

ILLINOIS.

PRIMARY TRAVERSE.

Beardstown, Belvidere, Carbondale, Chandleville, Dixon, Dongola, Genoa, Harvard, Havana, Jonesboro, Kings, Kirkland, Mound City, Oregon, Rockford, Thebes, and Vermont quadrangles.

ALEXANDER, BOONE, OGLE, PULASKI, SCHUYLER, UNION, AND WINNEBAGO COUNTIES.

The primary traverse was done by J. H. Wilson in 1916 and F. W. Crisp in 1917, as indicated at the beginning of each quadrangle list.

For other positions in Illinois see United States Geological Survey Bulletins 201, 216, 245, 276, 310, 440, 496, 551, and 644, Appendix to the Eighteenth and Nineteenth Annual Reports of the Director, United States Coast and Geodetic Survey, Special Publication 30, Appendix EEE, Report of the Chief of Engineers for 1902, Mississippi River Commission Report for 1883, 1888, 1892, 1893, and 1894, and Appendix 22, House Document 50, Sixty-first Congress.

BEARDSTOWN QUADRANGLE.

Along highways near north border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fect.</i>
Road forks.....	40 14 44.8	90 24 45.1	.....
T road west, 30 feet southwest of Ezra Tannehill's mail box.....	40 14 41.5	90 22 14.8	.....
T. 3 N., R. 1 E., 15 feet south and 35 feet east of corner of secs. 11, 12, 13, and 14, at southeast corner of crossroads, 1.25 miles north of Astoria; iron post stamped "Prim. Trav. Sta. No. 10, 1916, Ill".....	40 14 48.6	90 21 18.8	4,402
T. 3 N., Rs. 1 and 2 E., corner of secs. 7, 12, 13, and 18, opposite north and south fence line, center of road.....	40 14 46.9	90 20 10.3	5,319
T. 3 N., R. 2 E., corner of secs. 7, 8, 17, and 18, T road east of Leesburg.....	40 14 46.3	90 19 03.0	.....
T. 3 N., R. 2 E., corner of secs. 8, 9, 16, and 17, bend in road.....	40 14 47.0	90 17 48.8	5,754
T road east, center of triangle.....	40 14 33.4	90 16 57.7	4,196
Crossroads, in line with road south, 170 feet north of small iron bridge.....	40 14 27.8	90 15 44.3	5,718

Magnetic declination for north border of quadrangle, 5° 44' E.

BELVIDERE QUADRANGLE.

Along highways near south border of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fect.</i>
Private road north.....	42 15 15.1	88 45 09.7	.....
T road south, on north and south section line.....	42 15 10.4	88 45 50.1	3,080
Epworth Camp, T road north.....	42 15 08.3	88 46 07.4	1,320
Iron railroad bridge over creek, center of.....	42 15 16.3	88 46 14.5	961
Do.....	42 15 16.1	88 47 39.2	6,370
Belvidere, 1.5 miles east of, railroad crossing.....	42 15 04.9	88 48 54.7	5,798
T. 44 N., Rs. 3 and 4 E., on line between secs. 31 and 36, T road south.....	42 15 00.4	88 49 18.5	1,840
Belvidere, Logan Avenue and State Street intersection.....	42 15 19.1	88 50 19.5	4,694
Belvidere, State Street crossing on Chicago & Northwestern Ry.....	42 15 24.2	88 50 24.5	640
Belvidere, Locust and State street intersection.....	42 15 26.8	88 50 27.0	320

BELVIDERE QUADRANGLE—Continued.

Along highways near south border of quadrangle—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
Belvidere, Locust and West Pleasant streets, 50 feet south by 30 feet west of intersection; iron post stamped "Prim. Trav. Sta. No. 13, 1917"	42 15 16.3	88 50 44.9	1,715
Crossroads.....	42 15 13.0	88 51 39.3	4,106
T road north.....	42 15 18.1	88 51 51.6	1,065
North and south fence, corner of secs. 27, 28, 33, and 34.....	42 15 17.5	88 52 49.6	4,360
Private road north and south.....	42 15 17.1	88 53 25.0	2,660
North and south fence.....	42 15 17.0	88 53 42.7	1,330
T road south.....	42 15 15.3	88 54 02.1	1,473
Second-class road north fording creek.....	42 15 05.5	88 54 34.3	2,615
T. 44 N., R. 3 E., on line between secs. 31 and 32, T road south.....	42 15 07.9	88 55 11.3	2,800
T road west.....	42 15 20.9	88 55 45.1	2,859
County and range line, Rs. 2 and 3 E., north and south fence.....	42 15 15.5	88 56 26.1	3,133
T. 44 N., R. 2 E., line between secs. 25 and 26, crossroads.....	42 15 14.5	88 57 18.7	3,959
T. 44 N., R. 2 E., quarter corner between secs. 26 and 35, crossroads.....	42 15 13.6	88 58 11.9	4,000
T. 44 N., R. 2 E., corner of secs. 26, 27, 34, and 35.....	42 15 13.0	88 58 47.2	2,660
T. 44 N., R. 2 E., corner of secs. 27, 28, 33, and 34, crossroads.....	42 15 12.0	88 59 57.8	5,305

Magnetic declination along south border of quadrangle, 2.5° E.

Along east border of quadrangle. (By F. W. Crisp in 1917.)

T. 44 N., R. 4 E., corner of secs. 3, 4, 9, and 10, crossroads.....	42 18 47.8	88 45 50.6	.....
Tps. 44 and 45 N., R. 4 E., corner of secs. 3, 4, 33, and 34, crossroads.....	42 19 41.0	88 45 50.4	5,390
T. 45 N., R. 4 E., quarter corner between secs. 33 and 34, T road west.....	42 20 07.0	88 45 50.7	2,630
T. 45 N., R. 4 E., corner of secs. 27, 28, 34, and 35, T road east.....	42 20 33.5	88 45 51.0	2,690
T. 45 N., R. 4 E., corner of secs. 21, 22, 27, and 28, T road south.....	42 21 25.5	88 45 51.4	5,259
T. 45 N., R. 4 E., quarter corner between secs. 22 and 27.....	42 21 25.6	88 45 15.7	2,680
T. 45 N., R. 4 E., center of quarter corner of sec. 22, T road east.....	42 21 51.5	88 45 16.0	2,620
T. 45 N., R. 4 E., quarter corner between secs. 15 and 22, T road east.....	42 22 17.5	88 45 15.7	2,640
T. 45 N., R. 4 E., in sec. 15, 20 feet north by 15 feet east of crossroads; iron post stamped "Prim. Trav. Sta. No. 14, 1917".....	42 22 24.9	88 45 15.7	746

West along highways through center of quadrangle. (By F. W. Crisp in 1917.)

Prim. Trav. Sta. No. 4 (previously described).....	42 22 24.9	88 45 16.7	.....
T. 45 N., R. 4 E., quarter corner between secs. 20 and 21.....	42 21 51.2	88 47 01.5	8,649
Crossing of north and south road and Chicago & Northwestern Ry.....	42 22 01.2	88 47 36.3	2,797
T. 45 N., R. 4 E., quarter corner between secs. 17 and 20, crossroads.....	42 22 17.4	88 47 36.2	1,640
T. 45 N., R. 4 E., corner of secs. 17, 18, 19, and 20, crossroads.....	42 22 17.4	88 48 11.0	2,610
T. 45 N., Rs. 3 and 4 E., corner of secs. 13, 24, 18, and 19, Poplar Grove.....	42 22 17.9	88 49 18.9	5,100
T. 45 N., R. 3 E., corner of secs. 13, 14, 23, and 24, T road north.....	42 22 17.2	88 50 29.5	5,300
T. 45 N., R. 3 E., quarter corner between secs. 14 and 23, crossroads.....	42 22 16.9	88 51 04.6	2,640
T. 45 N., R. 3 E., corner of secs. 14, 15, 22, and 23, T road north.....	42 22 16.5	88 51 39.9	2,650
T. 45 N., R. 3 E., quarter corner between secs. 15 and 22.....	42 22 16.2	88 52 15.1	2,640
T road north.....	42 22 16.0	88 52 32.8	1,330
Caledonia, 345 feet northeast of railroad station, at northwest corner of old store, on east side street, at sharp angle to east; iron post stamped "Prim. Trav. Sta. No. 15, 1917".....	42 22 15.2	88 53 29.2	4,234
T road to west.....	42 22 41.0	88 54 28.1	5,140
T. 45 N., R. 2 E., in sec. 13, T road east.....	42 22 39.6	88 56 52.3	10,820
T road west, on line between secs. 13 and 24.....	42 22 13.5	88 56 43.9	2,720
T. 45 N., R. 2 E., corner of secs. 13, 14, 23, and 24.....	42 22 13.0	88 57 35.8	3,900
Dim T road north.....	42 22 12.9	88 57 57.5	1,630
T. 45 N., R. 2 E., quarter corner between secs. 14 and 23, T road south.....	42 22 12.8	88 58 11.1	1,020
T. 45 N., R. 2 E., corner of secs. 14, 15, 22, and 23, private road south.....	42 22 12.6	88 58 46.3	2,650
T. 45 N., R. 2 E., in sec. 22, T road north.....	42 22 00.9	88 59 39.6	4,170
T. 45 N., R. 2 E., line between secs. 21 and 22 (fence).....	42 22 58.5	88 59 57.3	1,356

Magnetic declination in center of quadrangle, 3.2° E.

CARBONDALE QUADRANGLE.

NOTE.—An adjustment of 3" in latitude and 0.5" in longitude has been applied between the east and west boarders of this quadrangle.

East along highways near south border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
T. 12 S., R. 1 W., line between secs. 2 and 3, T road east, 40 feet north of T lane west.....	° ' "	° ' "	<i>Feet.</i>
Cache River, south end of bridge over.....	37 30 07.8	89 11 33.9	.....
Saratoga, sulphur-well pump at T road west.....	37 30 16.5	89 10 15.1	6,406
Third Principal Meridian, center of east and west road, 440 feet east of Methodist Episcopal Church.....	37 30 35.1	89 09 23.0	4,595
T. 12 S., R. 1 E., quarter corner in center of sec. 6, T road south mean of Henderson and North American datum.....	37 30 25.3	89 09 17.1	1,122
	37 30 19.2	89 08 41.5	2,934

Magnetic declination near south border of quadrangle, 5° E.

CHANDLEVILLE QUADRANGLE.

Along highways near northwest corner of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
T. 3 N., R. 2 E., in north half of sec. 13, at road forks, at south edge of road, 15 feet east of James Walraven's mail box, 35 feet southwest of walnut tree, 4,200 feet south of small iron bridge over creek; iron post stamped "Prim. Trav. Sta. No. 11, 1916, Ill.".....	° ' "	° ' "	<i>Feet.</i>
	40 14 31.2	90 14 59.8	.....

Magnetic declination for northwest corner of quadrangle, 5° 44' E.

DIXON QUADRANGLE.

Near northeast corner of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
T. 23 N., R. 11 E., near quarter corner on west side of sec. 7, 30 feet south by 30 feet east of T road east; iron post stamped "Prim. Trav. Sta. No. 8, 1917. El. 690".....	° ' "	° ' "	<i>Feet.</i>
T. 23 N., R. 10 and 11 E., crossing of range line on Chicago, Burlington & Quincy R. R., 400 feet east of Honey Creek (B. 551, p. 135).....	41 59 40.1	89 16 45.7	.....
	41 59 28.8	89 16 46.6	1,145

Magnetic declination for northeast corner of quadrangle, 4.5° E. (one observation).

DONGOLA QUADRANGLE.

NOTE.—An adjustment of approximately 3" in latitude and 1" in longitude has been applied between the east and west borders of this quadrangle because of the difference in Henderson and North American datum in which respectively positions on the east and west borders of the quadrangle are based. The correction to Henderson datum is + in latitude and - in longitude.

