevation 0.825 ft. higher than that originally determined. The figures given represent the new elevation. In the same year this mark was tied to U. S. C. & G. S. standard disk stamped "A 90 1935," elevation 508.477 ft.

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T. 5 N., R. 9 E., 0.25 mi. E. of SW. cor. sec. 22, on N. side of county-line rd., midway of front yard of house on N. side of rd., in root on S. side of 27-in. oak tree; nail bent double-----	<i>Feet</i> 490. 98
T. 5 N., R. 9 E., near N $\frac{1}{4}$ cor. sec. 26, 150 ft. S. of junction of T-rd. S., on W. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard tablet stamped "R M 12 3 1934"-----	503. 750
T. 5 N., R. 9 E., 0.25 mi. E. of NW. cor. sec. 26, on S. side of county-line rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 12 3 1934"-----	497. 642
T. 5 N., R. 9 E., near SE. cor. sec. 23, in NW. corner of crossroads, in top of W. wing wall of concrete culvert; monel-metal rivet----	499. 20
T. 5 N., R. 10 E., near NW. cor. sec. 30, 100 ft. S. of crossroads, on E. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 12 2 1934"-----	497. 748
T. 5 N., R. 10 E., 0.25 mi. E. of NW. cor. sec. 30, on S. side of county-line rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 12 2 1934"-----	497. 890
T. 5 N., R. 10 E., 300 ft. E. of NW. cor. sec. 28, 300 ft. E. of crossroads, on S. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 12 1, 1934"-----	460. 561
T. 5 N., R. 10 E., 0.25 mi. E. of NW. cor. sec. 28, 1.2 mi. W. thence 0.3 mi. S. from West Liberty, on S. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 12 1 1934"-----	480. 772
Olney West Base triangulation sta., in NW $\frac{1}{4}$ sec. 21, T. 5 N., R. 10 E., Fox Township, in center of stone post set in bed of brick work 3 ft. square and 4 ft. below surface of ground; top of copper bolt (U. S. Lake Survey sta.)-----	488. 614
West Liberty, 0.5 mi. W. of, 0.25 mi. N. of S. cor. secs. 21 and 22, T. 5 N., R. 10 E., in NW corner of crossroads, in top of W. head wall of concrete culvert; monel-metal rivet inside chiseled square-----	482. 15
West Liberty, just S. of I. C. R. R. sta., at rd. crossing, on W. side of track, in top of N. head wall of culvert; monel-metal rivet-----	483. 35
West Liberty, 1.0 mi. E. of, 0.25 mi. S. of center of sec. 23, T. 5 N., R. 10 E., in SW. angle of crossroads, in top of concrete fence post; top of bolt-----	480. 04
West Liberty, 1.5 mi. E. thence 0.2 mi. S. from, 0.5 mi. S. thence 2.8 mi. W. from Rafetown, near cor. secs. 23, 24, 25, and 26, at Jasper-Richland county line, in top of S. wing wall of W. abutment of concrete culvert; monel-metal rivet-----	485. 55
Rafetown, 0.5 mi. S. thence 1.8 mi. W. from, near SW. cor. sec. 19, T. 5 N., R. 11 E., 35 ft. N. and 45 ft. E. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	509. 505
Rafetown, 0.25 mi. S. and 1.8 mi. W. from, about 5 mi. S. of Ste. Marie, 0.25 mi. N. of SW. cor. sec. 19, T. 5 N., R. 11 E., on E. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	500. 472
Rafetown, 0.5 mi. S. thence 0.7 mi. W. from, 0.25 mi. W. of N $\frac{1}{4}$ cor. sec. 30, T. 5 N., R. 14 W., on S. side of county-line rd., 100 ft. E. of gate at corner of field, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	476. 705

Rafetown, 0.5 mi. S. thence 0.5 mi. W. from, near N $\frac{1}{4}$ cor. sec. 30, T. 5 N., R. 14 W., in SW. angle of junction of T-rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk----- *Feet*
473.927

10. From point 3.2 miles north of Noble along roads north 0.3 mile, east 4 miles, and south 0.3 mile (by W. C. Elledge in 1939)

[A jog from Olney quadrangle, line 14]

Noble, 3.5 mi. N. of, near W $\frac{1}{4}$ cor. sec. 28, T. 4 N., R. 9 E., 25 ft. N. and 30 ft. E. from crossroads, in field, 2 ft. N. and 2 ft. E. from corner fence post, in concrete post; standard tablet stamped "14 E 1939"----- 477.255

Reference mark, 100 ft. E. of tablet, on N. head wall of concrete culvert; chiseled square----- 473.88

Noble, 3.5 mi. N. thence 0.9 mi. E. from, 500 ft. W. of crossroads at quarter corner between secs. 27 and 28, T. 4 N., R. 9 E., on S. side of rd., 1 ft. S. of fence, in root on N. side of 20-in. maple tree; copper nail and washer----- 507.89

Noble, 3.5 mi. N. thence 2.0 mi. E. from, near W $\frac{1}{4}$ cor. sec. 26, T. 4 N., R. 9 E., 25 ft. N. and 105 ft. E. from crossroads, in root on SE. side of 20-in. oak tree; copper nail and washer----- 495.83

Noble, 3.5 mi. N. thence 3.0 mi. E. from; 1.5 mi. N. and 4.5 mi. W. from Olney, near quarter corner between secs. 25 and 26, T. 4 N., R. 9 E., at Pleasant Ridge Church, 6 in. N. and 2 ft. E. from NE. corner of vestibule; standard tablet stamped "15 E 1939"----- 489.567

Olney, 1.5 mi. N. and 3.5 mi. W. from, near E $\frac{1}{4}$ cor. sec. 25, T. 4 N., R. 9 E., 13 ft. S. and 21 ft. W. from junction of N-S. rd., on S. end of concrete culvert; chiseled square----- 489.42

[Continued in Olney quadrangle, line 14]

OKAWVILLE QUADRANGLE

[Latitude 38°15'–38°30'; longitude 89°30'–89°45']

CLINTON, ST. CLAIR, AND WASHINGTON COUNTIES

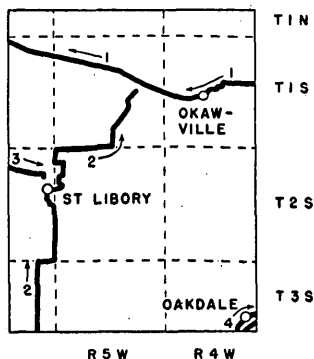


FIGURE 62.—Lines of leveling in Okawville quadrangle.

1. From point 3.3 miles east of Okawville west and southwest along roads to point on Louisville & Nashville Railroad 2.4 miles southeast of Venedy Station, thence northwest along railroad to point 2.5 miles southeast of Mascoutah (by W. A. Gelbach in 1907)

[Continued from Nashville quadrangle, line 1]

Okawville, 2.4 mi. SE. thence about 1.5 mi. E. from Venedy Sta., in S. corner of schoolyard; standard iron post with bronze cap stamped "445"-----	Feet 444.240
Venedy Sta., 3.5 mi. NE. of Venedy, about 3.5 mi. SE. of New Memphis Sta., 50 ft. S. of sta., near picket fence; standard iron post with bronze cap stamped "1907 410"-----	410.063
New Memphis Sta., 1.5 mi. S. of New Memphis, W. of sta., in SW. angle of rd. crossing; standard iron post with bronze cap stamped "409"-----	409.073
New Memphis Sta., about 2.5 mi. NW. of, about 4 mi. SE. of Mascoutah, 250 ft. S. of track, near SW. corner of crossroads; standard iron post with bronze cap stamped "424"-----	424.996

[Continued in New Athens quadrangle, line 1]

2. From point near southwest corner sec. 24, T. 3 S., R. 6 W., along roads generally north and northeast by way of St. Libory and Venedy to Venedy Station (by W. A. Gelbach in 1907)

[Continued from Coulterville quadrangle, line 1]

T. 3 S., R. 6 W., 0.25 mi. S. of NE. cor. sec. 14, 150 ft. S. of Oak Grove Saloon, on W. side of rd.; standard iron post with bronze cap stamped "1907 448"-----	447.267
T. 3 S., R. 6 W., near NE. cor. sec. 2, 1.0 mi. S. thence 0.5 mi. E. from Darmstadt, 3.9 mi. S. thence 1.0 mi. W. from St. Libory, in SW. angle of junction of E.-W. rd.; standard iron post with bronze cap stamped "1907 432"-----	430.812

St. Libory, 1.4 mi. SE. of, near E $\frac{1}{4}$ cor. sec. 24, T. 2 S., R. 6 W., in SW. angle of crossroads; standard iron post with bronze cap stamped "1907 432"-----	<i>Feet</i> 431.274
St. Libory, 1.0 mi. E. of, near N $\frac{1}{4}$ cor. sec. 18, T. 2 S., R. 5 W., in SE. angle of offset crossroads; standard iron post with bronze cap stamped "1907 430"-----	428.505
St. Libory, 2.8 mi. NE. of, 1.2 mi. S. and 2.8 mi. W. from Venedy, 0.25 mi. N. of S $\frac{1}{4}$ cor. sec. 6, T. 2 S., R. 5 W., in SW. angle of crossroads; standard iron post with bronze cap stamped "1907 424"-----	422.670
Venedy, at N. end of town, 3.5 mi. SW. of Venedy Sta., in SW. angle of junction of T-rd. W.; standard iron post with bronze cap stamped "1907 428"-----	426.522
3. From point 2.4 miles east of Fayetteville along roads east and south to St. Libory (by W. A. Gelbach in 1907)	
[Connects with line 2 in New Athens quadrangle]	
Fayetteville, 2.5 mi. E. of, about 2.5 mi. NW. of St. Libory, in NE $\frac{1}{4}$ sec. 10, T. 2 S., R. 6 W., at SE. corner of schoolhouse, in brick foundation; aluminum tablet stamped "Prim Trav Sta No 19 1907 410"-----	409.575
4. From point 1.8 miles southwest of Oakdale northeast and east along roads to Oakdale (by G. W. Lucas in 1914)	
[Continued from Coulterville quadrangle, line 7]	
Oakdale, 1.6 mi. SW. of, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 22, T. 3 S., R. 4 W., S. and E. of bend NE. in rd., in root of lone 24-in. tree; copper nail and washer-----	527.30
[Connects with line 2 in Nashville quadrangle]	

OLNEY QUADRANGLE

[Latitude 38°30'–38°45'; longitude 88°00'–88°15']

EDWARDS, RICHLAND, AND WAYNE COUNTIES

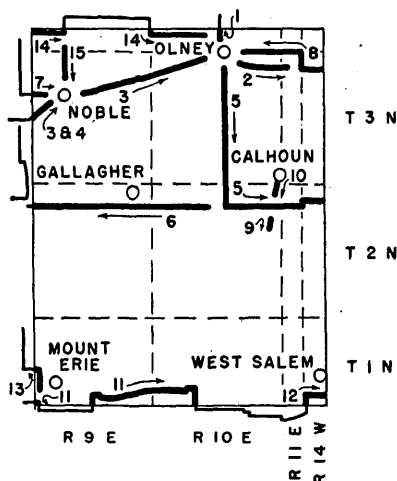


FIGURE 63.—Lines of leveling in Olney quadrangle.

1. From Olney north along Illinois Central Railroad (by T. A. Green in 1906; first-order leveling)

	<i>Feet</i>
U. S. C. & G. S. B. M., designated "II" (recovered by U. S. C. & G. S. in 1935)-----	479.851
U. S. C. & G. S. B. M. designated "B, 1881" ¹² -----	485.573
Olney, at S. entrance to Richland County courthouse, in W. stone balustrade of steps; aluminum tablet stamped "1906 483" and designated "A ₃ " (reported destroyed in 1916)-----	483.101

[Continued in Newton quadrangle, line 1]

2. From Olney east along Baltimore & Ohio Railroad (by Henry Bücher in 1907; leveled twice)

Olney, 0.5 mi. E. of, at overhead wagon bridge 219-15, between main track and S. siding, on top of E. stone pier; chiseled square-----	488.06
Olney, 1.1 mi. E. of sta., at SW. corner of stone culvert, on top of wall; chiseled square-----	428.90
Olney, 2.7 mi. E. of, at stone culvert, on top of S. wall; chiseled square-----	495.57
Olney, 2.7 mi. E. of, 3.5 mi. W. of Claremont, 1,200 ft. E. of rd. crossing, in coping stone at SE. corner of stone culvert, 13 in. W. of E. end and 10 in. N. of S. end; aluminum tablet stamped "495 Adj"-----	495.614
Claremont, 2.1 mi. W. of, on S. wall of stone culvert; chiseled square-----	517.45

[Continued in Sumner quadrangle, line 2]

¹² In 1921 this bench mark was reported destroyed.

3. From point 1.7 miles southwest of Noble northeast along Lincoln Trail and Baltimore & Ohio Railroad to Olney (by H. P. Kilby in 1921)

[Continued from Cisne quadrangle, line 1]

Noble, 1.0 mi. SW. of, on E. line 0.25 mi. N. of SE. cor. sec. 18, T. 3 N., R. 9 E., in NW. angle of crossroads, on S. side of concrete abutment of small bridge; chiseled square-----	Feet 461. 94
Noble, at B. & O. R. R. sta., in SE. corner of small park; standard iron post with bronze cap stamped "1921 479" (recovered in 1939; also recovered by U. S. C. & G. S. in 1935)-----	477. 988
Reference mark, 18 ft. SE. of iron post, on concrete sidewalk; chiseled square-----	477. 34
Noble, 2.0 mi. NE. of, on E. line sec. 10, T. 3 N., R. 9 E., in SE. angle of rd. crossing, 30 ft. W. of track, 30 ft. E. of rd., at fence corner; standard iron post with bronze cap stamped "1921 463"-----	462. 122
Reference mark, 30 ft. W. of iron post, on end of tile pipe; chiseled square-----	458. 86
Noble, 4.1 mi. NE. of, in NW $\frac{1}{4}$ sec. 7, T. 3 N., R. 10 E., at iron milepost St L-115; top of post-----	442. 48
Noble, 4.4 mi. NE. of, 3.9 mi. SW. of Olney, on E. line near SE. cor. sec. 6, T. 3 N., R. 10 E., in NW. angle of crossing, in fence corner; standard iron post with bronze cap stamped "1921 437" (recovered by U. S. C. & G. S. in 1935)-----	436. 252
Olney, 1.9 mi. SW. of, near center of sec. 4, T. 3 N., R. 10 E., 60 ft. W. of crossing, on top of iron milepost St L-117; chiseled cross-----	441. 50
Olney, 0.8 mi. W. of, in sec. 3, T. 3 N., R. 10 E., on top of iron milepost St L-118; chiseled cross-----	459. 69
Olney, at S. side of main entrance to post office building, in concrete foundation of step; aluminum tablet stamped "1921 487" (recovered by U. S. C. & G. S. in 1935)-----	486. 000

4. From point 1.7 miles southwest of Noble northeast along U. S. Highway 50 to Noble (by Robert Krause in 1934; double-rod-ded line)

[Continued from Cisne quadrangle, line 3]

Noble, 1.6 mi. SW. of, in SW. part of SE $\frac{1}{4}$ sec. 18, T. 3 N., R. 9 E., 300 ft. NE. of angle in highway, about 0.3 mi. SW. of crossroads, on top of N. corner of NW. head wall of concrete culvert; chiseled square-----	457. 52
Noble, 1.0 mi. SW. of, near center of SW $\frac{1}{4}$ sec. 17, T. 3 N., R. 9 E., 0.2 mi. NE. of crossroads, on S. side of highway, on top of E. corner of SW. head wall of concrete culvert under private driveway; chiseled square-----	463. 92

5. From Olney south along State Highway 130 to crossroads 1.5 miles south and 2.4 miles west from Calhoun, thence generally east along roads about 5 miles (by H. M. Hunneman in 1934)

[Connects with line 1 in Newton quadrangle]

Olney, on W. side of Richland County courthouse, 3 ft. S. of steps to entrance, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939; recovered also by U. S. C. & G. S. in 1935)-----	481. 298
--	----------

Olney, near middle of E. side of Central Public School grounds, near walk, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939; recovered also by U. S. C. & G. S. in 1935) -----	<i>Feet</i> 479.402
Olney, on S. side of B. & O. R. R. sta., at entrance to women's waiting room, on top of E. end of doorsill; chiseled square -----	479.39
Olney, 2.0 mi. S. of, 500 ft. S. of N $\frac{1}{4}$ cor. sec. 15, T. 3 N., R. 10 E., 500 ft. S. of crossroads, on top of NW. corner of W. wing wall of concrete culvert; chiseled square -----	455.92
Olney, 2.4 mi. S. of, near center of sec. 15, T. 3 N., R. 10 E., on top of NW. corner of W. wing wall of concrete culvert; chiseled square -----	450.13
Olney, 3.0 mi. S. of, near quarter corner between secs. 15 and 22, T. 3 N., R. 10 E., 130 ft. S. of bridge over fork of Fox River, on W. side of highway, in fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	461.972
Olney, 3.1 mi. S. of, about 950 ft. S. of N $\frac{1}{4}$ cor. sec. 22, T. 3 N., R. 10 E., 40 ft. W. of highway, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	471.961
Olney, 3.5 mi. S. of, near center of sec. 22, T. 3 N., R. 10 E., near crossroads, on top of NW. corner of W. wall of concrete culvert 130-2143; chiseled square -----	468.53
Olney, 4.1 mi. S. of, near quarter corner between secs. 22 and 27, T. 3 N., R. 10 E., at bridge over Sugar Creek, on top of SE. corner of W. wall, at base of railing, about 3 ft. above level of ground; chiseled square -----	446.95
Olney, 4.9 mi. S. of, 2.4 mi. W. thence 0.5 mi. N. from Calhoun, near N $\frac{1}{4}$ cor. sec. 34, T. 3 N., R. 10 E., 30 ft. S. and 40 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	459.209
Calhoun, 2.4 mi. W. thence 0.3 mi. N. from, 1,050 ft. S. of N $\frac{1}{4}$ cor. sec. 34, T. 3 N., R. 10 E., 40 ft. W. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk -----	458.811
Calhoun, 2.4 mi. W. thence 0.5 mi. S. from, near N $\frac{1}{4}$ cor. sec. 3, Tps. 2 and 3 N., R. 10 E., 30 ft. S. and 35 ft. W. from crossroads, at concrete highway right-of-way post; top of post -----	448.11
Calhoun, 2.4 mi. W. thence 1.5 mi. S. from, near N $\frac{1}{4}$ cor. sec. 10, T. 2 N., R. 10 E., 25 ft. S. and 40 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	479.186
Calhoun, 2.4 mi. W. thence 1.7 mi. S. from, 0.25 mi. S. of crossroads and N $\frac{1}{4}$ cor. sec. 10, T. 2 N., R. 10 E., 40 ft. W. of highway, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	478.528
Calhoun, 1.5 mi. S. thence 0.3 mi. W. from, 2.7 mi. N. of Parkersburg, near quarter corner between secs. 1 and 12, T. 2 N., R. 10 E., 25 ft. S. and 25 ft. E. from Illinois Central R. R. crossing, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939) -----	517.504
Calhoun, 1.5 mi. S. thence 0.2 mi. W. from, near quarter corner between secs. 1 and 12, T. 2 N., R. 10 E., 830 ft. E. of Illinois Central R. R. crossing, 20 ft. N. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk -----	521.678

Calhoun, 1.5 mi. S. thence 0.3 mi. E. from, about 0.3 mi. W. of quarter corner between secs. 6 and 7, T. 2 N., R. 11 E., at concrete bridge over Sugar Creek, on top of SW. wing wall; chiseled square -----	<i>Feet</i> 483. 45
Calhoun, 1.4 mi. S. and 1.0 mi. E. from, 640 ft. N. of SW. cor. sec. 6, T. 2 N., R. 14 W., 35 ft. E. of N.-S. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk -----	521. 556
Calhoun, 1.2 mi. S. and 1.0 mi. E. from, about 0.25 mi. S. of W $\frac{1}{4}$ cor. sec. 6, T. 2 N., R. 14 W., 25 ft. S. and 90 ft. E. from junction of T-rd. SE., in concrete post; U. S. C. & G. S. and State Survey standard disk -----	520. 611
Calhoun, 1.2 mi. S. and 1.5 mi. E. from, about 0.3 mi. S. of center of sec. 6, T. 2 N., R. 14 W., on N. head wall of culvert; plate -----	542. 59
Calhoun, 1.5 mi. S. and 2.0 mi. E. from, near SW. cor. sec. 5, T. 2 N., R. 14 W., 25 ft. N. and 25 ft. E. from crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 11 1908" -----	539. 845

[Continued in Sumner quadrangle, line 8]

6. From point 1.5 miles south and 2.4 miles west from Calhoun west along road to point near Schnell (by H. M. Hunneman in 1934)

Calhoun, 1.5 mi. S. thence 2.9 mi. W. from, near NW. cor. sec. 10, T. 2 N., R. 10 E., at SE. corner of crossroads, on top of E. head wall of culvert; chiseled square -----	461. 46
Calhoun, 1.5 mi. S. thence 4.1 mi. W. from, 0.5 mi. S. thence 2.8 mi. E. from Gallagher, 0.25 mi. E. of quarter corner between secs. 5 and 8, T. 2 N., R. 10 E., 40 ft. S. of rd., 20 ft. S. of fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	440. 040
Gallagher, 0.5 mi. S. thence 2.5 mi. E. from, near quarter corner between secs. 5 and 8, T. 2 N., R. 10 E., 25 ft. S. and 40 ft. E. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	440. 426
Gallagher, 0.5 mi. S. thence 1.7 mi. E. from, 0.3 mi. W. of SE. cor. sec. 6, T. 2 N., R. 10 E., 20 ft. N. of rd., in root on N. side of tree; nail -----	422. 04
Gallagher, 0.5 mi. S. thence 1.3 mi. E. from, 0.25 mi. W. of quarter corner between secs. 6 and 7, T. 2 N., R. 10 E., 20 ft. N. of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk -----	403. 110
Gallagher, 0.5 mi. S. thence 1.1 mi. E. from, near W. cor. secs. 6 and 7, T. 2 N., R. 10 E., about 0.2 mi. E. of Fox River, 0.2 mi. W. of T-rd. E. and abandoned rd. W., 25 ft. N. of continuation of center line of rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk -----	403. 536
Gallagher, 0.5 mi. S. of, near NW. cor. sec. 12, T. 2 N., R. 9 E., 20 ft. S. and 25 ft. E. from crossroads, in root on S. side of oak tree; nail -----	425. 98
Gallagher, 0.5 mi. S. thence 1.0 mi. W. from, near SE. cor. sec. 3, T. 2 N., R. 9 E., 70 ft. N. and 30 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	462. 758
Gallagher, 0.5 mi. S. thence 1.2 mi. W. from, 2.0 mi. N. thence 1.8 mi. E. from Wynoose, 0.2 mi. W. of SE. cor. sec. 3, T. 2 N., R. 9 E., 30 ft. N. of rd., 15 ft. N. of fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk -----	451. 348

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Wynoose, 2.0 mi. N. thence 0.2 mi. E. from, 0.25 mi. E. of crossroads and cor. secs. 4, 5, 8, and 9, T. 2 N., R. 9 E., 60 ft. S. of rd., 100 ft. W. of abandoned farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	<i>Feet</i> 444. 715
Wynoose, 2.0 mi. N. of, near NW. cor. sec. 9, T. 2 N., R. 9 E., 35 ft. S. and 30 ft. E. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	444. 374
Wynoose, 2.0 mi. N. thence 0.7 mi. W. from, 0.5 mi. S. thence 0.8 mi. E. from Schnell, 900 ft. W. of quarter corner between secs. 5 and 8, T. 2 N., R. 9 E., on N. side of rd., in front of old farmhouse, in root on S. side of westernmost maple tree; nail-----	442. 57

[Continued in Cisne quadrangle, line 4]

7. From point 1.3 miles west of Noble east along road to Noble (by L. L. Newlin in 1934; releveled by W. C. Elledge in 1939)

[Continued from Cisne quadrangle, line 5]

Noble, 1.0 mi. W. of, near NW. cor. sec. 17, T. 3 N., R. 9 E., in SE. corner of crossroads, on concrete culvert; chiseled square-----	468. 09
Noble, 1.0 mi. W. of, near SW. cor. sec. 8, T. 3 N., R. 9 E., 33 ft. N. and 100 ft. E. from crossroads, in root on W. side of 15-in. maple tree; copper nail and washer (established in 1939)-----	469. 52

8. From point 1.5 miles west of Claremont west 0.2 mile along Baltimore & Ohio Railroad, thence north and west along roads to Olney (by L. L. Newlin in 1934)

[Continued from Sumner quadrangle, line 9]

Claremont, 1.7 mi. W. thence 0.8 mi. N. from, 4.4 mi. E. of Olney, near N. cor. secs. 5 and 6, T. 3 N., R. 14 W., S. of junction of E.-W. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	530. 605
Olney, 4.6 mi. E. of, 0.25 mi. E. of SW. cor. sec. 32, T. 4 N., R. 14 W., in NW. angle of junction of T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	544. 282
Olney, 3.3 mi. E. of, near NE. cor. sec. 6, T. 3 N., R. 11 E., at SW. corner of crossroads, on concrete culvert, 2 ft. from S. end; monel-metal rivet inside chiseled square-----	514. 07
Olney, 2.5 mi. E. of, near NE. cor. sec. 1, T. 3 N., R. 10 E., 90 ft. W. of crossroads, on S. side of rd., 20 ft. W. of 12-in. cedar tree, in yard of vacant farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	537. 245
Olney, 2.2 mi. E. of, 0.25 mi. W. of E. cor. secs. 1 and 36, Tps. 3 and 4 N., R. 10 E., 0.25 mi. W. of crossroads, on S. side of rd., at fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	531. 718
Olney, 1.5 mi. E. of, near NE. cor. sec. 2, T. 3 N., R. 10 E., in SW. corner of crossroads, on top of W. head wall of concrete culvert; monel-metal rivet inside chiseled square-----	504. 27
Olney, at intersection of Chestnut and Walnut Streets; top of fire plug-----	506. 95

9. From point 2.7 miles north of Parkersburg south 1 mile along Illinois Central Railroad (by E. W. Gouchenour in 1936; leveled twice)

U. S. C. & G. S. standard disk stamped "F 91 1935"-----	507. 758
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10. From Calhoun south 1.4 miles along Illinois Central Railroad
(by W. C. Elledge in 1939)

U. S. C. & G. S. standard disk stamped "E 91 1935"----- Feet
525. 629

11. From southwest corner of quadrangle generally east along roads
to point about 3 miles west and 0.7 mile north from Samsville
(by W. C. Elledge in 1939; leveled twice)

[Continued from Fairfield quadrangle, line 1]¹²

Mount Erie, 0.8 mi. S. and 0.7 mi. W. from, 0.25 mi. N. of S $\frac{1}{4}$ cor.
sec. 19, T. 1 N., R. 9 E., 15 ft. S. and 80 ft. W. from junction of
N.-S. rd. and rd. W., in concrete post; U. S. C. & G. S. and State
Survey standard disk stamped "23 E 1939"----- 461. 640

[Jogs into Golden Gate quadrangle, line 1]

Mount Erie, 0.8 mi. S. and 1.9 mi. E. from, in SW $\frac{1}{4}$ sec. 22, T. 1 N.,
R. 9 E., 6 ft. N. and 20 ft. W. from junction of T-rd. E., in con-
crete post; standard tablet stamped "24 E 1939"----- 428. 776

Reference mark, 70 ft. W. of tablet, on N. side of rd., in root on SW.
side of 20-in. catalpa tree; copper nail and washer----- 429. 02

Mount Erie, 0.8 mi. S. and 2.7 mi. E. from, 0.25 mi. N. of cor. secs.
22, 23, 26, and 27, T. 1 N., R. 9 E., 200 ft. W. of crossroads, on N.
side of rd., 2 ft. S. and 3 ft. W. from SE. corner of yard, in con-
crete post; U. S. C. & G. S. and State Survey standard disk----- 438. 689

Reference mark, about 500 ft. E. of tablet, 300 ft. E. of crossroads, on N.
side of rd., in root on S. side of 24-in. oak tree; copper nail and
washer----- 436. 92

Mount Erie, 0.8 mi. S. and 3.6 mi. E. from, 0.25 mi. N. of cor. secs.
23, 24, 25, and 26, T. 1 N., R. 9 E., 60 ft. W. of intersection of rd.
tangents W. and N., on S. head wall of small bridge; chiseled
square----- 386. 77

Mount Erie, 0.5 mi. S. and 4.7 mi. E. from, near E $\frac{1}{4}$ cor. sec. 24,
T. 1 N., R. 9 E., 380 ft. W. of turn N. in rd. on Edwards-Wayne
county line, 280 ft. E. of timber line S., 20 ft. N. of rd., 2 ft. S. of
fence, in concrete post; standard tablet stamped "25 E 1939"----- 391. 789

Mount Erie, 0.3 mi. S. and 5.7 mi. E. from, 0.8 mi. S. and 7.0 mi. W.
from West Salem, in NE $\frac{1}{4}$ sec. 19, T. 1 N., R. 10 E., at SW. pier
head of steel bridge over Little Wabash River, at bolt nearest SW.
corner of pier plate; top of bolt head----- 396. 41

West Salem, 0.5 mi. S. and 6.2 mi. W. from, 3.2 mi. W. and 1.5 mi.
N. from Samsville, 0.25 mi. W. of cor. secs. 16, 17, 20, and 21,
T. 1 N., R. 10 E., on S. side of rd., 3 ft. W. of corner of fence along
W. edge of timber, in root on N. side of 30-in. oak tree; copper
nail and washer----- 450. 84

[Continued in Golden Gate quadrangle, line 2]

12. North and east along roads south of West Salem (by W. C.
Elledge in 1939)

[Continued from Golden Gate quadrangle, line 2]

West Salem, 1.0 mi. S. of, near center of SE $\frac{1}{4}$ sec. 19, T. 1 N., R.
14 W., 25 ft. S. and 85 ft. E. from junction of T-rd. E., on N. edge
of schoolyard, in root on SE. side of 24-in. oak tree; copper nail
and washer----- 465. 79

[Continued in Sumner quadrangle, line 11]

¹² This line cuts the southeast corner of Cisne quadrangle, but no bench marks were set in that portion of the line.

13. From crossroads 0.8 mile south and 0.7 mile west from Mount Erie along roads north 1.5 miles and west 0.2 mile (by W. C. Elledge in 1939)

Mount Erie, 0.2 mi. S. and 0.7 mi. W. from, near quarter corner between secs. 18 and 19, T. 1 N., R. 9 E., 65 ft. S. and 30 ft. W. from crossroads, 40 ft. E. of NE. corner of house, in root on E. side of 24-in. maple tree; copper nail and washer-----	<i>Feet</i> 451.45
Mount Erie, 0.2 mi. N. thence 0.7 mi. W. from, 0.2 mi. S. of N $\frac{1}{4}$ cor. sec. 18, T. 1 N., R. 9 E., 135 ft. N. and 15 ft. W. from junction of T-rd W., in root on SW. side of 20-in. oak tree; copper nail and washer-----	473.14

[Continued in Cisne quadrangle, line 9]

14. From point 3.2 miles north and 1.3 miles west from Noble generally east along roads to Olney (by W. C. Elledge in 1939)

[Continued from Cisne quadrangle, line 14]

Noble, 3.2 mi. N. thence 0.8 mi. W. from, 0.25 mi. E. of NW. cor. sec. 32, T. 4 N., R. 9 E., 40 ft. S. and 70 ft. E. from crossroads, 90 ft. N. and 30 ft. E. from NW. corner of yard of Freedom Church, in root on NW. side of 20-in oak tree; copper nail and washer-----	453.65
Noble, 3.2 mi. N. of, near NW. cor. sec. 33, T. 4 N., R. 9 E., 30 ft. S. and 30 ft. E. from junction of N-S. rd., 6 ft. S. and 2 ft. W. from SW. corner of barnyard fence, in root of N. side of 12-in. locust tree; copper nail and washer-----	488.67

[Jogs into Newton quadrangle, line 10]

Olney, 1.0 mi. N. thence 3.5 mi. W. from, near cor. secs. 25, 30, 31, and 36, T. 4 N., Rs. 9 and 10 E., 20 ft. S. and 10 ft. E. from intersection of rd. tangents N. and E., in root on W. side of 12-in. wild-cherry tree; copper nail and washer-----	488.62
Olney, 1.0 mi. N. thence 2.5 mi. W. from, near SW. cor. sec. 29, T. 4 N., R. 10 E., 25 ft. N. and 85 ft. E. from crossroads, in concrete post; standard tablet stamped "16 E 1939"-----	464.031
Olney, 1.0 mi. N. thence 1.4 mi. W. from, about 600 ft. E. of cor. secs. 28, 29, 32, and 33, T. 4 N., R. 10 E., at steel bridge over Fox River, on SW. concrete wing wall; chiseled square-----	428.89
Olney, at N. edge of, near cor. secs. 27, 28, 33, and 34, T. 4 N., R. 10 E., 20 ft. S. and 23 ft. W. from crossroads, on N. end of W. head wall of concrete culvert; chiseled square-----	450.09
U. S. C. & G. S. standard disk stamped "A 91 1935"-----	477.407

15. From point 3.3 miles north of Noble south along road to Noble (by W. C. Elledge in 1939)

Noble, 2.2 mi. N. of, near N. cor. secs. 4 and 5, T. 3 N., R. 9 E., 150 ft. E. of T-rd S., 25 ft. N. of rd., at driveway to house, on W. head wall of concrete culvert; chiseled square-----	508.10
Noble, 1.2 mi. N. of, near SW. cor. sec. 4, T. 3 N., R. 9 E., 50 ft. N. and 18 ft. E. from crossroads, on S. end of E. head wall of concrete culvert; chiseled square-----	483.47

PADUCAH QUADRANGLE

[Latitude 37°00'–37°15'; longitude 88°30'–88°45']

MASSAC AND POPE COUNTIES

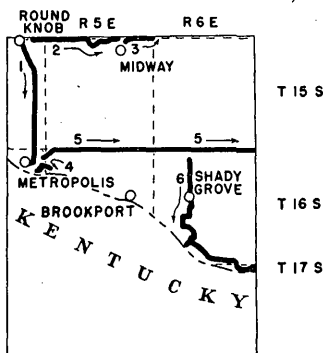


FIGURE 64.—Lines of leveling in Paducah quadrangle.

1. From point just north of Round Knob southeast and south along Illinois Central Railroad to Metropolis (by S. R. Archer in 1913)

[Continued from Brownfield quadrangle, line 4]

Round Knob, about 850 ft. NW. of sta., 60 ft. E. of rd. crossing, at highway bridge over drain, on top of NW. abutment; chiseled square -----	<i>Feet</i> 357.28
Round Knob, near center of, 55 ft. N. and 20 ft. E. from crossroads, 2 ft. W. of W. edge of sidewalk, 4.8 ft. S. and 6.8 ft. W. from NW. corner of Dixon Drug Store; standard iron post with bronze cap stamped "Prim Trav Sta No 8 1913. 396" ¹⁴ -----	395.423
Round Knob, 1.2 mi. SE. of, at rd. crossing, on E. side of track, on S. side of rd.; top of S. end of drain under rd. -----	392.07
Round Knob, 2.8 mi. SE. of, at rd. crossing, on W. side of track, on N. side of rd.; top of N. end of tile drain under rd. -----	379.84
Round Knob, 3.4 mi. SE. of, 4.7 mi. N. of Metropolis, 880 ft. N. of center of sec. 24, T. 15 S., R. 4 E., 440 ft. S. of second-class rd. E., 200 ft. E. of track, on E. side of N.-S. rd., opposite private rd. W., at fence line; standard iron post with bronze cap stamped "384" ¹⁵ -----	382.837
Metropolis, 4.0 mi. N. of, about 260 ft. W. of N¼ cor. sec. 25, T. 15 S., R. 4 E., at rd. crossing, on S. side of rd., on W. side of track; top of S. end of culvert under rd. -----	380.56
Metropolis, 3.0 mi. N. of, 300 ft. S. of crossing of line between secs. 25 and 36, T. 15 S., R. 4 E., on W. right-of-way line, in root on E. side of 42-in. oak tree; copper nail and washer -----	338.69

¹⁴ In 1926 this bench mark was moved 9.2 ft. south and 52.5 ft. east from its original position. The description given refers to the new location and elevation. In 1936 the mark was tied to U. S. C. & G. S. standard disk stamped "M 111 1935," elevation 356.728 ft.

¹⁵ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "P 111 1935," elevation 386.466 ft.

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Metropolis, 2.0 mi. N. of, 160 ft. E. of track, at center of rd. fork at junction of rd. SW., in root on W. side of 36-in. oak tree; copper nail and washer-----	<i>Feet</i> 339.25
Metropolis, on downstream side of Metropolis Street between First Street and river, about 60 ft. toward river from line of I. C. R. R., between sidewalk and curb, on right bank, in 18- by 18-in. concrete slab; U. S. C. E. B. M. 4 (recovered by U. S. C. & G. S. in 1935)	
Cap on iron pipe-----	332.076
Top of bolt-----	328.006
2. From point north of Round Knob generally east along roads to point 0.5 mile north of Midway, thence northwest 0.3 mile (by S. R. Archer in 1913)	
Round Knob, 0.2 mi. N. thence 1.3 mi. E. from, near NW. cor. sec. 6, T. 15 S., R. 5 E., at crossing of N.-S. township line, on S. side of rd., at fence line, in root 7 in. underground on N. side of 14-in. oak tree; copper nail and washer-----	470.80
Round Knob, 0.2 mi. N. thence 2.3 mi. E. from, just E. of NW cor. sec. 5, T. 15 S., R. 5 E., at concrete bridge over drain, on SE. corner of top of guard rail; chiseled square-----	426.73
Round Knob, 0.2 mi. N. thence 2.9 mi. E. from, 0.3 mi. W. of SE. cor. sec. 32, T. 14 S., R. 5 E., at NW. corner of crossroads; standard iron post with bronze cap stamped "410"-----	409.227
T. 14 S., R. 5 E., just W. of S $\frac{1}{4}$ cor. sec. 33, on N. side of rd., at junction of T-rd. S., in root on W. side of 12-in. oak tree; copper nail and washer-----	454.50
T. 15 S., R. 5 E., about 650 ft. SW. of E $\frac{1}{4}$ cor. sec. 4, 50 ft. S. of rd. fork, on W. side of rd., in root on S. side of 14-in. pin-oak tree; copper nail and washer-----	515.78
T. 15 S., R. 5 E., about 650 ft. S. of N $\frac{1}{4}$ cor. sec. 3, 0.5 mi. N. and 0.8 mi. W. from Midway, at rd. crossing N.-S. line, on N. side of rd., 30 ft. E. of N.-S. fence line, in root on N. side of 15-in. oak tree; copper nail and washer-----	555.88
Midway, 0.5 mi. N. of, 740 ft. S. and 650 ft. E. from NW cor. sec. 2, T. 15 S., R. 5 E., at SE. corner of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No. 7 1913 568"-----	566.888

[Continued in Brownfield quadrangle, line 5]

3. From point 0.5 mile north of Midway along roads southeast 0.1 mile, northeast 0.3 mile, east 1.5 miles to Massac-Pope county line, and north 0.2 mile (by S. R. Archer in 1913)

Midway, 0.6 mi. NE. of, at N. cor. secs. 1 and 2, T. 15 S., R. 5 E., at center of junction of T-rd. S., on stone marking section corner; chiseled square-----	543.86
Midway, 2.1 mi. NE. of, at SE. cor. sec. 36, T. 14 S., R. 5 E., at crossing of Massac-Pope county line, in center of junction of N.-S. rd., on stone marking section corner; chiseled square-----	582.94

[Continued in Brownfield quadrangle, line 6]

4. From Metropolis along roads northeast 1.6 miles to Brookport branch of Illinois Central Railroad, thence southeast 0.6 mile (by S. R. Archer in 1926)

Metropolis, in NE. angle of intersection of Fifth and Oak Streets, at NW. corner of crossing of Fifth Street and I. C. R. R., on top of SE. corner of concrete base of electric warning bell; chiseled square-----	341.32
--	--------

Metropolis, 1.6 mi. NE. of, 950 ft. N. and 630 ft. W. from SE. cor. sec. 1, T. 16 S., R. 4 E., 70 ft. N. and 50 ft. W. from crossing of Brookport branch of I. C. R. R., 0.2 mi. E. of E. end of wye, in root on W. side of 12-in. oak tree; copper nail and washer-----	Feet 340. 83
Metropolis, about 1.5 mi. E. of, about 1,500 ft. from river, 470 ft. below end of Massac River trestle, on right bank, 200 ft. from milepost B-4, 20 ft. S. of track, 25 ft. from right-of-way fence line, approximately at the point of intersection of two tangents, in 4- by 4-in. concrete pedestal; U. S. C. E. B. M. 24	
Cap on iron pipe-----	340. 20
Copper bolt-----	337. 11
5. From point 1.6 miles northeast of Metropolis northeast along roads 1.1 miles, thence east to point 5.5 miles northwest of Hamletsburg (by S. R. Archer in 1926; first 8.6 miles leveled twice)	
Metropolis, 2.2 mi. NE. of, at new concrete bridge over Massac River, on top of NE. corner of N. abutment; chiseled square ¹⁶ -----	341. 49
Metropolis, 2.7 mi. NE. of, near quarter corner between secs. 6 and 31, Tps. 15 and 16 S., R. 5 E., 50 ft. W. of intersection of center lines of rd. at sharp angle E., in center of private rd. W., in root on E. side of 24-in. oak tree; copper nail and washer-----	339. 77
Metropolis, 2.7 mi. NE. thence 0.6 mi. E. from, 0.25 mi. E. of SW. cor. sec. 32, T. 15 S., R. 5 E., 20 ft. N. and 30 ft. E. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 115 F. 1925 346" ¹⁷ -----	346. 510
Metropolis, 2.7 mi. NE. thence 1.4 mi. E. from, in SE. cor. sec. 32, T. 15 S., R. 5 E., 180 ft. N. of junction of T-rd. N., on W. side of rd., in root on SW. side of 42-in. oak tree; copper nail and washer-----	379. 94
Metropolis, 2.7 mi. NE. thence 1.9 mi. E. from, near S¼ cor. sec. 33, T. 15 S., R. 5 E., at concrete bridge over Fourmile Creek, at foot on S. side at W. end of N. head wall, at E. end of NW. wing wall, directly over W. abutment, on top of W. end of ledge; chiseled square-----	336. 03
Metropolis, 2.7 mi. NE. thence 2.9 mi. E. from, 2.5 mi. N. and 1.0 mi. W. from Brookport, near S¼ cor. sec. 34, T. 15 S., R. 5 E., 18 ft. N. and 25 ft. E. from crossroads, 8 ft. E. of fence corner, in fence line, in root on SW. side of 24-in. oak tree; copper nail and washer-----	373. 77
Brookport, 2.5 mi. N. and 0.5 mi. W. from, near NW. cor. sec. 2, T. 16 S., R. 5 E., just W. of crossing of Sevenmile Creek, 25 ft. S. and 15 ft. E. from crossroads, 6 ft. S. of fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 116 F 1925 345" ¹⁸ -----	344. 041

¹⁶ This bench mark replaces the chiseled square on the east parapet of the north abutment of the old bridge, the old mark being 14.68 ft. lower than the present mark.

¹⁷ In 1928 this bench mark was moved 14 ft. north of this position and reset at an elevation 0.790 ft. higher than that originally determined. The figures given represent the new elevation.

¹⁸ In 1934 this bench mark was replaced by a new tablet set 26.85 ft. S. 1° 14' W. from this position and at an elevation 0.539 ft. lower than that originally determined. The figures given represent the new elevation.

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Reference mark, 20 ft. SE. of tablet, 40 ft. S. and 25 ft. E. from crossroads, in root on SE. side of 24-in. oak tree; copper nail and washer-----	<i>Feet</i> 344. 57
Brookport, 2.5 mi. N. and 0.5 mi. E. from, 0.5 mi. E. of Washington School, near SW. cor. sec. 36, T. 15 S., R. 5 E., 35 ft. N. and 90 ft. E. from crossroads, in woods, in root on SE. side of 15-in. oak tree; copper nail and washer-----	377. 95
Brookport, 2.5 mi. N. and 1.5 mi. E. from, near NW. cor. sec. 6, T. 16 S., R. 6 E., 100 ft. E. of crossroads, on S. side of rd., at fence line, in root on N. side of 5-in. oak tree; copper nail and washer-----	373. 72
Brookport, 2.5 mi. N. and 2.5 mi. E. from, 2.4 mi. N. thence 1.0 mi. W. from Shady Grove, near SE. cor. sec. 31, T. 15 S., R. 6 E., at offset crossroads, 20 ft. N. and 20 ft. W. from junction of rd. N., in concrete post; standard tablet stamped "Prim Trav Sta No. 124 F 1925 360"-----	359. 901
Reference mark, 110 ft. W. of tablet, 130 ft. W. of rd. N., on top of E. end of N. head wall of concrete culvert; chiseled square-----	359. 49
Shady Grove, 2.4 mi. N. of, 2.5 mi. N. thence 1.0 mi. W. from Unionville, 85 ft. S. and 350 ft. E. from junction of rd. S. at NW. cor. sec. 4, T. 16 S., R. 6 E., 85 ft. S. and 180 ft. E. from junction of rd. N. at SW. cor. sec. 33, T. 15 S., R. 6 E., in root on NW. side of 36-in. tree, northeasternmost of three oak trees in field; copper nail and washer-----	389. 34
Unionville, 2.5 mi. N. of, near SE. cor. sec. 33, T. 15 S., R. 6 E., at offset crossroads, in NW. angle of junction of rd. N., in fence corner, in root on N. side of 7-in. walnut tree; copper nail and washer-----	370. 32
Unionville, 2.5 mi. N. thence 1.0 mi. E. from, near NE. cor. sec. 3, T. 16 S., R. 6 E., 25 ft. S. and 30 ft. W. from crossroads, in fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 125 F 1925 431"-----	430. 053
Reference mark, 125 ft. E. of crossroads, on S. side of rd., in root on SE. side of 15-in. oak tree; copper nail and washer-----	435. 70
Unionville, 2.5 mi. N. thence 2.0 mi. E. from, 4.3 mi. W. and 1.5 mi. N. from Hamletsburg, near NW. cor. sec. 1, T. 16 S., R. 6 E., 15 ft. S. and 40 ft. E. from junction of T-rd. S., in fence line S. of rd. E., 10 ft. E. of 6-in. oak tree used as fence corner, in root on NW. side of 6-in. oak tree used as fence post; copper nail and washer-----	456. 23

[Continued in Smithland quadrangle, line 1]

6. From point 2.4 miles north of Shady Grove generally south along roads to point opposite Paducah, Ky., thence southeast along roads near river to point near Massac-Pope county line (by S. R. Archer in 1926)

Shady Grove, 1.4 mi. N. of, near NW. cor. sec. 9, T. 16 S., R. 6 E., at N. side of yard at Palmar School, 35 ft. S. and 115 ft. E. from crossroads, 25 ft. E. of 24-in. oak tree, in root on SW. side of 15-in. oak tree; copper nail and washer-----	361. 89
Shady Grove, 0.8 mi. N. of, 0.25 mi. S. of W ¹ / ₄ cor. sec. 9, T. 16 S., R. 6 E., 35 ft. E. of rd., 75 ft. N. of SW. corner of timber and fence line E., in root on W. side of 12-in. oak tree; copper nail and washer-----	342. 74

Shady Grove, 630 ft. N. of quarter corner between secs. 16 and 17, T. 16 S., R. 6 E., 90 ft. S. and 30 ft. W. from junction of T-rd. W., in SE. corner of yard of residence, in root on SE. side of 36-in. oak tree; copper nail and washer-----	Feet 343. 27
Shady Grove, 0.1 mi. S. thence 0.1 mi. E. from, 0.9 mi. W. of Unionville, 630 ft. E. of W $\frac{1}{4}$ cor. sec. 16, T. 16 S., R. 6 E., 35 ft. S. and 12 ft. W. from junction of T-rd. S., 20 ft. S. of fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 117 F 1925 349"-----	348. 142
Unionville, 1.0 mi. S. and 1.0 mi. W. from, just N. of W $\frac{1}{4}$ cor. sec. 21, T. 16 S., R. 6 E., 15 ft. N. and 25 ft. E. from E. end of bridge over Mud Creek, on N. side of rd., in root on SW. side of 12-in. elm tree; copper nail and washer-----	315. 16
Unionville, 1.5 mi. S. and 1.3 mi. W. from, near SE. end of Loon Lake, 630 ft. E. of quarter corner between secs. 20 and 29, T. 16 S., R. 6 E., at angle from SE. to E. in rd., 160 ft. E. of junction of rd. N., on N. side of rd., in root on NW. side of 30-in. gum tree; copper nail and washer-----	326. 39
Unionville, 1.5 mi. S. and 1.0 mi. W. from, near cor. secs. 20, 21, 28, and 29, T. 16 S., R. 6 E., 10 ft. E. of junction of T-rd. S., on N. side of E-W. rd., 800 ft. E. of farm buildings on N. side of rd., in root on NW. side of 12-in. locust tree; copper nail and washer-----	321. 34
Unionville, 2.2 mi. S. and 1.0 mi. W. from, 0.25 mi. S. of quarter corner between secs. 28 and 29, T. 16 S., R. 6 W., 700 ft. S. of concrete bridge over Big Lake, 20 ft. S. and 15 ft. E. from junction of T-rd. E., 8 ft. S. of S. gatepost, in concrete post; standard tablet stamped "Prim Trav Sta No 118 F 1925 321"-----	320. 994
Unionville 2.5 mi. S. and 1.3 mi. W. from, 0.25 mi. W. of cor. secs. 28, 29, 32, and 33, T. 16 S., R. 6 E., on bank of Ohio River, 25 ft. N. of willow line, 125 ft. S. of gate and rd. NE., 8 ft. W. of NE-SW. fence line, in root 1 ft. underground on NE. side of 15-in. poplar tree; copper nail and washer-----	313. 95
Unionville, 2.8 mi. S. and 0.2 mi. W. from, near center of NE $\frac{1}{4}$ sec. 33, T. 16 S., R. 6 E., 360 ft. SE. of house on N. side of rd. at junction of rd. S., in root on E. side of 30-in. pecan tree; copper nail and washer-----	327. 58
Unionville, 3.1 mi. S. and 0.2 mi. E. from, 0.2 mi. SE. of W $\frac{1}{4}$ cor. sec. 34, T. 16 S., R. 6 E., 515 ft. E. of angle in rd. to E. and field rd. S. to river, on N. side of rd., at SW. corner of yard of residence, in root on SW. side of 30-in. walnut tree; copper nail and washer-----	328. 23
Unionville, 3.2 mi. S. and 0.5 mi. E. from, 0.2 mi. S. of center of sec. 34, T. 16 S., R. 6 E., 110 ft. N. of rd., on E. edge of turn row N., in root on SW. side of lone 36-in. pecan tree; copper nail and washer-----	327. 27
Unionville, 3.3 mi. S. and 1.5 mi. E. from, about 800 ft. N. of S $\frac{1}{4}$ cor. sec. 35, T. 16 S., R. 6 E., 30 ft. N. and 210 ft. W. from rd. S. to river, 45 ft. S. and 30 ft. W. from SW. corner of house on N. side of rd., at SE. corner of barn lot, in concrete post; standard tablet stamped "Prim Trav Sta No 119 F 1925 329"-----	328. 551
Reference mark, 13 ft. S. and 80 ft. E. from tablet, 20 ft. N. and 150 ft. W. from rd. fork, 10 ft. N. and 20 ft. W. from SE. corner of yard, in root on N. side of 30-in. locust tree; copper nail and washer-----	325. 74

350 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Unionville, 3.0 mi. S. and 1.9 mi. E. from, 0.2 mi. W. of point where line between secs. 1 and 2, T. 17 S., R. 6 E., ends at river bank, 0.8 mi. W. of T-rd. N. at farm buildings, 35 ft. S. of rd., at top of river bank, 35 ft. S. and 13 ft. E. from gate in N.-S. fence line, in root on E. side of 10-in. tree, northernmost of two small hackberry trees; copper nail and washer-----	<i>Feet</i> 330. 87
Unionville, 3.0 mi. S. and 2.7 mi. E. from, near point where N.-S. quarter line of sec. 1, T. 17 S., R. 6 E. ends at river, at T-rd. N. at farm buildings, in line upstream from N. side of northernmost of two houses SW. of rd. fork, 40 ft. S. of gate in N.-S. fence line, on E. side of fence, in root on N. side of catalpa tree with forks 24 in. and 18 in. in diameter; copper nail and washer-----	332. 13

[Continued in Smithland quadrangle, line 2]

PINCKNEYVILLE QUADRANGLE

[Latitude 38°00'–38°15'; longitude 89°15'–89°30']

PERRY AND WASHINGTON COUNTIES

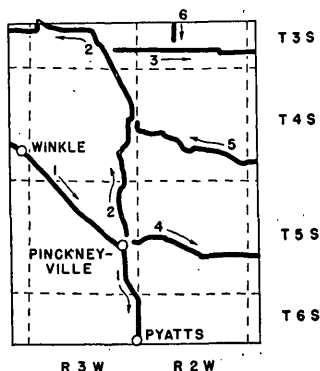


FIGURE 65.—Lines of leveling in Pinckneyville quadrangle.

1. From point 0.8 mile northwest of Winkle along Illinois Central Railroad southeast to Pinckneyville, thence south to point 0.2 mile south of Pyatts (by H. E. Wessman in 1921)

[Continued from Coulterville quadrangle, line 9]

Winkle (Craig), 15 ft. E. of rd., 45 ft. N. of track; standard iron post with bronze cap stamped "17 W 1921" (recovered by U. S. C. & G. S. in 1935)-----	Feet 570.507
Reference mark 1, 15 ft. E. of rd., on W. end of concrete retaining wall of sta. platform; chiseled square-----	571.37
Reference mark 2, 228.25 ft. S.25°30'E. from iron post, 70 ft. S. of sta., in root on N. side of 18-in. black-oak tree; copper nail and washer-----	570.81
Winkle, 0.7 mi. SE. of, about 800 ft. N. of SW. cor. sec. 30, T. 4 S., R. 3 W., on SE. corner of concrete base of semaphore G-534; chiseled square-----	554.48
Winkle, 1.5 mi. SE. of, near center of sec. 31, T. 4 S., R. 3 W., on NW. corner of concrete base of semaphore G-541; chiseled square--	558.06
Winkle, 1.9 mi. SE. of, in SE¼ sec. 31, T. 4 S., R. 3 W., 200 ft. S. of rd. crossing, 50 ft. E. of track, on E. side of rd., in root on E. side of 24-in. white-oak tree; copper nail and washer-----	565.81
Winkle, 2.0 mi. SE. of, 6.0 mi. NW. of Perry County courthouse at Pinckneyville, 0.25 mi. N. of SE. cor. sec. 31, T. 4 S., R. 3 W., 530 ft. SE. of rd. crossing, 50 ft. NE. of track, in fence line; standard iron post with bronze cap stamped "18 W 1921"-----	564.703
Reference mark, 203.7 ft. N.58°W. from iron post, 310 ft. SE. of rd. crossing, on SE. corner of concrete base of semaphore; chiseled square-----	563.73

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Pinckneyville, 5.3 mi. NW. of, about 0.2 mi. N. of center of sec. 5, T. 5 S., R. 3 W., 480 ft. NW. of rd. crossing, on NW. corner of concrete base of semaphore G-561; chiseled square (recovered by U. S. C. & G. S. in 1935) ¹⁹ -----	<i>Feet</i> 543.257
Pinckneyville, 4.9 mi. NW. of, in SE¼ sec. 5, T. 5 S., R. 3 W., 0.3 mi. SE. of N-S. rd. through center of sec. 5, on NW. corner of concrete base of semaphore G-563; chiseled square-----	542.61
Pinckneyville, 4.0 mi. NW. of, in NW¼ sec. 9, T. 5 S., R. 3 W., 50 ft. S. of rd., on SE. corner of concrete base of semaphore G-572; chiseled square (recovered by U. S. C. & G. S. in 1935) ¹⁹ -----	536.908
Pinckneyville, 3.8 mi. NW. of, near center of sec. 9, T. 5 S., R. 3 W., 120 ft. SE. of rd. crossing, in root on N. side of 10-in. hickory tree; copper nail and washer-----	534.67
Pinckneyville, 3.3 mi. NW. of, in SE¼ sec. 9, T. 5 S., R. 3 W., on NE. corner of concrete base of semaphore G-573; chiseled square-----	526.01
Pinckneyville, 2.6 mi. NW. of, about 0.25 mi. E. of NW. cor. sec. 15, T. 5 S., R. 3 W., on E. side of rd., 50 ft. N. of N. track, 2 ft. W. of fence line; standard iron post with bronze cap stamped "19 W 1921"-----	505.368
Reference mark 1, on W. side of rd., on N. end of W. abutment of R. R. bridge; chiseled square-----	506.85
Reference mark 2, 34.7 ft. S.39°30'W. from iron post, on E. side of rd., N. of tracks, on SE. corner of concrete base of bell-crossing-signal post; chiseled square-----	505.08
Pinckneyville, 1.8 mi. NW. of, near E¼ cor. sec. 15, T. 5 S., R. 3 W., at rd. crossing, on NE. corner of W. abutment of bridge over rd.; chiseled square-----	486.51
Pinckneyville, 1.4 mi. NW. of, near center of SW¼ sec. 14, T. 5 S., R. 3 W., 90 ft. NW. of rd. crossing, on SE. corner of base of semaphore G-592; chiseled square-----	473.48
Pinckneyville, 0.8 mi. W. of, near center of NE¼ sec. 23, T. 5 S., R. 3 W., on S. side of rd. crossing, 60 ft. NW. of coal chute, on NW. corner of concrete base of semaphore; chiseled square-----	457.53
Pinckneyville, at intersection of Wabash, Chester & Western R. R. ²⁰ crossing; top of rail-----	449.4
Pinckneyville, 15 ft. N. and 15 ft. E. from SW. corner of courthouse square; standard iron post with bronze cap stamped "20 W 1921" (recovered by U. S. C. & G. S. in 1935)-----	439.284
Reference mark 1, at SW. corner of courthouse square, on SW. corner of concrete walk; chiseled square-----	438.50
Reference mark 2, 143.35 ft. N.87°30'E. from iron post, 15 ft. N. and 13 ft. W. from SE. corner of courthouse square, in root on W. side of 24-in. elm tree; copper nail and washer (recovered in 1923)-----	437.47
Pinckneyville, at I. C. R. R. sta., 5 ft. N. of track, on W. end of concrete retaining wall of sta. platform; chiseled square-----	447.75
Pinckneyville, on S. branch of I. C. R. R., about 0.25 mi. W. of N¼ cor. sec. 25, T. 5 S., R. 3 W., on NE. corner of concrete base of semaphore G-613; chiseled square-----	440.57

¹⁹ This mark probably was disturbed between the time it was established and its recovery.

