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UNITED STATES GEOLOGICAL SURVEY

GEORGE OTIS SMITH, DIRECTOR

BULLETIN 399-406

RESULTS

OF

SPIRIT LEVELING IN WEST VIRGINIA

1896 TO 1908, INCLUSIVE

COMPILED BY

S. S. GANNETT AND D. H. BALDWIN

IN COOPERATION WITH THE WEST VIRGINIA STATE GEOLOGICAL SURVEY
DURING 1901 TO 1908, INCLUSIVE



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RESULTS OF SPIRIT LEVELING IN WEST VIRGINIA,
1896 TO 1908, INCLUSIVE.

Compiled by S. S. GANNETT and D. H. BALDWIN.

INTRODUCTION.

Scope of the work.—The results herein given are based on a common mean sea-level datum. The main control is the adjustment made in 1903 by the Coast and Geodetic Survey of a great net of precise levels which combines work of various organizations and covers the eastern half of the United States. The precise-level lines which traverse West Virginia are the "transcontinental" line of the Coast and Geodetic Survey following the Baltimore and Ohio Railroad from Corinth to Parkersburg; the Baltimore and Ohio precise-level line from Harpers Ferry via Cumberland and Grafton to Moundsville; the precise levels of the Ohio River survey by the Corps of Engineers, U. S. Army; and two lines by the United States Geological Survey from Grafton north along the Baltimore and Ohio Railroad to the state line and from Alleghany west to Charleston. The results of adjustments of the Ohio River survey line are given by the Coast and Geodetic Survey only for junction points with other precise lines; the adjusted heights at other points were interpolated by the United States Geological Survey. The portion of the Baltimore and Ohio line lying between Cumberland, Md., and Benwood, W. Va., is recent work and did not form part of the data involved in the net adjustment, but an adjustment has been made of this line and corrections made to the primary leveling in agreement.

All results of spirit leveling in this State previously published by the United States Geological Survey and all later work are included in this report, readjusted, and rearranged by quadrangles. Descriptions and elevations of bench marks are given for 48 counties, furnishing vertical control for nearly half the State.

Personnel.—The field work for the years 1896 to 1906, inclusive, was done under the direction of H. M. Wilson, geographer, and for

the years 1907 and 1908 under Frank Sutton, geographer, in 1908 under the general supervision of R. B. Marshall, chief geographer.

Credit is given to the various level men directly in charge under the heading of each list.

The office work of adjustment was principally done by D. H. Baldwin, topographer, under the immediate supervision of S. S. Gannett, geographer, and since 1907 under the general direction of E. M. Douglas, geographer.

Methods of determination.—The lists are arranged according to the degree of accuracy of the method used in their determination, precise and primary. Under precise leveling are included either lines run in both forward and backward directions or simultaneous double-rodDED lines, a high-grade instrument being used and special precautions being taken in observations and reduction to correct errors and make the line continuously good throughout. Under primary leveling are included lines run mostly single with the Y level, precautions being taken against only the principal sources of error, and depending upon the closure of circuits for a check. The allowable limit of error observed on the double-simultaneous precise line from Grafton, W. Va., to Pittsburg, Pa., by the Geological Survey is represented in feet by the formula $0.04\sqrt{D}$, and the limit observed on the precise line from Alleghany to Charleston, by the forward and backward method, by the formula $0.017\sqrt{D}$, in which D is the distance between bench marks in miles. The limit in feet on primary work is $0.05\sqrt{D}$, in which D is the length of circuit in miles.

Bench marks.—The bench marks described in the following list are mainly of three general forms: First, a circular bronze or aluminum tablet $3\frac{1}{2}$ inches in diameter and one-fourth inch thick, appropriately lettered, having a 3-inch stem cemented into a drill hole, generally in the vertical walls of public buildings, bridge abutments, or other substantial masonry structures. The second form, employed where masonry or rock is not accessible, consists of a hollow wrought-iron post 4 feet in length and 3.5 inches in outer diameter, split at the bottom and expanded to 10 inches, so as to prevent both the easy subsidence of the post and the malicious pulling of it out of the ground. The iron is heavily coated with asphalt, and over the top of the post is riveted a bronze tablet similar to that described above. The third form consists of a copper bolt 1 inch in diameter and 4 inches long, which is split at one end and expanded in a drill hole in masonry by driving on a brass wedge. But few bench marks of the third class have been used in this State, and their use has now been discontinued.

The numbers stamped upon the bench marks as described in the following lists represent the elevations to the nearest foot above mean

sea level, as determined by unadjusted levels in the field. The notes have since been subjected to changes resulting from the adjustments necessary to close circuits and to those resulting from reduction to mean sea level through readjustment of the precise-level net of the United States, and therefore in some cases the finally accepted elevations as printed herein differ from those submitted as bench-mark numbers by 1 or 2 feet. This method of numbering bench marks has been adopted where many levelmen are working in the same area at the same time, as less liable to lead to confusion in identification of bench marks than any attempt at serial numbering, and because the bench-mark number at the same time gives an approximate statement of the elevation. It is assumed that engineers and others finding these bench marks so stamped in the field will communicate with the Director of the United States Geological Survey in order to obtain the accepted elevation to hundredths or thousandths of a foot. Bench marks established under cooperation with the State of West Virginia are stamped with the state name.

Any person finding bench marks in the following lists mutilated or destroyed will confer a favor by notifying the Director, United States Geological Survey, Washington, D. C.

PRECISE LEVELING.

BLACKSVILLE, FAIRMONT, AND MORGANTOWN QUADRANGLES.

MARION, MONONGALIA, AND TAYLOR COUNTIES.

The elevations in the following list are a portion of the result of a line of precise levels run in 1899 from Grafton, W. Va., to Pittsburg, Pa., by E. L. McNair. This line was included in the adjustment of the precise-level net made in 1903 by the Coast and Geodetic Survey, with the result that the elevation by the original line was lowered at Braddock, Pa., 0.112 foot with respect to Grafton in a total distance of 142.5 miles, and 0.053 foot of this error has been adjusted into this West Virginia portion.

The double-simultaneous method was employed with a Buff & Berger precise level and two double-faced 10-foot nonextensible target rods.

GRAFTON, NORTH ALONG BALTIMORE AND OHIO RAILROAD, VIA FAIRMONT AND MORGANTOWN, TO STATE LINE.

FAIRMONT QUADRANGLE.

Grafton, Baltimore and Ohio Railroad bridge across Tygart River, at north end of central pier, on coping stone; chisel mark (Coast and Geodetic Survey bench mark "M").....	Feet. 996.856
Grafton, in front of station; top of rail on main line.....	1,000.5

Valley Falls, 2.9 miles east of, bridge seat at northeast corner of girder bridge 104, 7 feet east of center of track, 4 feet below top of outer rail of curve; bronze tablet stamped "986 PITTSBURG 1899".....	Feet. 985. 601
Bush, in front of flag station; top of south rail.....	985. 2
Valley Falls, in front of station; top of north rail.....	974. 9
Powells, in front of flag station; top of south rail.....	907. 6
Powells, 0.67 mile west of flag station, stone-arch bridge 108, coping of stone wall, 1.1 feet below top of rail, 7 feet north of center of track; aluminum tablet stamped "899 PITTSBURG 1899".....	899. 043
Colfax, in front of station; top of south rail.....	891. 9
Bentons Ferry, at signboard; top of south rail.....	889. 9
Bentons Ferry, 160 feet south of signboard, bridge seat at southwest corner of girder bridge 111, 4.5 feet below top of rail and 18.5 feet south of center of track; bronze tablet stamped "885 PITTSBURG 1899".....	885. 094
Fairmont, in front of Baltimore and Ohio station; top of east rail.....	883. 6
Fairmont, 1.25 miles north of, Baltimore and Ohio Railroad bridge 371 across Monongahela River, at north end of east abutment in coping stone; bronze tablet stamped "885 PITTSBURG 1899".....	885. 034

BLACKSVILLE QUADRANGLE.

Hoult, in front of station; top of west rail.....	882. 4
Rivesville, in front of flag station; top of east rail.....	881. 3
Montana, in front of station; top of east rail.....	875. 4
Catawba, 0.8 mile south of, Baltimore and Ohio Railroad 1-span truss bridge 369, in coping stone at north end of east abutment, 3 feet below and 8 feet north of rail; bronze tablet stamped "873 PITTSBURG 1899".....	872. 605
Catawba, in front of station; top of north rail.....	873. 0
Luther, in front of station; top of east rail.....	867. 9
Murray (Scottdale post-office), in front of station; top of north rail.....	868. 0
Opekiska, in front of station; top of north rail.....	866. 2
Beechwood, in front of station; top of south rail.....	860. 2
Little Falls, 1.33 miles northwest of, 9.5 feet west of and 4 feet above west rail, 0.5 mile north of bridge 366, in face of rock bluff; bronze tablet stamped "859 PITTSBURG 1899".....	858. 844
Little Falls, in front of station; top of north rail.....	847. 3

MORGANTOWN QUADRANGLE.

Uffington, in front of station; top of north rail.....	831. 3
Uffington, 400 feet north of station, in coping stone of abutment at northwest corner of 1-span truss bridge 364, 3 feet below and 7 feet north of top of rail; aluminum tablet stamped "828 PITTSBURG 1899".....	827. 883
Russell siding; east rail.....	822. 6
Morgantown, 480 feet south of Baltimore and Ohio station, in coping stone of abutment at northwest corner of truss bridge over Deckers Creek; bronze tablet stamped "821 PITTSBURG 1899".....	820. 870
Morgantown, in front of Baltimore and Ohio station; top of east rail.....	823. 1
Randall, in front of flag station; top of east rail.....	824. 5
Van Voorhis, 1 mile south of, in bridge seat at southeast corner of steel-girder bridge 359; bronze tablet stamped "815 PITTSBURG 1899".....	815. 218
Van Voorhis, in front of station; top of west rail.....	818. 0
Hoard, in front of flag station; top of east rail.....	817. 0
State line (West Virginia-Pennsylvania) post; top of east rail.....	815. 3

CHARLESTON, HINTON, KANAWHA FALLS, LEWISBURG, AND RALEIGH 30' QUADRANGLES;
CHARLESTON SPECIAL, FAYETTEVILLE, AND MONTGOMERY 15' QUADRANGLES.

FAYETTE, GREENBRIER, KANAWHA, RALEIGH, AND SUMMERS COUNTIES.

The following are the adjusted results of a line of precise levels extended from precise leveling in Virginia and North Carolina; the closure error, using the Kanawha River survey levels of the army engineers to complete the line from Charleston to the Ohio River, was +0.732 foot upon the 1903 adjustment at Point Pleasant. This error has been adjusted through the entire line from Greensboro, N. C., the West Virginia portion being corrected by amounts proportionate to the mileage, between -0.44 foot at Alleghany and -0.732 foot at Lock 6, or at a rate of about 0.002 foot per mile.

The prism level and yard rods were used and the latest methods employed.

The leveling was done in 1907 by C. H. Semper, level man.

ALLEGHANY TUNNEL, VA., WEST ALONG CHESAPEAKE AND OHIO RAILWAY, TO HINTON; NORTHWEST TO GAULEY, W. VA.; THENCE NORTHWEST, ALONG KANAWHA AND MICHIGAN RAILWAY, TO CHARLESTON AND LOCK 6.

LEWISBURG 30' QUADRANGLE.

	Feet.
Tuckahoe, in front of station; top of rail.....	2,036. 5
Tuckahoe, 2.03 miles west of, 15 feet west of milepost "CIN 355," south of track, in face of wall in rock cut; aluminum tablet stamped "1981" ..	1,980. 335
White Sulphur, in front of station; top of rail.....	1,923. 3
White Sulphur, 546 feet north of station, in northwest corner of brick church; aluminum tablet stamped "1915".....	1,914. 100
Dickson, in front of station; top of rail.....	1,835. 4
Dickson, 0.33 mile west of, in top of abutment at west end of bridge over highway; aluminum tablet stamped "1790".....	1,789. 207
Harts Run, in front of signboard; top of rail.....	1,818. 0
Caldwell, in front of signboard; top of rail.....	1,764. 0
Caldwell, 0.56 mile west of, in top of north side of west abutment of steel bridge; aluminum tablet stamped "1745".....	1,744. 562
Whitcomb, 500 feet east of, in top of north side of west abutment of bridge over river; aluminum tablet stamped "1700".....	1,699. 570
Whitcomb, in front of station; top of rail.....	1,700. 7
Ronceverte, in front face of First National Bank Building; aluminum tablet stamped "1666".....	1,665. 036
Ronceverte, in front of station; top of rail.....	1,663. 8
Ronceverte, 3.22 miles west of, 240 feet east of milepost "CIN 339," in foundation of semaphore pole; aluminum tablet stamped "1659".....	1,658. 111

HINTON 30' QUADRANGLE.