East along highways near north border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
Anna, 2 miles north by 1 mile west of, east side in turn in road, about 1,800 feet east and 800 feet south of quarter corner of sec. 7, T. 12 N., R. 1 W.; iron post stamped "Prim. Trav. Sta. No. 155, Ill. 1911" (approximate North American datum).....	° ' "	° ' "	<i>Feet.</i>
Mail box on fence post about 500 feet northeast of road forks.....	37 29 20.0	89 15 50.7	.....
Barring schoolhouse, northeast corner of.....	37 29 19.5	89 13 43.1	10,278
	37 29 47.1	89 12 19.7	7,271

DONGOLA QUADRANGLE—Continued.

East along highways near north border of quadrangle—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
T. 12 S., R. 1 E., 75 feet north of center of crossroads, near center of sec. 8, at southwest corner of old store building; iron post stamped "Prim. Trav. Sta. No. 1, 1916, Ill"	° ' "	° ' "	<i>Fect.</i>
Bradshaw Creek, east end of bridge over	37 29 28.7	89 07 25.4	.....
W. C. Bishop's mail box at bend in road	37 29 31.8	89 06 40.7	3,611
Road south at Newton schoolhouse, 610 feet south of road forks is corner of secs. 10, 11, 14, and 15, T. 12 S., R. 1 E. (Henderson datum)	37 29 23.7	89 05 45.3	4,541
T. 12 S., R. 1 E., center of road at line between secs. 11 and 12	37 29 00.1	89 04 48.6	5,166
Road forks, at road north on Johnson-Union county line	37 29 06.9	89 03 43.1	5,320
Elvira schoolhouse, 30 feet north of road forks; iron post stamped "Prim. Trav. Sta. No. 13, 1915 Ill"	37 29 10.4	89 02 36.9	5,340
Anna, railroad crossing, just southeast of depot, center of street-track, halfway between the two main tracks of Illinois Central R. R. (North American datum)	37 29 36.9	89 01 49.5	4,652
	37 27 36.7	89 14 49.9	.....

West along highways through center of quadrangle.

T road east (Henderson datum)	37 21 01.5	89 01 48.2	.....
T. 13 S., R. 2 E., quarter corner, west side of sec. 30, Union-Johnson county line	37 21 09.5	89 02 39.3	4,204
Cypress Creek, center of bridge over	37 21 42.4	89 04 06.3	7,775
T. 13 S., R. 1 E., line between secs. 15 and 22, center of road in line with fence east, 0.5 mile south of Friendship Church	37 22 37.7	89 05 40.4	9,442
T. 13 S., R. 1 E., quarter corner between secs. 16 and 21, at bend in road, 460 feet south of T road east	37 22 41.1	89 06 29.4	3,965
T. 13 S., R. 1 E., approximate corner of secs. 16, 17, 20, and 21, T road south at Karraker schoolhouse	37 22 40.9	89 07 02.4	2,660
Karraker schoolhouse, 0.75 mile west of, on embankment at northeast corner of T road north; iron post stamped "Prim. Trav. Sta. No. 2, 1916 Ill"	37 22 36.6	89 07 50.8	3,930
Big Creek, center of bridge over	37 22 30.5	89 08 15.6	2,080
Third Principal Meridian (approximate) center of road	37 22 08.3	89 09 24.0	5,952
Dongola, Baggott's grocery and furniture store, southwest corner of (approximate North American datum)	37 21 44.4	89 09 56.2	3,540
Road forks at roads, north, northwest, and southeast, telephone line follows road north	37 22 25.4	89 11 03.8	6,860
T road west	37 22 51.8	89 11 53.9	4,849
T. 13 S., R. 1 W., line between secs. 15 and 16, not in road	37 22 56.2	89 12 44.0	4,064
Oak tree at road forks at road south	37 22 59.2	89 13 05.0	1,726
Road west, at Chapel Church	37 23 14.0	89 13 59.4	4,639
St. John's Church, 0.3 mile west of, T road east	37 23 14.8	89 14 58.6	4,770
T road west	37 22 41.8	89 14 59.6	3,325

East along Chicago & Eastern Illinois R. R. and highways near south border of quadrangle

T. 14 S., R. 1 W., railroad crossing at east and west road probably running through center of sec. 32	37 15 15.8	89 14 24.8	.....
Railroad crossing, north and south road, west end of railroad section 154	37 15 51.8	89 13 16.1	6,619
Railroad crossing, 300 feet southwest of milepost 20 (mean of Henderson and North American datums)	37 16 28.8	89 11 55.6	7,390
Ulin, railroad crossing, Illinois Central R. R., east track, about 300 feet south of depot	37 16 34.4	89 11 06.2	4,062
T. 14 S., R. 1 W., line between secs. 25 and 26, T road west	37 16 14.0	89 10 29.8	3,594
Third Principal Meridian, west corner of secs. 19 and 30, T. 14 S., R. 1 E., lane north, roads east and south	37 16 18.1	89 09 25.1	5,242
T road west	37 16 16.2	89 07 54.4	7,320
Good Hope Church, 15 feet south of line between secs. 29 and 32, T. 14 S., R. 1 E., at southeast corner of T road east; iron post stamped "Prim. Trav. Sta. No. 7, 1916 Ill"	37 15 23.4	89 07 54.4	5,361
Crossroads	37 15 22.0	89 06 48.4	5,330
T. 14 S., R. 1 E., road west on line between secs. 28 and 33	37 15 21.2	89 06 03.5	3,620

Magnetic declination along north border of quadrangle, 5° E.; through center of quadrangle, 4° 40' E.; along south border of quadrangle, 4° 30' E.

GENOA QUADRANGLE.

South along highways near west border of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fcet.</i>
T private road to west.....	42 02 09.0	88 44 49.4	.....
Center of T roads.....	42 01 41.9	88 44 39.2	2,840
Road fork, at sign painted "DeKalb 6-1/2 M.".....	42 01 31.2	88 44 35.4	1,127
T road west.....	42 01 12.4	88 44 34.7	1,902
T. 41 N., R. 4 E., near center of sec. 26, 30 feet south and 40 feet east of crossroads, 750 feet north of Chicago Great Western R. R. tracks; iron post stamped "Prim. Trav. Sta. No. 29, 1914, Ill".....	42 00 06.7	88 44 23.6	6,701
T. 43 N., R. 4 E., on line between secs. 27 and 34, T road north.....	42 10 05.5	88 44 56.9	.....
T. 43 N., R. 4 E., quarter corner in sec. 27, T road east.....	42 10 31.6	88 44 56.9	2,650
T. 43 N., R. 4 E., on fence line between secs. 22 and 27.....	42 10 57.7	88 44 56.8	2,640
T. 43 N., R. 4 E., in sec. 22, T road east.....	42 11 10.9	88 44 56.7	1,330
T. 43 N., R. 4 E., in sec. 22, junction with road southwest.....	42 11 42.9	88 44 56.8	3,240
T. 43 N., R. 4 E., on line between secs. 15 and 22, T road east.....	42 11 50.0	88 44 56.8	720
T. 43 N., R. 4 E., in sec. 10, crossroads.....	42 13 08.4	88 44 57.5	.....
T. 43 N., R. 4 E., quarter corner between secs. 11 and 12, T road west.....	42 13 08.6	88 43 29.2	6,644
T. 43 N., R. 4 E., corner of secs. 1, 2, 11, and 12, T road east.....	42 13 26.6	88 43 29.4	1,820
North bridge of two iron bridges within 100 feet of each other.....	42 14 01.4	88 43 29.4	3,520
T road west.....	42 14 27.5	88 43 29.4	2,640

Magnetic declination along north half of west border of quadrangle, 3.3° E.

HARVARD QUADRANGLE.

Along highways near southwest corner of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fcet.</i>
Garden Prairie, T 44 N., R. 4 E., on line between secs. 35 and 36, 20 feet north by 20 feet west of crossroads, on Grant Highway, in yard of Methodist Church: iron post stamped "Prim. Trav. Sta. No. 12, 1917".....	42 15 12.6	88 43 29.7	.....
T road south.....	42 15 14.8	88 44 40.7	5,340

Magnetic declination near southwest corner of quadrangle, 3.3° E.

North along highways near west border of quadrangle. (By F. W. Crisp in 1917.)

Garden Prairie station, 600 feet west of, road crossing.....	42 15 16.4	88 43 29.3	.....
T. 44 N., R. 4 E., quarter corner between secs. 25 and 26, T road west.....	42 15 45.8	88 43 29.7	2,980
T. 44 N., R. 4 E., corner of secs. 23, 24, 25, and 26, T road east.....	42 16 11.9	88 43 29.7	2,640
T. 44 N., R. 4 E., quarter corner between secs. 23 and 24, crossroads.....	42 16 37.8	88 43 29.7	2,630
T. 44 N., R. 4 E., corner of secs. 13, 14, 23, and 24, fence line.....	42 17 04.0	88 43 29.7	2,650
T. 44 N., R. 4 E., quarter corner between secs. 13 and 14, fence line.....	42 17 30.1	88 43 29.9	2,640
T. 44 N., R. 4 E., corner of secs. 11, 12, 13, and 14, fence line.....	42 17 56.2	88 43 30.0	2,650
Private road west.....	42 18 22.3	88 43 30.1	2,640
T. 44 N., R. 4 E., corner of secs. 1, 2, 11, and 12, crossroads at school-house.....	42 18 48.3	88 43 30.3	2,640
T road south.....	42 18 47.9	88 44 49.1	5,920
Junction with road southwest.....	42 22 37.6	88 44 40.6	.....
T. 45 N., R. 4 E., quarter corner between secs. 14 and 15, T road east.....	42 22 43.7	88 44 40.6	620
T. 45 N., R. 4 E., corner of secs. 10, 11, 14, and 15, T road west.....	42 23 09.8	88 44 40.8	2,640
T. 45 N., R. 4 E., quarter corner between secs. 10 and 11, T road east.....	42 23 35.8	88 44 40.9	2,640
Crossing of north-south road, 0.3 mile west of Capron.....	42 23 44.1	88 44 41.0	840
T road west to Capron.....	42 23 55.4	88 44 41.0	1,150
T. 45 N., R. 4 E., quarter corner between secs. 2 and 3, crossroads.....	42 24 28.1	88 44 41.2	3,310
Tps. 45 and 46 N., R. 4 E., corner of secs. 34, 35, 2, and 3, fence.....	42 24 53.4	88 44 41.6	2,500
T. 46 N., R. 4 E., quarter corner between secs. 34 and 35, fence line.....	42 25 19.5	88 44 41.8	2,650
T. 46 N., R. 4 E., section line between secs. 27 and 34, crossroads.....	42 25 45.6	88 44 45.7	2,655
T road west.....	42 26 30.0	88 44 41.9	4,598
T. 46 N., R. 4 E., corner of secs. 14, 15, 22, and 23, crossroads.....	42 27 30.2	88 44 41.9	6,100
T. 46 N., R. 4 E., corner of secs. 10, 11, 14, and 15, crossroads.....	42 28 22.3	88 44 42.5	5,270
T. 46 N., R. 4 E., north side, corner of secs. 2 and 3, on Illinois-Wisconsin State line, T road south.....	42 29 32.6	88 44 45.4	7,129
Illinois-Wisconsin State line, T road north.....	42 29 32.5	88 44 48.9	260

Magnetic declination along west border of quadrangle, 3° E.

HAVANA QUADRANGLE.

North along highways near west border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
T. 3 N., R. 2 E., stone quarter corner between secs. 2 and 11, 10 feet north of lane west.....	° ' '' 40 15 35.8	° ' '' 90 14 52.9	Feet.
T. 5 N., R. 2 E., quarter corner between secs. 26 and 35, center of north and south road at T road west, 25 feet southeast to telegraph pole, 15 feet west to center of triangle.....	40 22 43.4	90 14 44.1	.....
T. 5 N., R. 2 E., quarter corner between secs. 14 and 23, center of north and south road at east and west fence line, 940 feet north of T road east at church.....	40 24 27.8	90 14 42.3	.....

Magnetic declination for west border of quadrangle, 5° 12' E.

JONESBORO QUADRANGLE.