²⁰ Now the Chester & Mt. Vernon branch of the Missouri Pacific R. R.

Pinckneyville, 1.6 mi. S. of courthouse at, 0.25 mi. W. of center of sec. 25, T. 5 S., R. 3 W., opposite milepost "E 62 miles-New Orleans 634 miles," on SW. corner of concrete base of semaphore G-618; chiseled square-----	<i>Feet</i> 435. 87
Pinckneyville, 2.1 mi. S. of, 0.25 mi. W. of S $\frac{1}{4}$ cor. sec. 25, T. 5 S., R. 3 W., 70 ft. N. of rd. crossing, on NE. corner of concrete base of semaphore G-621; chiseled square-----	426. 40
Pinckneyville, 3.3 mi. S. of, 2.6 mi. W. of Pyatts, 0.25 mi. E. of N $\frac{1}{4}$ cor. sec. 1, T. 6 S., R. 3 W., 35 ft. S. of rd. crossing, 50 ft. W. of track, in right-of-way fence line; standard iron post with bronze cap stamped "21 W 1921"-----	422. 564
Reference mark, 170 ft. SE. of rd. crossing, on NE. corner of concrete base of semaphore G-631; chiseled square-----	420. 58
Pyatts, 1.6 mi. N. of, 750 ft. N. of SE. cor. sec. 1, T. 6 S., R. 3 W., on SW. corner of concrete base of semaphore G-642; chiseled square-----	424. 08
Pyatts, 0.8 mi. N. of, 1,200 ft. S. of E $\frac{1}{4}$ cor. sec. 12, T. 6 S., R. 3 W., on NE. corner of semaphore G-651; chiseled square-----	407. 32
Pyatts, on S. side of rd. crossing, 45 ft. E. of tracks, in root on N. side of 26-in. poplar tree; copper nail and washer-----	410. 83
Pyatts, 0.5 mi. E. of, near center of sec. 18, T. 6 S., R. 2 W., in SW. angle of offset crossroads, 6 ft. from NE. fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 35 1906 22 W 1921" ²¹ -----	417. 053
Reference mark, 70 ft. N.31°E. from iron post, 60 ft. N. of crossroads, 10 ft. E. of E. fence line, in root on S. side of 15-in. walnut tree; copper nail and washer-----	417. 31

[Continued in Murphysboro quadrangle, line 4]

2. From Pinckneyville along roads generally north to road junction 3.5 miles northwest of Rice, thence west to point 0.2 mile west of northeast corner sec. 26, T. 3 S., R. 4 W. (by C. E. Walker in 1923)

Pinckneyville, 1.1 mi. N. of courthouse at, in NW $\frac{1}{4}$ sec. 13, T. 5 S., R. 3 W., 60 ft. S. of private T-rd. W., 20 ft. E. of center line of rd., 5 ft. E. of fence line, in root 2 in. underground on SW. side of 24-in. oak tree; copper nail and washer-----	426. 31
Pinckneyville, 2.1 mi. N. of, in NE $\frac{1}{4}$ sec. 11, T. 5 S., R. 3 W., 0.25 mi. S. of farmhouse of Adam Mantle, 20 ft. N. of junction of private T-rd. W., 20 ft. E. of center line of rd., 20 ft. N. of E-W. fence line, 5 ft. E. of N-S. fence line, in root on W. side of 24-in. wild-cherry tree; copper nail and washer-----	494. 23
Pinckneyville, 3.2 mi. N. of, near center of NW $\frac{1}{4}$ sec. 1, T. 5 S., R. 3 W., about 600 ft. S. of farmhouse of Jasper Killerman, in line with center of private rd. W. into barn lot, 10 ft. E. of center line of rd., in fence line, in concrete post; standard tablet stamped "8 WA 1923"-----	464. 456
Reference mark, on E. side of rd.; in valley, 40 ft. E. of center line of rd., 100 ft. NE. of small bridge, in root 4 in. underground on E. side of old walnut tree; copper nail and washer-----	462. 59
Pinckneyville, 4.2 mi. N. of, in NW $\frac{1}{4}$ sec. 36, T. 4 S., R. 3 W., 400 ft. N. of jog in rd., 15 ft. W. of center line of rd., 5 in. underground on E. side of 24-in. oak tree; copper nail and washer-----	453. 35

²¹ On spur line east 0.5 mile.

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Pinckneyville, 5.0 mi. N. of, in SE $\frac{1}{4}$ sec. 26, T. 4 S., R. 3 W., about 600 ft. N. of junction of rd. W. toward Winkle, 15 ft. E of center line of rd., 50 ft. N. of private rd. E., 115 ft. W. of old frame house, in root on E. side of 18-in. oak tree; copper nail and washer-----	<i>Feet</i> 489.79
Pinckneyville, 5.9 mi. N. of, 3.3 mi. S. of Rice, 0.3 mi. SW. of Eichholz School, about 500 ft. W. of quarter corner between secs. 24 and 25, T. 4 S., R. 3 W., 20 ft. W. of center line of rd., in line with center of T-rd. E., 300 ft. N. of farmhouse of Dan Feik, in concrete post; standard tablet stamped "9 WA 1923" and "Prim Trav Sta No 33 S 1924"-----	440.224
Reference mark, 200 ft. N. of junction of T-rd. E., 15 ft. W. of center line of rd., in root on E. side of 18-in. elm tree; copper nail and washer-----	438.86
Rice, 2.1 mi. S. of, 0.9 mi. N. of Eichholz School, about 800 ft. N. of S $\frac{3}{4}$ cor sec. 13, T. 4 S., R. 3 W., 400 ft. S. of right-angle bend in rd from N. to E., 300 ft. SE of farmhouse of George Dietz, 20 ft. W. of center line of rd., 50 ft. S. of private rd. W., inside field, in root on E. side of 24-in. wild-cherry tree; copper nail and washer-----	477.00
Rice, 1.0 mi. S. of, in SE $\frac{1}{4}$ sec. 12, T. 4 S., R. 3 W., 360 ft. N. of junction of private rd. E., 20 ft. W. of center line of rd., 300 ft. SW. of farmhouse of William Zitt, 5 ft. W. of fence line, inside field, in root 2 in. underground on E side of 18-in. oak tree; copper nail and washer-----	497.43
Rice, at Concord Baptist Church, 30 ft. SW. of crossroads, in NE corner of churchyard, in concrete post; standard tablet stamped "10 WA 1923"-----	509.138
Reference mark, 90 ft. NE. of Concord Baptist Church, 80 ft. W. of center line of N.-S. rd., 50 ft. S. of center line of E.-W. rd., in root on E side of 30-in. maple tree; copper nail and washer-----	511.01
Rice, 1.0 mi. NW. of, in NE $\frac{1}{4}$ sec. 2, T. 4 S., R. 3 W., 230 ft. S. of crossroads and Perry-Washington county line, 20 ft. E. of center line of rd., in root 2 in. underground on W. side of 8-in. cedar tree; copper nail and washer-----	515.99
Rice, 2.2 mi NW. of, 0.3 mi. W. of Slade School, about 1,000 ft. E. of SW. cor. sec. 26, T. 3 S., R. 3 W., at junction of T-rd. E., 80 ft. W. of farmhouse of W. R. Murphy, 45 ft. E. of center line of N.-S. rd., 25 ft. N. of rd. E., in root on S. side of 10-in. maple tree; copper nail and washer-----	520.82
Rice, 3.5 mi. NW. of, near N $\frac{1}{4}$ cor. sec. 27, T. 3 S., R. 3 W., 20 ft. E. of center line of N.-S. rd., in line with center of T-rd. W., in fence line, in concrete post; standard tablet stamped "11 WA 1923"-----	522.978
Reference mark, 100 ft. W. of N.-S. rd., 30 ft. N. of center line of rd. W., 50 ft. S. of old house, in root 2 in. underground on S. side of 8-in. walnut tree; copper nail and washer-----	524.96
T. 3 S., R. 3 W., near N $\frac{1}{4}$ cor. sec. 28, 20 ft. S. of center line of rd., 900 ft. W. of T-rd S., 500 ft. E. of farmhouse on S. side of rd., in fence line, in root 2 in. underground on N. side of 18-in. oak tree; copper nail and washer-----	519.18

T. 3 S., R. 3 W., in SW $\frac{1}{4}$ sec. 20, 100 ft. S. of farmhouse of Fred Brammeir, 20 ft. S. of center line of rd., 5 ft. S. of fence line, inside field, in root on S. side of three-forked 40-in. locust tree; copper nail and washer-----	Feet 521.31
[Jogs into Nashville quadrangle, line 3]	
T. 3 S., R. 4 W., near SE. cor. sec. 24, at N. end of jog in rd., 70 ft. W. of Oakdale-Pilot Knob township line, 20 ft. N. of center line of rd., in root on N. side of 18-in. sycamore tree; copper nail and washer-----	500.02
T. 3 S., R. 4 W., about 500 ft. E. of SW. cor. sec. 24, 80 ft. N. of center line of rd., 60 ft. N. of hedge fence line, 10 ft. W. of two-story frame house, in root on SW. side of three-forked 30-in. maple tree; copper nail and washer-----	523.92
[Continued in Coulterville quadrangle, line 10]	
3. From road junction 2.2 miles northwest of Rice east along road to point 2.1 miles west of Dubois (by C. E. Walker in 1923)	
T. 3 S., R. 3 W., 0.3 mi. E. of SW. cor. sec. 25, 30 ft. N. of center line of rd., 40 ft. NW. of small bridge, in root on S. side of 6-in. maple tree; copper nail and washer-----	491.14
T. 3 S., R. 2 W., 0.2 mi. E. of S $\frac{1}{4}$ cor. sec. 30, 1,200 ft. E. of junction of T-rd. S. on half section line, at junction of T-rd. N., 20 ft. N. of center line of rd., 350 ft. SW. of farmhouse, in root 2 in. underground on NW. side of 20-in. thorn tree; copper nail and washer--	466.70
T. 3 S., R. 2 W., about 625 ft. W. of N $\frac{1}{4}$ cor. sec. 32, 250 ft. E. of E. end of bridge over Locust Creek, 450 ft. SW. of farmhouse of Mike Rugite, 20 ft. S. of center line of rd., at corner of woods lot, in fence corner, in concrete post; standard tablet stamped "13 WA 1923" and "Prim Trav Sta No 35 S 1924" ²² -----	439.374
Reference mark, 360 ft. E. of bridge, about 400 ft. SW. of farmhouse, in root 2 in. underground on S. side of 30-in. hickory tree; copper nail and washer (recovered in 1930)-----	440.58
T. 3 S., R. 2 W., near N $\frac{1}{4}$ cor. sec. 33, at junction of private T-rd. S., 20 ft. S. of center line of rd., in root 2 in. underground on N. side of 30-in. oak tree; copper nail and washer (recovered in 1930)--	462.32
T. 3 S., R. 2 W., near N $\frac{1}{4}$ cor. sec. 34, 10 ft. S. of center line of rd., in line with center of private rd. N., 5 ft. N. of fence line, in root on N. side of two-forked 20-in. hickory tree; copper nail and washer.	462.59
T. 3 S., R. 2 W., near S $\frac{1}{4}$ cor. sec. 26, at Turkey Bend School, at right-angle bend from E. to S. in rd., 25 ft. N. of E.-W. rd., in line with rd. S., in SE. corner of schoolyard, 65 ft. SE. of schoolhouse door, in N.-S. fence line, in concrete post; standard tablet stamped "14 WA 1923" and "Prim Trav Sta No 34 S 1924"-----	490.475
Reference mark, in schoolyard, 150 ft. W. of schoolhouse, 40 ft. N. of center line of rd., 30 ft. E. of private T-rd. N., in root 2 in. underground on SW. side of 14-in. oak tree; copper nail and washer---	489.88
T. 3 S., R. 2 W., in NW $\frac{1}{4}$ sec. 36, 900 ft. W. of crossroads, near junction of private T-rd. S., 30 ft. N. of center line of rd., in fence line, in root on S. side of 24-in. wild-cherry tree; copper nail and washer-----	508.25

²² Apparently reset.

T. 3 S., R. 1 W., 0.25 mi. N. of center of sec. 31, 2.2 mi. W. of Illinois Central R. R. sta. in Dubois, 20 ft. S. of center line of rd., 95 ft. W. of farmhouse of Mike Bochantin, 160 ft. W. of fence on half-section line, 2 ft. S. of fence line, in root 2 in. underground on NE. side of 6-in. hedge tree; copper nail and washer----- *Feet*
527. 70

[Continued in Duquoin quadrangle, line 2]

4. From Pinckneyville east along roads to point 0.6 mile west of Sunfield (by S. R. Archer in 1923)

Pinckneyville, 0.8 mi. E. of courthouse at, in NW $\frac{1}{4}$ sec. 19, T. 5 S., R. 2 W., 40 ft. N. and 30 ft. E. from N. end of highway bridge over Beaucoup Creek, in root on NW. side of 36-in. oak tree; copper nail and washer----- 404. 31

Pinckneyville, 1.8 mi. E. of, near NW. cor. sec. 20, T. 5 S., R. 2 W., 50 ft. S. and 75 ft. E. from crossroads, in root on NW. side of 30-in. oak tree; copper nail and washer----- 424. 49

Pinckneyville, 2.4 mi. E. of, about 500 ft. S. of N $\frac{1}{4}$ cor. sec. 20, T. 5 S., R. 2 W., 85 ft. N. of angle SE. in rd., on top of W. head wall of concrete culvert under rd.; chiseled square----- 428. 06

Pinckneyville, 3.2 mi. E. of, about 0.2 mi. S. of center of NW $\frac{1}{4}$ sec. 21, T. 5 S., R. 2 W., 25 ft. N. and 50 ft. W. from junction of rd. S., 28 ft. W. of fence corner, in fence line, in concrete post; standard tablet stamped "66 A 1923"----- 447. 166

Reference mark, 12 ft. E. of tablet, 25 ft. N. and 35 ft. W. from junction of T-rd. S., 20 ft. W. of private rd. N., 15 ft. W. of fence corner, in root on E. side of 6-in. elm tree; copper nail and washer----- 447. 56

Pinckneyville, 4.6 mi. E. of, near quarter corner between secs. 22 and 27, T. 5 S., R. 2 W., 45 ft. S. and 2 ft. W. from junction of rd. E., on N. side of gate of lane W. to residence, in root on NW. side of 30-in. oak tree; copper nail and washer----- 453. 01

Pinckneyville, 5.8 mi. E. of, 2.7 mi. W. of Sunfield, near S $\frac{1}{4}$ cor. sec. 23, T. 5 S., R. 2 W., in NE. angle of offset crossroads, 40 ft. N. and 30 ft. E. from junction of rd. S., 40 ft. N. and 12 ft. E. from junction of rd. N., 25 ft. N. of fence corner, at fence line, in concrete post; standard tablet stamped "67 A 1923"----- 443. 945

Reference mark, 85 ft. E. of tablet, 40 ft. N. and 100 ft. E. from crossroads, in field, 25 ft. N. of fence line, in root on SW. side of 12-in. oak tree; copper nail and washer----- 443. 85

Sunfield, 2.0 mi. W. of, 0.25 mi. E. of NW. cor. sec. 25, T. 5 S., R. 2 W., in SW. angle of crossroads, at fence corner, in root 5 in. underground on NW. side of 12-in. oak tree; copper nail and washer----- 458. 98

Sunfield, 1.2 mi. W. of, at W. cor. secs. 19 and 30, T. 5 S., R. 1 W., on range line, at junction of center lines of rd. E. and jog, in root on NW. side of 15-in. oak tree; copper nail and washer----- 456. 79

[Continued in Duquoin quadrangle, line 3]

5. From point 1.4 miles west of Tamaroa west and northwest along roads to point 2.1 miles south of Rice (by S. R. Archer in 1923)

[Continued from Duquoin quadrangle, line 4]

Tamaroa, 2.0 mi. W. of, near SW. cor. sec. 30, T. 4 S., R. 1 W., 35 ft. N. and 25 ft. E. from junction of T-rd. S., 14 ft. N. and 13 ft. E. from 12-in. locust tree, 10 ft. E. of fence corner, at fence line, in concrete post; standard tablet stamped "68 A 1923" and "Prim Trav Sta No 30 S 1924"----- 514. 237

Reference mark, 25 ft. S. and 15 ft. E. from rd. junction, in root on NW. side of 24-in. hickory tree; copper nail and washer-----	<i>Feet</i> 513.95
T. 4 S., R. 2 W., in SW $\frac{1}{4}$ sec. 25, 240 ft. NW. of highway bridge over White Walnut Creek, in NW. angle of private rd. N., in root on S. side of 12-in. oak tree; copper nail and washer-----	462.16
T. 4 S., R. 2 W., near center of sec. 26, in NW. angle of junction of T-rd. N., in root on SW. side of 30-in. oak tree; copper nail and washer-----	511.11
T. 4 S., R. 2 W., near quarter corner between secs. 26 and 27, at junction of T-rd. S., on N. side of rd., in root on S. side of 8-in. oak tree; copper nail and washer-----	512.53
T. 4 S., R. 2 W., 500 ft. N. of center of sec. 27, 40 ft. E. of point where rd. crosses N.-S. quarter line, on S. side of rd., in NW. corner of yard of W. A. Chapman, 25 ft. N. and 15 ft. W. from NW. corner of residence, inside fence corner, in concrete post; standard tablet stamped "69 A 1923" and "Prim Trav Sta No 31 S 1924"-----	505.846
Reference mark, 50 ft. W. of front of house, 28 ft. E. of point where rd. crosses N.-S. quarter line, on N. side of rd., in root 3 in. underground and 1 ft. from base on W. side of westernmost of two 12-in. boxelder trees standing 18 ft. apart; copper nail and washer-----	505.30
T. 4 S., R. 2 W., near center of sec. 28, 40 ft. N. of angle N. in rd., on E. side of rd., 25 ft. NW. of 24-in. oak tree, in root on S. side of forked oak tree; copper nail and washer-----	486.54
T. 4 S., R. 2 W., about 800 ft. N. of SW. cor. sec. 21, 60 ft. W. of highway bridge over Little Beaucoup Creek, on S. side of rd., in root on W. side of 24-in. birch tree; copper nail and washer-----	432.52
T. 4 S., R. 2 W., about 800 ft. S. of center of sec. 20, 25 ft. N. and 20 ft. W. from junction of T-rd. E., 2 ft. N. of fence corner, at fence line, in concrete post; standard tablet stamped "70 A 1923" and "Prim Trav Sta No 32 S 1924"-----	456.247
T. 4 S., R. 2 W., about 650 ft. W. of E $\frac{1}{4}$ cor. sec. 19, 15 ft. N. and 30 ft. W. from W. end of highway bridge over fork of Beaucoup Creek, on N. side of rd., in root on NW. side of forked elm tree; copper nail and washer-----	421.63
T. 4 S., R. 2 W., about 800 ft. N. of W $\frac{1}{4}$ cor. sec. 19, 130 ft. N. and 40 ft. E. from junction of N.-S. rd., in root on SW. side of 30-in. oak tree; copper nail and washer-----	446.08
T. 4 S., R. 2 W., 0.25 mi. N. of SW. cor. sec. 18, 2.1 mi. S. thence 0.6 mi. E. from Rice, 70 ft. NE of right-angle bend W. in rd., on N. side of private rd. E., near fence corner in range line, in root on SE. side of 12-in. oak tree; copper nail and washer-----	481.23
6. From east quarter corner sec. 20, T. 3 S., R. 2 W., along roads south 1.5 miles, thence west to bridge over Locust Creek near north quarter corner sec. 32, T. 3 S., R. 2 W. (by L. V. Johnson in 1930)	

[Continued from Nashville quadrangle, line 8]

T. 3 S., R. 2 W., near SE. cor. sec. 29, 25 ft. N. and 20 ft. W. from crossroads, in root on N. side of 12-in. maple tree; copper nail and washer-----	467.12
--	--------

PRINCETON QUADRANGLE

[Latitude 38°15'–38°30'; longitude 87°30'–87°45']

WABASH COUNTY

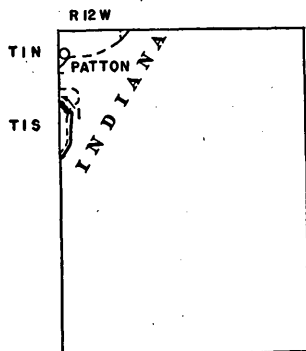


FIGURE 66.—Lines of leveling in Princeton quadrangle.

1. From southeast end of Southern Railway bridge over Wabash River at Mount Carmel northeast along road on Indiana side of Wabash River to Grand Rapids, thence northwest across river (by W. A. Gelbach in 1908)

[Continued from Mount Carmel quadrangle, line 7]

Grand Rapids, on pier on land side of government locks, at point where three coping stones meet; top of coping (Wabash River Survey P. B. M. 13 1903)²³ -----

Feet
395.934

[Connects with line 6 in Mount Carmel quadrangle]

²³ This bench mark is in Indiana.

RAMSEY QUADRANGLE

[Latitude 39°00'–39°15'; longitude 89°00'–89°15']

FAYETTE, MONTGOMERY, AND SHELBY COUNTIES

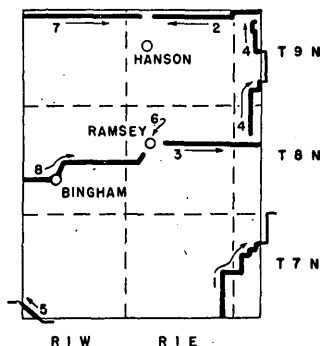


FIGURE 67.—Lines of leveling in Ramsey quadrangle.

1. From point about 2.5 miles north of Bluff along roads alternately north and east to point 4.2 miles north and 2.5 miles west from Brownstown (by P. E. Fletcher in 1907)

[Continued from Vandalia quadrangle, line 1]

Bluff, about 3.8 mi. N. of, 1.4 mi. N. and 4.5 mi. W. from Brownstown, 0.25 mi. N. of S¼ cor. sec. 25, T. 7 N., R. 1 E., in front of residence of B. F. Forbes; standard iron post with bronze cap stamped "535"-----	Feet 534.416
Brownstown, 3.5 mi. N. and 3.6 mi. W. from, near center of sec. 18, T. 7 N., R. 2 E., 0.25 mi. N. of residence of Thomas Grandfield; standard iron post with bronze cap stamped "501"-----	499.952

[Continued in St. Elmo quadrangle, line 1]

2. From point 2 miles north and 0.6 mile west from Herrick generally west along road to point 2 miles north of Hanson (by L. V. Johnson in 1930)

[Continued from St. Elmo quadrangle, line 4]

Herrick, 2.0 mi. N. and 0.8 mi. W. from, 0.25 mi. N. of S¼ cor. sec. 5, T. 9 N., R. 2 E., 21 ft. S. and 23 ft. W. from junction of T-rd. S., on S. end of E. head wall of concrete culvert under rd. S.; chiseled square-----	599.91
Herrick, 2.0 mi. N. and 1.3 mi. W. from, 0.25 mi. N. of SW. cor. sec. 5, T. 9 N., R. 2 E., 18 ft. S. and 33 ft. E. from junction of T-rd. S., in in root on NE. side of black-oak tree; copper nail and washer----	607.02
Herrick, 2.0 mi. N. and 2.1 mi. W. from, 25 ft. S. and 15 ft. E. from rd. junction, in concrete post; standard tablet stamped "Prim Trav Sta No 98 LS 1924"-----	582.854
Reference mark, 30 ft. S. of tablet, in root on W. side of 14-in. oak tree; copper nail and washer-----	578.60
Herrick, 1.8 mi. N. and 2.1 mi. W. from, 2.0 mi. N. and 4.5 mi. E. from Hanson, near SW. cor. sec. 6, T. 9 N., R. 2 E., 10 ft. N. and 15 ft. E. from junction of T-rd. W., on E. side of fence line, in root on S. side of 30-in. oak tree; copper nail and washer-----	610.03

Hanson, 2.0 mi. N. and 3.5 mi. E. from, near NW cor. sec. 12, T. 9 N., R. 1 E., 85 ft. S. and 60 ft. E. from junction of N-S. rd., at school-house, 3 ft. W. of porch, on concrete walk; chiseled square-----	<i>Feet</i> 635.44
Hanson, 2.0 mi. N. and 3.0 mi. E. from, 0.25 mi. E. of NW. cor. sec. 11, T. 9 N., R. 1 E., 7 ft. S. and 290 ft. E. from junction of T-rd. S., on E. end of S. concrete head wall of culvert; chiseled square-----	642.64
Hanson, 2.0 mi. N. and 2.0 mi. E. from, near S $\frac{1}{4}$ cor. sec. 3, T. 9 N., R. 1 E., 36 ft. N. of junction of T-rd. S., 14 ft. N. of corner fence post, in concrete post; standard tablet stamped "15 J 1930"-----	647.265
Reference mark, 30 ft. N. of rd. junction, in root on W. side of 6-in. oak tree; copper nail and washer-----	647.04
Hanson, 2.0 mi. N. and 1.1 mi. E. from, just E. of N $\frac{1}{4}$ cor. sec. 9, T. 9 N., R. 1 E., on S. side of rd., on E. end of S. concrete head wall of large culvert over creek; chiseled square-----	637.53
Hanson, 2.0 mi. N. and 0.5 mi. E. from, near SE. cor. sec. 5, T. 9 N., R. 1 E., 25 ft. N. and 18 ft. W. from junction of N-S. rd., 10 ft. N. and 18 ft. W. from junction of T-rd. W., in center of top of NW. concrete head wall of culvert; chiseled square-----	662.55
Warren triangulation sta., 2.0 mi. N. of Hanson, 2.7 mi. S. of Ozonee, on W. side of Illinois Central R. R. track, 105 ft. N. of N. edge of overpass, 34 ft. W. of W. rail, in concrete; U. S. C. & G. S. standard disk-----	668.414
Reference mark, on W. side of track, 61 ft. from sta. in azimuth 90°38', in concrete; U. S. C. & G. S. standard reference disk (recovered in 1937)-----	666.327
3. From Ramsey along road east 5.9 miles (by S. R. Archer in 1932)	
U. S. C. & G. S. standard disk stamped "C 8" (recovered in 1937)---	611.629
U. S. C. & G. S. standard disk stamped "B 8" ²⁴ (recovered in 1937)---	609.429
Ramsey, 0.5 mi. E. of, 370 ft. E. of cross streets, at NE. corner of yard of public school, on top of S. head wall of concrete culvert; chiseled square-----	596.19
Ramsey, 1.2 mi. E. of, 0.25 mi. W. of SE. cor. sec. 9, T. 8 N., R. 1 E., 19 ft. N. and 20 ft. E. from crossroads, in concrete post; standard tablet stamped "T T Sta No 17 L 1929"-----	597.306
Ramsey, 1.4 mi. E. of, near E. cor. secs. 9 and 16, T. 8 N., R. 1 E., on S. side of concrete bridge, on E. side of end post, on top of W. end of concrete side wall; chiseled square-----	575.26
Ramsey, 2.0 mi. E. of, near quarter corner between secs. 10 and 15, T. 8 N., R. 1 E., at steel bridge over Ash Creek, on top of S. parapet of E. concrete abutment; chiseled square-----	544.50
Ramsey, 2.5 mi. E. of, near NW. cor. sec. 14, T. 8 N., R. 1 E., in SE. angle of crossroads, in field, in root on N. side of forked wild-cherry tree; copper nail and washer-----	589.27
Ramsey, 3.5 mi. E. of, near NW. cor. sec. 13, T. 8 N., R. 1 E., at offset crossroads, 45 ft. N. of rd. W., 70 ft. S. of rd. E., on E. side of N-S. rd., on top of N. end of E. head wall of concrete culvert; chiseled square-----	582.81
Ramsey, 4.1 mi. E. of, near quarter corner between secs. 12 and 13, T. 8 N., R. 1 E., on inside at foot of W. end of S. side wall of concrete bridge, on top of ledge; chiseled square-----	537.89

²⁴ The sidewalk has apparently settled 0.055 ft. since this bench mark was set.

Ramsey, 4.5 mi. E. of, near NW. cor. sec. 18, T. 8 N., R. 2 E., 30 ft. S. and 20 ft. E. from crossroads, 10 ft. S. of fence corner, in concrete post; standard tablet stamped "T T Sta No. 16 L 1929"-----	<i>Feet</i> 572. 535
Ramsey, 5.3 mi. E. of, near SW. cor. sec. 8, T. 8 N., R. 2 E., at NE. corner of crossroads, on top of N. head wall of concrete culvert under rd. E.; chiseled square-----	586. 49

[Continued in St. Elmo quadrangle, line 5]

4. From crossroads 5.3 miles east of Ramsey generally north along roads to point 2 miles north and 0.8 mile west from Herrick (by S. R. Archer in 1932)

Ramsey, 5.3 mi. E. thence 1.0 mi. N. from, near NE. cor. sec. 7, T. 8 N., R. 2 E., 145 ft. S. and 42 ft. W. from crossroads, in field, in root on E. side of 10-in. cedar tree; copper nail and washer-----	603. 75
Ramsey, 5.3 mi. E. thence 2.0 mi. N. from, 2.2 mi. E. of Dresser, near NW. cor. sec. 5, T. 8 N., R. 2 E., 40 ft. S. and 20 ft. E. from junction of T-rd. W., 17 ft. S. and 20 ft. E. from junction of rd. E., in concrete post; standard tablet stamped "Prim Trav Sta No. 137 LS 1924-----	590. 943
Reference mark, 50 ft. S. of rd. W., 30 ft. S. of rd. E., on W. side of N.-S. rd., at fence line, in root on NW. side of 30-in. locust tree; copper nail and washer-----	590. 36
Ramsey, 5.3 mi. E. thence 2.9 mi. N. from, about 2.3 mi. S. and 1.3 mi. W. from Herrick, in NW $\frac{1}{4}$ sec. 32, T. 9 N., R. 2 E., 80 ft. NE. of rd. fork, on NW. side of rd., at S. corner of yard of farmhouse, in root on S. side of 24-in. maple tree; copper nail and washer-----	529. 08
Herrick, 2.1 mi. S. and 0.8 mi. W. from, near N $\frac{1}{4}$ cor. sec. 32, T. 9 N., R. 2 E., at NE. end of bridge over Beck Creek, on top of SE. pier, on top of southwesternmost bolt; chiseled circle-----	525. 60

[Jogs into St. Elmo quadrangle, line 7]

Herrick, 0.2 mi. S. thence 0.8 mi. W. from, near N $\frac{1}{4}$ cor. sec. 20, T. 9 N., R. 2 E., 20 ft. E. of junction of T-rd. N., on S. side of rd., at fence corner, in root on NE. side of 36-in. oak tree; copper nail and washer-----	593. 91
Herrick, 0.8 mi. N. and 1.3 mi. W. from, near NE. cor. sec. 18, T. 9 N., R. 2 E., 45 ft. S. and 35 ft. W. from crossroads, in NE. corner of schoolyard, in concrete post; standard tablet stamped "T T 138 LS 35 A 1932"-----	590. 814
Herrick, 0.8 mi. N. and 0.8 mi. W. from, 275 ft. S. of N $\frac{1}{4}$ cor. sec. 17, T. 9 N., R. 2 E., 275 ft. S. of right-angle turn in rd., 75 ft. N. of farmhouse on E. side of rd., on E. side of rd., in root on NW. side of 24-in. maple tree; copper nail and washer-----	598. 10
Herrick, 1.3 mi. N. and 0.8 mi. W. from, near center of sec. 8, T. 9 N., R. 2 E., about 500 ft. E. of T-rd. S., on W. side of rd. at right-angle turn N., at SE. corner of yard of farmhouse, in root on SE. side of 24-in. maple tree; copper nail and washer-----	593. 70

5. From point 0.9 mile north and 0.8 mile west from Jintown northwest along road across southwest corner of quadrangle (by Walton Thomson in 1934)

[Continued from Vandalia quadrangle, line 6]

Jintown, 1.0 mi. N. and 0.9 mi. W. from, in SW $\frac{1}{4}$ sec. 32, T. 7 N., R. 1 W., 500 ft. SE. of T-rd. N., on S. side of rd., at curve, in root on N. side of 20-in. oak tree; spike with "16" on head-----	568. 79
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Jimtown, 1.4 mi. N. and 1.5 mi. W. from, 7.5 mi. S. and 2.0 mi. E. from Fillmore, near center of sec. 31, T. 7 N., R. 1 W., 500 ft. E. of bridge over Hurricane Creek, on S. side of rd., 7 ft. W. of fence corner, 60 ft. S. of and across rd. from front door of residence of Henry Durr, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 4 1934"-----	Feet 528. 703
Fillmore, 7.3 mi. S. and 1.8 mi. E. from, in NW¼ sec. 31, T. 7 N., R. 1 W., 0.22 mi. SE. of Bond-Fayette county line, 800 ft. NW. of residence of J. W. Hunter, on SW. side of rd., in root on SE. side of 12-in. oak tree; spike with "16" on head-----	572. 93

[Continued in Coffeen quadrangle, line 2]

6. In Ramsey (by P. G. VanSickle in 1934; releveled by S. R. Archer in 1937)

Ramsey, 2 blocks N. of I. C. R. R. sta., on S. side of Fifth Street, 160 ft. W. of North Superior Street, 27 ft. E. of E. rail of I. C. R. R. track, at N. edge of sidewalk, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 1 1934" ²⁶ -----	612. 481
--	----------

7. From point 0.5 mile south and 5.5 miles east from Witt east along road to point 2 miles north of Hanson (by P. G. VanSickle in 1934; releveled by S. R. Archer in 1937)

[Continued from Coffeen quadrangle, line 3]

Witt, 0.8 mi. S. and 6.0 mi. E. from, 2.0 mi. N. and 6.8 mi. W. from Hanson, 0.14 mi. E. and 0.25 mi. N. from center of sec. 7, T. 9 N., R. 1 W., 0.25 mi. S. of E.-W. rd., in SE. corner of yard of farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 7 1934 673"-----	672. 622
Hanson, 2.0 mi. N. and 6.6 mi. W. from, near SW. cor. sec. 5, T. 9 N., R. 1 W., 20 ft. N. and 40 ft. E. from junction of T-rd. N., in concrete post; standard tablet stamped "Prim Trav Sta No 104 LS 1924 655"-----	655. 164
Hanson, 2.0 mi. N. and 5.4 mi. W. from, about 800 ft. E. of crossroads at cor. secs. 4, 5, 8, and 9, T. 9 N., R. 1 W., on N. side of rd., in front of residence of J. C. Grimes, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 6 1934 670"-----	669. 603
Hanson, 2.0 mi. N. and 5.2 mi. W. from, about 500 ft. W. of quarter corner between secs. 4 and 9, T. 9 N., R. 1 W., 500 ft. W. of private rd. S., at summit of small rise, on S. side of rd., 1 ft. N. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 5 1934 668"-----	667. 366
Hanson, 2.0 mi. N. and 4.8 mi. W. from, about 0.2 mi. W. of SE. cor. sec. 4, T. 9 N., R. 1 W., on E. bank of fork of Ramsey Creek, 10 ft. N. of N. side of bridge, in root on S. side of 18-in. poplar tree; copper nail and washer-----	600. 79
Hanson, 2.0 mi. N. and 4.1 mi. W. from, near N¼ cor. sec. 10, T. 9 N., R. 1 W., 80 ft. S. and 30 ft. W. from crossroads, in root on E. side of twin poplar tree; copper nail and washer-----	641. 86

²⁶ In 1937 this bench mark was reset at an elevation 0.448 ft. lower than that originally determined, and "613" was added to the stamping. The figures given represent the new elevation.

Hanson, 2.0 mi. N. and 3.8 mi. W. from, 0.25 mi. E. of S $\frac{1}{4}$ cor. sec. 3, T. 9 N., R. 1 W., 125 ft. E. of N-S. fence line, at summit of rise, opposite 20-in. oak tree in pasture, on N. side of rd., 1 ft. S. of fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 4 1934 666"-----	<i>Feet</i> 665.376
Hanson, 2.0 mi. N. and 3.6 mi. W. from, near cor. secs. 2, 3, 10, and 11, T. 9 N., R. 1 W., 30 ft. S. of T-rd. N., in concrete post; standard tablet stamped "Prim Trav Sta No 103 LS 1924 650"-----	650.244
Hanson, 2.0 mi. N. and 2.6 mi. W. from, near NE. cor. sec. 11, T. 9 N., R. 1 W., 285 ft. S. of crossroads, on W. side of rd. S., on N. side of private rd. W., in root on E. side of 24-in. oak tree; copper nail and washer-----	666.69
Hanson, 2.0 mi. N. and 1.9 mi. W. from, 0.25 mi. W. of SE. cor. sec. 1, T. 9 N., R. 1 W., 0.25 mi. W. of crossroads, on N side of rd., 24 ft. SE. of 24-in. maple tree, 25 ft. E. of N-S. fence line, 2 ft. S. of fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 3 1934 661"-----	661.205
Hanson, 2.0 mi. N. and 1.6 mi. W. from, 2.7 mi. S. and 1.6 mi. W. from Oconee, near NE. cor. sec. 12, T. 9 N., R. 1 W., 20 ft. S. and 29 ft. W. from junction of N-S. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "32 2 1934 658"-----	657.656
Hanson, 2.0 mi. N. and 0.5 mi. W. from, 2.7 mi. S. and 0.5 mi. W. from Oconee, near SW. cor. sec. 5, T. 9 N., R. 1 E., 30 ft. E. of crossroads, on N. side of rd. E., 13 ft. E. of fence corner, in root on W. side of triple-forked elm tree; copper nail and washer-----	631.01

8. From point 1.7 miles east of Fillmore east and north along roads by way of Bingham to Ramsey (by S. R. Archer in 1937)

[Continued from Coffeen quadrangle, line 9]

Fillmore, 2.0 mi. E. of, 1.5 mi. W. of Bingham, near S $\frac{1}{4}$ cor. sec. 19, T. 8 N., R. 1 W., 30 ft. N. and 22 ft. E. from crossroads, 0.5 mi. E. of Fayette-Montgomery county line, in concrete post; standard tablet stamped "T T Sta No 20 L 1929 631"-----	630.593
Bingham, 0.7 mi. W. of, about 0.2 mi. W. of quarter corner between secs. 20 and 29, T. 8 N., R. 1 W., 0.2 mi. W. of crossroads, on top of S. wing wall of E. abutment of concrete bridge; chiseled square--	588.22
Bingham, 500 ft. S. of highway, opposite NW. corner of city park, in NE. angle of street intersection, on S. side of sidewalk E., on E. side of sidewalk S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "600"-----	599.951
Bingham, about 0.4 mi. NE. of, in SW $\frac{1}{4}$ sec. 21, T. 8 N., R. 1 W., near rd. fork, at NE. abutment of concrete bridge, on top of NW. wing wall; chiseled square-----	574.12
Bingham, 1.2 mi. NE. of, 1.4 mi. SW. thence 4.4 mi. W. from Ramsey, 0.25 mi. E. of SW. cor. sec. 16, T. 8 N., R. 1 W., 85 ft. E. of crossroads, on N. side of rd., in root on SW. side of 8-in. oak tree; copper nail and washer-----	607.69
Ramsey, 1.4 mi. SW. thence 3.7 mi. W. from, near SW. cor. sec. 16, T. 8 N., R. 1 W., 22 ft. N. and 23 ft. W. from junction of T-rd. N., 444 ft. E. of T-rd. S., 2 ft. NW. of fence corner, in concrete post; standard tablet stamped "T T Sta No 19 L 1929 623"-----	623.430

364 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Ramsey, 1.4 mi. SW. thence 2.4 mi. W. from, 0.25 mi. E. of SW. cor. sec. 14, T. 8 N., R. 1 W., 30 ft. N. and 20 ft. W. from junction of T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "611"-----	<i>Feet</i> 610.757
Ramsey, 1.4 mi. SW. thence 1.3 mi. W. from, 0.25 mi. E. of SW. cor. sec. 13, T. 8 N., R. 1 W., in NE. angle of crossroads, in root on S. side of 12-in. oak tree; copper nail and washer-----	616.21
Ramsey, 1.4 mi. SW. thence 0.5 mi. W. from, about 0.2 mi. W. of bridge over Ramsey Creek, 0.2 mi. E. of W. cor. secs. 18 and 19, T. 8 N., R. 1 E., about midway of hill, 300 ft. S. of rd. fork, 73 ft. S. and 13 ft. E. from old rd. fork, in concrete post; standard tablet stamped "T T Sta No 18 L 1929 557"-----	557.082
Ramsey, 1.4 mi. SW. thence 0.2 mi. W. from, near S $\frac{1}{4}$ cor. sec. 18, T. 8 N., R. 1 E., at E. end of bridge over Ramsey Creek, on top of N. wing wall of concrete abutment; chiseled square-----	533.76
Ramsey, 0.9 mi. SW. of, at summit of Ramsey Creek hill, 0.25 mi. N. of SE. cor. sec. 18, T. 8 N., R. 1 E., 140 ft. S. and 50 ft. W. from junction of rd. S., in pasture between rds., in root on N. side of 40-in. oak tree; copper nail and washer-----	608.28

RENAULT QUADRANGLE

[Latitude 38°00'–38°15'; longitude 90°00'–90°15']

MONROE AND RANDOLPH COUNTIES

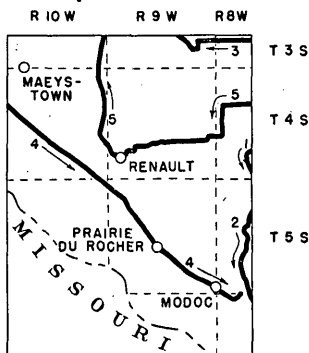


FIGURE 68.—Lines of leveling in Renault quadrangle.

1. From point 4 miles south of Redbud west and southeast along roads about 1 mile (by W. A. Gelbach in 1908)

[A jog from Baldwin quadrangle, line 5]

Ruma, 1.8 mi. NW. of, about 4 mi. SW. of Redbud, in E½ sec. 29, T. 4 S., R. 8 W., 20 ft. S. and 20 ft. W. from center of rd. junction; standard iron post with bronze cap stamped "Prim Trav Sta No 8 1908 419"

Feet
419.548

[Continued in Baldwin quadrangle, line 5]

2. From point 1.7 miles south of Ruma southwest and southeast along roads by way of Marigold to point 2.6 miles southeast of Modoc (by W. A. Gelbach in 1908)

[A jog from Baldwin quadrangle, line 5]

Ruma, 3.0 mi. SW. of, 1.0 mi. N. of Marigold, 100 ft. W. of junction of rd. W., in root of large tree; nail-----
Marigold, in SE. corner of schoolyard; standard iron post with bronze cap stamped "Prim Trav Sta No. 5 1908 565"-----
Marigold, 2.7 mi. S. of, 2.6 mi. by rds. SE. of Modoc, in NE¼ sec. 5, T. 6 S., R. 8 W., at junction of Kaskaskia rd., in center of triangular mound; standard iron post with bronze cap stamped "1908 607"

524.97
564.216
606.931

[Continued in Baldwin quadrangle, line 5]

3. From crossroads 2.2 miles north of Redbud west and northwest along roads to Poe (by S. R. Archer in 1910)

[Connects with line 2 in Baldwin quadrangle]

Redbud, 2.2 mi. N. thence 1.0 mi. W. from, near W¼ cor. sec. 29, T. 3 S., R. 8 W., 0.5 mi. W. of Round Prairie School, in SE. angle of crossroads, in root on N. side of sycamore tree; tack-----
Round Prairie School, 2.0 mi. W. of, 1.6 mi. E. thence 0.5 mi. S. from Poe, near center of sec. 25, T. 3 S., R. 9 W., in NE. angle of junction of T-rd. N., in root of cedar tree; nail-----

457.82
512.03

366 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Poe, 1.2 mi. SE. of, near S $\frac{1}{4}$ cor. sec. 26, T. 3 S., R. 9 W., in NE. angle of crossroads, near peach tree; standard iron post with bronze cap stamped "546"-----	<i>Feet</i> 545.989
Reference mark, in root of peach tree; nail-----	545.10

[Continued in Waterloo quadrangle, line 2]

4. From point near Branch Lake southeast along road on northeast side of Valley by way of Prairie du Rocher and Modoc to point 2.7 miles south of Marigold (by C. R. French in 1911)

[Continued from Crystal City quadrangle, line 2]

Chalfin Bridge, 3.2 mi. SE. of, 0.4 mi. NE. thence 1.8 mi. NW. from Brownsburg Sta. on St. Louis, Iron Mountain & Southern R. R., 0.5 mi. SE. of Branch Lake, at mouth of Morrison Hollow, in SW $\frac{1}{4}$ sec. 17, T. 4 S., R. 10 W., in S. angle of crossroads, 50 ft. SW. of valley rd., standard tablet stamped "404"-----	403.806
Brownsburg Sta. (Fults), 0.4 mi. NE. of, 0.8 mi. NE. thence 3.6 mi. NW. from Renault Sta., in NW $\frac{1}{4}$ sec. 28, T. 4 S., R. 10 W., at junction of rd. NE. along Fults Creek, at center of triangular mound; standard iron post with bronze cap stamped "404" ²⁷ -----	403.166
Renault Sta., 0.8 mi. NE. of, 1.8 mi. SW. of Renault, in NE $\frac{1}{4}$ sec. 1, T. 5 S., R. 10 W., in E. angle of intersection of Renault-Renault Sta. rd., near NE. wing wall of bridge; standard iron post with bronze cap stamped "396" ²⁸ -----	395.117
Renault, 2.3 mi. S. of, 3.3 mi. NW. of Prairie du Rocher, 0.8 mi. NW. of Monroe-Randolph county line, about 500 ft. SE. of junction of rd. N. to Renault, on E. side of rd., 20 ft. S. and 5 ft. E. from center of stone arch culvert; standard iron post with bronze cap stamped "Prim Trav Sta No 14 1909 406" ²⁹ -----	406.141
Prairie du Rocher, in SE. part of business district, 35 ft. N. and 35 ft. E. from junction of street NW., standard iron post with bronze cap stamped "396" ³⁰ -----	395.953
Modoc, in SW. part of village, on NW. side of rd. from village to R. R. sta., opposite junction of and in line with rd. SE.; standard iron post with bronze cap stamped "391" ³¹ -----	390.234

5. From crossroads 1.5 miles south of Redbud alternately west and south along roads to Renault, thence northwest and north to point 1.2 miles south of Burksville (by C. R. French in 1911)

[Connects with line 5 in Baldwin quadrangle]

Redbud, 3.0 mi. S. and 2.2 mi. W. from, 6.0 mi. NE. of Renault, at Monroe-Randolph county line, 0.25 mi. N. of SE. cor. sec. 24, T. 4 S., R. 9, W., on N. side of E.-W. rd., at junction of T-rd. S.; standard iron post with bronze cap stamped "467"-----	466.368
---	---------

²⁷ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "R 97 1935," elevation 393.716 ft.

²⁸ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "P 97 1935," elevation 385.327 ft.

²⁹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "N 97 1935," elevation 391.863 ft.

³⁰ In 1936 this bench mark was tied to U. S. C. & G. S. monel-metal rivet designated "Rv 49," elevation 393.618 ft.

³¹ In 1924 this bench mark was moved 18 ft. north of its original position and reset at an elevation 0.400 ft. lower than that originally determined. The figures given represent the new elevation. In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "K 97 1935," elevation 386.436 ft.

Horse Creek, under bridge; surface of water, June 15, 1911-----	<i>Feet</i> 404.5
Dry Fork, under bridge; surface of water, June 15, 1911-----	474.5
Renault, 2.4 mi. NE. of, 0.1 mi. S. of N $\frac{1}{4}$ cor. sec. 28, T. 4 S., R. 9 W., in NW. angle of junction of rd. N.; standard iron post with bronze cap stamped "556"-----	555.850
Renault, at NW. corner of public square, 1 ft. N. of telephone pole; standard iron post with bronze cap stamped "684"-----	683.960
Renault, 1.6 mi. NW. of, in NW. angle of junction of rd. SW., in root of tree; nail-----	694.05
Renault, 1.9 mi. NW. of, at junction of Burksville and Maeystown rds., in triangle, on E. side of mound; standard iron post with bronze cap stamped "688"-----	687.937
Renault, 4.0 mi. NW. of, in NE $\frac{1}{4}$ sec. 12, T. 4 S., R. 10 W., 0.9 mi. W. of Clifford School; at junction of rd. E., in center of rd., in base of black-oak tree; spike-----	667.39
Renault, 5.5 mi. NW. of, 3.1 mi. S. of Burksville, 0.5 mi. S. of St. Joe, near S $\frac{1}{4}$ cor. sec. 36, T. 3 S., R. 10 W., in NE. angle of crossroads; standard iron post with bronze cap stamped "685"----	684.590

[Connects with line 2 in Waterloo quadrangle]

RICHVIEW QUADRANGLE

[Latitude 38°15'–38°39' ; longitude 89°00'–89°15']

JEFFERSON, MARION, AND WASHINGTON COUNTIES

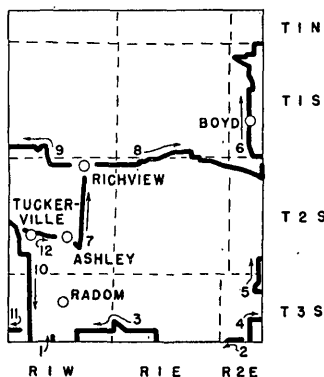


FIGURE 69.—Lines of leveling in Richview quadrangle.