Rockland, in front of station; top of rail.....	1,654. 7
Fort Spring, in front of station; top of rail.....	1,624. 4
Fort Spring, directly opposite station, at margin of highway, in railroad retaining wall; aluminum tablet stamped "1622".....	1,621. 565

	Feet.
Frazier, in front of signboard; top of rail.....	1,610.5
Fort Spring, 2.92 miles west of, 230 feet east of milepost "CIN 333," in face of rock wall; aluminum tablet stamped "1593".....	1,592.730
Half Way, in front of station; top of rail.....	1,586.5
Alderson, northwest corner of front face of Merchant Grocery Company Building; aluminum tablet stamped "1556".....	1,555.074
Alderson, in front of station; top of rail.....	1,550.9
Mohler, in front of station; top of rail.....	1,543.7
Alderson, 2.52 miles west of, west of track, 0.38 mile south of milepost "CIN 327," in top of railroad culvert; aluminum tablet stamped "1534".....	1,533.252
Riffe, in front of station; top of rail.....	1,523.2
Alderson, 6.13 miles west of, at milepost "CIN 323," in face of rock; alu- minum tablet stamped "1525".....	1,524.209
Pence Springs, in front of station; top of rail.....	1,530.2
Pence Springs, 0.42 mile west of, in foundation of semaphore pole; alumi- num tablet stamped "1531".....	1,530.564
Lowell, in front of station; top of rail.....	1,516.8
Talcott, northwest corner of foundation under Chesapeake and Ohio Rail- way station; aluminum tablet stamped "1514".....	1,513.329
Hilldale, 175 feet west of, in stone step on north side of track; aluminum tablet stamped "1509".....	1,508.265
Hilldale, 2.53 miles west of, 65 feet west of milepost "CIN 313," in face of rock wall; aluminum tablet stamped "1455".....	1,454.374
Wiggins, in front of station; top of rail.....	1,441.5
Wiggins, 2.72 miles west of, in foundation of semaphore pole; aluminum tablet stamped "1395".....	1,394.665
Hinton, in northwest corner of Chesapeake and Ohio Railway station; aluminum tablet stamped "1388".....	1,385.212
Hinton, in front of station; top of rail.....	1,382.2
Hinton, 3.05 miles west of, 260 feet west of milepost "CIN 305," north of track, in bridge seat at east end; aluminum tablet stamped "1350".....	1,349.715
Brooks, in front of signboard; top of rail.....	1,341.8
Hinton, 6.04 miles west of, 250 feet west of milepost "CIN 302," south of track, in railroad culvert; aluminum tablet stamped "1329".....	1,328.047
Sandstone, 0.31 mile east of, west side of railroad bridge, in north abut- ment; aluminum tablet stamped "1292".....	1,291.732
Sandstone, in front of station; top of rail.....	1,293.0
Meadow Creek, in front of station; top of rail.....	1,272.9
Meadow Creek, 0.2 mile west of, in top of west abutment at north side of railroad bridge; aluminum tablet stamped "1269" ^a	1,270.126
Meadow Creek, 2.75 miles west of, north of track, in top of east end of rail- road culvert; aluminum tablet stamped "1252".....	1,250.998

RALEIGH 30' QUADRANGLE.

Glade, in front of station; top of rail.....	1,242.2
Glade, 0.75 mile west of, north of track, 250 feet west of milepost "CIN 290," in top of railroad culvert; aluminum tablet stamped "1233".....	1,232.434
Quinnimont, 40 feet south of station, in top of north abutment at west side of railroad bridge; aluminum tablet stamped "1200".....	1,199.058
Quinnimont, in front of station; top of rail.....	1,201.5

^a In accordance with report of R. W. Mumford, division engineer, Chesapeake and Ohio Railway, that the above bench mark was reestablished at same description but 19 inches greater elevation, its equivalent 1.58 feet was added to the original elevation for the bench mark in addition to the adjustment correction.

	Fect.
Prince, in front of station; top of rail.....	1, 191. 4
McKendree, 0.21 mile east of, 85 feet east of milepost "CIN 282," north of track, in face of boulder; aluminum tablet stamped "1137".....	1, 136. 459
McKendree, in front of station; top of rail.....	1, 130. 5
Thayer, in front of signboard; top of rail.....	1, 111. 3
Thayer, 60 feet east of signboard, south of track, in top of west abutment of railroad bridge; aluminum tablet stamped "1111".....	1, 110. 018
Alaska, in front of signboard; top of rail.....	1, 095. 8
Claremont, in front of station; top of rail.....	1, 089. 8
Stone Cliff, 0.17 mile east of, in foundation of semaphore pole; aluminum tablet stamped "1083".....	1, 082. 060
Stone Cliff, in front of station; top of rail.....	1, 079. 3
Thurmond, in front of station; top of rail.....	1, 070. 9
Thurmond, in north abutment on west side of railroad bridge over New River; aluminum tablet stamped "1068".....	1, 067. 457
Rush Run, in front of station; top of rail.....	1, 045. 7
Beury, in front of signboard; top of rail.....	1, 037. 8
Beury, 160 feet east of signboard, in top of west abutment at north side of railroad culvert; aluminum tablet stamped "1036".....	1, 035. 596
Fire Creek, in front of station; top of rail.....	1, 034. 2
Sewell, 0.58 mile north of, 170 feet east of milepost "CIN 268," in foundation of semaphore pole; aluminum tablet stamped "1011".....	1, 010. 113
Sewell, in front of station; top of rail.....	1, 008. 2

FAYETTEVILLE 15' (KANAWHA FALLS 30') QUADRANGLE.

Caperton, in front of station; top of rail.....	991. 0
Keeney Creek, in front of signboard; top of rail.....	968. 8
Nuttall (Nuttallburg post-office), 0.56 mile east of, north of track, in top of east abutment to railroad culvert; aluminum tablet stamped "959".....	958. 091
Nuttall, in front of station; top of rail.....	949. 5
Nuttall, 1.47 miles west of, 220 feet west of milepost "CIN 262," west of track, in face of large rock; aluminum tablet stamped "924".....	923. 546
Fayette, in front of station; top of rail.....	899. 9
Newlyn, in front of signboard; top of rail.....	880. 9
Elmo, in front of signboard; top of rail.....	870. 6
Fayette, 1.81 miles west of, 200 feet west of milepost "CIN 259," north of track, in face of large rock; aluminum tablet stamped "868".....	867. 085
Sunnyside, in front of signboard; top of rail.....	849. 7
Hawks Nest, in front of station; top of rail.....	834. 5
Hawks Nest, 0.22 mile west of, south of track, in top of abutment at east end of railroad bridge over New River; aluminum tablet stamped "834".....	832. 873
Cotton Hill, in front of station; top of rail.....	794. 7
Cotton Hill, 1.14 miles west of, 150 feet south of milepost "CIN 253," 7 feet east of track, in top of large rock; aluminum tablet stamped "771".....	770. 240
Gauley, in front of station; top of rail.....	720. 0
Gauley, 400 feet north of Chesapeake and Ohio station, in top of south abutment at west side of bridge over New River; aluminum tablet stamped "712".....	711. 842
Gauley Bridge station, on Kanawha and Michigan Railway, at top step of wing wall in south face of abutment at west end of bridge over highway; aluminum tablet stamped "677 KNWA" (old bench mark—elevation given in 21st Annual Report, 677.086).....	676. 543
Glen Ferris, in front of station; top of rail.....	673. 3

Kanawha Falls, 180 feet south of flag station of Kanawha and Michigan Railway, 200 feet north of railway crossing, west of track, nearly opposite house of T. W. Farley, in face of rock at base of cliff; bronze tablet stamped "667 KNWA" (old bench mark—elevation given in 21st Annual Report, 667.121).....	Feet. 666.540
Falls View, in front of station; top of rail.....	652.9

MONTGOMERY 15' (KANAWHA FALLS 30') QUADRANGLE.

Boomer, in front of station; top of rail.....	644.9
Harewood, in front of station; top of rail.....	643.0
Longacre, in front of station; top of rail.....	645.1
Smithers, in front of station; top of rail.....	640.4
Cannelton, in front of station; top of rail.....	638.8
Cannelton, 1.03 miles west of, in east face of masonry near north end of Kanawha Lock 2; bronze tablet stamped "614 KNWA" (old bench mark—elevation given in 21st Annual Report, 614.205).....	613.485
Lock 2, top of coping over tablet (elevation given in 21st Annual Report, 614.530).....	613.808
London, in front of station; top of rail.....	636.0
London, 395 feet north of, east of track, in top of railroad culvert; aluminum tablet stamped "636".....	635.334
Hugheston, in front of station; top of rail.....	629.1
Riverside, in top of coping stone at northwest corner of head of Lock 3; aluminum tablet stamped "606".....	605.466
Riverside, in front of signboard; top of rail.....	626.5
Cedar Grove, in front of station; top of rail.....	619.5
Cedar Grove, 1.95 miles west of, in top of bridge seat in east abutment at north side of railroad culvert; aluminum tablet stamped "618".....	617.316
Shrewsbury, in front of station; top of rail.....	617.2

PEYTONA (CHARLESTON 30') QUADRANGLE.

Dickinson, in inside face of wall around turntable; aluminum tablet stamped "620".....	619.064
Dickinson, in front of station; top of rail.....	622.2
Belle, in front of signboard; top of rail.....	613.4
Belle, 110 feet west of signboard, north of track, in top of railroad culvert; aluminum tablet stamped "611".....	609.962
Piatt, in front of signboard; top of rail.....	611.8

CHARLESTON SPECIAL (CHARLESTON 30') QUADRANGLE.

Heskett, in front of signboard; top of rail.....	616.4
Heskett, 80 feet north of, west of track, in top of north abutment to-railroad culvert; aluminum tablet stamped "614".....	612.976
Malden, in front of station; top of rail.....	612.3
Dana, in front of station; top of rail on Kanawha and Michigan Railway track.....	608.5
Dana, 1.03 miles west of, south of track, 230 feet east of milepost "G B 33," in top of large rock; aluminum tablet stamped "598".....	597.458
Charleston, in north face of Kanawha and Michigan Railway station, under window of ticket office; aluminum tablet stamped "601".....	600.935

PRIMARY LEVELING.

13

Charleston, in northwest corner of state capitol; bronze tablet stamped "602 C" (old bench mark).....	Feet. 600.703
Charleston, in front of station; top of rail.....	597.7
Charleston, in front of Park street station; top of rail.....	604.9
West Charleston, in front of station; top of rail.....	601.3
Charleston, 4.86 miles west of, at hollow quoin stone of lower gate, in top of coping stone of north wall of Lock 6; chiseled square (army engineers' bench mark—elevation, 565.5).....	569.355

PRIMARY LEVELING.

WILLIAMSPORT QUADRANGLE.

BERKELEY COUNTY.

Leveling done in 1908 by J. M. Harris. Part of single spur from Hagerstown to be extended in 1909 to Martinsburg.

POTOMAC RIVER BRIDGE SOUTH OF WILLIAMSPORT, MD., SOUTHWEST ALONG CUMBERLAND VALLEY RAILROAD, TO FALLING WATERS.

Williamsport station, 1.5 miles southwest of, railroad bridge 82-1 over Potomac River; top of rail near west end.....	Feet. 380.8
Williamsport station, 2.3 miles southwest of, in top of southwest corner of west bridge seat of railroad bridge 82-2; aluminum tablet stamped "363".....	362.647
Williamsport station, 3.4 miles southwest of; on top of west foundation at north end of water tank.....	361.485
Falling Waters, 500 feet east of, railroad bridge 85; northeast corner of east bridge seat.....	359.160
Falling Waters, in front of station; top of rail.....	372.3
Falling Waters, 0.6 mile southwest of, at telephone pole "85-31," in center of south head wall in top of concrete box culvert under railroad; aluminum tablet stamped "404".....	404.335

MARTINSBURG AND MIDDLETOWN QUADRANGLES.

JEFFERSON COUNTY.

Leveling in 1907 by W. R. Winstead.

Elevations in Maryland and Virginia on these quadrangles will be published in another bulletin.

MIDDLETOWN QUADRANGLE.

AT HARPERS FERRY.

Harpers Ferry, on northwest corner of south end of west abutment of road bridge near toll office; point marked "U. S. B. M. 279".....	Feet. 279.23
Harpers Ferry, in front face of post-office on south side of main entrance; aluminum tablet stamped "ADJ 275".....	274.645

MARTINSBURG QUADRANGLE.

AT SHEPHERDSTOWN.

Shepherdstown, in front face of post-office, 3 feet east of main entrance; aluminum tablet stamped "ADJ 406".....	405.671
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FLINTSTONE, FROSTBURG, HANCOCK, AND PAWPAW QUADRANGLES.

BERKELEY, MINERAL, AND MORGAN COUNTIES.

Leveling in Frostburg and Flintstone quadrangles in 1897 by Hargraves Wood, and in Pawpaw and Hancock quadrangles in 1898 by C. B. Bailey, and in 1899 by Chas. M. Smith.

PATTERSON CREEK SOUTH TO ALASKA.

FLINTSTONE QUADRANGLE.

Patterson Creek, north end of Baltimore and Ohio Railroad bridge over Patterson Creek, north side of track, in ballast wall; copper plug marked "574 C"	Feet. 574. 327
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FROSTBURG QUADRANGLE.

Frankfort (Alaska), 0.5 mile northwest of, in west end of north abutment of highway bridge over Patterson Creek; copper bolt stamped "589 C" .	589. 257
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HANCOCK QUADRANGLE.

HANCOCK, SOUTHWEST ALONG HIGHWAY VIA BERKELEY SPRINGS, TO ROCK GAP.

Berkeley Springs, west face of southwest corner stone of Morgan County court-house; aluminum tablet stamped "612 C" (reported destroyed, court-house torn down).....	612. 085
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STOTLERS CROSSROADS, NORTHEAST AND EAST ALONG SLEEPY CREEK, TO CHERRY RUN, MD.

Stotlers Crossroads, 0.5 mile north of; at first ford of Sleepy Creek, ledge of rock east side of road, 0.25 mile north of north entrance to ford, in cleft of rock about 4 feet above roadway; aluminum tablet stamped "662 C" .	662. 244
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M'COY'S FERRY, SOUTH UP BLACK CREEK (DOUBLE-TARGETED SPUR LINE).

Johnstown, 1.2 miles south of; on an outcrop of sandstone rock about 125 feet east of road forks and 2.5 miles west of Hedgesville; three small pines stand just south; chiseled square	561. 51
Tomahawk, in northeast corner of foundation stone of W. W. Hedges's barn; aluminum tablet stamped "466 C"	466. 577

PAWPAW QUADRANGLE.

ROCK GAP, EAST TO STOTLER'S CROSSROADS.

Rock Gap, 700 feet west of Fearnow's house; 10 feet north of road at summit of gap, in rock, aluminum tablet stamped "761 C"	760. 946
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GREAT CACAPON, VIA LONG HOLLOW RUN, TO FISHER FORD (DOUBLE-TARGETED SPUR LINE).

Great Cacapon, Md., on Lock 55 of Dam No. 6; U. S. C. & G. S. bench mark "C"	444. 128
Fisher Ford, in large boulder southeast corner of road; aluminum tablet stamped "MARYLAND 543 C"	543. 505

BRUCETON, MORGANTOWN, BLACKSVILLE, AND MANNINGTON QUADRANGLES.

PRESTON, MONONGALIA, MARION, AND WETZEL COUNTIES.

Leveling in Morgantown quadrangle in 1899 by W. Crennell, in Blacksville quadrangle in 1901 by M. Page, in Mannington quadrangle in 1902 by J. W. Hodges, and in Bruceton quadrangle in 1902 by F. T. Willis.