North along Mobile & Ohio and Illinois Central railroads near east border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
Point of switch, just south of right-angle bend in wagon road, on east side of track (North American datum).....	° ' '' 37 15 14.0	° ' '' 89 15 46.0	Feet.
Railroad crossing, second-class road.....	37 15 59.9	89 15 35.6	4,720
Railroad crossing.....	37 16 20.0	89 15 27.3	2,135
Railroad crossing, 760 feet south of milepost 129.....	37 16 57.1	89 15 09.0	4,035
Elco, railroad crossing, just south of depot.....	37 17 57.3	89 15 44.3	6,718
Elco, 1 mile northeast of, railroad crossing.....	37 18 53.0	89 15 21.2	5,933
Tps. 13 and 14 S., R. 1 W., line between secs. 6 and 31, Union-Alexander county line, center of track just south of railroad crossing, county line is marked by railroad signboard.....	37 20 07.3	89 15 06.0	7,593
Mill Creek, railroad crossing at depot.....	37 20 30.5	89 15 09.9	2,346
Railroad crossing, 160 feet north of milepost 124.....	37 21 07.6	89 15 33.0	4,186
Springville, railroad crossing at south end of curve.....	37 22 18.1	89 16 01.0	7,482
Mobile & Ohio R. R. trestle 523-02, 360 feet southeast of, in sharp point of triangle formed by road forks; iron post stamped "Prim. Trav. Sta. No. 3, 1916 Ill.".....	37 22 45.7	89 15 58.7	2,794
Railroad crossing, 775 feet south of milepost 121.....	37 23 30.5	89 16 08.4	4,599
Railroad crossing, 600 feet north of trestle 525-48.....	37 24 55.5	89 16 24.4	8,692
Railroad crossing.....	37 25 21.9	89 16 44.1	3,107
Milepost 118, center of track.....	37 26 03.9	89 16 36.6	4,285
Jonesboro, corporation line, center of track, marked by railroad signboard.....	37 26 27.5	89 16 21.9	2,670
Jonesboro, railroad crossing at depot, main track.....	37 27 13.2	89 16 05.2	4,813

North along Illinois Central R. R.

Railroad crossing, between tracks.....	37 28 10.4	89 15 23.4	.....
Railroad crossing, northbound track.....	37 29 00.6	89 15 34.3	5,155
Anna, 2 miles north by 1 mile west of, east side in turn of road, about 1,600 feet east and 800 feet south of quarter corner of sec. 7, T. 12 N., R. 1 W.; iron post stamped "Prim. Trav. Sta. No. 155, Ill. 1911".....	37 29 20.0	89 15 50.7	2,366

North along Illinois Central R. R. near Mississippi River.

Railroad crossing (North American datum).....	37 16 00.5	89 26 22.8	.....
Railroad crossing, 460 feet north of milepost 123.....	37 16 21.8	89 26 22.5	2,160
T. 14 S., R. 3 W., line between secs. 21 and 23, center of track.....	37 16 39.1	89 26 22.2	1,750
T. 14 S., R. 3 W., line through center of sec. 16, east and west railroad crossing, 440 feet south of milepost 121.....	37 17 57.3	89 26 21.1	7,905
T. 14 S., R. 3 W., line between secs. 9 and 16, center of track, 275 feet south of McClure signal board.....	37 18 23.8	89 26 20.7	2,675
T. 14 S., R. 3 W., line between secs. 9 and 10, center of track at north and south road crossing.....	37 18 56.4	89 26 03.3	3,589
McClure, just northeast of depot, east and west railroad crossing.....	37 19 05.6	89 25 44.8	1,760
Tps. 13 and 14 N., line between secs. 2 and 35, Alexander-Union county line, center of Illinois Central R. R. track, just west of signboard along Missouri Pacific R. R. track.....	37 20 04.8	89 24 34.0	8,268
Railroad crossing.....	37 20 55.6	89 24 05.1	5,644

JONESBORO QUADRANGLE—Continued.

North along Illinois Central R. R. near Mississippi River—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Railroad crossing.....	37 21 21.9	89 23 54.0	2,805
Reynoldsville, 1,100 meters above, east of Illinois Central R. R., near wagon road paralleling same railroad and making slight turn near the pipe, 215 meters below angle in road, in fence corner; iron pipe (Miss. R. Comm. b. m. 16 H).....	37 22 34.55	89 23 21.61	7,800
T. 13 S., R. 3 W., line between secs. 13 and 24, center of track, 15 feet south of railroad crossing.....	37 22 41.2	89 23 20.8	670
T. 13 S., R. 3 W., line between secs. 12 and 13, railroad crossing.....	37 23 34.2	89 23 19.0	5,369
Vineland, railroad crossing 2,240 feet north of, Potts Spur on Missouri Pacific R. R. just east.....	37 24 36.0	89 23 19.1	6,245
Railroad trestle 111-8, north end of.....	37 25 12.4	89 23 23.3	3,699
Ware, railroad crossing.....	37 26 51.7	89 23 44.6	10,195
T. 12 S., R. 3 W., line between secs. 14 and 23, 10 feet below railroad crossing, in line with fence east.....	37 27 58.3	89 24 10.4	7,050
Milepost 107, center of track.....	37 29 04.0	89 25 08.7	8,129
Milepost 106, center of track.....	37 29 46.5	89 25 46.7	5,280
Wolf Lake, south side of Wolf Lake and Jonesboro road, in southeastern part of Wolf Lake, 230 feet south of semaphore, 140 feet west to tracks, 18 feet north to middle of wagon road; iron post stamped "Prim. Trav. Sta. No. 153, Ill. 1911".....	37 30 09.4	89 26 02.7	2,646

West along highways through center of quadrangle.

T. 13 S., R. 2 W., T road north through center of sec. 13.....	37 22 53.4	89 16 44.6	.....
Misenheimer schoolhouse, about 300 feet northwest of, on hill, front gate of Dillon's residence.....	37 23 04.5	89 17 50.1	5,414
Second-class road southwest.....	37 23 35.7	89 18 17.7	3,867
Mail box 84-A, in front of house on south side of road, 460 feet east of road forks.....	37 23 22.0	89 19 58.6	8,260
T road east, at southeast corner of, 0.5 mile south of schoolhouse; iron post stamped "Prim. Trav. Sta. No. 4, 1916 Ill.".....	37 22 09.7	89 21 10.0	9,316
Lyrle Bridge, north end of.....	37 22 07.2	89 21 30.0	1,633
Reynoldsville, railroad crossing, main track of Illinois Central R. R.....	37 22 01.7	89 23 37.3	10,200

Magnetic declination through center of quadrangle, 4° 35' E.

KINGS QUADRANGLE.

West along highways near north border of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
T road east, west, and north.....	42 14 56.7	89 06 56.8	.....
T road north, on section line.....	42 14 54.1	89 08 04.2	5,074
T road west.....	42 14 41.6	89 08 29.0	2,259
T. 44 N., R. 1 E., quarter corner between 30 and 31, crossroads.....	42 14 41.1	89 08 17.5	3,650
Station 78=Prim. Trav. Sta. No. 2, 1917.....	42 14 40.3	89 10 23.2	4,941

West along highways near north border of quadrangle.

T. 44 N., R. 1 E., quarter corner between secs. 31 and 30, principal meridian, 35 feet south and 30 feet west of T road south, center of crossroads; iron post stamped, "Prim. Trav. Sta. No. 2, 1917".....	42 14 40.3	89 10 23.2	.....
T. 26 N., R. 11 E., quarter corner between secs. 14 and 23, center of crossroads, T roads north, south, and west.....	42 14 52.2	89 11 32.1	5,319
T. 26 N., R. 11 E., quarter corner between secs. 15 and 22, center of crossroad, T road north.....	42 14 51.3	89 12 41.9	5,250
T. 26 N., R. 11 E., corner of secs. 15, 16, 21, and 22, fence to south.....	42 14 50.9	89 13 17.0	2,640
T. 26 N., R. 11 E., quarter corner between secs. 16 and 21, T road north, center of crossroad.....	42 14 50.5	89 13 51.8	2,620
T. 26 N., R. 11 E., corner of secs. 16, 17, 21, and 22, T road north, center of crossroad.....	42 14 50.4	89 14 26.8	2,630

KINGS QUADRANGLE—Continued.

South along highways on third principal meridian through quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Fect.
Tps. 43 and 44 N., R. 1 E., township corner, iron stake on fence line.	42 14 14.4	89 10 22.2	-----
Tps. 43 and 44 N., R. 1 E., iron stake at fence line.	42 14 14.4	89 10 22.2	2,619
T. 26 N., R. 11 E., corner of secs. 24 and 35, T road west.	42 14 00.7	89 10 22.4	1,390
T. 26 N., R. 11 E., 1,196 feet south of corner of secs. 24 and 25, on third principal meridian; iron post.	42 13 48.8	89 10 21.9	1,196
T. 43 N., R. 1 E., corner of secs. 6 and 7, T road east.	42 13 23.3	89 10 22.0	2,581
T. 43 N., R. 1 E., corner of secs. 7 and 18, T road east.	42 12 31.0	89 10 21.7	5,300
Tps. 25 and 26 N., R. 11 E., corner of secs. 36 and 1 (fence line).	42 12 16.2	89 10 21.7	1,490
T. 43 N., R. 1 E., corner of secs. 18 and 19, T road east.	42 11 38.6	89 10 21.6	3,810
T. 25 N., R. 11 E., corner of secs. 1 and 12, T road west.	42 11 19.0	89 10 21.4	1,980
T road north on third principal meridian.	42 10 58.9	89 10 21.4	2,040
Rock River, center of island.	42 10 51.1	89 10 21.3	785
T. 43 N., R. 1 E., corner of secs. 19 and 30, on third principal meridian, concrete post.	42 10 44.1	89 10 21.2	707
T road north.	42 09 46.7	89 10 05.7	5,923
T road south, on third principal meridian.	42 09 39.2	89 10 21.2	1,453
T. 42 N., R. 1 E., on west side of sec. 6, 30 feet west of intersection of road northeast with north-south road; iron post stamped "Prim. Trav. Sta. No. 4, 1917"	42 08 42.8	89 10 21.0	5,610
T. 42 N., R. 1 E., corner of secs. 6 and 7, T road east, 890 feet south is T. 25 N., R. 11 E., corner of secs. 25 and 36, T road west.	42 08 09.2	89 10 20.5	3,392
T road east.	42 07 17.3	89 10 32.1	5,326
T road west.	42 06 52.3	89 10 42.8	2,660
Road forks, roads north, south, and southeast.	42 06 40.3	89 10 50.6	1,343
Stillmans Valley railway station, 800 feet west of, at crossing of public road and Chicago, Milwaukee & St. Paul Ry.	42 06 36.4	89 10 53.2	445
Stillmans Valley, Main Street crossing.	42 06 29.2	89 10 43.2	1,046
Chicago, Milwaukee & St. Paul Ry. crossing, on third principal meridian.	42 06 29.2	89 10 20.2	1,740
Chicago Great Western R. R. crossing on third principal meridian.	42 06 13.5	89 10 20.0	1,589
T. 42 N., R. 1 E., corner of secs. 19 and 30, fence east.	42 05 33.2	89 10 20.4	4,080
T. 25 N., R. 11 E., T road west.	42 05 06.1	89 10 20.5	2,740
T. 42 N., R. 1 E., corner of secs. 30 and 31, T road east.	42 04 41.1	89 10 20.6	2,535
Tps. 41 and 42 N., R. 1 E., corner of secs. 6 and 31, crossroads.	42 03 48.1	89 10 20.5	5,365
T. 24 N., R. 11 E., corner of secs. 24 and 25, 420 feet south of iron bridge over creek.	42 03 28.3	89 10 20.2	2,000
T. 24 N., R. 11 E., corner of secs. 25 and 36, fence line.	42 02 42.9	89 10 19.2	4,600
T. 41 N., R. 1 E., on third principal meridian, corner of secs. 7 and 18, crossroads.	42 02 05.4	89 10 18.4	3,790
T. 24 N., R. 11 E., corner of fractional secs. 1 and 36, on third principal meridian.	42 01 50.0	89 10 18.0	1,560
T. 41 N., R. 1 E., corner of secs. 18 and 19, fence to east.	42 01 13.0	89 10 17.2	3,750
T road west to Oregon.	42 00 59.1	89 10 16.8	1,400
T. 41 N., R. 1 E., west quarter corner of sec. 19, T road east.	42 00 46.5	89 10 16.5	1,280
T. 41 N., R. 1 E., quarter corner between secs. 19 and 20, T road west.	42 00 47.0	89 09 10.7	4,973
T road east.	42 00 33.9	89 09 10.2	1,320
T. 41 N., R. 1 E., 0.25 mile north of corner of secs. 20, 21, 28, and 29, T road east; iron post stamped "Prim. Trav. Sta. No. 1, 1912 III." (Bull. 551, p. 161).	42 00 34.8	89 08 00.6	5,253

South along highways near east border of quadrangle.