1. From point 1.8 miles north of Dubois north along Illinois Central Railroad 0.1 mile (by S. R. Archer in 1923)

[Continued from Duquoin quadrangle, line 5]

U. S. C. & G. S. standard disk stamped "L 9 1922"-----	Feet 508. 703
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2. West along road about 1.2 miles in secs. 20 and 19, T. 3 S., R. 2 E. (by F. D. Kramer in 1924)

[A jog from Duquoin quadrangle, line 7]

T. 3 S., R. 2 E., about 0.25 mi. E. of center of sec. 20, in NW. angle of crossroads, in root of double black-walnut tree; copper nail and washer (recovered in 1928)-----	425. 40
--	---------

[Continued in Duquoin quadrangle, line 7]

3. From center of sec. 21, T. 3 S., R. 1 E., along roads north 0.5 mile, thence generally west to northwest corner sec. 23, T. 3 S., R. 1 W., thence south 0.5 mile (by F. D. Kramer in 1924)

[A jog from Duquoin quadrangle, line 7]

T. 3 S., R. 1 E., near quarter corner between secs. 16 and 21, in NW. angle of crossroads, at S. entrance to Blissville Township polling house, on E. end of concrete step; chiseled square-----	497. 63
T. 3 S., R. 1 E., about 0.25 mi. E. of NW. cor. sec. 20, about 1.2 mi. W. of Blissville Township polling house, on S. side of rd., in fence, in root of 36-in. poplar tree; copper nail and washer-----	507. 83
T. 3 S., R. 1 E., near cor. secs. 17, 18, 19, and 20, 0.8 mi. SE. of Minson Church, in SE. angle of junction of N.-S. rd., 150 ft. E. of residence of J. F. Hick; standard iron post with bronze cap stamped "Prim Trav Sta No 160 1911 12 K 1924"-----	525. 692
Reference mark, 298 ft. N. 17°W. from tablet, on E. side of rd., in grove, in root of 18-in. white-oak tree; copper nail and washer----	524. 11

T. 3 S., R. 1 E., about 845 ft. E. of W $\frac{1}{4}$ cor. sec. 18, in front of Minson Church, on N. side of rd., in root of 36-in. black-oak tree; copper nail and washer-----	Feet 558.77
T. 3 S., R. 1 W., about 0.25 mi. E. of W. cor. secs. 13 and 24, on N. side of rd., in yard of Broweak residence, on top of concrete cistern cover; chiseled square-----	520.73
T. 3 S., R. 1 W., about 200 ft. S. of NW. cor. sec. 23, in SE. angle of junction of N.-S. rd., in grove, in root of shellbark hickory tree; copper nail and washer-----	520.00

[Continued in Duquoin quadrangle, line 7]

4. From point about 0.25 mile east of center of sec. 20, T. 3 S., R. 2 E., along roads north 1 mile, thence east 0.5 mile to point 3.4 miles south and 5.2 miles west from Mount Vernon (by E. W. Gouchenour in 1928)

[Connects with line 7 in Duquoin quadrangle]

T. 3 S., R. 2 E., about 0.25 mi. E. of center of sec. 17, 50 ft. S. of crossroads, in root on E. side of black-walnut tree; copper nail and washer-----	433.00
---	--------

[Continued in Mount Vernon quadrangle, line 3]

5. West, north, and northeast about 2 miles along roads to State Highway 15, thence east to point about 5 miles west of Mount Vernon (by E. W. Gouchenour in 1928)

[A jog from Mount Vernon quadrangle, line 3]

T. 3 S., R. 2 E., about 0.25 mi. N. of SW. cor. sec. 4, 360 ft. E. of NE. cor. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, 20 ft. N. and 30 ft. E. from junction of rd. N., in concrete post; standard tablet stamped "13 G 1928"---	433.176
Reference mark, 55 ft. S. of tablet, 35 ft. S. and 30 ft. E. from rd. junction, in root of 18-in. tree; copper nail and washer-----	433.14
T. 3 S., R. 2 E., 900 ft. S. and 0.25 mi. E. from NW. cor. sec. 4, 300 ft. N. of junction of private T-rd. E., on E. wing of concrete culvert; chiseled square-----	433.90
T. 2 S., R. 2 E., in NE $\frac{1}{4}$ sec. 32, about 5 mi. W. of Mount Vernon, 20 ft. S. and 390 ft. E. from junction of State Highway 15, on S. wing of concrete bridge; chiseled square-----	439.92

[Continued in Mount Vernon quadrangle, line 3]

6. From point 5 miles north and 5.2 miles west from Mount Vernon along roads west 0.6 mile, thence north and northwest to point in sec. 6, T. 1 S., R. 2 E., thence alternately east and north to point 1 mile south and 5.2 miles west from Kell (by E. W. Gouchenour in 1928)

[Continued from Mount Vernon quadrangle, line 3]

Mount Vernon, 5.0 mi. N. and 5.7 mi. W. from, 2.1 mi. S. of Boyd, about 250 ft. W. of S $\frac{1}{4}$ cor. sec. 32, T. 1 S., R. 2 E., 150 ft. N. and 30 ft. W. from junction of T-rd. N., in root on E. side of 24-in. white-oak tree; copper nail and washer-----	491.14
Boyd, 1.4 mi. S. of, 750 ft. W. of center of sec. 32, T. 1 S., R. 2 E., at steel girder bridge over East Muddy Creek, on N. wing of W. abutment; chiseled square-----	469.62
Boyd, 0.8 mi. S. of, 0.25 mi. E. of SW. cor. sec. 29, T. 1 S., R. 2 E., 15 ft. N. and 45 ft. E. from crossroads, in root on S. side of 40-in. oak tree; copper nail and washer-----	498.42
Boyd, 25 ft. S. and 40 ft. W. from crossroads, in concrete post; standard tablet stamped "15 G 1928"-----	524.116

370 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Reference mark, 340 ft. S. and 40 ft. W. from crossroads, in oak tree; copper nail and washer-----	Feet 526.40
Boyd, 1.5 mi. N. of, near center of SW¼ sec. 17, T. 1 S., R. 2 E., 10 ft. S. and 20 ft. W. from junction of T-rd. W., in root on E. side of water-oak tree; copper nail and washer-----	553.21
T. 1 S., R. 2 E., near center of sec. 17, 20 ft. S. and 150 ft. W. from crossroads, in root on N. side of 15-in. walnut tree; copper nail and washer-----	563.32
T. 1 S., R. 2 E., about 0.25 mi. N. of S¼ cor. sec. 6, 150 ft. S. and 180 ft. E. from Southern Ry. crossing, 30 ft. S. of center of rd. at entrance to yard of Little Grove Church, in concrete post; standard tablet stamped "16 G 1928"-----	547.725
Reference mark, 150 ft. S. and 90 ft. W. from tablet, in root on W. side of 30-in. white-oak tree; copper nail and washer-----	545.96
T. 1 S., R. 2 E., near center of sec. 5, at junction of N.-S. rd., 65 ft. E. of T-rd. W., in root on N. side of 12-in. wild-cherry tree; copper nail and washer-----	569.49
T. 1 S., R. 2 E., near N¼ cor. sec. 5, 1.0 mi. S. and 5.6 mi. W. from Kell, 20 ft. S. and 10 ft. E. from junction of E.-W. rd., on E. wing of concrete culvert; chiseled square-----	565.40

[Continued in Mount Vernon quadrangle, line 4]

7. From Ashley southeast 0.9 mile along State Highway 15, thence north along U. S. Highway 51 to Richview (by L. V. Johnson in 1930)

U. S. C. & G. S. standard disk stamped "H 9 1922"-----	544.205
Ashley, 1.1 mi. SE. of Illinois Central R. R. sta., 4.1 mi. S. of Illinois Central R. R. sta. at Richview, at point where U. S. Highway 51 turns N. from State Highway 15, 22 ft. E. of Highway 15, 18 ft. S. of Highway 51, on NE. concrete head wall of culvert; chiseled square-----	543.64
Richview, 3.5 mi. S. of, 430 ft. N. of intersection of Louisville & Nashville R. R., 160 ft. S. and 18 ft. W. from crossroads, on N. head wall of concrete culvert under rd. to farmhouse; chiseled square--	553.06
Richview, 2.7 mi. S. of, near center of NW¼ sec. 23, T. 2 S., R. 1 W., 25 ft. S. and 20 ft. W. from junction of T-rd. E., on N. concrete head-wall of culvert under T-rd. W. to farmhouse; chiseled square--	530.41
Richview, 2.0 mi. S. of, about 0.25 mi. E. of W¼ cor. sec. 14, T. 2 S., R. 1 W., 15 ft. N. and 15 ft. W. from crossroads, on W. concrete head wall of culvert; chiseled square-----	545.71
Richview, 1.5 mi. S. of, about 0.25 mi. E. of SW. cor. sec. 11, T. 2 S., R. 1 W., 11 ft. N. and 16 ft. W. from crossroads, on NE. corner of N. concrete head wall of culvert under rd. W.; chiseled square--	569.86
Richview, 1.0 mi. S. of, 16 ft. S. and 16 ft. W. from crossroads, on N. end of W. concrete head wall of culvert; chiseled square-----	545.95
U. S. C. & G. S. standard disk stamped "G 9 1922"-----	538.749

8. From Richview along roads generally east to point 5 miles north and 5.2 miles west from Mount Vernon (by L. V. Johnson in 1930)

Richview, about 0.9 mi. E. of Illinois Central R. R. sta. at, near approximate quarter corner between secs. 1 and 2, T. 2 S., R. 1 W., 120 ft. W. of junction of T-lane S. to farmhouse, 25 ft. N. of E.-W. rd., in fence line, in root on S. side of double-trunked oak tree; copper nail and washer-----	528.17
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T. 2 S., R. 1 E., near E $\frac{1}{4}$ cor. sec. 6, at White Swan Church, 20 ft. S. and 30 ft. W. from crossroads, in concrete post; standard tablet stamped "T T 94 S 1928"-----	Feet 530.965
Reference mark, 12 ft. S. of tablet, in root on N. side of 24-in. maple tree; copper nail and washer-----	531.41
T. 2 S., R. 1 E., near center of NE $\frac{1}{4}$ sec. 5, at bottom of valley, on NE. wing wall of bridge over creek; chiseled square-----	479.15
T. 1 S., R. 1 E., 0.25 mi. S. of center of sec. 34, 90 ft. W. of crossroads, on S. side of rd., 2 ft. S. of fence, in concrete post; standard tablet stamped "T T 95 S 1928"-----	521.849
Tps. 1 and 2 S., R. 1 E., near approximate cor. secs. 2, 3, 34, and 35, 55 ft. N. of center of rd. angles, 30 ft. NE. of corner post of fence lines N. and E., in root on SW. side of 12-in. hickory tree; copper nail and washer-----	531.32
T. 2 S., R. 1 E., about 0.25 mi. N. of E $\frac{1}{4}$ cor. sec. 2, 23 ft. S. and 22 ft. W. from junction of N.-S. rd., in root on E. side of 24-in. oak tree used for corner fence post; copper nail and washer-----	546.37
T. 2 S., R. 1 E., in SW $\frac{1}{4}$ sec. 6, 720 ft. NE. of crossroads, 9 ft. N. and 45 ft. E. from center of steel bridge over Muddy Creek, 11 ft. E. of NE. corner of bridge, in knob 3 ft. above ground on 40-in. elm tree; copper nail and washer-----	464.56
T. 2 S., R. 2 E., near center of sec. 6, about 175 ft. SE. of rd. junction, 37 ft. S. of rd., 7 ft. E. of fence corner, in concrete post; standard tablet stamped "T T 96 S 1928"-----	458.673
T. 2 S., R. 2 E., near approximate S $\frac{1}{4}$ cor. sec. 5, 260 ft. NW. of crossroads, at schoolhouse, on SE. corner of concrete post; chiseled square-----	495.18
T. 2 S., R. 2 E., near center of sec. 5, 4.5 mi. N. and 5.5 mi. W. from Mount Vernon, 60 ft. S. and 25 ft. E. from T-junction of E.-W. rd., in root on NW. side of 30-in. oak tree; copper nail and washer-----	502.48
[Connects with line 3 in Mount Vernon quadrangle]	
9. From Richview alternately west and north along roads to point 3 miles south and 1.3 miles east from Hoyleton (by L. V. Johnson in 1930; leveled twice)	
Richview, 0.7 mi. W. of, near center of sec. 3, T. 2 S., R. 1 W., 20 ft. S. and 10 ft. E. from crossroads, on E. end of corrugated iron culvert; chiseled square-----	561.17
Richview, 1.7 mi. W. of, near center of sec. 4, T. 2 S., R. 1 W., 30 ft. N. and 30 ft. E. from junction of rd. N., in root on SE. side of double-trunked oak tree; copper nail and washer-----	569.15
Richview, 1.7 mi. W. thence 1.1 mi. NW. from, about 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 33, 250 ft. NE. of junction of E.-W. rd., in root on W. side of 36-in. hickory tree; copper nail and washer-----	528.41
Richview, 3.3 mi. NW. of, 3.0 mi. S. thence 2.8 mi. E. from Hoyleton, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 32, T. 1 S., R. 1 W., 20 ft. S. of junction of T.-rd. N., on E. side of fence, in concrete post; standard tablet stamped "T T 90 S 1928"-----	528.971

[Continued in Nashville quadrangle, line 4]

10. From point 7.2 miles east of Nashville east 0.8 mile along State Highway 15, thence alternately south and east along roads to point 1.1 miles west thence 1.7 miles north from Dubois (by L. V. Johnson in 1930)

[Continued from Nashville quadrangle, line 5]

Nashville, 8.0 mi. E. of, 0.5 mi. W. of Tuckerville, 1,640 ft. N. of SE. cor. sec. 19, T. 2 S., R. 1 W., at Liberty Church, 33 ft. S. of highway, 40 ft. W. of N.-S. rd., in concrete post; standard tablet stamped "T T 87 S 1928" (recovered in 1936)-----	<i>Feet</i> 558. 073
Reference mark, 120 ft. W. of T.-rd. S., on W. concrete head wall of culvert; chiseled square-----	557. 91
Tuckerville, 0.2 mi. S. thence 0.5 mi. W. from, near SE. cor. sec. 19, T. 2 S., R. 1 W., 21 ft. N. and 27 ft. W. from crossroads, in root on W. side of 24-in. oak tree; copper nail and washer-----	555. 88
Tuckerville, 1.2 mi. S., thence 0.5 mi. W. from, near NW. cor. sec. 32, T. 2 S., R. 1 W., 38 ft. S. and 70 ft. E. from junction of E.-W. rd., 19 ft. S. of fence line, in root on N. side of 30-in. oak tree; copper nail and washer-----	555. 79
Tuckerville, 1.2 mi. S. of, near S $\frac{1}{4}$ cor. sec. 29, T. 2 S., R. 1 W., 15 ft. N. and 23 ft. W. from intersection of U. S. Highway 51, on concrete head wall of culvert under E.-W. rd.; chiseled square--	564. 87
Tuckerville, 2.2 mi. S. of, near N $\frac{1}{4}$ cor. sec. 5, T. 3 S., R. 1 W., at Dry Arm Church, 75 ft. S. and 30 ft. E. from junction of T.-rd. E., in concrete post; standard tablet stamped "T T 88 S 1928"-----	591. 120
Reference mark, on N. concrete head wall under rd. to school-house; chiseled square-----	586. 88
Tuckerville, 3.2 mi. S. of, near quarter corner between secs. 5 and 8, T. 3 S., R. 1 W., 1.8 mi. W. thence 0.5 mi. N. from Radom, 130 ft. S. and 24 ft. W. from intersection of E.-W. rd. to farmhouse, in line with fence W., on N. concrete head wall of culvert; chiseled square-----	578. 57
Tuckerville, 3.7 mi. S. of, 1.8 mi. W. of Radom, near center of sec. 8, T. 3 S., R. 1 W., 55 ft. N. and 22 ft. W. from junction of T.-rd. E., 15 ft. N. and 22 ft. W. from junction of T.-rd. W., on N. concrete head wall of culvert under rd. W.; chiseled square-----	554. 08
Radom, 1.8 mi. W. thence 0.5 mi. S. from, near S $\frac{1}{4}$ cor. sec. 8, T. 3 S., R. 1 W., 16 ft. N. and 20 ft. W. from junction of T.-rd. W., on N. concrete head wall of culvert; chiseled square-----	573. 95
T. 3 S., R. 1 W., near quarter corner between secs. 17 and 20, 1.1 mi. W. thence 2.3 mi. N. from Dubois, at junction of T.-rd. W., 34 ft. E. of center line of paved rd., 3 ft. N. of fence, in concrete post; standard tablet stamped "T T 89 S 1928"-----	538. 997
Reference mark, 130 ft. S. and 15 ft. E. from rd. junction, on N. end of E. concrete head wall of culvert; chiseled square-----	536. 61

[Continued in Duquoin quadrangle, line 8]

11. From quarter corner between secs. 17 and 20, T. 3 S., R. 1 W., west 1.1 miles (by L. V. Johnson in 1930; spur line leveled twice)

T. 3 S., R. 1 W., near S $\frac{1}{4}$ cor. sec. 18, 21 ft. N. and 25 ft. E. from junction of T.-rd. N., in root on W. side of 14-in. oak tree; copper nail and washer-----	530. 68
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[Continued in Nashville quadrangle, line 6]

12. From crossroads 0.5 mile west of Tuckerville east along State Highway 15 to Ashley (by Harry McDermith in 1936)

Tuckerville, at junction of U. S. Highway 51, 2.5 mi. W. of Ashley, 40 ft. N. and 25 ft. W. from junction of dirt rd. N., on E. head wall of concrete culvert under entrance to Egyptian Transportation System Building; chiseled square-----	<i>Feet</i> 558.99
Ashley, 1.7 mi. W. of, in SW $\frac{1}{4}$ sec. 21, T. 2 S., R. 1 W., 80 ft. S. and 25 ft. W. from junction of T-rd. S., in NE. corner of farmyard, in root on N. side of 24-in. elm tree; copper nail and washer-----	554.66
Ashley, 0.9 mi. W. of, near NW. cor. sec. 27, T. 2 S., R. 1 W., 35 ft. S. and 17 ft. E. from junction of T-rd. S., on E. head wall of concrete culvert; chiseled square-----	539.35

ROSE HILL QUADRANGLE

[Latitude 39°00'–39°15'; longitude 88°00'–88°15']

CLARK, CUMBERLAND, AND JASPER COUNTIES

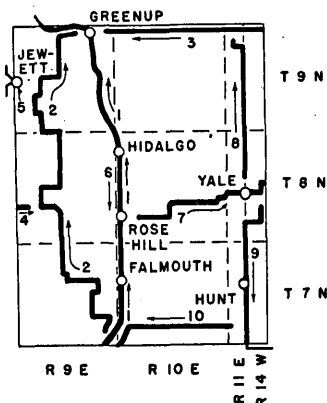


FIGURE 70.—Lines of leveling in Rose Hill quadrangle.

1. From Newton generally north along Illinois Central Railroad (by T. A. Green in 1906; first-order leveling)

[Continued from Newton quadrangle, line 1]

Newton, 3.0 mi. N. of, 1.7 mi. S. of Falmouth, 165 ft. S. of milepost 157–90, 10 ft. N. of crossing of private rd., 30 ft. E. of track, in fence corner; standard iron post with bronze cap stamped “1906” 538” and designated “I ₃ ”	Feet 538.424
Falmouth, 1.4 mi. N. of, 2.0 mi. S. of Rose Hill, 50 ft. E. of milepost 154–93, 40 ft. E. of track, 175 ft. W. of oil derrick, at fence line; standard iron post with bronze cap stamped “1906 564” and designated “J ₃ ” (recovered in 1932)	564.487
Rose Hill, 1.1 mi. N. of, 2.6 mi. S. of Hidalgo, 553 ft. N. of milepost 151–96, 35 ft. SE. of rd. crossing, in fence corner; standard iron post with bronze cap stamped “1906 566” and designated “K ₃ ” (recovered in 1932)	566.229
Hidalgo, 0.3 mi. N. of, 8 ft. W. of milepost 148–99, 30 ft. W. of track; standard iron post with bronze cap stamped “1906 581” and designated “L ₃ ” (recovered by U. S. C. & G. S. in 1935)	581.862
Hidalgo, 3.4 mi. N. of, 2.9 mi. S. of Greenup, 245 ft. N. of milepost 145–102, 30 ft. E. of tracks, 9 ft. N. of rd. through field, at edge of right-of-way; standard iron post with bronze cap stamped “1906 593” and designated “M ₃ ” (recovered by U. S. C. & G. S. in 1935)	593.352
Greenup, 700 ft. NW. of sta., 40 ft. N. of track, 570 ft. SE. of milepost 142–105; standard iron post with bronze cap stamped “1906 543” and designated “N ₃ ” (recovered by U. S. C. & G. S. in 1935)	542.702
Greenup, 3.2 mi. NW. of, 45 ft. NW. of rd. crossing, 25 ft. N. of warning post, 15 ft. W. of wagon rd.; standard iron post with bronze cap stamped “1906 553” and designated “O ₃ ” (recovered in 1924)	552.942

[Continued in Toledo quadrangle, line 1]

2. From point near Newton generally northwest along roads to Cumberland-Jasper county line, thence north and northeast to Greenup (by R. G. Clinite in 1911)

[Continued from Newton quadrangle, line 3]

Newton, 2.4 mi. in air line N. of, near N $\frac{1}{4}$ cor. sec. 25, T. 7 N., R. 9 E., at right-angle turn N. in rd., 24 ft. S. of stone marking quarter corner; standard iron post with bronze cap stamped "486"-----	<i>Feet</i> 485.228
Newton, 2.4 mi. N. of, at quarter corner between secs. 24 and 25, T. 7 N., R. 9 E., at stone marking quarter corner; top of stone-----	484.83
Newton, 2.4 mi. N. and 0.5 mi. W. from, 1.2 mi. W. and 1.8 mi. S. from Falmouth, 0.25 mi. N. of S. cor. secs. 23 and 24, T. 7 N., R. 9 E., on stone marking sixteenth corner; chiseled square-----	487.56
Falmouth, 1.4 mi. W. and 1.7 mi. S. from, about 500 ft. N. of center of SE $\frac{1}{4}$ sec. 23, T. 7 N., R. 9 E., on W. side of rd., in oak tree; copper nail and washer-----	489.51
Falmouth, 1.4 mi. W. and 0.5 mi. S. from, 0.25 mi. E. of center of sec. 14, T. 7 N., R. 9 E., in SE. angle of junction of E-W. rd., in root of 48-in. white-oak tree; copper nail and washer-----	558.34
Falmouth, 1.2 mi. W. and 0.5 mi. S. from, near E $\frac{1}{4}$ cor. sec. 14, T. 7 N., R. 9 E., in NW. angle of junction of T-rd. N., in root of black-oak tree; copper nail and washer-----	555.60
Falmouth, 1.2 mi. W. of, near NW. cor. sec. 13, T. 7 N., R. 9 E., in SE. angle of crossroads, 5 ft. E. of corner fence post; standard iron post with bronze cap stamped "561"-----	560.098
Falmouth, 1.2 mi. W. of, near NE. cor. sec. 14, T. 7 N., R. 9 E., in SW. angle of crossroads, 5 ft. S. of stone marking section corner, in root of 36-in. black-oak tree; copper nail and washer-----	559.49
Falmouth, 1.8 mi. W. of, at concrete bridge over Embarrass River, on SW. wing wall; chiseled square-----	499.58
Falmouth, 3.0 mi. W. and 0.8 mi. N. from, near center of NW $\frac{1}{4}$ sec. 10, T. 7 N., R. 9 E., in NE. angle of crossroads, 22 ft. E. of fence corner, in root of small elm tree; copper nail and washer-----	500.98
Falmouth, 3.2 mi. W. and 1.0 mi. N. from, 3.2 mi. W. thence 2.5 mi. S. from Rose Hill, near center of SW $\frac{1}{4}$ sec. 3, T. 7 N., R. 9 E., in NW. angle of junction of T-rd. W., at foot of bluff, 38 ft. N. of stone marking quarter section; standard iron post with bronze cap stamped "516"-----	516.127
Rose Hill, 3.2 mi. W. thence 0.7 mi. S. from, near NW. cor. sec. 34, T. 7 N., R. 9 E., 250 ft. W. of Embarrass River, on N. side of private field rd., 20 ft. E. of old shed, in root of walnut tree; copper nail and washer-----	499.24
Rose Hill, 3.1 mi. W. of, in NW $\frac{1}{4}$ sec. 27, T. 7 N., R. 9 E., at steel highway bridge over Embarrass River, on SE. concrete wing wall; chiseled square-----	506.38
Rose Hill, 4.2 mi. W. and 0.3 mi. N. from, near NE. cor. sec. 29, T. 8 N., R. 9 E., on W. side of rd., 1 ft. E. of fence; standard iron post with bronze cap stamped "568" (recovered in 1929)---	567.636
Rose Hill, 4.2 mi. W. and 1.0 mi. N. from, near W. side NW $\frac{1}{4}$ sec. 21, T. 8 N., R. 9 E., on E. side of rd., 50 ft. SE. of residence of Jasper Newlin, in root of tree; copper nail and washer-----	575.40
Rose Hill, 4.2 mi. W. and 1.4 mi. N. from, near SE. cor. sec. 16, T. 8 N., R. 9 E., in NW. angle of crossroads, in front of Excelsior School, on SE. corner of concrete square; chiseled square-----	520.23

Rose Hill, 4.2 mi. W. and 1.4 mi. N. from, 2.0 mi. S. and 3.0 mi. W. from Hidalgo, near N. cor. secs. 21 and 22, T. 8 N., R. 9 E., on S. side of rd., opposite T-rd. N., 1 ft. N. of fence line; standard iron post with bronze cap stamped "503"-----	Feet 502.395
Hidalgo, 0.5 mi. S. and 3.2 mi. W. from, at quarter corner between secs. 9 and 10, T. 8 N., R. 9 E., on stone marking quarter corner; chiseled circle-----	507.51
Hidalgo, 3.2 mi. W. of, near S. cor. secs. 3 and 4, T. 8 N., R. 9 E., at steel highway bridge over Embarrass River, on NE. wing wall; chiseled square-----	512.93
Hidalgo, 3.2 mi. W. and 0.3 mi. N. from, 0.25 mi. N. of S. cor. secs. 3 and 4, T. 8 N., R. 9 E., on stone marking sixteenth corner; chiseled square-----	509.01
Hidalgo, 3.2 mi. W. and 0.6 mi. N. from, at quarter corner between secs. 3 and 4, T. 8 N., R. 9 E., on stone marking quarter corner; chiseled square-----	509.62
Hidalgo, 3.2 mi. W. and 1.1 mi. N. from, at cor. secs. 3, 4, 33, and 34, Tps. 8 and 9 N., R. 9 E., at Cumberland-Jasper county line, on stone marking section corner; chiseled square-----	509.17
Hidalgo, 3.5 mi. W. and 1.5 mi. N. from, 2.0 mi. S. and 1.5 mi. E. from Jewett, 0.25 mi. E. of center of sec. 32, T. 9 N., R. 9 E., in SE. angle of crossroads, 16 in. S. of fence post; standard iron post with bronze cap stamped "515"-----	514.648
Jewett, 1.5 mi. S. and 1.2 mi. E. from, 0.8 mi. S. and 1.0 mi. W. from Walla Walla, near S $\frac{1}{4}$ cor. sec. 29, T. 9 N., R. 9 E., at steel bridge over Embarrass River, in top of SE. cylindrical support; bolt head-----	519.82
Jewett, 0.5 mi. S. and 1.2 mi. E. from, near N $\frac{1}{4}$ cor. sec. 29, T. 9 N., R. 9 E., in NE. angle of rd. fork, in root of oak tree; copper nail and washer-----	513.97
Jewett, 0.2 mi. N. and 1.5 mi. E. from, 2.2 mi. W. and 2.0 mi. S. from I. C. R. R. sta. at Greenup, near center of NE $\frac{1}{4}$ sec. 20, T. 9 N., R. 9 E., 116 ft. NW. of steel windmill, on E. side of rd., at foot of bluff, 20 ft. N. of fence corner; standard iron post with bronze cap stamped "522"-----	521.505
Greenup, 1.5 mi. W. and 1.8 mi. S. from, near N $\frac{1}{4}$ cor. sec. 21, T. 9 N., R. 9 E., at E. edge of woods, on N. side of field rd., 15 ft. S. of rail fence, in root of walnut tree; copper nail and washer-----	518.86
Greenup, 1.0 mi. W. and 1.8 mi. S. from, near SW. cor. sec. 15, T. 9 N., R. 9 E., 500 ft. W. of river, at edge of sink basin, in root of lone walnut tree; copper nail and washer-----	522.94
Greenup, 1.0 mi. W. and 1.3 mi. S. from, at quarter corner between secs. 15 and 16, T. 9 N., R. 9 E., on stone marking quarter corner; chiseled square-----	522.71
Greenup, about 1.0 mi. W. of, at steel highway bridge over Embarrass River, on SE. concrete wing wall; chiseled square-----	536.30
3. From point 3.7 miles south and 0.2 mile east from Casey west along road to Greenup (by R. G. Clinite in 1911)	
[Continued from Moonshine quadrangle, line 2]	
Casey, 3.7 mi. S. thence 1.0 mi. W. from, 8.7 mi. E. of Greenup, at W. cor. secs. 6 and 7, T. 9 N., R. 14 W., and E. cor. secs. 6 and 7, T. 9 N., R. 11 E., at Clark-Cumberland county line, on stone marking section corner; chiseled circle-----	639.18

Greenup, 8.3 mi. E. of, near N $\frac{1}{4}$ cor. sec. 7, T. 9 N., R. 11 E., in SE. angle of junction of T-rd. S.; standard iron post with bronze cap stamped "Prim Trav Sta No 5 638" (recovered in 1932)-----	Feet 637.627
Greenup, 7.9 mi. E. of, near SW. cor. sec. 6, T. 9 N., R. 11 E., at crossroads, at N. end of culvert under E-W. rd., on stone; chiseled square-----	630.58
Greenup, 7.4 mi. E. of, near S $\frac{1}{4}$ cor. sec. 1, T. 9 N., R. 10 E., in NE. angle of crossroads, 200 ft. SE. of brick schoolhouse, on stone; chiseled square-----	621.93
Greenup, 6.8 mi. E. of, near NW. cor. sec. 12, T. 9 N., R. 10 E., at SE. corner of crossroads, in root of small elm tree; spike-----	619.36
Greenup, 4.9 mi. E. of, near SW. cor. sec. 3, T. 9 N., R. 10 E., in NE. angle of crossroads, diagonally opposite Delno School, 12 ft. E. of corner fence post, 16 in. S. of fence; standard iron post with bronze cap stamped "606"-----	606.193
Greenup, 4.9 mi. E. of, at cor. secs. 3, 4, 9, and 10, T. 9 N., R. 10 E., 96 ft. E. of Delno School, at crossroads, on stone marking section corner; chiseled square-----	605.54
Greenup, 4.1 mi. E. of, 0.2 mi. E. of SW. cor. sec. 4, T. 9 N., R. 10 E., at small iron bridge over Range Creek, in NW. wing wall, at vertical reinforcing L-bar; top of bar-----	555.65
Greenup, 3.9 mi. E. of, at cor. secs. 4, 5, 8, and 9, T. 9 N., R. 10 E., at crossroads, on stone marking section corner; chiseled square-----	588.27
Greenup, 2.9 mi. E. of, at cor. secs. 5, 6, 7, and 8, T. 9 N., R. 10 E., at crossroads, on stone marking section corner; chiseled square-----	590.57

4. From point 0.5 mile east of Gila east along road 1.5 miles (by E. E. Harris in 1929)

[Continued from Teutopolis quadrangle, line 1]

Gila, 0.9 mi. E. of, near NW. cor. sec. 29, T. 8 N., R. 9 E., in SE. angle of junction of T-rd. S., in center of top of head wall of concrete culvert; chiseled square-----	574.33
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5. At Jewett (by E. E. Harris in 1929)

[A jog from Teutopolis quadrangle, line 4]

Jewett, near W. limits of, at NE. corner of junction of T-rd. N., in center of top of head wall of concrete culvert; chiseled square-----	581.99
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[Continued in Teutopolis quadrangle, line 4]

6. From point 0.3 mile north of Hidalgo south along Illinois Central Railroad to point 1.4 miles north of Falmouth (by S. R. Archer in 1932; last 3.1 miles leveled twice)

Hidalgo, 400 ft. E. of crossing of main E-W. street, on S. side of street, at N. entrance to public school, on top of E. end of stone doorsill; chiseled square-----	583.47
Hidalgo, 1.1 mi. S. of, 2.6 mi. N. of Rose Hill, 145 ft. W. of rd. crossing, on N. side of rd., in field, in root on N. side of 36-in. oak tree; copper nail and washer-----	574.40
Rose Hill, 2.0 mi. N. of, about 0.25 mi. W. of center of sec. 18, T. 8 N., R. 10 E., 615 ft. N. of milepost 150-97, 35 ft. S. of E-W. fence, on E. side of track, 30 ft. E. of E. right-of-way fence, in field, in root on NW. side of large forked cottonwood tree with triangular blaze; copper nail and washer-----	572.52

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Rose Hill, 1.1 mi. N. of, 15 ft. S. of E.-W. fence, in root on W. side of 30-in. oak tree; copper nail and washer ³² -----	Feet 564.19
Rose Hill, 43 ft. E. of crossing of main E.-W. street, on S. side of street, at NW. corner of office of Rose Hill Milling Co., on E. side of drive to scales, on top of concrete retaining wall and extension of foundation; chiseled square-----	566.80
Rose Hill, near W. edge of, 35 ft. SE. of quarter corner between secs. 25 and 30, T. 8 N., Rs. 9 and 10 E., on outside of sidewalk; standard iron post with bronze cap stamped "Prim Trav Sta No 7 1910"-----	563.010
Rose Hill, 1.0 mi. S. of, 0.25 mi. W. of center of sec. 31, T. 8 N., R. 10 E., 150 ft. E. of track, on S. side of rd., in root on NNW. side of 24-in. oak tree; copper nail and washer-----	563.44
Rose Hill, 1.5 mi. S. of, 2.0 mi. N. of Falmouth, 0.25 mi. W. of S¼ cor. sec. 31, T. 8 N., R. 10 E., 150 ft. E. of track, on N. side of rd., in root on N. side of forked locust tree; copper nail and washer--	565.08
Falmouth, 1.4 mi. N. of, in E.-W. fence line, in root on N. side of 24-in. locust tree with triangular blaze, second tree from W. end of row of trees; copper nail and washer ³³ -----	563.35
7. From Rose Hill alternately east and north along roads to point 1.2 miles east and 0.5 mile north from Yale (by S. R. Archer in 1932)	
Rose Hill, 0.3 mi. E. of, near center of sec. 30, T. 8 N., R. 10 E., at SE. corner of crossroads, on top at angle in E. head wall of concrete culvert under rd. S.; chiseled square-----	564.44
Rose Hill, 0.6 mi. E. of, about 800 ft. W. of E¼ cor. sec. 30, T. 8 N., R. 10 E., 40 ft. W. of crossroads, on S. side of rd., at fence line, in root on NW. side of 10-in. maple tree; copper nail and washer--	564.29
Rose Hill, 1.8 mi. E. of, near W¼ cor. sec. 28, T. 8 N., R. 10 E., at NE. corner of crossroads, on top of E. head wall of concrete culvert under rd. N.; chiseled square-----	562.64
Rose Hill, 2.8 mi. E. of, near W¼ cor. sec. 27, T. 8 N., R. 10 E., at SE. corner of crossroads, on top of E. head wall of concrete culvert under rd. S.; chiseled square-----	558.14
Rose Hill, 2.8 mi. E. thence 0.5 mi. N. from, near SE. cor. sec. 21, T. 8 N., R. 10 E., 20 ft. N. and 30 ft. W. from crossroads, in concrete post; standard tablet stamped "24 A 1932"-----	559.400
Rose Hill, 3.8 mi. E. and 0.5 mi. N. from, near S. cor. secs. 22 and 23, T. 8 N., R. 10 E., 70 ft. N. of crossroads, on E. side of rd., at fence line, in root on SW. side of 12-in. elm tree; copper nail and washer--	561.19
Rose Hill, 4.8 mi. E. and 0.5 mi. N. from, near E. cor. secs. 23 and 26, T. 8 N., R. 10 E., 75 ft. W. of crossroads, on N. side of rd., on E. side of driveway, in root on SSW. side of easternmost of two large cottonwood trees; copper nail and washer-----	552.90
Rose Hill, 5.8 mi. E. and 0.7 mi. N. from, 0.8 mi. W. thence 0.2 mi. S. from Yale, 0.25 mi. N. of SW. cor. sec. 24, T. 8 N., R. 10 E., 23 ft. S. and 18 ft. W. from junction of T-rd. W., 5 ft. S. of fence corner, in concrete post; standard tablet stamped "25 A 1932"-----	548.530

³² This bench mark is 155 ft. east of the standard iron post stamped "1906 566," for which it was set as a reference mark. See line 1.

³³ This bench mark is 135 ft. southeast of the standard iron post with bronze cap stamped "1906 564," for which it was set as a reference mark. See line 1.

Reference mark, 70 ft. W. of rd. junction, on N. side of rd., at fence line, in root on N. side of forked oak tree; copper nail and washer--	Feet 548.53
Yale, 230 ft. W. of State Highway 49, on S. side of main E.-W. street, in SE. angle of intersection of cross streets, at entrance to bank building, on top of E. end of stone doorsill; chiseled square-----	555.24
Yale, 340 ft. E. of highway and T-rd. E., on N. side of street, at SE. corner of town hall, on NE. corner of concrete porch floor; chiseled square-----	553.74
Yale, 1.0 mi. E. of, near W $\frac{1}{4}$ cor. sec. 20, T. 8 N., R. 14 W., 70 ft. N. and 45 ft. E. from crossroads, in root on SW. side of 24-in. locust tree; copper nail and washer-----	543.88
Yale, 1.0 mi. E. thence 0.5 mi. N. from, near cor. secs. 17, 18, 19, and 20, T. 8 N., R. 14 W., 40 ft. W. of crossroads, on N. side of rd., at fence line, in root on S. side of 30-in. sycamore tree; copper nail and washer-----	542.79
[Connects with line 2 in Moonshine quadrangle]	
8. From Yale north along highway and roads to point 8.7 miles east and 0.5 mile north from Greenup (by S. R. Archer in 1932)	
Yale, 0.5 mi. N. of, near SW. cor. sec. 18, T. 8 N., R. 14 W., at NE. corner of crossroads, on top of NW. end of N. head wall of concrete culvert under rd. E.; chiseled square-----	553.97
Yale, 1.7 mi. N. of, near W. cor. secs. 7 and 18, T. 8 N., R. 14 W., in SE. corner of crossroads, 10 ft. S. of fence corner, in concrete post; standard tablet stamped "29 A 1932" ³⁴ -----	563.953
Reference mark, 360 ft. N. of crossroads, on top of N. end of E. head wall of concrete culvert; chiseled square-----	562.17
Yale, 2.5 mi. N. of, 0.4 mi. E. of Advance, near SW. cor. sec. 6, T. 8 N., R. 14 W., at offset crossroads, at NE. corner of junction of rd. E., on top of W. end of N. head wall of concrete culvert under rd. E.; chiseled square-----	570.10
Yale, 3.7 mi. N. of, about 700 ft. W. of SE. cor. sec. 36, T. 9 N., R. 10 E., at NE. corner of crossroads, on top of N. end of E. head wall of concrete culvert; chiseled square-----	583.14
Yale, 4.8 mi. N. of, near NW. cor. sec. 31, T. 9 N., R. 11 E., in SE. angle of crossroads, 4 ft. S. of fence corner, in concrete post; standard tablet stamped "30 A 1932"-----	591.895
Reference mark, at NE. corner of crossroads, on top of E. head wall of concrete culvert; chiseled square-----	591.53
Yale, 5.7 mi. N. of, near NW. cor. sec. 30, T. 9 N., R. 11 E., 290 ft. S. of crossroads, at SW. corner of triangle between rds., on N. side of curve NE. in highway, on top of E. head wall of concrete culvert under rd. N.; chiseled square-----	600.55
Yale, 6.5 mi. N. of, near SE. cor. sec. 19, T. 9 N., R. 11 E., at NW. corner of crossroads, on top of W. head wall of concrete culvert; chiseled square-----	595.48
Yale, 7.0 mi. N. of, near W $\frac{1}{4}$ cor. sec. 19, T. 9 N., R. 14 W., 15 ft. N. and 30 ft. E. from junction of T-rd. E., in root on W. side of 26-in oak tree; copper nail and washer-----	604.01

³⁴ In 1936 this bench mark was moved 50 ft. south of its original location and reset at an elevation 0.227 ft. higher than that originally determined. The description given refers to its new position.

Yale, 7.5 mi. N. of, near NE. cor. sec. 19, T. 9 N., R. 11 E., 18 ft. S. and 30 ft. W. from crossroads, 13 ft. W. of fence corner, in concrete post; standard tablet stamped "31 A 1932"-----	<i>Feet</i> 609.072
Yale, 8.6 mi. N. of, 290 ft. W. of E. cor. secs. 7 and 18, T. 9 N., R. 11 E., on S. side of rd. W., in root on NNE. side of forked locust tree; copper nail and washer-----	631.85
Yale, 9.6 mi. N. and 0.5 mi. W. from, 8.3 mi. E. of Greenup, in SW. corner of junction of T-rd. S., at fence corner, in root on E. side of 24-in. hedge tree; copper nail and washer. ³⁵ -----	636.62
Greenup, 8.7 mi. E. of, near SW. cor. sec. 6, T. 9 N., R. 14 W., 35 ft. N. of junction of T-rd. N., on E. side of rd., in root on NW. side of 12-in. tree; southernmost of row of five maple trees; copper nail and washer-----	639.47

[Continued in Toledo quadrangle, line 7]

9. From point 1 mile east of Yale along roads alternately south and west by way of Hunt to Willow Hill (by S. R. Archer in 1932)

Yale, 1.0 mi. E. thence 0.5 mi. S. from, 30 ft. S. of N. cor. secs. 29 and 30, T. 8 N., R. 14 W., near NW. corner of front yard of dwelling of Roscoe Meeker, 25 ft. E. of N.-S. rd., 25 ft. S. of E.-W. rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 4 1910"-----	538.223
Yale, 1.0 mi. E. thence 1.5 mi. S. from, near SE. cor. sec. 30, T. 8 N., R. 14 W., 310 ft. S. of crossroads, on W. side of rd., in field, in root on SE. side of 30-in. oak tree; copper nail and washer-----	529.94
Yale, 1.5 mi. S. of, near NE. cor. sec. 31, T. 8 N., R. 11 E., at SW. corner of crossroads, on top of S. head wall of concrete culvert under rd. W.; chiseled square-----	538.26
Yale, 2.5 mi. S. of, 2.0 mi. N. of Hunt, near NW. cor. sec. 6, T. 7 N., R. 14 W., 38 ft. S. and 37 ft. E. from crossroads, 16 ft. S. of fence corner, in concrete post; standard tablet stamped "26 A 1932"---	537.694
Reference mark, at SE. corner of crossroads, on top of E. head wall of concrete culvert under rd. S.; chiseled square-----	538.58
Hunt, 1.5 mi. N. of, near E $\frac{1}{4}$ cor. sec. 6, T. 7 N., R. 11 E., at SW. corner of junction of T-rd. W., on top of S. head wall of concrete culvert under rd. W.; chiseled square-----	536.09
Hunt, 1.0 mi. N. of, near SE. cor. sec. 6, at NW. corner of crossroads, on top of W. head wall of concrete culvert under rd. N.; chiseled square-----	531.72
Hunt, 275 ft. S. of T-rd. W., on top of W. parapet of S. concrete abutment of highway bridge; chiseled square-----	515.56
Hunt, 0.5 mi. S. of, 3.5 mi. N. of Willow Hill, near W $\frac{1}{4}$ cor. sec. 18, T. 7 N., R. 14 W., at SE. corner of junction of T-rd. E., on top of S. head wall of concrete culvert under rd. E.; chiseled square-----	519.68
Willow Hill, 3.0 mi. N. of, near SE. cor. sec. 18, T. 7 N., R. 11 E., 25 ft. N. and 35 ft. W. from junction of T-rd. W., 5 ft. N. of fence corner, in concrete post; standard tablet stamped "27 A 1932"-----	512.997
Reference mark, 15 ft. N. of rd. W., on top of S. end of E. head wall of concrete culvert under rd. N.; chiseled square-----	514.53

³⁵ This bench mark was set as a reference mark to the standard iron post stamped "Prim Trav Sta No 5 638," described in line 3.

Willow Hill, 2.0 mi. N. of, near NW. cor. sec. 30, T. 7 N., R. 14 W., at SE. corner of crossroads, on top of S. head wall of concrete culvert under rd. E.; chiseled square-----	<i>Feet</i> 514. 19
Willow Hill, 1.0 mi. N. of, near SE. cor. sec. 30, T. 7 N., R. 11 E., 50 ft. N. and 50 ft. W. from crossroads, on top of S. end of W. head wall of concrete culvert under rd. N.; chiseled square-----	498. 53
Willow Hill, near N. limits of, near E¼ cor. sec. 31, T. 7 N., R. 11 E., 200 ft. S. of T-rd. E., on top of W. parapet of S. abutment of concrete bridge; chiseled square-----	490. 67

[Continued in Newton quadrangle, line 6]

10. From point 1 mile north of Willow Hill west and southwest along State Highways 33 and 130 to point 1.6 miles northeast of Newton (by S. R. Archer in 1932)

Willow Hill, 1.0 mi. N. thence 0.8 mi. W. from, near E. cor. sec. 25, T. 7 N., R. 10 E., at NW. corner of crossroads, on top of W. head wall of concrete culvert under rd. N.; chiseled square-----	504. 87
Willow Hill, 1.0 mi. N. thence 1.8 mi. W. from, near SE. cor. sec. 26, T. 7 N., R. 10 E., at NW. corner of crossroads, on top of N. head wall of concrete culvert; chiseled square-----	518. 86
Willow Hill, 1.0 mi. N. thence 2.3 mi. W. from, near N¼ cor. sec. 35, T. 7 N., R. 10 E., 27 ft. S. and 27 ft. E. from crossroads, 5 ft. E. of fence corner, in concrete post; standard tablet stamped "32 A 1932"-----	522. 167
Reference mark, at NW. corner of crossroads, on top of W. head wall of concrete culvert under rd. N.; chiseled square-----	522. 69
Willow Hill, 1.0 mi. N. thence 2.8 mi. W. from, near SE. cor. sec. 27, T. 7 N., R. 10 E., at NW. corner of crossroads, on top of W. head wall of concrete culvert under rd. N.; chiseled square-----	535. 87
Willow Hill, 1.0 mi. N. thence 3.6 mi. W. from, 0.2 mi. E. of W. cor. secs. 27 and 34, T. 7 N., R. 10 E., at bridge over Crooked Creek, on top of N. wing wall of E. abutment; chiseled square-----	487. 11
Willow Hill, 1.0 mi. N. thence 4.4 mi. W. from, 500 ft. W. of S¼ cor. sec. 28, T. 7 N., R. 10 E., in NW. corner of T-rd. N., on top of W. head wall of concrete culvert under rd. N.; chiseled square-----	530. 62
Willow Hill, 1.0 mi. N. thence 4.8 mi. W. from, 2.1 mi. NE. thence 1.4 mi. E. from Newton, near SE. cor. sec. 29, T. 7 N., R. 10 E., 63 ft. W. of crossroads, on N. side of rd., at fence line, in concrete post; standard tablet stamped "33 A 1932"-----	520. 868
Newton, 2.1 mi. NE. thence 0.9 mi. E. from, 360 ft. E. of quarter corner between secs. 29 and 32, T. 7 N., R. 10 E., on top of E. end of S. head wall of concrete bridge; chiseled square-----	492. 73
Newton, 2.1 mi. NE. thence 0.6 mi. E. from, 0.25 mi. E. of NW. cor. sec. 32, T. 7 N., R. 10 E., at SW. corner of junction of T-rd. S., on top of W. head wall of concrete culvert under rd. S.; chiseled square-----	519. 56
Newton, 2.1 mi. NE. of, 650 ft. SW. of N. side sec. 31, T. 7 N., R. 10 E., 390 ft. SW. of SW. corner of triangle at highway junction, on top of E. parapet of N. concrete abutment of concrete bridge; chiseled square-----	492. 68

[Continued in Newton quadrangle, line 7]

SAILOR SPRINGS QUADRANGLE

[Latitude 38°45'–39°00'; longitude 88°15'–88°30']

CLAY, EFFINGHAM, JASPER, AND RICHLAND COUNTIES

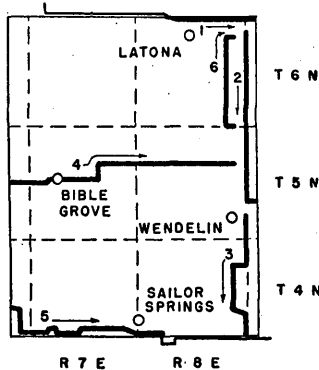


FIGURE 71.—Lines of leveling in Sailor Springs quadrangle.

1. From point 6 miles east of Elliottstown east along road 4.5 miles (by E. E. Harris in 1929)

[Continued from Teutopolis quadrangle, line 2]

Elliottstown, 6.5 mi. E. of, 1.0 mi. N. and 1.0 mi. W. from Latona, near SW. cor. sec. 33, T. 7 N., R. 8 E., 32 ft. N. and 66 ft. E. from junction of T-rd. S., in root on SW. side of 18-in. maple tree; copper nail and washer-----	Feet 562.99
Latona, 1.0 mi. N. of, 3.0 mi. S. of Wheeler, in NW¼ sec. 3, T. 6 N., R. 8 E., 28 ft. S. and 26 ft. W. from junction of T-rd. S., in concrete post; standard tablet stamped "28 H 1928"-----	562.998
Reference mark, 0.3 mi. W. of tablet, 50 ft. W. of T-rd. N., in crotch of small oak tree; copper nail and washer-----	564.53
Latona, 1.0 mi. N. and 1.0 mi. E. from, near NE. cor. sec. 3, T. 6 N., R. 8 E., 35 ft. S. of junction of T-rd. N., in root on NW. side of 15-in. cedar tree; copper nail and washer-----	559.08
Latona, 1.0 mi. N. and 2.0 mi. E. from, near NE. cor. sec. 2, T. 6 N., R. 8 E., at SW. corner of jog in crossroads, on angle of head wall of concrete culvert; chiseled square-----	558.86
Latona, 1.0 mi. N. and 3.0 mi. E. from, near SE. cor. sec. 36, T. 7 N., R. 8 E., in NW. corner of crossroads, in concrete post; standard iron post with bronze cap stamped "Prim Trav Sta No 11 1910" ⁸⁸ ---	557.454

[Continued in Newton quadrangle, line 5]

⁸⁸ In 1934 this bench mark was reported destroyed and a new mark was set. For the description and elevation of the new mark, see line 2.

2. From point 3 miles south and 3.5 miles west from Wheeler along roads west 0.5 mile, thence generally south 10 miles, thence east 0.5 mile (by L. L. Newlin in 1934) ²⁷

[Connects with line 5 in Newton quadrangle]

Wheeler, 3.0 mi. E. thence 3.0 mi. S. from, 3.0 mi. E. thence 1.0 mi. N. from Latona, 1.8 mi. S. of Lis, near SE. corner sec. 36, T. 7 N., R. 8 E., in NW. corner of crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939) ²⁸ -----	Feet 557.068
Latona, 3.0 mi. E. of, near SW. cor. sec. 6, T. 6 N., R. 9 E., at NE. corner of crossroads, on concrete culvert; chiseled square (recovered in 1939)-----	555.36
Latona, 3.0 mi. E. thence 1.0 mi. S. from, near NW. cor. sec. 18, T. 6 N., R. 9 E., in SE. corner of crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	551.466
Latona, 3.3 mi. E. and 1.0 mi. S. from, 0.3 mi. E. of crossroads at W. cor. secs. 7 and 18, T. 6 N., R. 9 E., at corner of private lane S., in concrete post; U. S. C. & G. S. and State Survey standard disk ²⁹ -----	549.022
Latona, 3.0 mi. E. thence 2.2 mi. S. from, 200 ft. N. of center of W. side NW $\frac{1}{4}$ sec. 19, T. 6 N., R. 9 E., 0.2 mi. S. of crossroads, on E. side of rd., in root of hickory tree; nail-----	540.44
Latona, 3.4 mi. E. and 3.0 mi. S. from, 1.2 mi. N. thence 0.5 mi. W. from Bogota, about 0.3 mi. W. of E. cor. secs. 19 and 30, T. 6 N., R. 9 E., 330 ft. W. of T-rd. S., on S. side of E-W. rd., at fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk ³⁰ -----	542.644
Bogota, 1.2 mi. N. thence 1.0 mi. W. from, 330 ft. E. of crossroads at W. cor. secs. 19 and 30, T. 6 N., R. 9 E., 150 ft. S. of rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	539.140
Bogota, 0.2 mi. N. thence 1.0 mi. W. from, near NW. cor. sec. 31, T. 6 N., R. 9 E., in SE. angle of crossroads, in front of farmhouse, in root of walnut tree; nail with "10" on head-----	546.54
Bogota, 0.8 mi. S. thence 1.0 mi. W. from, 150 ft. E. of NW. cor. sec. 6, T. 5 N., R. 9 E., 150 ft. E. of crossroads, on S. side of rd., 2 ft. S. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939)-----	526.437
Bogota, 1.1 mi. S. and 1.0 mi. W. from, 0.8 mi. E. thence 4.7 mi. N. from Wendelin, 0.25 mi. S. of NW. cor. sec. 6, T. 5 N., R. 9 E., on E. side of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	534.276
Wendelin, 0.8 mi. E. thence 3.9 mi. N. from, 500 ft. S. of NW. cor. sec. 7, T. 5 N., R. 9 E., 500 ft. S. of crossroads, on E. side of rd., in root on SW. side of lone 40-in. oak tree; nail with "11" on head (recovered in 1939)-----	521.48

²⁷ An excessive error affecting the first eight bench marks in this line has been disposed of by adjustment.

²⁸ This bench mark replaces the iron post stamped "Prim Trav Sta No 11 1910," which was reported destroyed.

²⁹ This bench mark is probably in Newton quadrangle.

Wendelin, 0.8 mi. E. thence 3.0 mi. N. from, near NE. cor. sec. 13, T. 5 N., R. 8 E., 330 ft. W. of crossroads, on S. side of rd. W., on W. side of private lane to farmhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939)-----	<i>Feet</i> 515. 417
Wendelin, 0.6 mi. E. and 3.0 mi. N. from, 0.25 mi. W. of NE. cor. sec. 13, T. 5 N., R. 8 E., on S. side of rd., 385 ft. W. of N.-S. fence, 2 ft S. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk (recovered in 1939)-----	515. 313
Wendelin, 0.8 mi. E. thence 2.0 mi. N. from, 300 ft. W. of E. cor. secs. 13 and 24, T. 5 N., R. 8 E., 300 ft. W. of junction of T-rd. W., on S. side of rd., at SW. corner of small bridge, in root on SW. side of 24-in. cottonwood tree; nail (recovered in 1939)-----	476. 25
Wendelin, 0.8 mi. E. thence 1.0 mi. N. from, 0.5 mi. N. thence 0.7 mi. W. from Wakefield, near cor. secs. 19, 24, 25, and 30, T. 5 N., Rs. 8 and 9 E., at corner of Clay, Jasper, and Richland counties, 50 ft. N. and 20 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 12 5 1934" (recovered in 1939)-----	493. 721
Wakefield, 0.5 mi. N. thence 0.5 mi. W. from, 0.25 mi. E. of W. cor. secs. 19 and 30, T. 5 N., R. 9 E., on N. side of Jasper-Richland county-line rd., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "R M 12 5 1934"-----	489. 531

[Continued in Newton quadrangle, line 9]

3. From point 0.8 mile east and 1 mile north from Wendelin generally south to point 0.8 mile south and 5.5 miles east from Sailor Springs (by L. L. Newlin in 1934; releveled by W. C. Elledge in 1939)

Wendelin, 0.8 mi. E. thence 0.3 mi. N. from, about 750 ft. S. of quarter corner between secs. 25 and 30, T. 5 N., Rs. 8 and 9 E., at Clay-Richland county line, on top of W. head wall of concrete culvert; chiseled square-----	461. 62
Wendelin, 0.8 mi. E. thence 0.8 mi. S. from, 0.25 mi. N. of S. cor. secs. 31 and 36, T. 5 N., Rs. 8 and 9 E., at Clay-Richland county line, 10 ft. S. and 25 ft. W. from center line of rd. in line with fence E., 5 ft. W. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	476. 624
Wendelin, 0.8 mi. E. thence 1.0 mi. S. from, near SE. cor. sec. 36, T. 4 N., R. 8 E. 20 ft. N. and 30 ft. W. from crossroads, 2 ft. N. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	474. 593
Wendelin, 0.8 mi. E. thence 1.8 mi. S. from, 0.25 mi. S. of quarter corner between secs. 1 and 6, T. 4 N., Rs. 8 and 9 E., at Clay-Richland county line, 21 ft. N. and 18 ft. E. from junction of T-rd. E., in root on SW. side of 24-in. maple tree; nail-----	471. 70
Wendelin, 0.8 mi. E. thence 2.5 mi. S. from, near quarter corner between secs. 7 and 12, T. 4 N., Rs. 8 and 9 E., 15 ft. S. and 115 ft. W. from junction of T-rd. W., in root on NE. side of 36-in. oak tree; copper nail and washer (established in 1939)-----	461. 73
Wendelin, 3.0 mi. S. of, 0.25 mi. E. of SW. cor. sec. 12, T. 4 N., R. 8 E., 20 ft. N. and 30 ft. W. from crossroads, 2 ft. N. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	460. 397

Wendelin, 3.0 mi. S. thence 0.2 mi. W. from, near cor. secs. 11, 12, 13, and 14, T. 4 N., R. 8 E., 0.25 mi. W. of crossroads, on N. side of rd., at corner of garden, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	<i>Feet</i> 461.939
Wendelin, 4.0 mi. S. of, 1.2 mi. N. and 4.8 mi. E. from Sailor Springs, 0.25 mi. E. of SW. cor. sec. 13, T. 4 N., R. 8 E., 300 ft. N. of section line, 30 ft. N. of fence E., on E. side of rd., on top of N. concrete gatepost; chiseled square-----	459.83
Sailor Springs, 0.7 mi. N. and 4.8 mi. E. from, 0.2 mi. W. of center of sec. 24, T. 4 N., R. 8 E., 15 ft. N. and 30 ft. E. from junction of rd. N., on W. bank of creek, in root on NE, side of 20-in. oak tree; copper nail and washer (established in 1939)-----	429.01
Sailor Springs, 0.4 mi. N. and 5.5 mi. E. from, 0.25 mi. N. of S. cor. secs. 19 and 24, T. 4 N., Rs. 8 and 9 E., at Clay-Richland county line, 15 ft. S. and 45 ft. E. from junction of private T-rd. E.; in concrete post; U. S. C. & G. S. and State Survey standard disk-----	450.683
Sailor Springs, 0.2 mi. N. and 5.5 mi. E. from, near SW. cor. sec. 19, T. 4 N., R. 9 E., 30 ft. N. and 55 ft. E. from junction of T-rd. E., in concrete post; U. S. C. & G. S. and State Survey standard disk--	446.288

[Continued in Cisne quadrangle, line 5]

4. From point 0.3 mile south and 2.5 miles west from Bible Grove along roads east to point 0.8 mile east and 3 miles north from Wendelin (by W. C. Elledge in 1939)

[Continued from Edgewood quadrangle, line 8]

Bible Grove, 0.3 mi. S. and 2.4 mi. W. from, about 400 ft. W. of SE. cor. sec. 14, T. 5 N., R. 6 E., on N. side of rd., in line with door of house on S. side of rd., 3 ft. S. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "5 E 1939"-----	513.691
Bible Grove, 0.3 mi. S. and 1.3 mi. W. from, near E. cor. secs. 13 and 24, T. 5 N., R. 6 E., 150 ft. S. of rd., in line with T-rd. N., in root on N. side of 36-in. elm tree; copper nail and washer-----	515.74
Bible Grove, 0.5 mi. W. of, 0.25 mi. N. of SW. cor. sec. 17, T. 5 N., R. 7 E., 30 ft. S. and 300 ft. E. from junction of T-rd. E., at fence line, at concrete right-of-way post; top of post-----	518.22
Bible Grove, 1,000 ft. E. of business district, 400 ft. E. of concrete bridge, in NW. corner of yard of cream-colored house on S. side of rd., 3 ft. E. of corner fence post, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "6 E 1939"-----	512.401
Bible Grove, 1.5 mi. E. of, 0.25 mi. N. of SW. cor. sec. 15, T. 5 N., R. 7 E., 20 ft. S. and 60 ft. E. from crossroads, in root on NW. side of 24-in. tree, westernmost of two elm trees; copper nail and washer-----	514.08
Bible Grove, 2.5 mi. E. of, 0.25 mi. N. of SW. cor. sec. 14, T. 5 N., R. 7 E., 5 ft. S. and 21 ft. E. from junction of rd. W., 2 ft. S. and 3 ft. W. from fence corner, in concrete post; standard tablet stamped "7 E 1939"-----	514.378
Bible Grove, 0.7 mi. N. thence 2.5 mi. E. from, near SE. cor. sec. 10, T. 5 N., R. 7 E., 25 ft. N. and 75 ft. W. of crossroads, in root on S. side of 15-in. tree; copper nail and washer-----	516.83
Bible Grove, 0.7 mi. N. thence 3.5 mi. E. from, near NE. cor. sec. 14, T. 5 N., R. 7 E., 50 ft. S. and 15 ft. W. from junction of T-rd. N., in root on N. side of 12-in. oak tree; copper nail and washer---	517.83

386 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Bible Grove, 0.7 mi. N. thence 4.5 mi. E. from, near E. cor. secs. 12 and 13, T. 5 N., R. 7 E., at Clay-Jasper county line, 54 ft. W. of jog in rd., on N. side of rd., 25 ft. E. of private rd. N., 2 ft. S. of fence, in concrete post; standard tablet stamped "8 E 1939"-----	Feet 515.650
Bible Grove, 0.7 mi. N. thence 5.0 mi. E. from, near SW. cor. sec. 8, T. 5 N., R. 8 E., 30 ft. N. and 380 ft. E. from crossroads, in root on N. side of 24-in. oak tree; copper nail and washer-----	511.40
Bible Grove, 0.7 mi. N. thence 5.8 mi. E. from, 0.25 mi. W. of cor. secs. 8, 9, 16, and 17, T. 5 N., R. 8 E., on SW. wing wall of large concrete bridge; chiseled square-----	469.01
Bible Grove, 0.7 mi. N. thence 7.0 mi. E. from, near SW. cor. sec. 10, T. 5 N., R. 8 E., 10 ft. N. and 250 ft. E. from crossroads, 75 ft. E. of fence line N., 2 ft. S. of fence, in concrete post; standard tablet stamped "9 E 1939"-----	508.584
Reference mark, 75 ft. W. of tablet, in root on S. side of 12-in. oak tree; copper nail and washer-----	507.43
Bible Grove, 0.7 mi. N. thence 8.0 mi. E. from, 1.2 mi. W. and 3.0 mi. N. from Wendelin, near SW. cor. sec. 11, T. 5 N., R. 8 E., 20 ft. N. and 170 ft. E. from crossroads, in root on SE. side of 24-in. oak tree; copper nail and washer-----	509.40
Wendelin, 0.2 mi. W. and 3.0 mi. N. from, near NE. cor. sec. 14, T. 5 N., R. 8 E., 120 ft. W. of center of small bridge, 30 ft. S. and 80 ft. W. from junction of T-rd. S., in root on N. side of 24-in. sycamore tree; copper nail and washer-----	479.23
5. From point near Louisville along roads east 0.8 mile and south 1.2 miles, thence generally east to point 0.8 mile south and 1.4 miles east from Sailor Springs (by W. C. Elledge in 1939)	
[Continued from Edgewood quadrangle, line 9]	
Louisville, 0.8 mi. E. of, at W. end of steel bridge over creek, on S. wing wall; painted square-----	447.04
Louisville, 1.2 mi. E. of, near center of S½ sec. 24, T. 4 N., R. 6 E., 40 ft. N. of T-rd. S., in root on S. side of 20-in. oak tree; copper nail and washer-----	445.39
Louisville, 1.2 mi. E. thence 1.2 mi. S. from, near quarter corner between secs. 25 and 36, T. 4 N., R. 6 E., 80 ft. N. of turn E. in rd., 12 ft. E. of rd., in root on SE. side of 14-in. elm tree; copper nail and washer-----	444.32
Louisville, 1.8 mi. E. and 1.2 mi. S. from, 0.8 mi. S. and 5.8 mi. W. from Sailor Springs, near cor. secs. 25, 30, 31, and 36, T. 4 N., Rs. 6 and 7 E., 250 ft. E. of small steel bridge, 21 ft. S. of rd., 4 ft. E. of point in line with fence S., 3 ft. S. of point in line with fence E., in concrete post; standard tablet stamped "10 E 1939"-----	440.596
Sailor Springs, 0.5 mi. S. and 5.0 mi. W. from, 0.25 mi. N. of SW. cor. sec. 29, T. 4 N., R. 7 E., 20 ft. S. and 35 ft. E. from junction of T-rd. E., in root on NW. side of 24-in. oak tree; copper nail and washer-----	463.77
Sailor Springs, 0.8 mi. S. and 4.0 mi. W. from, near cor. secs. 28, 29, 32, and 33, T. 4 N., R. 7 E., 200 ft. W. of old house on S. side of rd., 25 ft. N. and 30 ft. W. from center line of rd. in line with fence N., in root on S. side of 24-in. oak tree; copper nail and washer-----	466.97

Sailor Springs, 0.5 mi. S. and 3.0 mi. W. from, 1.0 mi. S. thence 4.8 mi. E. from Louisville, 0.25 mi. N. of S. cor. secs. 27. and 28, T. 4 N., R. 7 E., 45 ft. N. and 4 ft. W. from junction of T-rd. S., in SE. corner of yard of Little Grove School, 24 in. W. of fence, in concrete post; standard tablet stamped "11 E 1939"-----	Feet 456.652
Reference mark, W. of tablet, at entrance to school, on E. end of first concrete step; chiseled square-----	455.89
Sailor Springs, 0.5 mi. S. and 2.0 mi. W. from, 0.25 mi. N. of S. cor. secs. 26 and 27, T. 4 N., R. 7 E., 29 ft. N. and 20 ft. W. from junction of T-rd. N., in SE. corner of farmyard, in root on SW side of 15-in. maple tree; copper nail and washer-----	454.59
Sailor Springs, 0.5 mi. S. and 1.2 mi. W. from, 0.25 mi. N. and 0.25 mi. W. from SE cor. sec. 26, T. 4 N., R. 7 E., 20 ft. N. and 30 ft. E. from crossroads, in SW. corner of farmyard, in root on SE. side of 18-in. elm tree; copper nail and washer-----	447.92
Sailor Springs, 0.5 mi. S. and 0.5 mi. W. from, 0.25 mi. N. of S $\frac{1}{4}$ cor. sec. 25, T. 4 N., R. 8 E., 15 ft. S. and 45 ft. E. from crossroads, in root on N. side of 30-in. oak tree; copper nail and washer-----	433.62
Sailor Springs, 0.8 mi. S. of, near cor. secs. 25, 30, 31, and 36, T. 4 N., Rs. 7 and 8 E., 13 ft. N. and 30 ft. W. from crossroads, 1 ft. S. of fence, in concrete post; standard tablet stamped "12 E 1939"-----	443.059
Sailor Springs, 0.8 mi. S. thence 1.2 mi. E. from, near quarter corner between secs. 29 and 32, T. 4 N., R. 8 E., 100 ft. S. and 20 ft. E. from junction of N-S. rd., in root on SW. side of 24-in. maple tree; copper nail and washer-----	441.58
[Continued in Cisne quadrangle, line 14]	
6. From point 0.8 mile east and 3.9 miles north from Wendelin along roads north 1.1 miles and west 1 mile, thence alternately north and east to crossroads 3 miles south and 3 miles east from Wheeler (by W. C. Elledge in 1939)	
Bogota, 0.8 mi. S. thence 2.0 mi. W. from, near N. cor. secs. 1 and 2, T. 5 N., R. 8 E., 18 ft. S. and 12 ft. E. from junction of T-rd. S., on E. head wall of concrete culvert; chiseled square-----	528.56
Bogota, 0.2 mi. N. thence 2.0 mi. W. from, 2.0 mi. E. thence 4.0 mi. S. from Latona, about 200 ft. S. of N. cor. secs. 35 and 36, T. 6 N., R. 8 E., at concrete bridge over Laws Creek, on SW. wing wall; chiseled square-----	486.87
Latona, 2.0 mi. E. thence 3.0 mi. S. from, near cor. secs. 23, 24, 25, and 26, T. 6 N., R. 8 E., 84 ft. N. and 20 ft. E. from junction of T-rd. W., 3 ft. S. and 1 ft. W. from NW. corner of yard, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	537.748
Latona, 2.0 mi. E. thence 2.0 mi. S. from, near cor. secs. 13, 14, 23, and 24, T. 6 N., R. 8 E., 102 ft. S. and 18 ft. W. from junction of T-rd. W., on W. head wall of concrete culvert; chiseled square---	548.68
Latona, 2.0 mi. E. thence 1.0 mi. S. from, near SW. cor. sec. 12, T. 6 N., R. 8 E., 18 ft. N. and 87 ft. E. from junction of T-rd. E., in root on W. side of 15-in. oak tree; copper nail and washer---	554.44
Latona, 2.0 mi. E. of, near SW. cor. sec. 1, T. 6 N., R. 8 E., 105 ft. N. and 36 ft. E. from crossroads, 2 ft. N. and 22 ft. W. from SW. corner of Kedron School, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	554.192

ST. CHARLES QUADRANGLE

[Latitude 38°45'–39°00'; longitude 90°15'–90°30']

CALHOUN, JERSEY, AND MADISON COUNTIES

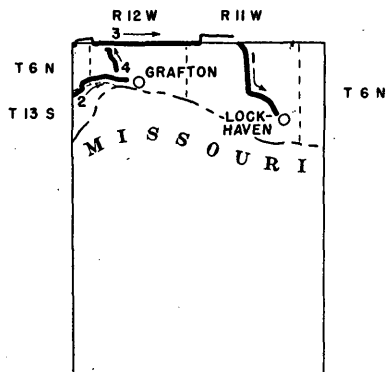


FIGURE 72.—Lines of leveling in St. Charles quadrangle.