MORGANTOWN QUADRANGLE.

MORGANTOWN, SOUTHEAST, VIA DELLSLOW, TO MASONTOWN, RETURNING WESTWARD AND NORTH, VIA COLD SPRING, TO MORGANTOWN.^a

Morgantown, 0.4 mile east of, on southeast corner of east abutment of first bridge over Deckers Creek; chisel mark.....	Feet. 820. 55
Morgantown, 0.9 mile east of, on northwest corner of east abutment of second bridge over Deckers Creek; chisel mark.....	823. 30
Morgantown, 3.9 miles east of, at Johnson's mills, on bridge seat at northeast corner of west abutment of third bridge over Deckers Creek; chisel mark.....	890. 14
Dellslow, north side of creek, 30 feet east of bridge over creek, in top of large boulder; aluminum tablet stamped "994 PITTSBURG 1899".....	993. 846
Dellslow, 4.8 miles south of, on south side of east abutment of covered bridge over Deckers Creek; chisel mark.....	1, 454. 81
Masontown, in southeast corner of foundation of Methodist Church; aluminum tablet stamped "1843 PITTSBURG".....	1, 842. 421
Cold Spring, 0.5 mile north of, near watering trough west of pike, in large sandstone; aluminum tablet stamped "2113 PITTSBURG".....	2, 112. 571

CHEATHADEN, SOUTH TO LAUREL IRON WORKS.

Laurel Iron Works, 150 feet east of, in southeast bridge seat; aluminum tablet stamped "1055 PITTSBURG".....	1, 054. 834
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BRUCETON QUADRANGLE.

MASONTOWN, W. VA., SOUTHEAST ALONG HIGHWAY, TO ALBRIGHT; THENCE NORTHEAST, TO LENOX; THENCE NORTHWARD, VIA BRUCETON MILLS, TO ELLIOTTSTVILLE, PA.

Herring, in southwest corner of stone foundation of church; bronze tablet stamped "2042 GRAFTON".....	2, 042. 080
Herring, 4.3 miles southeast of, 8.4 miles east of Masontown, on stone abutment of bridge; square.....	1, 767. 90
Lenox post-office, at southwest corner of stone foundation; aluminum tablet stamped "2123 GRAFTON".....	2, 122. 318
Lenox, 2.25 miles north of, in southwest corner of stone foundation of Methodist Church; bronze tablet stamped "1851 GRAFTON".....	1, 850. 258
Bruceton Mills, 1.6 miles south of, in southeast corner of cut-stone foundation to residence of Marshall A. Wolfe; bronze tablet stamped "1578 GRAFTON".....	1, 577. 470
Bruceton Mills, in northeast corner of stone foundation to Lutheran Church; aluminum tablet stamped "1549 GRAFTON".....	1, 549. 206
Brandonville, 1.5 miles east of, in southwest corner of cut-stone foundation to residence of Wm. M. Willett; bronze tablet stamped "1831 GRAFTON".....	1, 831. 723
Clifton Mills, on northeast corner of north abutment of iron bridge over Big Sandy Creek; chiseled square.....	1, 535. 25

BLACKSVILLE QUADRANGLE.

MORGANTOWN, NORTHWESTWARD TO BLACKSVILLE.

Cassville, 20 feet north of road and 20 feet west of road running north, in stone doorstep of post-office; bronze tablet stamped "999 GRAFTON".....	999. 202
Core, 2.2 miles north-northwest of, 10 feet south of road, in southeast abutment of bridge over east side of Dolls Run; bronze tablet stamped "913 GRAFTON".....	913. 265

^a The closure on this circuit slightly exceeded allowable limit.

Pentress, 1 mile west of, east side of road, north side of Dunkard Creek, on abutment of bridge over, at forks of road; chisel mark.....	Feet. 951. 11
Blacksville, 10 feet east of center of road, in stone abutment of bridge over Dunkard Creek, 5 feet north of bridge floor; bronze tablet stamped "958 GRAFTON".....	957. 321

PENTRESS, SOUTH ALONG HIGHWAYS, TO AMOS; THENCE SOUTHEAST ALONG HIGHWAY TO CATAWBA.

Amos (Fairview), 30 feet from center of road, in doorstep on east side of door to post-office; bronze tablet stamped "1000 GRAFTON".....	999. 900
Rivesville, south side of road, on abutment of iron bridge over Pawpaw Creek, west side of creek; chisel mark.....	859. 65

FAIRMONT, NORTHWEST ALONG BALTIMORE AND OHIO RAILROAD, TO FARMINGTON.

Barrackville, crossing at station; top of rail.....	907
Barrackville, 3.7 miles west of, 1.7 miles east of Farmington, on top of northeast abutment of bridge 116; chiseled square.....	927. 69

MANNINGTON QUADRANGLE.^a

FARMINGTON, NORTHEAST ALONG BALTIMORE AND OHIO RAILROAD, TO BELLTON.

Farmington, George Creek Coal and Iron Company's store, at northeast corner in front face of water table; bronze tablet stamped "952 GRAFTON 1901".....	951. 710
Farmington, 2.8 miles northwest of, on abutment of bridge; chiseled square.....	953. 56
Mannington, corner of Railroad and Market streets, in pillar north of door of Exchange Bank; bronze tablet stamped "975 GRAFTON 1902".....	975. 391
Metz, at road crossing; top of rail.....	1, 002
Glover Gap, in south foundation of signal tower; bronze tablet stamped "1040 GRAFTON 1902".....	1, 039. 894
Glover Gap, in front of station; top of rail.....	1, 041
Hundred, crossing at station; top of rail.....	1, 019
Hundred, 0.1 mile northwest of, in top of bridge seat of northeast abutment of bridge 128; bronze tablet stamped "1013 GRAFTON 1902".....	1, 013. 276

MANNINGTON, NORTH UP FLAT RUN ALONG PUBLIC ROADS, VIA GALLETTIN, TO A POINT NORTH OF CROSSROADS POST-OFFICE (SINGLE SPUR LINE).

Gallettin, 300 feet east of post-office, north of road, in face of rock; bronze tablet stamped "1452 GRAFTON 1902".....	1, 452. 368
Crossroads, 1.6 miles north of post-office, on north side of road down Miracle Run, 30 feet east of Mrs. Marberly's dwelling, in face of large rock; bronze tablet stamped "1014 GRAFTON 1902".....	1, 014. 679

BELINGTON, KINGWOOD, PARSONS, AND THORNTON 15' (ST. GEORGE 30') QUADRANGLES.

BARBOUR, PRESTON, RANDOLPH, TAYLOR, AND TUCKER COUNTIES.

Leveling in Thornton quadrangle in 1904 by F. T. Willis and in 1905 by F. T. Willis and George L. Gordon; in Kingwood quadrangle in 1905 by F. T. Willis and R. A. Kiger; and in Belington and Parsons quadrangles in 1905 by F. T. Willis and J. H. Wetzel.

^a A line was run from Blacksville westward via Brave, Pa., and St. Cloud, W. Va., to Hundred, but no standard bench marks were set.

THORNTON 15' (ST. GEORGE 30') QUADRANGLE.

GRAFTON, EAST ALONG HIGHWAY, VIA KNOTTSVILLE, SINCLAIR, AND FELLOWSVILLE, TO TUNNELTON.

	Feet.
Knottsville, 300 feet south of post-office, in large rock on east of road opposite house of W. E. Wilson; bronze tablet stamped "1484 ADJ 1903"	1, 483. 764
Claude, 1 mile northwest of, 3.1 miles southeast of Knottsville, 10 feet south of center of road, in large rock; bronze tablet stamped "1418 ADJ 1903"	1, 418. 088
Dent, opposite post-office, west side of road, 300 feet south of covered bridge over Sandy Creek, in large rock; bronze tablet stamped "1326 ADJ 1903"	1, 325. 749
Sinclair, 1 mile northeast of post-office, 250 feet north of forks, in large rock on east side of road; bronze tablet stamped "1489 ADJ 1903"	1, 488. 956
Sinclair, 3.4 miles north of post-office, 0.2 mile north of forks of road, 0.1 mile south of residence of H. Goff, west side of road, in large rock; bronze tablet stamped "1408 ADJ 1903." (The true elevation is possibly 1 foot greater)	1, 408. 185
Fellowsville, 0.3 mile northeast of, in bridge seat of south abutment of iron bridge over Little Sandy Creek; bronze tablet stamped "1379 ADJ 1903"	1, 379. 639
Fellowsville, 3.2 miles northeast of, 150 feet east of Bolyard residence, on right side of road, in large rock; aluminum tablet stamped "1625 ADJ 1903"	1, 626. 274

GRAFTON, EAST ALONG BALTIMORE AND OHIO RAILROAD, TO IRONTOWN; THENCE NORTH ALONG HIGHWAYS, VIA GLADESVILLE AND BROWNS MILL, TO MASONTOWN.^a

Lesmalinston, in front of station; top of rail	1, 031
Thornton, 0.1 mile west of, 5.7 miles east of Grafton, in bridge seat on east side of north abutment of iron bridge over Threefork Creek; aluminum tablet stamped "1041 ADJ 1903"	1, 041. 842
Irontown, 65 feet northwest of railroad, in large rock; bronze tablet stamped "1079 ADJ 1903"	1, 079. 002
Irontown, 2.5 miles northwest of, 175 feet east of house, forks of road to left in center of forks, in large rock; bronze tablet stamped "1506 ADJ 1903"	1, 505. 794
Irontown, 4.5 miles north of, 100 feet east of house, 150 feet west of road fork to north, north side of road, 15 feet from center, in rock; bronze tablet stamped "1431 ADJ 1903"	1, 431. 638
Gladesville, 75 feet south of post-office, at crossroads, in large rock; aluminum tablet stamped "1774 ADJ 1903"	1, 773. 901
Gladesville, 3.5 miles east of, at Browns Mills, at crossing of highway with Ices Ferry and Tunnelton pike, on Stony Run, south side of road, in large rock about 4 feet from bridge abutment; aluminum tablet stamped "1635 ADJ 1903"	1, 635. 701

BROWNS MILLS, SOUTHEAST ALONG TURNPIKE, TO TUNNELTON.

Oriole, in northwest corner of stone foundation of Pleasant Valley M. P. Church; bronze tablet stamped "1486 ADJ 1903." (This elevation is possibly 1 foot too great)	1, 487. 431
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IRONTOWN, EAST ALONG BALTIMORE AND OHIO RAILROAD, TO TUNNELTON.

Hardman, 0.15 mile west of, 1.7 miles east of Irontown, bridge 97 over Raccoon Creek, near Taylor-Preston county line, in west abutment on north side; bronze tablet stamped "1111 ADJ 1903"	1, 111. 263
Newburg, 0.2 mile east of, on south side of Baltimore and Ohio Railroad, about 8 feet from track, in large rock; bronze tablet stamped "1232"	1, 231. 861

^a An excessive error is distributed in this line.

TUNNELTON, NORTH ALONG HIGHWAY, TO HOWESVILLE.

Howesville, 700 feet south of post-office, on west side of West Virginia Northern Railroad, 940 feet west of George Rhodes's store; bronze tablet stamped "2222 ADJ 1903"	2, 223. 039
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KINGWOOD 15' (ST. GEORGE 30') QUADRANGLE.

AT TUNNELTON.

Tunnelton, in southeast corner of large cut-stone building owned by J. J. Bonifield; bronze tablet stamped "1828 ADJ 1903"	1, 829. 682
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HOWESVILLE, NORTHEAST ALONG HIGHWAY, TO ALBRIGHT.

Kingwood, at corner of Price and Main streets, on southwest corner, water table of Kingwood National Bank, east of front door; bronze tablet stamped "1862 ADJ 1903"	1, 862. 985
Albright, at northwest corner of iron bridge over Cheat River, in stone retaining wall; bronze tablet stamped "1217 ADJ 1903"	1, 217. 557

ALBRIGHT, SOUTHEAST ALONG HIGHWAYS, TO TERRA ALTA.

Albright, 2.6 miles southeast of, in front of residence owned by John Horner, in large rock on north side of road by water trough; bronze tablet stamped "1891 ADJ 1903"	1, 891. 249
Terra Alta, in foundation at southeast corner of large brick Offutt & Lakin Building; bronze tablet stamped "2559 ADJ 1903"	2, 559. 097

TERRA ALTA, SOUTH ALONG HIGHWAYS, VIA AURORA AND HORSESHOE RUN, TO SUMMIT OF MOUNTAIN NEAR PRESTON-TUCKER COUNTY LINE.^a

Terra Alta, 4.2 miles south of, on farm of John Shaffer, in large rock on west side of road; bronze tablet stamped "2759 ADJ 1903"	2, 759. 272
Amboy, 1 mile north of, on farm owned by Robert McMickin, in large rock on west side of road; bronze tablet stamped "2700 ADJ 1903"	2, 699. 594
Aurora, in northeast corner of forks of road, in large rock; bronze tablet stamped "2640 ADJ 1903"	2, 639. 985
Aurora, 2.4 miles south of, in stone foundation of barn of Daniel J. King; bronze tablet stamped "2650 ADJ 1903"	2, 650. 479
Horseshoe Run, 1 mile southwest of post-office, in north side of stone foundation of church; bronze tablet stamped "2686 ADJ 1903"	2, 685. 737

ROWLESBURG, SOUTH ALONG HIGHWAYS, TO HANNAHSVILLE.

Rowlesburg, Baltimore and Ohio Railroad bench mark 75	1, 401. 265
Rowlesburg, in north side of west abutment of railroad bridge over Cheat River; bronze tablet stamped "1398 ADJ 1903"	1, 398. 387
Macomber, 3.1 miles south of Rowlesburg, 50 yards east of forks of roads with Northwestern turnpike, on south side of road by farm owned by Mrs. Macomber, in rock; bronze tablet stamped "1410 ADJ 1903"	1, 410. 152
Etam, 2.1 miles northwest of, on south side of road at forks leading to Dog Run, in large rock; bronze tablet stamped "1618 ADJ 1903"	1, 618. 211
Etam, southeast corner of stone foundation of schoolhouse; bronze tablet stamped "1765 ADJ 1905"	1, 764. 577

AT AMBLERSBURG.