T. 41 N., R. 2 E., north corner of secs. 3 and 4, on township line, T road south.	42 03 52.9	89 00 00.1	-----
Crossroads at schoolhouse, district 5.	42 03 20.6	89 00 00.4	3,270
Crossing of Chicago Great Western R. R.	42 02 40.7	89 00 00.7	4,040
T. 41 N., R. 2 E., corner of secs. 9, 10, 15, and 16, crossroad east.	42 02 11.4	89 00 01.5	2,960
T. 41 N., R. 2 E., corner of secs. 15, 16, 21, and 22, crossroads, macadam east to west.	42 01 19.2	89 00 01.8	5,280
T. 41 N., R. 2 E., 20 feet south by 25 feet west of corner of secs. 21, 22, 27, and 28, at T road corners; iron post stamped "Prim. Trav. Sta. No. 2, 1912"	42 00 26.9	89 00 01.8	5,296

East along highways through center of quadrangle.

Prim. Trav. Sta. No. 4, 1917 (previously described)	42 08 42.8	89 10 21.0	-----
T. 41 N., R. 1 E., quarter corner, north side of sec. 5, T road to south, on Winnebago-Ogle county line.	42 09 01.6	89 08 35.7	8,157
T. 42 N., R. 1 E., on township line, south side of secs. 32 and 33 (fence).	42 09 01.9	89 08 04.9	2,320
T. 41 N., R. 1 E., corner of secs. 4 and 5 (fence).	42 09 02.0	89 08 02.4	190

KINGS QUADRANGLE—Continued.

East along highways through center of quadrangle—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Center of concrete bridge over ditch.....	42 09 02.1	89 07 52.8	720
Center of concrete culvert.....	42 09 02.5	89 06 53.7	4,445
Winneshago-Ogle county line and township line, center of T road north.....	42 09 02.8	89 06 02.2	3,878
T. 41 N., R. 1 E., north corner of secs. 2 and 3, center of T road south.....	42 09 03.0	89 05 46.7	1,170
Crossing of Chicago, Milwaukee & St. Paul Ry., center of track....	42 09 03.1	89 05 29.6	1,290
T. 41 N., R. 1 E., center of crossroads, corner of secs. 1 and 2....	42 09 03.5	89 04 36.3	4,020
Center of T road south.....	42 09 03.9	89 03 41.0	4,160
Center of T road east, on Winneshago-Ogle county line and township line.....	42 09 04.1	89 03 11.7	2,214
T. 42 N., R. 2 E., south corner between secs. 31 and 32.....	42 09 04.9	89 02 13.4	4,390
Winneshago-Ogle county and township line, T road north.....	42 09 05.1	89 01 56.0	1,310
One-sixteenth corner, fence line north and south.....	42 09 05.6	89 01 21.0	2,640
Tps. 41 and 42 N., R. 2 E., Winneshago-Ogle county and township line, corner of secs. 4, 5, 32, and 33, T road south.....	42 09 05.8	89 01 03.2	1,340

Magnetic declination along third principal meridian, 4.1° E.

KIRKLAND QUADRANGLE.

South along highways near west border of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
T. 44 N., R. 2 E., corner of secs. 27, 28, 33, and 34, crossroads (in Belvidere quadrangle).....	42 15 12.0	88 59 57.8	.....
T. 44 N., R. 2 E., line between secs. 33 and 34, crossroads, 40 feet north of interurban electric railway.....	42 14 41.2	88 59 57.7	3,120
T. 44 N., R. 2 E., south side of secs. 33 and 34, on township line, T road north.....	42 14 19.6	88 59 57.7	2,180
T. 43 N., R. 2 E., north side of secs. 3 and 4, on township line, T road south.....	42 14 19.6	88 59 55.3	180
Chicago & Northwestern Ry. crossing of section line.....	42 13 43.0	88 59 54.7	3,710
T. 43 N., R. 2 E., corner of secs. 3, 4, 9, and 10, T road west.....	42 13 28.3	88 59 54.6	1,480
T. 43 N., R. 2 E., quarter corner between secs. 9 and 10, crossroads.....	42 13 02.3	88 59 54.4	2,630
Center of T road west.....	42 12 23.1	88 59 54.2	3,970
T road south, 150 feet north of bridge over Kishwaukee River.....	42 11 43.9	88 59 56.6	3,972
Kishwaukee River, on west side of abutment of north end of iron bridge over; bronze tablet stamped "Prim. Trav. Sta. No. 10, 1917. El. 711".....	42 11 42.4	88 59 55.8	155
T. 43 N., R. 2 E., corner of secs. 21, 22, 27, and 28, T road east.....	42 10 51.5	88 59 54.1	5,160
T. 43 N., R. 2 E., quarter corner between secs. 27 and 28, center of T road west.....	42 10 25.4	88 59 54.0	2,650
T. 43 N., R. 2 E., corner of secs. 27, 28, 33, and 34, center of crossroads.....	42 09 59.0	88 59 53.7	2,660
Crossing of Chicago, Milwaukee & Gary Ry., center of track.....	42 09 33.9	88 59 53.4	2,540
Winneshago-Ogle county line and township line between Tps. 42 and 43 N., R. 2 E., T road north, south, and west.....	42 09 06.6	88 59 52.7	2,760
Winneshago-Ogle county line, 700 feet south of, east side of concrete culvert 700 feet south of county line; bronze tablet stamped "Prim. Trav. Sta. No. 9, 1917. El. 822".....	42 08 59.1	88 59 53.1	756
T. 42 N., R. 2 E., corner of secs. 3, 4, 9, and 10, crossroads.....	42 08 14.9	88 59 52.3	4,475
T. 42 N., R. 2 E., corner of secs. 9, 10, 15, and 16, fence line.....	42 07 22.4	88 59 51.2	5,311
Center of crossroads.....	42 07 06.6	88 59 50.9	1,600
T. 42 N., R. 2 E., corner of secs. 15, 16, 21, and 22, T road west.....	42 06 30.1	88 59 50.6	3,690
T. 42 N., R. 2 E., quarter corner between secs. 21 and 22, T road west, "Monroe Center" crossroads.....	42 06 03.8	88 59 50.5	2,660
Chicago, Milwaukee & St. Paul Ry., crossing of, center of track....	42 05 50.8	88 59 50.4	1,320
T. 42 N., R. 2 E., quarter corner between secs. 27 and 28, crossroads.....	42 05 11.5	88 59 50.3	3,980
T. 42 N., R. 2 E., corner of secs. 27, 28, 33, and 34, T road west.....	42 04 45.4	88 59 50.1	2,640
T. 42 N., R. 2 E., quarter corner between secs. 33 and 34.....	42 04 18.1	88 59 50.0	2,760
T. 42 N., R. 2 E., south corner of secs. 33 and 34, on township line, T road north.....	42 03 53.0	88 59 50.0	2,540

KIRKLAND QUADRANGLE—Continued.

East along highways through center of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
Junction with line north and south, Winnebago-Ogle county line and township line between Tps. 42 and 43 N., R. 2 E., corner of secs. 3, 4, 33, and 34, T road north, south, and west.....	° ' "	° ' "	Feet.
	42 09 06.6	88 59 52.7	5,399

Magnetic declination along east and west borders of quadrangle, 3.7° E.; through center of quadrangle, 3.7° E.

Winnebago-Ogle county line, Tps. 42 and 43 N., R. 2 E., corner of secs. 3, 4, 33, and 34, T road west.....	42 09 06.6	88 59 52.7	.....
Winnebago-Ogle county line and township line, Tps. 42 and 43 N., R. 2 E., corner of secs. 2, 3, 34, and 35, T road east.....	42 09 07.6	88 58 43.0	5,256
T road south.....	42 09 08.0	88 57 50.7	3,940
T. 43 N., R. 2 E., corner of secs. 35 and 36, T road north.....	42 09 08.2	88 57 33.3	1,310
Tps. 42 and 43 N., Rs. 2 and 3 E., T road west.....	42 09 09.0	88 56 21.7	5,390
T. 43 N., R. 3 E., quarter corner of sec. 31, Winnebago-Boone county line.....	42 09 35.2	88 56 22.0	2,650
T. 43 N., R. 3 E., quarter corner of secs. 30 and 31, crossroads.....	42 09 35.6	88 55 11.1	5,340
T. 43 N., R. 3 E., quarter corner between secs. 29 and 30, crossroads.....	42 09 36.6	88 54 00.9	5,291
Crossroads.....	42 09 37.4	88 52 36.6	6,350
T road south.....	42 09 33.4	88 52 32.9	488
Boone-Dekalb county line and township line.....	42 09 11.4	88 52 10.9	2,771
T road west.....	42 08 48.4	88 51 47.5	2,927
T road south.....	42 08 26.9	88 51 03.0	3,992
Charter Oak School, district 24, on north-south section line, crossroads.....	42 08 17.3	88 50 30.1	2,660
Crossroads, on north-south section line.....	42 08 01.5	88 49 19.5	5,558
Quarter-section line north-south fence.....	42 07 57.7	88 48 45.5	2,590
North-south section-line fence.....	42 07 54.3	88 48 10.5	2,660
T road north at church.....	42 07 54.3	88 47 52.8	1,340
Crossroads near quarter corner between secs. 8 and 9.....	42 07 53.4	88 46 59.9	3,983
Kingston School, district 12, crossroads.....	42 07 45.1	88 46 07.8	4,015

South along highways near east border of quadrangle.

Crossroads.....	42 07 37.2	88 45 32.7	2,760
West quarter corner of sec. 15, T road west.....	42 07 02.2	88 45 32.5	3,540
East-west section line (fence).....	42 06 36.2	88 45 32.2	2,630
Kingston, 0.25 mile north of, center of iron bridge over creek, 780 feet north of Chicago, Milwaukee & St. Paul Ry. tracks.....	42 06 10.6	88 45 31.9	2,590
Kingston, Main Street, intersection of.....	42 06 00.2	88 45 31.8	1,050
T road west, on quarter-section line.....	42 05 17.8	88 45 31.1	4,290
T road east.....	42 05 04.7	88 45 30.9	1,330
T. 42 N., R. 4 E., secs. 27 and 34, east-west section-line fence.....	42 04 51.7	88 45 30.7	1,320
Tps. 41 and 42 N., R. 4 E., line between, T road east.....	42 03 59.3	88 45 29.9	5,300
T. 41 N., R. 4 E., quarter corner between secs. 2 and 3.....	42 03 36.9	88 45 15.8	2,504
East-west lines between secs. 2 and 11.....	42 03 10.4	88 45 12.0	2,706
Crossroads.....	42 02 44.1	88 45 02.4	2,755

Magnetic declination for center of quadrangle, 3.6° E.; for east border of quadrangle, 3.5° E.

North along highways near east border of quadrangle. (By F. W. Crisp in 1917.)

Kingston School, district No. 12, crossroads at.....	42 07 45.1	88 46 07.8	.....
T. 42 N., R. 4 E., in sec. 9, 40 feet north by 40 feet east of crossroads, in yard of Kingston schoolhouse, district 12; iron post stamped "Prim. Trav. Sta. No. 11, 1917".....	42 07 45.4	88 46 07.3	44
Railroad crossing, north and south road.....	42 08 01.9	88 46 07.9	1,674
T. 42 N., R. 4 E., on line between secs. 4 and 9.....	42 08 20.6	88 46 08.0	1,890
Railroad crossing, north and south road.....	42 08 46.1	88 46 07.9	2,580
T road east.....	42 08 46.6	88 46 07.9	55
Township line, Tps. 42 and 43 N., R. 4 E.....	42 09 13.2	88 46 07.7	2,685
Crossroads.....	42 09 26.6	88 46 07.5	1,360
T. 43 N., R. 4 E., quarter line in sec. 33, crossroads.....	42 09 39.5	88 46 08.2	1,301
T. 43 N., R. 4 E., on line between secs. 28 and 33, crossroads.....	42 10 05.3	88 46 31.3	3,140
T. 43 N., R. 4 E., corner of secs. 27, 28, 33, and 34, T road north.....	42 10 05.4	88 45 49.4	3,150
T. 43 N., R. 4 E., in sec. 15, T road west.....	42 12 03.1	88 45 06.0	.....