1. Southeast along Chicago, Springfield & St. Louis Railway from point 0.6 mile southeast of Newbern to point near Lock Haven (by S. R. Archer in 1922)

[Continued from Jerseyville quadrangle, line 1]

Beltrees, 2.1 mi. N. of, 1.6 mi. SE. of Newbern, near SW. cor. sec. 3, T. 6 N., R. 11 W., 250 ft. S. of bridge 1636 over creek, on N. side of hollow, at E. fence line of R. R. right-of-way, in root on SW. side of 30-in. oak tree; copper nail and washer-----	Feet 546. 02
Beltrees, 1.4 mi. N. of, near W¼ cor. sec. 10, T. 6 N., R. 11 W., 340 ft. W. of crossing of E.-W.-rd., on W. bank of creek, on S. side of rd., in root 6 in. underground on S. side of 42-in. oak tree; copper nail and washer-----	494. 49
Beltrees, 50 ft. S. and 130 ft. E. from sta., 8 ft. N. of NE. corner of dwelling of A. T. Bechtold, at S. fence line of R. R. right-of-way; standard iron post with bronze cap stamped "51 A 1922"-----	452. 864
Beltrees, 0.3 mi. SE. of sta., 0.25 mi. N. of S¼ cor. sec. 15, T. 6 N., R. 11 W., 45 ft. SW. of crossing of E.-W. rd., on S. side of rd., in root on N. side of 15-in. oak tree; copper nail and washer-----	449. 40
Beltrees, 1.3 mi. SE. of, 1.2 mi. NW. of Lock Haven, 0.12 mi. S. of N¼ cor. sec. 23, T. 6 N., R. 11 W., 45 ft. N. and 30 ft. W. from crossing of N.-S. rd., in root on W. side of 36-in. oak tree; copper nail and washer-----	431. 95
Lock Haven, 350 ft. E. of sta., on W. stone abutment of C. S. & St. L. Ry. bridge over Piasa Creek, on N. end of bridge seat; chiseled square-----	428. 53
Lock Haven, 0.6 mi. SW. of, 0.6 mi. above mouth of Piasa Creek, 33 ft. N. of Alton & Eastern R. R., 476 ft. back from river bank, 98 ft. E. of trestle over small ravine; Mississippi River Comm. B. M. 63/2 cap on iron pipe-----	440. 146
copper bolt in tile at bottom of pipe-----	436. 126

2. From point 0.4 mile northeast of Marshall Landing on Illinois River northeast and east along roads to Grafton (by J. M. Lawson in 1926)

[Continued from Brussels quadrangle, line 6]

Grafton, about 3 mi. W. of, 0.4 mi. NE. of center of sec. 2, T. 12 S., R. 1 W., on Calhoun Point, 20 ft. N. and 40 ft. E. from junction of rd. N. to Deer Plain Ferry landing, on S. side of Illinois River, 50 ft. back from edge of water, 10 ft. NW. of head wall of culvert, in root on W. side of 36-in. maple tree; copper nail and washer-----	<i>Feet</i> 420. 14
Grafton, 2.8 mi. W. of Catholic Church, 158 ft. N. and 78 ft. W. from Deer Plain Ferry landing, on N. side of Illinois River, in concrete post; standard tablet stamped "P T Sta No 16 LS 1924" ⁴⁰ ---	430. 977
Reference mark, 98 ft. E. of tablet, 160 ft. N. of ferry landing, 20 ft. S. and 10 ft. E. from junction of rd. to ferry, in root on SE. side of 24-in. maple tree; copper nail and washer-----	425. 32
Grafton, 1.8 mi. W. of, in SE $\frac{1}{4}$ sec. 8, T. 6 N., R. 12 W., on W. side of ravine near culvert under rd., 30 ft. N. of rd., 100 ft. W of fence N., in root of 15-in. walnut tree; copper nail and washer-----	431. 55
Grafton, 0.5 mi. W. of Catholic Church, 500 ft. E. of curve in Main Street, 50 ft. S. of center line of street, on NW. corner of concrete curb of public well; chiseled square-----	434. 51
Grafton, on S. side of Clinton Street. 1 block W. of Church Street, in top of doorstep of Catholic Church, 9 in. from front edge of step and 5 in. from N. door jamb; copper bolt (U. S. C. E. B. M. 3)---	436. 613
Grafton, at SW. corner of intersection of Main and Church Streets, 1 block S. and 1 block E. from Catholic Church, in NE. corner of yard of Peter Freeman; Mississippi River Comm. B. M. 66/2 cap on iron pipe-----	430. 247
copper bolt in tile at bottom of pipe-----	426. 220

3. From point near northwest corner sec. 1, T. 6 N., R. 13 W., generally east along township-line road and State Highway 109 to south corner of Mississippi and Otter Creek townships (by J. M. Lawson in 1926) ⁴¹

[Continued from Hardin quadrangle, line 7]

Grafton, 5.7 mi. NW. of, 0.25 mi. E. of NW. cor. sec. 1, T. 6 N., R. 13 W., on NE. side of Graham Hollow rd., 40 ft. N. and 100 ft. E. from junction of second-class rd. SW., 25 ft. S. of E.-W. rd., on NW. corner of NW. concrete base of Mississippi River Power Co. transmission tower; chiseled square-----	865. 30
T. 7 N., R. 13 W., 0.2 mi. N. of SE. cor. sec. 36, 25 ft. S. of rd., 30 ft. N. and 100 ft. E. from dwelling standing on S side of rd, on W. side of range-line fence, in line with yard fence, in root on S. side of 18-in. walnut tree; copper nail and washer-----	868. 95
T. 7 N., R. 12 W., in SW $\frac{1}{4}$ sec. 31, 7 ft. S. and 20 ft. E. from junction of rd. W., 25 ft. S. and 20 ft. W. from SW. corner of house, 1 ft. W. of yard fence, in concrete post; standard tablet stamped "17 L 1926"-----	856. 714

⁴⁰ In 1934 this bench mark was reset 158 ft. west of its original position and 3.644 ft. higher in elevation. The description and elevation given refer to the new position.

⁴¹ Published also as part of line 7 in Jerseyville quadrangle.

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Reference mark, 90 ft. S. of tablet, at SW. corner of yard fence, 100 ft. S. of rd. W., 20 ft. E. of rd., in root on SE. side of 24-in. oak tree; copper nail and washer-----	<i>Feet</i> 853. 82
T. 7 N., R. 12 W., near S $\frac{1}{4}$ cor. sec. 31, 160 ft. E. of dwelling, 25 ft. N. of rd., S. of corn crib, at foot of hill, on knob on SE. side of 36-in. oak tree; copper nail and washer-----	799. 44
T. 7 N., R. 12 W., near N $\frac{1}{4}$ cor. sec. 5, 10 ft. S. and 30 ft. E. from junction of Dagett Hollow rd., along property of Mississippi River Power Co.; top of concrete right-of-way post-----	836. 94
T. 7 N., R. 12 W., near S $\frac{1}{4}$ cor. sec. 32, 7 ft. N. and 12 ft. W. from junction of private rd. N., 50 ft. E. of junction of second-class rd. S., at top of hill, 10 ft. S. of fence corner, in root on SE. side of lone 30-in. oak tree; copper nail and washer-----	792. 21
T. 7 N., R. 12 W., 0.15 mi. W. of SE. cor. sec. 32, 40 ft. S. of four-way rd. fork, 10 ft. W. of Mason Hollow rd., 10 ft. E. of creek, in trunk on NE. side near base of 36-in. oak tree; copper nail and washer---	670. 86
T. 7 N., R. 12 W., 0.25 mi. W. of S $\frac{1}{4}$ cor. sec. 33, 40 ft. S. and 90 ft. E. from SE corner of dwelling, 30 ft. N. and 240 ft. E. from S. end of fence N., in root on S. side of 18-in. walnut tree; copper nail and washer-----	788. 99
Grafton, 2.5 mi. along State Highway 109 NE. of, 0.2 mi. W. of N $\frac{1}{4}$ cor. sec. 2, T. 6 N., R. 12 W., 36 ft. S. and 24 ft. W. from crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 87 W 1921"-----	708. 667
Grafton, 4.1 mi. NE. of, 0.5 mi. S. and 2.6 mi. W. from Newbern, 420 ft. E. of SW. cor. sec. 36, T. 7 N., R. 12 W., 80 ft. W. of creek crossing, 20 ft. N of rd., 7 ft. S. of hedge fence, at edge of embankment, in root on SW. side of 30-in. hickory tree; copper nail and washer-----	631. 81
[Continued in Jerseyville quadrangle, line 7]	
4. From Grafton northwest along Dagett Hollow road to point near north quarter corner sec. 5, T. 6 N., R. 12 W. (by J. M. Lawson in 1926)	
Grafton, 1.0 mi. NW. of Catholic Church, 0.2 mi. S. and 0.2 mi. E. from NW. corner of town boundary, 15 ft. N. of junction of rds., in center of Y, in root on SW. side of 12-in. tree; copper nail and washer-----	459. 89
Grafton, 1.7 mi. NW. of, 0.25 mi. W. of quarter corner between secs. 4 and 9, T. 6 N., R. 12 W., 10 ft. N. and 20 ft. E. from junction of second-class rd., 35 ft. NW. of creek, 7 ft. E. of gate, in root on W. side of 24-in. elm tree; copper nail and washer-----	539. 03
Grafton, 2.5 mi. NW. of, 0.12 mi. N. of quarter corner between secs. 4 and 5, T. 6 N., R. 12 W., 400 ft. S. of sharp curve, on W. side of rd., 2 ft. higher than surface of rd., on large rock shelf; chiseled square-----	683. 42

ST. ELMO QUADRANGLE

[Latitude 39°00'–39°15'; longitude 88°45'–89°00']

EFFINGHAM, FAYETTE, AND SHELBY COUNTIES

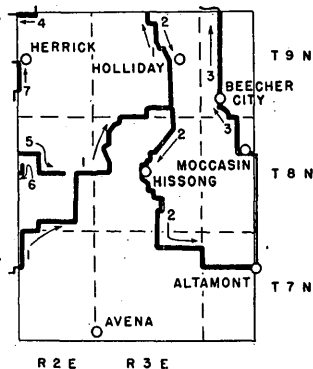


FIGURE 73.—Lines of leveling in St. Elmo quadrangle.

1. From point 4.2 miles north and 2.5 miles west from Brownstown alternately east and north along roads to point 0.8 mile west of Holliday, thence northwest to Cowden (by P. E. Fletcher in 1907)

[Continued from Ramséy quadrangle, line 1]

Brownstown, 5.2 mi. N. and 2.1 mi. W. from, near SW. cor. sec. 4, T. 7 N., R. 2 E.; standard iron post with bronze cap stamped "506"	<i>Feet</i> 505.157
Brownstown, 6.7 mi. N. and 0.7 mi. W. from, 5.3 mi. W. and 2.5 mi. S. from Hissong, near center of sec. 34, T. 8 N., R. 2 E.; standard iron post with bronze cap stamped "509"	508.091
Hissong (Wrights Corner), 3.8 mi. W. thence 0.3 mi. S. from, near E. side sec. 23, T. 8 N., R. 2 E., at Hogge School, in NE. corner of schoolyard; standard iron post with bronze cap stamped "580" (recovered in 1932)	579.472
Hissong, 1.8 mi. W. thence 1.3 mi. N. from, about 0.2 mi. W. of SE. cor. sec. 7, T. 8 N., R. 3 E.; standard iron post with bronze cap stamped "594"	593.258
Hissong, 0.8 mi. W. and 3.0 mi. N. from, 5.0 mi. W. and 1.0 mi. S. from Beecher City, near NE. cor. sec. 5, T. 8 N., R. 3 E.; standard iron post with bronze cap stamped "589"	588.272
Beecher City, 2.8 mi. W. of, 0.8 mi. W. thence 2.0 mi. S. from Holliday, 0.25 mi. E. of NW. cor. sec. 35, T. 9 N., R. 3 E., in SW. angle of crossroads; standard iron post with bronze cap stamped "610" ⁴² (recovered in 1928)	609.013
Holliday, 0.8 mi. W. thence 1.1 mi. S. from, 300 ft. S. of N. side NW¼ sec. 26, T. 9 N., R. 3 E., on iron bridge over Fanny Branch; Illinois Geological Survey plate stamped "536"	535.49
Kaskaskia River; surface of water Sept. 24, 1907	501.0

⁴² In 1930 this bench mark was restamped "G 609."

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Holliday, 2.3 mi. NW. of, 1.3 mi. S. and 0.5 mi. W. from Cowden, near S $\frac{1}{4}$ cor. sec. 10, T. 9 N., R. 3 E., in NW. angle of rd. junction; standard iron post with bronze cap stamped "558"⁴³ (recovered in 1928) - Feet
556.982

[Continued in Shelbyville quadrangle, line 1]

2. From Cowden along roads generally south and east to point 0.8 mile west of Holliday, thence south and southwest to Hissong, thence southeast, south, and east to Altamont (by E. W. Gouchenour in 1928)

[Continued from Shelbyville quadrangle, line 2]

Cowden, in SE. part of, 18 ft. S. and 55 ft. E. from junction of southernmost and easternmost streets, in NW. corner of yard of residence of B. A. Brown, in root on E. side of 36-in. water-oak tree; nail-----	595.17
Cowden, 0.3 mi. S. thence 0.5 mi. E. from B. & O. R. R. sta., near S $\frac{1}{4}$ cor. sec. 3, T. 9 N., R. 3 E., 18 ft. N. and 70 ft. E. from junction of T-rd. S., in root on W. side of elm tree; nail-----	589.23
Holliday, 1.2 mi. NW. of, near center of E. side SE $\frac{1}{4}$ sec. 15, T. 9 N., R. 3 E., about 0.25 mi. N. of Fayette-Shelby county line, 150 ft. W. of point where rd. bends SE., on N. side of rd., in root on S. side of large elm tree; copper nail and washer-----	527.41
Holliday, 0.8 mi. W. of, 0.25 mi. E. of NW. cor. sec. 23, T. 9 N., R. 3 E., on Fayette-Shelby county line, 30 ft. N. and 20 ft. W. from junction of rd E., in yard of abandoned farmhouse, in root on NE. side of triple maple tree; copper nail and washer-----	552.80
Holliday, 0.8 mi. W. thence 0.5 mi. S. from, 0.25 mi. W. of center of sec. 23, T. 9 N., R. 3 E., about 150 ft. N. and 25 ft. W. from junction of T-rd. W., in front of farmhouse, in root on S. side of 36-in. maple tree; copper nail and washer-----	602.34
Holliday, 0.8 mi. W. thence 1.1 mi. S. from, 2.8 mi. W. thence 0.9 mi. N. from Beecher City, near N. side NW $\frac{1}{4}$ sec. 26, T. 9 N., R. 3 E., at S. end of bridge over Fanny Branch, on W. wing wall of concrete abutment; chiseled square-----	532.91
Beecher City, 2.8 mi. W. thence 0.5 mi. S. from, 0.2 mi. W. of center of sec. 35, T. 9 N., R. 3 E., about 200 ft. E. of T-rd. N., 30 ft. N. of rd., in front yard of farmhouse, in root on W. side of 8-in. catalpa tree; copper nail and washer-----	604.20
Beecher City, 2.5 mi. W. and 0.5 mi. S. from, near center of sec. 35, T. 9 N., R. 3 E., 30 ft. S. and 10 ft. W. from junction of T-rd. S., on W. wing wall of concrete culvert; chiseled square-----	605.69
Beecher City, 2.5 mi. W. and 1.5 mi. S. from, near center of sec. 2, T. 8 N., R. 3 E., 180 ft. N. and 30 ft. W. from junction of T-rd. E., in root on NE. side of 12-in. pin-oak tree in fence row; copper nail and washer-----	613.96
Beecher City, 2.8 mi. W. and 1.8 mi. S. from, 3.1 mi. NE. of Hissong, 0.2 mi. NE. of Miller School, W. of center of SW $\frac{1}{4}$ sec. 2, T. 8 N., R. 3 E., 75 ft. W. of sharp angle in rd., in root on SE. side of 36-in. pin-oak tree; copper nail and washer-----	600.06
Hissong, 2.8 mi. NE. of, near SW. cor. sec. 2, T. 8 N., R. 3 E., 120 ft. N. of T-rd. W., at Miller School, in E. end of yard, in root on SE. side of 20-in. hickory tree; copper nail and washer-----	611.40

⁴³ In 1930 this bench mark was restamped "G 557."

Hissong, 2.2 mi. NE. of, 0.3 mi. W. of E $\frac{1}{4}$ cor. sec. 10, T. 8 N., R. 3 E., 30 ft. S. and 25 ft. E. from junction of private rd. E., in root on E. side of 24-in. black-oak tree; copper nail and washer-----	Feet 622.29
Hissong, 1.4 mi. NE. of, 0.25 mi. E. of NW cor. sec. 15, T. 8 N., R. 3 E., 40 ft. S. and 5 ft. E. from stone marking sixteenth corner, about 35 ft. S. and 150 ft. W. from rd. in front of farmhouse of Jim Holman, in W. fence line, in concrete post; standard tablet stamped "G 630"-----	629.972
Reference mark, 50 ft. N. of tablet, in root on SE. side of 6-in. oak tree; copper nail and washer-----	630.05
Hissong, 1.0 mi. NE. of, near W. side NW $\frac{1}{4}$ sec. 15, T. 8 N., R. 3 E., 10 ft. N. and 40 ft. E. from junction of rd. E., on N. wing wall of concrete culvert; chiseled square-----	635.34
Hissong, at crossroads, 0.25 mi. W. of SE. cor. sec. 16, T. 8 N., R. 3 E., at store, on NW. corner of concrete base of gasoline pump; chiseled square-----	656.17
Hissong, 1.1 mi. SE. of, 6.1 mi. N and 0.5 mi. W. from St. Elmo, near S. cor. secs. 21 and 22, T. 8 N., R. 3 E., at steel girder bridge over Big Creek, on E. edge of NE. pier; head of northernmost rivet-----	524.75
St. Elmo, 5.8 mi. N. and 0.2 mi. E. from, 20 ft. N. and 30 ft. W. from stone marking center of NE $\frac{1}{4}$ sec. 27, T. 8 N., R. 3 E., in NW. angle of junction of N.-S. rd., in concrete post; standard tablet stamped "G 609"-----	609.157
Reference mark 1, 480 ft. W. of rd. junction, on S. side of rd., in root on NW. side of 14-in. black-oak tree; copper nail and washer-----	609.85
Reference mark 2, about 70 ft. S. and 20 ft. E. from rd. junction, in root on N. side of 8-in. white-oak tree; copper nail and washer--	608.67
St. Elmo, 5.0 mi. N. and 0.2 mi. E. from, 0.25 mi. E. of N $\frac{1}{4}$ cor. sec. 34, T. 8 N., R. 3 E., 30 ft. S. and 125 ft. W. from junction of T-rd. N., in root on NE. side of 20-in. pin-oak tree; copper nail and washer-----	604.79
St. Elmo, 4.5 mi. N. of, near center of sec. 34, T. 8 N., R. 3 E., 30 ft. N. and 15 ft. W. from crossroads, in root on SE. side of 20-in. cottonwood tree; copper nail and washer-----	605.31
St. Elmo, 3.5 mi. N. of, near center of sec. 3, T. 7 N., R. 3 E., 10 ft. N. and 35 ft. W. from junction of T-rd. W., on N. wing wall of concrete culvert; chiseled square-----	600.01
St. Elmo, 3.0 mi. N. of, near S $\frac{1}{4}$ cor. sec. 3, T. 7 N., R. 3 E., across rd. from St. Bonaventure Church, 20 ft. N. and 30 ft. W. from crossroads, in concrete post; standard tablet stamped "G 607"-----	607.103
Reference mark, 130 ft. N. and 35 ft. W. from crossroads, in root on SW. side of 6-in. oak tree; copper nail and washer-----	606.64
Reference mark 2, at NE. corner of churchyard, on concrete base of fence post; chiseled square-----	606.59
St. Elmo, 3.0 mi. N. thence 0.4 mi. E. from, near S. side SE $\frac{1}{4}$ sec. 3, T. 7 N., R. 3 E., at bridge over Watson Creek, on NE. wing wall; chiseled square-----	588.16
St. Elmo, 3.0 mi. N. thence 1.5 mi. E. from, near SE. cor. sec. 2, T. 7 N., R. 3 E., opposite Franklin School, about 140 ft. W. of center line of T-rd. S., on N. wing wall of concrete culvert; chiseled square-----	620.71
St. Elmo, 3.0 mi. N. thence 1.8 mi. E. from, 0.25 mi. E. of SW. cor. sec. 1, T. 7 N., R. 3 E., 25 ft. N. and 25 ft. W. from junction of T-rd. N., in root on S. side of 36-in. black-oak tree; copper nail and washer-----	619.09

St. Elmo, 3.0 mi. N. thence 2.5 mi. E. from, 3.0 mi. W. thence 1.0 mi. N. from Altamont, in NE. cor. sec. 12, T. 7 N., R. 3 E., 30 ft. S. and 25 ft. W. from junction of Effingham-Fayette county-line rd., in concrete post; standard tablet stamped "G 622"-----	<i>Feet</i> 622. 077
Reference mark, on W. base of concrete corner fence post; chiseled square-----	621. 57
Altamont, 3.0 mi. W. of, in SW. cor. sec. 7, T. 7 N., R. 4 E., about 10 ft. N. and 30 ft. E. from junction of T-rd. E., on N. wing wall of concrete culvert; chiseled square-----	621. 42
Altamont, 2.0 mi. W. of, near NW. cor. sec. 17, T. 7 N., R. 4 E., about 240 ft. E. of crossroads, on S. side of rd., on W. side of entrance to farmyard, in root on N. side of hard-maple tree; copper nail and washer-----	636. 41
Altamont, 1.0 mi. W. of, near SW. cor. sec. 9, T. 7 N., R. 4 E., 0.3 mi. N. of Pennsylvania R. R., 25 ft. N. and 25 ft. E. from crossroads, in concrete post; standard tablet stamped "G 628" ⁴⁴ -----	628. 242
Reference mark, 10 ft. N. and 20 ft. E. from crossroads, on N. wing wall of concrete culvert; chiseled square (recovered in 1936)-----	629. 76

[Continued in Effingham quadrangle, line 1]

3. From point near Moccasin alternately west and north along roads by way of Beecher City to point 0.5 mile west and 1 mile south from Fancher (by E. W. Gouchenour in 1928)

[Continued from Effingham quadrangle, line 1]

Moccasin, at town hall, on SE. corner of concrete porch; square cut (B. & O. R. R. B. M.)-----	613. 12
Moccasin, 0.5 mi. W. thence 1.0 mi. N. from, 2.0 mi. S. and 1.0 mi. E. from Beecher City, near cor. secs. 4, 5, 8, and 9, T. 8 N., R. 4 E., about 55 ft. E. of center of crossing of B. & O. R. R., in concrete post; standard tablet stamped "G 616"-----	615. 402
Reference mark, about 125 ft. N. of R. R. crossing, 20 ft. W. of rd., in root on SE. side of small triple locust tree; copper nail and washer-----	613. 20
Beecher City, 1.0 mi. S. and 1.0 mi. E. from, near SW. cor. sec. 33, T. 9 N., R. 4 E., 15 ft. N. and 120 ft. W. from junction of E.-W. rd., in root on S. side of 36-in. elm tree; copper nail and washer-----	609. 31
Beecher City, 0.8 mi. S. and 0.5 mi. E. from, 100 ft. S. of bridge over Wolf Creek, 30 ft. W. of rd., in root on E. side of 20-in. walnut tree; copper nail and washer-----	556. 13
Beecher City, 0.5 mi. S. of B. & O. R. R. sta., 25 ft. S. and 10 ft. W. from crossroads, on W. end of concrete culvert; chiseled square-----	598. 80
Beecher City, at B. & O. R. R. sta., on NW. end of concrete curb of platform; chiseled square-----	615. 43
Beecher City, 0.5 mi. N. of, near quarter corner between secs. 29 and 30, T. 9 N., R. 4 E., 20 ft. N. and 45 ft. W. from crossroads, in concrete post; standard tablet stamped "G 611"-----	611. 070
Reference mark, about 35 ft. S. and 30 ft. W. from crossroads, in fence line, in root on W. side of 14-in. pin-oak tree; copper nail and washer-----	610. 97

⁴⁴In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "A 89 1935," elevation 624.592 ft.

Beecher City, 1.5 mi. N. of, 0.2 mi. S. of W $\frac{1}{4}$ cor. sec. 20, T. 9 N., R. 4 E., 12 ft. N. and 30 ft. E. from junction of T-rd. E., on W. end of W. wing wall of concrete culvert; chiseled square-----	Feet 630.08
Beecher City, 2.0 mi. N. of, near NW. cor. sec. 20, T. 9 N., R. 4 E., near Prairie Union School, 20 ft. S. and 20 ft. E. from crossroads, on E. wing wall of concrete culvert; chiseled square-----	612.37
Beecher City, 2.5 mi. N. of, near quarter corner between secs. 17 and 18, T. 9 N., R. 4 E., 65 ft. N. and 20 ft. E. from junction of T-rd. E., in root on W. side of 24-in. black-oak tree in fence row; copper nail and washer-----	606.93
Beecher City, 3.0 mi. N. of, in SW. cor. sec. 8, T. 9 N., R. 4 E., 30 ft. E. of center line of dim rd. W., in fence corner, in concrete post; standard tablet stamped "G 573"-----	572.348
Reference mark, 35 ft. S. and 30 ft. E. from rd. junction, in root on N. side of 20-in. white-oak tree; copper nail and washer-----	569.53
Beecher City, 3.4 mi. N. of, 0.5 mi. W. thence 2.2 mi. S. from Fancher, at steel girder bridge over Richland Creek, on E. curb of concrete floor; chiseled square-----	533.62
Fancher, 0.5 mi. W. thence 1.3 mi. S. from, 0.25 mi. N. of SW. cor. sec. 5, T. 9 N., R. 4 E., on E. side of rd., opposite S. edge of timber line on W. side of rd., in root on W. side of 42-in. red-oak tree; copper nail and washer-----	605.92

[Continued in Shelbyville quadrangle, line 3]

4. From point 2.1 miles north and 0.7 mile east from Herrick along roads south 0.1 mile and west 1.3 miles (by L. V. Johnson in 1930)

[Continued from Shelbyville quadrangle, line 5]

Herrick, 2.0 mi. N. and 0.7 mi. E. from, 0.25 mi. N. of S. cor. secs. 3 and 4, T. 9 N., R. 2 E., 18 ft. S. and 48 ft. E. from junction of E.-W. rd., in root on W. side of 16-in. cottonwood tree; copper nail and washer-----	607.13
Herrick, 2.0 mi. N. and 0.2 mi. E. from, 0.25 mi. N. of S $\frac{1}{4}$ cor. sec. 4, T. 9 N., R. 2 E., 17 ft. N. and 10 ft. E. from junction of T-rd. S., 5 ft. E. of corner fence post, in root on W. side of 30-in. elm tree; copper nail and washer-----	595.23
Herrick, 2.0 mi. N. and 0.3 mi. W. from, 0.25 mi. N. of S. cor. secs. 4 and 5, T. 9 N., R. 2 E., 330 ft. W. of crossroads, on S. side of rd.; in root on N. side of 24-in. elm tree; copper nail and washer-----	595.06

[Continued in Ramsey quadrangle, line 2]

5. From point 5.9 miles east of Ramsey alternately east and south to road junction 3.8 miles west and 0.3 mile south from Hissong (by S. R. Archer in 1932)

[Continued from Ramsey quadrangle, line 3]

Ramsey, 6.3 mi. E. of, near NW. cor. sec. 16, T. 8 N., R. 2 E., in SE. corner of crossroads, in field, in root on NW. side of 24-in. hickory tree; copper nail and washer-----	561.02
Ramsey, 7.3 mi. E. of, 34 ft. E. of stone marking cor. secs. 9, 10, 15, and 16, T. 8 N., R. 2 E., 34 ft. E. of crossroads, at fence corner opposite rd. W., in concrete post; standard tablet stamped "T T Sta No 15 L 1929"-----	558.264

Reference mark, 200 ft. W. of crossroads, on top of E. end of N. head wall of concrete culvert under rd. W.; chiseled square----	Feet 538. 52
Ramsey, 7.3 mi. E. thence 1.0 mi. S. from, 5.8 mi. W. of Hissong, near cor. secs. 15, 16, 21, and 22, T. 8 N., R. 2 E., at E. end of bridge over Kaskaskia River, on N. steel pier, at foot and on outside of N. truss, on large bolt with nut which holds outside guard for expansion plate; chiseled cross-----	502. 32
Hissong, 4.8 mi. W. of, near cor. secs. 14, 15, 22, and 23, T. 8 N., R. 2 E., at T-rd. S., on N. side of rd., in root on SE. side of 30-in. oak tree; copper nail and washer-----	496. 49
Hissong, 4.3 mi. W. of, 1.0 mi. S. and 10.0 mi. W. from Moccasin, near quarter corner between secs. 14 and 23, T. 8 N., R. 2 E., 24 ft. N. and 22 ft. E. from crossroads, in concrete post; standard tablet stamped "T T Sta No 14 L 1929"-----	497. 338
6. From point 6.3 miles east of Ramsey along roads, south and west (by S. R. Archer in 1932; spur line leveled twice)	
Ramsey, 6.0 mi. E. and 1.0 mi. S. from, 0.25 mi. W. of cor. secs. 16, 17, 20, and 21, T. 8 N., R. 2 E., 15 ft. N. of T-rd. S., at fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 136 LS 1923"-----	559. 761
Reference mark, 90 ft. E. of tablet, on N. side of rd., inside fence line, in root on NE. side of 24-in. elm tree; copper nail and washer--	557. 64
7. From point 1.7 miles south and 0.6 mile west from Herrick along roads east 0.4 mile, north 1.5 miles, and west 0.4 mile (by S. R. Archer in 1932)	
[A jog from Ramsey quadrangle, line 4]	
Herrick, 1.7 mi. S. and 0.5 mi. W. from, 0.2 mi. E. of center of sec. 29, T. 9 N., R. 2 E., 30 ft. N. of rd. W., on E. side of rd., at fence line, in root on NW. side of 30-in. oak tree; copper nail and washer--	588. 57
Herrick, 1.2 mi. S. and 0.2 mi. W. from, near cor. secs. 20, 21, 28, and 29, T. 9 N., R. 2 E., on top of S. end of W. head wall of concrete culvert; chiseled square-----	581. 79
• Herrick, 0.7 mi. S. and 0.2 mi. W. from, near quarter corner between secs. 20 and 21, T. 9 N., R. 2 E., in NE. corner of T-rd. E., in root on SW. side of 30-in. oak tree; copper nail and washer-----	593. 93
Herrick, 0.2 mi. S. thence 0.2 mi. W. from, near NE. cor. sec. 20, T. 9 N., R. 2 E., 65 ft. S. and 40 ft. W. from crossroads, in yard of farmhouse, in root on NE. side of 24-in. maple tree; copper nail and washer-----	597. 77

[Continued in Ramsey quadrangle, line 4]

SALEM QUADRANGLE

[Latitude 38°30'–38°45'; longitude 88°45'–89°00']

MARION COUNTY

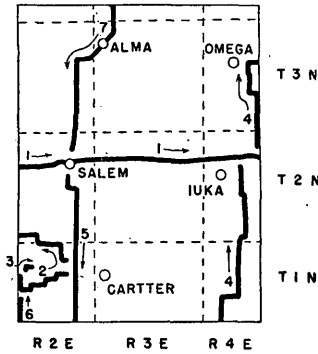


FIGURE 74.—Lines of leveling in Salem quadrangle.

1. From point 2.9 miles west of Salem east along Lincoln Trail (U. S. Highway 50) to point 1 mile north and 2.2 miles east from Iuka (by H. P. Kilby in 1921)

[Continued from Centralia quadrangle, line 6]

Salem, 2.6 mi. W. of Marion County courthouse, 0.3 mi. S. of E¼ cor. sec. 8, T. 2 N., R. 2 E., in NE. angle of crossroads, at Shanafelt School, in fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 164 1911 551"	<i>Feet</i> 549.847
Reference mark, at SE. corner of courthouse, 2 ft. above ground; chiseled square	550.38
Salem, at W. limits of, at junction of rd. directly W., at N. edge of rd., on concrete curbstone; chiseled square	540.91
Salem, at E. entrance of courthouse, on S. side of door, in concrete foundation; standard tablet stamped "1921 545" (recovered in 1932)	543.807
Reference mark, at SE. corner of courthouse, 2 ft. above ground; chiseled square (recovered in 1928)	544.45
Salem, 1.0 mi. E. of, 0.25 mi. W. of E¼ cor. sec. 12, T. 2 N., R. 2 E., in NW. angle of junction of T-rd. N., on top of concrete watering trough; chiseled square	535.16
Salem, 2.7 mi. E. of, about 700 ft. W. of Phelps School, 0.4 mi. E. of W¼ cor. sec. 8, T. 2 N., R. 3 E., on E. side of concrete residence of W. A. Brubaker, 70 ft. N. of highway, in top of reinforced concrete well platform; standard tablet stamped "1921 525"	523.967
Reference mark, 55 ft. E. of tablet, in root of 15-in. maple tree; copper nail	521.39
Salem, 3.6 mi. E. of, 0.25 mi. E. of W¼ cor. sec. 9, T. 2 N., R. 3 E., at concrete bridge over small creek, on N. end of E. abutment; chiseled square	516.99

Salem, 4.6 mi. E. of, 0.7 mi. N. of Bannister, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 10, T. 2 N., R. 3 E., 240 ft. E. of crossroads, 20 ft. N. of rd., in fence line, in base of 15-in. oak tree; copper nail-----	Feet 518.96
Salem, 5.6 mi. E. of, 0.5 mi. E. of Brubaker School, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 11, T. 2 N., R. 3 E., in NE. angle at junction of rd. N., in base of 10-in. oak tree; copper nail-----	502.64
Salem, 6.4 mi. E. of, 1.0 mi. N. thence 2.0 mi. W. from Iuka, near W $\frac{1}{4}$ cor. sec. 12, T. 2 N., R. 3 E., 100 ft. N. of junction of T-rd S., 60 ft. E. of fence corner, in pasture; standard iron post with bronze cap stamped "1921 528"-----	527.392
Iuka, 1.0 mi. N. thence 1.0 mi. W. from, near W $\frac{1}{4}$ cor. sec. 7, T. 2 N., R. 4 E., in NE. angle of crossroads, in fence corner, in base of 20-in. elm tree; copper nail-----	529.23
Iuka, 1.0 mi. N. of, near W $\frac{1}{4}$ cor. sec. 8, T. 2 N., R. 4 E., in NE. angle of crossroads, on top of concrete culvert; chiseled square-----	521.57
Iuka, 1.0 mi. N. thence 0.2 mi. E. from, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 8, T. 2 N., R. 4 E., at NE. entrance of Stringtown School, in concrete platform; standard tablet stamped "1921 520" (recovered in 1928)-----	518.922
Reference mark, 40 ft. W. of tablet, on concrete well platform; chiseled square-----	518.84
Iuka, 1.0 mi. N. thence 2.0 mi. E. from, near E $\frac{1}{4}$ cor. sec. 9, T. 2 N., R. 4 E., in SW. angle of crossroads, at Hebron School, on NE. corner of concrete step; chiseled square (recovered in 1939)-----	499.42
[Continued in Xenia quadrangle, line 1]	
2. From point 0.8 mile north and 7.5 miles east from Centralia along roads east 0.2 mile, thence south 0.8 mile, thence alternately east and north to point 0.5 mile north and 1.7 miles west from Cartter, thence alternately west and north to point 3.3 miles south and 3 miles east from Odin (by J. M. Lawson in 1926)	
[Continued from Centralia quadrangle, line 7]	
Cartter, 1.0 mi. S. and 4.8 mi. W. from, near quarter corner between secs. 16 and 17, T. 1 N., R. 2 E., 20 ft. S. and 20 ft. E. from crossroads, at NW. corner of yard of Saterfield farmhouse, in concrete post; standard tablet stamped "22 L 1926" (recovered in 1928)-----	557.591
Cartter, 0.7 mi. S. and 3.9 mi. W. from, near E. side NE $\frac{1}{4}$ sec. 16, T. 1 N., R. 2 E., 170 ft. NE. of angle in rd., 40 ft. S. of rd., 50 ft. N. of old farmhouse, in fence line, in root on W. side of 30-in. elm tree; copper nail and washer-----	551.56
Cartter, 0.5 mi. S. and 3.4 mi. W. from, W. of S $\frac{1}{4}$ cor. sec. 10, T. 1 N., R. 2 E., 500 ft. SE. of Mount Moriah Church, 40 ft. NW. of rd. at angle E., 10 ft. back from edge of bank, in fence line, in root on SW. side of 18-in. hickory tree; copper nail and washer-----	546.57
Cartter, 0.2 mi. S. and 2.7 mi. W. from, 0.25 mi. S. of quarter corner between secs. 10 and 11, T. 1 N., R. 2 E., 20 ft. N. and 15 ft. E. from junction of T-rd. N., 1 ft. N. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "23 L 1926"-----	557.444
Reference mark, 40 ft. S. of tablet, 20 ft. S. and 15 ft. E. from rd. junction, 1 ft. N. of fence line, at edge of bank, in root on N. side of 18-in. oak tree; copper nail and washer-----	558.06
Cartter, 0.2 mi. S. and 1.7 mi. W. from, 6.1 mi. S. of Salem, 0.25 mi. S. of quarter corner between secs. 11 and 12, T. 1 N., R. 2 E., 30 ft. N. and 30 ft. W. from crossroads, in root on W. side of 15-in. wild-cherry tree; copper nail and washer (recovered in 1928)-----	596.42

Cartter, 0.5 mi. N. and 1.7 mi. W. from, 5.4 mi. S. of Salem, 0.3 mi. N. of Rainey School, near cor. secs. 1, 2, 11, and 12, T. 1 N., R. 2 E., 30 ft. E. of T-rd. W., in line with row of trees E., in N.-S. fence line, in knob at base of small wild-cherry tree; copper nail and washer (recovered in 1928)	Feet 586.74
Cartter, 0.5 mi. N. and 2.5 mi. W. from, 0.25 mi. E. of NW. cor. sec. 11, T. 1 N., R. 2 E., 35 ft. S. and 15 ft. W. from junction of T-rd. N., 40 ft. N. and 140 ft. W. from farmhouse, 5 ft. NE. of corner fence post, in root on NW. side of 24-in. elm tree; copper nail and washer	586.99
Cartter, 1.5 mi. N. and 2.5 mi. W. from, 0.25 mi. E. of SW. cor. sec. 35, T. 1 N., R. 2 E., 120 ft. N. of crossroads, on W. side of rd. N., 100 ft. SE. of SE. corner of Kell farmhouse, in open field, in root on SW. side of lone persimmon tree; copper nail and washer	541.85
Cartter, 1.5 mi. N. and 3.4 mi. W. from, 0.25 mi. W. of N $\frac{1}{4}$ cor. sec. 3, T. 1 N., R. 2 E., 60 ft. E. of T-rd. S., 20 ft. S. of rd., 30 ft. E. of fence corner, 1 ft. N. of E.-W. fence, in root on N. side of 18-in. hickory tree; copper nail and washer	557.55
Cartter, 1.5 mi. N. and 4.0 mi. W. from, 3.8 mi. S. and 3.9 mi. E. from Odin, 0.25 mi. W. of NE. cor. sec. 4, T. 1 N., R. 2 E., 400 ft. W. of T-rd. N. to Pleasant Grove Church, 20 ft. S. and 20 ft. E. from right-angle turn S. in rd., 5 ft. E. of fence corner, in concrete post; standard tablet stamped "24 L 1926"	529.404
Reference mark, 400 ft. E. of tablet, 35 ft. N. and 25 ft. W. from rd. junction, in field, at edge of bank, 2 ft. W. of corner fence post, in root on SW. side of 15-in. oak tree; copper nail and washer	543.57
Odin, 13.3 mi. S. and 4.0 mi. E. from, 0.25 mi. E. of center of sec. 33, T. 2 N., R. 2 E., 40 ft. N. and 90 ft. W. from Pleasant Grove Church, 20 ft. S. and 6 ft. E. from junction of T-rd. S., in triangle of rd. forks, in exposed root on SW. side of lone 20-in. oak tree; copper nail and washer	564.41
Odin, 3.3 mi. S. and 3.3 mi. E. from, near W $\frac{1}{4}$ cor. sec. 33, T. 2 N., R. 2 E., 50 ft. S. and 35 ft. E. from junction of T-rd. S., 25 ft. S. and 15 ft. E. from fence corner, in field of timber, in root on NE. side of 18-in. oak tree; copper nail and washer	527.83

[Continued in Centralia quadrangle, line 8]

3. From point 0.8 mile north and 7.5 miles east from Centralia along roads alternately east and north to point near southeast end of Centralia Reservoir (by J. M. Lawson in 1926; spur line leveled twice)

[Connects with line 7 in Centralia quadrangle]

Centralia, 1.3 mi. N. and 8.3 mi. E. from, 0.3 mi. N. and 3.1 mi. W. from Cartter, near center of NE $\frac{1}{4}$ sec. 9, T. 1 N., R. 2 E., 350 ft. E. of bridge over reservoir, 30 ft. NE. of water edge, 30 ft. W. of concrete post land mark, 20 ft. S. of rd., 1 ft. N. of fence, on bank, in concrete post; standard tablet stamped "21 L 1926"	513.769
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4. From point 8 miles south of Iuka generally north and east along roads to point 1.7 miles east of Omega (by S. R. Archer in 1928)

[Continued from Mount Vernon quadrangle, line 2]

Iuka, 7.7 mi. S. of, near NW. cor. sec. 29, T. 1 N., R. 4 E., 115 ft. S. of crossroads, on E. side of rd., at NW. corner of yard of farmhouse, in root on NE. side of 10-in. tree, northernmost of row of four maple trees; copper nail and washer	524.10
--	--------

Iuka, 6.7 mi. S. of, near SE. cor. sec. 18, T. 1 N., R. 4 E., 120 ft. W. of crossroads, on N. side of rd., 25 ft. E. of SE. corner of Dalton School, in root on E side of 48-in. oak tree; copper nail and washer	<i>Feet</i> 515.29
Iuka, 6.7 mi. S. and 1.0 mi. E. from, near SW. cor. sec. 16, T. 1 N., R. 4 E., 25 ft. N. and 25 ft. E. from crossroads, 3 ft. NE. of fence corner, in concrete post; standard tablet stamped "72 S 1928"-----	501.819
Reference mark, 90 ft. N. of crossroads, on E. side of rd., at fence line, in root on E. side of 30-in. oak tree; copper nail and washer	501.70
Iuka, 5.7 mi. S. and 1.0 mi. E. from, near SE. cor. sec. 8, T. 1 N., R. 4 E., in NW. angle of crossroads, 60 ft. W. of bridge, in root 6 in. underground on S. side of 30-in. oak tree; copper nail and washer	502.84
Iuka, 5.2 mi. S. and 1.0 mi. E. from, near E $\frac{1}{4}$ cor. sec. 8, T. 1 N., R. 4 E., 40 ft. N. and 30 ft. W. from crossroads, in SE. corner of yard of farmhouse, in root on E side of 24-in. maple tree; copper nail and washer-----	535.31
Iuka, 4.7 mi. S. and 1.0 mi. E. from, 275 ft. N. of S. cor. secs. 4 and 5, T. 1 N., R. 4 E., on E. side of rd., in SW. corner of yard of farmhouse, in root on NW. side of 36-in. oak tree; copper nail and washer-----	527.62
Iuka, 3.7 mi. S. and 1.0 mi. E. from, near N. cor. secs. 4 and 5, T. 1 N., R. 4 E., 55 ft. S. and 15 ft. E. from junction of E.-W. rd., in concrete post; standard tablet stamped "73 S 1928"-----	462.548
Reference mark, 250 ft. E. of tablet, 15 ft. S. and 20 ft. E. from right angle turn in rd., 2 ft. S. and 5 ft. E. from fence corner, in root on N. side of forked elm tree; copper nail and washer-----	461.97
Iuka, 3.0 mi. S. and 1.2 mi. E. from, about 550 ft. S. of center of NW $\frac{1}{4}$ sec. 33, T. 2 N., R. 4 E., 30 ft. N. and 30 ft. E. from N. end of bridge over Fulton Creek, on N. bank of creek, in field, in root on W. side of 24-in. oak tree; copper nail and washer-----	452.94
Iuka, 2.7 mi. S. and 1.2 mi. E. from, 0.25 mi. E. of SW. cor. sec. 28, T. 2 N., R. 4 E., 80 ft. E. of crossroads, on N. side of rd., in field, in root 8 in. underground on W. side of 36-in. sycamore tree; copper nail and washer-----	470.67
Iuka, 1.7 mi. S. and 1.2 mi. E. from, 0.25 mi. E. of NW. cor. sec. 28, T. 2 N., R. 4 E., 70 ft. E. of crossroads, on S. side of rd., at fence line, in root on S. side of 12-in. sycamore tree; copper nail and washer-----	509.51
Iuka, 1.2 mi. S. and 1.0 mi. E. from, near quarter corner between secs. 20 and 21, T. 2 N., R. 4 E., 25 ft. S. and 10 ft. E. from junction of T.-rd. N., 5 ft. S. and 2 ft. E. from fence corner, in root on NW. side of 5-in. wild-cherry tree; copper nail and washer-----	510.09
Iuka, 0.5 mi. S. and 1.0 mi. E. from, 0.25 mi. N. of SW. cor. sec. 16, T. 2 N., R. 4 E., 25 ft. S. and 20 ft. E. from junction of T.-rd. E., in concrete post; standard tablet stamped "74 S 1928"-----	508.036
Iuka, 0.2 mi. S. and 1.0 mi. E. from, near quarter corner between secs. 16 and 17, T. 2 N., R. 4 E., 260 ft. S. of T.-rd. W., on W. side of rd., in field, in root on E. side of 24-in. elm tree; copper nail and washer-----	508.11
Iuka, 1.0 mi. E. of, at crossing of Baltimore & Ohio Railroad; top of S. rail-----	509.4
Iuka, 1.0 mi. N. thence 1.0 mi. E. from, N. of quarter corner between secs. 8 and 9, T. 2 N., R. 4 E., at SE. corner of intersection of U. S. Highway 50, on top of E. end of E. head wall of concrete culvert under rd. S.; chiseled square-----	510.08

Iuka, 1.0 mi. N. thence 2.0 mi. E. from, near quarter corner between secs. 9 and 10, T. 2 N., R. 4 E., 117 ft. S. of U. S. Highway 50, 20 ft. W. of N-S. rd., 47 ft. SE. of SE. corner of Hebron School, in concrete post set flush with ground; standard tablet stamped "75 S 1928" (recovered in 1939)-----	Feet 498.293
Reference mark, at NW. corner of crossroads, on top of N. end of W. head wall of concrete culvert under rd. N.; chiseled square (recovered in 1939)-----	498.01
Iuka, 2.2 mi. N. and 2.0 mi. E. from, 0.25 mi. N. of quarter corner between secs. 3 and 4, T. 2 N., R. 4 E., 65 ft. N. and 28 ft. W. from junction of T-rd. E., in NE. corner of barn lot, in root on E. side of 24-in. oak tree; copper nail and washer-----	503.18
Iuka, 3.4 mi. N. and 2.0 mi. E. from, near SW. cor. sec. 27, T. 3 N., R. 4 E., in NE. angle of crossroads, 15 ft. N. of SW. corner of yard of dwelling, in root on W. side of three-forked maple tree; copper nail and washer-----	514.00
Iuka, 4.4 mi. N. and 2.0 mi. E. from, 1.5 mi. E. and 1.8 mi. S. from Omega, near NW. cor. sec. 27, T. 3 N., R. 4 E., 30 ft. S. and 20 ft. E. from junction of E-W. rd., at Siloam School, in NW. corner of yard, in concrete post; standard tablet stamped "76 S 1928"-----	517.327
Omega, 1.0 mi. E. and 1.8 mi. S. from, near quarter corner between secs. 21 and 28, 90 ft. E. of N-S. rd., on S. side of rd., in NW. corner of yard of farmhouse, 10 ft. W. of line with W. end of house, in root on NNW. side of 15-in. maple tree; copper nail and washer-----	521.35
Omega, 1.0 mi. E. and 1.3 mi. S. from, near center of sec. 21, T. 3 N., R. 4 E., in SW. angle of crossroads, in fence corner, in root on E. side of 15-in. locust tree; copper nail and washer-----	525.84
Omega, 1.0 mi. E. and 0.8 mi. S. from, W. of N $\frac{1}{4}$ cor. sec. 21, T. 3 N., R. 4 E., 40 ft. S. and 20 ft. E. from junction of T-rd. N., 10 ft. E. of NE. corner of barn, in root on NE. side of 24-in. maple tree; copper nail and washer-----	527.13
Omega, 1.0 mi. E. of, 0.25 mi. N. of center of sec. 16, T. 3 N., R. 4 E., in SW. angle of crossroads, 15 ft. S. and 15 ft. W. from NE. corner of yard of farmhouse, in root on NW. side of 6-in. maple tree; copper nail and washer-----	549.94

[Continued in Xenia quadrangle, line 2]

5. From Salem south along roads and State Highway 37 to point 2 miles west and 0.6 mile north from Kell (by E. W. Gouchenour in 1928; leveled twice to point 6.1 miles south of Salem)

Salem, 0.2 mi. W. thence 1.5 mi. S. from courthouse, near N $\frac{1}{4}$ cor. sec. 23, T. 2 N., R. 2 E., 20 ft. S. and 10 ft. W. from crossroads, on concrete abutment of steel girder bridge; chiseled square-----	512.48
Salem, 1.5 mi. S. along State Highway 37 from courthouse, near cor. secs. 13, 14, 23, and 24, T. 2 N., R. 2 E., 35 ft. N. and 15 ft. E. from intersection of center lines of rd. S. and E-W. rd., at SW. corner of Salem Country Club, in concrete post; standard tablet stamped "G 524"-----	523.480
Reference mark 1, 60 ft. W. of tablet, in root on S. side of small twin oak tree; copper nail and washer-----	523.15
Reference mark 2, 90 ft. N. of rd. junction, in N-S. fence line, in root on S. side of 14-in. black-oak tree; copper nail and washer-----	522.86

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Salem, 2.6 mi. S. of, S. of N. cor. secs. 25 and 26, T. 2 N., R. 2 E., at steel girder bridge over Crooked Creek, on E. wing of N. abutment; chiseled square-----	<i>Feet</i> 499.30
Salem, 3.5 mi. S. of, near SW. cor. sec. 25, T. 2 N., R. 2 E., at East Nation School, in SW. corner of yard, in root on W. side of black-oak tree; copper nail and washer-----	517.25
Salem, 4.5 mi. S. of, 1.5 mi. N. and 1.7 mi. W. from Cartter, near SW. cor. sec. 36, T. 2 N., R. 2 E., 20 ft. N. and 50 ft. E. from junction of E.-W. rd., in concrete post; standard tablet stamped "G 561"-----	559.972
Reference mark 1, in NE. angle of crossroads, in root on NE. side of 20-in. red-oak tree; copper nail and washer-----	560.12
Reference mark 2, in NW. angle of crossroads, in root on SE side of second growth oak bush; copper nail and washer-----	561.89
Cartter, 1.0 mi. S. and 1.7 mi. W. from, near E $\frac{1}{4}$ cor. sec. 14, T. 1 N., R. 2 E., 20 ft. N. and 30 ft. W. from junction of T-rd. E.; copper nail and washer-----	561.31
Cartter, 1.5 mi. S. and 1.7 mi. W. from, 2.0 mi. W. thence 2.0 mi. N. from Kell, near NE. cor. sec. 23, T. 1 N., R. 2 E., 45 ft. S. and 35 ft. W. from crossroads, at NE. corner of Romine Church, in concrete post; standard tablet stamped "G 550"-----	549.512
Reference mark 1, at front entrance to church, on W. end of bottom step; chiseled square-----	550.80
Reference mark 2, in SW. angle of crossroads, in root on NW. side of 30-in. white-oak tree; copper nail and washer-----	548.17
Kell, 2.0 mi. W. thence 1.0 mi. N. from, near SW. cor. sec. 24, T. 1 N., R. 2 E., 20 ft. N. and 200 ft. E. from crossroads, in root on S. side of 30-in. maple tree; copper nail and washer-----	554.73
[Continued in Mount Vernon quadrangle, line 1]	
6. From point 1.3 miles north and 2.6 miles east from Walnut Hill north along road 1.8 miles (by E. W. Gouchenour in 1928)	
[Continued from Mount Vernon quadrangle, line 4]	
Walnut Hill, 1.6 mi. N. and 2.7 mi. E. from, 2.5 mi. S. and 4.8 mi. W. from Cartter, 6 ft. N. and 20 ft. W. from SE. cor. sec. 20, T. 1 N., R. 2 E.; standard iron post with bronze cap stamped "Prim Trav Sta No 163 1911"-----	540.356
Reference mark, 85 ft. N. and 25 ft. E. from junction of T-rd. E., in root on SW. side of 30-in. wild-cherry tree; copper nail and washer-----	539.68
Cartter, 1.5 mi. S. and 4.8 mi. W. from, near SE. cor. sec. 17, T. 1 N., R. 2 E., 20 ft. N. and 15 ft. W. from crossroads, on wing wall of concrete culvert; chiseled square-----	556.16
7. From point 1.6 miles north and 2.8 miles west from Kimmundy generally south and west along road and State Highway 37 by way of Alma to Salem (by S. R. Archer in 1932)	
[Continued from Kimmundy quadrangle, line 3]	
Alma, 0.5 mi. E. and 1.3 mi. N. from, 0.25 mi. S. of W $\frac{1}{4}$ cor. sec. 32, T. 4 N., R. 3 E., 170 ft. E. of junction of T-rd. E., on N. side of rd., at driveway to farmhouse, on top of W. head wall of concrete culvert; chiseled square-----	577.26

Alma, 0.5 mi. NE. of, about 800 ft. S. of quarter corner between secs. 5 and 6, T. 3 N., R. 3 E., at NW. corner of junction of State Highway 37, on top of S. end of W. head wall of concrete culvert under rd. N.; chiseled square-----	<i>Feet</i> 607. 40
Alma, 560 ft. NE. of Illinois Central R. R. sta., 350 ft. E. of highway, 35 ft. N. and 120 ft. E. from crossing of E.-W. rd. and R. R., 10 ft. NE. of fence corner, on NW. side of right-of-way fence, in concrete post; standard tablet stamped "36 A 1932"-----	615. 871
Reference mark, 350 ft. W. of tablet, at SE. corner of crossroads, on top of W. end of S. head wall of concrete culvert under rd. E.; chiseled square-----	617. 99
Alma, in NW. corner of intersection of highway and main E.-W. street, 18 ft. E. of SE. corner of brick store building of J. B. Owens, on top of N. head wall of concrete culvert under street W.; chiseled square-----	626. 84
Alma, 150 ft. SW. of intersection of highway and N.-S. quarter line of sec. 7, T. 3 N., R. 3 E., at S. corner of junction of street SE., on top of SW. head wall of concrete culvert; chiseled square-----	634. 53
Alma, 1.1 mi. SW. of, near S. side SE $\frac{1}{4}$ sec. 12, T. 3 N., R. 2 E., at S. corner of junction of T-rd. SE., on top of SW. head wall of concrete culvert under rd. SE.; chiseled square-----	626. 42
Alma, 0.9 mi. S. and 1.5 mi. W. from, 5.6 mi. N. of Salem, near cor. secs. 11, 12, 13, and 14, T. 3 N., R. 2 E., 20 ft. N. and 30 ft. W. from crossroads, in concrete post; standard tablet stamped "37 A 1932 Reset 1933" ⁴⁵ -----	630. 717
Reference mark, 610 ft. S. of tablet, 100 ft. N. of junction of rd. N., 85 ft. N. of private rd. W., on top of S. end of W. head wall of concrete culvert under rd. N.; chiseled square-----	631. 65
Salem, 4.6 mi. N. of, near S. cor. secs. 13 and 14, T. 3 N., R. 2 E., 150 ft. N. of T-rd. E., on top of N. end of W. head wall of concrete culvert; chiseled square-----	607. 88
Salem, 3.6 mi. N. of, near NE. cor. sec. 26, T. 3 N., R. 2 E., at SW. corner of crossroads, on top of E. end of S. head wall of concrete culvert under rd. W.; chiseled square-----	577. 46
Salem, 2.6 mi. N. of, 2.0 mi. E. of Tonti, near SW. cor. sec. 25, T. 3 N., R. 2 E., 30 ft. N. and 35 ft. E. from crossroads, 14 ft. N. of fence corner, in concrete post; standard tablet stamped "38 A 1932"-----	572. 975
Salem, 1.6 mi. N. of, near SE. cor. sec. 35, T. 3 N., R. 2 E., 300 ft. N. of township line and T-rd. E., on E. side of highway, on top of E. head wall of concrete culvert; chiseled square-----	561. 84
Salem, 0.6 mi. N. of, near center of S. side SE $\frac{1}{4}$ sec. 2, T. 2 N., R. 2 E., 365 ft. NE. of cross streets, about midway of W. side of triangular plot between streets, on top of S. end of E. head wall of concrete culvert; chiseled square-----	548. 88
Salem, 0.3 mi. N. of NW. corner of courthouse square, on North Main Street, on E. side at S. end of concrete bridge, at foot and on inside of E. side wall, on ledge, 3 ft. N. of S. end; chiseled square--	528. 80

⁴⁵ In 1938 this bench mark was moved 50 ft. south of this position and reset at an elevation 1.411 ft. higher than that originally determined. The figures given represent the new elevation.