Amblersburg, west end of south wall of railroad bridge over Saltlick Creek, opposite telegraph pole 250/27; bronze tablet stamped "1625 ADJ 1903" (set from corrected railroad precise levels)	1, 625. 349
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^a An excessive error is distributed in this line.

AT RODAMERS TUNNEL.

Rodamers, 0.25 mile northeast of station, south side of west portal of tunnel; bronze tablet stamped "2092 ADJ 1903" (set from corrected railroad precise levels).....	Feet. 2, 092. 350
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PARSONS 15' (ST. GEORGE 30') QUADRANGLE.

MOUTH OF LICKING CREEK, ALONG HIGHWAYS UP CHEAT RIVER, TO PARSONS.

Hannahsville, 3.1 miles south of, west side of road at turn, in outcrop of rock; bronze tablet stamped "1659 ADJ 1903".....	1, 659. 515
St. George, 1 mile north of, in south end of east abutment of iron bridge over Cheat River; bronze tablet stamped "1553 ADJ 1903".....	1, 553. 064
St. George, 2.6 miles east of, iron bridge over Horseshoe Run, near mouth, in northwest wing wall of concrete abutment; aluminum tablet stamped "1576 ADJ 1903".....	1, 576. 356
Parsons, 2 miles north of, iron highway bridge over Cheat River, in northwest bridge seat; bronze tablet stamped "1614 ADJ 1903".....	1, 614. 140
Parsons, 900 feet east of, iron railroad bridge over Cheat River, in second step of southwest coping stone; bronze tablet stamped "1660 ADJ 1903".....	1, 649. 837

UP HORSESHOE RUN, ALONG HIGHWAY TO TOP OF MOUNTAIN.^a

Leadmine, 1 mile south of, in southeast bridge seat of iron highway bridge; aluminum tablet stamped "1727 ADJ 1903".....	1, 727. 042
Leadmine, 2.4 miles northeast of, 970 feet north of intersection of road near mouth of Wolf Run, on west bank of Horseshoe Run, in ledge of rock; aluminum tablet stamped "1872 ADJ 1903".....	1, 872. 311
Leadmine, 7 miles northeast of, on Hogback Mountain, in northwest corner of foundation of residence of David Ruth; aluminum tablet stamped "2482 ADJ 1903".....	2, 482. 456

PARSONS, ALONG WESTERN MARYLAND RAILROAD, TO THOMAS.

Hambleton, road crossing at station; top of rail.....	1, 682. 7
Hendricks, wagon bridge spanning Black Fork of Cheat River, in northwest bridge seat; aluminum tablet stamped "1721 ADJ 1903".....	1, 721. 004
Hendricks, 2.5 miles northeast of, in second step of northeast wing wall of iron railroad bridge; aluminum tablet stamped "1910 ADJ 1903".....	1, 910. 117
Douglas (Albert), 1.1 miles southwest of, at milepost 81, in coping stone south side of east end of stone arch; aluminum tablet stamped "2631 ADJ 1903".....	2, 630. 795
Douglas, in front of station; top of rail.....	2, 796. 1
Thomas, in southwest corner of Davis Coal and Coke Company's office; aluminum tablet stamped "2986 ADJ 1903".....	2, 986. 462

HENDRICKS, SOUTHEAST ALONG DRY FORK RAILROAD, TO GLADWIN.

Hendricks, 3 miles southeast of, 900 feet north of milepost 3, 100 feet east of railroad, 70 feet southeast of spring under oak tree, near two large chestnut trees, in bowlder; aluminum tablet stamped "1788 ADJ 1903".....	1, 787. 621
Hendricks, 6.4 miles southeast of, north of track, in side of cleft of rock; aluminum tablet stamped "1876 ADJ 1903".....	1, 876. 266
Gladwin, at west side of north end of wooden railroad bridge spanning Dry Fork, in large sandstone ledge; aluminum tablet stamped "1944 ADJ 1903".....	1, 943. 765

^a An excessive error is distributed in this line.

PORTERWOOD, SOUTH TO EDGE OF QUADRANGLE (SINGLE SPUR LINE).

Pleasant Run post-office, on right bank of Pleasant Run, 100 feet upstream from wooden bridge, in large flat stone; aluminum tablet stamped "1738 ADJ 1903"	Feet. 1, 738. 131
Pleasant Run post-office, 3 miles south of, 100 feet south of Harman Harford's residence, on side of hill, 4 feet south of road, in ledge of rock; aluminum tablet stamped "1898 ADJ 1903"	1, 898. 587

HANNAHSVILLE, SOUTHWEST ALONG PUBLIC ROAD.

Hannahsville, west side of stone foundation of house owned by N. E. Longley; bronze tablet stamped "1526 ADJ 1903"	1, 525. 576
Hannahsville, 3.3 miles southwest of, on north side of road at Licking Creek, at hollow, in outcrop of rock; bronze tablet stamped "1664 ADJ 1903" ..	1, 664. 122

PARSONS, SOUTHWEST ALONG WESTERN MARYLAND RAILROAD, TO PORTERWOOD; THENCE WEST ALONG SAME, TO POINT 1 MILE WEST OF MOORE.

Porterwood, opposite schoolhouse, in ledge of rock extending into Cheat River; aluminum tablet stamped "1687 ADJ 1903"	1, 686. 672
Moore station, 1 mile west of, in northeast bridge seat of iron railroad bridge over Haddix Run; aluminum tablet stamped "1818 ADJ 1903" ..	1, 817. 590

BELINGTON 15' (ST. GEORGE 30') QUADRANGLE.

MOORE STATION, ALONG WESTERN MARYLAND RAILROAD, TO KERENS (SPUR LINE, CHECKED).

Montrose, 0.2 mile northeast of station, in second step from top of coping stone of northeast wing wall of railroad bridge; bronze tablet stamped "1997 ADJ 1903"	1, 996. 824
Kerens, in front of station; top of rail	1, 946. 2
Kerens, 350 feet south of station, in southwest bridge seat of iron bridge; bronze tablet stamped "1944 ADJ 1903"	1, 944. 018

MONTROSE, WEST ALONG PUBLIC ROAD.

Montrose, 1.5 miles west of, in foundation stone of east end of Mathias Skidmore's residence; aluminum tablet stamped "2049 ADJ 1903"	2, 049. 240
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HANNAHSVILLE, WEST ALONG PUBLIC ROADS, VIA VALLEY FURNACE, TO ARDEN; THENCE SOUTHWEST, TO PHILIPPI.

Valley Furnace, 5.5 miles northeast of, near head of Licking Creek, south side of road near crossing, in large rock; bronze tablet stamped "2398 ADJ 1903"	2, 397. 510
Valley Furnace, 0.7 mile west of, on side of road, in large rock; bronze tablet stamped "1462 ADJ 1903"	1, 461. 596
Nestorville, 1 mile northwest of, on Teter Creek, on farm owned by A. J. Bighman, in large rock on north side of road; bronze tablet stamped "1328 ADJ 1903"	1, 327. 662
Moatsville (Nicklow post-office), southwest abutment of Baltimore and Ohio Railroad bridge over mouth of Teter Creek; bronze tablet stamped "1167 ADJ 1903"	1, 166. 730
Arden, 75 yards southeast of, near railroad, in large rock; bronze tablet stamped "1275 ADJ 1903"	1, 274. 747

VALLEY FURNACE, ALONG PUBLIC ROADS, TO SINCLAIR.

Kasson post-office (Danville), 1.5 miles east of, at forks of road, east side of road, in large rock; aluminum tablet stamped "1634 ADJ 1903"	1, 634. 073
Colebank, 0.1 mile south of, between church and planing mill, east side of road, in large rock; bronze tablet stamped "1468 ADJ 1903"	1, 468. 239

NESTORVILLE, SOUTH ALONG PUBLIC ROADS, TO BELINGTON.

	Feet.
Nestorville, southwest corner of north abutment of iron bridge over Teter Creek; bronze tablet stamped "1372 ADJ 1903".....	1, 371. 956
Kalamazoo, 0.5 mile north of, on east side of road, in top of outcrop of rock; bronze tablet stamped "1598 ADJ 1903".....	1, 597. 858
Meadowville, southwest corner of cut sandstone foundation of residence of J. D. Holesberry; aluminum tablet stamped "1569 ADJ 1903".....	1, 569. 211
Flora, 0.3 mile south of, in large rock on west side of road opposite Mr. Goodwin's residence; bronze tablet stamped "1585 ADJ 1903".....	1, 585. 064
Belington, in base rock of cut-stone foundation of Citizens National Bank; aluminum tablet stamped "1698 ADJ 1903".....	1, 698. 471

ELKINS AND HORTON 15' (BEVERLY 30') QUADRANGLES.

BARBOUR AND RANDOLPH COUNTIES.

Leveling in Elkins quadrangle in 1905, by J. H. Wetzel, and in Horton and Elkins quadrangles in 1907, by C. K. Alexander.

ELKINS 15' (BEVERLY 30') QUADRANGLE.

GILMAN STATION, SOUTH ALONG WESTERN MARYLAND RAILROAD, TO ELKINS, THENCE WEST TO ROARING CREEK JUNCTION; THENCE NORTH TO BELINGTON.

	Feet.
Gilman, railroad crossing at station; top of rail.....	1, 926. 4
Gilman, 1,800 feet north of station, near sawmill, southeast bridge seat of iron bridge; bronze tablet stamped "ADJ 1903 1926".....	1, 926. 455
Read, in front of station; top of rail.....	1, 918. 4
Elkins, at west entrance of main building of Western Maryland Railroad, in stone step; bronze tablet stamped "1930 ADJ 1903".....	1, 929. 895
Buxton, crossing at station; top of rail.....	1, 924. 6
Elkins, 3.5 miles northwest of, in 2-inch step of southeast wing wall of iron bridge over Tygart River; aluminum tablet stamped "1914 ADJ 1903".....	1, 914. 015
Roaring Creek Junction, road crossing; top of rail.....	1, 864
Roaring Creek Junction, in northeast bridge seat of Coal and Coke Railroad bridge over Tygart River; aluminum tablet stamped "1865 ADJ 1903".....	1, 864. 597
Harding, in front of station; top of rail.....	1, 847. 8
Junior station, 1 mile south of, small stream at Weaver pumping station, iron-girder bridge, on 2-inch step of northwest abutment; aluminum tablet stamped "1738 ADJ 1903".....	1, 737. 543
Dartmoor, in front of station; top of rail.....	1, 714. 6

ELKINS, SOUTH ALONG HIGHWAY, TO BEVERLY AND RETURN.

Elkins, 3 miles south of, Midland schoolhouse, in west front face of foundation, 1 foot from ground and 1 foot from southwest corner of building; aluminum tablet stamped "2003".....	2, 002. 942
Beverly, in front face, north end of doorstep of public school; aluminum tablet stamped "1973".....	1, 972. 943

BEVERLY, SOUTH ALONG HIGHWAYS, TO VALLEY BEND; THENCE WEST TO RICH MOUNTAIN; THENCE NORTH, ALONG TRAIL AND HIGHWAYS, TO ROARING CREEK JUNCTION.

Beverly, 2.5 miles south of, in top face of north side of east abutment of iron highway bridge over Tygart River; aluminum tablet stamped "1960".....	1, 959. 867
Valley Bend, Crawford schoolhouse, in rear of building, in face of foundation stone 3 feet west of northeast corner of building; aluminum tablet stamped "2042".....	2, 042. 397

Pingley's house, 0.5 mile west of, on west side of Rich Mountain, in stone at south side of road; aluminum tablet stamped "3261".....	Feet. 3, 261. 239
Fisher, or Mabie, 2 miles south of, 150 feet north of road forks, 40 feet west of road, in top face of very large boulder; aluminum tablet stamped "2568".....	2, 568. 426
Coalton, in south front face of foundation corner stone in southwest corner of Junior Mercantile Company store; aluminum tablet stamped "2157".....	2, 157. 373

ELKINS, EAST ALONG HIGHWAYS AND WESTERN MARYLAND RAILROAD, TO TUNNEL STATION.

Canfield, 0.1 mile west of station, in top face of stone wall at south end of culvert; aluminum tablet stamped "2088".....	2, 087. 712
Tunnel station, in front of; top of rail.....	2, 322. 6

BEVERLY, EAST ALONG HIGHWAYS, TO BEMIS.

Bemis, 4 miles west of (8 miles east of Beverly), on side of Cheat Mountain, in top face of large boulder at west side of road; aluminum tablet stamped "3277".....	3, 277. 486
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HORTON 15' (BEVERLY 30') QUADRANGLE.

TUNNEL STATION, EAST AND SOUTH ALONG WESTERN MARYLAND RAILROAD, TO BEMIS.

Meadows, 0.2 mile west of station, 10 feet south of railroad crossing, in ledge of rock; aluminum tablet stamped "2205".....	2, 204. 959
Bowden, 0.1 mile south of station, in top face of large limestone boulder, 20 feet west of track; aluminum tablet stamped "2214".....	2, 213. 534
Bowden, 2.8 miles south of, near log house west of railroad; in top face of stone coping of culvert; aluminum tablet stamped "2311".....	2, 310. 804
Woodrow, in front of station; top of rail.....	2, 359. 2
Montes, in southwest concrete bridge seat of iron bridge over Cheat River; aluminum tablet stamped "2420".....	2, 419. 870
Bemis, in top face, east side of north abutment of wooden trestle railroad bridge over Fishing Hawk Creek; aluminum tablet.....	2, 474. 65

CLARKSBURG, FAIRMONT, PHILIPPI, AND WESTON QUADRANGLES.

BARBOUR, HARRISON, LEWIS, MARION, TAYLOR, AND UPSHUR COUNTIES.

Leveling in Fairmont and Philippi quadrangles in 1901, by Geo. L. Gordon; in Clarksburg and Weston quadrangles in 1901, by J. H. Hodges.

FAIRMONT QUADRANGLE.

FAIRMONT, NORTHWEST TO FARMINGTON; THENCE SOUTH, VIA BOOTHVILLE AND MEADLAND, TO BRIDGEPORT.