Magnetic declination along north half of east border of quadrangle, 3.3° E.

MOUND CITY QUADRANGLE.

NOTE.—An adjustment of approximately 3.5" in latitude and 1.5" in longitude has been applied between the east and west borders of this quadrangle. Positions along the Mobile & Ohio R. R. between Eliza triangulation station, Cairo, and Cache, do not contain this adjustment.

East along highways near north border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
Road forks on hillside (approximate Henderson datum).....	37 14 26.8	89 04 52.8	.....
Center of road forks at A. J. Shoeborn's mail box.....	37 14 10.9	89 04 18.6	3,200
T road west, 1,200 feet south of T road east.....	37 14 23.0	89 02 40.1	8,049

Southwest along Big Four Route between Grand Chain and Cairo.

Grand Chain, at fence corner 18 feet north of stock pen, on the west side of track, 180 feet north of depot; iron post stamped "Prim. Trav. Sta. No. 15, 1915 Ill. Elev. 405".....	37 15 13.5	89 01 11.0	.....
Trestle 715, center of.....	37 14 35.8	89 01 55.0	5,192
Railroad crossing at north and south road on line between Rs. 1 and 2 E., 360 feet south of railroad crossing is T road east at west corner of secs. 6 and 7, T. 15 S., R. 2 E.....	37 13 46.7	89 02 40.5	6,181
MEAN OF HENDERSON AND NORTH AMERICAN DATUM.			
Levings, depot and post office, opposite front door of, center of track.....	37 13 04.1	89 03 33.2	6,045
Railroad crossing, east and west section-line road.....	37 12 39.0	89 03 47.4	2,763
Milepost 244, center of track.....	37 11 32.2	89 04 50.2	8,438
Olmstead, railroad crossing just north of depot, main track.....	37 10 56.2	89 05 18.0	4,260
Railroad crossing at schoolhouse.....	37 10 23.3	89 05 43.0	3,880
Railroad crossing just south of milepost 246.....	37 10 00.7	89 05 58.9	2,600
Milepost 247, center of track.....	37 09 17.1	89 06 29.7	5,045
Railroad crossing, probable line between secs. 4 and 9, T. 16 S., R. 1 E.....	37 08 38.8	89 06 56.8	4,435
America, just north of depot, railroad crossing, 45 feet east of line between secs. 8 and 9, T. 16 S., R. 1 E.....	37 08 01.1	89 07 23.3	4,350
Trestle 751, north end of.....	37 07 08.9	89 08 01.6	6,285
Railroad crossing, just north of trestle 753.....	37 06 18.3	89 08 36.6	5,654
Mound City, 100 feet north of Big Four Route depot, on west side of street leading northwest from depot, on east side of cinder sidewalk, at foot of second telephone pole from depot (U. S. C. E. b. m. No. 64).....	37 05 04.4	89 09 43.1	9,192
Cache River, railroad trestle 763, north end of.....	37 04 12.8	89 10 22.2	6,087
Point of switch.....	37 03 07.7	89 10 50.0	6,045
Cairo, junction of Big Four and Illinois Central railroads, almost directly under shore span of Illinois Central R. R. bridge over Ohio River, 25 feet north and 20 feet west of; iron post stamped "Prim. Trav. Sta. No. 8, 1916, Ill.".....	37 01 20.4	89 10 51.4	1,827
Cairo, Sycamore Street, center track of Illinois Central R. R. over Cairo Junction, Illinois Central R. R. (third track from east), directly opposite signal-tower building at junction of Mobile & Ohio and Illinois Central railroads.....	37 01 18.5	89 11 08.2	1,370
	37 02 20.5	89 11 30.0	6,536

Along Mobile & Ohio R. R. from Cairo to Beech Ridge.

NORTH AMERICAN DATUM.			
Eliza Point, 50 feet downstream from second or low switchstand, in line with upstream side of cross levee above sawmill and with center of track above switches; iron pipe, 8 inches above surface of ground, outside of track of Mobile & Ohio R. R. embankment (Miss. R. Comm. triang. sta.).....	37 00 31.43	89 11 38.61	.....
Cairo, junction of Mobile & Ohio and Missouri Pacific railroads.....	37 01 22.8	89 11 27.8	5,268
Point of switch at north end of Y.....	37 02 16.6	89 12 07.2	6,308
T. 17 S., R. 1 W., line between secs. 10 and 15, center of main track, in line with east and west road.....	37 02 26.9	89 12 24.2	1,730
Railroad crossing.....	37 02 33.3	89 12 34.9	1,080
T. 17 S., R. 1 W., center of track, due south of road forks at road north, probably on line between secs. 9 and 10.....	37 02 42.8	89 12 48.8	1,485
T. 17 S., R. 1 W., center of track at line between secs. 4 and 9, in line with east and west road, just north of milepost 146.....	37 03 19.8	89 13 22.5	4,630
Klondike, railroad crossing on Mobile & Ohio R. R.....	37 03 38.8	89 13 46.3	2,718
Railroad crossing.....	37 04 01.4	89 14 15.7	3,304
Railroad crossing just north of milepost 144.....	37 04 39.3	89 14 43.9	4,457

Magnetic declination near north border of quadrangle, 4° 30' E.

OREGON QUADRANGLE.

West along highways near north border of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
			Feet.
T. 26 N., R. 11 E., corner of secs. 17, 18, 19, and 20, fence line.....	42 14 49.2	89 15 37.0	.....
T. 26 N., R. 11 E., quarter corner between secs. 18 and 19, crossroads.....	42 14 48.8	89 16 12.2	2,645
T. 26 N., R. 11 E., west line of, section corner between secs. 18 and 19, T road east, center of crossroad.....	42 14 48.5	89 16 48.7	2,745
T. 26 N., R. 10 E., 25 feet south and 30 feet west of corner of secs. 13, 14, 23, and 24, at southwest corner of crossroads, 2 feet west of Wilke Braver's mail box; iron post stamped "Prim. Trav. Sta. No. 1, 1915".....	42 14 47.4	89 17 59.0	5,290

South along highways near east border of quadrangle. (By F. W. Crisp in 1917.)

T. 26 N., R. 11 E., west corner of secs. 18, 19, T road east.....	42 14 48.5	89 16 48.7	.....
Illinois Central E. R. crossing of public road.....	42 14 17.0	89 16 47.9	3,190
T. 26 N., R. 10 E., east corner of secs. 24 and 25, crossroads.....	42 13 56.0	89 16 47.8	2,130
T. 26 N., R. 10 E., east corner of secs. 25 and 30, T road west.....	42 13 03.7	89 16 47.0	5,290
Township corner and south boundary of Winnebago County, T road north.....	42 12 11.7	89 16 45.6	5,260
Winnebago County line, crossroad south on.....	42 12 12.0	89 16 27.0	1,400
Road elbow south and west on county line.....	42 11 46.3	89 16 26.3	2,601
T road west.....	42 11 30.4	89 16 25.7	1,606
T. 25 N., R. 11 E., line between secs. 7 and 18, crossroads, 2,890 feet north of bridge over creek.....	42 10 28.2	89 16 25.6	6,300
T. 25 N., R. 11 E., on line between secs. 18 and 19, crossroads.....	42 09 35.6	89 16 25.2	5,330
T. 25 N., R. 11 E., on line between secs. 19 and 30, fence line.....	42 08 43.6	89 16 24.6	5,260
Byron, 1 mile northwest of T road north.....	42 08 17.3	89 16 24.0	2,660
T road south.....	42 08 17.4	89 15 55.1	2,180
Byron, 0.5 mile west of Main Street crossing, on west road boundary (at city limit), 20 feet south by 25 feet west of cross streets; iron post stamped "Prim. Trav. Sta. No. 5, 1917".....	42 07 35.5	89 15 48.8	4,259
Byron, Main and Bridge streets, intersection.....	42 07 36.6	89 15 20.3	2,151
Byron bridge, 500 feet south of south end, crossroads.....	42 07 12.9	89 15 14.2	2,436
T. 24 N., R. 11 E., corner of secs. 5, 6, 7, and 8, T road south, at schoolhouse.....	42 06 08.5	89 15 29.5	6,520
T road east.....	42 05 27.4	89 15 45.1	4,328
T. 24 N., Rs. 10 and 11 E., 90 feet south by 30 feet west of corner of secs. 12 and 13, also 50 feet south by 30 feet west of corner of secs. 7 and 18, at T road east; iron post stamped "Prim. Trav. Sta. No. 6, 1917. El. 864".....	42 05 14.8	89 16 38.0	4,193
T. 24 N., R. 11 E., corner of secs. 13 and 24, T road west.....	42 04 23.4	89 16 36.6	5,199
T. 24 N., R. 10 E., quarter corner of sec. 24, T road west.....	42 03 57.2	89 16 36.2	2,650
T. 24 N., R. 11 E., quarter corner of sec. 19, fence line.....	42 03 56.6	89 16 36.2	65
T. 24 N., R. 11 E., corner of secs. 19 and 30, T road east.....	42 03 31.0	89 16 35.5	2,595
T. 24 N., R. 10 E., quarter corner on east side of sec. 25, on range line, 10 feet north by 20 feet east of T road west; iron post stamped "Prim. Trav. Sta. No. 7, 1917. El. 862".....	42 03 05.3	89 16 34.7	2,600
T. 24 N., R. 11 E., on township line between secs. 31 and 36, T road north.....	42 01 46.9	89 16 33.3	7,941
T. 23 N., Rs. 10 and 11 E., corner of secs. 1 and 6, on township line, at angle in road.....	42 01 46.9	89 16 41.2	600
Crossroads.....	42 01 18.5	89 16 42.4	2,880
Road forks.....	42 00 39.5	89 17 01.3	4,192
T. 23 N., Rs. 10 and 11 E., on line between secs. 1 and 6.....	42 00 29.8	89 16 44.4	1,611

Magnetic declination along east border of quadrangle, 4.0° E.

ROCKFORD QUADRANGLE.

West along highways through center of quadrangle. (By F. W. Crisp in 1917.)

Station.	Latitude.	Longitude.	Distance between stations.
			Feet.
Roscoe, at southeast corner of Bridge and Main streets; iron post stamped "Prim. Trav. Sta. No. 8, 1915 III".....	42 24 47.6	89 00 32.8	.....
Crossing of electric railway, center of track.....	42 23 31.9	89 00 58.0	7,900
T. 45 N., R. 2 E., corner of secs. 16, 17, 8, and 9.....	42 23 02.8	89 01 10.1	3,087
T. 45 N., R. 2 E., corner of secs. 16, 17, 20, and 21.....	42 22 11.1	89 01 09.0	5,240
T roads east, west, and north, center of intersection.....	42 21 57.3	89 01 08.8	1,390
T. 45 N., R. 2 E., quarter corner between secs. 17 and 20.....	42 22 09.9	89 01 44.4	2,962
T. 45 N., R. 2 E., corner of secs. 17, 18, 19, and 20.....	42 22 09.4	89 02 19.8	2,660
T. 45 N., R. 1 E., line between secs. 13 and 24, crossroads.....	42 22 07.4	89 03 56.0	7,222
T. 45 N., R. 1 E., corner of secs. 13, 14, 23, and 24, crossroads.....	42 22 07.0	89 04 40.6	3,350
T. 45 N., R. 1 E., corner of secs. 14, 15, 22, and 23, crossroads.....	42 22 06.5	89 05 48.8	5,120

ROCKFORD QUADRANGLE—Continued.