SHAWNEETOWN QUADRANGLE

[Latitude 37°30'–37°45'; longitude 88°00'–88°15']

GALLATIN AND HARDIN COUNTIES

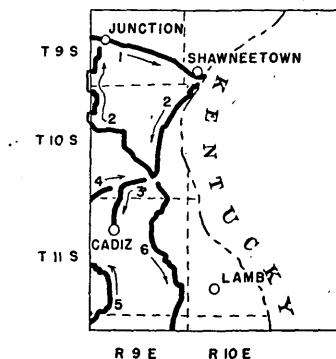


FIGURE 75.—Lines of leveling in Shawneetown quadrangle.

1. From point 0.8 mile northwest of Junction southeast along Louisville & Nashville Railroad to Shawneetown (by T. A. Green in 1906; first-order leveling)

[Continued from Equality quadrangle, line 1]

Junction, 0.6 mi. NW. of, 2.1 mi. SE. of Lawler, 60 ft. N. of mile-post "St. Louis 138-Shawneetown 6," in edge of cornfield; standard iron post with bronze cap stamped "1906" and designated "W ₁ " (recovered in 1911)-----	Feet 352.571
Junction, 2.5 mi. SE. of, 3.4 mi. NW. of Shawneetown, 330 ft. W. of rd. crossing, 50 ft. N. of milepost "St. Louis 141-Shawneetown 5," in field; standard iron post with bronze cap designated "X ₁ "-----	395.944
Shawneetown, at SW. corner of sta., on N. side of platform; standard iron post with bronze cap stamped "1906" and designated "Y ₁ " (recovered in 1911) ⁴⁶ -----	349.031
Shawneetown, on E. side of levee, 100 ft. E. of SE. corner of Riverside Hotel, in NE. corner of concrete base for cannon; aluminum tablet stamped "1906" and designated "Z ₁ "-----	365.281

[Continued in Kentucky]

2. From Shawneetown along road southwest to Saline Mines, thence northwest and north to point 0.6 mile northwest of Junction (by R. G. Clinite in 1911)

Shawneetown, 1.9 mi. SW. of, near quarter corner between secs. 1 and 12, T. 10 S., R. 9 E., on SE. side of rd., opposite two-story white house, in root of 48-in. elm tree; copper nail-----	348.23
Shawneetown, 2.9 mi. SW. of, S. of quarter corner between secs. 11 and 12, T. 10 S., R. 9 E., on NW. side of rd., at residence of Green Canady, 1 ft. S. of fence corner; standard iron post with bronze cap stamped "360"-----	360.004

⁴⁶ This bench mark has been reported 2 ft. below surface of cinders, 12 ft. from west end of station, 2 ft. north of south building line, 15 ft. northwest of wooden column supporting station roof.

Shawneetown, 3.9 mi. SW. of, near center of sec. 14, T. 10 S., R. 9 E., on W. side of rd., 160 ft. S. of gatepost, in root of 30-in. oak tree; copper nail-----	<i>Feet</i> 362. 29
Shawneetown, 4.9 mi. SW. of, in NW¼ sec. 23, T. 10 S., R. 9 E., on W. side of rd., in root of 26-in. black-oak tree; copper nail-----	360. 16
Shawneetown, 6.0 mi. SW. of, 0.5 mi. NE. of Saline Mines, W. of center of sec. 26, T. 10 S., R. 9 E., 100 ft. S. of center of junction of rd. S.; standard iron post with bronze cap stamped "Prim Trav Sta No 357" (recovered in 1914)-----	356. 770
Saline Mines, about 500 ft. N. of SW. cor. sec. 26, T. 10 S., R. 9 E., 120 ft. S. of store, 70 ft. S. of well, at base of 8-in. forked locust tree, on stone; chiseled square-----	358. 63
Saline Mines, 1.2 mi. NW. of, in NW¼ sec. 27, T. 10 S., R. 9 E., on N. side of rd., 80 ft. SE. of small white cottage, in root of 14-in. double locust tree; copper nail-----	436. 31
Saline Mines, 1.8 mi. NW. of, near E. side SE¼ sec. 21, T. 10 S., R. 9 E., on SW. side of rd., in root of 26-in. white-oak tree; nail-----	466. 26
Saline Mines, 2.8 mi. NW. of, 2.0 mi. S. of Bowlesville, about 600 ft. N. of S¼ cor. sec. 16, T. 10 S., R. 9 E., in SW. angle of junction of rd. SW., 64 ft. SW. of 42-in. black-oak tree; standard iron post with bronze cap stamped "388"-----	387. 562
Saline Mines, 3.9 mi. NW. of, 0.5 mi. W. of Buckeye School, 0.25 mi. E. of center of sec. 17, T. 10 N., R. 9 E., in SE. angle of cross-roads, on stone; chiseled square-----	396. 58
Saline Mines, 5.0 mi. NW. of, 1.0 mi. NE. of Gibsonia, 0.3 mi. E. of Eagle Ripple Ford across Saline River, 0.3 mi. NW. of E¼ cor. sec. 18, T. 10 S., R. 9 E., at NW. corner of junction of rd. W., in 10-in. hickory tree; copper nail-----	344. 82
[Jogs into Equality quadrangle, line 2]	
Bowlesville, 1.8 mi. W. of, near SE. cor. sec. 6, T. 10 S., R. 9 E., 10 ft. W. of right-angle turn N. in rd., in 11-in. evergreen tree; nail-----	399. 59
[Jogs into Equality quadrangle, line 3]	
Junction, 2.4 mi. SW. of, 0.4 mi. S. of Sand Ridge School, 0.25 mi. S. of NE. cor. sec. 31, T. 9 S., R. 9 E., at junction of T-rd. N., near rd., in root of 32-in. elm tree; copper nail-----	359. 73
Junction, 1.7 mi. SW. of, 6 ft. SW. of E¼ cor. sec. 30, T. 9 S., R. 9 E., in root of 36-in. oak tree; copper nail-----	372. 87
Junction, 0.3 mi. NW. of, at junction of B. & O. and L. & N. R. Rs., at point of switch; top of rail-----	356. 5
3. From Saline Mines along roads southwest and south to Cadiz (by R. G. Clinite in 1911; spur line leveled twice)	
Saline Mines, 0.4 mi. W. of, 100 ft. SW. of Saline Rocks Ferry across Saline River, in 14-in. oak tree; copper nail (recovered in 1913)-----	347. 06
Saline Mines, 0.9 mi. SW. of, in NW¼ sec. 34, T. 10 S., R. 9 E., on N. side of rd., 50 ft. E. of mail box, in root of 27-in. oak tree; copper nail (recovered in 1913)-----	356. 69
Saline Mines, 2.5 mi. SW. of, 1.5 mi. N. of Cadiz, near Gallatin-Hardin county line, 180 ft. E. of bridge over ravine, on S. side of rd., on small shale ledge; chiseled square-----	382. 01
Cadiz, 0.5 mi. N. of, about 400 ft. N. of S. cor. secs. 4 and 5, T. 11 S., R. 9 E., on W. side of rd., on large flat rock; chiseled square-----	402. 03

Cadiz, on W. side of rd., opposite T-rd. E.; standard iron post with bronze cap stamped "573"-----	Feet 572.366
4. From point 3.7 miles southwest of Saline Mines northeast along road to Saline Rocks Ferry across Saline River (by F. B. Barrett in 1913)	
[Continued from Equality quadrangle, line 7]	
Saline Mines, 1.8 mi. SW. of, N. of center of sec. 33, T. 10 S., R. 9 E., near SW. corner of rd. fork, in root of 24-in. black-oak tree; copper nail and washer-----	389.12
5. From point near southwest corner of quadrangle along roads northeast, north, and northwest by way of Rockcreek to point 2 miles southeast of Sparks Hill (by R. G. Clinite in 1914)	
[Continued from Golconda quadrangle, ⁴⁷ line 4]	
Rockcreek, 2.0 mi. S. thence 1.3 mi. SW. from, in NE $\frac{1}{4}$ sec. 6, T. 12 S., R. 9 E., on N. side of mountain rd., 100 ft. S. and 300 ft. W. from residence of T. J. Lasater, in cultivated field, in root of 12-in. locust tree; spike-----	816.70
Rockcreek, 2.0 mi. S. of, in SE $\frac{1}{4}$ sec. 32, T. 11 S., R. 9 E., 300 ft. S. of residence of W. S. Page, near center of rd. fork, on sandstone rock; chiseled square-----	770.70
Rockcreek, 0.5 mi. S. of, near center of NE $\frac{1}{4}$ sec. 29, T. 11 S., R. 9 E., 100 ft. N. of Baptist church, in SW. angle at junction of rd. E., on sandstone rock; chiseled square-----	493.43
Rockcreek, opposite Oxford store, 70 ft. N. and 30 ft. E. from center of junction of rd. W., in 10- by 12- by 29-in. sandstone rock, set flush with ground; aluminum tablet stamped "570"-----	569.216
Reference mark, at store, at SE. corner of porch, on rock; chiseled square-----	569.85
Rockcreek, 1.0 mi. NW. of, 2.3 mi. SE. of Sparks Hill, near E $\frac{1}{4}$ cor. sec. 9, T. 11 S., R. 9 E., 180 ft. W. of right-angle turn from N. to W. in rd., 30 ft. E. of oak tree, on sandstone rock; chiseled square-----	570.79
[Continued in Equality quadrangle, line 9]	
6. From point 0.5 mile northeast of Saline Mines along road alternately southeast and southwest to point 2 miles north of Cave in Rock (by R. G. Clinite in 1914)	
Saline Mines, 1.6 mi. SE. of, at Saline Tip Ferry across Saline River, 30 ft. E. of N. landing, in root of 28-in. elm tree; spike-----	328.23
Saline River; surface of water May 27, 1914-----	318.7
Saline Tip Ferry, 1.0 mi. SW. of, near center of SW $\frac{1}{4}$ sec. 2, T. 11 S., R. 9 E., about 450 ft. SE. of Lambert School, 100 ft. NE. of unpainted farmhouse, in SE. angle of rd. fork, in root of 30-in. walnut tree; spike-----	372.75
Saline Tip Ferry, 1.5 mi. SW. of, 0.3 mi. N. of Carr Store, 0.25 mi. S. of NE. cor. sec. 11, T. 11 S., R. 9 E., in SW. angle of rd. fork, 100 ft. S. and 70 ft. W. from 28-in. mulberry tree at fork, in sandstone ledge; aluminum tablet stamped "428"-----	427.056
Carr Store, 0.8 mi. S. of, in NW $\frac{1}{4}$ sec. 14, T. 11 S., R. 9 E., 450 ft. N. of Baugher School, 230 ft. N. of junction of T-rd. E., on W. side of rd., in root of 24-in. oak tree; spike-----	414.13

⁴⁷ This line cuts the southeast corner of Equality quadrangle, but no bench marks were set in that portion of the line.

Carr Store, 2.1 mi. SE. of, in NE $\frac{1}{4}$ sec. 23, T. 11 S., R. 9 E., opposite Mount Zion Church, in root of 38-in. oak tree; spike-----	<i>Feet</i> 357.15
Carr Store, 2.9 mi. SE. of, 2.6 mi. NW. of Lamb, 6.2 mi. N. of Cave in Rock, 0.25 mi. E. of W $\frac{1}{4}$ cor. sec. 24, T. 11 S., R. 9 E., at junction of T-rd. S., 25 ft. N. and 4 ft. W. from triangular grass plot, in 30- by 14- by 12-in. sandstone rock set flush with ground; aluminum tablet stamped "385"-----	384.913
Cave in Rock, 3.7 mi. N. of, about 500 ft. W. of center of sec. 36, T. 11 S., R. 9 E., 70 ft. N. of T-rd. E., 40 ft. S. of mail box of T. A. Dunn, on sandstone rock; chiseled square-----	488.78
Cave in Rock, 2.6 mi. N. of, 0.25 mi. W. of center of sec. 1, T. 12 S., R. 9 E., in SW. angle of crossroads, 80 ft. W. of Lackey residence, in root of 14-in. catalpa tree; spike-----	609.39

[Continued in Cave in Rock quadrangle, line 1]

SMITHLAND QUADRANGLE

[Latitude 37°00'–37°15'; longitude 88°15'–88°30']

MASSAC AND POPE COUNTIES

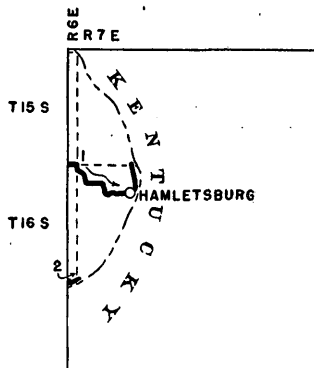


FIGURE 76.—Lines of leveling in Smithland quadrangle.

1. From point 2.5 miles north and 2.5 miles east from Unionville alternately east and south to Hamletsburg, thence north 1.8 miles (by S. R. Archer in 1926)

[Continued from Paducah quadrangle, line 5]

Unionville, 2.5 mi. N. and 2.9 mi. E. from, 3.4 mi. W. and 1.5 mi. N. from Hamletsburg, 630 ft. W. of NE. cor. sec. 1, T. 16 S., R. 6 E., 80 ft. E. of T-rd. NW., on S. side of rd., in root 6 in. underground on NW. side of 8-in. cedar tree; copper nail and washer-----	Feet 407. 28
Hamletsburg, 3.3 mi. W. and 1.4 mi. N. from, near SW. cor. sec. 31, T. 15 S., R. 7 E., at Massac-Pope county line, on E. side of N-S. rd., on N. side of E-W. fence line, in root on S. side of 15-in. hackberry tree; copper nail and washer-----	369. 14
Hamletsburg, 2.8 mi. W. and 1.0 mi. N. from, near center of sec. 6, T. 16 S., R. 7 E., about 600 ft. W. of right-angle turn S. in rd., on S. side of rd., at summit of hill, in front of and in line with W. end of dwelling, in yard, in root on N. side of easternmost of two 36-in. cottonwood trees; copper nail and washer-----	474. 46
Hamletsburg, 2.7 mi. W. and 0.5 mi. N. from, 0.3 mi. SE. of Audubon Church, near S¼ cor. sec. 6, T. 16 S., R. 7 E., in NE. angle of junction of N-S. rd., in root on NW. side of 24-in. persimmon tree; copper nail and washer-----	393. 71
Hamletsburg, 1.8 mi. W. and 0.5 mi. N. from, near S¼ cor. sec. 5, T. 16 S., R. 7 E., 25 ft. S. and 30 ft. E. from junction of T-rd. W., 240 ft. N. and 30 ft. E. from junction of T-rd. E., 17 ft. E. of NW. corner of yard at Yellowbird School, in concrete post; standard tablet stamped "Prim Trav Sta No. 121 F 1925 343"-----	343. 013
Reference mark, 50 ft. S. and 10 ft. W. from tablet, 75 ft. S. and 20 ft. E. from junction of T-rd. W., 190 ft. N. and 20 ft. E. from junction of T-rd. E., in schoolyard, in root on S. side of 48-in. oak tree; copper nail and washer-----	343. 73

Hamletsborg, 2.0 mi. by rd. W. of, near center of sec. 8, T. 16 S., R. 7 E., 20 ft. S. and 30 ft. W. from crossroads, in root on NW. side of twin oak tree with forks 15 in. in diameter; copper nail and washer-----	Feet 368.06
Hamletsborg, 1.2 mi. W. of, 0.2 mi. NW. of center of sec. 9, T. 16 S., R. 7 E., at summit of highest point of ridge, on N. side of rd., 20 ft. S. and 25 ft. W. from SW. corner of house, in root on S. side of 36-in. tree, westernmost of two large cottonwood trees in yard; copper nail and washer-----	475.14
Hamletsborg, in NW. part of, 250 ft. W. of junction of T-rd. N., on S. side of rd., at entrance to school, on top of E. end of upper step of two concrete steps; chiseled square-----	405.16
Hamletsborg, in NE. part of, on property of Ed Scott, about 75 ft. below top of high right bank of small creek, 200 ft. from top of high bank of river, opposite middle of Cumberland Island, 20 ft. above fence line; U. S. C. E. B. M. 322 cap on pipe-----	323.573
copper bolt in concrete base-----	320.548
Reference mark, 30 ft. S. and 90 ft. W. from B. M. 322, 10 ft. S. of E.-W. fence line, on S. bank of small creek, in root on E. side of 12-in. thorn-locust tree; copper nail and washer-----	324.08
Hamletsborg, 0.6 mi. N. of, about 500 ft. SE. of center of SW $\frac{1}{4}$ sec. 3, T. 16 S., R. 7 E., on land of Mildred Woolridge, near W. side of lower bottom land, 350 ft. N. and 450 ft. E. from barn on E. side of N.-S. rd. in second bottom, 80 ft. E. of N.-S. fence and farm rd., 400 ft. S. of E.-W. fence and farm rd., in field, in root on W. side of 12-in. lone forked pecan tree; copper nail and washer-----	326.86
Hamletsborg, 1.8 mi. N. of, 4.0 mi. S. of Birdsville, Ky., about 600 ft. above junction of Dog Creek and Ohio River, on top of high right bank of Dog Creek, on property of Oliver Ison, at edge of cultivation, in 4- by 4- by 18-in. concrete base; copper bolt (U. S. C. E. B. M. 318)-----	329.264
2. Northeast 0.7 mile along road between Beaverdam Lake and Ohio River (by S. R. Archer in 1926)	
[Continued from Paducah quadrangle, line 6]	
Paducah, Ky., opposite foot of Cottonwood Bar, on land of Clara Fritts-Powell, 300 ft. above house, 470 ft. E. of Massac-Pope county line, on S. side of rd., on top of high bank of river, on right bank, at timber line; U. S. C. E. B. M. 4 cap on iron pipe-----	331.980
copper bolt in concrete base-----	327.960
Reference mark, 20 ft. E. of iron post, 10 ft. NNE. of SE. blazed tree, 25 ft. W. of E. blazed tree, in root on N. side of 12-in. hackberry tree; copper nail and washer-----	330.78

SUMNER QUADRANGLE

[Latitude 38°30'–38°45'; longitude 87°45'–88°00']

EDWARDS, LAWRENCE, RICHLAND, AND WABASH COUNTIES

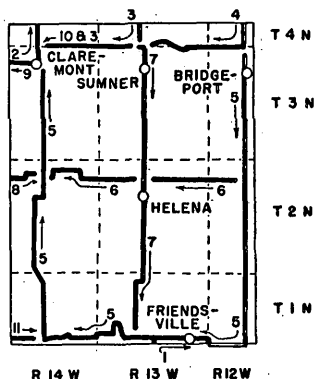


FIGURE 77.—Lines of leveling in Sumner quadrangle.

1. Along roads north, east, and south by way of Friendsville (by H. G. Lowe in 1902)

[A jog from Mount Carmel quadrangle, line 5]

Friendsville, on E. side at SE. corner of residence of Dr. C. S. Couch, in wall, 3 ft. above ground; standard tablet stamped "482 Vin" (recovered in 1908)-----

Feet
481.127

[Continued in Mount Carmel quadrangle, line 5]

2. East along Baltimore & Ohio Railroad to Claremont, thence alternately north and east 2.5 miles along roads (by Henry Bücher in 1907; section west of Claremont leveled twice)

[Continued from Olney quadrangle, line 2]

Claremont, 1.0 mi. W. of, 350 ft. W. of milepost C 215–St L 124, at SE. corner of stone culvert, on top of wall; chiseled square-----

511.75

Claremont, 0.4 mi. W. of, at S. end of small artificial lake, in NW. corner of top of E. wing of masonry dam; aluminum tablet stamped "Ill 498 Adj" (recovered in 1934)-----

498.404

Claremont, 0.4 mi. W. of, at S. end of lake, on top of E. wing of masonry dam; chiseled square-----

498.26

[Continued in Hardinville quadrangle, line 1]

3. From point about 2.5 miles north of Sumner along roads alternately south and west to Claremont (by Henry Bücher in 1907)

[Continued from Hardinville quadrangle, line 1]

Sumner, 2.1 mi. N. of, 0.25 mi. E. of W. cor. secs. 28 and 33, T. 4 N., R. 13 W., at junction of T-rd. E., on W. side of rd., 2 ft. E. of fence, in concrete post set flush with ground; aluminum tablet stamped "Prim Trav Sta No. 10 489 Adj"-----

489.901

Sumner, 1.1 mi. N. of, 0.25 mi. E. of NW. cor. sec. 4, T. 3 N., R. 13 W., on S. side of E.-W. rd., about 11 ft. E. of center line of N.-S. rd., 25 ft. E. of telephone pole, 8 in. N. of fence; standard iron post with bronze cap stamped "483 Adj"-----	<i>Feet</i> 483.562
Sumner, 1.1 mi. N. thence 3.5 mi. W. from, 0.9 mi. N. thence 2.4 mi. E. from Claremont, opposite Prairieton Chapel, 40 ft. N. and 18 ft. E. from crossroads, 22 ft. N. of fence corner, 8 in. W. of fence; standard iron post with bronze cap stamped "509 Adj" (recovered in 1939) ⁴⁸ -----	509.810
4. From point 3 miles north of Bridgeport along roads south 1.3 miles and west 5.9 miles to point 1.1 mile north of Sumner (by Henry Bücher in 1907)	
[Continued from Hardinville quadrangle, line 3]	
Bridgeport, 1.7 mi. N. of, on S. side of E.-W. rd., E. of center line of rd. N., on bank, 11 in. N. of fence; standard iron post with bronze cap stamped "457 Adj" (recovered in 1908)-----	456.903
Bridgeport, 1.7 mi. N. thence 3.0 mi. W. from, near SE. cor. sec. 35, T. 4 N., R. 13 W., in NW. angle of crossroads, in SW. corner of yard of United Brethren Union Chapel, 172 ft. W. of N.-S. rd., 6 ft. N. and 2 ft. E. from fence corner; standard iron post with bronze cap stamped "570 Adj" ⁴⁹ -----	573.588
5. From road junction 1.7 miles north of Bridgeport south along road to point 6.6 miles north of Mount Carmel, thence generally west by way of Friendsville to point 1 mile south and 2 miles east from West Salem, thence north to Claremont (by W. A. Gelbach in 1908)	
Bridgeport, about 100 ft. N. of R. R. track, at SE. corner of yellow brick building owned by F. W. Cox, in front wall, 3 ft. above sidewalk; aluminum tablet stamped "1908 448"-----	448.037
Bridgeport, 2.4 mi. S. of, near SE. cor. sec. 20, T. 3 N., R. 12 W., in NW. corner of crossroads; standard iron post with bronze cap stamped "1908 489"-----	489.225
Bridgeport, 5.4 mi. S. of, near SE. cor. sec. 5, T. 2 N., R. 12 W., in NW. angle of crossroads, in SE. corner of yard of Grant School; standard iron post with bronze cap stamped "1908 446"-----	446.348
Bridgeport, 7.9 mi. S. of, near W $\frac{1}{4}$ cor. sec. 21, T. 2 N., R. 12 W., in NE. angle of crossroads, in SW. corner of yard of Harmony School; standard iron post with bronze cap stamped "1908 445"-----	445.095
Bridgeport, 9.9 mi. S. of, at quarter corner between secs. 32 and 33, T. 2 N., R. 12 W.; top of stone marking quarter corner-----	486.73
Bridgeport, 11.4 mi. S. of, 9.7 mi. N. of Mount Carmel, at cor. secs. 4, 5, 8, and 9, T. 1 N., R. 12 W., at crossroads; top of stone marking section corner-----	464.93
Mount Carmel, 8.7 mi. N. of, near SE. cor. sec. 8, T. 1 N., R. 12 W., in NW. angle of crossroads, near picket fence; standard iron post with bronze cap stamped "1908 462"-----	461.768

⁴⁸ In 1940 this bench mark was reported destroyed.

⁴⁹ As reset in 1936, when the bench mark was moved and reset at an elevation 2.960 ft. higher than that originally determined. The figures given represent the new elevation.

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Mount Carmel, 8.2 mi. N. of, at quarter corner between secs. 16 and 17, T. 1 N., R. 12 W., at T-rd. E.; top of stone marking quarter corner-----	<i>Feet</i> 430.56
[Jogs into Mount Carmel quadrangle, line 61]	
Friendsville, 1.0 mi. E. of, at quarter corner between secs. 19 and 24, T. 1 N., Rs. 12 and 13 W.; top of stone marking quarter corner-----	455.00
Friendsville, 3.0 mi. W. of, 0.4 mi. W. thence 3.0 mi. S. from Lancaster, near E $\frac{1}{4}$ cor. sec. 20, T. 1 N., R. 13 W., in SW. corner of crossroads, in NE. corner of yard of Stoltz School; standard iron post with bronze cap stamped "1908 459" ⁵² -----	458.891
Friendsville, 4.0 mi. W. and 0.2 mi. N. from, at quarter corner between secs. 19 and 20, T. 1 N., R. 13 W., at T-rd. W.; top of stone marking quarter corner-----	468.92
Friendsville, 5.0 mi. W. and 0.2 mi. N. from, 0.25 mi. N. of E $\frac{1}{4}$ cor. sec. 24, T. 1 N., R. 13 W., on W. side of rd., 20 ft. S. of center line of rd. E.; standard iron post with bronze cap stamped "1908 409"-----	408.904
Friendsville, 8.0 mi. W. of, 1.0 mi. S. and 2.0 mi. E. from West Salem, at Pinhook, 1.0 mi. W. of crossing of Bonpas Creek and Edwards-Wabash county line, near W $\frac{1}{4}$ cor. sec. 22, T. 1 N., R. 14 W., in NE. corner of junction of T-rd. N.; standard iron post with bronze cap stamped "1908 435" (recovered in 1939)-----	435.063
West Salem, 2.5 mi. N. and 1.7 mi. E. from, about 10 mi. S. of Claremont, 0.2 mi. E. of S $\frac{1}{4}$ cor. sec. 33, T. 2 N., R. 14 W., in NW. corner of crossroads, opposite small white house; standard iron post with bronze cap stamped "1908 458" ⁵² -----	457.874
Claremont, about 0.2 mi. W. and 8.0 mi. S. from, 2.5 mi. W. of Berryville, near N $\frac{1}{4}$ cor. sec. 21, T. 2 N., R. 14 W., in SW. angle of crossroads, in NE. corner of yard of Redhead School; standard iron post with bronze cap stamped "1908 462"-----	462.066
Claremont, 0.3 mi. E. thence 6.0 mi. S. from, near E. cor. secs. 4 and 9, T. 2 N., R. 14 W., opposite T-rd. E., in SE. corner of yard of Preston School; standard iron post with bronze cap stamped "1908 456" (recovered in 1934) ⁵² -----	455.757
Claremont, 0.3 mi. E. thence 4.0 mi. S. from, in SE. cor. sec. 28, T. 3 N., R. 14 W., in NW. angle of crossroads, in SE. corner of yard of Blackoak School, in tree root; spike-----	496.70
Claremont, 0.3 mi. E. thence 3.0 mi. S. from, near NE. cor. sec. 28, T. 3 N., R. 14 W., in SW. angle of crossroads, near picket fence; standard iron post with bronze cap stamped "1908 506"-----	505.454
6. From crossroads 5.4 miles south of Bridgeport generally west along roads to Preston School (by W. A. Gelbach in 1908)	
Sumner, 6.0 mi. S. of, 1.0 mi. N. of Helena, near N $\frac{1}{4}$ cor. sec. 9, T. 2 N., R. 13 W., in SW. angle of crossroads, 3 ft. W. of corner of yard of John White; standard iron post with bronze cap stamped "1908 476"-----	476.751
Sumner, 6.0 mi. S. and 2.5 mi. W. from, near SE. cor. sec. 1, T. 2 N., R. 14 W., at Lawrence-Richland county line, in NW. corner of crossroads, in root of tree; spike-----	537.40

⁵² In 1938 it was reported that this bench mark had been destroyed.

7. From road junction 1.1 miles north of Sumner generally south along roads by way of Lancaster to crossroads 3 miles west of Friendsville (by W. A. Gelbach in 1908)

Sumner, 250 ft. S. of crossing of R. R. and Main Street, at NE. corner of street intersection, in S. wall of brick building owned by Mart Wagner, 1 ft. from SW. corner and 3 ft. above ground; aluminum tablet stamped "1908 461" ⁵³ -----	<i>Feet</i> 461.595
Sumner, 2.8 mi. S. of, 0.25 mi. S. of center of sec. 21, T. 3 N., R. 13 W., in SW. angle of junction of T-rd. W.; standard iron post with bronze cap stamped "1908 529"-----	529.513
Sumner, 9.0 mi. S. of, 2.5 mi. N. of Lancaster, 1.0 mi. S. of Helena, near quarter corner between secs. 21 and 23, T. 2 N., R. 13 W., opposite T-rd. W. and White School, 4 ft. S. of corner fence post; standard iron post with bronze cap stamped "1908 460"-----	460.101
Lancaster, 400 ft. S. and 400 ft. E. from junction of T-rd. S., on W. side of Lutheran Church, S. of entrance, in wall under window, about 2.5 ft. above ground; aluminum tablet stamped "1908 494"---	494.034

8. From center of west side of quadrangle generally east 2.3 miles to Preston School (by H. M. Hunneman in 1934)

[Continued from Olney quadrangle, line 5]

T. 2 N., R. 14 W., 430 ft. W. of quarter corner between secs. 5 and 8, on N. head wall of concrete culvert; metal plate-----	472.46
T. 2 N., R. 14 W., 650 ft. E. of quarter corner between secs. 5 and 8, 20 ft. N. of center line of rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	501.216
T. 2 N., R. 14 W., near NE. cor. sec. 8, 80 ft. S. and 25 ft. W. from junction of N-S. rd., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	481.064

9. From Claremont west along Baltimore & Ohio Railroad (by L. L. Newlin in 1934)

Claremont, 1.0 mi. W. of sta., at milepost St L 124-C 215; top of post -----	523.02
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[Continued in Olney quadrangle, line 8]

10. From point 0.9 mile north and 2.4 miles east from Claremont west and south to Claremont (by W. C. Elledge in 1939; leveled twice)

Claremont, 0.9 mi. N. and 1.2 mi. E. from, 740 ft. W. of crossroads at cor. secs. 2, 3, 34, and 35, Tps. 3 and 4 N., R. 14 W., on top of S. head wall of highway culvert; chiseled square-----	514.80
Claremont, 0.9 mi. N. of, 0.3 mi. W. of SE. cor. sec. 33, T. 4 N., R. 14 W., 25 ft. N. and 22 ft. E. from crossroads, on E. wing wall of concrete culvert; chiseled square-----	521.65
U. S. C. & G. S. standard disk stamped "B 123 1938"-----	509.461

11. From point about 1 mile south of West Salem east along road 1.9 miles (by W. C. Elledge in 1939)

[Continued from Olney quadrangle, line 12]

West Salem, 1.0 mi. S. and 1.0 mi. E. from, near W $\frac{1}{4}$ cor. sec. 21, T. 1 N., R. 14 W., 12 ft. S. and 15 ft. E. from crossroads, on S. head wall of concrete culvert; chiseled square-----	456.17
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⁵³ In 1939 this bench mark was tied to U. S. C. & G. S. standard disk stamped "V 127 1938," elevation 458.867 ft.

TEUTOPOLIS QUADRANGLE

[Latitude 39°00'–39°15'; longitude 88°15'–88°30']

CUMBERLAND, EFFINGHAM, JASPER, AND SHELBY COUNTIES

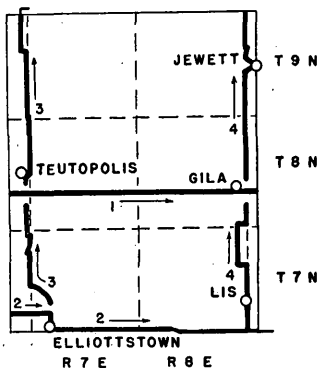


FIGURE 78.—Lines of leveling in Teutopolis quadrangle.

1: From point 0.5 mile south and 2.4 miles east from Effingham generally east along roads to point 1.8 miles east of Gila (by E. E. Harris in 1929)

[Continued from Effingham quadrangle, line 5]

Effingham, 0.5 mi. S. and 2.5 mi. E. from, 1.4 mi. S. thence 1.5 mi. W. from Teutopolis, near center of sec. 26, T. 8 N., R. 6 E., 24 ft. S. and 21 ft. E. from junction of T-rd. S., in concrete post; standard tablet "18 H 1929"	Feet 593.172
Reference mark, 243 ft. N. 75° W. from tablet, on N. side of concrete culvert; chiseled square	593.79
Teutopolis, 1.4 mi. S. thence 0.5 mi. W. from, near E¼ cor. sec. 26, T. 8 N., R. 6 E., at NW. corner of rd. junction, in center of concrete culvert; chiseled square	590.98
Teutopolis, 0.9 mi. S. thence 0.2 mi. E. from, 0.25 mi. E. of N¼ cor. sec. 25, T. 8 N., R. 6 E., in SE. corner of crossroads, in root on N. side of 24-in. red-oak tree; copper nail and washer	596.92
Teutopolis, 0.9 mi. S. thence 1.2 mi. E. from, near SW. cor. sec. 20, T. 8 N., R. 7 E., 86 ft. E. of crossroads, on N. side of rd., 2 ft. S. of fence line, in root on N. side of small peach tree; copper nail and washer	597.89
Teutopolis, 0.9 mi. S. thence 1.7 mi. E. from, near S¼ cor. sec. 20, T. 8 N., R. 7 E., at NE. corner of crossroads, in center of concrete culvert; chiseled square	593.01
Teutopolis, 0.9 mi. S. thence 2.2 mi. E. from, 3.0 mi. S. thence 3.0 mi. W. from Montrose, near SW. cor. sec. 21, T. 8 N., R. 7 E., 21 ft. N. and 64 ft. E. from junction of T-rd. S., 3 ft. S. of fence line, in concrete post; standard tablet stamped "19 H 1929"	592.056
Montrose, 3.0 mi. S. thence 2.0 mi. W. from, near NE. cor. sec. 28, T. 8 N., R. 7 E., 68 ft. S. and 31 ft. W. from crossroads, at jog in E-W. rd., in root on N. side of 36-in. cottonwood tree; copper nail and washer	574.53

Montrose, 3.0 mi. S. thence 1.0 mi. W. from, near NE. cor. sec. 27, T. 8 N., R. 7 E., in SW. angle of crossroads, in corner of apple orchard, in root on NW. side of tree; copper nail and washer-----	Feet 594.58
Montrose, 3.0 mi. S. of, near SW. cor. sec. 24, T. 8 N., R. 7 E., 27 ft. N. and 40 ft. E. from crossroads, in concrete post; standard tablet ⁵⁴ -----	599.083
Montrose, 3.0 mi. S. thence 1.0 mi. E. from, near SE. cor. sec. 24, T. 8 N., R. 7 E., at jog in E.-W. rd., at NW corner of rd. junction, on angle of head wall of concrete culvert; chiseled square-----	589.90
Montrose, 3.0 mi. S. thence 1.6 mi. E. from, near N. side NW $\frac{1}{4}$ sec. 29, T. 8 N., R. 8 E., on S. side of rd., in center of top of parapet of concrete culvert; chiseled square-----	585.56
Montrose, 3.0 mi. S. thence 2.4 mi. E. from, near SW. cor. sec. 21, T. 8 N., R. 8 E., in NE. angle of crossroads, in root on N. side of 20-in. maple tree; copper nail and washer-----	590.77
Montrose, 3.0 mi. S. thence 3.4 mi. E. from, 3.0 mi. W. of Gila, near SW. cor. sec. 22, T. 8 N., R. 8 E., 28 ft. N. and 25 ft. E. from crossroads, 4 ft. N. and 4 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "21 H 1929"-----	588.142
Reference mark, 61 ft. S.50°W. from tablet, on S. end of W. side of concrete culvert; chiseled square-----	586.94
Gila, 2.0 mi. W. of, near NE. cor. sec. 27, T. 8 N., R. 8 E., at SW. corner of crossroads, in center of top of head wall of concrete culvert; chiseled square-----	584.01
Gila, 1.0 mi. W. of, near NE. cor. sec. 26, T. 8 N., R. 8 E., 50 ft. S. and 25 ft. W. from crossroads, in root on N. side of cherry tree; copper nail and washer-----	583.24
Gila, in NW. angle of crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 10 1910"-----	579.545

[Continued in Rose Hill quadrangle, line 4]

2. From point 4.2 miles east and 0.5 mile south from Watson alternately east and south along roads to point 6 miles east of Elliottstown (by E. E. Harris in 1929)

[Continued from Effingham quadrangle, line 6]

Watson, 4.4 mi. E. and 0.5 mi. S. from, 1.0 mi. N. thence 1.9 mi. W. from Elliottstown, near NE. cor. sec. 35, T. 7 N., R. 6 E., 25 ft. S. and 25 ft. W. from junction of T-rd. W., in concrete post; standard tablet stamped "24 H 1929"-----	554.332
Reference mark, 125 ft. S.88°E. from tablet, in root on N. side of 24-in. oak tree; copper nail and washer-----	553.68
Elliottstown, 1.0 mi. N. thence 1.4 mi. W. from, near N $\frac{1}{4}$ cor. sec. 36, T. 7 N., R. 6 E., in SE. corner of T-rd. E., in root on N. side of 36-in. red-oak tree; copper nail and washer-----	559.63
Elliottstown, 1.0 mi. N. of, 0.25 mi. E. of NW. cor. sec. 32, T. 7 N., R. 7 E., at SW. corner of crossroads, on angle of head wall of concrete culvert; chiseled square-----	565.68
Elliottstown, 26 ft. N. and 48 ft. E. from crossroads, in yard of house occupied by Miss Sadie Merry, 8 ft. W. of concrete walk to house, 18 in. N. of fence, in concrete post; standard tablet stamped "25 H 1929"-----	567.573

⁵⁴ This bench mark, set in 1937, replaces the standard tablet stamped "20 H 1929" which was set 15 ft. west of this position and at an elevation 0.470 ft. higher.

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Reference mark, 187 ft. S.75°E. from tablet, at entrance to church, on NE. corner of first concrete step from rd.; chiseled square-----	<i>Feet</i> 565.74
Elliottstown, 0.8 mi. E. of, near NW. cor. sec. 4, T. 6 N., R. 7 E., 40 ft. S. and 25 ft. E. from junction of T-rd. S., at jog in N.-S. rd., in root on N. side of 15-in. hickory tree; copper nail and washer----	562.13
Elliottstown, 1.8 mi. E. of, near NW. cor. sec. 3, T. 6 N., R. 7 E., in SE. corner of junction of T-rd. S., at jog in N.-S. rd., in root on N. side of 15-in. catalpa tree; copper nail and washer-----	575.98
Elliottstown, 2.8 mi. E. of, near SW. cor. sec. 35, T. 7 N., R. 7 E., 27 ft. N. and 26 ft. E. from junction of T-rd. N., at jog in N.-S. rd., in L-angle in fence line, 3 ft. from each fence, in concrete post; standard tablet stamped "26 H 1929"-----	579.739
Elliottstown, 3.8 mi. E. of, near NW. cor. sec. 1, T. 6 N., R. 7 E., 100 ft. S. and 84 ft. E. from crossroads, in root on W. side of 15-in. maple tree; copper nail and washer-----	583.20
Elliottstown, 4.8 mi. E. of, near NE. cor. sec. 1, T. 6 N., R. 7 E., at SW. corner of crossroads, on angle in head wall of concrete culvert; chiseled square-----	575.70
Elliottstown, 5.3 mi. E. of, near SE. cor. sec. 31, T. 7 N., R. 8 E., 24 ft. NW. of angle in rd. at timber line, just W. of small bridge, 5 ft. NW. of corner fence post, in concrete post; standard tablet stamped "27 H 1929"-----	535.166
Reference mark, 152 ft. S.75°W. from tablet, in root on E. side of 12-in. thorn tree; copper nail and washer-----	534.40

[Continued in Sailor Springs quadrangle, line 1]

3. From point 1 mile north of Elliottstown generally north along roads by way of Teutopolis (by E. E. Harris in 1929)

Elliottstown, 1.9 mi. N. of, near NW. cor. sec. 29, T. 7 N., R. 7 E., 300 ft. N. of bridge over Bishop Creek, on W. edge of rd., in center of top of head wall of concrete culvert; bottom of chiseled hole-----	521.07
Elliottstown, 3.1 mi. NW. of, 6.8 mi. S. of Teutopolis, in NE¼ sec. 24, T. 7 N., R. 6 E., 29 ft. SW. of angle N. in rd., 17 ft. S. of farm rd. W. through gate, 3 ft. S. of fence line, in concrete post; standard tablet stamped "35 H 1929"-----	563.691
Reference mark, 75 ft. E. of tablet, in root on NW. side of 30-in. pin-oak tree; copper nail and washer-----	563.55
Teutopolis, 5.3 mi. S. of, near NW. cor. sec. 18, T. 7 N., R. 7 E., at SE. corner of junction of T-rd. E., at jog in E.-W. rd., on S. end of 12-in. drain pipe; chiseled square-----	573.16
Teutopolis, 4.6 mi. S. of, in NE¼ sec. 12, T. 7 N., R. 6 E., 88 ft. N. of right-angle turn to W. in rd., 21 ft. W. of center line of private rd. NE. to farmhouse, in root on SW. side of 20-in. shellbark hickory tree; copper nail and washer-----	578.62
Teutopolis, 3.8 mi. S. of, near S. side SE¼ sec. 1, T. 7 N., R. 6 E., 130 ft. W. of bridge over Little Salt Creek, on N. side of rd., in root on SW. side of 15-in. leaning sycamore tree; copper nail and washer-----	529.65
Teutopolis, 3.0 mi. S. of, near N. side NE¼ sec. 1, T. 7 N., R. 6 E., 59 ft. S. and 17 ft. E. from junction of T-rd. W., 2 ft. W. of fence line, in concrete post; standard tablet stamped "36 H 1929"-----	582.518

Reference mark, 80 ft. N.35°W. from tablet, in root on NE. side of 12-in. pin-oak tree; copper nail and washer-----	Feet 582.98
Teutopolis, 2.0 mi. S. of, near N. side NE¼ sec. 36, T. 8 N., R. 6 E., 32 ft. S. and 16 ft. E. from crossroads, 33 ft. N. of crossing of Illinois Central R. R., on angle of head wall of concrete culvert; chiseled square ⁸⁸ -----	588.74
Teutopolis, just W. of Pennsylvania R. R. sta., at center of rd. crossing main-line track; top of rail-----	605.0
Teutopolis, 44 ft. N. of highway, 34 ft. E. of dirt rd., in SW. corner of yard of house, in angle in yard hedge, in concrete post; standard tablet stamped "37 H 1929"-----	604.401
Reference mark, 85 ft. S.45°W. from tablet, in center of top of head wall of concrete culvert; chiseled square-----	603.75
Teutopolis, at E. limits of, in SE¼ sec. 18, T. 8 N., R. 7 E., at NW. corner of junction of T-rd. N., on top of concrete culvert under rd. N.; chiseled square-----	601.87
Teutopolis, 1.4 mi. N. of, near SW. cor. sec. 7, T. 8 N., R. 7 E., 75 ft. N. and 30 ft. E. from junction of T-rd. E., in root on W. side of 15-in. oak tree; copper nail and washer-----	602.65
Teutopolis, 2.4 mi. N. of, 4.7 mi. W. of Montrose, near SE. cor. sec. 1, T. 8 N., R. 6 E., in NW. corner of crossroads, in root on SE. side of 36-in. white-oak tree; copper nail and washer-----	599.66
Teutopolis, 3.0 mi. N. of, in SW¼ sec. 31, T. 9 N., R. 7 E., 38 ft. NE. of center of angle W. in rd., 8 ft. N. of farm rd. E. through gate, in concrete post; standard tablet stamped "38 H 1929"-----	605.205
Reference mark, 74 ft. N.45°W. from tablet, in root on N. side of 12-in. oak tree; copper nail and washer-----	606.84
Teutopolis, 3.8 mi. by rd. N. of, near E¼ cor. sec. 36, T. 9 N., R. 6 E., 71 ft. W. of rd., in line with T-rd. E., 24 ft. N. of dim rd. W., in root on E. side of 24-in. red-oak tree; copper nail and washer-----	624.49
Teutopolis, 4.3 mi. N. of, near SE. cor. sec. 25, T. 9 N., R. 6 E., on W. side of rd., 165 ft. N. of T-rd. W., in root on NW. side of small wild-cherry tree; copper nail and washer-----	625.86
Teutopolis, 4.8 mi. N. of, near E¼ cor. sec. 25, T. 9 N., R. 6 E., 50 ft. W. of rd., in line with T-rd. E., in root on NE. side of 24-in. oak tree; copper nail and washer-----	630.54
Teutopolis, 5.2 mi. N. of, 1.3 mi. E. and 2.0 mi. S. from Sigel, near NE. cor. sec. 25, T. 9 N., R. 6 E., 26 ft. S. and 20 ft. W. from junction of T-rd. W., in L-angle in fence line, 3 ft. from each fence, in concrete post; standard tablet stamped "39 H 1929"-----	631.022
Sigel, 1.3 mi. E. and 1.0 mi. S. from, near SW. cor. sec. 18, T. 9 N., R. 7 E., at NE. corner of junction of T-rd. E., on head wall of concrete culvert; chiseled square-----	637.64
Sigel, 0.8 mi. E. of, near N¼ cor. sec. 13, T. 9 N., R. 6 E., 21 ft. S. and 32 ft. E. from junction of T-rd. N., 11 ft. E. of private rd. S. to farmhouse, 5 ft. NE. of telephone pole, in concrete post; standard tablet stamped "40 H 1929"-----	641.910
Reference mark, 55 ft. N.45°W. from tablet, in center of top of head wall of concrete culvert; chiseled square-----	643.40

⁸⁸ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "P 89 1935," elevation 588.253 ft.

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Sigel, 0.8 mi. E. thence 1.0 mi. N. from, near N $\frac{1}{4}$ cor. sec. 12, T. 9 N., R. 6 E., 20 ft. S. and 38 ft. W. from crossroads, in root on NE. side of 15-in. elm tree; copper nail and washer-----	Feet 639.79
[Connects with line 3 in Mattoon quadrangle]	
4. From point 1.7 miles south of Lis along roads generally north by way of Gila and Jewett to point 1.6 miles south and 1.2 miles west from Toledo (by E. E. Harris in 1929)	
[Connects with line 1 in Sailor Springs quadrangle]	
Lis, 0.7 mi. S. of, near NE. cor. sec. 36, T. 7 N., R. 8 E., 50 ft. W. of rd., in front of school, on SW. corner of concrete base of pump; chiseled square-----	561.09
Lis, 60 ft. NE. of I. C. R. sta., at SW. corner of intersection of State Highway 33 and N-S. rd., in center of top of head wall of concrete culvert; chiseled square ⁶⁶ -----	564.64
Lis, 1.3 mi. N. of, 3.0 mi. E. of Wheeler, near NW. cor. sec. 19, T. 7 N., R. 9 E., 25 ft. S. and 28 ft. E. from junction of T-rd. E., at jog in E-W. rd., 4 ft. S. and 4 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "30 H 1929"-----	566.608
Wheeler, 3.0 mi. E. thence 1.0 mi. N. from, near NE. cor. sec. 13, T. 7 N., R. 8 E., on E. side of rd., just S. of point where rd. turns W., in root on E. side of 15-in. white-oak tree; copper nail and washer-----	567.24
Wheeler, 2.5 mi. E. and 1.8 mi. N. from, 0.25 mi. N. of center of sec. 12, T. 7 N., R. 8 E., at SW. corner of crossroads, in center of top of head wall of concrete culvert under rd. W.; chiseled square-----	576.40
Wheeler, 2.5 mi. E. and 3.0 mi. N. from, 2.0 mi. S. and 0.5 mi. W. from Gila, near S $\frac{1}{4}$ cor. sec. 36, T. 8 N., R. 8 E., 26 ft. N. and 37 ft. W. from junction of T-rd. W., 4 ft. S. and 17 ft. W. from fence corner, in concrete post; standard tablet stamped "31 H 1929"-----	577.817
Reference mark, 440 ft. N.20°E. from tablet, in center of top of parapet of concrete culvert; chiseled square-----	553.69
Gila, 1.7 mi. S. of, 0.25 mi. S. of E $\frac{1}{4}$ cor. sec. 36, T. 8 N., R. 8 E., at NW. corner of junction of T-rd. W., on top of 12-in. drain pipe; chiseled square-----	577.46
Gila, 1.0 mi. S. of, near NE. cor. sec. 36, T. 8 N., R. 8 E., in SW. angle of crossroads, in root on W. side of 15-in. hedge tree; copper nail and washer-----	581.75
Gila, 1.0 mi. N. of, near NW. cor. sec. 19, T. 8 N., R. 9 E., at SE. corner of crossroads, in center of top of head wall of concrete culvert; chiseled square-----	556.22
Gila, 2.0 mi. N. of, near SE. cor. sec. 12, T. 8 N., R. 8 E., 160 ft. N. of crossroads, on W. side of rd., in root on NE. side of 36-in. elm tree; copper nail and washer-----	582.44
Gila, 3.0 mi. N. of, near NW. cor. sec. 7, T. 8 N., R. 9 E., 23 ft. S. and 25 ft. E. from crossroads, in concrete post; standard tablet stamped "32 H 1929"-----	584.921
Reference mark, 111 ft. N.45°W. from tablet, at entrance to Harmony Church, on SE. corner of large stone step; chiseled square-----	586.47

⁶⁶ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "W 89 1935," elevation 558.043 ft.