	Feet.
Fairmont, 0.32 mile east of, at north end of suspension bridge over Monongahela River, on northwest corner of east revetment wall; on stones; chiseled square.....	902. 51
Fairmont, 2.4 miles west of, wooden bridge over Ices Run, on northeast corner of top stone in west wall; chiseled square.....	986. 18
Fairmont, 3.9 miles west of, iron bridge over Buffalo Creek, 2 feet east of southwest corner of north abutment wall; chiseled square.....	918. 03
Katy, 1.5 miles south of, Georges Creek Coal and Iron Company's shaft building, on top of stone at southeast corner of retaining wall; chiseled square.....	956. 61

	Feet.
Farmington, 5.6 miles south of, iron bridge over West Fork River, in southeast corner of top stone of northwest pier; chiseled square.....	892. 13
Monongah, Baltimore and Ohio Railroad plate-girder bridge over Booths Creek, west face of north pier, 2 feet from southwest corner, in seventh stone from top; bronze tablet stamped "874 GRAFTON".....	873. 916
Eldora, 1.5 miles south of, on road to west, iron bridge over Booths Creek, 0.7 foot from southwest corner of north abutment wall, on top stone; chiseled square.....	953. 38
Boothsville, covered bridge over Husted Creek, 3.5 feet from southwest corner and 4.5 feet from top of west face of north abutment; bronze tablet stamped "954 GRAFTON".....	954. 130
Boothsville, 3.1 miles south of, wooden bridge over Husted Creek, on south corner of northeast abutment; chiseled square.....	1, 017. 67
Boothsville, 7.1 miles south of, 50 feet east of crossroads, on northeast corner of west abutment to bridge over Husted Creek; chiseled square.....	1, 310. 16
Meadland, east face of brick house owned by L. J. Stark, 1 foot from northeast corner of foundation; bronze tablet stamped "1319 GRAFTON"....	1, 318. 530
Bridgeport, railroad bridge 6 over Simpson Creek, at south end of west abutment, in third stone from top and second above bridge seat, center of east face; bronze tablet stamped "979 GRAFTON".....	978. 773

GRAFTON, WEST ALONG BALTIMORE AND OHIO RAILROAD, TO CLARKSBURG.

Grafton, Baltimore and Ohio Railroad bridge over Tygart River, on top of north side of central pier; chiseled square "B □ M U. S. C. S. 1878" (Coast and Geodetic Survey bench mark).....	996. 856
Webster, Baltimore and Ohio Railroad bridge 2 over Berkeley Run, in northeast face of third stone from top of south abutment wall; bronze tablet stamped "1014 GRAFTON".....	1, 013. 770
Webster, southwest of, 5.5 miles from Grafton, trestle 2½, on corner stone; chisel mark (Coast Survey bench mark No. XXXI).....	1, 082. 623
Rosemont, road crossing near station; top of rail.....	1, 003

CLARKSBURG QUADRANGLE.

MONONGAHELA JUNCTION, NORTH ALONG BALTIMORE AND OHIO RAILROAD, TO MONONGAH

Glen Falls, in front of station; top of rail.....	932
Meadowbrook, in northwest corner of abutment of iron railway bridge; stamped "B □ M".....	922. 97
Gypsy, in front of station; top of rail.....	915
Shinnston, West Fork River, in southwest corner of retaining wall of highway bridge; bronze tablet stamped "909 GRAFTON 1901".....	910. 461
Worthington, in front of station; top of rail.....	896
Worthington, southwest abutment of highway bridge at south end, in top seat; bronze tablet stamped "898 GRAFTON 1901".....	899. 236

ENTERPRISE, WEST UP BINGAMON CREEK TO MARGARET; THENCE SOUTH, VIA WALLACE AND BROWN, TO LYNCH.

Enterprise, 5.4 miles west of, on southeast corner of retaining wall of highway covered bridge over Bingamon Creek; chiseled square.....	947. 36
Margaret, in northwest corner of covered highway bridge over Quaker Fork of Bingamon Creek; bronze tablet stamped "1032 GRAFTON 1901"....	1, 032. 220
Irving, at road crossing near Baltimore and Ohio Railroad station; top of rail.....	1, 016
Brown, 0.2 mile west of, southwest abutment of railroad bridge over Little Tenmile Creek (trestle 404), in top of capstone; bronze tablet stamped "999 GRAFTON 1901".....	999. 183

CLARKSBURG, WEST ALONG BALTIMORE AND OHIO RAILROAD, TO LYNCH.

Clarksburg, at corner of Pike and Third streets, in northwest corner of post-office, 2 feet above ground; aluminum tablet stamped "1006 GRAFTON".....	Feet. 1,007.699
Adamston, 0.5 mile west of, northeast corner of trestle 9, on top of stone; chiseled square.....	960.68
Wilsonburg, in front of station; top of rail.....	984
Wilsonburg, 0.5 mile west of, on small culvert south of track; chiseled square.....	997.66
Reynoldsville, at road crossing near station; top of rail.....	1,101
Wolf Summit, at southeast corner of William H. Dolan's store, in end of stone curbing; bronze tablet stamped "1133 GRAFTON 1901".....	1,134.512
Lynch, 0.5 mile west of, trestle 14 of Baltimore and Ohio Railroad, on top of retaining wall on sixth stone from bridge; chiseled square.....	1,039.55

PHILIPPI QUADRANGLE.

BRIDGEPORT, VIA BERRYBURG, SWITZER, AND PLEASANT CREEK, TO WEBSTER.

Berryburg, Southern Coal and Transportation Company tipple, west of tipple and in front of power house, in fourth stone from top of retaining wall; bronze tablet stamped "1390 GRAFTON".....	1,389.500
Switzer, 1.1 miles northeast of, east side of pike, on southeast corner of stone gate step of residence of B. H. Woodford; chiseled square.....	1,447.69
Pleasant Creek, brick residence of A. I. Cole, west corner of stone foundation, fifth stone from top and fourth from ground, 1.45 feet from corner; bronze tablet stamped "1170 GRAFTON".....	1,170.044

SWITZER, SOUTH VIA PHILIPPI, TO PECKS RUN.

Switzer, 4 miles south of, covered bridge over Tygart River, in northwest corner of top stone of east abutment wall; chiseled square.....	1,308.01
Philippi, at north side of front entrance to brick schoolhouse, in center north face of foundation stone; bronze tablet stamped "1311 GRAFTON".....	1,310.685
Buckhannon (Tygart) Junction, plate-girder bridge 1, over Tygart River, in north side of west abutment, in center of east face of first stone above bridge bed; bronze tablet stamped "1334 GRAFTON".....	1,333.540
Volga (3.2 miles southwest of Malta), in north abutment of Baltimore and Ohio Railroad bridge over Wash Run, in east face in center of third stone from top; bronze tablet stamped "1404 GRAFTON".....	1,403.859
Volga, 2.5 miles southwest of, on northwest corner of north abutment of bridge over Pecks Run, in second stone from top; chiseled square.....	1,405.46
Pecks Run (Hodgeville), in northwest corner of south abutment of bridge over Pecks Run, on west side of second stone from corner; chiseled square.....	1,419.27

PECKS RUN, VIA PEELTREE AND OVERFIELD, TO PEPPER.

Peeltree, retaining wall in front of residence of Dr. Isaac Smith, at opening for steps, west face of south wall, in center of third stone above third step from sidewalk; bronze tablet stamped "1069 GRAFTON".....	1,068.789
Peeltree, 2.9 miles north of, in front of Dever Picken's dwelling, in third step from bottom of stone stile; chiseled square.....	1,093.66
Peeltree, 4.4 miles north of, on southeast corner of north abutment of iron bridge over Elk Creek; chiseled square.....	1,023.10
Overfield, 3.1 miles northeast of, in front of Cletus Stout's dwelling, east side of stone stile, on north end of bottom step; chiseled square.....	1,103.11

PECKS RUN, SOUTH TO BUCKHANNON; THENCE NORTHWEST TO RURALDALE.

Ruraldale, 0.6 mile west of, near fork of road by old mill, 200 feet east of residence of V. H. Regar, in face of large rock; bronze tablet stamped "1121 GRAFTON 1901".....	1,122.118
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PRIMARY LEVELING.

25

WESTON QUADRANGLE.

RURALDALE, NORTH VIA JOHNSTOWN, TO QUIET DELL; THENCE SOUTHWEST TO WEST MILFORD; THENCE NORTH TO CLARKSBURG.

Johnston, 0.1 mile west of, in face of ledge of rock north of road; bronze tablet stamped "1062 GRAFTON 1901".....	Feet., 1,062.946
Quiet Dell, 0.5 mile south of, 600 feet from crossroads, in large boulder on west side of road; aluminum tablet stamped "1050 GRAFTON 1901"....	1,050.778
West Milford, at southwest corner of highway bridge over West Fork River, in top of bridge seat; bronze tablet stamped "979 GRAFTON 1901"....	979.365

WEST MILFORD, SOUTH ALONG HIGHWAYS, TO WESTON.^a

Jane Lew, southeast end of railroad bridge over Hackers Creek, in top of first stone below bridge seat; aluminum tablet stamped "1007 GRAFTON 1901".....	1,006.997
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WESTON, ALONG ROAD, TO RURALDALE.

Weston, at end of southwest pier of Baltimore and Ohio Railroad bridge 24-A over West Fork River; bronze tablet stamped "1017 GRAFTON 1901" ^b	1,009.293
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WESTON, SOUTH ALONG BALTIMORE AND OHIO RAILROAD, TO BROWNSVILLE.

Weston, 0.5 mile south of, on northeast corner of south abutment of railroad bridge 25 C; chiseled square.....	1,017.67
Brownsville, on northeast corner of west abutment of covered bridge; chiseled square.....	1,028.11

CENTERPOINT, LITTLETON, AND WEST UNION QUADRANGLES.

DODDRIDGE, HARRISON, MARSHALL, RITCHIE, TYLER, AND WETZEL COUNTIES.

Leveling in 1903 by George L. Gordon.

LITTLETON QUADRANGLE.

BELLTON, SOUTHWEST ALONG HIGHWAYS, VIA WEST, TO HALLS MILLS; THENCE SOUTH TO READER; THENCE EAST ALONG HIGHWAYS AND RAILROAD, TO JACKSONBURG; THENCE NORTHEAST ALONG HIGHWAY, TO LITTLETON.

Bannen, 1.1 miles of; schoolhouse subdistrict 9, 8.8 feet southwest of west corner; iron post stamped "1398 GRAFTON".....	Feet. 1,398.160
Bannen, 2.8 miles southwest of; schoolhouse at forks of road, stone steps, bottom step, west end; chiseled square.....	1,376.98
Silver Hill, bridge over Laurel Run, south end of west abutment; chiseled square.....	1,133.96
West, east angle of forks of road, outcrop of rock; bronze tablet stamped "1106 GRAFTON".....	1,106.218
Bebee post-office, bottom step of stone stairway to house of Louis Feias; chiseled square.....	1,205.75
Halls Mills (5.3 miles southwest of West), north side of road near Thomas Adams's store and dwelling, outcrop of rock; bronze tablet stamped "774 GRAFTON".....	774.396
Reader, county bridge over Fishing Creek, northeast corner of south abutment; aluminum tablet stamped "693 GRAFTON".....	693.676

^a The error distributed in this line is excessive.

^b This description and corrected elevation were furnished by the chief engineer of the Baltimore and Ohio Railroad after reconstruction of pier.

Reader, 0.8 mile southeast of, Baltimore and Ohio Railroad bridge 145, north end of east abutment, top stone; chiseled square.....	Feet. 687. 89
Galmish, 0.2 mile east of pump station, Baltimore and Ohio Railroad bridge 159 over Piney Creek, on south end of west abutment, sixth step from top; chiseled square.....	687. 97
Pinegrove, covered bridge over North Fork of Fishing Creek, southwest corner of north abutment; chiseled square.....	712. 58
Pinegrove, 1.8 miles southeast of, Baltimore and Ohio Railroad bridge 195, north abutment east end of bridge seat; chiseled square.....	723. 07
Jacksonburg, lot at railroad crossing; top of rail.....	747. 3
Jacksonburg, 0.1 mile southeast of, Baltimore and Ohio Railroad bridge over Buffalo Run, northwest abutment, south corner of bridge seat; bronze tablet stamped "746 GRAFTON".....	745. 958
Lowman, 0.05 mile southeast of, east of road, in outcrop of rock; aluminum tablet stamped "839 GRAFTON".....	839. 220
Uniontown, 0.08 mile southwest of; south of road, in outcrop or rock; aluminum tablet stamped "1133 GRAFTON".....	1, 133. 320
Uniontown, 1 mile northeast of, bridge over Knob Fork, east end of northeast abutment; chiseled square.....	1, 052. 74
Uniontown, 4.7 miles northeast of, bridge over small hollow, top of northeast stone of abutment; chiseled square.....	1, 179. 38

JACKSONBURG (LOT), SOUTHEAST ALONG BALTIMORE AND OHIO RAILROAD, TO SMITHFIELD.

Jacksonburg, 1.3 miles southeast of, railroad bridge 236, over South Fork of Fishing Creek, northwest abutment, northeast end of bridge seat; chiseled square.....	765. 93
Jacksonburg, 3.5 miles southeast of, railroad bridge 260 over South Fork of Fishing Creek, top of west abutment, north side; chiseled square.....	803. 13
Jacksonburg, 4.75 miles southeast of, northwest corner of railroad culvert; chiseled square.....	811. 95

GALMISH, SOUTHWEST ALONG HIGHWAY, TO LIMA.

Piney, cliff between forks of creek, near the corner; bronze tablet stamped "790 GRAFTON".....	790. 039
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CENTERPOINT QUADRANGLE.

SMITHFIELD, SOUTHWEST ALONG BALTIMORE AND OHIO RAILROAD, TO WALLACE.

Smithfield, 0.2 mile northwest of, railroad bridge 293 over South Fork of Fishing Creek, north abutment southeast corner of bridge seat; bronze tablet stamped "829 GRAFTON".....	828. 787
Smithfield, railroad crossing at station; top of rail.....	836. 1
Folsom, 1.6 miles northwest of, railroad bridge 307 over South Fork of Fishing Creek, south abutment, second stone from top; chiseled square.....	870. 62
Folsom, railroad crossing between station and post-office; top of rail.....	952. 5
Rinehart, 3.6 miles northwest of; 0.2 mile northwest of tunnel station, on southwest corner of railroad culvert; chiseled square.....	1, 051. 61
Rinehart, 0.05 mile southeast of; in northwest corner of railroad culvert over Mudlick Run; aluminum tablet stamped "1059 GRAFTON".....	1, 058. 895
Rinehart, railroad crossing; top of rail.....	1, 068. 4

LEECH, WEST ALONG BALTIMORE AND OHIO RAILROAD, TO WEST UNION.