West along highways through center of quadrangle—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
T. 45 N., R. 1 E., corner of secs. 15, 16, 21, and 22, crossroads.	42 22 05.9	89 06 50.9	5,340
T. 45 N., R. 1 E., corner of secs. 16, 17, 20, and 21, crossroads.	42 22 05.5	89 08 10.6	5,310
T. 45 N., R. 1 E., corner of secs. 17, 18, 19, and 20, crossroads.	42 22 04.9	89 09 20.6	5,255
T. 45 N., R. 1 E., west corner fractional section between secs. 18 and 19 third principal meridian, T roads north, south, and east, center of intersection.	42 22 04.4	89 10 26.9	4,975
T. 27 N., R. 11 E., 15 feet south by 25 feet east of east corner of fractional secs. 1 and 12, on east side of north-south road along third principal meridian; iron post stamped "Prim. Trav. Sta. No. 9, 1915 III"	42 21 50.7	89 10 26.2	1,392

South along highways along third principal meridian.

T. 45 N., R. 1 E., T road at quarter corner of sec. 19 (east corner on third principal meridian).....	42 21 38.1	89 10 26.4	1,280
T. 45 N., R. 1 E., third principal meridian, west side of secs. 19 and 30, fence.....	42 21 11.9	89 10 25.7	2,655
T. 27 N., R. 11 E., third principal meridian, east side of fractional section corner between secs. 12 and 13.....	42 20 58.6	89 10 25.9	1,345
T. 45 N., R. 1 E., third principal meridian, west corner between secs. 30 and 31, center of T road east.....	42 20 19.7	89 10 25.6	3,935
T. 27 N., R. 11 E., third principal meridian, east side corner between secs. 13 and 24, fence.....	42 20 06.6	89 10 25.5	1,335
Third principal meridian, township line between Tps. 44 and 45 N., R. 1 E., and west corner between secs. 31 and 6.....	42 20 27.4	89 10 24.8	3,970
T. 27 N., R. 11 E., third principal meridian, quarter corner on east side of sec. 25, 30 feet north by 30 feet west of, center of intersection at T road west; iron post stamped "Prim. Trav. Sta. No. 1, 1917"	42 18 49.1	89 10 25.4	3,870
T. 44 N., R. 1 E., third principal meridian, west section corner between secs. 6 and 7, fence.....	42 18 35.6	89 10 24.6	1,378
T. 44 N., R. 1 E., third principal meridian, quarter corner on west side of sec. 7, center of intersection at T road east.....	42 18 09.4	89 10 24.4	2,650
T. 44 N., R. 1 E., third principal meridian, west section corner between secs. 7 and 18.....	42 17 43.7	89 10 24.2	2,600
Third principal meridian, line between Tps. 26 and 27 N., R. 11 E.; concrete post marked "Third principal meridian, 10 mi."	42 17 30.1	89 10 24.2	1,380
T. 44 N., R. 1 E., concrete post marked "Third principal meridian, 9 mi." corner of secs. 18 and 19.....	42 16 50.9	89 10 23.9	3,970
T fence west.....	42 16 15.6	89 10 23.5	3,573
T. 44 N., R. 1 E., third principal meridian, corner between secs. 19 and 30, concrete post.....	42 15 59.2	89 10 23.4	1,662
T. 44 N., R. 1 E., third principal meridian, corner of secs. 30 and 31, concrete post, T fence north.....	42 15 07.1	89 10 23.5	1,405

Magnetic declination through center of quadrangle, 3° E.; along third principal meridian, 4.4° E.

West along highways through center of quadrangle. (By F. W. Crisp in 1917.)

T road south.....	42 21 57.6	89 00 51.3	.....
T. 45 N., R. 2 E., line between secs. 20 and 21, T road north.....	42 21 57.3	89 01 08.8	1,316

South along highways near east border of quadrangle. (By F. W. Crisp in 1917.)

T roads east, west, and north, center of intersection.....	42 21 57.3	89 01 08.8	.....
T roads east, west, and south, center of crossroad.....	42 21 57.6	89 00 50.9	1,340
T. 45 N., R. 2 E., line between secs. 21 and 28, T roads north, south, and east, center of intersection.....	42 21 18.4	89 00 52.0	3,969
Harlem, crossroads at.....	42 20 25.9	89 01 02.8	5,381
T roads north, south, and east.....	42 19 49.4	89 01 15.3	3,810
Tps. 44 and 45 N., R. 2 E., at sharp bend in road, on township line.....	42 19 33.2	89 01 21.3	1,700
Tps. 44 and 45 N., R. 2 E., crossroads on town line.....	44 19 32.9	89 01 42.1	1,488
T roads east, west, and south.....	42 19 06.6	89 01 44.2	2,673
T. 44 N., R. 2 E., quarter corner between secs. 8 and 17, T roads north, south, and east.....	42 17 48.1	89 01 43.5	7,950
T road west.....	42 17 08.8	89 01 43.4	3,980
T roads north, south, and west.....	42 16 36.8	89 01 43.3	3,240
T. 44 N., R. 2 E., quarter corner between secs. 20 and 29, fence.....	42 16 03.2	89 01 43.2	3,400
T. 44 N., R. 2 E., quarter corner between secs. 29 and 32, 20 feet south by 20 feet west of crossroads, iron post stamped "Prim. Trav. Sta. No. 3, 1917"	42 15 10.7	89 01 43.6	5,319

ROCKFORD QUADRANGLE—Continued.

West along highways near south border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
T. 44, N., R. 2 E., corner of secs. 29, 30, 31, and 32, fence south.....	42 15 10.4	89 02 18.6	2,630
T. 44 N., Rs. 1 and 2 E., corner of secs. 25, 30, 31, and 36, crossroads. Rockford, Fourteenth Avenue and Ninth Street center of inter- section	42 15 10.0	89 03 26.2	5,090
Rockford, intersection of Fifteenth Avenue and Seminary Street..	42 15 09.5	89 04 50.3	6,320
Rockford, east end of highway bridge over Rock River.....	42 15 04.3	89 05 42.7	3,977
	42 15 04.2	89 06 07.6	1,870

Magnetic declination for east border of quadrangle, 4° E.

THEBES QUADRANGLE.

North along Mobile & Ohio R. R. near east border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
NORTH AMERICAN DATUM.			
	° ' "	° ' "	Feet.
Beech Ridge, railroad crossing, 1,100 feet south of depot.....	37 05 33.0	89 15 22.7	.....
Cache, intersection of Mobile & Ohio and Illinois Central railroads.	37 06 06.6	89 15 46.9	3,915
Cache, 1.5 miles north of, railroad crossing	37 07 10.5	89 16 30.4	7,363
Railroad crossing, just north of milepost 140	37 07 48.1	89 16 29.1	3,797
Railroad crossing, second-class road	37 08 42.4	89 16 25.3	5,500
Hodges Park (Unity post office), railroad crossing 300 feet north of depot, line between secs. 1 and 36, Tps. 15 and 16 S., R. 2 W. ...	37 09 30.7	89 16 21.9	4,895
Railroad crossing, 900 feet south of milepost 137	37 10 10.0	89 16 26.9	3,993
T. 15 S., R. 2 W., line between secs. 25 and 36 at second class road crossing, center of track	37 10 23.3	89 16 29.2	1,359
T. 15 S., R. 2 W., line between secs. 24 and 25, railroad crossing...	37 11 16.4	89 16 20.6	5,408
T. 15 S., R. 2 W., line between secs. 13 and 24, railroad crossing, at south edge of Sandusky.....	37 12 09.4	89 16 26.1	5,380
Sandusky, railroad crossing just north of depot.....	37 12 30.6	89 16 28.8	2,155
T. 15 S., R. 2 W., line between secs. 12 and 13, center of track, 15 feet north of trestle 511-15.....	37 13 02.7	89 16 29.6	3,249
Tamm's, about 150 feet south of depot, 2 feet from high board fence around hotel yard and 20 feet northeast of the southwest corner of this fence; iron post stamped "Prim. Trav. Sta. No. 6, 1916, Ill."	37 14 06.4	89 16 11.3	6,608

Northwest along Illinois Central and Chicago & Eastern Illinois railroads from Cache to Gale.

NORTH AMERICAN DATUM.			
Cache, 110 feet northwest of railroad intersection, at right-angle bend in wagon road, on north side of road, 5 feet west of fence corner; iron post stamped "Prim. Trav. Sta. No. 9, 1916"	37 06 07.2	89 15 48.3	.....
Point of switch	37 06 21.1	89 16 31.2	3,743
Miller's spur, railroad crossing	37 07 29.7	89 17 51.2	9,496
Railroad crossing, about 1,100 feet northwest of sawmill	37 08 27.1	89 18 56.9	7,873
Railroad crossing at second-class road, just north of milepost 138 ..	37 08 44.0	89 19 13.4	2,170
T. 16 S., R. 2 W., line between secs. 3 and 10, center of track, in line with road east.....	37 09 06.7	89 19 35.6	2,910
Railroad crossing at north and south road, probably on line between secs. 32 and 33, T. 15 S., R. 2 W.	37 09 51.9	89 20 38.8	6,863
Olive Branch, 10 feet east of northeast corner of Chicago & Eastern Illinois R. R. station and near edge of platform, on line with south rail of tangent below (northeast of) Olive Branch; iron pipe (Miss. R. Comm. 4 H)	37 10 04.80	89 21 09.39	2,797
T. 15 S., R. 2 W., probable line between secs. 31 and 32, center of track	37 09 50.1	89 21 44.0	3,170
T. 15 S., R. 2 W., probable line between secs. 31 and 36, about 600 feet northwest of milepost 371, center of track, in line with fence north	37 09 47.2	89 22 57.7	5,973
T. 15 S., R. 2 W., probable line between secs. 35 and 36, 700 feet west of milepost 372, railroad crossing.....	37 09 44.8	89 24 03.8	5,358
Railroad crossing	37 09 41.8	89 25 03.6	4,855
Fayville, intersection of Chicago & Eastern Illinois and Missouri Pacific railroads	37 09 43.4	89 25 19.8	1,318
Point of switch	37 10 29.5	89 26 18.3	6,676
Milepost 2, center of track	37 11 32.7	89 27 06.0	7,444
Milepost 377, center of track	37 12 20.3	89 27 28.8	5,157
Thebes, gable of courthouse (Miss. R. Comm.)	37 13 10.23	89 27 36.10	5,083
Point of switch, west track	37 14 17.9	89 27 18.5	6,993
Gale, railroad crossing, 850 feet below Illinois Central depot.....	37 14 43.1	89 26 58.6	3,009

THEBES QUADRANGLE—Continued.

Along highways near north border of quadrangle from Thebes to Tamm.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fect.</i>
Thebes, center of cross streets at First State Bank.....	37 13 12.0	89 27 40.2	.....
Thebes, overhead bridge over Missouri Pacific R. R., west end of.	37 13 14.9	89 27 13.0	2,214
Road forks near Beech Grove Church.....	37 13 22.6	89 26 19.2	4,423
Brownville schoolhouse, 0.5 mile southeast of, on east side of road at road forks, 5 feet southeast of signboard reading "Diswood 7 miles, Olive Branch 5 miles;" iron post stamped "Prim. Trav. Sta. No. 5, 1916 Ill.".....	37 12 53.9	89 24 48.2	7,739
Large walnut tree on south side of road, opposite barnyard gate.....	37 13 18.6	89 23 40.5	5,828
Divide on top of ridge, center of road.....	37 13 23.1	89 22 19.9	6,534
Road forks, 230 feet east of log house.....	37 13 50.2	89 21 46.9	3,823
Road forks, 30 feet southeast of walnut tree used as corner post of barbed-wire fence.....	37 14 13.5	89 20 31.5	6,540
Diswood at store and post office, stone in center of road forks.....	37 13 44.2	89 19 23.6	6,232
Hargis's store, 400 feet north of, lane west.....	37-13 17-2	89 19 15.6	2,810
Tamm, 2 miles southwest of railroad crossing, Chicago & Eastern Illinois R. R., just north of milepost 13.....	37-12 45-4	89-17 45-2	7,984
Milepost 14, center of track.....	37 13 22.4	89 17 05.2	4,950
Prim. Trav. Sta. No. 6 (previously described).....	37 14 03.4	89 16 11.3	6,228
Railroad crossing, 560 feet northeast of milepost 16.....	37 11 37.5	89 15 25.6	4,832

Magnetic declination near north border of quadrangle, 5° 03' E.