Gila, 4.0 mi. N. of, 1.4 mi. SW. thence 2.2 mi. S. from Jewett, near NE. cor. sec. 1, T. 8 N., R. 8 E., in SW. corner of junction of T-rd. S., at jog in N-S. rd., on top of concrete culvert; chiseled square-----	Feet 585.90
Jewett, 1.4 mi. SW. thence 1.2 mi. S. from, near cor. secs. 25, 26, 35, and 36, T. 9 N., R. 8 E., in root on W. side of 10-in. hackberry tree; copper nail and washer-----	517.72
Jewett, 1.4 mi. SW. thence 0.4 mi. S. from, near E. side NE $\frac{1}{4}$ sec. 25, T. 9 N., R. 8 E., on W. side of rd., at jog in E-W. rd., 100 ft. S. of rd. E., in center of top of head wall of concrete culvert; chiseled square-----	571.69
Jewett, 0.8 mi. SW. of, in SW $\frac{1}{4}$ sec. 24, T. 9 N., R. 8 E., 22 ft. N. of U. S. Highway 40, 13 ft. E. of farm rd., 60 ft. E. of rd. S., 3 ft. N. of fence line, in concrete post; standard tablet stamped "33 H 1929"-----	577.437
Reference mark, 58 ft. S.45°W. from tablet, in center of top of head wall of concrete culvert; chiseled square-----	577.88
[Jogs into Rose Hill quadrangle, line 5]	
Jewett, 0.9 mi. NW. of, near N $\frac{1}{4}$ cor. sec. 24, T. 9 N., R. 8 E., in SW. angle of rd. fork, in root on E. side of 30-in. oak tree; copper nail and washer-----	530.97
Jewett, 1.6 mi. NW. of, 3.5 mi. S. and 1.2 mi. W. from Toledo, near quarter corner between secs. 13 and 14, T. 9 N., R. 8 E., 36 ft. W. of center of angle in rd. N., in line with rd. E., in root on NW. side of 12-in. pin-oak tree; copper nail and washer-----	585.94
Toledo, 2.5 mi. S. and 1.2 mi. W. from, near E $\frac{1}{4}$ cor. sec. 11, T. 9 N., R. 8 E., 150 ft. N. and 19 ft. W. from crossroads, 80 ft. NE. of NE. corner of Morton Chapel, 9 ft. N. and 2 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "34 H 1929"-----	588.286
Reference mark, 147 ft. S. of tablet, on end of concrete culvert; chiseled square-----	588.24

[Continued in Mattoon quadrangle, line 8]

THEBES QUADRANGLE

[Latitude 37°00'–37°15'; longitude 89°15'–89°30']

ALEXANDER AND PULASKI COUNTIES

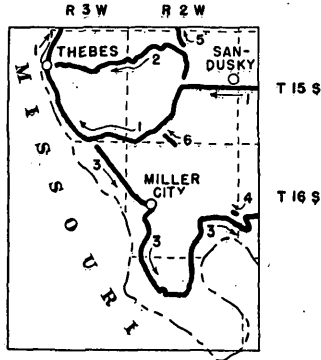


FIGURE 79.—Lines of leveling in Thebes quadrangle.

1. From point 0.9 mile southwest thence 2.2 miles west from Pulaski alternately west and southwest along roads by way of Sandusky and Olive Branch to point 0.5 mile southeast of Fayville, thence northwest and northeast along Chicago & Eastern Illinois Railway and Illinois Central Railroad to Gale (by S. R. Archer in 1927)

[Continued from Cairo quadrangle, line 6]

Pulaski, 0.9 mi. SW. thence 2.2 mi. W. from, 0.2 mi. S. thence 1.4 mi. E. from Sandusky, near cor. secs. 17, 18, 19, and 20, T. 15 S., R. 1 W., 120 ft. W. of crossroads, on S. side of rd., in front of house, in root on N. side of 24-in. tree, northeasternmost of group of four walnut trees; copper nail and washer-----	Feet 337.63
Sandusky, 0.2 mi. S. thence 0.6 mi. E. from, about 0.2 mi. W. of quarter corner between secs. 18 and 19, T. 15 S., R. 1 W., at bridge over Cache River, on top of W. end of N. abutment; chiseled square-----	324.34
Sandusky, 0.2 mi. S. thence 0.2 mi. E. from, near cor. secs. 13, 18, 19, and 24, T. 15 S., Rs. 1 and 2 W., 35 ft. S. and 23 ft. E. from junction of T-rd. W., in concrete post; standard tablet stamped "1927 334"-----	333.437
Reference mark, at SW. corner of rd. junction, on top of W. end of S. concrete head wall of culvert under rd. W.; chiseled square-----	334.90
Sandusky, on S. side of village, at crossing of Mobile & Ohio R. R.; top of E. rail-----	343.2
Sandusky, 0.2 mi. S. thence 0.8 mi. W. from, near cor. secs. 13, 14, 23, and 24, T. 15 S.; R. 2 W., in NE. angle of crossroads, in root on SE. side of 30-in. oak tree; copper nail and washer-----	338.40
Sandusky, 0.2 mi. S. thence 1.8 mi. W. from, 1.5 mi. SW. thence 1.1 mi. E. from Diswood, at Davey Switch, 25 ft. N. and 30 ft. E. from cor. secs. 14, 15, 22, and 23, T. 15 S., R. 2 W., 225 ft. W. of crossing of C. & E. I. Ry., on N. side of rd., in front yard of farmhouse, in root on S. side of 24-in. maple tree; copper nail and washer-----	342.90

Diswood, 2.1 mi. SW. of, about 0.3 mi. E. of center of sec. 21, T. 15 S., R. 2 W., 60 ft. SW. of junction of private rd. E., at angle in rd., in front of farmhouse on W. side of rd., on top of N. end of W. concrete head wall of culvert; chiseled square-----	Feet 363.02
Diswood, 2.7 mi. SW. of, 1.7 mi. NE. of Olive Branch, 0.4 mi. W. of Clank, 370 ft. S. and 500 ft. E. from N $\frac{1}{4}$ cor. sec. 28, T. 15 S., R. 2 W., 400 ft. S. of junction of rd. E., on top of S. end of W. head wall of concrete culvert; chiseled square-----	363.46
Olive Branch, 1.3 mi. NE. of, near center of sec. 28, T. 15 S., R. 2 W., in NW. angle of crossroads, in root on E. side of 48-in. elm tree; copper nail and washer-----	332.36
Olive Branch, 0.6 mi. NE. of, near cor. secs. 28, 29, 32, and 33, T. 15 S., R. 2 W., 115 ft. NE. of junction of rd. S., on top of NE. end of SE. concrete head wall of culvert; chiseled square-----	336.80
Olive Branch, at center of village, 70 ft. N. of crossroads, 35 ft. NW. of rd. NE., 30 ft. SE. and 5 ft. NE. from E. corner of Methodist Church, 10 ft. NW. of E. corner of yard, in concrete post; standard tablet stamped "1927 339" (recovered by U. S. C. & G. S. in 1935)-----	338.818
Olive Branch, 200 ft. NE. of C. & E. I. Ry. sta., 70 ft. W. of rd. crossing, at S. corner of crossroads, on top of S. head wall of concrete culvert running diagonally across intersection; chiseled square----	339.32
Olive Branch, at W. edge of village, at public school building, on Olive Branch-Fayville rd., on top of S. wing wall of W. abutment of concrete bridge; chiseled square (recovered by U. S. C. & G. S. in 1935) -----	340.360
Olive Branch, 0.5 mi. SW. of, about 800 ft. E. of quarter corner between secs. 31 and 32, T. 15 S., R. 2 W., 200 ft. SW. of junction of rd. W., on top of SW. end of SW. wing wall of concrete highway bridge; chiseled square-----	338.43
Olive Branch, 1.5 mi. SW. of, near center of SW $\frac{1}{4}$ sec. 31, T. 15 S., R. 2 W., 24 ft. W. of crossing of third-class rd., on top of W. end of N. head wall of concrete culvert; chiseled square-----	338.48
Olive Branch, 1.9 mi. SW. of, 2.6 mi. E. of Fayville, about 0.2 mi. S. of quarter corner between secs. 31 and 36, T. 15 S., Rs. 2 and 3 W., at crossroads, 25 ft. N. and 25 ft. W. from rd. NE., 25 ft. N. and 65 ft. W. from rd. S., 8 ft. W. of fence corner, on S. side of fence, in concrete post; standard tablet stamped "1927 343"-----	342.424
Reference mark, at NW. corner of crossroads, at W. end of concrete culvert under rd. NE., on top of S. angular head wall; chiseled square -----	341.80
Fayville, 1.5 mi. E. of, about 800 ft. S. of quarter corner between secs. 35 and 36, T. 15 S., R. 3 W., 10 ft. W. of center line of T-rd. S., on N. side of rd., on top of W. concrete head wall of culvert under driveway N., chiseled square-----	353.76
Fayville, 0.6 mi. E. of, about 800 ft. NE. of S. cor. secs. 34 and 35, T. 15 S., R. 3 W., in S. corner of junction of T-rd. SW., on top of angular corner of SE. head wall of concrete culvert; chiseled square -----	325.28
Fayville, 0.5 mi. SE. of, 980 ft. SE. of crossing of Chicago & Eastern Illinois Ry. and Missouri Pacific R. R., 35 ft. E. of rd. crossing, on S. side of rd., in concrete post; standard tablet stamped "Prim Trav Sta No. 109 F 1925 343"-----	342.565

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Fayville, 0.5 mi. SE. of sta., at point where second creek below Fayville was diverted to pass under track at bridge 0.3 mi. N., in line with N. rail of tangent of C. & E. I. Ry. below the point, 500 ft. above rd. crossing, on S. side of track, in edge of field; iron post with cap missing (Board on Examination and Survey of Mississippi River 1908 B. M. 1 H2)-----	<i>Feet</i> 352.720
Fayville, 290 ft. SE. and 110 ft. NE. from C. & E. I. Ry. sta., about 475 ft. NW. of crossing of Missouri Pacific R. R. and rd., on top of SE. end of W. concrete highway culvert; chiseled square-----	341.00
Fayville, at C. & E. I. Ry. sta.; top of E. rail-----	342.0
Fayville, 0.9 mi. NW. of sta., 35 ft. N. of switch at N. end of passing siding, 125 ft. S. of line with S. end of S. brick building of powder plant on E. side of rd., on top of E. end of 24-in. iron drain pipe under track; chiseled square (reported destroyed)-----	337.00
Fayville, 1.6 mi. NW. of, 0.2 mi. N. of milepost 375, 190 ft. N. of point of tangent to S., on top of S. end of W. head wall of concrete culvert under track; chiseled square-----	336.29
Fayville, 2.3 mi. NW. of, 2.0 mi. SE. of sta. at Thebes, 270 ft. S. of milepost 376, on E. side of tracks, 15 in. N. of S. end of E. concrete head wall of R. R. culvert; chiseled square-----	355.06
Thebes, 1.1 mi. SE. of, in line with N. end of barn W. of track, 240 ft. N. of crossing of private rd., on top of S. end of W. concrete head wall of R. R. culvert; chiseled square-----	334.99
Thebes, 0.2 mi. S. of, on E. side of main track, at W. end of E. concrete approach of R. R. bridge over Mississippi River, in face of N. end of easternmost stone pier; standard tablet stamped "1927 342" (recovered by U. S. C. & G. S. in 1935; later reported destroyed)-----	341.184
Thebes, on S. side at E. end of E. concrete approach to R. R. bridge over Mississippi River, at top of E. end of guard wall, on top of lower outside corner of capstone of post; chiseled square-----	413.32
Thebes, about 50 ft. S. of NE. corner of C. & E. I. Ry. and I. C. R. R. sta., at N. side of entrance to dining room of hotel, on top of NE. corner of doorsill; chiseled square (recovered by U. S. C. & G. S. in 1935)-----	339.271
Thebes, 0.7 mi. NE. of, at culvert 133-09 under track, on top of W. corner at S. end of W. concrete head wall; chiseled square-----	335.75
Thebes, 1.6 mi. NE. of, 0.7 mi. SW. of sta. at Gale, at SW. point of wye, on SE. side of tracks, opposite and 15 ft. NE. of switch stand, 40 ft. SW. of rail stand, on top of SW. end of SE. concrete head wall of culvert under tracks; chiseled square-----	360.76
Gale, 800 ft. S. of sta., 115 ft. W. of rd. crossing, on N. side of rd., in root on N. side of forked cottonwood tree; copper nail and washer-----	340.09

[Continued in Jonesboro quadrangle, line 15]

2. From point 1.5 miles south of Diswood along roads north 1.8 miles, thence northwest and southwest to Thebes (by S. R. Archer in 1927)

Diswood, 1.4 mi. SW. of, near SE. cor. sec. 16, T. 15 S., R. 2 W., about 375 ft. N. of junction of T-rd. E., on W. side of rd., 25 ft. N. and 30 ft. E. from NE. corner of farmhouse of Sidney Childers, at SE. corner of garden, in fence corner, in concrete post; standard tablet stamped "1927 366"-----	365.317
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Reference mark, 160 ft. S. of tablet, 220 ft. N. of rd. junction, on top of S. end of E. head wall of concrete culvert; chiseled square-----	Feet 364.28
Diswood, 0.3 mi. S. of, near center of SW $\frac{1}{4}$ sec. 10, T. 15 S., R. 2 W., on W. side of rd., at junction of T-rd. SE., 45 ft. S. and 70 ft. W. from S. end of bridge, on S. bank of creek, in root on SE. side of 10-in. walnut tree; copper nail and washer-----	356.52
Diswood, 0.3 mi. N. of, 0.3 mi. S. of Sandy Creek Church, about 630 ft. W. of center of NW $\frac{1}{4}$ sec. 10, T. 15 S., R. 2 W., 150 ft. S. of junction of T-rd. NW., on E. side of rd., in root on SW. side of forked elm tree; copper nail and washer-----	359.19
Diswood, 1.3 mi. NW. of, near center of SW $\frac{1}{4}$ sec. 4, T. 15 S., R. 2 W., opposite and 100 ft. NW. of farmhouse on S. side of rd., 110 ft. NW. of barn, at foot on E. side at end of low spur ridge from N., on N. side of rd., in field, in root on SE. side of 24-in. oak tree, directly under knot projection; copper nail and washer-----	394.91
Diswood, 1.5 mi. NW. of, near W $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 4, T. 15 S., R. 2 W., 60 ft. SW. of rd. fork, in root on SW. side of large forked sycamore tree; copper nail and washer-----	383.00
Diswood, 2.6 mi. NW. of, near SW. cor. sec. 5, T. 15 S., R. 2 W., 100 ft. W. of farmhouse on N. side of rd. and creek, 65 ft. N. of rd., on N. bank of creek, in root on S. side of 48-in. elm tree; copper nail and washer-----	417.65
Diswood, 3.7 mi. W. of, 5.4 mi. E. of Thebes, at Honey School, about 750 ft. S. of center of sec. 7, T. 15 S., R. 2 W., at summit of hill, 24 ft. W. of rd. fork, on NW. side of rd., 13 ft. SW. of SW. post of gate to private rd. NW., opposite rd. SE., 6 ft. W. of 24-in. walnut tree, at fence line, in concrete post; standard tablet stamped "1927 594" ⁵⁷ -----	591.499
Reference mark, 6 ft. E. of tablet, at summit of hill, 18 ft. W. of rd. fork, on NW. side of rd., 13 ft. SW. of SW. post of gate, in root on SE. side of 24-in. walnut tree; copper nail and washer-----	593.16
Thebes, 4.7 mi. E. of, near quarter corner between secs. 7 and 12, T. 15 S., Rs. 2 and 3 W., 120 ft. SW. of junction of creeks, 90 ft. SW. of fence line N., 70 ft. N. of rd., on N. bank of creek, in root on E. side of 36-in. sycamore tree; copper nail and washer-----	487.40
Thebes, 3.6 mi. E. of, 0.25 mi. N. of cor. secs. 11, 12, 13, and 14, T. 15 S., R. 3 W., 15 ft. N. and 45 ft. W. from E $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 11, 130 ft. N. of rd., on W. side of driveway to farmhouse of George Clutts, in root on SW. side of 30-in. walnut tree; copper nail and washer---	422.50
Thebes, 3.0 mi. E. of, near quarter corner between secs. 11 and 14, T. 15 S., R. 3 W.; at concrete highway bridge over creek, on top of S. end of SW. wing wall; chiseled square (reported destroyed)---	398.74
Thebes, 2.7 mi. E. of, 0.6 mi. SE. of Brownsville School, 500 ft. N. of center of NW $\frac{1}{4}$ sec. 14, T. 15 S., R. 3 W., 35 ft. E. of center of rd. fork; standard iron post with bronze cap stamped "Prim Trav Sta No 5 1916 391"-----	391.021
Thebes, 2.1 mi. E. of, 0.2 mi. SE. of quarter corner between secs. 10 and 15, T. 15 S., R. 3 W., at Brownsville School, on top of N. end of NW. concrete wing wall of bridge; chiseled square-----	364.38

⁵⁷ In 1936 this bench mark was moved 30 ft. west of this position and reset at an elevation 1.760 ft. lower than that originally determined. The figures given represent the new elevation.

Thebes, 1.2 mi. NE. of, about 650 ft. W. of E $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 9, T. 15 S., R. 3 W., 55 ft. NE. of rd. fork, on S. side of rd. NE., in root on SW. side of 36-in. sycamore tree; copper nail and washer-----	<i>Feet.</i> 344.54
Thebes, at E. side of town, 28 ft. S. of SE. corner of highway bridge over Missouri Pacific R. R. and St. Louis Southwestern Ry., on S. end of S. concrete wing wall of E. abutment; chiseled square----	449.61
Thebes, in highest part of town, at public school building, on S. side of schoolyard, 6.5 ft. E. of E. side of walk leading to main entrance, on N. edge of street sidewalk, in concrete post; standard tablet stamped "1927 481" (recovered by U. S. C. & G. S. in 1935)-----	480.816
Reference mark, at main entrance to schoolhouse, on top of W. end of stone doorsill; chiseled square-----	484.20
3. From Fayville southeast along Missouri Pacific Railroad to Miller City, thence along roads generally southwest and southeast to corner secs. 8, 9, 16, and 17, T. 17 S., R. 2 W., thence east and north to Cache, thence east along Illinois Central Railroad (by S. R. Archer in 1927)	
Fayville, 1.9 mi. SE. of, 0.9 mi. above foot of Burnham Island, 0.2 mi. from bank of Santa Fe chute, 590 ft. out from line of timber, 160 ft. NE. of track, on property of William Woods, 82 ft. NE. of fence; Mississippi River Comm. 1884 B. M. 8/1 cap on iron pipe-----	331.078
flat stone at bottom of pipe-----	326.072
Fayville, 2.5 mi. SE. of, 0.7 mi. NW. of Shasta, 70 ft. SW. of rd. crossing, in center of rd. SW., in root on E. side of forked elm tree; copper nail and washer-----	331.23
Shasta, in front of sta. shed; top of W. rail-----	334.1
Shasta, 75 ft. SE. and 45 ft. SW. from front of sta., near S $\frac{1}{4}$ cor. SE $\frac{1}{4}$ sec. 12, T. 16 S., R. 3 W., on S. side of rd. SW., 2.5 ft. SE. and 1 ft. SW. from right-of-way fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 108 F 1925 332" ⁶⁸ ---	331.353
Reference mark, 215 ft. E. of tablet, 165 ft. NE. and 55 ft. SE. from rd. crossing, in field, in root on SW. side of 15-in. persimmon tree; copper nail and washer-----	330.86
Shasta, 0.4 mi. SE. of, 185 ft. NE. of rd. crossing, on NW. side of rd., in root on SW. side of 36-in. walnut tree; copper nail and washer---	332.87
Shasta, 0.9 mi. SE. of, 1.6 mi. NW. of Miller City, about 0.8 mi. E. of Atherton Landing on Mississippi River, about 430 ft. E. of track, on land owned by F. D. Atherton estate, near NW. edge of cypress swamp and cultivated field; top of stone post (Mississippi River Comm. 1880-81 B. M. "Atherton")-----	392.658
Miller City, 0.9 mi. NW. of, on NE. side of track, 325 ft. SE. of point of tangent to NW., at fence corner, in root on NW. side of 4-in. oak tree; copper nail and washer-----	332.33
Miller City, 40 ft. SE. of SE. corner of sta., 80 ft. S. of rd. crossing, on top of S. end of W. head wall of concrete culvert; chiseled square-----	328.38
Miller City, 0.8 mi. SW. of, about 500 ft. NE. of farmhouse of O. Greenley, 25 ft. W. of junction of rd. SW., 15 ft. SW. of 48-in. maple tree, 18 in. SE. of foot of fence line, in concrete post; standard tablet stamped "Prim Trav Sta No 107 F 1925 334"-----	333.350

⁶⁸ In 1939 it was reported that this bench mark had apparently been disturbed and was located in the edge of the road.

Reference mark, 260 ft. SE. of tablet, on top of N. end of E. head wall of concrete culvert under rd. SE.; chiseled square-----	Feet 330. 59
Miller City, 1.5 mi. S. of, 0.5 mi. NW. of Willard, about 630 ft. NE. of W $\frac{1}{4}$ cor. SW $\frac{1}{4}$ sec. 29, T. 16 S., R. 2 W., 95 ft. W. of rd. fork, in root on E. side of 24-in. sycamore tree; copper nail and washer-----	328. 63
Miller City, 2.5 mi. S. of, about 950 ft. SE. of center of sec. 31, T. 16 S., R. 2 W., on E. side of rd., at angle to W., in root on NE. side of 15-in. pecan tree; copper nail and washer-----	326. 99
Miller City, 3.6 mi. S. of, 0.25 mi. E. of center of sec. 6, T. 17 S., R. 2 W., 8 ft. N. and 10 ft. W. from junction of rd. E., in concrete post; standard tablet stamped "Prim Trav Sta No 106 F 1925 326"-----	325. 886
Reference mark, 300 ft. E. of rd. junction, on S. side of rd., in root on W. side of 30-in. locust tree; copper nail and washer-----	328. 33
Miller City, 4.2 mi. S. of, about 630 ft. E. of cor. secs. 5, 6, 7, and 8, T. 17 S., R. 2 W., 250 ft. S. of farmhouse on E. side of rd., on E. side of rd., at fence line E., in root on N. side of 36-in. pecan tree; copper nail and washer-----	324. 82
Miller City, 5.3 mi. SE. of, near quarter corner between secs. 8 and 9, T. 17 S., R. 2 W., 8 ft. N. of quarter section line fence W., in root on E. side of 12-in. pecan tree; copper nail and washer-----	321. 99
Miller City, 5.8 mi. SE. of, 4.4 mi. SW. thence 1.2 mi. W. from Roth sta. on Missouri Pacific R. R., 0.8 mi. W. of Lake Milligan School, near cor. secs. 8, 9, 16, and 17, T. 17 S., R. 2 W., 35 ft. N. of T-rd. E., on top of S. end of W. concrete head wall of culvert; chiseled square-----	324. 18
Roth, 4.4 mi. SW. of, 0.4 mi. E. of Lake Milligan School, about 0.2 mi. E. of cor. secs. 9, 10, 15, and 16, T. 17 S., R. 2 W., about 140 ft. S. and 40 ft. W. from crossroads, 90 ft. S. of farmhouse, 5 ft. W. of SE. corner of yard, in concrete post; standard tablet stamped "Prim Trav Sta No 105 F 1925 325"-----	325. 003
Reference mark, 25 ft. N. and 35 ft. E. from crossroads, in root on SW. side of 24-in. oak tree; copper nail and washer-----	320. 25
Roth, 3.3 mi. SW. of, near quarter corner between secs. 3 and 10, T. 17 S., R. 2 W., 20 ft. E. of rd., in E-W. section line, in root on NW. side of 24-in. hickory tree; copper nail and washer-----	318. 83
Roth, 2.8 mi. SW. of, about 500 ft. N. of center of sec. 3, T. 17 S., R. 2 W., at foot of W. railing of bridge over creek, 3 ft. N. of S. end of W. concrete guard wall, on top of wall; center of large letter "D"-----	321. 20
Roth, 2.4 mi. SW. of, about 250 ft. N. of S $\frac{1}{4}$ cor. sec. 34, T. 16 S., R. 2 W., 250 ft. N. of T-rd. W., on W. side of rd., in front of farm cabin, in root on E. side of northernmost of two cypress trees 25 ft. apart; copper nail and washer-----	322. 92
Roth, 1.3 mi. SW. of, 0.25 mi. E. of quarter corner between secs. 27 and 34, T. 16 S., R. 2 W., at T-rd. N., on top of center of W. head wall of concrete culvert over drainage ditch; chiseled square-----	322. 40
Roth, 1.0 mi. S. of, near head of revetment, on property of Jeff Tillman, S. of house, on slight ridge, on E. side of and at angle in public rd., inside wire fence, 216.5 ft. S. of 13-in. maple tree near fence, 50 ft. from top of bank, 2 ft. above surface of ground; top of iron post (U. S. Engineer office, St. Louis, Mo., 1902 B. M. "Greenleaf")-----	323. 228

Roth, 0.6 mi. S. of, about 500 ft. N. of quarter corner between secs. 26 and 27, T. 16 S., R. 2 W., 35 ft. S. and 30 ft. E. from rd. fork, 45 ft. W. of NW. corner of Phillips School, in root on W. side of 30-in. sycamore tree; copper nail and washer-----	Feet 325.19
Roth, 0.2 mi. S. of, near cor. secs. 22, 23, 26, and 27, T. 16 S., R. 2 W., 30 ft. N. and 25 ft. E. from junction of T-rd. E., 4 ft. N. and 2.5 ft. W. from fence corner, in concrete post; standard tablet stamped "Prim Trav. Sta No. 104 F. 1925 325"-----	324.875
Roth, 0.2 mi. S. thence 0.8 mi. E. from, 0.2 mi. W. of cor. secs. 23, 24, 25, and 26, T. 16 S., R. 2 W., on S. side of rd., 50 ft. W. of front of residence of G. W. Roth, 15 ft. S. and 20 ft. W. from NW. corner of yard, in field, in root on N. side of 36-in. beech tree; copper nail and washer-----	324.06
Roth, 0.2 mi. S. thence 1.8 mi. SE. from, near center of NE $\frac{1}{4}$ sec. 25, T. 16 S., R. 2 W., 35 ft. W. of rd., below head of Beechridge revetment, 20 ft. back from edge of revetment, 210 ft. S. of house, at S. edge of garden, projecting 6 in. above ground; top of iron post (U. S. Engineer Office, St. Louis, Mo. 1898 B. M. "Fence")-----	321.980
Roth, 0.2 mi. S. thence 2.5 mi. SE. from, 0.8 mi. SE. thence 0.5 mi. W. from Cache, about 0.4 mi. W. of center of sec. 30, T. 16 S., R. 1 W., 440 ft. E. of turn E. in main rd., on N. side of rd., 120 ft. E. of farmhouse, in barn lot, in root on SW. side of 36-in. sycamore tree; copper nail and washer-----	321.59
Cache, 0.8 mi. SE. of, about 625 ft. E. of center of sec. 30, T. 16 S., R. 1 W., 140 ft. W. of rd. fork, 80 ft. W. of crossing of Mobile & Ohio R. R., on N. side of rd., at right-of-way corner, in root on S. side of forked locust tree; copper nail and washer-----	322.94
Cache, 110 ft. NW. of crossing of Illinois Central and Mobile & Ohio R. Rs., opposite and 5 ft. W. of line with W. end of sta., on S. side of fence at N. right-of-way line of I. C. R. R., 25 ft. W. of intersection of NW. right-of-way lines; standard iron post with bronze cap stamped "Prim Trav Sta No 9 1916 326" (recovered by U. S. C. & G. S. in 1935)-----	325.662
Reference mark, 105 ft. S. and 40 ft. W. from R. R. crossing, on S. side of street W., in root on E. side of 36-in. oak tree; copper nail and washer-----	325.16
Cache, 0.6 mi. E. of, at milepost "Cairo 10 mi.," at I. C. C. R. R. bridge GG 143-0 over Cache River, on top of S. end of W. concrete pier; chiseled square-----	321.70

[Continued in Cairo quadrangle, line 7]

4. From Cache west 0.5 mile along Illinois Central Railroad (by S. R. Archer in 1927; spur line leveled twice)

Cache, 0.3 mi. W. of sta., 30 ft. S. of center of track, near charcoal kiln, between siding to kiln and main track; top of 2-in. iron post (Board on Examination and Survey of Mississippi River 1908 B. M. 14 F)-----	326.812
Cache, about 0.5 mi. W. of, 100 ft. S. of center line of track, 75 ft. below milepost "Cairo 11 mi.," at crossing of rd. to charcoal kilns, on W. side of rd.; top of 2-in. iron post (Board on Examination and Survey of Mississippi River 1908 B. M. 13 F)-----	327.782

5. From road junction 0.3 mile north of Diswood northwest 1.7 miles along road (by S. R. Archer in 1927)

Diswood, 0.6 mi. N. of, near N. side NW $\frac{1}{4}$ sec. 10, T. 15 S., R. 2 W., about 200 ft. W. of rd. fork, on S. side of rd., 4 ft. N. and 4 ft. E. from SE. corner of Sandy Creek Church, 4 ft. S. of SE. corner of vestibule at main entrance, in concrete post; standard-tablet stamped "1927 362"-----	<i>Feet</i> 361.913
Diswood, 1.3 mi. NW. of, about 0.25 mi. E. of center of sec. 4, T. 15 S., R. 2 W., opposite and about 50 ft. N. of farmhouse of H. M. McCrite, on top of N. end of W head wall of concrete culvert; chiseled square-----	372.63

[Continued in Jonesboro quadrangle, line 16]

6. From point 1.4 miles southeast of Olive Branch northwest along Illinois Central Railroad to Olive Branch (by S. R. Archer in 1927)

Olive Branch, 1.4 mi. SE. of, about 0.8 mi. below crossing of private rd., 10 ft. N. of track, near point of intersection of curve; top of 2-in. iron pipe (Board on Examination and Survey of Mississippi River 1908 B. M. 8 H2)-----	333.90
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VANDALIA QUADRANGLE

[Latitude 38°45'–39°00'; longitude 89°00'–89°15']

FAYETTE AND MARION COUNTIES

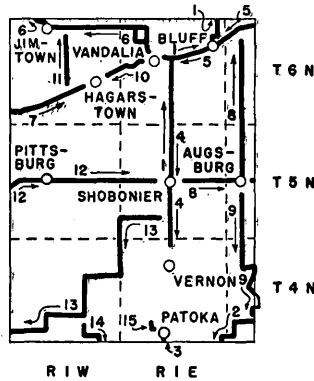


FIGURE 80.—Lines of leveling in Vandalia quadrangle.

1. From Shobonier along roads north to Vandalia, thence northeast to Bluff, thence generally north about 2.5 miles (by P. E. Fletcher in 1907)

Shobonier, approximately 300 ft. W. of NE. cor. sec. 21, T. 5 N., R. 1 E.; standard iron post with bronze cap stamped "516" (recovered in 1937; also recovered by U. S. C. & G. S. in 1920 and designated "T 8" ⁵⁹)	Feet 515.370
Shobonier, about 3 mi. N. of, about 3.5 mi. S. of Vandalia, 30 ft. N. of SE. cor. sec. 33, T. 6 N., R. 1 E.; standard iron post with bronze cap stamped "466"	464.982
Vandalia, at intersection of National and Shobonier rds., about 2.5 mi. SW. of Bluff, near SE. cor. sec. 16, T. 6 N., R. 1 E.; standard iron post with bronze cap stamped "474" (recovered in 1929) ⁶⁰	491.395
Bluff (Bluff City), 0.7 mi. N. of, about 0.25 mi. W. of center of sec. 12, T. 6 N., R. 1 E., in SW angle of junction of E.-W. rd., 1 ft. N. and 2.5 ft. E. from fence corner, flush with ground; standard iron post with bronze cap stamped "507" (recovered in 1937)	506.413

[Continued in Ramsey quadrangle, line 1]

⁵⁹ In 1920, after its recovery by the U. S. C. & G. S., this bench mark was moved about 65 ft. northeast of this position to a point 550 ft. south of station, 140 ft. east of track, 47 ft. east of State highway, 25 ft. north of center line of rd. E., 8 ft. south and 15 ft. east from southwest corner of store of W. D. Perry. The figures given represent the new elevation.

⁶⁰ In 1927 this bench mark was moved about 450 ft. south of this location, to a point 6.5 ft. south of south edge of concrete pavement and 13.5 ft. east of southeast wing wall of highway bridge, and reset 18.296 ft. higher than its original elevation. The figures given represent the new elevation.

2. From point 2.5 miles south and 1.2 miles west from Lester along roads alternately west and south to point 3.3 miles east of Patoka (by S. R. Archer in 1928)

[Continued from Kinmundy quadrangle, line 1]

Lester, 2.5 mi. S. and 1.5 mi. W. from, 1.0 mi. N. thence 5.0 mi. E. from Patoka, near quarter corner between secs. 20 and 29, T. 4 N., R. 2 E., 10 ft. S. and 30 ft. E. from crossroads, 7 ft. N. and 4.5 ft. E. from fence corner; standard iron post with bronze cap stamped "Prim Trav Sta No 165 1911" ^{a1}	Feet 536.438
Reference mark, 85 ft. NE. of iron post, 50 ft. N. and 90 ft. E. from crossroads, in root on NW. side of 36-in. sycamore tree; copper nail and washer (recovered in 1937)	536.57
Patoka, 1.0 mi. N., thence 4.5 mi. E. from, near SE. cor. sec. 19, T. 4 N., R. 2 E., 70 ft. N. and 90 ft. W. from crossroads, 20 ft. S. and 50 ft. E. from SE. corner of church, in root on SE. side of 48-in. cottonwood tree; copper nail and washer ^{a2}	540.88
Patoka, 1.0 mi. N., thence 4.0 mi. E. from, near S $\frac{1}{4}$ cor. sec. 19, T. 4 N., R. 2 E., 40 ft. N. of junction of T-rd. S., in N.-S. fence line, in root on S. side of SE. fork of double wild-cherry tree; copper nail and washer	542.13
Patoka, 4.0 mi. E. of, near N $\frac{1}{4}$ cor. sec. 31, T. 4 N., R. 2 E., 75 ft. S. of crossroads, on E. side of rd., in root on NE. side of 10-in. locust tree; copper nail and washer	535.38
Patoka, 3.3 mi. E. of, 0.25 mi. E. of N $\frac{1}{4}$ cor. sec. 36, T. 4 N., R. 1 E., 70 ft. S. and 40 ft. W. from junction of T-rd. S., 40 ft. NE. of NE. corner of farmhouse, in root on NE. side of 42-in. maple tree; copper nail and washer	527.74

[Continued in Centralia quadrangle, line 11]

3. North along Illinois Central Railroad and streets in Patoka (by S. R. Archer in 1928)

[Continued from Centralia quadrangle, line 11]

U. S. C. & G. S. standard disk stamped "P 8"	506.436
U. S. C. & G. S. standard disk stamped "Q 8"	507.089

4. From point 3.7 miles south of Vandalia south along Illinois Central Railroad and U. S. Highway 51 to point 3.5 miles south of Shobonier (by E. E. Harris in 1929; releveled by S. R. Archer in 1937)

U. S. C. & G. S. B. M. designated "I 8"	475.931
Vandalia, 4.3 mi. S. of, 2.3 mi. N. of Shobonier, 440 ft. S. of rd. crossing, on W side of track, on top of S. abutment of R. R. bridge; chiseled square	479.10
Shobonier, 1.9 mi. N. of, 0.25 mi. S. of NE. cor. sec. 9, T. 5 N., R. 1 E., near NW. corner of crossroads, on top of W. end of N. head wall of concrete culvert under rd. W.; chiseled square (established in 1937)	491.85

^{a1} In 1937 this mark was replaced by a standard tablet stamped "536" set 16.5 ft. due south of this position, at a point described as 17 ft. south and 47 ft. west from center of crossroads, in top of east end of south head wall of concrete culvert. The figures given represent the new elevation.

^{a2} In 1937 this mark was reported destroyed.

Shobonier, 1.2 mi. N. of, 560 ft. N. of SW. cor. sec. 10, T. 5 N., R. 1 E., 560 ft. N. of crossroads, on top of N. end of E. head wall of concrete culvert under highway; chiseled square (established in 1937)-----	Feet 491.57
Shobonier, in front of sta.; top of rail-----	517.5
Shobonier, 180 ft. S. of crossroads, 210 ft. S. of iron post, on top of E. head wall of concrete culvert under highway; chiseled square ⁶³ -----	516.65
Shobonier, 1.0 mi. S. of, near NW. cor. sec. 27, T. 5 N., R. 1 E., near SE. corner of junction of T-rd. E., on top of E. end of S. head wall of concrete culvert under rd. E.; chiseled square (established in 1937)-----	495.54
Shobonier, 1.5 mi. S. of, near W $\frac{1}{4}$ cor. sec. 27, T. 5 N., R. 1 E., near SE. corner of crossroads, on top of S. end of angular head wall of concrete culvert; chiseled square (established in 1937)-----	516.02
Shobonier, 2.0 mi. S. of, near SE. cor. sec. 28, T. 5 N., R. 1 E., near NW. corner of crossroads, on top of W. end of N. head wall of concrete culvert; chiseled square (established in 1937)-----	523.92
Shobonier, 2.9 mi. S. of, 560 ft. N. of SW. cor. sec. 34, T. 5 N., R. 1 E., 560 ft. N. of crossroads, on top of N. end of E. head wall of concrete culvert; chiseled square (established in 1937)-----	516.50
U. S. C. & G. S. standard disk stamped "N 8"-----	504.632

5. From point about 2.5 miles northeast of Bluff southwest along Pennsylvania Railroad and road to Vandalia (by E. E. Harris in 1929; 1.6 miles releveled by S. R. Archer in 1937)

[Continued from Kimmundy quadrangle, line 2]

Bluff, 1.6 mi. NE. of, 5.0 mi. NE. of Vandalia, in NE $\frac{1}{4}$ sec. 7, T. 6 N., R. 2 E., 380 ft. W. of rd. crossing, on S. side of track, on W. end of S. head wall of concrete culvert under R. R.; chiseled square-----	511.78
U. S. C. & G. S. standard disk stamped "R 88 1935"-----	524.110
Vandalia, 3.3 mi. along highway E. thence 0.5 mi. N. from, 0.7 mi. N. and 0.25 mi. E. from Bluff, near center of sec. 12, T. 6 N., R. 1 E., on S. side of rd., at right angle, near fence corner, in concrete post; standard tablet stamped "Prim Trav Sta No 133 LS 1924 509"-----	508.807
U. S. C. & G. S. standard disk stamped "Q 88-1935"-----	483.785
Vandalia, 2.6 mi. E. of along Pennsylvania R. R., on N. side of track, on W. end of concrete rail of bridge; chiseled square-----	483.72
Vandalia, 1.7 mi. E. of, 210 ft. E. of W. end of bridge, on N. concrete rail; chiseled square-----	484.25
U. S. C. & G. S. standard disk stamped "J 8"-----	506.708

6. From Vandalia generally northwest along roads to point 0.9 mile north and 0.8 mile west from Jintown (by Walton Thomson in 1934; releveled to point 1 mile east of Jintown by S. R. Archer in 1937)

U. S. C. & G. S. standard disk stamped "Garner 1920" ⁶⁴ -----	522.520
U. S. C. & G. S. standard reference disk to "Garner 1920"-----	519.983
U. S. C. & G. S. standard disk stamped "Dow 1920" ⁶⁵ -----	515.609

⁶³ Established in 1937 as a reference mark to principal bench mark stamped "516," previously described in line 1.

⁶⁴ This bench mark was raised 0.070 ft. by frost. The figures given represent the new elevation.

⁶⁵ By comparison with other bench marks in the vicinity, this mark appears to have been disturbed 0.030 ft.

	Feet
U. S. C. & G. S. standard reference disk to "Dow 1920"-----	514. 805
U. S. C. & G. S. standard disk stamped "Cocagne 1920"-----	583. 939
Vandalia, 1.5 mi. N. thence 1.0 mi. W. from R. R. sta., 500 ft. E. of SW. cor. sec. 5, T. 6 N., R. 1 E., 400 ft. W. of junction of rd. W., on N. side of rd., at Ritter School, in top of SW. corner of concrete porch; monel-metal rivet-----	537. 68
Vandalia, 1.5 mi. N. thence 2.0 mi. W. from, 4.0 mi. E. of Jimtown, near NE. cor. sec. 12, T. 6 N., R. 1 W., 25 ft. S. and 20 ft. W. from crossroads, 15 ft. S. of I. P. L. power-line pole 69, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 1 1934"-----	549. 007
Jimtown, 3.0 mi. E. of, near N. cor. secs. 11 and 12, T. 6 N., R. 1 W., on S. side of rd., on top of S. head wall of concrete culvert; chiseled square-----	536. 77
Jimtown, 2.0 mi. E. of, near SW. cor. sec. 2, T. 6 N., R. 1 W., 20 ft. N. and 25 ft. E. from crossroads, 330 ft. S. of Prairie Mound School, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 2 1934"-----	521. 651
Jimtown, 1.6 mi. E. of, 420 ft. E. of quarter corner between secs. 3 and 10, T. 6 N., R. 1 W., 420 ft. E. of junction of T-rd. N., on top of N. wing wall of E. concrete abutment of bridge; chiseled square-----	525.01
Jimtown, 1.0 mi. E. of, near NW. cor. sec. 10, T. 6 N., R. 1 W., 19 ft. S. and 34 ft. E. from junction of T-rd. S., 1 ft. N. and 14 ft. E. from fence corner, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 3 1934"-----	550. 426
Jimtown, 0.6 mi. E. of, 900 ft. E. of quarter corner between secs. 4 and 9, T. 6 N., R. 1 W., 500 ft. W. of church, on top of S. end of E. abutment of concrete bridge; chiseled square-----	531. 35
Jimtown, 0.4 mi. E. of, 200 ft. W. of S $\frac{1}{4}$ cor. sec. 4, T. 6 N., R. 1 W., on N. side of rd., opposite I. P. L. pole 205, in root on SE. side of 36-in. soft maple tree; spike with "16" on head-----	557. 53
Jimtown, 50 ft. S. and 210 ft. E. from crossroads, in NE. corner of concrete foundation of gasoline pump; monel-metal rivet-----	558. 15
Jimtown, 0.8 mi. N. of, near SW. cor. sec. 33, T. 7 N., R. 1 W., at offset crossroads, 20 ft. N. and 80 ft. E. from junction of rd. N., 20 ft. N. and 2 ft. W. from junction of rd. S., 60 ft. E. of 24-in. oak tree, in concrete post; standard tablet stamped "Prim Trav Sta No 131 LS 1924"-----	557. 843

[Continued in Ramsey quadrangle, line 5]

7. From point near Mulberry Grove northeast along Pennsylvania Railroad to Hagarstown (by Walton Thomson in 1934; releveled by S. R. Archer in 1937)

[Connects with line 1 in Mulberry Grove quadrangle]

Mulberry Grove, 0.7 mi. E. of E. limits of, 4.6 mi. SW. of Hagarstown, near center of sec. 31, T. 6 N., R. 1 W., about 0.3 mi. E. of overhead highway bridge (U. S. Highway 40), about 800 ft. W. of rd. crossing, at R. R. bridge over Owl Creek, in E. abutment, 15 ft. S. of S. rail; U. S. C. & G. S. and State Survey standard disk stamped "31 9 1934"-----	513. 444
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432 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Reference mark, on E. abutment, 3.5 ft. N. of N. rail; chiseled square-----	Feet 513.46
Hagarstown, 3.9 mi. SW. of, about 0.25 mi. S. of NE. cor. sec. 31, T. 6 N., R. 1 W., at R. R. bridge over Hurricane Creek, on top of S. parapet of E. concrete abutment; chiseled square (established in 1937)-----	494.80
Hagarstown, 3.0 mi. SW. of, near center of NE¼ sec. 32, T. 6 N., R. 1 W., at R. R. bridge 179-19 over rd., 6.4 ft. S. of S. rail, in top of W. concrete abutment; U. S. C. & G. S. and State Survey standard disk stamped "31 10 1934"-----	502.364
Reference mark, on E. abutment, 6.8 ft. S. of S. rail; chiseled square--	502.39
Hagarstown, 2.3 mi. SW. of, near point where R. R. crosses line between secs. 28 and 33, T. 6 N., R. 1 W., on S. side of track, on top of concrete foundation of east-bound block signal 1786; top of northwesternmost of four stud bolts anchoring signal to foundation--	519.69
Hagarstown, 1.6 mi. SW. of, near W¼ cor. sec. 27, T. 6 N., R. 1 W., 30 ft. E. of center line of N-S. rd., 49 ft. S. of center line of track, at S. right-of-way fence line, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "31 11 1934"-----	525.247
Reference mark, on N. side of track, 40 ft. E. of center line of N-S. rd., on SE. corner of concrete foundation of transformer; chiseled square-----	529.01
Hagarstown, 0.6 mi. W. of, about 700 ft. S. of NE. cor. sec. 27, T. 6 N., R. 1 W., about 600 ft. N. of junction of U. S. Highway 40 and rd. S., on S. side of track, on top of concrete foundation of east-bound block signal 1768; top of northwesternmost of four stud bolts anchoring signal to foundation-----	532.36
Hagarstown, at W. edge of, 600 ft. SW. of sta., at curve SW. in highway, on top of N. head wall of concrete culvert under highway; top of bolt cemented in concrete-----	529.14
Hagarstown, 0.4 mi. E. of sta., near center of SE¼ sec. 23, T. 6 N., R. 1 W., 16 ft. S. and 12 ft. E. from crossroads, on top of E. head wall of concrete culvert under rd. S.; U. S. C. & G. S. and State Survey standard disk stamped "31 12 1934"-----	525.273
Reference mark, on top of W. head wall of culvert; top of bolt cemented in concrete-----	525.31
8. From Shobonier along roads east to Augsburg, thence north to Pennsylvania Railroad, thence northeast to point 2.5 miles northeast of Bluff (by Caryl York in 1934; releveled by S. R. Archer in 1937)	
Shobonier, 0.9 mi. E. of, 0.2 mi. W. of E. cor. secs. 15 and 22, T. 5 N., R. 1 E., on top of E. end of S. head wall of concrete bridge; chiseled square-----	502.46
Shobonier, 1.6 mi. E. of, 2.4 mi. W. of Augsburg, near N¼ cor. sec. 23, T. 5 N., R. 1 E., 27 ft. S. and 24 ft. W. from junction of T-rd. S., 10 ft. W. of fence corner, in concrete post; standard tablet stamped "T T Sta No 28 L 1929 512"-----	512.575
Augsburg, 2.2 mi. W. of, about 0.2 mi. E. of S¼ cor. sec. 14, on top of N. parapet of W. abutment of concrete bridge; chiseled square--	515.85
Augsburg, 1.9 mi. W. of, near NW. cor. sec. 24, T. 5 N., R. 1 E., near SE. corner of crossroads, on top of E. head wall of concrete culvert; chiseled square-----	542.00

	<i>Feet</i>
Augsburg, 1.4 mi. W. of, near N $\frac{1}{4}$ cor. sec. 24, T. 5 N., R. 1 E., on top of middle of S. head wall of concrete culvert; chiseled square-----	531. 79
Augsburg, 0.9 mi. W. of, near SE. cor. sec. 13, T. 5 N., R. 1 E., 200 ft. W. of crossroads, on N. side of rd., in front of farmhouse, in root 4 in. from trunk on S. side of 30-in. cottonwood tree; rail spike-----	541. 52
Augsburg, 0.6 mi. W. of, about 0.25 mi. E. of W. cor. secs. 18 and 19, T. 5 N., R. 2 E., on top of N. wing wall of W. abutment of concrete culvert; chiseled square-----	541. 72
Augsburg, 25 ft. S. and 20 ft. W. from crossroads, 114 ft. SE. of SE. corner of church, 93 ft. SW. of SW. cor of store, inside fence corner, in concrete post; standard tablet stamped "T T Sta No. 25 L 1929 562" -----	562. 142
Reference mark, 300 ft. W. of crossroads, on top of S. head wall of concrete culvert; chiseled square (established in 1937)-----	563. 58
Augsburg, 0.6 mi. N. of, 400 ft. N. of E $\frac{1}{4}$ cor. sec. 18, T. 5 N., R. 2 E., on top of W. head wall of concrete culvert; chiseled square-----	548. 10
Augsburg, 0.8 mi. N. of, 0.25 mi. N. of E $\frac{1}{4}$ cor. sec. 18, T. 5 N., R. 2 E., on top of S. end of W. side wall of concrete bridge over Richland Creek; chiseled square-----	528. 84
Augsburg, 1.0 mi. N. of, near SE. cor. sec. 7, T. 5 N., R. 2 E., 65 ft. W. of junction of T-rd. W., on N. side of rd., at fence line, in root on N. side of 12-in. cherry tree; copper nail and washer (established in 1937)-----	541. 99
Augsburg, 1.4 mi. N. of, about 500 ft. S. of W $\frac{1}{4}$ cor. sec. 8, T. 5 N., R. 2 E., on top of E. head wall of concrete culvert; chiseled square--	530. 70
Augsburg, 2.0 mi. N. of, 4.0 mi. E. thence 2.0 mi. N. from Shobonier, 36 ft. S. and 18 ft. W. from NE. cor. sec. 7, T. 5 N., R. 2 E., and junction of T-rd. W., 14 ft. S. of fence corner, in concrete post; standard tablet stamped "T T Sta No 24 L 1929 540"-----	539. 862
Augsburg, 4.0 mi. N. of, at cor. secs. 29, 30, 31, and 32, T. 6 N., R. 2 E., at junction of T-rd. E., on stone marking section corner; chiseled square-----	556. 80
Augsburg, 4.5 mi. N. of, 4.0 mi. E. thence 4.5 mi. N. from Shobonier, about 2.5 mi. S. and 1.8 mi. E. from, 50 ft. S. and 20 ft. E. from W $\frac{1}{4}$ cor. sec. 29, T. 6 N., R. 2 E., and junction of T-rd. E., 60 ft. NW. of NW. corner of schoolhouse, in concrete post; standard tablet stamped "T T Sta No 23 L 1929 544"-----	544. 481
Augsburg, 5.0 mi. N. of, near SW. cor. sec. 20, T. 6 N., R. 2 E., in NE. corner of crossroads, on top of S. end of E. head wall of concrete culvert; chiseled square-----	539. 64
Augsburg, 6.1 mi. N. of, about 0.8 mi. S. and 1.7 mi. E. from Bluff, near SE. cor. sec. 18, T. 6 N., R. 2 E., 32 ft. N. and 22 ft. W. from junction of T-rd. N., in concrete post; U. S. C & G. S. and State Survey standard disk stamped "30 1-1934 537"-----	537. 239
Bluff, 0.3 mi. S. and 1.8 mi. E. from, near quarter corner between secs. 17 and 18, 80 ft. N. of jog in rd., at small iron bridge, on NE. end of E. wing wall of N. concrete abutment; chiseled square (established in 1937)-----	500. 36
Bluff, 0.5 mi. N. and 1.8 mi. E. from, about 0.2 mi. N. of SW. cor. sec. 8, T. 6 N., R. 2 E., in SE. angle of intersection of State Highway 185, on top of E. end of concrete head wall of culvert; chiseled square-----	536. 94

Bluff, 2.0 mi. along U. S. Highway 40 NE. of; 3.4 mi. SW. of Brownstown, near quarter corner between secs. 7 and 8, T. 6 N., R. 2 E., 50 ft. N. of junction of rd. S., 49 ft. N. and 16 ft. W. from junction of rd. N., 73 ft. SE. of SE. corner of schoolhouse, 5 ft. W. of corner of schoolyard, inside fence along S. side of schoolyard, in concrete post; standard tablet stamped "T T Sta No 22 1929 533"-----

Feet.
533. 231

[Connects with line 2 in Kinmundy quadrangle]

9. From Augsburg generally south along roads to crossroads 1 mile north and 4.5 miles east from Patoka (by Caryl York in 1934; releveled by S. R. Archer in 1937)

Augsburg, 0.3 mi. S. of, 0.3 mi. S. of NE. cor. sec. 19, T. 5 N., R. 2 E., on W. side of rd., on top of S. head wall of concrete culvert under driveway to farmhouse; chiseled square----- 563. 98

Augsburg, 1.0 mi. S. of, near SE. cor. sec. 19, T. 5 N., R. 2 E., near NW. corner of crossroads, on top of N. wing wall at W. end of concrete culvert; chiseled square----- 549. 44

Augsburg, 1.0 mi. S. of, near NE. cor. sec. 30, T. 5 N., R. 2 E., 120 ft. W. of crossroads, on top of S. parapet of W. abutment of concrete bridge; chiseled square (established in 1937)----- 549. 96

Augsburg, 1.5 mi. S. of, near E $\frac{1}{4}$ cor. sec. 30, T. 5 N., R. 2 E., 23 ft. W. of center line of rd., in SE. corner of schoolyard, 80 ft. SE. of SE. corner of schoolhouse, in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "30 2 1934 552"----- 551. 973

Augsburg, 2.0 mi. S. of, near NE. cor. sec. 31, T. 5 N., R. 2 E., near SW. corner of crossroads, on N. end of concrete head wall of culvert under rd. S.; chiseled square----- 535. 13

Augsburg, 2.0 mi. S. of, near NW. cor. sec. 32, T. 5 N., R. 2 E., near SE. corner of crossroads, on top of S. end of E. head wall of concrete culvert; chiseled square (established in 1937)----- 535. 11

Augsburg, 2.5 mi. S. of, 200 ft. S. of W $\frac{1}{4}$ cor. sec. 32, T. 5 N., R. 2 E., on N. end of E. wing wall of N. abutment of concrete bridge; chiseled square----- 518. 34

Augsburg, 3.0 mi. S. of, 4.0 mi. E. thence 3.0 mi. S. from Shobonier, 2.0 mi. W. thence 1.5 mi. N. from Lester, near Fayette-Marion county line, 22 ft. S. of T-rd. N. and S. cor. secs. 31 and 32, T. 5 N., R. 2 E., 22 ft. S. and 108 ft. W. from junction of T-rd. S. and N. cor. secs. 5 and 6, T. 4 N., R. 2 E., in fence line, in concrete post; standard tablet stamped "T T Sta No. 26 L 1929 541"----- 541. 317

Lester, 2.0 mi. W. of, near E $\frac{1}{4}$ cor. sec. 7, T. 4 N., R. 2 E., in NW. angle of crossroads, in front of schoolhouse, on top of SE. corner of concrete porch floor; chiseled square (established in 1937)----- 535. 44

Lester, 2.0 mi. W. of, near E $\frac{1}{4}$ cor. sec. 7, T. 4 N., R. 2 E., in NW. angle of crossroads, on W. side of rd., in schoolyard, in blaze on root on S. side of 12-in. elm tree; spike----- 535. 10

[Jogs into Kinmundy quadrangle, line 6]

Lester, 1.2 mi. W. thence 0.9 mi. SW. from, near center of sec. 17, T. 4 N., R. 2 E., on top of E. wing wall of N. abutment of concrete bridge; chiseled square----- 507. 68

[Jogs into Kinmundy quadrangle, line 7]

Lester, 2.5 mi. S. and 2.0 mi. W. from, 1.0 mi. N. thence 4.5 mi. E. from Patoka, 55 ft. N. and 150 ft. W. from crossroads, 35 ft. S. of church, on W. side of concrete walk, in root on SE. side of 30-in. maple tree; copper nail and washer (established in 1937)-----	<i>Feet</i> 541.64
10. From Vandalia southwest along U. S. Highway 40 to Hagarstown (by S. R. Archer in 1937)	
U. S. C. & G. S. standard disk stamped "K 8"-----	514.786
Vandalia, in SW. part of, 15 ft. S. and 40 ft. W. from intersection of St. Louis Avenue and South Seventh Street, 3 ft. W. of W. edge of sidewalk, directly N. of fire hydrant, on top of concrete curb; chiseled square-----	538.46
Vandalia, at W. side of, on N. side of highway, at NE. end of curve SW., on top of W. head wall of concrete culvert under street N.; chiseled square-----	543.73
Vandalia, 1.7 mi. W. of, near SW. cor. sec. 17, T. 6 N., R. 1 E., near SE. corner of junction of T-rd. S., on top of E. head wall of concrete culvert; chiseled square-----	562.90
Vandalia, 2.2 mi. SW. of, 2.2 mi. NE. of Hagarstown, near quarter corner between secs. 18 and 19, T. 6 N., R. 1 E., at curve SW. in highway, 100 ft. W. of end of tangent in highway E., 38 ft. N. of center line of highway, in N-S. fence line; standard iron post with bronze cap stamped "531"-----	530.967
Reference mark, 20 ft. S. and 10 ft. W. from iron post, on N. side of highway, on top of W. concrete head wall of culvert under driveway to field; chiseled square-----	529.69
Hagarstown, 1.4 mi. NE. of, near center of NE $\frac{1}{4}$ sec. 24, T. 6 N., R. 1 W., at point where N-S. 1/16 line in E $\frac{1}{2}$ of section crosses highway, on the top of N. head wall of concrete culvert; chiseled square-----	528.60
Hagarstown, 0.6 mi. NE. of, about 0.2 mi. S. of E $\frac{1}{4}$ cor. sec. 23, T. 6 N., R. 1 W., 125 ft. W. of section line, on S. side of highway, on top of W. concrete head wall of culvert under driveway to barn lot; chiseled square-----	521.53
11. From point on Pennsylvania Railroad 1.6 miles southwest of Hagarstown north along road to point 1 mile east of Jintown (by S. R. Archer in 1937)	
Hagarstown, 1.6 mi. SW. thence 0.6 mi. N. from, 1.0 mi. E. thence 2.9 mi. S. from Jintown, near SE. cor. sec. 21, T. 6 N., R. 1 W., in NW. angle of crossroads, in SE. corner of yard of farmhouse, in root on SW. side of 10-in. walnut tree; copper nail and washer-----	525.12
Jintown, 1.0 mi. E. thence 2.4 mi. S. from, near W $\frac{1}{4}$ cor. sec. 22, T. 6 N., R. 1 W., 50 ft. E. of crossroads, on N. side of rd., in root on SE. side of 10-in. oak tree; copper nail and washer-----	524.43
Jintown, 1.0 mi. E. thence 1.5 mi. S. from, near E $\frac{1}{4}$ cor. sec. 16, T. 6 N., R. 1 W., 28 ft. S. and 20 ft. W. from crossroads, 8 ft. S. of fence corner; standard iron post with bronze cap stamped "529"-----	528.672
Reference mark, 300 ft. S. of crossroads, on E. side of rd., at fence line, 15 ft. N. of 30-in. oak tree, in root on NW. side of 24-in. oak tree; copper nail and washer-----	527.77
Jintown, 1.0 mi. E. thence 1.0 mi. S. from, near W. cor. secs. 10 and 15, T. 6 N., R. 1 W., 100 ft. E. of junction of T-rd. W., in E-W. fence line, in root on W. side of 10-in. elm tree; copper nail and washer-----	533.59