Wolf Summit, 3.8 miles west of, on southwest corner of Baltimore and Ohio railroad trestle 15; chiseled square.....	1, 053. 08
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Bristol, 0.2 mile west of, top stone of northwest corner of small culvert; marked "B. M."	Feet. 1,027.52
Salem, easternmost railroad crossing in; top of rail	1,047.0
Salem, Salem Bank, 4 feet east of corner, in south face of water table; aluminum tablet stamped "1047 GRAFTON"	1,047.366
Industrial, railroad crossing at; top of rail	1,074.7
Long Run, 0.7 mile east of, railroad bridge 16, southwest corner of east abutment; chiseled square	877.32
Long Run, railroad crossing at; top of main-track rail	854.5
Long Run, 675 feet west of station, north side of railroad; aluminum tablet stamped "853 GRAFTON"	853.286
Sherwood post-office, at road crossing; top of rail	832.0
Morgansville, 0.2 mile west of, Baltimore and Ohio Railroad bridge 17, northwest corner of east abutment; chiseled square	812.39
Smithton, railroad crossing at; top of rail	797.5
Smithton, 0.7 mile west of, about 2 miles east of West Union, on abutment of bridge 21; Coast and Geodetic Survey bench mark XXXIII	800.186

WEST UNION, NORTHEAST ALONG HIGHWAY, TO WALLACE.

Kenton, 1.1 miles north of, east of road on bank of Little Flint Run, opposite junction of run from west, on northwest corner of low flat rock; chiseled square	763.97
Kenton, 3.4 miles north of; 0.1 mile west of Eagle Mills post-office; in bend at side of road, near dwelling, in large flat rock; bronze tablet stamped "760 GRAFTON"	759.844
Centerpoint, 0.1 mile south of, northeast side of road at sharp bend to left, in outcrop of rock; bronze tablet stamped "790 GRAFTON"	789.746
Centerpoint, 3 miles east of, about 160 feet east of J. T. Shield's store, north of road, on top of rock; chiseled square	864.89
Centerpoint, 6 miles east of, junction of road at summit (on county line), southwest angle, on large rock; chiseled square	1,277.52

WEST UNION QUADRANGLE.

LIMA, WEST TO BLUE.

Lima, 0.37 mile west of, north of road, in outcrop of rock; bronze tablet stamped "769 GRAFTON"	769.235
Blue, 0.2 mile east of, on east end of second step from bottom of stone steps in front of dwelling; chiseled square	734.23

MIDDLEBOURNE, SOUTHEAST ALONG HIGHWAY, TO WEST UNION.

Middlebourne, in stone over cellar window, north of front entrance to house, northeast of sheriff's residence; aluminum tablet stamped "744 GRAFTON 1903"	745.162
Middlebourne, 0.2 mile southeast of; on southwest corner of east abutment of iron bridge over Gorrell Run; chiseled square	681.48
Blue, 0.3 mile southeast of, in southwest corner of northwest abutment to iron bridge over mouth of Indian Creek; bronze tablet stamped "707 GRAFTON"	707.193
Blue, 1.6 miles southeast of, south corner of northwest abutment to iron bridge over McElroy Creek; chiseled square	716.66
Wilbur, 0.15 mile northwest of (6.5 miles southeast of Blue) east of road, in outcrop of rock; bronze tablet stamped "973 GRAFTON"	974.012
West Union, Bank Building, between door and center window, in center face of stone; aluminum tablet stamped "836 GRAFTON"	836.104

West Union, 0.2 mile east of, in southwest corner of pier of Baltimore and Ohio Railroad bridge 23 over Middle Island creek; chiseled square, lettered "U. S. C. & G. S. N".....	Feet. 804. 862
West Union, 1 mile east of; 60 feet west of junction of road, on southeast corner of east abutment to bridge over Rock Run; chiseled square.....	778. 79

BLUE, ALONG HIGHWAY SOUTHWEST TO BEARSVILLE; THENCE SOUTH TO TOLLGATE.

Alma (Centerville), 3 miles south of, southwest angle of forks of road, under corner of store, on top of large flat rock; chiseled square.....	717. 25
Alma, 6.5 miles southwest of (0.34 mile south of Bearsville) northeast of road, northwest side of hollow; in outcrop of rock; bronze tablet stamped "839 GRAFTON".....	839. 349
Molehill, north bank of Brush Run, at forks of road, in outcrop of rock; bronze tablet stamped "854 GRAFTON".....	854. 575
Molehill, 7.5 miles south of, on northeast bridge seat of iron bridge on old northwestern pike over North Fork of Hughes River; chiseled square..	793. 93
Tollgate post-office, 0.4 mile west of (about 10 miles west of West Union) on the southeast corner stone of pier of Baltimore and Ohio Railroad bridge 26; United States Coast and Geodetic Survey bench mark.....	802. 817
Greenwood, 0.4 mile west of, north of Baltimore and Ohio Railroad, near center of rock cut; bronze tablet stamped "854 GRAFTON".....	854. 635

TOLLGATE, WEST ALONG BALTIMORE AND OHIO RAILROAD, TO ELLENBORO.

Pennsboro, railroad crossing; top of rail.....	861
Pennsboro, east face of Farmers and Merchants' Bank Building, 2.8 feet north of southwest corner, 2 feet above pavement; bronze tablet stamped "852 GRAFTON".....	852. 619
Ellenboro, 4.2 miles east of, about halfway between tunnels 8 and 9, on ledge of rock south of track; chiseled square.....	872. 74

MIDDLEBOURNE, SOUTHWEST ALONG HIGHWAY, TO LITTLE POST-OFFICE.

Little post-office, on top of east pier south side of large iron bridge over Middle Island Creek; bronze tablet stamped "672 GRAFTON 1903"...	672. 187
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HOLBROOK AND VADIS QUADRANGLES.

DODDRIDGE, GILMER, LEWIS, AND RITCHIE COUNTIES.

Leveling in Holbrook quadrangle in 1903 by G. L. Gordon and F. T. Willis and in Vadis quadrangle in 1902 by G. L. Gordon.

VADIS QUADRANGLE.

WEST UNION, SOUTHEAST ALONG PIKE, TO POINT 2.3 MILES SOUTHEAST OF NEW MILTON.

Sugarcamp, 0.5 mile southeast of, in southwest corner of east abutment of iron bridge over Meathouse Fork; bronze tablet stamped "830 GRAFTON" (mean of direct and reverse lines).....	Feet. 829. 950
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POINT 2.2 MILES SOUTHEAST OF NEW MILTON, SOUTHEAST ALONG PIKE, VIA AVON AND CHURCHVILLE, TO WESTON.

Avon, 0.2 mile south of, on west end of north abutment of covered bridge over Middle Island Creek; chiseled square.....	867. 34
Churchville, 0.5 mile southeast of, left side of main road to Weston, in west side of middle of large rock; aluminum tablet stamped "972 GRAFTON".....	971. 906

WESTON, WEST ALONG ROAD, VIA ALUM BRIDGE AND LINN, TO MOUTH OF FINK CREEK; THENCE NORTH VIA HURST, TO NEW MILTON.

Camden, opposite post-office, in front yard to P. E. Fetty's house, 8.5 feet west of porch and 1 foot south of fence; iron post stamped "1096 GRAFTON".....	Fect. 1,095.782
Alum bridge, iron bridge over Alum Fork of Leading Creek, in southeast corner of west abutment; bronze tablet stamped "810 GRAFTON"....	810.172
Linn, 1.75 miles northwest of, in northwest corner of bridge seat of east abutment of iron bridge over Fink Creek; bronze tablet stamped "766 GRAFTON".....	766.091
Hurst, cliff facing south, 4.5 feet below top; bronze tablet stamped "815 GRAFTON".....	814.958

AVON, EAST VIA COUNTY ROAD TOWARD BIG ISAAC.

Avon, 1.8 miles southeast of, in north angle of forks of road at Double Camp Run; iron post stamped "884 GRAFTON".....	884.007
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HOLBROOK QUADRANGLE.

WEST UNION, SOUTH ALONG HIGHWAY, VIA OXFORD, GROVE, AND TROY, TO LEADING CREEK.

West Union, 5.5 miles southwest of, large dwelling east side of road, near outcrop of rock; bronze tablet stamped "881 GRAFTON".....	881.534
Oxford, 0.25 mile south of, in southeast corner of east pier of iron bridge over south fork of Hughes River; bronze tablet stamped "814 GRAFTON".....	814.678
Grove, in northwest corner of cut-stone foundation of residence of C. A. Van Horn; bronze tablet stamped "918 GRAFTON".....	917.908
Conings post-office, southeast corner of cut-stone foundation to store owned by H. W. Ryner; bronze tablet stamped "789 GRAFTON".....	788.898
Troy, 0.25 mile west of, in northeast abutment of iron bridge over mouth of Cove Creek; bronze tablet stamped "758 GRAFTON".....	759.114

GOOSENECK, SOUTH ALONG HIGHWAYS, TO HAZEL GREEN; THENCE SOUTHEAST, TO TROY.

Pullman, 0.2 mile west of, in outcrop of rock at northeast angle of crossroads; bronze table stamped "843 GRAFTON".....	843.726
Slab, 0.3 mile northwest of post-office, left side of road, 100 feet north of small run, on top of outcrop of rock; chiseled square.....	791.825
Hazel Green, near northwest corner of store and post-office, in stone foundation; bronze tablet stamped "742 GRAFTON".....	743.404
Lawford, in northeast corner of stone house of D. G. Law; bronze tablet stamped "820 GRAFTON".....	820.694
Newberne, 0.5 mile above, in southeast corner of foundation to schoolhouse at forks of road; bronze tablet stamped "896 GRAFTON".....	897.349
Coxs Mills (Troy dist. 6), northeast corner of stone foundation of schoolhouse; bronze tablet stamped "788 GRAFTON".....	788.873

BURNSVILLE, GASSAWAY, GLENVILLE, AND SUTTON SPECIAL 15' QUADRANGLES; BUCKHANNON AND SUTTON 30' QUADRANGLES.

BRAXTON, CLAY, GILMER, LEWIS, NICHOLAS, UPSHUR, AND WEBSTER COUNTIES.

Leveling in Burnsville quadrangle in 1902 by G. L. Gordon; in Glenville quadrangle in 1903 by F. T. Willis and in 1905 by G. L. Gordon; in Buckhannon quadrangle in 1901-2 by G. L. Gordon; in Sutton Special quadrangle by G. L. Gordon and in 1908 by E. S. Dawson; and in Gassaway quadrangle in 1906 by D. D. Teets and in 1908 by E. S. Dawson.

BUCKHANNON 30' QUADRANGLE.

BROWNSVILLE, SOUTH ALONG BALTIMORE AND OHIO RAILROAD, TO ARNOLD.

	Feet.
Rohrbough, in front of station; top of rail.....	1,036.5
Watson crossing; top of rail.....	1,049.0
Roanoke, 0.4 mile north of, on southeast corner of north abutment of iron bridge over Canos River; chiseled square.....	1,048.25
Roanoke, 1.8 miles southwest of, 0.6 mile northeast of Arnold, in southwest corner of southwest pier of railroad bridge No. 38-B over Monongahela River; bronze tablet stamped "1,058 GRAFTON".....	1,057.970

AT BUCKHANNON.

Buckhannon, Upshur County court-house, west side of front entrance, in center of west face of base block of square column; aluminum tablet stamped "1433 GRAFTON".....	1,432.881
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BURNSVILLE 15' (SUTTON 30') QUADRANGLE.

ARNOLDSBURG, SOUTHWEST ALONG BALTIMORE AND OHIO RAILROAD, TO BURNSVILLE; THENCE NORTHWEST, ALONG HIGHWAY, TO LINN.

Confluence, 2.6 miles northeast of, 4.6 miles southwest of Arnold, on Second Big Run, on southwest corner of east abutment of railroad bridge 43-A; chiseled square.....	803.18
Confluence, 0.4 mile northeast of, opposite forks of county road, on north corner of pier of railroad bridge 46-A; chiseled square.....	777.26
Confluence, 0.8 mile southwest of, at forks of road, on northwest corner of west pier of railroad bridge 47-A; chiseled square.....	775.67
Burnsville, 0.5 mile north of, in top of east corner of northeast pier of railroad bridge 50-A over Little Kanawha River; bronze tablet stamped "765 GRAFTON".....	764.616
Stouts Mills, iron bridge over Little Kanawha River, in northwest corner of east abutment; bronze tablet stamped "750 GRAFTON".....	749.874

BURNSVILLE, SOUTHEAST ALONG ROAD, TO BULLTOWN; THENCE WEST, TO POINT 1 MILE NORTH OF ROLLYSON.

Bulltown, in north face of west abutment of covered bridge over Little Kanawha River, 9.8 feet below bridge seat and 8.1 feet west of corner; bronze tablet stamped "777 GRAFTON".....	776.788
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BURNSVILLE, SOUTH ALONG BALTIMORE AND OHIO RAILROAD AND HIGHWAYS, TO HEATERS.

Burnsville, 1.7 miles south of, on northwest corner of south abutment of railroad bridge 52-A over Saltlick Creek; chiseled square.....	765.14
Cogers, 3.4 miles south of, on northeast corner of south abutment of railroad bridge 55-D over Saltlick Creek; chiseled square.....	785.71
Rollyson, 0.5 mile north of, in bridge seat at northeast corner of south abutment of railroad bridge 57-D; bronze tablet stamped "797 GRAFTON".....	796.934
Heaters, on southeast corner of west abutment of highway bridge over O'Brien Fork; chiseled square.....	865.22

GLENVILLE 15' (SUTTON 30') QUADRANGLE.

SAND FORK, WEST ALONG HIGHWAY, VIA GLENVILLE, TO DEKALB.