VERMONT QUADRANGLE.

East along highways near south border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Fect.</i>
T. 3 N., R. 1 W., quarter corner between secs. 10 and 11, 95 feet north and 18 feet east of, on east side of north-south road; iron post stamped "Prim. Trav. Sta. No. 43, Ill. 1911".....	40 15 19.4	90 29 22.2	.....
T. 3 N., R. 1 W., quarter corner between secs. 11 and 12, center of east and west road, at north and south fence line.....	40 15 16.6	90 28 09.6	5,636
T. 3 N., Rs. 1 E. and 1 W., quarter corner between secs. 12 and 7, T road north, Schuyler-Fulton county line.....	40 15 16.0	90 27 01.5	5,284
T. 3 N., R. 1 E., quarter corner between secs. 7 and 8, T road north.....	40 15 14.5	90 25 52.9	5,320
T. 3 N., R. 1 E., quarter corner between secs. 8 and 9, T road east.....	40 15 15.0	90 24 44.6	.....
T. 3 N., R. 1 E., quarter corner between secs. 9 and 10, bend in road, 420 feet east of T road south.....	40 15 16.1	90 23 37.5	5,210
T road east, center of triangle.....	40 15 13.3	90 19 52.6	.....
T. 3 N., R. 2 E., quarter corner between secs. 7 and 8, T road west at Mulberry schoolhouse.....	40 15 12.6	90 19 02.2	3,905

North along highways near east border of quadrangle.

Tps. 3 and 4 N., R. 2 E., line between secs. 2 and 35, T road south, about 900 feet west of Beatty schoolhouse No. 191.....	40 16 31.2	90 15 07.4	.....
T. 4 N., R. 2 E., quarter corner between secs. 26 and 27, crossroads.....	40 17 49.6	90 15 25.1	8,056
T. 4 N., R. 2 E., corner of secs. 22, 23, 26, and 27, center of north and south road, in line with fence west, large oak tree stands in center of road.....	40 18 16.2	90 15 24.7	2,689
T. 4 N., R. 2 E., corner of secs. 14, 15, 22, and 23, center of north and south road at east and west fence.....	40 19 09.6	90 15 23.8	5,411
T. 4 N., R. 2 E., quarter corner between secs. 14 and 15, crossroads.....	40 19 36.4	90 15 23.3	2,705
T. 4 N., R. 2 E., corner of secs. 10, 11, 14, and 15.....	40 20 03.1	90 15 22.8	2,705
T. 4 N., R. 2 E., quarter corner between secs. 10 and 11, crossroads.....	40 20 29.8	90 15 22.2	2,700
T. 4 N., R. 2 E., corner of secs. 2, 3, 10, and 11.....	40 20 56.4	90 15 21.8	2,700
T. 4 N., R. 2 E., quarter corner in center of sec. 3, T road north.....	40 21 23.5	90 15 56.0	3,807
Tps. 4 and 5 N., R. 2 E., quarter corner between secs. 3 and 34.....	40 21 50.0	90 15 54.8	2,680
T. 5 N., R. 2 E., stone corner of secs. 26, 27, 34, and 35, 10 feet north and 3 feet west of, on north side of east and west road at T road south; iron post stamped "Prim. Trav. Sta. No. 12, 1916 Ill.".....	40 22 43.1	90 15 16.7	6,132
Spoon River, near center of triangle at road forks, 100 feet south of south end of Elrod Bridge.....	40 23 27.7	90 15 16.8	.....
Roadforks at B. Barclay's residence.....	40 25 05.1	90 15 03.6	.....
Lane east, center of triangle.....	40 25 45.6	90 15 02.0	4,102
T. 5 N., R. 2 E., corner of secs. 2, 3, 10, and 11, at bend in road, 10 feet north of large oak tree.....	40 26 11.5	90 15 14.5	2,785

VERMONT QUADRANGLE—Continued.

North along highways near east border of quadrangle—Continued.

Station.	Latitude.	Longitude.	Distance between stations.
Tps. 5 and 6 N., R. 2 E., corner of secs. 2, 3, 34, and 35, T road east, lane west.....	40 27 05.8	90 15 14.2	5,502
Elm tree at T road west.....	40 27 25.7	90 15 13.3	2,010
T road east.....	40 27 45.1	90 16 21.3	5,607
Railroad crossing.....	40 28 23.8	90 16 20.5	3,914
T. 5 N., R. 2 E., 220 feet east of corner of secs. 21, 22, 27, and 28, at T road south, in center of large triangle; iron post stamped "Prim. Trav. Sta. No. 17, Ill. 1910".....	40 28 48.32	90 16 17.21	2,489

West along highways through center of quadrangle.

T. 5 N., R. 2 E., line between secs. 27 and 28, crossroads at Elrod (district 7) schoolhouse.....	40 22 52.4	90 16 28.5	.....
T. 5 N., R. 2 E., corner of secs. 28, 29, 32, and 33, T road west.....	40 22 41.4	90 17 36.9	5,410
T. 5 N., R. 2 E., corner of secs. 29, 30, 31, and 32, crossroads at Martin schoolhouse.....	40 22 41.2	90 18 45.0	5,275
T. 5 N., R. 2 E., west corner of secs. 30, and 31, in line with road east, 40 feet south of above corner is T. 5 N., R. 1 E., east corner of secs. 25 and 36, in line with road west.....	40 22 41.5	90 19 57.3	5,590
T. 5 N., R. 1 E., T road south, on line between secs. 25 and 26.....	40 22 51.3	90 21 07.1	5,495
Road forks at Hawthorne schoolhouse.....	40 22 55.3	90 21 41.9	2,727
T. 5 N., R. 1 E., 20 feet east and several hundred feet south of quarter corner in center of sec. 34, on east side of north and south road at T road west; iron post stamped "Prim. Trav. Sta. No. 13, 1916 Ill.".....	40 22 08.4	90 22 51.2	7,164
T. 5 N., R. 1 E., line between secs. 33 and 34.....	40 22 09.2	90 23 25.8	2,680
T. 5 N., R. 1 E., south corner of secs. 32 and 33, bend in road, 65 feet south of above corner is T. 4 N., R. 1 E., north corner of secs. 4 and 5.....	40 21 51.1	90 24 35.3	5,686
Table Grove, cross streets at Christian Church.....	40 21 51.8	90 25 26.2	3,940
T. 5 N., R. 1 E., south corner of secs. 31 and 32, T street north in Table Grove, 45 feet west of above corner is T. 4 N., R. 1 E., north corner of secs. 5 and 6.....	40 21 51.9	90 25 44.4	1,410
Tps. 4 and 5 N., Rs. 1 E. and 1 W., corner of Fulton and McDonough county line crossroads at Harris Cemetery, the principal meridian.....	40 21 52.2	90 26 53.8	5,370
T. 5 N., R. 1 W., quarter corner south side of sec. 36, in line with road north, 90 feet east of quarter corner in line with road south.....	40 21 52.7	90 27 28.4	2,680
T. 5 N., R. 1 W., quarter corner between secs. 25 and 36, T road west.....	40 22 45.5	90 27 27.9	5,340
T. 5 N., R. 1 W., corner of secs. 25, 26, 35, and 36, fence line at district 87 schoolhouse.....	40 22 46.4	90 28 02.5	2,684
T. 5 N., R. 1 W., corner of secs. 26, 27, 34, and 35, 25 feet south by 25 feet east of, in southeast corner of T road south; iron post stamped "Prim. Trav. Sta. No. 45, Ill. 1911".....	40 22 47.5	90 29 12.5	5,420

Magnetic declination east-west through center of quadrangle, 5° 28' E.; for south border of quadrangle, 5° 44' E.; for east border of quadrangle, 5° 12' E.

WISCONSIN.

PRIMARY TRAVERSE.

Baraboo, Cross Plains, Denzer, Lone Rock, Mazomanie, and White Mound quadrangles.

DANE, IOWA, AND SAUK COUNTIES.

The following geographic positions were determined by primary traverse in 1916 by J. H. Wilson and are based upon primary traverse positions in the Cross Plains quadrangle and upon United States Coast and Geodetic Survey position of Arena Church belfry.

For other positions in Wisconsin see United States Geological Survey Bulletins 201, 245, 276, 310, 440, 551, and 644; also Part I of the Eighteenth and Twenty-first Annual Reports, United States Coast and Geodetic Survey Report for 1911, as well as unpublished records of the United States Coast and Geodetic Survey, Appendix EEE, Report of Chief of Engineers, United States Army, for 1902, and Mississippi River Commission Report for 1885, 1894, and 1895.

BARABOO QUADRANGLE.

Along highways near southwest corner of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
Sauk City, at west end of railroad bridge over Wisconsin River, railroad crossing.....	° ' " 43 15 56.1	° ' " 89 43 39.7	<i>Fcct.</i>
T. 9 N., R. 6 E., corner of secs. 11, 12, 13, and 14, crossroads.....	43 15 50.2	89 44 22.3	3,206

CROSS PLAINS QUADRANGLE.

(By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
Primary traverse station No. 11, 1905.....	° ' " 43 14 58.5	° ' " 89 43 30.2	<i>Fcct.</i>
Mount Horeb, north and south railroad crossing, 1,350 feet west of depot.....	43 00 21.9	89 44 43.6	.....
Primary traverse station No. 9, 1905.....	43 00 45.5	89 43 48.7	4,583

DENZER QUADRANGLE.

West along highways near south border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
T. 9 N., R. 6 E., line between secs. 14 and 15, bend in road, 15 feet west of small wooden bridge.....	43 15 06.8	89 45 34.1	.....
T. 9 N., R. 6 E., corner of secs. 10, 11, 14, and 15, crossroads.....	43 15 49.3	89 45 33.6	4,300
T. 9 N., R. 6 E., corner of secs. 9, 10, 15, and 16, fence north.....	43 15 50.0	89 46 44.8	5,270
T. 9 N., R. 6 E., corner of secs. 8, 9, 16, and 17, 950 feet east of road forks to Koenig's mill, at north and south fence line, center of road.....	43 15 49.8	89 47 56.3	5,290
T. 9 N., R. 6 E., 810 feet west of corner of secs. 13, 14, 23, and 24, 90 feet west of road forks at road northwest, 25 feet west of oak tree, on north side of road; iron post stamped "Prim. Trav. Sta. No. 1, 1916, Wis.".....	43 15 00.0	89 51 38.9	.....
T. 9 N., R. 5 E., 10 feet west of line between secs. 14 and 15, lane south.....	43 15 02.9	89 52 40.2	4,547
Jacob Mingo's mail box, 20 feet northwest of, T road south.....	43 15 18.1	89 54 08.9	6,743
Black Hawk, about 2 miles southeast of, at road forks, 4 mail boxes.....	43 15 25.0	89 54 27.1	1,521
T road west, 10 feet west of mail box on dead oak tree.....	43 15 01.3	89 54 49.7	2,919
Black Hawk, 1 mile south of, in line with road north, crossroads.....	43 15 15.0	89 55 47.7	4,514
T. 9 N., R. 5 E., line between secs. 17 and 18, just east of old church building, at north and south fence line, center of road.....	43 15 20.3	89 56 12.6	1,921
Harrisburg Church, T road southwest at.....	43 15 21.8	89 56 37.0	1,808
T. 9 N., Rs. 4 and 5 E., on line between secs. 13 and 18, at creamery, T road north.....	43 15 24.7	89 57 17.6	3,025
T. 9 N., R. 4 E., on line between secs. 13 and 14, road south.....	43 15 36.8	89 58 30.1	5,500

Magnetic declination for south border of quadrangle, 4° 32' E.

LONE ROCK QUADRANGLE.