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12. From point 1.8 miles west, thence 0.6 mile southwest from Pittsburg east along roads to Shobonier (by S. R. Archer in 1937)

[Continued from Mulberry Grove quadrangle, line 7]

Pittsburg, 1.8 mi. W. of, near quarter corner between oversize secs. 18 and 19, T. 5 N., R. 1 W., at right-angle turn E. in rd., on top of E. end of N. head wall of concrete culvert; chiseled square-----	<i>Feet</i> 480. 60
Pittsburg, 1.0 mi. W. of, near NE. cor. sec. 19, T. 5 N., R. 1. W., 20 ft. S. and 30 ft. W. from crossroads, in root on S. side of 24-in. oak tree; copper nail and washer-----	505. 19
Pittsburg, 0.5 mi. W. of, 3.6 mi. S. and 1.7 mi. E. from Mulberry Grove, near N¼ cor. sec. 20, T. 5 N., R. 1. W., 116 ft. W. of NW. corner of Maple Grove School, in NW. corner of schoolyard, 43 ft. S. of center line of rd., midway between two large oak trees, in concrete post; standard tablet stamped "T T Sta No 31 L 1929 526"-----	526. 507
Pittsburg, in SW. angle of crossroads, 10 ft. NE. of NE. corner of store, 7 ft. N. and 2 ft. W. from northernmost of three gasoline pumps, at middle of curved corner of concrete curb, on top of curb; chiseled square-----	529. 28
Pittsburg, 1.0 mi. E. of, near SE. cor. sec. 16, T. 5 N., R. 1 W., 100 ft. W. of crossroads, on N. side of rd., on field side of fence, in root on S. side of 30-in. elm tree; copper nail and washer-----	507. 92
Pittsburg, 2.0 mi. E. of, 4.8 mi. W. of Shobonier, 3.6 mi. S. and 4.2 mi. E. from Mulberry Grove, near SE. cor. sec. 15, T. 5 N., R. 1 W., 21 ft. N. and 35 ft. W. from junction of T-rd. N., in concrete post; standard tablet stamped "T T Sta No 30 L 1929 527"-----	526. 691
Shobonier, 3.9 mi. W. of, near cor. secs. 13, 14, 23, and 24, T. 5 N., R. 1 W., at E. end of bridge over Kaskaskia River, on top of S. circular steel pier, at foot of E. end of S. truss, on easternmost rivet head of five rivets fastening expansion plate to pier; chiseled cross-----	460. 70
Shobonier, 3.2 mi. W. of, 0.25 mi. W. of E. cor. secs. 13 and 24, T. 5 N., R. 1 W., 0.7 mi. E. of bridge over Kaskaskia River, at angle SE. in rd., on N. side of rd., at fence line, opposite fence line S., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "460"-----	460. 243
Reference mark, 35 ft. S. and 85 ft. W. from tablet, on S. side of rd., in root on NW. side of 10-in. hickory tree; copper nail and washer--	459. 38
Shobonier, 2.2 mi. W. of, about 800 ft. E. of N¼ cor. sec. 19, T. 5 N., R. 1 E., at bridge over slough, 200 ft. SW. of cabin on N. side of rd., on S. side of rd., on W. bank of slough, in center of blazed triangle on N. side of trunk of 48-in. sycamore tree; copper nail and washer-----	465. 00
Shobonier, 1.4 mi. W. of, near N¼ cor. sec. 20, T. 5 N., R. 1 E., 27 ft. S. and 30 ft. W. from junction of T-rd. S., 1 ft. N. and 12 ft. W. from fence corner, in concrete post; standard tablet stamped "T T Sta No. 29 L 1929 467"-----	467. 288
Shobonier, 0.9 mi. W. of, near NE. cor. sec. 20, T. 5 N., R 1 E., 45 ft. S. of junction of T-rd. S., on W. side of rd., at fence line, in root on E. side of 8-in. locust tree; copper nail and washer-----	488. 77

13. From crossroads 2 miles south of Shobonier along roads alternately west and south to point 0.8 mile north and 1.2 miles east from Keyesport (by S. R. Archer in 1937 over old line leveled by P. E. Fletcher in 1907) ^a

Shobonier, 2.0 mi. S. thence 1.0 mi. W. from, near NE. cor. sec. 32, T. 5 N., R. 1 E., in SW. angle of crossroads, at entrance to Methodist church, on top of N. end of lower concrete step; chiseled square-----	Feet 508.45
Shobonier, 2.0 mi. S. thence 1.7 mi. W. from, 0.25 mi. E. of SW. cor. sec. 29, T. 5 N., R. 1 E., in NE. angle of crossroads, at fence corner; standard iron post with bronze cap stamped "505"-----	503.920
Shobonier, 2.0 mi. S. thence 2.4 mi. W. from, near S $\frac{1}{4}$ cor. sec. 30, T. 5 N., R. 1 E., on N. side of rd., 55 ft. W. of farmhouse on S. side of rd., opposite garage, in root on S. side of 15-in. hickory tree; copper nail and washer-----	483.17
Shobonier, 2.0 mi. S. thence 2.7 mi. W. from, near NE. cor. sec. 36, T. 5 N., R. 1 W., at offset crossroads, 110 ft. S. of junction of rd. E., 40 ft. W. of center line of rd. S., in field, in root on E. side of 30-in. sycamore tree; copper nail and washer-----	470.03
Shobonier, 3.0 mi. S. and 2.7 mi. W. from, near NE. cor. sec. 1, T. 4 N., R. 1 W., on W. side of rd., on S. side of driveway, on N. side of E.-W. fence, in root on SW. side of 36-in. oak tree; copper nail and washer-----	480.70
Shobonier, 3.7 mi. S. and 2.7 mi. W. from, about 0.25 mi. N. of SW. cor. sec. 6, T. 4 N., R. 1 E., in NE. angle of offset crossroads, 30 ft. N. of center line of rd. E., 13 ft. S. of junction of rd. W., 9 ft. N. of fence corner; standard iron post with bronze cap stamped "492"-----	491.152
Shobonier, 4.3 mi. S. and 2.7 mi. W. from, 0.2 mi. N. and 2.7 mi. W. from Vernon, 0.2 mi. N. of W $\frac{1}{4}$ cor. sec. 7, T. 4 N., R. 1 E., at SE. corner of concrete highway culvert, on inside and at foot of E. wall, 1.5 ft. N. of S. end of side wall, on top of ledge with chiseled arrow directly above point; chiseled square-----	476.91
Shobonier, 5.0 mi. S. and 2.7 mi. W. from, 0.5 mi. S. and 2.7 mi. W. from Vernon, near SW. cor. sec. 7, T. 4 N., R. 1 E., 150 ft. N. of junction of rd. W., on E. side of rd., in root on NW. side of 30-in. elm tree; copper nail and washer-----	492.87
Shobonier, 5.0 mi. S. and 3.7 mi. W. from, 390 ft. W. of NE. cor. sec. 14, T. 4 N., R. 1 W., 390 ft. W. of crossroads, on S. side of rd., in barn lot, in root on NW. side of 36-in. tree, easternmost of two locust trees standing 35 ft. apart; copper nail and washer-----	484.62
Shobonier, 5.0 mi. S. and 4.7 mi. W. from, 9.8 mi. NE. of Keyesport, near NE. cor. sec. 15, 33 ft. S. and 17 ft. W. from crossroads, 16 ft. S. of fence corner, 4 ft. S. of S. side of gate, at fence line; standard iron post with bronze cap stamped "476"-----	475.595
Reference mark, 70 ft. N. of crossroads, on W. side of rd. N., in SE. corner of schoolyard, in root on SW. side of 24-in. oak tree; copper nail and washer-----	475.62
Keyesport, 8.6 mi. NE. of, 470 ft. S. of NW. cor. sec. 23, T. 4 N., R. 1 W., 470 ft. S. of crossroads, on E. side of rd., 150 ft. N. of farmhouse, at fence corner, in root on E. side of 10-in. maple tree; copper nail and washer-----	483.44

^a No marks along the old line were found in original position.

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Keyesport, 7.6 mi. NE. of, 1.2 mi. N. and 4.2 mi. W. from Patoka, 265 ft. S. of NW. cor. sec. 26, T. 4 N., R. 1 W., on E. side of rd., at fence line, in root on NW. side of 12-in. locust tree; copper nail and washer-----	<i>Feet</i> 487.32
Keyesport, 6.6 mi. NE. of, 1.0 mi. N and 4.5 mi. W. from Patoka, near SW. cor. sec. 22, T. 4 N., R. 1 W., in NE. angle of crossroads, inside fence corner; standard iron post with bronze cap stamped "470"-----	469.581
Reference mark, 120 ft. N. of crossroads, on E. side of rd., at fence line, in root on SE. side of 10-in. oak tree; copper nail and washer----	467.33
Keyesport, 5.6 mi. NE. of, near NE. cor. sec. 29, T. 4 N., R. 1 W., 50 ft. W. of junction of T-rd. S., on S. side of rd., in fence line, 25 ft. W. of fence corner, in root on S. side of 6-in. oak tree; copper nail and washer-----	442.53
Keyesport, 0.8 mi. N. thence 3.8 mi. E. from, near SW. cor. sec. 28, T. 4 N., R. 1 W., in NE. angle of crossroads, at fence corner, in root on W. side of 36-in. maple tree; copper nail and washer-----	452.79
Keyesport, 0.8 mi. N. thence 2.8 mi. E. from, near N. cor. secs. 31 and 32, T. 4 N., R. 1 W., on S. side of rd., at fence line, 28 ft. E. of fence corner, opposite and 15 ft. E. from fence line N.; standard iron post with bronze cap stamped "441"-----	440.836
Keyesport, 0.8 mi. N. thence 1.9 mi. E. from, near line between secs. 30 and 31, T. 4 N., R. 1 W., about 500 ft. W. of Kaskaskia River, 14 ft. SW. of S. corner of cabin, in root on NW. side of 30-in. birch tree; copper nail and washer-----	442.74

[Continued in Mulberry Grove quadrangle, line 9]

14. From point 1.2 miles north and 4.2 miles west from Patoka alternately south and east along roads to point 3.5 miles west of Patoka (by S. R. Archer in 1937)

Patoka, 0.2 mi. N. and 4.2 mi. W. from, near SW. cor. sec. 26, T. 4 N., R. 1 W., 110 ft. N. and 260 ft. E. from junction of E.-W. rd., in field, in root on NW. side of 12-in. hickory tree; copper nail and washer-----	478.19
Patoka, 0.2 mi. N. and 3.7 mi. W. from, near quarter corner between secs. 26 and 35, T. 4 N., R. 1 W., 135 ft. S. and 120 ft. E. from new highway bridge, 75 ft. SW. of old bridge over North Fork of Kaskaskia River, on S. side of creek, on S. side of old rd., in root on N. side of 30-in. oak tree; copper nail and washer-----	455.43
Patoka, 0.2 mi. N. and 3.5 mi. W. from, 0.25 mi. W. of NE. cor. sec. 35, T. 4 N., R. 1 W., in SW. angle of junction of T-rd. S., in fence line, in root on S. side of 15-in. sassafras tree; copper nail and washer-----	480.96

[Continued in Centralia quadrangle, line 12]

15. West and north 0.8 mile along streets in Patoka (by S. R. Archer in 1937; spur line leveled twice)

Patoka, 0.4 mi. N. and 0.5 mi. W. from sta., 0.25 mi. S. of N. cor. secs. 28 and 29, T. 4 N., R. 1 E., 35 ft. S. and 20 ft. E. from right angle in rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 166 1911 496"-----	496.307
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VIENNA QUADRANGLE

[Latitude 37°15'-37°30'; longitude 88°45'-89°00']

JOHNSON, MASSAC, AND PULASKI COUNTIES

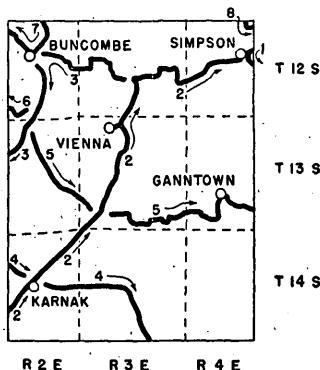


FIGURE 81.—Lines of leveling in Vienna quadrangle.

1. Generally south along roads east of Simpson (by S. R. Archer in 1913-14)

[A jog from Brownfield quadrangle, line 4]

Simpson, 0.3 mi. SE. thence 0.6 mi. NE. from center of, E. of center of sec. 15, T. 12 S., R. 4 E., 50 ft. E. of junction of N.-S. rd., on N. side of rd. E., in 5-in. maple tree; copper nail and washer-----	Feet 436.44
Simpson, 0.3 mi. SE. of, 200 ft. E. of junction of rd. NE., 70 ft. E. of E. end of steel bridge over Cedar Creek, on S. side of rd., at fence line, in base on N. side of 36-in. oak tree; copper nail and washer (recovered in 1915)-----	373.85

[Continued in Brownfield quadrangle, line 4]

2. From point 2 miles southwest of Karnak northeast along Cleveland, Cincinnati, Chicago & St. Louis Railway to Bloomfield, thence generally northeast along roads to Simpson (by R. G. Clinite in 1915)

[Continued from Dongola quadrangle, line 1]

Karnak, 1.4 mi. SW. of, at milepost Dan 236, in concrete rail support; point of rail spike embedded vertically-----	345.18
Karnak, 115 ft. S. of sta., in grove, 8 ft. W. of 10-in. white-oak tree; standard iron post with bronze cap stamped "340"-----	339.446
Karnak, at R. R. crossing; top of rail-----	342.4
Cache River; surface of water Oct. 21, 1915-----	327.8
Karnak, 0.6 mi. NE. of, 25 ft. N. of trestle over Cache River, at milepost Dan 234, in concrete rail support; point of rail spike embedded vertically-----	342.26
Karnak, 1.7 mi. NE. of, 1.1 mi. SW. of Belknap, at milepost Dan 233, at crossing of private rd., in concrete rail support; point of rail spike-----	344.08

440 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Belknap, 120 ft. W. of sta., on S. side of main street, 2 ft. E. of right-of-way line; standard iron post with bronze cap stamped "347"-----	<i>Feet</i> 346.540
Belknap, 0.9 mi. NE. of, 1.2 mi. SW. of Forman, at milepost Dan 231, in concrete rail support; point of rail spike-----	348.17
Cache River; surface of water Oct. 22, 1915-----	333.7
Forman, in W. angle of intersection of Chicago, Burlington & Quincy R. R., on concrete support of signal wires; chiseled cross-----	349.40
Forman, 0.5 mi. NE. of, 150 ft. SE. of rd. crossing, at small frame dwelling; in yard, in root of 26-in. black-oak tree; copper nail-----	358.06
Cave Creek; surface of water Oct. 22, 1915-----	339.4
Forman, 2.2 mi. NE. of, near quarter cor. between secs. 20 and 21, T. 13 S., R. 3 E., 3.4 mi. SW. of Vienna, on NW. side of track, on S. side of rd., 2 ft. E. of corner of right-of-way; standard iron post with bronze cap stamped "355" ⁶⁸ -----	354.662
Dutchman Creek; surface of water Oct. 22, 1915-----	345.2
Vienna, 2.5 mi. SW. of, at milepost 226.25, at N. end of trestle, 5 ft. E. of and about 1 ft. lower than track; top of concrete fence post-----	359.20
Vienna, 1.7 mi. S. of, at milepost Dan 226; in concrete rail support; point of spike-----	373.34
Vienna, 0.7 mi. S. of, at milepost Dan 225, in concrete rail support; point of rail spike-----	387.97
Vienna, 350 ft. S. of sta., on S. side of rd., on W. side of track; SE. corner of concrete sidewalk-----	368.55
Vienna, in NW. corner of courthouse yard, 9 ft. W. of concrete gun support; standard iron post with bronze cap stamped "405" (recovered by U. S. C. & G. S. in 1935)-----	404.386
Vienna, in front of sta.; top of rail-----	369.7
Vienna, 1.4 mi. NE. of, at milepost Dan 223, in top of concrete rail support; point of spike-----	380.22
Vienna, 2.4 mi. NE. of, 0.6 mi. S. of Bloomfield, at milepost Dan 222, in concrete rail support; point of rail spike-----	383.41
Bloomfield, 300 ft. N. of sta., at crossing; top of rail-----	406.2
Bloomfield, 150 ft. W. of post office, in NE. angle of junction of second-class T-rd. N., 2 ft. N. of fence corner; standard iron post with bronze cap stamped "431"-----	420.220
Little Cache Creek, at point 0.5 mi. E. of Bloomfield; surface of water Oct. 22, 1915-----	371.7
Bloomfield, 1.4 mi. E. of, 0.1 mi. N. and 0.25 mi. E. from SW. cor. sec. 23, T. 12 S., R. 3 E., 15 ft. N. and 50 ft. W. from junction of T-rd. S., in root on N. side of 7-in. persimmon tree; copper nail-----	483.53
Bloomfield, 2.1 mi. NE. of, at center of sec. 23, T. 12 S., R. 3 E., at T-rd. S.; highest point on section stone-----	500.84
Bloomfield, 3.2 mi. NE. of, 4.7 mi. SW. thence 1.0 mi. N. from Simpson, near center of sec. 24, T. 12 S., R. 3 E., 18 ft. N. and 3 ft. E. from junction of T-rd. S.; standard iron post with bronze cap stamped "527"-----	526.344
Simpson, 4.7 mi. SW. of, at Pond (formerly post office), near center of sec. 25, T. 12 S., R. 3 E., 30 ft. NW. of center of rd. fork, at fence corner, in root of 18-in. oak tree; copper nail-----	515.43

⁶⁸ In 1940 it was reported that this bench mark could not be found.

Simpson, 3.5 mi. SW. of, 400 ft. NE. of quarter corner between secs. 19 and 30, T. 12 S., R. 4 E., in front yard of residence of F. M. Veach, in root of 12-in. maple tree; copper nail-----	Feet 516.93
Max Creek; surface of water Oct. 27, 1915-----	372.7
Simpson, 3.1 mi. SW. of, about 0.2 mi. N. and 0.2 mi. W. from SE. cor. sec. 19, T. 12 S., R. 4 E., 16 ft. E. of E. end of steel bridge over Max Creek, on NW. side of rd., in pasture, 2 ft. N. of fence line; standard iron post with bronze cap stamped "380"-----	379.314
Simpson, 2.4 mi. SW. of, in center of NW $\frac{1}{4}$ sec. 20, T. 12 S., R. 4 E., in SW. angle of junction of rd. S., 300 ft. SW. of residence of Walter Bateman, 4 ft. E. of fence corner, in root of 12-in. hickory tree; copper nail-----	491.49
Simpson, 1.1 mi. SW. of, just W. of S $\frac{1}{4}$ cor. sec. 16, T. 12 S., R. 4 E., 150 ft. W. of crossroads, on N. side of rd., in root on E. side of 48-in. oak tree; copper nail-----	421.31
Simpson, 0.3 mi. W. of, just E. of SW. cor. sec. 15, T. 12 S., R. 4 E., on N. side of rd., in SE. corner of churchyard, 2 ft. N. of fence corner; standard iron post with bronze cap stamped "445" (recovered by U. S. C. & G. S. in 1935)-----	444.294
Simpson, 80 ft. S. of sta., at crossing; top of rail of siding-----	383.5

[Connects with line 4 in Brownfield quadrangle]

3. From Bloomfield generally northwest along roads to Buncombe, thence south and southwest along Chicago & Eastern Illinois Railway to point 2.4 miles northeast of Cypress (by R. G. Clinite in 1915)

Bloomfield, 1.2 mi. W. of, 2.7 mi. N. of Vienna, at NW. cor. sec. 28, T. 12 S., R. 3 E., in SE. angle of rd. junction, at S. end of culvert, on concrete head wall; highest point in chiseled square-----	457.60
Vienna, 3.7 mi. N. of, about 0.3 mi. SW. of NE. cor. sec. 20, T. 12 S., R. 3 E., on E. side of Vienna-Marion rd., 30 ft. NE. of junction of T-rd. W.; E. end of tile-----	464.45
Dutchman Creek; surface of water Oct. 30, 1915-----	380.7
Vienna, 3.7 mi. N. thence 1.0 mi. W. from, about 330 ft. W. of SE. cor. sec. 18, T. 12 S., R. 3 E., 330 ft. W. of steel bridge over Dutchman Creek, on N. side of rd., at garden of Tom Mullinix, 1 ft. S. of corner post; standard iron post with bronze cap stamped "408"-----	407.715
Vienna, 3.1 mi. N. and 1.8 mi. W. from, 3.0 mi. SE. of Buncombe, near E $\frac{1}{4}$ cor. sec. 24, T. 12 S., R. 2 E., about 0.2 mi. NE. of Johnson County poor-farm dwellings, 28 ft. N. and 60 ft. W. from center of junction of rd. S. along Massac-Pulaski county line, 4 ft. N. of fence line, in field, in root of 14-in. elm tree; copper nail-----	460.98
Buncombe, 2.0 mi. SE. of, near S $\frac{1}{4}$ cor. sec. 13, T. 12 S., R. 2 E., in NE. angle of intersection of Vienna-Marion and Buncombe rds., 6 ft. E. of fence corner; standard iron post with bronze cap stamped "463"-----	462.923
Buncombe, 0.9 mi. E. of, near center of sec. 14, T. 12 S., R. 2 E., in NW. angle of junction of second-class N.-S. rd., in root of 20-in. haw tree; copper nail-----	496.65
Buncombe, at NE. edge of town, 200 ft. E. of crossing of C. & E. I. Ry., 100 ft. N. of small reservoir, on S. side of rd., 4 ft. E. of fence corner; standard iron post with bronze cap stamped "508" (recovered in 1920)-----	507.247

442 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

	<i>Feet</i>
Boles (R. R. name West Vienna), in front of sta.; top of rail.....	401. 2
Boles, 220 ft. W. of sta., 70 ft. E. of store, on N. side of rd., 10 ft. W. of fence corner; standard iron post with bronze cap stamped "399" (recovered in 1919) ⁶⁹	398. 243
Boles, 0.7 mi. SW. of, 120 ft. S. of rd. crossing, on E. side of Chicago, Burlington & Quincy R. R. track; NW. corner of concrete base of semaphore.....	370. 72
Bruce (sawmill siding); point of switch.....	363. 8

[Continued in Dongola quadrangle, line 2]

4. From point 1.5 miles northwest of Karnak generally southeast along Chicago & Eastern Illinois Railway to point 3.3 miles north of Joppa (by R. G. Clinite in 1915)

[Continued from Dongola quadrangle, line 2]

Karnak, 1.0 mi. NW. of, 0.4 mi. W. of milepost J-12, on N. side of right-of-way, in timber, 3 ft. N. of fence, in root of 12-in. black-oak tree; copper nail.....	337. 79
Karnak, 3.0 mi. E. of, 1.0 mi. W. of Boaz, on N. side of track, 14 ft. W. of N-S. fence line, 12 ft. NW. of nearest corner of concrete culvert, 25 ft. SW. of 20-in. elm tree in edge of woods, 1 ft. outside right-of-way line; standard iron post with bronze cap stamped "339".....	338. 916
Grinnell, in SW. corner of schoolyard, 2 ft. E. of right-of-way line, 4 ft. N. of fence corner; standard iron post with bronze cap stamped "367".....	366. 210

[Continued in La Center quadrangle, line 2]

5. From point 0.7 mile southwest of Boles generally southeast along Chicago, Burlington & Quincy Railroad to Forman, thence generally east along roads to point 0.5 mile north and 1.8 miles west from Reevesville (by R. G. Clinite in 1915)

Hollins Spur, 1.8 mi. SW. of Boles, at sta. sign; top of rail.....	363. 5
Hollins Spur, 0.4 mi. SE. of, 50 ft. E. of crossing of public highway; top of S. end of tile drain.....	355. 92
Hollins Spur, 1.6 mi. SE. of, 1.5 mi. NW. of Scanlin Spur, 200 ft. S. of milepost 206, at crossing of private rd., on SW. side of track, about 500 ft. SE. of small farmhouse on hill, 2 ft. N. of gate of right-of-way fence; standard iron post with bronze cap stamped "360".....	360. 155
Cache River; surface of water Nov. 3, 1915.....	341. 7
Scanlin Spur, 2.4 mi. NW. of Forman, at rd. crossing; top of rail....	359. 3
Black Slough outlet; surface of water Nov. 4, 1915.....	341. 1
Forman, 1.4 mi. NW. of, about 0.6 mi. SE. of milepost 208, at Massac-Pulaski county line, at SE. end of R. R. cut, 90 ft. S. of track, at crossing of second-class rd., on W. side of rd., 2 ft. N. of fence corner, 14 ft. N. of 28-in. blazed elm tree; standard iron post with bronze cap stamped "353".....	352. 880
Forman, 0.5 mi. NW. of, 150 ft. E. of rock quarry, on S. side of track, in base of distant signal, set in concrete on side near track; top of bolt.....	353. 34
Cache River; surface of water Nov. 4, 1915.....	335. 2

⁶⁹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "W 105. 1935," elevation 375.344 ft.

Forman, at T-rd. E., at schoolhouse, in SE. corner of yard, 2 ft. N. of fence corner; standard iron post with bronze cap stamped "351"-----	Feet 350. 209
Forman School, 1.1 mi. E. of, E. of center of NW $\frac{1}{4}$ sec. 33, T. 13 S., R. 3 E., just S. of center of rd., 200 ft. E. of small farmhouse, 60 ft. N. of log barn, in root of 32-in. forked walnut tree; copper nail-----	376. 62
Forman School, 1.5 mi. E. thence 0.4 mi. S. from, about 0.2 mi. SW. of E $\frac{1}{4}$ cor. sec. 33, T. 13 S., R. 3 E., 40 ft. W. of second-class T-rd. S., 100 ft. E. of turn in rd., 250 ft. SW. of farmhouse of Logan Duncan, in root of 36-in. white-oak tree; copper nail-----	401. 23
T. 13 S., R. 3 E., near E $\frac{1}{4}$ cor. sec. 34, 10 ft. S. and 16 ft. W. from junction of T-rd. E., 2 ft. S. of E-W. fence line; standard iron post with bronze cap stamped "539"-----	538. 402
T. 13 S., R. 3 E., near E $\frac{1}{4}$ cor. sec. 35, about 0.5 mi. W. of Clifty Creek, at turn in rd. from E. to N., 12 ft. S. of center line of rd. E., 16 ft. W. of center line of rd. N., in root of 7-in. thorn tree; copper nail-----	531. 21
T. 13 S., R. 3 E., near center of NE $\frac{1}{4}$ sec. 36, 0.5 mi. W. of Crossroads Store, on W. bluff of Clifty Creek, 50 ft. E. of gate to private rd. to creek bottoms, on S. side of main rd., in root of 24-in. white-oak tree; copper nail-----	422. 40
Clifty Creek; surface of water Nov. 12, 1915-----	364. 7
T. 13 S., R. 4 E., about 0.2 mi. E. of NW. cor. sec. 31, 0.7 mi. N. thence 1.8 mi. NW. from Samoth, in SE. angle of crossroads, 80 ft. S. of Crossroads Store, 8 ft. S. of fence corner; standard iron post with bronze cap stamped "449"-----	448. 835
Samoth, 0.7 mi. N. of, 1.4 mi. S. of Ganntown, about 0.2 mi. E. of center of sec. 32, T. 13 S., R. 4 E., at T-rd. W., 16 ft. NE. of center of junction of N-S. rd., in root of 14-in. hickory tree; copper nail-----	420. 53
Ganntown, 0.9 mi. S. of, about 0.2 mi. E. of S $\frac{1}{4}$ cor. sec. 29, T. 13 S., R. 4 E., on E. side of rd., opposite second-class T-rd. W., on N. side of driveway into farmyard, in root of 16-in. gum tree; wire nail-----	586. 23
Ganntown, in NE. angle of junction of rd. SE., 60 ft. SE. of nearest corner of store of C. S. Fitch, 6 ft. E. of fence corner; standard iron post with bronze cap stamped "472"-----	471. 942
Ganntown, 0.9 mi. SE. of, SE. of center of sec. 28, T. 13 S., R. 4 E., at rd. fork, on N. bank of Georges Creek, 6 ft. S. of gate, in root of 38-in. sycamore tree; copper nail-----	444. 07
Ganntown, 1.8 mi. SE. of, about 700 ft. S. of center of SW $\frac{1}{4}$ sec. 27, T. 13 S., R. 4 E., in SE. angle of rd. fork, 2 ft. N. of corner of rail fence; standard iron post with bronze cap stamped "436"-----	435. 156

[Continued in Brownfield quadrangle, line 8]

6. From Boles generally west 2 miles along road (by Crawford Dickey in 1919)

Cache River; surface of water May 7, 1919----- 356. 5

[Continued in Dongola quadrangle, line 4]

* In 1940 it was reported that this bench mark was lying in the field.

444 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

7. From point 2.4 miles northeast of Buncombe southeast and southwest along Chicago & Eastern Illinois Railway to Buncombe, thence northwest 2 miles along road (by R. G. Clinite in 1920)

[Continued from Marion quadrangle, line 4]

Buncombe, 1.1 mi. NW. of, in SE. angle of rd. fork, in root of 12-in. cherry tree; copper nail and washer-----	<i>Feet</i> 402. 70
Buncombe, 2.2 mi. NW. of, at steel bridge over Lick Creek, in center of S. side of floor; spike-----	384. 18.

[Continued in Dongola quadrangle, line 10]

8. Southeast and northeast 0.7 mile along road near Double Bridges School (by S. R. Archer in 1923)

[Continued from Marion quadrangle, line 6]

Simpson, 2.0 mi. N. of, 4.5 mi. NW. of Robbs, about 800 ft. NW. of Double Bridges School, about 500 ft. SW. of N¼ cor. sec. 10, T. 12 S., R. 4 E., at bridge over Cedar Creek, on top of E. end of S. concrete abutment; chiseled square-----	387. 11
Robbs, 4.1 mi. NW. of, about 800 ft. N. of center of NE¼ sec. 10, T. 12 S., R. 4 E., 40 ft. N. and 40 ft. W. from crossroads, 5 ft. S. and 5 ft. E. from SE. corner of house, in root on E. side of 10-in. hickory tree; copper nail and washer-----	449. 36

[Continued in Brownfield quadrangle, line 9]

VINCENNES QUADRANGLE

[Latitude 38°30'–38°45'; longitude 87°30'–87°45']

LAWRENCE AND WABASH COUNTIES

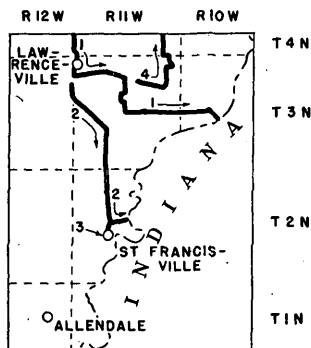


FIGURE 82.—Lines of leveling in Vincennes quadrangle.

1. From point 1.7 miles north of Lawrenceville south along road and Cleveland, Cincinnati, Chicago & St. Louis Railway to Lawrenceville Junction, thence northeast along Baltimore & Ohio Railroad to Jackson switch, thence southeast, south, and east along roads into Indiana at Vincennes (by H. W. Peabody, Jr., in 1910)

[Continued from Birds quadrangle, line 2]

Lawrenceville, on N. side of, at C. C. C. & St. L. Ry. bridge over Embarrass River, at first bend from N. end, on iron in center of track; small cross-----	Feet 432.48
Lawrenceville, in NW. corner of Lawrence County courthouse yard, surrounded with concrete; standard iron post with bronze cap stamped "Prim Trav Sta No 1 1910 472" (recovered by U. S. C. & G. S. in 1938)-----	471.384
Lawrenceville Junction, in SW. corner of crossing of C. C. C. & St. L. Ry. and B. & O. R. R., at concrete milepost Dan-102; top of post ¹ -----	436.86
Lawrenceville Junction, 1.0 mi. NE. of, 1.0 mi. SW. of Jackson switch, at W. parapet of R. R. bridge over Embarrass River; NE. corner of top stone-----	427.37
Lawrenceville, 3.5 mi. SE. of, 1.1 mi. SE. of Jackson switch, about 600 ft. S. of NE. cor. sec. 9, T. 3 N., R. 11 W., in NW. corner of crossroads, at SE. corner of May Chapel; standard iron post with bronze cap stamped "1910 426" (recovered in 1911)-----	425.010
Lawrenceville, 3.5 mi. SE. thence 1.5 mi. S. from, 0.2 mi. W. of E¼ cor. sec. 16, T. 3 N., R. 11 W., at NW. corner of rd. junction, in root on E. side of 20-in. tree; spike-----	417.78
Lawrenceville, 3.5 mi. SE. thence 2.3 mi. S. from, 6.3 mi. NW. of courthouse at Vincennes, 1.6 mi. N. and 1.0 mi. E. from Billett, near SE. cor. sec. 16, T. 3 N., R. 11 W., 25 ft. W. of junction of rd. E.; standard iron post with bronze cap stamped "1910 411"-----	410.472

¹ In 1939 this bench mark was tied to U. S. C. & G. S. standard disk stamped "Lawrenceville No 3 1938," elevation 435.226 ft.

446 SPIRIT LEVELING IN ILLINOIS—PART 1. SOUTHERN ILLINOIS

Vincennes (Indiana), 4.0 mi. NW. of, 1,390 ft. E. of NW. cor. sec. 24, T. 3 N., R. 11 W., 20 ft. S. of center line of E.-W. rd., in center line of rd. S.; standard iron post with bronze cap stamped "Prim Trav Sta No 2 410"-----	Feet 409.485
[Continued in Indiana]	
2. From Lawrenceville Junction southeast and south along Cleveland, Cincinnati, Chicago & St. Louis Railway to wye north of St. Francisville, thence northeast 1 mile (by H. W. Peabody, Jr., in 1910; leveled twice)	
Lawrenceville Junction, 1.0 mi. S. of, 3.4 mi. NW. of Billett, at concrete milepost Dan-103; top of post-----	427.18
Billett, 2.4 mi. NW. of, at concrete milepost Dan-104; top of post----	426.60
Billett, 1.4 mi. NW. of, at concrete milepost Dan-105; top of post----	419.58
Billett, 0.4 mi. N. of, at concrete milepost Dan-106; top of post-----	422.36
Billett, 75 ft. NW. of sta., at NE. corner of lot of Amanda Richardson; standard iron post with bronze cap stamped "1910 424"-----	423.212
Billett, 0.6 mi. S. of, at concrete milepost Dan-107; top of post-----	424.62
Billett, 1.6 mi. S. of, 4.2 mi. N. of St. Francisville, at concrete milepost Dan-108; top of post-----	419.14
St. Francisville, 3.2 mi. N. of, at concrete milepost Dan-109; top of post-----	417.62
St. Francisville, 2.2 mi. N. of, at concrete milepost Dan-110; top of post-----	426.34
St. Francisville, 1.2 mi. N. of, at concrete milepost Dan-111; top of post-----	442.11
St. Francisville, about 1.5 mi. NE. of, at R. R. bridge over Wabash River, on top of downstream end of second pier from left bank end; chiseled square (U. S. C. E. B. M.; recovered by U. S. C. & G. S. in 1935) ⁷² -----	415.636
3. From railroad wye north of St. Francisville southwest along Cleveland, Cincinnati, Chicago & St. Louis Railway bridge to St. Francisville (by H. W. Peabody, Jr., in 1910; leveled twice)	
St. Francisville, 90 ft. SW. of intersection of R. R. and E.-W. rd., 2,000 ft. S. of sta., 25 ft. S. of E.-W. rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 3 1910 440" ⁷³ -----	439.509
4. From crossroads 3.5 miles southeast of Lawrenceville along roads southeast 2.4 miles, thence generally north to point near south corner secs. 25 and 26, T. 4 N., R. 11 W. (by R. G. Clinite in 1911)	
Lawrenceville, 4.0 mi. SE. of, N. of center of sec. 10, T. 3 N., R. 11 W., on N. side of rd., 54 ft. W. of rd. N., in root of double sycamore tree; copper nail and washer-----	415.36
Lawrenceville, 4.6 mi. SE. of, near E $\frac{1}{4}$ cor. sec. 10, T. 3 N., R. 11 W., on N. side of rd., 6 ft. S. of fence, in root of 34-in. sycamore tree; copper nail and washer-----	413.42
Lawrenceville, 5.9 mi. SE. of, near center of SW $\frac{1}{4}$ sec. 12, T. 3 N., R. 11 W., at NW. corner of Plank Road School, on flat stone; chiseled square-----	412.85
Tps. 3 and 4 N., R. 11 W., at cor. secs. 1, 2, 35 and 36, on stone marking section corner; chiseled square-----	419.71
[Continued in Birds quadrangle, line 3]	

⁷² This bench mark is in Indiana.

⁷³ In 1927 it was reported that this bench mark had been reset at an elevation 0.058 ft. lower than that originally determined. The figures given represent the new elevation.

WATERLOO QUADRANGLE

[Latitude 38°15'–38°30'; longitude 90°00'–90°15']

MONROE AND ST. CLAIR COUNTIES

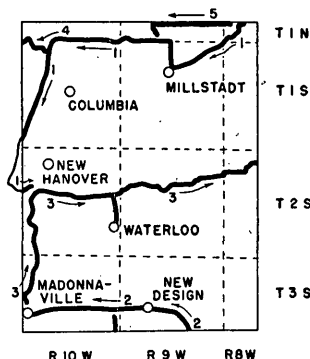


FIGURE 83.—Lines of leveling in Waterloo quadrangle.

1. From point 1.8 miles southwest of Belleville southwest along road to Millstadt, thence north and west by way of Bluffside to Lakeview, thence southwest and east to road junction 2.6 miles south of New Hanover (by S. R. Archer in 1910).

[Connects with line 5 in Belleville quadrangle] ⁷⁴

Belleville, 2.4 mi. SW. of city square, 5.2 mi. NE. of Millstadt, at Stookey School, near SW. cor. sec. 29, T. 1 N., R. 8 W., on N. side of Belleville-Millstadt rd. (State Highway 158), opposite junction of T-rd. S., at E. side of entrance to schoolhouse, on stone doorsill; chiseled square-----	Feet 539.54
Millstadt, 3.5 mi. along rd. NE. of, near NE. cor. sec. 1, T. 1 S., R. 9 W., on SE. side of rd., 2 ft. W. of Millstadt-Smithton township line, 15 ft. N. of 24-in. oak tree; standard iron post with bronze cap stamped "544"-----	543.428
Millstadt, 3.1 in. mi. NE. of, in NE¼ sec. 1, T. 1 S., R. 9 W., on NW. side of rd., opposite junction of rd. S., in root on S. side of oak tree; spike-----	554.82
Millstadt, 2.4 mi. NE. of, in SW¼ sec. 1, T. 1 S., R. 9 W., on SE. side of rd., 200 ft. NE. of White School, 50 ft. E. of junction of private rd. S., in root on W. side of oak tree; spike-----	566.55
Millstadt, in NW. part of town, at SE. corner of public school; standard iron post with bronze cap stamped "614"-----	614.201
Millstadt, 0.8 mi. N. of, 0.1 mi. N. of SW. cor. sec. 3, T. 1 S., R. 9 W., at SE. corner of stone culvert, on wing wall; chiseled square--	584.98
Millstadt, 1.7 mi. N. of, near NW. cor. sec. 3, T. 1 S., R. 9 W., on E. side of N.-S. rd., 80 ft. S. of intersection of E.-W. rd. along base line, in root on W. side of 30-in. oak tree; spike-----	580.92

⁷⁴ This line cuts the southeast corner of East St. Louis quadrangle, but no bench marks were established in that portion of the line.

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Millstadt, 1.7 mi. N. thence 1.0 mi. W. from, 2.9 mi. E. of Bluffsides, near NW. cor. sec. 4, T 1 S., R. 9 W., 20 ft. S. and 20 ft. W. from center of rd. junction; standard iron post with bronze cap stamped "Prim Trav Sta No 17 1909 545" (recovered in 1929)-----	<i>Feet</i> 545.056
Bluffsides, 0.2 mi. SE. of, in NE¼ sec. 1, T. 1 S., R. 10 W., on N. side of rd., 50 ft. NE. of junction of rd. SE., in root on S. side of 30-in. oak tree; spike-----	589.11
Bluffsides, near N¼ cor. sec. 1, T. 1 S., R. 10 W., in NW. angle of crossroads, 100 ft. NW. of Bluffsides Exchange Saloon, at Bluffsides Hotel, at corner of garden fence; standard iron post with bronze cap stamped "587" (recovered in 1929)-----	586.980
Lakeview, in SE. angle of junction of rd. E., 15 ft. N. and 10 ft. W. from NW. corner of blacksmith shop of Charles Baker; standard iron post with bronze cap stamped "Prim Trav Sta No 18 1909 429" ⁷⁵ -----	428.933
Lakeview, 3.2 mi. SW. of, 1.6 mi. W. of Columbia, near E. boundary of land claim 487, in SE. angle of rd. junction, at corner of garden fence; standard iron post with bronze cap stamped "426"---	425.247
[Jogs into Kimmswick quadrangle, line 1]	
New Hanover, 1.8 mi. SW. of, in NE¼ sec. 18, T. 2 S., R. 10 W., in SE. angle of rd. junction, on S. end of stone culvert; chiseled square-----	504.86
New Hanover, 2.6 mi. S. of, near center of NW¼ sec. 17, T. 2 S., R. 10 W., just W. of steel bridge over Fountain Creek, 20 ft. S. and 15 ft. E. from center of triangle of rd. forks, at foot of tree; standard iron post with bronze cap stamped "Prim Trav Sta No 15 1909 427"-----	426.732
2. From Poe northwest and west along roads by way of New Design and Burksville to Madonnville (by S. R. Archer in 1910)	
[Continued from Renault quadrangle, line 3]	
Poe, 0.9 mi. NW. of, 2.0 mi. SE. of New Design, 0.1 mi. NW. of center of sec. 22, T. 3 S., R. 9 W., at NW. corner of junction of rd. NE., on top of stone; chiseled square-----	572.92
New Design (Burksville Sta.), at S. edge of, near S¼ cor. sec. 17, T. 3 S., R. 9 W., at SW. corner of rd. fork; standard iron post with bronze cap stamped "Prim Trav Sta No 12 1909 661"-----	660.872
New Design, 0.8 mi. W. of, 1.1 mi. E. of Burksville, in NE¼ sec. 9, T. 3 S., R. 9 W., in SW. angle of junction of T-rd. S., at W. end of drain, on unmarked stone; highest point-----	648.87
Burksville, at S. edge of, in SE¼ sec. 13, T. 3 S., R. 10 W., in NE. angle of crossroads, on S. side near W. corner of saloon, on base at W. side of stone steps to doorway; chiseled square-----	654.52
Burksville, 0.5 mi. W. of, 0.25 mi. E. of SW. cor. sec. 13, T. 3 S., R. 10 W., at junction of T-rd. S., on N. side of rd., at SW. corner of cemetery, near fence corner; standard iron post with bronze cap stamped "653"-----	652.596
Reference mark, 50 ft. W. of tablet, on N. side of rd., in root of 24-in. cherry tree; spike-----	651.53

⁷⁵ In 1929 this bench mark was destroyed and a new mark was set nearby; see line 5.

Burksville, 0.8 mi. W. of, near NE. cor. sec. 23, T. 3 S., R. 10 W., at SE. corner of stone culvert over stream, on wing wall; chiseled square-----	Feet 629. 74
Burksville, 1.7 mi. W. of, near SW. cor. sec. 14, T. 3 S., R. 10 W., in NE. angle of junction of T-rd. N., at W. abutment of bridge over Hesterburg Creek, on W. end of N. wing wall; chiseled square-----	653. 82
Burksville, 2.7 mi. W. of, 2.4 mi. E. of Madonnville, at Rock School, 20 ft. N. and 50 ft. W. from junction of T-rd. S., 20 ft. SE. of SE. corner of schoolhouse, on unmarked stone; highest point-----	682. 45
Madonnville, 1.5 mi. E. of, 0.15 mi. E. of NW. cor. sec. 21, T. 3 S., R. 10 W., in SE. angle of crossroads, under small peach tree; standard iron post with bronze cap stamped, "710"-----	709. 521
Madonnville, 0.5 mi. E. of, near center of NW $\frac{1}{4}$ sec. 20, T. 3 S., R. 10 W., near center of N. side of triangular plot at junction of second-class rd. S., in root on S. side of small red-oak tree; spike--	737. 52
Madonnville, at E. edge of, in NE $\frac{1}{4}$ sec. 19, T. 3 S., R. 10 W., in NE. angle of junction of rd. N., just E. of Roman Catholic Church, at E. side of cemetery, on stone; chiseled square-----	749. 73
3. From Madonnville north along roads to point 2.6 miles southwest of New Hanover, thence generally east along roads by way of Floraville to point 1.3 miles south and 0.5 mile west from Smithton, including checked spur line to Waterloo (by S. R. Archer in 1910)	
Madonnville, 1.6 mi. along winding rd. N. of, 0.3 mi. W. of E. cor. secs. 7 and 18, T. 3 S., R. 10 W., 3 ft. N. of section line, on SE. side of curve in rd. from E. to NE., at foot of peach tree; standard iron post with bronze cap stamped "755"-----	754. 678
Madonnville, 2.6 mi. N. of, near NE. cor. sec. 7, T. 3 S., R. 10 W., in SE. angle of junction of rd. E., in root on W. side of 24-in oak tree; spike-----	715. 21
Madonnville, 3.8 mi. N. of, 0.3 mi. W. of Foster Pond, near NW. cor. sec. 5, T. 3 S., R. 10 W., on S. side of E.-W. rd., opposite rd. N., in root of 12-in. poplar tree; spike-----	668. 82
Madonnville, 4.8 mi. N. of, near NE. cor. sec. 31, T. 2 S., R. 10 W., at center of S. side of triangle formed by junction of rd. SW., in root of 24-in. oak tree; spike-----	656. 34
Madonnville, 5.4 mi. N. of, 6.0 mi. along winding rd. S. of New Hanover, 4.5 mi. in air line W. of Waterloo, near W $\frac{1}{4}$ cor. sec. 29, T. 2 S., R. 10 W., at NE. corner of Johanna Evangelical Church; standard iron post with bronze cap stamped "653"-----	652. 275
New Hanover, 3.7 mi. S. of, near NE. cor. sec. 19, in center of rd., 300 ft. NW. of farmhouse, in root on W. side of 30-in. oak tree; spike-----	589. 18
New Hanover, about 2 mi. in air line SE. of, 0.25 mi. E. of center of sec. 16, T. 2 S., R. 10 W., on N. side of Dug Hollow rd., in NE. angle of junction of rd. N., at SW. corner of yard fence, in root of tree; spike-----	577. 41
New Hanover, 2.5 mi. in air line SE. of, 3.5 mi. along rds. NW. of Waterloo, in SW $\frac{1}{4}$ sec. 15, T. 2 S., R. 10 W., on E. side of N.-S. rd., 90 ft. S. of junction of rd. W., in root on W. side of 24-in. hickory tree; spike-----	581. 69

Waterloo, 2.0 mi. along Mobile & Ohio R. R. NW. of sta., in SW¼ sec. 14, T. 2 S., R. 10 W., 35 ft. NW. of grade crossing, at intersection of N. line of rd. and W. right-of-way line of R. R.; standard iron post with bronze cap stamped "611"-----	<i>Feet</i> 610.605
Waterloo, 1.8 mi. along St. Louis rd. N. of, near center of sec. 13, T. 2 S., R. 10 W., on E. side of rd., 180 ft. S. of junction of rd. W., in root on W. side of 24-in. cherry tree; spike-----	695.06
Waterloo, on E. side of Monroe County courthouse, 30 ft. from NE. corner of building, 15 ft. N. of rear entrance, 8 ft. from basement entrance; standard iron post with bronze cap stamped "717"-----	716.654
Waterloo, 1.8 mi. N. along St. Louis rd. thence 2.0 mi. along rds. alternately E. and N. from, 20 ft. N. and 5 ft. E. from cor. secs. 7, 8, 17, and 18, T. 2 S., R. 9 W., in yard at SW. corner of Schroeder School; standard iron post with bronze cap stamped "Prim Trav Sta No 16 1909 629"-----	628.277
Waterloo, 3.5 mi. along Smithton rd. NE. of, 3.0 mi. SW. of Floraville, 0.1 mi. N. of center of sec. 16, T. 2 S., R. 9 W., in W. angle of rd. junction, near telephone pole; top of unmarked stone-----	566.12
Floraville, 2.4 mi. SW. of, about 500 ft. N. of S. cor. secs. 9 and 10, T. 2 S., R. 9 W., on Smithton rd., about 400 ft. E. of Monroe-St. Clair county line, at NE. corner of steel bridge over Gerhardt Creek, on top of circular steel foundation; painted bolt-----	492.88
Floraville, in SE. part of, 250 ft. W. of E¼ cor. sec. 11, T. 2 S., R. 9 W., 3 ft. W. of NE. corner of brick schoolhouse; standard iron post with bronze cap stamped "527" ⁷⁰ -----	530.307
[Connects with line 2 in New Athens quadrangle]	
4. From Bluffside generally west along roads by way of Lakeview to Fish Lakes (by E. W. Gouchenour in 1929; duplicates a portion of line 1)	
Bluffside, 1.4 mi. W. of, at junction of private rd. N., on N. side of rd., in root of 15-in. oak tree; copper nail and washer-----	675.59
Lakeview, 0.6 mi. E. of, 230 ft. W. of center of bridge over Missouri Pacific R. R., 10 ft. S. of center line of rd., in root on N. side of large wild-cherry tree; copper nail and washer-----	494.35
Lakeview, 25 ft. S. and 25 ft. E. from junction of State Highway 3 and rd. E., 15 ft. W. of NW. corner of fence, in concrete post; standard tablet stamped "T T Sta No 18 1909" ⁷¹ -----	427.686
Reference mark, 2 ft. N. and 5 ft. W. from tablet, on E. end of concrete culvert; chiseled square-----	425.93
Bixby, 0.5 mi. W. thence 0.9 mi. SW. from, on E. bank of Fish Lakes, 394 ft. SW. of crossing of Mobile & Ohio R. R. and rd. along E. bank of Fish Lakes, in front of barn on property of H. Wecker, at fence; Mississippi River Comm. B. M. 50/1 cap on iron pipe-----	405.717

[Continued in Kimmswick quadrangle, line 3]

⁷⁰ In 1917 this bench mark was reset at an elevation 3.138 ft. higher than that originally determined. The figures given represent the new elevation.

⁷¹ Replaces standard iron post described in line 1. In 1936 this tablet was tied to U. S. C. & G. S. standard disk stamped "G 115 1935," elevation 411.318 ft.

5. From point 1.8 miles southwest of Belleville southwest along State Highway 158 to Stookey School, thence west 5 miles and south about 1 mile to point 2.9 miles east of Bluffside (by E. W. Gouchenour in 1929)

[Continued from East St. Louis quadrangle, line 9]

Belleville, 2.4 mi. SW. of along State Highway 158, near SW. cor. sec. 29, T. 1 N., R. 8 W., 290 ft. E. of Stookey School, on N. head wall of concrete culvert; chiseled square-----	Feet 537.10
T. 1 N., R. 8 W., near SW. cor. sec. 30, 30 ft. N. and 25 ft. E. from crossroads, in root on S. side of large sassafras tree; spike-----	546.20
T. 1 N., R. 9 W., 0.2 mi. W. of NE. cor. sec. 35, 0.3 mi. E. of Fairview School, on SW. wing of wall of steel girder bridge; chiseled square-----	515.21
T. 1 N., R. 9 W., near N $\frac{1}{4}$ cor. sec. 35, at Fairview School, in concrete platform of well; standard tablet stamped "2 G 1929"-----	555.913
Reference mark, 38 ft. N. of tablet, in root on N. side of sycamore tree; copper nail and washer-----	555.17
T. 1 N., R. 9 W., near NE. cor. sec. 34, 0.5 mi. W. of Fairview School, on SW. pier of bridge; chiseled square-----	502.02
T. 1 N., R. 9 W., in SW $\frac{1}{4}$ sec. 33, in SW angle of curve from W. to S. in rd., 0.2 mi. N. of T-junction of E.-W. rd., 400 ft. SE. of house, in root on E. side of apple tree; copper nail and washer-----	577.00

WAYNE CITY QUADRANGLE

[Latitude 38°15'–38°30' ; longitude 88°30'–88°45']

HAMILTON, JEFFERSON, MARION, AND WAYNE COUNTIES

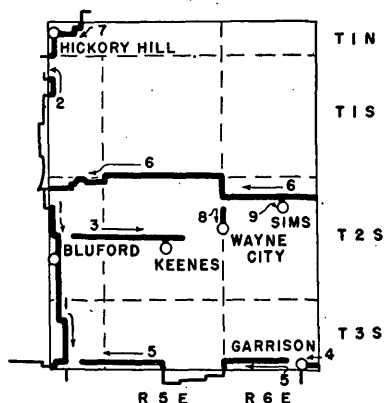


FIGURE 84.—Lines of leveling in Wayne City quadrangle.

1. From point 1.2 miles north and 0.2 mile west from Bluford generally south along roads to point 1.5 miles north and 0.5 mile west from Belle Rive (by E. W. Gouchenour in 1928)

[Continued from Mount Vernon quadrangle, line 5]

Bluford, 1.2 mi. N. of, 3.5 mi. S. and 0.7 mi. E. from Pigeon, near quarter corner between secs. 15 and 22, T. 2 S., R. 4 E., 35 ft. S. and 25 ft. E. from junction of State Highway 15 and T-rd. S., in concrete post; standard tablet stamped "50 S 1928" (recovered in 1934)	Feet 477. 203
Bluford, at store building of Bluford Hardware Co., on SW. corner of concrete step; chiseled square ⁷⁸	527. 20
Bluford, 1.3 mi. S. of, 0.25 mi. S. of N¼ cor. sec. 34, T. 2 S., R. 4 E., 230 ft. S. and 20 ft. W. from junction of T-rd. W., in root on E. side of 12-in. oak tree; copper nail and washer	514. 71
Bluford, 2.1 mi. S. of, near N¼ cor. sec. 3, T. 3 S., R. 4 E., 15 ft. N. and 6 ft. W. from junction of T-rd. S., in concrete post; standard tablet stamped "49 S 1928"	518. 383
Reference mark, 15 ft. S. and 65 ft. W. from junction of T-rd. S., in root on E. side of 36-in. water-oak tree; copper nail and washer	517. 80
Bluford, 2.8 mi. S. of, 0.25 mi. N. of S¼ cor. sec. 3, T. 2 S., R. 4 E., 30 ft. S. and 15 ft. E. from junction of T-rd. E., in root of small oak bush; copper nail and washer	484. 06
Bluford, 3.6 mi. S. of, 3.0 mi. N. thence 0.5 mi. W. from Belle Rive, near center of sec. 10, T. 2 S., R. 4 E., 10 ft. S. and 10 ft. W. from junction of T-rd. E., in root on E. side of 30-in. white-oak tree; copper nail and washer	482. 52

⁷⁸ In 1936 and again in 1939 this bench mark was tied to U. S. C. & G. S. standard disk stamped "B 109 1935," elevation 528.598 ft.