Glenville, 1.4 miles east of, on stone at southeast corner of iron bridge over mouth of Stewart Creek; chiseled square.....	721.61
Glenville, in top stone of middle pier on east side of bridge over Little Kanawha River; bronze tablet stamped "733 GRAFTON".....	733.823

Glenville, 0.7 mile west of, on southeast corner of east abutment to bridge at mouth of Sycamore Run; square.....	Feet. 716. 02
Glenville, 3.7 miles west of, on northwest corner of west abutment to iron bridge across Leading Creek near mouth; square.....	723. 66
Dekalb, 3.4 miles east of, on northwest corner of stone abutment to bridge across Sinking Creek; chiseled square.....	711. 64
Dekalb, just back of post-office, in southwest corner of residence on second course of masonry foundation; bronze tablet stamped "715 GRAFTON"	715. 895

GLENVILLE, SOUTHEAST ALONG HIGHWAY, TO CUTLIPS.

Glenville, 4.2 miles south of, on northwest abutment of iron bridge over Cedar Creek; square cut.....	740. 38
Cedarville, 5.3 miles northwest of, on stone at ford over Cedar Creek; chiseled square.....	746. 77
Cedarville, at front of residence of W. H. Jack, on west side of cut-stone steps, in big stone; aluminum tablet stamped "802 GRAFTON".....	803. 013
Cedarville, 6 miles southeast of, near house east of road, on big stone; chiseled square.....	822. 99
Hope, about 2.5 miles east of, at forks of road leading up Toms Run, near hickory tree, on big rock; chisel mark.....	833. 87
Cutlips, in southwest corner of cut-stone foundation of church; aluminum tablet stamped "851 GRAFTON" (elevation possibly 1 foot too high)...	852. 170

MOUTH OF TOMS RUN, WEST ALONG HIGHWAY, VIA HOPE, TO STUMPTOWN; THENCE NORTH, VIA NORMANTOWN, TO DEKALB.

Hope post-office, on stone foundation of old log stable; chiseled square....	989. 474
Hope, 1.4 miles southwest of, east of road fork at mouth of Leopard Run, in southwest corner of stone foundation to house occupied in 1903 by John Seal and owned by C. F. Gerwig; aluminum tablet stamped "861 GRAFTON".....	861. 863
Progress, 1 mile northwest of, near mouth of Piper Fork on Crooked Fork schoolhouse, at forks of road, on stone foundation at southwest corner; chiseled square.....	868. 34
Perkins, to right of road at forks, on large stone; chiseled square.....	771. 75
Perkins, 3.3 miles west of, in southwest corner of stone foundation of schoolhouse at forks of road; aluminum tablet stamped "741 GRAFTON"....	742. 243
Stumptown, 0.5 mile east of, at forks of road, in southeast corner of east pier of iron bridge over Left Fork of Steer Run; bronze tablet stamped "714 GRAFTON".....	714. 952
Normantown, on stone at forks of road up Steer Run; chiseled square.....	737. 45
Lettergap, at south angle of crossroads, in northwest face of foundation stone at north corner of dwelling of A. S. Westfall; aluminum tablet stamped "827 GRAFTON".....	828. 049

SUTTON SPECIAL (SUTTON 30') QUADRANGLE.

HEATERS, SOUTH ALONG BALTIMORE AND OHIO RAILROAD, TO SUTTON; THENCE ALONG HIGHWAY AND ACROSS COUNTRY, TO BIRCH RIVER.

Shaversville (Flatwoods post-office), Dr. B. M. Squire's drug store, 0.8 foot west and 3.5 feet south of northwest corner; iron post stamped "1071 GRAFTON".....	1, 070.810
Flatwoods, 1.6 miles south of, northeast corner of south abutment of railroad bridge 64-B; chiseled square.....	1, 051. 89
Sutton, 2.3 miles north of (3.7 miles south of Flatwoods), on northeast corner of south abutment of railroad bridge 66-D; chiseled square.....	863. 15

	Feet.
Sutton, at suspension bridge over Elk River, in north face of north tower, 0.9 foot above foundation and 2.4 feet east of corner; bronze tablet stamped "843 GRAFTON".....	842. 477
Littlebirch, 2 miles west of, 160 feet northwest of Bear Run, 50 feet northwest of road forks, north of road, in outcrop of rock; bronze tablet stamped "1073 GRAFTON".....	1, 072. 575
Birch River, 300 feet north of post-office, 0.2 mile south of mouth of Powell Creek on east side, opposite Ivan Brothers and Brown's store, in outcrop of rock; aluminum tablet stamped "1108 KNWA" (21st Annual Report elevation retained).....	1, 108. 365
BIRCH RIVER, EASTWARD ALONG HIGHWAY, TO ERBACON; THENCE NORTH, ALONG BALTIMORE AND OHIO RAILROAD, TO GILLESPIE.	
Birch River post-office, 3 miles east of, 150 feet west of Birch Valley school-house (No. 24), 170 feet east of ford, north of river and road, in east end of large rock bowlder; aluminum tablet stamped "1186".....	1, 186. 091
Waggy post-office, 0.5 mile west of, south of ridge road, 300 feet west of Tram road and water tank, 0.3 mile east of road forks, in rock bowlder; aluminum tablet stamped "2085".....	2, 084. 528
Waggy post-office, 1 mile east of, north of county road, south of Tram road, near summit, 0.4 mile from where Tram road leaves ridge road, in outcrop of rock; aluminum tablet stamped "2176".....	2, 175. 859
Erbacon, 100 feet east of post-office, 100 feet south of station, in abutment at northwest end of Baltimore and Ohio bridge over mouth of Missouri Creek; aluminum tablet stamped "1518".....	1, 517. 654
Defoe, in front of station; top of rail.....	1, 401
Erbacon, 2.7 miles north of, east of railroad, 0.1 mile north of Defoe station, 150 feet south of milepost 81, in top of stone culvert; aluminum tablet stamped "1373".....	1, 372. 951
Erbacon, 3.7 miles north of, west of railroad, east of Laurel Creek, 150 feet south of milepost 80, on outcrop of sand rock; chiseled square; marked "1286".....	1, 285. 77
Erbacon, 4.7 miles north of, west of railroad, 200 feet south of milepost 79, on sand rock, chiseled square; marked "1203".....	1, 202. 83
Prestonia post-office, 0.1 mile north of, near mouth of Brook Run, in top stone of abutment to railroad bridge over Laurel Creek; aluminum tablet stamped "1137".....	1, 136. 921
Custis, in front of station; top of rail.....	1, 073. (?)
Centralia, 400 feet south of post-office, opposite G. E. & H. A. Hyer's store, 40 feet south of road crossing, 400 feet south of station, 20 feet east of railroad, 0.1 mile south of mouth of Laurel Creek, in stone culvert; aluminum tablet stamped "945".....	944. 619
Centralia, 1.1 miles north of, east of railroad, west of Elk River, opposite rock cliff, 200 feet south of milepost 48, on outcrop of sand rock, chiseled square; marked "952".....	951. 51
Bakers Run, 1 mile north of, west of railroad, 150 feet south of house, opposite mouth of Holly River, in outcrop of sand rock in bank; aluminum tablet stamped "943".....	942. 486
Bakers Run, 2 miles north of, south of railroad and river, 1 mile east of Holly River Junction, on outcrop of sand rock, chiseled square; marked "914".....	913. 10
Gillespie station, 0.5 mile south of, 40 feet south of milepost "C-69 & R-53," east of railroad, west of county road, 430 feet north of road crossing, in east end of culvert; aluminum tablet stamped "890".....	889. 665
Gillespie, in front of station; top of rail.....	890.

Gillespie, 0.5 mile north of, on edge of county road near summit, on outcrop of sand rock, chiseled square; marked "930"	Feet. 929. 79
Gillespie, 1.2 miles northwest of, west of trail, opposite field, 0.2 mile south of house, on outcrop of rock, chiseled square; marked "886"	885. 20
Gillespie, 2.2 miles northwest of, west of trail, on top of summit 0.5 mile west of house, in rock cliff; aluminum tablet stamped "945"	944. 275

GASSAWAY 15' (SUTTON 30') QUADRANGLE.

NEAR SUTTON, WEST ALONG HIGHWAY, TO GASSAWAY; THENCE SOUTHWEST ALONG COAL AND COKE RAILROAD, TO OTTER.

Sutton, 3 miles west of, 0.2 mile west of Buffalo Ford, 800 feet east of old sawmill, in abutment of small bridge over Mud Run; aluminum tablet stamped "822"	821. 723
Gassaway, 0.5 mile east of, in second stone of abutment at northeast end of railroad bridge over Elk River; aluminum tablet stamped "839"	838. 819
Gassaway, in front of station; top of south rail	833. 6
Gassaway, 0.5 mile west of, south of railroad, at end of yard limit, on sandstone in culvert over run, chiseled square; marked "831"	831. 03
Gassaway, 1.5 miles west of, south of railroad and Elk River, on doorstep of house, chiseled square; marked "833"	832. 53
Gassaway, 2.6 miles west of, south of railroad and Elk River, 0.3 mile south of sawmill, in outcrop of sand rock; aluminum tablet stamped "831"	831. 019
Gassaway, 3.6 miles west of, south of railroad and Elk River, 70 feet east of hollow, on outcrop of sand rock, chiseled square; marked "829"	828. 47
Gassaway, 4.6 miles west of, south of railroad and Elk River, 0.1 mile west of road crossing, on rock cliff, chiseled square; marked "825"	824. 37
Gassaway, 5.6 miles west of, west of railroad and Elk River, 200 feet from mouth of Lower Rockcamp Run, opposite sawmill, in outcrop of rock; aluminum tablet stamped "825"	825. 028
Gassaway, 6.6 miles west of, north of railroad and south of Elk River, on outcrop of sand rock, chiseled square; marked "823"	822. 19
Frametown, 200 feet south of post-office, in southeast abutment of county iron bridge over Elk River; aluminum tablet stamped "817"	816. 426
Frametown, 1 mile west of post-office, 0.2 mile north of Rockton station, east of railroad and Elk River, on rock cliff, chiseled square; marked "817"	816. 99
Rockton, 1.9 miles south of, southeast of railroad and river, in outcrop of sand rock; aluminum tablet stamped "813"	812. 466
Glendon, 0.5 mile south of post-office, on southwest abutment of railroad bridge over Birch River, chiseled square; marked "811"	810. 20
Glendon, 1.9 miles south of, southeast of railroad, near bend, on outcrop of sand rock, chiseled square; marked "806"	805. 95
Strange Creek post-office, 200 feet north of station, in northeast abutment of railroad bridge over mouth of Strange Creek; aluminum tablet stamped "807"	806. 515
Strange Creek post-office, 1 mile west of, north of railroad, near bend south of river, on outcrop of sand rock, chiseled square; marked "807"	806. 99
Villa Nova, 140 feet north of store and station, opposite house, west of railroad, east of river, in southwest corner of culvert; aluminum tablet stamped "787"	786. 981
Villa Nova, 1.6 miles southwest of, south of railroad, 250 feet east of Frame Run, on rock cliff, chiseled square; marked "795"	794. 24

Ira, 0.5 mile west of post-office, 250 feet south of station, in northeast abutment of railroad bridge over mouth of Grove Run; aluminum tablet stamped "788"	Feet. 787. 822
Ira, 1 mile southwest of, west of railroad, east of river, 300 feet north of sawmill and hollow to west, on rock boulder, chiseled square; marked "784"	784. 10
Ira, 2.1 miles southwest of, on southeast abutment of bridge over Jumping Gut, chiseled square; marked "780"	779. 81
Ira, 3.1 miles southwest of, in top of stone in south end of culvert; aluminum tablet stamped "772"	771. 579

STRANGE CREEK, SOUTHEAST TO BIRCH RIVER POST-OFFICE.

Strange Creek post-office, 1 mile southeast of, 50 feet east of road crossing, 300 feet east of Upper Mill Creek, 100 feet east of road forks, on outcrop of sand rock, chiseled square; marked "818"	818. 16
Strange Creek, 2 miles southeast of, south of road in bank, 180 feet west of road crossing, opposite house and hollow, in outcrop of sand rock; aluminum tablet stamped "879"	878. 731
Jennings, 0.5 mile east of post-office, west of railroad, on edge of creek, at west end of trestle, on rock, chiseled square; marked "898"	897. 50
Jennings, 2.4 miles southeast of, east of railroad, north of Strange Creek, 70 feet south of house, opposite hollow between trestles, in outcrop of sand rock; aluminum tablet stamped "993"	993. 092
Jennings, 3.6 miles southeast of, 100 feet north of Trace Fork at mouth, east of railroad and creek, on sand rock, chiseled square; marked "1044"	1, 043. 96
Jennings, 4.6 miles southeast of, east of road, 300 feet south of road to west, on sand rock, chiseled square; marked "1223"	1, 222. 60
Jennings, 5.5 miles southeast of, between Ball schoolhouse and New Hope Church, 10 feet south of road fork, 300 feet west of Morris's store, in hollow between Hughes Mountain and Kenna Mountain, in outcrop of sand rock; aluminum tablet stamped "1253"	1, 252. 773
Jennings, 7.6 miles southeast of, 0.5 mile east of Big Birch Ford, opposite hollow to right, north of river, on outcrop of sand rock, chiseled square; marked "1106"	1, 105. 17

IVYDALE, SOUTHEAST TO BUFFALO CREEK.

Ivydale, 3.2 miles southeast of, on ridge from Ivydale to Buffalo Creek, northeast of road, in large stone; aluminum tablet stamped "1308" (this elevation may be a foot too great)	1, 307. 847
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FRAMETOWN, NORTHWEST TO MOUTH OF JOES FORK OF STEER CREEK.^a

Frametown, 0.5 mile north of post-office, southwest of road, on edge of bank, 0.5 mile north of mouth of Big Run, 100 feet west of Big Run schoolhouse, on sand rock, chiseled square; marked "827"	827. 05
Frametown, 3.3 miles northwest of, south of run, north of road, 100 feet east of private road to north, 300 feet west of old store, on small rock, chiseled square; marked "977"	976. 87
Dessie, 0.5 mile northeast of post-office, 130 feet northwest of road forks, 200 feet east of Joes Fork at mouth, 10 feet west of foot log, opposite hollow, in outcrop of sandstone; aluminum tablet stamped "908"	907. 898

^aMean of two runnings.

ELIZABETH AND HARRISVILLE QUADRANGLES.

RITCHIE, WIRT, AND WOOD COUNTIES.