South along highways near east border of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	Feet.
J. Houslader's mail box, in front of his house, at bend in road just where road crosses top of ridge.....	43 14 49.8	90 00 37.1	.....
Joseph Frank's mail box, at walnut tree, center of road.....	43 14 01.4	90 00 56.8	5,114
T. 9 N., R. 4 E., probably on line between secs. 33 and 34, 45 feet southeast of walnut tree in fence corner at east end of row of walnut trees, on north side of road, at J. A. Frank's residence, T road north.....	43 12 58.2	90 01 05.4	6,430
District 7 schoolhouse, 1,250 feet west of, T road south.....	43 12 58.2	90 02 20.4	5,556
T. 8 N., R. 4 E., 0.25 mile west of corner of secs. 4, 5, 8, and 9, on line between secs. 5 and 8, crossroads at brick schoolhouse.....	43 11 24.1	90 02 20.8	9,531
Spring Green, 1.50 miles east of, extreme west end of railroad bridge over Wisconsin River.....	43 10 27.7	90 02 17.4	5,719
Spring Green, 1.90 miles east of, east end of bridge over Wisconsin River.....	43 10 26.1	90 01 51.7	1,910
Helena, just west of station, railroad crossing.....	43 10 23.9	90 01 17.1	2,589
Helena, 0.80 mile south of, T road east.....	43 09 42.4	90 01 25.8	4,252
T. 8 N., R. 4 E., corner of secs. 15, 16, 21, and 22, in line with fences north, south, and west and road east, at slight bend in road.....	43 09 42.0	90 00 54.4	2,325
District 5 schoolhouse, about 0.30 mile southwest of, 30 feet northwest of D. Ruggles's mail box, center of road forks at road west.....	43 03 01.4	90 00 13.6	.....
Mill Creek, just west of cheese factory, 250 feet northwest of road east, at road west by concrete culvert, 4 mail boxes, on wheel.....	43 02 35.6	90 00 23.8	2,722
Prominent rock, about 20 feet high, in field, about 200 feet north of road and just south of telephone line.....	43 01 29.6	90 00 01.1	6,893

Magnetic declination for east border of quadrangle, 4° 47' E.

MAZOMANIE QUADRANGLE.

South along highways near north border of quadrangle. (By J. H. Wilson in 1916.)

Lane south, center of main road at.....	43 14 53.8	89 49 35.8	.....
Rich's Corner, 0.25 mile north of Rich's schoolhouse, road forks.....	43 14 51.0	89 50 25.4	3,680
T. 9 N., R. 5 E., approximate corner of secs. 13, 14, 23, and 24, road south.....	43 14 58.3	89 51 28.3	4,714

MAZOMANIE QUADRANGLE—Continued.

Along highways near west border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
T. 8 N., R. 4 E., corner of secs. 14, 15, 22, and 23	43 09 42.0	89 59 43.0	<i>Fcct.</i>
T. 8 N., R. 4 E., quarter corner between secs. 14 and 23, T road south	43 09 41.9	89 59 25.2	1,315
T. 8 N., R. 5 E., quarter corner between secs. 19 and 30, center of east and west road, in line with road north, about 820 feet east of Bawden schoolhouse	43 08 48.9	89 56 47.6	
T road east at Catholic Church	43 07 38.8	89 57 00.3	7,158
T. 8 N., Rs. 4 and 5 E., line between secs. 31 and 36, center of road at north and south fence line, 190 feet west of road southeast, at cheese factory	43 07 19.6	89 57 20.7	2,463
Road forks, at Mill Creek Church, probably in line between Tps. 7 and 8 N.	43 07 05.4	89 57 50.9	2,654
Mill Creek Church, about 600 feet south of, at northwest corner of road forks; Prim. Trav. Sta. No. 4, 1916 Wis.	43 06 59.8	89 57 51.0	595
Road forks, at T. D. Mahoney's mail box, center of triangle	43 05 43.3	89 57 48.1	7,752
Road forks, about 510 feet west of bridge over Mill Creek, at sign board painted "Spring Green 9 M. Arena 8 M."; center of triangle	43 04 53.9	89 58 38.3	6,232
T. 7 N., R. 4 E., line between secs. 14 and 23; center of road at fence west, 580 feet north of T road east at Hyde	43 04 29.7	89 58 51.4	2,636
Hyde, about 1 mile south of, at road west, just south of three mail boxes on east side of road	43 03 58.5	89 59 08.8	3,410

East along highways through center of quadrangle.

T. 8 N., R. 4 E., corner of secs. 13, 14, 23, and 24, in line with road east and fence south	43 09 42.0	89 58 31.4	
T. 8 N., Rs. 4 and 5 E., corner of secs. 13, 24, 18, and 19, at fence north, center of east and west road	43 09 42.2	89 57 19.2	5,355
T road south	43 09 41.8	89 56 48.4	2,279
T. 8 N., R. 5 E., corner of secs. 16, 17, 20, and 21, at southwest corner of Arena, T road north	43 09 41.8	89 55 02.3	7,860
Arena, church belfry (U. S. C. & G. S. value)	43 09 50.69	89 54 50.28	1,264
T. 8 N., R. 5 E., 0.25 mile west of corner of secs. 15, 16, 21, and 22, on line between secs. 16 and 21, crossroads	43 09 42.1	89 54 08.9	3,196
T. 8 N., R. 5 E., line between secs. 21 and 28, center of road at fence east	43 08 49.8	89 54 19.7	5,365
T road east	43 08 23.8	89 54 18.2	2,631
T. 8 N., R. 5 E., line between secs. 28 and 33, about 320 feet south of O. Nelson's residence, at fence east, center of road	43 07 58.0	89 54 17.1	2,612
Tps. 7 and 8 N., R. 5 E., line between secs. 4 and 33, 75 feet north of road east, at east and west fence line, center of road	43 07 05.6	89 54 08.8	5,345
T. 7 N., R. 5 E., in northeast part of sec. 4, 180 feet south of road west, on east side of road, at fence corner at road east; iron post stamped "Prim. Trav. Sta. No. 3, 1916 Wis."	43 06 43.9	89 53 51.8	2,538
Tps. 7 and 8 N., R. 5 E., line between secs. 3 and 34, 10 feet north of crossroads	43 07 05.8	89 53 48.8	2,225
T. 8 N., R. 5 E., probably line between secs. 27 and 34, at east and west fence line, center of road	43 07 58.2	89 52 56.3	6,574
T. 8 N., R. 5 E., 1,450 feet east of crossroads, center of northeast and southwest road, in line with road west through center of sec. 25	43 08 25.4	89 50 50.5	9,733
T. 8 N., R. 5 E., line between secs. 25 and 36	43 07 59.3	89 50 46.6	2,655
T road east 0.5 mile southeast of creamery	43 07 37.0	89 50 28.2	2,726
Blue Mound Creek, center of bridge over, 310 feet east of road fork at Lockwood's residence	43 07 15.4	89 49 55.1	3,188
Blue Mound Creek, 1 mile northeast of bridge over, on south side of road, at bend in road at lane north, mail box on fence post	43 07 33.0	89 48 49.7	5,170
T. 8 N., R. 4 E., probably line between secs. 32 and 33, about 150 feet northwest of schoolhouse on top of ridge, at fence north, center of east and west road	43 07 35.4	89 47 56.4	3,964
T. 8 N., R. 4 E., about 1,070 feet south of corner of secs. 27, 28, 33, and 34, at Mr. Kerr's residence, T road west	43 07 50.2	89 46 45.4	5,483
Black Earth, 1.25 miles west of road southwest, center of triangle at road forks	43 08 29.8	89 46 06.1	4,958
Primary Traverse Station No. 10, 1905	43 08 03.80	89 44 58.20	

Magnetic declination for north border of quadrangle, 4° 32' E.; for south border of quadrangle, 4° 57' E.; for west border of quadrangle, 4° 47' E.; through center of quadrangle, 5° 05'.

MAZOMANIE QUADRANGLE—Continued.

East along highways and Chicago & North Western Ry. near south border of quadrangle.

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Road forks, at road west.....	43 01 12.9	89 59 45.0	.....
Ridgeway, northeast edge of, at northwest corner of road forks, 80 feet south of railroad crossing and 270 feet south of cemetery; iron post stamped "Prim. Trav. Sta. No. 5, 1916 Wis.".....	43 00 19.8	89 59 12.6	5,887
T. 6 N., R. 4 E., line between secs. 11 and 12, railroad crossing, 80 feet south of crossroads.....	43 00 23.6	89 58 32.3	3,015
T. 6 N., Rs. 4 and 5 E., quarter corner between secs. 7 and 12, center of road, 20 feet west of overhead railroad bridge and 50 feet east of T road north, at cheese factory.....	43 00 34.3	89 57 22.0	5,338
T. 6 N., R. 5 E., quarter corner between secs. 7 and 8, T lanes south, 886 feet east of Junction schoolhouse.....	43 00 34.4	89 56 14.6	5,015
T. 6 N., R. 5 E., quarter corner in center of sec. 8, T road south.....	43 00 34.2	89 55 38.7	2,670
T. 6 N., R. 5 E., quarter corner between secs. 8 and 9, center of east and west road, at north and south fence line.....	43 00 34.2	89 55 03.0	2,655
Barneveld, 1 mile south west of, railroad crossing signboard roads "Station 1 mile".....	43 00 36.4	89 54 44.2	1,422
T. 6 N., R. 5 E., quarter corner between secs. 3 and 10, T road north.....	43 01 01.0	89 53 16.8	6,954
Barneveld, 1 mile east of, on north side of road at bend in road at foot of hill, 10 feet west of road south and 60 feet west of road north; iron post stamped "Prim. Trav. Sta. No. 6, 1916 Wis.".....	43 01 01.4	89 52 49.5	2,037
Road forks, road south, 123 feet west of District 8 schoolhouse.....	43 00 55.1	89 51 27.4	6,131
T. 6 N., Rs. 5 and 6 E., corner of secs. 6, 7, 1, and 12, center of east and west road, 160 feet due south of east side of windmill.....	43 01 01.8	89 50 18.4	5,177
Blue Mounds, just south of post office, crossing of streets.....	43 01 02.3	89 49 55.4	1,709
T. 6 N., R. 6 E., 120 feet east of north and south line through center of sec. 8, on railroad, directly under overhead road crossing.....	43 00 52.9	89 48 33.7	6,148
T. 6 N., R. 6 E., line between secs. 8 and 9, center of railroad track.....	43 00 51.6	89 48 00.0	2,510
Railroad crossing, 375 feet south of schoolhouse.....	43 00 25.7	89 47 06.3	4,773
T. 6 N., R. 6 E., north and south road through center of sec. 10.....	43 00 21.9	89 46 12.8	3,999
T. 6 N., R. 6 E., about 100 feet north of corner of secs. 10, 11, 14, and 15, center of railroad track, in line with road south; 145 feet above second-class railroad crossing.....	43 00 11.9	89 45 37.6	2,806

Magnetic declination near north border of quadrangle, 4° 32' E.; near south border of quadrangle, 4° 57' E.; near west border of quadrangle, 4° 47' E.; through center of quadrangle, 5° 05' E.

WHITE MOUND QUADRANGLE.

Along highways near southeast corner of quadrangle. (By J. H. Wilson in 1916.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
Schoolhouse, 750 feet west of, road south.....	43 16 00.7	90 00 00.1	.....
Plain, about 1.50 miles southeast of, on north side of road, at road forks near creamery, 16 feet southwest of telephone pole, iron post stamped "Prim. Trav. Sta. No. 2, 1916, Wis.".....	43 16 17.9	90 01 10.3	5,481

DELANAV QUADRANGLE.

(By F. W. Crisp in 1917, extended from work in Illinois.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
T. 1 N., R. 15 E., quarter corner between secs. 29 and 32, crossroads.....	42 30 25.1	88 44 49.8	.....

SHOPIERE QUADRANGLE.

(By F. W. Crisp in 1917, extended from work in Illinois.)

Station.	Latitude.	Longitude.	Distance between stations.
	° ' "	° ' "	<i>Feet.</i>
T. 1 N., R. 14 E., quarter corner between secs. 29 and 32, 1,600 feet west of, north side of east-west road, 3 feet from plank fence; iron post stamped "Prim. Trav. Sta. No. 4, 1905" (tie point).....	42 30 24.6	88 45 11.5	.....