Belle Rive, 2.2 mi. N. of, 0.25 mi. S. of N. cor. secs. 14 and 15, T. 3 S., R. 4 E., 30 ft. N. and 20 ft. W. from junction of private T-rd. E., in root on W. side of twin white-oak tree; copper nail and washer (recovered in 1939)-----	<i>Feet</i> 478.25
Belle Rive, 1.5 mi. N. of, near SW. cor. sec. 14, T. 3 S., R. 4 E., 20 ft. N. and 24 ft. E. from crossroads, in concrete post; standard tablet stamped "48 S 1928" (recovered in 1939)-----	462.932
Reference mark, 35 ft. S. and 40 ft. W. from crossroads, in root on E. side of 25-in. water-oak tree; copper nail and washer (recovered in 1939)-----	462.64
Belle Rive, 1.5 mi. N. thence 0.5 mi. W. from, 150 ft. W. of quarter corner between secs. 15 and 22, T. 3 S., R. 4 E., at steel girder bridge over Axure Creek, on SE. concrete abutment; chiseled square-----	443.09
[Continued in Mount Vernon quadrangle, line 6]	
2. North 0.8 mile along road just south of Byars (by E. W. Gouche-nour in 1928)	
[A jog from Mount Vernon quadrangle, line 7]	
Divide, 4.3 mi. E. of, 0.3 mile E. of NW. cor. sec. 15, T. 1 S., R. 4 E., 20 ft. S. and 30 ft. W. from junction of T-rd. N., in root on E. side of 15-in. white-oak tree; copper nail and washer-----	506.20
[Continued in Mount Vernon quadrangle, line 7]	
3. From Bluford north to State Highway 15, thence east to point 0.2 mile north and 0.9 mile east from Keenes (by D. S. Montgomery in 1934)	
Bluford, 1.2 mi. N. thence 1.0 mi. E. from, 1.2 mi. N. of Markham City, near quarter corner between secs. 14 and 23, T. 2 S., R. 4 E., 12 ft. S. and 450 ft. E. from junction of T-rd. N., on top of SW. corner of overhead bridge; chiseled square-----	521.97
Bluford, 1.2 mi. N. thence 1.5 mi. E. from, 0.2 mi. N. thence 4.2 mi. W. from Keenes, near cor. secs. 13, 14, 23, and 24, T. 2 S., R. 4 E., 38 ft. S. and 560 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	559.583
Keenes, 0.2 mi. N. thence 3.9 mi. W. from, near cor. secs. 13, 14, 23, and 24, T. 2 S., R. 4 E., 40 ft. N. and 725 ft. E. from crossroads, on N. side of highway, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	523.019
Keenes, 0.2 mi. N. thence 3.1 mi. W. from, near cor. secs. 13, 18, 19, and 24, T. 2 S., Rs. 4 and 5 E., 63 ft. E. of T-rd. S., on top of S. head wall of concrete culvert; chiseled square-----	501.72
Keenes, 0.2 mi. N. thence 2.1 mi. W. from, near cor. secs. 17, 18, 19, and 20, T. 2 S., R. 5 E., 40 ft. N. and 165 ft. E. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	505.584
Keenes, 0.2 mi. N. thence 1.8 mi. W. from, 0.25 mi. W. of quarter corner between secs. 17 and 20, T. 2 S., R. 5 E., 40 ft. S. of high-way, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	508.952
Keenes, 0.2 mi. N. thence 1.1 mi. W. from, near cor. secs. 16, 17, 20, and 21, T. 2 S., R. 5 E., 27 ft. W. of T-rd. N., in center of top of S. head wall of concrete culvert; chiseled square-----	448.62

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Keenes, 0.2 mi. N. thence 0.2 mi. W. from, near cor. secs. 15, 16, 21, and 22, T. 2 S., R. 5 E., 40 ft. S. and 574 ft. W. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk	Feet 443. 861
Keenes, near N. limits of, 40 ft. N. and 160 ft. E. from crossroads, in concrete post; U. S. C. & G. S. and State Survey standard disk ⁷⁹	443. 000
Keenes, 0.2 mi. N. thence 1.0 mi. E. from; 250 ft. W. of cor. secs. 14, 15, 22, and 23, in center of top of S. head wall of concrete culvert; chiseled square. (on unchecked spur)-----	424. 36
4. West and south through Garrison (by W. C. Elledge in 1939; leveled twice to Garrison)	
[Continued from Fairfield quadrangle, line 3]	
Aden, 1.0 mi. N. and 2.0 mi. W. from, 1.0 mi. E. of Garrison, near center of NW¼ sec. 24; T. 3 S., R. 6 E., 85 ft. E. of crossroads, on N. side of rd., in SW. corner of yard, in root on SW. side of 12-in. maple tree; copper nail and washer-----	416. 78
Garrison, 30 ft. S. and 32 ft. E. from rd. junction, 54 ft. S. and 72 ft. E. from SE. corner of post office, 15 ft. E. of large oak tree, in concrete post; standard tablet stamped "T T 10 C 1939"-----	439. 740
[Continued in McLeansboro quadrangle, line 4]	
5. From Garrison generally west along roads to point 2.2 miles north of Belle Rive (by W. C. Elledge in 1939)	
Garrison, 0.25 mi. N. thence 1.0 mi. W. from, 1.0 mi. S. and 0.8 mi. E. from Mayberry, near cor. secs. 15, 16, 21, and 22, T. 3 S., R. 6 E., 15 ft. N. and 20 ft. W. from crossing of State Highway 142-A, on N. head wall of concrete culvert; chiseled square-----	419. 22
Mayberry, 1.0 mi. S. and 0.2 mi. W. from, near W. cor. secs. 16 and 21, T. 3 S., R. 6 E., about 250 ft. E. of crossroads, on S. head wall of concrete culvert; chiseled square-----	413. 24
Mayberry, 1.0 mi. S. and 1.2 mi. W. from, near cor. secs. 17, 18, 19, and 20, T. 3 S., R. 6 E., about 250 ft. W. of white house on S. side of rd., 60 ft. W. of N-S. fence, on S. edge of rd., in root on N. side of 24-in. oak tree; copper nail and washer-----	397. 70
Mayberry, 1.0 mi. S. and 2.2 mi. W. from, near cor. secs. 13, 18, 19, and 24, T. 3 S., Rs. 5 and 6 E., 69 ft. N. and 24 ft. E. from center of steel bridge over drainage ditch, 17 ft. N. and 20 ft. E. from junction of T-rd. E., in small pasture, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	396. 520
[Jogs into McLeansboro quadrangle, line 8]	
Dahlgren, 4.0 mi. N. thence 1.0 mi. E. from, near cor. secs. 16, 17, 20, and 21, T. 3 S., R. 5 E., 185 ft. S. and 50 ft. W. from junction of T-rd. W., in root on NW. side of 20-in. oak tree; copper nail and washer-----	428. 72
Dahlgren, 4.0 mi. N. of, near cor. secs. 17, 18, 19, and 24, T. 3 S., R. 5 E., 41 ft. N. and 21 ft. W. from crossroads, 17 ft. N. of fence corner, in concrete post; standard tablet stamped "T T 12 C 1939"---	435. 927
Dahlgren, 4.0 mi. N. thence 1.0 mi. W. from, 1.5 mi. N. thence 2.0 mi. E. from Belle Rive, near SE. cor. sec. 13, T. 3 S., R. 4 E., in NW. angle of crossroads, at entrance to No. 9 School, on SE. corner of concrete step; chiseled square-----	446. 08

⁷⁹ In 1936 this bench mark was tied to U. S. C. & G. S. standard disk stamped "X 108 1935," elevation 453.782 ft.

Belle Rive, 1.0 mi. N. thence 0.7 mi. E. from, 0.25 mi. W. of NE. cor. sec. 23, T. 3 S., R. 5 E., 40 ft. S. and 95 ft. W. from junction of T-rd. N., in root on S. side of 18-in. oak tree; copper nail and washer-----

Feet
443. 52

6. From point 0.5 mile north and 3 miles west from Boyleston west along State Highway 15 and other roads to point 0.4 mile east and 1 mile south from Pigeon (by W. C. Elledge in 1939)

[Connects with line 4 in Fairfield quadrangle]

Boyleston, 0.5 mi. N. thence 3.1 mi. W. from, 0.8 mi. N. thence 1.7 mi. E. from Sims, 0.25 mi. W. of cor. secs. 1, 2, 11, and 12, T. 2 S., R. 6 E., at concrete bridge over Dry Fork, on SW. wing wall; chiseled square-----

402. 72

Sims, 0.7 mi. N. thence 1.0 mi. E. from, near cor. secs. 2, 3, 10, and 11, T. 2 S., R. 6 E., on N. side of rd., at field rd. N., on E. head wall of concrete culvert; chiseled square-----

401. 24

Sims, 0.7 mi. N. of, near cor. secs. 3, 4, 9, and 10, T. 2 S., R. 6 E., 30 ft. S. and 118 ft. W. from crossroads, 5 ft. W. of telephone pole, in concrete post; U. S. C. & G. S. and State Survey standard disk-----

423. 890

Sims, 0.7 mi. N. thence 1.0 mi. W. from, 1.7 mi. N. thence 2.0 mi. east from Wayne City, about 300 ft. E. of W. cor. secs. 4 and 9, T. 2 S., R. 6 E., 300 ft. E. of T-rd. N., on SE. wing wall of concrete bridge; chiseled square-----

405. 42

Wayne City, 1.7 mi. N. thence 1.0 mi. E. from, near cor. secs. 5, 6, 7, and 8, T. 2 S., R. 6 E., 15 ft. S. and 20 ft. W. from crossroads, on S. head wall of concrete culvert; chiseled square-----

417. 69

Wayne City, 1.7 mi. N. of, 300 ft. N. and 25 ft. W. from junction of T-rd E. at W. cor. secs. 6 and 7, T. 2 S., R. 6 E., 100 ft. N. and 25 ft. W. from junction of T-rd. W. at E. cor. secs. 1 and 12, T. 2 S., R. 5 E., in concrete post; standard tablet stamped "T T 28 C 1939"-----

428. 500

Wayne City, 2.7 mi. N. of, near SE. cor. sec. 36, T. 1 S., R. 5 E., 24 ft. N. and 33 ft. W. from crossroads, in root on SE. side of 15-in. maple tree; copper nail and washer-----

429. 72

Wayne City, 2.7 mi. N. thence 1.4 mi. W. from, 1.5 mi. S. and 2.2 mi. E. from Keenesville, near $N\frac{1}{4}$ cor. sec. 2, T. 2 S., R. 5 E., at SE. pier of steel bridge over Skillet Fork, on E. bolt of S. row where truss is fastened to pier; chiseled cross-----

409. 28

Keenesville, 1.5 mi. S. and 1.5 mi. E. from, 22 ft. S. and 20 ft. E. from center line of rd. at fence S. at N. cor. secs. 2 and 3, T. 2 S., R. 5 E., 22 ft. S. and 183 ft. E. from center line of rd. at fence N. at S. cor. secs. 34 and 35, T. 1 S., R. 5 E., in concrete post; standard tablet stamped "T T 29 C 1939"-----

436. 495

Keenesville, 1.5 mi. S. and 0.6 mi. E. from, near N. cor. secs. 3 and 4, T. 2 S., R. 5 E., 30 ft. N. and 100 ft. W. from junction of T-rd. S., in SW. corner of schoolyard, in root on S. side of 18-in. oak tree; copper nail and washer-----

441. 38

Keenesville, 1.5 mi. S. and 0.4 mi. W. from, near S. cor. secs. 32 and 33, T. 1 S., R. 5 E., 20 ft. S. of T-rd. N., in root on SE. side of 30-in. oak tree; copper nail and washer-----

438. 38

Keenesville, 1.5 mi. S. and 1.4 mi. W. from, 25 ft. S. and 1 ft. E. from center line of rd. and N.-S. fence at cor. secs. 5, 6, 31, and 32, Tps. 1 and 2 S., R. 5 E., 4 ft. S. of corner fence post, in concrete post; standard tablet stamped "T T 30 C 1939"-----	Feet 429. 014
Keenesville, 1.5 mi. S. and 2.4 mi. W. from, near cor. secs. 1, 6, 31, and 36, Tps. 1 and 2 S., Rs. 4 and 5 E., 190 ft. N. and 7 ft. E. from junction of old T-rd. E., 2 ft. N. of SE. corner of concrete bridge, at inside edge; chiseled square-----	424. 00
Keenesville, 1.7 mi. S. and 3.6 mi. W. from, 0.7 mi. S. and 2.0 mi. E. from Pigeon, about 0.25 mi. S. and 0.25 mi. W. from NE. cor. sec. 2, T. 2 S., R. 4 E., about 250 ft. N. and 300 ft. E. from center of overpass crossing I. C. R. R., on E. side of rd., in root on W. side of 24-in. hickory tree; copper nail and washer-----	476. 62
Pigeon, 1.0 mi. S. and 1.0 mi. E. from, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 3, T. 2 S., R. 4 E., 30 ft. N. and 40 ft. W. from junction of rd. N., opposite church, in root on S. side of 24-in. oak tree; copper nail and washer-----	497. 28

[Continued in Mount Vernon quadrangle, line 8]

7. From point about 0.5 mile south of Helm along roads south and west to point 1 mile south and 0.2 mile west from Hickory Hill (by W. C. Elledge in 1939)

[Continued from Xenia quadrangle, line 4]

Hickory Hill, 1.0 mi. E. of, near quarter corner between secs. 26 and 35, T. 1 N., R. 4 E., 20 ft. W. of E. end of steel bridge over Skillet Fork, on N. curb of flooring; chiseled square-----	443. 03
Hickory Hill, 0.5 mi. E. of, near cor. secs. 26, 27, 34, and 35, T. 1 N., R. 4 E., 17 ft. N. and 4 ft. W. from center line of rd. in line with N.-S. fence, in SE. corner of garden, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	502. 426
Hickory Hill, 0.5 mi. S. of, near center of sec. 34, T. 1 N., R. 4 E., 57 ft. E. of rd., 8 ft. S. of private drive E., in root on NW. side of 12-in. oak tree; copper nail and washer-----	496. 15

[Connects with line 7 in Mount Vernon quadrangle]

8. From road junction 1.7 miles north and 1 mile east from Wayne City along highways west and south to Wayne City (by W. C. Elledge in 1939; leveled twice)

Wayne City, 1.7 mi. N. thence 0.2 mi. E. from, near quarter corner between secs. 6 and 7, T. 2 S., R. 6 E., on S. side of State Highway 15, 3 ft. S. and 7 ft. W. from NE. corner of yard, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	415. 852
Wayne City, 1.3 mi. N. of, at steel bridge over Skillet Fork, on N. end of NW. wing wall; chiseled square-----	411. 84
Wayne City, 300 ft. E. of Southern Railway sta., 20 ft. N. of N. rail of track, 6 ft. S. of State Highway 15 at junction of State Highway 142-A, 2 ft. W. of sidewalk, 3 ft. SE. of telephone pole; U. S. C. & G. S. and State Survey standard disk (recovered by U. S. C. & G. S. in 1935)-----	440. 613
U. S. C. & G. S. standard disk stamped "V 108 1935"-----	436. 912
9. From crossroads 0.8 mile north of Sims south along road to Sims (by W. C. Elledge in 1939; leveled twice)	
U. S. C. & G. S. standard disk stamped "T 108 1935"-----	415. 255

WEST FRANKFORT QUADRANGLE

[Latitude 37°45'–38°00'; longitude 88°45'–89°00']

FRANKLIN AND WILLIAMSON COUNTIES

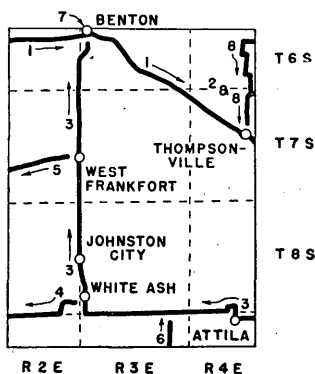


FIGURE 85.—Lines of leveling in West Frankfort quadrangle.

1. From point 3 miles northeast of Christopher east and southeast along Illinois Central Railroad to point 0.6 mile southeast of Thompsonville (by T. A. Green in 1906; first-order leveling)

[Continued from Herrin quadrangle, line 1]

Benton, 0.3 mi. S. thence 1.7 mi. W. from Franklin County courthouse, 150 ft. SE. of rd. crossing, at NW. corner of house occupied by W. M. Wolf; standard iron post with bronze cap stamped "1906 438" and designated "G ₁ "	Feet 438.579
Benton, just S. of W. entrance to courthouse, in stone step; aluminum tablet stamped "1906 474" and designated "H ₁ " (recovered in 1924)	475.248
Benton, 2.6 mi. SE. of, 2.9 mi. NW. of Smothersville, 90 ft. N. of mile-post "East St. Louis-92; Eldorado-29," 5 ft. N. of fence, in field; standard iron post with bronze cap stamped "1906 405" and designated "I ₁ "	406.023
Smothersville, 260 ft. SE. of rd. crossing, on N. side at NW. corner of store and post office kept by M. M. Moore; standard iron post with bronze cap stamped "1906 479" and designated "J ₁ "	479.415
Parrish, 196 ft. NW. of sta., 200 ft. NE. of rd. crossing, on W. side at SW. corner of Brown & Moore store; standard iron post with bronze cap stamped "1906 438" and designated "K ₁ " (reported destroyed)	438.920
Thompsonville, 600 ft. S. of rd. crossing, 100 ft. E. of brick schoolhouse, 60 ft. W. of rd.; standard iron post with bronze cap stamped "Prim Trav Sta No 4 1906 494" and designated "L ₁ " (recovered in 1939) ⁸⁰	494.822

[Continued in Galatia quadrangle, line 1]

⁸⁰ The top of this post was reported battered, but its elevation is believed not to have been disturbed.

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2. From point 2 miles north and 0.5 mile east from Thompsonville along roads southwest 0.2 mile, thence north 0.5 mile, thence alternately south and west to Thompsonville (by F. C. Higley in 1906)

[Continued from Galatia quadrangle, line 2]

Thompsonville, 3.0 mi. N. and 0.4 mi. E. from, near S $\frac{1}{4}$ cor. sec. 34, T. 6 S., R. 4 E., 30 ft. W. of rd., 2 ft. N. of township line, in field of Akin Plaster; standard iron post with bronze cap stamped "1906 459"-----	Feet 459. 916
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3. From point 1.1 miles east of Attila generally west along roads to point 0.9 mile south of White Ash, thence north along road and Chicago & Eastern Illinois Railway to Benton (by F. C. Higley in 1906)

[Continued from Galatia quadrangle, line 4]

Attila, in front of two-story brick church; standard iron post with bronze cap stamped "1906 558"-----	557. 330
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Attila, 0.4 mi. N. and 2.2 mi. W. from, 2.0 mi. E. of Pittsburg, 0.3 mi. E. of SW. cor. sec. 31, T. 8 S., R. 4 E., 58 ft. N. of R. R. track; standard iron post with bronze cap stamped "1906 467"-----	466. 526
---	----------

Burksville, 2.7 mi. W. of 2.4 mi. E. of Madonnville, at Rock School, standard iron post with bronze cap stamped "1906 464" (recovered in 1911)-----	463. 808
---	----------

Pittsburg, 2.8 mi. W. of, 0.9 mi. S. thence 1.3 mi. E. from White Ash, 0.5 mi. N. and 1.0 mi. E. from Spillertown, near N $\frac{1}{4}$ cor. sec. 5, T. 9 S., R. 3 E., between Marion & Johnston City R. R. right-of-way and township-line rd.; standard iron post with bronze cap stamped "1906 477"-----	476. 934
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White Ash, 60 ft. S. of intersection of C. & E. I. Ry. switch and rd.; standard iron post with bronze cap stamped "1906 449" (recovered in 1907)-----	448. 411
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Johnston City, 1.3 mi. N. of, 0.3 mi. N. of SE. cor. sec. 12, T. 8 S., R. 2 E., in NW. angle of crossing; standard iron post with bronze cap stamped "1906 459"-----	459. 155
--	----------

Johnston City, 2.9 mi. N. of, 1.7 mi. S. of West Frankfort, 0.8 mi. N. of Franklin-Williamson county line, 0.3 mi. S. of NW. cor. sec. 31, T. 7 S., R. 3 E., 55 ft. E. of track, on S. side of rd.; standard iron post with bronze cap stamped "1906 439"-----	438. 981
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West Frankfort, directly N. of sta., across rd., 25 ft. N. of N. sidewalk, between R. R. right-of-way and store wall; standard iron post with bronze cap stamped "1906 408" (recovered in 1907)-----	407. 403
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West Frankfort, near N. limits of, 0.2 mi. S. of R. R. coal chutes, in SW. angle of turn W. in rd.; standard iron post with bronze cap stamped "1906 396"-----	395. 468
--	----------

West Frankfort, 3.6 mi. N. of, 3.3 mi. SW. of Benton, near NW. cor. sec. 6, T. 7 S., R. 3 E., in SE. angle of rd. crossing; standard iron post with bronze cap stamped "1906 411"-----	410. 468
--	----------

4. From White Ash alternately west and south along railroads to point 1.4 miles east of Fordville (by Henry Bücher in 1907)

White Ash, 0.9 mi. S. and 2.1 mi. W. from, 0.2 mi. E. of SW. cor. sec. 35, T. 8 S., R. 2 E., on N. side of Coal Belt Electric Ry., 270 ft. W. of curve at junction with Missouri Pacific R. R. extension to Carterville District Mine, 9 ft. S. of fence, 8 ft. W. of trolley pole; standard iron post with bronze cap stamped "471 Adj"-----	471. 130
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[Continued in Herrin quadrangle, line 2]

5. From West Frankfort west and southwest along road to point 1.1 miles southeast of Plumfield (by Henry Bücher in 1907)

West Frankfort, 2.8 mi. W. of, about 600 ft. N. of S $\frac{1}{4}$ cor. sec. 22, T. 7 S., R. 2 E., in SW. angle of crossroads, 40 ft. W. of fence corner, 30 ft. E. of 36-in. white-oak tree, 8 ft. N. of fence; standard iron post with bronze cap stamped "396 Adj"----- Feet
395.473

[Continued in Herrin quadrangle, line 3]

6. From point 5 miles east and 1.3 miles north from Marion along roads north and west to Pittsburg (by R. G. Clinite in 1911)

[Continued from Marion quadrangle, line 1]

Pittsburg, 0.7 mi. E. thence 0.6 mi. S. from, near quarter corner between secs. 1 and 2, T. 9 S., R. 3 E., at wooden bridge over Craborchard Creek, in W. center of floor; copper nail----- 453.12

7. South along streets in Benton (by F. D. Kramer in 1924)

[Continued from Ina quadrangle, line 2]

Benton, on W. side of courthouse grounds, 4 ft. N. of sidewalk, in concrete post; standard tablet stamped "7 K 1924" (recovered by U. S. C. & G. S. in 1935)----- 474.924

Reference mark, 85 ft. S.89°E. from tablet, on S. side of courthouse grounds, 23 ft. E. of SW. corner of concrete retaining wall, on top of wall; chiseled square----- 475.50

8. From point 0.2 mile west of Akin along roads generally west and south to Thompsonville (by W. C. Elledge in 1939; leveled twice)

[Connects with line 6 in Galatia quadrangle]

Akin, 0.8 mi. W. of, near quarter corner between secs. 21 and 22, T. 6 S., R. 4 E., 200 ft. N. and 40 ft. W. from crossroads, in root on E. side of 30-in. oak tree; copper nail and washer----- 481.09

Akin, 0.8 mi. S. and 0.5 mi. W. from, about 4 mi. in air line N. of Thompsonville, near center of W $\frac{1}{2}$ sec. 27, T. 6 S., R. 4 E., at NW. corner of steel bridge, on curb rail; chiseled square----- 455.13

Thompsonville, 0.3 mi. E. and 3.0 mi. N. from, in SW $\frac{1}{4}$ sec. 34, T. 6 S., R. 4 E., on NE. wing wall of large concrete bridge over creek; standard tablet stamped "33 E 1939"----- 442.643

Thompsonville, 1.5 mi. N. of, 0.25 mi. E. of SW. cor. sec. 3, T. 7 S., R. 4 E., 20 ft. N. and 40 ft. E. from crossroads, at highway right-of-way post; top of post----- 500.52

Thompsonville, 0.5 mi. N. of, 0.25 mi. E. of NW. cor. sec. 15, T. 7 S., R. 4 E., 350 ft. S. of T-rd. E., on E. head wall of concrete culvert; chiseled square----- 478.93

WEST ST. LOUIS QUADRANGLE

[Latitude 38°30'–38°45' ; longitude 90°15'–90°30']

MONROE AND ST. CLAIR COUNTIES

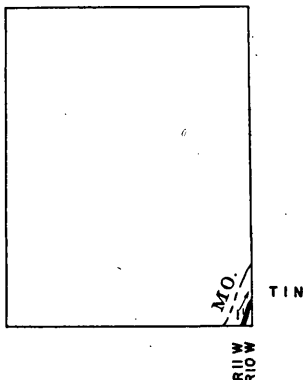


FIGURE 86.—Lines of leveling in West St. Louis quadrangle.

1. From point near Riverview School northeast along road to point 0.8 mile southwest of Vulcan (by E. W. Gouchenour in 1929)

[Continued from Kimmswick quadrangle, line 3]

Riverview School, 1.2 mi. NE. of, 1.1 mi. SW. of Vulcan, 0.2 mi. NE. of Monroe-St. Clair county line, on E. side of rd., in root on W. side of large hackberry tree; copper nail and washer-----

Feet
408.64

[Continued in East St. Louis quadrangle, line 4]

XENIA QUADRANGLE

[Latitude 38°39'–38°45'; longitude 88°30'–88°45']

CLAY, MARION, AND WAYNE COUNTIES

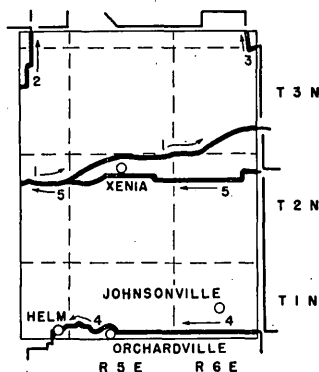


FIGURE 87.—Lines of leveling in Xenia quadrangle.

1. From point 1 mile north and 2.2 miles east from Iuka northeast along Lincoln Trail to Flora (by H. P. Kilby in 1921)

[Continued from Salem quadrangle, line 1]

Iuka, 1.0 mi. N. thence 3.0 mi. E. from, 0.7 mi. N. thence 6.1 mi. SW. from Xenia, about 800 ft. W. of center of E. side NE¼ sec. 10, T. 2 N., R. 4 E., at T-rd. N., 50 ft. S. of rd., in SW. angle of rd. to barn; standard iron post with bronze cap stamped "1921 475"-----	Feet 474.109
Xenia, 0.7 mi. N. thence 5.1 mi. SW. from, near center of sec. 11, T. 2 N., R. 4 E., at United Brethren Church, on third concrete step; chiseled square (recovered in 1939)-----	509.59
Xenia, 0.7 mi. N. thence 4.0 mi. SW. from, 0.25 mi. W. of E¼ cor. sec. 12, T. 2 N., R. 4 E., in SE. angle of junction of rd. to Greendale, in base of 15-in. tree; copper nail-----	517.54
Xenia, 0.7 mi. N. thence 3.0 mi. SW. from, near quarter corner between secs. 6 and 7, T. 2 N., R. 5 E., in SE. angle of crossroads, 50 ft. S. of rd., in fence corner; standard iron post with bronze cap stamped "1921 530" (recovered in 1939)-----	529.008
Reference mark, 17 ft. N. of iron post, on concrete culvert; chiseled square-----	528.59
Xenia, 0.7 mi. N. thence 2.0 mi. SW. from, near center of sec. 5, T. 2 N., R. 5 E., in NE. angle of crossroads, in root of 30-in. poplar tree; copper nail-----	542.83
Xenia, 0.7 mi. N. thence 1.0 mi. SW. from, near center of NW¼ sec. 4, T. 2 N., R. 5 E., at summit of hill, 50 ft. S. of rd., opposite white house, in root of 15-in. maple tree; copper nail-----	581.15

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Xenia, 0.7 mi. N. of, near center of NW $\frac{1}{4}$ sec. 3, T. 2 N., R. 5 E., in NW. angle of crossroads, 20 ft. N. of rd., in fence line; standard iron post with bronze cap stamped "1921 572" ⁸¹ (recovered in 1939)-----	<i>Feet</i> 573. 677
Reference mark, 110 ft. E. of iron post, in base of 30-in. maple tree; copper nail-----	569. 77
Xenia, 0.7 mi. N. thence 1.0 mi. E. from, 0.25 mi. S. of NW. cor. sec. 2, T. 2 N., R. 5 E., opposite T-rd. N., in base of 10-in. thorn tree; copper nail-----	517. 30
Xenia, 0.7 mi. N. thence 2.0 mi. E. from, 0.25 mi. S. of NW. cor. sec. 1, T. 2 N., R. 5 E., 300 ft. E. of crossroads, 10 ft. W. of fence corner and gate, in root of 40-in. poplar tree; copper nail-----	524. 82
Xenia, 0.7 mi. N. thence 3.0 mi. NE. from, 5.7 mi. SW. of Flora, near NE. cor. sec. 1, T. 2 N., R. 5 E., near sharp angle in rd. and T-rd. N., 10 ft. S. of rd.; standard iron post with bronze cap stamped "1921 529" ⁸² -----	527. 314
Flora, 4.7 mi. SW. of, 0.25 mi. W. of NE. cor. sec. 6, T. 2 N., R. 6 E., at T-rd. S., on E. end of concrete culvert; chiseled square-----	501. 75
Flora, 3.7 mi. SW. of, in SE $\frac{1}{4}$ sec. 32, T. 3 N., R. 6 E., at S. end of steel girder bridge over Raccoon Creek, on E. abutment; chiseled square-----	461. 75
Flora, 2.7 mi. SW. of, on E. line near NE. cor. sec. 33, T. 3 N., R. 6 E., at S. entrance to Lincoln District School No. 30, in top of concrete step; aluminum tablet stamped "1921 503"-----	501. 892
Reference mark, 180 ft. S.50°W. from tablet, at church, on concrete step; chiseled square-----	501. 52
Flora, 1.7 mi. SW. of, on E. line about 0.25 mi. N. of SE. cor. sec. 27, T. 3 N., R. 6 E., at T-rd. N., on W. end of galvanized iron pipe; chiseled cross-----	494. 80

[Continued in Cisne quadrangle, line 1]

2. From point 1.7 miles east of Omega along roads alternately east and north 3.7 miles to point 1.5 miles south and 6 miles east from Kinmundy (by S. R. Archer in 1928)

[Continued from Salem quadrangle, line 4]

Omega, 2.5 mi. E. of, 0.25 mi. S. of N $\frac{1}{4}$ cor. sec. 15, T. 3 N., R. 4 E., on E. side of rd., 10 ft. N. of center line of T-rd. W., in concrete post; standard tablet stamped "77 S 1928"-----	528. 281
Reference mark, 30 ft. S. of tablet, 20 ft. S. and 20 ft. E. from rd. junction, in root on N. side of 12-in. hickory tree; copper nail and washer-----	525. 33
Omega, 2.5 mi. E. thence 0.8 mi. N. from, near center of sec. 10, T. 3 N., R. 4 E., on E. side of rd., in fence corner, in root 6 in. underground on E. side of 5-in. oak tree; copper nail and washer-----	530. 97
T. 3 N., R. 4 E., 0.25 mi. W. of cor. secs. 2, 3, 10, and 11, 40 ft. S. and 150 ft. W. from junction of T-rd. N., at NE. corner of yard of farmhouse, in root on N. side of 24-in. oak tree; copper nail and washer-----	538. 19

⁸¹ In 1924 this bench mark was moved 10 ft. north of this position and reset at an elevation 2.817 ft. higher than that originally determined. The figures given represent the new elevation.

⁸² In 1924 this bench mark was moved 30 ft. southwest of this position and reset at an elevation 0.820 ft. lower than that originally determined. The figures given represent the new elevation.

T. 3 N., R. 4 E., 0.25 mi. E. of center of sec. 3, 90 ft. E. of crossroads, on S. side of rd. E., in root on NW. side of 5-in. oak tree; copper nail and washer-----	<i>Feet</i> 544. 91
T. 3 N., R. 4 E., 0.25 mi. W. of NE. cor sec. 3, in SW. angle of junction of T-rd. W., in yard of farmhouse, in root on N. side of 10-in. catalpa tree; copper nail and washer-----	568. 12

[Continued in Edgewood quadrangle, line 1]

3. From point 4.5 miles north and 0.3 mile west from Flora southwest 0.2 mile, thence north along Baltimore & Ohio Railroad (by D. W. Querfeld in 1934; double-rodged line)

[Continued from Cisne quadrangle, line 2]

Louisville, 2.4 mi. S. of, at sta. 4167+2, about 300 ft. S. of point where R. R. crosses line between secs. 2 and 35, Tps. 3 and 4 N., R. 6 E., on S. end of E. head wall of 48-in. cast-iron pipe culvert; chiseled square (B. & O. R. R. B. M. 114)-----	463. 34
--	---------

[Continued in Edgewood quadrangle, line 4]

4. From point 1 mile south and 2.1 miles east from Johnsonville generally west along roads by way of Orchardville to point near Helm, thence south about 0.5 mile (by W. C. Elledge in 1939)

[Connects with line 7 in Cisne quadrangle]

Johnsonville, 1.0 mi. S. thence 1.5 mi. E. from, near cor. secs. 22, 23, 26, and 27, T. 1 N., R. 6 E., 17 ft. N. and 25 ft. E. from crossroads, in root on SE. side of 12-in. oak tree; copper nail and washer-----	496. 92
Johnsonville, 1.0 mi. S. thence 0.4 mi. E. from, near SE. cor. sec. 21, T. 1 N., R. 6 E., about 500 ft. W. of crossroads, on N. side of rd., at summit of hill, directly opposite house, 3 ft. N. and 22 ft. E. from center of gate, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	500. 220
Johnsonville, 1.0 mi. S. thence 0.5 mi. W. from, near NW. cor. sec. 28, T. 1 N., R. 6 E., 21 ft. S. and 21 ft. E. from junction of T-rd. N., in concrete post; standard tablet stamped "T T 37 C 1939"-----	515. 147
Johnsonville, 1.0 mi. S. thence 1.0 mi. W. from, near quarter corner between secs. 20 and 29, T. 1 N., R. 6 E., 40 ft. N. and 10 ft. E. from junction of T-rd. N., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	515. 017
Johnsonville, 1.0 mi. S. thence 2.3 mi. W. from, 3.8 mi. E. of Orchardville, 0.25 mi. E. of W. cor. secs. 19 and 30, T. 1 N., R. 6 E., 25 ft. N. and 250 ft. W. from junction of T-rd. N., at Wesley Chapel, in SW. corner of yard, 1 ft. N. and 3 ft. E. from corner fence post, in concrete post; U. S. C. & G. S. and State Survey standard disk--	501. 638
Orchardville, 3.5 mi. E. of, near E. cor. secs. 24 and 25, T. 1 N., R. 5 E., 25 ft. S. and 370 ft. W. from junction of T-rd. W., 1 ft. N. of fence, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	507. 304
Orchardville, 2.5 mi. E. of, near SE. cor. sec. 23, T. 1 N., R. 5 E., 25 ft. N. and 45 ft. W. from crossroads, 24 ft. W. of corner fence post, in concrete post; standard tablet stamped "T T 38 C 1939"--	481. 152
Brush Creek, center of steel bridge over-----	432. 7
Orchardville, 1.7 mi. E. of, 0.2 mi. E. of SE. cor. sec. 22, T. 1 N., R. 5 E., at summit of hill, on N. side of rd., 5 ft. S. and 50 ft. E. from center of yard gate, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	459. 050

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Orchardville, 0.5 mi. E. of, near NW. cor. sec. 27, T. 1 N., R. 5 E., 30 ft. S. and 135 ft. E. from crossroads, in root on SW. side of 15-in. oak tree; copper nail and washer-----	<i>Feet</i> 471.66
Orchardville, 0.5 mi. W. of, on line between secs. 20 and 21, T. 1 N., R. 5 E., 22 ft. S. and 50 ft. E. from junction of T-rd. S., 32 ft. E. of corner fence post, in concrete post; standard tablet stamped "T T 39 C 1939"-----	491.000
Orchardville, 0.5 mi. W. of, on line between secs. 20 and 21, T. 1 N., R. 5 E., 45 ft. S. and 25 ft. W. from junction of T-rd. S., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	490.887
Orchardville, 2.0 mi. NW. of, 0.3 mi. N. and 1.7 mi. E. from Helm, near S¼ cor. sec. 20, T. 1 N., R. 5 E., 24 ft. N. and 12 ft. E. from junction of T-rd. N., in root on S. side of 30-in. oak tree; copper nail and washer-----	509.48
Helm, 0.3 mi. N. and 0.7 mi. E. from, near W¼ cor. sec. 19, T. 1 N., R. 5 E., 40 ft. N. and 80 ft. E. from junction of T-rd. S., in root on SW. side of 10-in. hickory tree; copper nail and washer-----	495.25
Helm, 0.2 mi. S. and 0.1 mi. W. from, in SW¼ sec 24, T. 1 N., R. 4 E., at W. end of fill of pass over I. C. R. R., on N. side of rd., 2 ft. S. and 2 ft. E. from SE. corner of barnyard, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	492.531
Helm, 0.25 mi. S. and 0.3 mi. W. from, on line between secs. 24 and 25, T. 1 N., R. 4 E., 27 ft. S. and 175 ft. W. from intersection of rd. tangents N. and W., in concrete post; U. S. C. & G. S. and State Survey standard disk-----	489.150

[Continued in Wayne City quadrangle, line 7]

5. From point 2.2 miles south and 0.4 mile west from Flora generally
west along roads by way of Xenia to point 1 mile north and 2.2
miles east from Iuka (by W. C. Elledge in 1939)

[Continued from Cisne quadrangle, line 10]

Flora, 2.5 mi. S. and 1.0 mi. W. from, 0.25 mi. S. of N. cor. secs. 10 and 11, T. 2 N., R. 6 E., at steel bridge over Raccoon Creek, on NE. wing wall; chiseled square-----	442.20
Flora, 2.7 mi. S. and 2.1 mi. W. from, 0.5 mi. S. and 5.7 mi. E. from Xenia, 230 ft. W. of E¼ cor. sec. 9, T. 2 N., R. 6 E., and T-rd. S., 300 ft. E. of T-rd. N., on N. side of rd., at fence line, in root on SE. side of 36-in. oak tree; copper nail and washer-----	491.52
Xenia, 0.5 mi. S. and 5.0 mi. E. from, 0.25 mi. E. of W¼ cor. sec. 9, T. 2 N., R. 6 E., 21 ft. N. and 10 ft. W. from junction of T-rd. S., 10 ft. W. of corner fence post, in concrete post; standard tablet stamped "T T 48 C 1939"-----	492.807
Xenia, 0.5 mi. S. and 3.7 mi. E. from, near E¼ cor. sec. 7, T. 2 N., R. 6 E., in NW. angle of crossroads, at front entrance to Shiloh Church, on SE. corner of concrete platform; chiseled square-----	492.21
Xenia, 0.5 mi. S. and 2.5 mi. E. from, 0.25 mi. W. of E¼ cor. sec. 12, T. 2 N., R. 5 E., 25 ft. N. and 160 ft. W. from junction of T-rd. S., in root on S. side of 24-in. wild-cherry tree; copper nail and washer-----	526.16
Xenia, 0.5 mi. S. and 1.8 mi. E. from; near E¼ cor. sec. 11, T. 2 N., R. 5 E., 17 ft. S. and 23 ft. W. from junction of N.-S. rd., in concrete post; standard tablet stamped "T T 49 C 1939"-----	521.326

Xenia, 0.8 mi. E. of, about 0.2 mi. E. of center of N $\frac{1}{2}$ sec. 11, T. 2 N., R. 5 E., on S. side of rd., at NE. corner of farmyard, in root on NE. side of 12-in. persimmon tree; copper nail and washer-----	<i>Feet</i> 520.63
Xenia, 15 ft. N. and 45 ft. W. from center of first street W. of sta. crossing main track of B. & O. R. R., in concrete post; U. S. C. & G. S. and State Survey standard disk stamped "T T 1 5 1934"-----	544.813
Xenia, 0.3 mi. S. and 0.8 mi. W. from, in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 2 N., R. 5 E., 12 ft. N. and 15 ft. W. from point of intersection of rds. from E. and S., 10 ft. S. of corner fence post; standard tablet stamped "T T 50 C 1939"-----	523.431
Xenia, 0.5 mi. S. and 1.8 mi. W. from, near center of sec. 8, T. 2 N., R. 5 E., 43 ft. S. and 21 ft. E. from crossing of B. & O. R. R., 9 ft. N. and 4 ft. E. from corner fence post, in concrete post; U. S. C. & G. S. and State Survey standard disk-----	534.481
Xenia, 0.5 mi. S. and 2.8 mi. W. from, near center of sec. 7, T. 2 N., R. 5 E., 260 ft. N. of crossing of B. & O. R. R., on W. side of rd., in root on S. side of 15-in. elm tree; copper nail and washer-----	532.33
Xenia, 0.5 mi. S. and 4.0 mi. W. from, 1.0 mi. N. thence 5.2 mi. E. from Iuka, 0.25 mi. W. of E $\frac{1}{4}$ cor. sec. 12, T. 2 N., R. 4 E., on U. S. Highway 50, 20 ft. S. and 15 ft. W. from junction of T-rd. S., on W. head wall of concrete culvert; chiseled square-----	518.62
Iuka, 1.0 mi. N. thence 3.5 mi. E. from, in NW $\frac{1}{4}$ sec. 11, T. 2 N., R. 4 E., at concrete bridge over Skillet Fork, on NW. wing wall; chiseled square-----	469.98

[Connects with line 4 in Salem quadrangle]

SUPPLEMENTAL ELEVATIONS

The following table shows altitudes of well-known features in Southern Illinois, such as summits, water surfaces, and tops of rails at railroad stations, as assembled from the topographic maps and records of the Geological Survey and from other sources. These altitudes, with the exception of a few which were determined by spirit leveling along railroads, were obtained by barometric and vertical-angle measurements. The figures given are in accord with the latest information, but they are only approximate and should not be used for accurate work.

Supplemental elevations in Southern Illinois

Location	Quadrangle	County	Elevation (feet)
Albion, Southern Ry.....	Golden Gate.....	Edwards.....	461
Altamont, I. C. R. R.....	Effingham-St. Elmo.....	Effingham.....	624
Backbone△.....	Altenburg.....	Jackson.....	516
Bald Knob.....	Alto Pass.....	Union.....	1,030
Bald Knob.....	Equality.....	Saline.....	820
Beaverdam Lake.....	Gillespie.....	Macoupin.....	550
Belleville, I. C. R. R.....	Belleville.....	St. Clair.....	479
Bellmont, Southern Ry.....	Mount Carmel.....	Wabash.....	425
Benham Hill.....	Equality.....	Pope.....	820
Benton, C. & E. I. Ry.....	Ina-West Frankfort.....	Franklin.....	467
Benton, I. C. R. R.....	West Frankfort.....	Franklin.....	470
Berger△ (U. S. C. & G. S.).....	Breese.....	St. Clair.....	567
Big Flat Lake.....	Nashville.....	Clinton.....	411
Big Forked Lake.....	Nashville.....	Clinton.....	406
Big Lake.....	Shawneetown.....	Gallatin.....	322
Bissell Pond.....	Waterloo.....	Monroe.....	644
Bluford, Southern Ry.....	Mount Vernon- Wayne City.....	Jefferson.....	530
Bone Gap, I. C. R. R.....	Mount Carmel.....	Edwards.....	460
Boos, I. C. R. R.....	Newton.....	Jasper.....	517
Bording△ (U. S. C. & G. S.).....	Carlyle.....	Clinton.....	540
Bridgeport, B. & O. R. R.....	Sumner.....	Lawrence.....	446
Brighton, C. B. & Q. R. R.....	Brighton.....	Jersey-Macoupin.....	659
Browns, I. C. R. R.....	Mount Carmel.....	Edwards.....	400
Browns Hill.....	Carlyle.....	Clinton.....	550
Browns Mound.....	Belleville.....	Madison.....	593
Brownstown, I. C. R. R.....	Kinmundy.....	Fayette.....	591
Brushy Mound.....	Gillespie.....	Macoupin.....	683
Buck Knob.....	Carbondale.....	Union.....	720
Buckner, I. C. R. R.....	Herrin.....	Franklin.....	408
Burner Hill.....	Jonesboro.....	Alexander.....	640
Buzzards Point.....	Equality.....	Gallatin-Hardin.....	805
Calamus Lake.....	Okawville.....	Washington.....	395
Calhoun, I. C. R. R.....	Olney.....	Richland.....	527
Campbell, Southern Ry.....	Fairfield.....	Wayne.....	412
Canteen Lake.....	East St. Louis.....	Madison.....	403
Carrier Mills, C. C. C. & St. L. Ry.....	Harrisburg.....	Saline.....	393

Location	Quadrangle	County	Elevation (feet)
Carterville, I. C. R. R.	Herrin	Williamson	455
Centralia Reservoir	Centralia-Salem	Marion	508
Chalk Bluff	Alto Pass	Jackson	660
Chester, M. P. R. R.	Chester	Randolph	378
Chouteau Slough	East St. Louis	Madison	405
Christopher, I. C. R. R.	Herrin	Franklin	438
Cisne, B. & O. R. R.	Cisne	Wayne	459
Claremont, B. & O. R. R.	Sumner	Richland	510
Clark, M. I. R. R.	Baldwin	Randolph	409
Clarks Mound (U. S. C. & G. S.)	East St. Louis	St. Clair	678
Clay City, B. & O. R. R.	Cisne	Clay	433
Collins, M. I. R. R.	Baldwin	Randolph	406
Cora, M. P. R. R.	Campbell Hill	Jackson	373
Cordes, M. I. R. R.	Nashville	Washington	508
Coulterville, I. C. R. R.	Coulterville	Randolph	544
Crainville, I. C. R. R.	Carbondale-Herrin	Williamson	473
Creal Springs, I. C. R. R.	Marion	Williamson	506
Crooked Lake	East St. Louis	St. Clair	415
Dago Hill	Jonesboro	Alexander	820
Danley Junction, M. P. R. R.	Renault	Randolph	392
Denny, I. C. R. R.	Pinckneyville	Perry	431
Dieterich, I. C. R. R.	Teutopolis	Effingham	592
Dobrey Slough	East St. Louis	Madison	413
Downey, I. C. R. R.	Herrin	Williamson	414
Dreyer (U. S. C. & G. S.)	East St. Louis	St. Clair	699
Dug Hill	Hardin	Jersey	720
Dundas, I. C. R. R.	Newton	Richland	478
Dupo (tower), M. P. R. R.	East St. Louis	St. Clair	418
Duquoin, I. C. R. R.	Duquoin	Perry	464
Edelhardt Lake	East St. Louis	Madison	410
Edgewood, junction B. & O. & I. C. R. Rs.	Edgewood	Effingham	578
Edwardsville, Wabash Ry	Edwardsville	Madison	453
Effingham, I. C. R. R.	Effingham	Effingham	591
Eldorado, C. C. C. & St. L. Ry.	Eldorado	Saline	391
Enfield, B. & O. R. R.	Enfield	White	435
Equality, L. & N. R. R.	Equality	Gallatin	362
Evansville, M. I. R. R.	Baldwin	Randolph	414
Fairfield, B. & O. R. R.	Fairfield	Wayne	448
Fairfield, Southern Ry	Fairfield	Wayne	433
Fikes Hill	Centralia	Marion	585
Fish Lake	Shawneetown	Gallatin	327
Flinton, M. P. R. R.	Renault	Randolph	383
Flora, B. & O. R. R.	Cisne	Clay	496
Fort Gage, M. P. R. R.	Chester	Randolph	380
Fountain, M. P. R. R.	Kimmswick	Monroe	411
Fox Hill	East St. Louis	Madison	610
Freeburg, I. C. R. R.	New Athens	St. Clair	515
Fults, M. P. R. R.	Renault	Monroe	394
Galatia, I. C. R. R.	Galatia	Saline	401
Golden Gate, Southern Ry	Golden Gate	Wayne	392
Gorham, M. P. R. R.	Alto Pass	Jackson	365
Gossett, C. C. C. & St. L. Ry.	Eldorado	White	414
Grammer Hill	Duquoin	Franklin	572
Grantsburg, I. C. R. R.	Brownfield	Johnson	360
Grassy Knob	Alto Pass	Jackson	840
Grassy Lake	Alton	Madison	425
Grayson, L. & N. R. R.	Eldorado	Saline	407
Greenup, I. C. R. R.	Rose Hill	Cumberland	554

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Location	Quadrangle	County	Elevation (feet)
Hamburg Hill	Jonesboro	Union	760
Harrisburg, C. C. C. & St. L. Ry	Harrisburg	Saline	368
Haubers Hill	New Athens	St. Clair	530
Hidalgo, I. C. R. R.	Rose Hill	Jasper	583
High Knob	Equality	Gallatin	920
Hookdale, C. B. & Q. R. R.	Mulberry Grove	Bond	514
Horseshoe Bluff	Alto Pass	Jackson	740
Horseshoe Lake	East St. Louis	Madison	404
Horton Hill	Equality	Saline	990
Hoyleton, M. I. R. R.	Nashville	Washington	523
Huegely, M. I. R. R.	Nashville	Washington	496
Indian Mound	Thebes	Alexander	340
Iola, B. & O. R. R.	Edgewood	Clay	524
Jims Hill	Carbondale	Union	680
Jones Ridge, M. P. R. R.	Campbell Hill	Jackson	369
Julien Hill	Golconda	Pope	640
Junction, L. & N. R. R.	Shawneetown	Gallatin	357
Kaskaskia	Chester	Randolph	374
Keenes, Southern Ry	Wayne City	Wayne	454
Kemper, C. B. & Q. R. R.	Brighton	Jersey	549
Kempside, M. I. R. R.	Nashville	Washington	534
Keyesport, C. B. & Q. R. R.	Carlyle	Clinton	453
King Hill	Sumner	Lawrence	641
Klondike Mine	Edwardsville	Madison	582
Lake Christine	Belleville	St. Clair	516
Lawrenceville, B. & O. R. R.	Vincennes	Lawrence	444
Lenzburg, I. C. R. R.	New Athens	St. Clair	445
Lis, I. C. R. R.	Teutopolis	Jasper	564
Litchfield, Wabash Ry	Mount Olive	Montague	692
Louis, B. & O. R. R.	Edgewood	Clay	479
McClure, M. P. R. R.	Jonesboro	Alexander	344
McDonough Lake	East St. Louis	Madison	412
McKinley, M. I. R. R.	Coulterville	Washington	554
Maeystown Sta., M. P. R. R.	Crystal City	Monroe	407
Maher Hill	Equality	Gallatin	620
Marion, I. C. R. R.	Marion	Williamson	440
Marion Reservoir	Marion	Williamson	441
Marissa, I. C. R. R.	Baldwin-Coulterville	St. Clair	467
Mason, I. C. R. R.	Edgewood	Effingham	582
Medora, C. B. & Q. R. R.	Brighton	Macoupin	611
Melcher Hills	Golconda	Hardin	690
Menard, M. P. R. R.	Chester	Randolph	378
Meyers Lake	Brighton	Macoupin	519
Mill Shoals, B. & O. R. R.	Enfield-Fairfield	White	383
Mitchell, Wabash Ry	Alton	Madison	429
Monks Mound	East St. Louis	Madison	519
Moores Hill	Duquoin	Franklin	540
Mount Carmel, Southern Ry	Mount Carmel	Wabash	403
Mulkeytown, I. C. R. R.	Herrin	Franklin	424
Murray Bluff	Harrisburg	Saline	565
Neudeckers Mtn	Edwardsville	Madison	564
New Athens, I. C. R. R.	New Athens	St. Clair	405
New Burnside, C. C. C. & St. L. Ry	Marion	Johnson	559
New Denison, I. C. R. R.	Marion	Williamson	432
Newton, I. C. R. R.	Newton	Jasper	508
Noble, B. & O. R. R.	Olney	Richland	478

Location	Quadrangle	County	Elevation (feet)
Norris City, B. & O. R. R.	Eldorado	White	423
Norris City, C. C. C. & St. L. Ry.	Eldorado	White	430
Oakdale, M. I. R. R.	Nashville-Okawville	Washington	523
Oblong, I. C. R. R.	Hardinville	Crawford	525
Olney, B. & O. R. R.	Olney	Richland	479*
Olney, I. C. R. R.	Olney	Richland	472
Olney, intersection of B. & O. and I. C. R. Rs.	Olney	Richland	477
Ozark, I. C. R. R.	Marion	Johnson	669
Parkersburg, I. C. R. R.	Olney	Richland	484
Parrish, I. C. R. R.	West Frankfort	Franklin	438
Pautler, M. I. R. R.	Baldwin	Randolph	513
Pelican Pouch	Carlyle	Clinton	590
Piasa, C. B. & Q. R. R.	Brighton	Macoupin	606
Pine Knob	Jonesboro	Union	725
Pinckneyville, I. C. R. R.	Pinckneyville	Perry	447
Plummer Hill	Hardin	Calhoun	800
Poag, Wabash Ry.	Alton	Madison	437
Point Lookout	New Athens	St. Clair	480
Potato Hill	Equality	Pope	910
Potato Hill	Kimmswick	Monroe	720
Pounds, The	Equality	Gallatin	660
Prairie du Rocher, M. P. R. R.	Renault	Randolph	392
Prairie Lake	East St. Louis	St. Clair	396
Raddle (tower)	Campbell Hill	Jackson	368
Raleigh, I. C. R. R.	Galatia	Saline	407
Reevesville, I. C. R. R.	Brownfield	Johnson	350
Reily Lake, M. P. R. R.	Chester	Randolph	382
Renault, M. P. R. R.	Renault	Monroe	392
Reno, C. B. & Q. R. R.	New Douglas	Bond	582
Reynoldsville, M. P. R. R.	Jonesboro	Union	345
Rifle, B. & O. R. R.	Edgewood	Clay	501
Rileyville, I. C. R. R.	Galatia	Saline	398
Rinard, B. & O. R. R.	Cisne	Wayne	458
Robinson, I. C. R. R.	Merom	Crawford	537
Rock Point, M. I. R. R.	Baldwin	Randolph	387
Rockwood, M. P. R. R.	Campbell Hill	Randolph	373
Rose Hill, I. C. R. R.	Rose Hill	Jasper	567
Round Knob	Paducah	Massac	504
Round Knob, I. C. R. R.	Paducah	Massac	359
Round Lake	Brighton	Greene	471
St. Elmo, I. C. R. R.	St. Elmo	Fayette	620
Sand Hill	Harrisburg	Pope	570
Sand Ridge, I. C. R. R.	Alto Pass	Jackson	368
Schuline, M. I. R. R.	Baldwin	Randolph	550
Scott Field	Belleville	St. Clair	438
Shanks Hill	Jerseyville	Greene	600
Shawneetown, L. & N. R. R.	Shawneetown	Gallatin	350
Shumway, Wabash Ry.	Effingham	Effingham	656
Simpson, I. C. R. R.	Brownfield-Vienna	Johnson	384
Sims, Southern Ry.	Wayne City	Wayne	424
Smith Lake	Alton	Madison	429
Smothersville, I. C. R. R.	West Frankfort	Franklin	481
Sorento, C. B. & Q. R. R.	Mount Olive-New Douglas	Bond	588
Spankey Hill	Hardin	Greene	700
Sparta, M. I. R. R.	Coulterville	Randolph	517
Sparta, M. & O. R. R.	Coulterville	Randolph	540

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Location	Quadrangle	County	Elevation (feet)
Springer, B. & O. R. R.	Enfield	White	384
Spring Lake	East St. Louis	St. Clair	410
Stonefort, C. C. C. & St. L. Ry.	Harrisburg	Saline-Williamson	410
Sugar Loaf	Hardin	Calhoun	700
Sumner, B. & O. R. R.	Sumner	Lawrence	460
Swan Lake	Okawville	Washington	401
Swanwick, I. C. R. R.	Coulterville	Perry	571
Tamalco, C. B. & Q. R. R.	Mulberry Grove	Bond	480
Texas City, C. C. C. & St. L. Ry.	Eldorado	Saline	371
Thebes, M. P. R. R.	Thebes	Alexander	411
Thompson Lake	Carbondale	Jackson	441
Thompsonville, I. C. R. R.	West Frankfort	Franklin	499
Tilden, I. C. R. R.	Coulterville	Randolph	522
Tiptop Knob	Carbondale	Union	870
Turkey Hill Δ (U. S. C. & G. S.)	New Athens	St. Clair	653
Valmeyer, M. P. R. R.	Kimmswick	Monroe	401
Vandalia, I. C. R. R.	Vandalia	Fayette	506
Vick Hill	Jonesboro	Alexander	765
Walker Hill	Altenburg	Jackson	480
Walsh, M. I. R. R.	Baldwin	Randolph	479
Walshville, C. B. & Q. R. R.	Mount Olive	Montague	621
War Bluff	Golconda	Pope	705
Ware, M. P. R. R.	Jonesboro	Union	351
Warnock, M. P. R. R.	Kimmswick	Monroe	407
Watson, I. C. R. R.	Effingham	Effingham	563
Wayne City, Southern Ry.	Wayne City	Wayne	441
West Liberty, I. C. R. R.	Newton	Jasper	484
West Salem, I. C. R. R.	Olney	Edwards	500
Wheeler, I. C. R. R.	Teutopolis	Jasper	573
Willeford, I. C. R. R.	Marion	Williamson	442
Willow Hill, I. C. R. R.	Newton-Rose Hill	Jasper	494
Wilson, I. C. R. R.	Herrin	Williamson	449
Wise Ridge	Marion	Johnson	645
Witachek Mound	Hardin	Greene	720
Wolf Lake, M. P. R. R.	Alto Pass	Union	355
Worden, Wabash Ry.	Edwardsville	Madison	574

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