Leveling in Elizabeth quadrangle in 1904 by G. L. Gordon, and in Harrisville quadrangle in 1903 by G. L. Gordon and R. E. McFadden, and in 1904 by George Seidel.

ELIZABETH QUADRANGLE.

DAVISVILLE, EAST ALONG BALTIMORE AND OHIO RAILROAD, TO PETROLEUM.

	Feet.
Davisville, at railroad crossing; top of rail.....	610
Davisville, at center of west end of railroad culvert; aluminum tablet stamped "601 ADJ 1903".....	601. 428
Davisville, 1.7 miles east of, in top of southeast abutment at southwest end of railroad bridge 51 over Stillwell Creek; chiseled square.....	607. 53
Kanawha Station, at crossing; top of rail.....	611. 5
Kanawha, 0.9 mile southeast of station, northwest end of railroad tunnel, southwest side of track, fifth stone from bottom next opening; aluminum tablet stamped "615 ADJ 1903".....	615. 096
Kanawha, 2 miles southeast of station, on top of southwest end of southeast abutment of railroad bridge 50; chiseled square.....	608. 68
Hanna, road crossing; top of rail.....	623. 3
Hanna, 0.14 mile east of post-office, in bridge seat at southwest end of west abutment of railroad bridge 48 over Walker Creek; bronze tablet stamped "623 ADJ 1903".....	623. 503
Walker, in front of station; top of rail.....	629. 4
Walker, 2.4 miles east of, in southeast corner of east abutment of railroad bridge 46 over Walker Creek; aluminum tablet stamped "698 ADJ 1903".....	698. 105
Eaton, in front of station; top of rail.....	775. 3
Eaton, 0.5 mile east of, north side of track, in face of rock cliff; aluminum tablet stamped "752 ADJ 1903".....	752. 123
Petroleum, 1 mile west of, on northeast corner stone of railroad bridge 44; chiseled square.....	693. 171
Petroleum, at road crossing; top of rail.....	695. 8
Petroleum, near, on south end of west abutment of railroad bridge 41; chiseled square.....	698. 03
Petroleum, 0.4 mile east of, in top of south side of west abutment to railroad bridge 40; bronze tablet stamped "700 ADJ 1903".....	700. 320

PETROLEUM, SOUTH ALONG HIGHWAY, TO CISKO; THENCE SOUTHWEST TO ELIZABETH.

Petroleum, 2.8 miles south of, 100 feet southeast of summit, northeast side of road, in rocky ledge; aluminum tablet stamped "1084 ADJ 1903"....	1, 084. 158
Cisko, 46 feet southwest of southwest corner of Buffalo M. P. Church; iron post stamped "640 ADJ 1903".....	640. 425
Cisko, 3.6 miles southwest of, 90 feet east of northeast corner of schoolhouse, in west face of large rock; bronze tablet stamped "702 ADJ 1903".....	702. 129
Standingstone, 3.5 miles east of, 540 feet southwest of Parish Fork schoolhouse, left side of road, in top of large rock; bronze tablet stamped "736 ADJ 1903".....	735. 694
Standingstone, 0.8 mile southeast of, 840 feet east of forks of road; on right side of road, in top of large rock; bronze tablet stamped "619 ADJ 1903".....	619. 083

KANAWHA, SOUTH ALONG LITTLE KANAWHA RAILROAD, TO PALESTINE.

	Feet.
Leachtown, at road crossing; top of rail.....	617. 4
Leachtown, west side of railroad, in rock cliff; bronze tablet stamped "620 ADJ 1903".....	620. 204
Slate, at road crossing; top of rail.....	608. 5
Fishing Camp, in front of station; top of rail.....	614. 7
Hughes River station, 2.5 miles east of Slate, 15 feet northeast of northeast corner of station; iron post stamped "618 ADJ 1903".....	617. 812
Newark, in front of station; top of rail.....	614. 1
Newark, 1.4 miles southeast of, 24 feet west of track; iron post stamped "627 ADJ 1903".....	627. 209
Standingstone, at road crossing; top of rail.....	621. 0
Elizabeth, on southwest curb line of Washington street, point southeast of north corner of Raleigh Hotel, south meridian mark, in stone post; bronze tablet stamped "646 ADJ 1903".....	646. 037
Palestine (Reedyripple), 150 feet east of post-office, 18 feet south of railroad; iron post stamped "645 ADJ 1903".....	644. 657

PALESTINE, SOUTH ALONG HIGHWAY, TO ROVER.

Rover, 0.8 mile southwest of, 250 feet southeast of stillhouse, left side of road at southeast end of large high rock in top of large low rock; aluminum tablet stamped "627 ADJ 1903".....	626. 560
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ELIZABETH, SOUTHEAST ALONG HIGHWAY, TO BURNING SPRINGS.

Elizabeth, 2.75 miles southeast of, 350 feet southwest of a small run, east side of road, in large rock 9 feet above road; aluminum tablet stamped "700 ADJ 1903".....	700. 088
Cherry, 0.3 mile north of, Highlog Run, in northeast corner of south abutment of iron bridge; bronze tablet stamped "633 ADJ 1903".....	633. 424

CISKO, SOUTHEAST ALONG HIGHWAY, TO OXBOW.

Cisko, 2.73 miles southeast of, in northeast corner of southeast abutment of county bridge over Camp Run; aluminum tablet stamped "637 ADJ 1903".....	637. 245
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HARRISVILLE QUADRANGLE.

OXBOW, SOUTH ALONG HIGHWAY, VIA MACFARLAN, TO MUNDAY.

Oxbow, 0.7 mile north west of, 200 feet northeast of road crossing of Louthers Run and close to a small stream, right side of road, in shelf of outcrop of rock; bronze tablet stamped "659 ADJ 1903".....	659. 136
Macfarlan, 150 feet southwest of post-office and station, left side of road, in top of large rock; bronze tablet stamped "668 ADJ 1903".....	668. 015
Macfarlan, road crossing; top of rail.....	658. 8
Macfarlan, 3 miles southeast of, 155 feet north of hollow, in shelf of outcrop of rock; bronze tablet stamped "757 ADJ 1903".....	757. 318
Hartley, 0.1 mile south of, at forks of road near a church and a store, in northeast angle, in top of outcrop of rock; aluminum tablet stamped "931 ADJ 1903".....	931. 272
Hartley, 2.85 miles southwest of, 0.13 mile north of Munday, west side of road, in outcrop of rock 5 feet above road; bronze tablet stamped "742 ADJ 1903".....	742. 144

NOBE, NORTHWEST ALONG LEATHERBARK RUN ROAD, TO SMITHVILLE; THENCE EAST TO HAZEL GREEN.

Smithville, in southwest corner of stone foundation of house owned by M. A. Ayers; bronze tablet stamped "718 GRAFTON".....	719. 251
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PENNSBORO, SOUTHWEST ALONG PENNSBORO AND HARRISVILLE RAILROAD, TO GOOSENECK.

	Feet.
Gooseneck, at road crossing; top of rail	741. 2
Gooseneck, 0.1 mile southwest of, at south end of foot bridge over North Fork, Hughes River, in rock cliff; bronze tablet stamped "732 GRAFTON"	732. 860

ELLENBORO, SOUTHWEST ALONG BALTIMORE AND OHIO RAILROAD, TO CAIRO; THENCE NORTHWEST ALONG HIGHWAY, TO NUTTER FARM; THENCE SOUTHEAST TO PETROLEUM.

Cornwallis, 2.8 miles northeast of, on coping stone of southwest abutment of Baltimore and Ohio Railroad bridge 30; chiseled square.....	739. 342
Cornwallis, 1.8 miles northeast of, at west end of Baltimore and Ohio Railroad tunnel 11, south side of track, on corner of foundation stone; chiseled square	709. 21
Cornwallis, in front of station; top of rail	686. 7
Cornwallis, 375 feet west of, in bridge seat at north end of east abutment of bridge 32; bronze tablet stamped "681 GRAFTON 1903"	681. 438
Cairo, 1 mile east of, on south end of east abutment of railway bridge 35 over Bonds Creek; Coast and Geodetic Survey bench mark XXXVI....	685. 954
Cairo, in front of freight station; top of low rail.....	680
Cairo, in railway bridge 36, in north end of east abutment; bronze tablet stamped "674 GRAFTON 1903"	674
Nutter farm, a short distance north of A. B. Wilson's store, in bridge seat at north end of west abutment of new county bridge over Goose Creek; bronze tablet stamped "733 GRAFTON 1903"	733. 189
Petroleum, 3.7 miles northeast of, north side of road, opposite farmhouse of W. H. Cantwell, in ledge of rock between road and creek; bronze tablet stamped "714 ADJ 1903"	713. 442

CAIRO, SOUTHWEST ALONG HIGHWAY, TO CISKO.

Cairo, 3.9 miles south of, at pumping station, 200 feet south of west end of footbridge, in large rock; aluminum tablet stamped "657 ADJ 1903" ..	657. 200
Rusk, 3.9 miles northwest of, east side of road, between road and small run, 500 feet north of A. R. Phillips's house, in ledge of rocks; bronze tablet stamped "671 ADJ 1903"	670. 608

CORNWALLIS, SOUTHEAST ALONG HIGHWAY, TO GOFFS; THENCE SOUTHWEST TO SMITHVILLE.

Harrisville, in west end of doorstep of main entrance of court-house; aluminum tablet stamped "871 ADJ 1903"	870. 568
Washburn, 0.5 mile northeast of new post-office, southwest corner of store owned and occupied by D. S. Hall & Bros.; bronze tablet stamped "756 ADJ 1903"	756. 087
Goffs post-office, west end of north abutment of big iron bridge across South Fork, Hughes River; aluminum tablet stamped "714 ADJ 1903"	713. 883

ARNOLDSBURG, RIPLEY, AND SPENCER QUADRANGLES.

CALHOUN, JACKSON, ROANE, AND WIRT COUNTIES.

Leveling in Arnoldsburg quadrangle in 1903 and 1904 by F. T. Willis, and in 1905 by D. D. Teets; in Ripley quadrangle in 1905 by G. L. Gordon; and in Spencer quadrangle in 1904 and 1905 by G. L. Gordon, and in 1905 by D. D. Teets.

ARNOLDSBURG QUADRANGLE.

CRESTON, EAST ALONG HIGHWAY VIA GRANTSVILLE, TO WHITE PINE.

Annamoriah, 0.2 mile north of, in southwest angle of forks of road near spring, in east end of outcrop of rock; bronze tablet stamped "945 ADJ 1903".....	Feet. 945. 053
Big Bend (Brooksville), 0.46 mile west of, right side of road, in northwest face of large rock; bronze tablet stamped "673 ADJ 1903".....	672. 920
Purdy, on west side of county road about 105 feet northeast of post-office, in southeast face of large rock; bronze tablet stamped "706 ADJ 1903".....	705. 790
Grantsville, in northwest corner of west face of stone foundation of courthouse; bronze tablet stamped "725 GRAFTON".....	726. 451
Whitepine, 4.9 miles northeast of Grantsville, 600 feet west of forks of road and 12 feet south of road crossing of small run, in northwest corner of large rock; bronze tablet stamped "787 ADJ 1903".....	786. 710

STUMPTOWN, WEST ALONG HIGHWAY VIA ARNOLDSBURG, TO PINK; THENCE NORTH TO CRESTON.

Stumptown, 2.1 miles southwest of, north side of road, 220 feet southeast of a hollow, in south face of large rock; aluminum tablet stamped "752 ADJ 1903".....	753. 296
Millstone, 0.5 mile northeast of, in center of corner stone of Sand Ridge Church; bronze tablet stamped "1203 ADJ 1903".....	1, 204. 005
Arnoldsburg, 0.4 mile east of, 125 feet southwest of hollow near junction of road from south, north side of road, in face of outcrop of rock; bronze tablet stamped "733 ADJ 1903".....	734. 389
Beech, 0.24 mile northeast of post-office, 90 feet southwest of mouth of hollow from southeast side of road, in top of large rock; bronze tablet stamped "742 ADJ 1903".....	743. 356
Pink, 0.87 mile east of, west side of road, in top of large rock; bronze tablet stamped "709 ADJ 1903".....	710. 415
Tristan, 0.5 mile north of, west side of road, near a poor dwelling, in large rock; bronze tablet stamped "709 ADJ 1903".....	710. 462
Rocksdale, 0.08 mile west of, north side of West Fork Little Kanawha River, opposite mouth of Henry Fork, north side of road, in southeast end of large rock; bronze tablet stamped "679 ADJ 1903".....	680. 554
Richardson, 5 feet northeast of northeast corner of W. E. Bee's store; iron post stamped "674 ADJ 1903".....	675. 982

BIG BEND, NORTH ALONG HIGHWAY, VIA INDUSTRY, TO MUNDAY.

Industry, 1.9 miles west of, 125 feet northwest of ford, on north side of Straight Creek, in face of outcrop of rock; bronze tablet stamped "663 ADJ 1903".....	663. 049
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GRANTSVILLE, NORTHEAST ALONG HIGHWAY, TO NOBE.

Nobe, at northwest corner of Chapel Church, in north foundation wall; bronze tablet stamped "1090 GRAFTON".....	1, 091. 379
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GRANTSVILLE, SOUTH ALONG HIGHWAY, TO ARNOLDSBURG.

Sycamore, 3.34 miles north of, on dividing ridge between Philip Run and Sycamore Creek; in center of corner stone of schoolhouse 150 feet east of road; bronze tablet stamped "1009 ADJ 1903".....	1, 009. 425
Sycamore, 0.2 mile south of, on Sycamore Creek, on east side of road, opposite house to west of road, in stone; bronze tablet stamped "814 ADJ 1903".....	814. 211

RIPLEY QUADRANGLE.

RAVENSWOOD, EAST ALONG BALTIMORE AND OHIO RAILROAD, TO DUKES (DOUBLE-RODDED LINE).

Silverton, 0.5 mile west of (2.5 miles east of Ravenswood), north side of track, in ledge of rock; bronze tablet stamped "579 ADJ 1903".....	Feet. 579. 241
Silverton, at road crossing; top of rail.....	584. 9
Crow Summit, 0.5 mile west of (2.7 miles east of Silverton), east of and near a large hill, 9 feet left of center of track, in top of large stone; bronze tablet stamped "591 ADJ 1903".....	590. 973
Crow Summit, in front of station; top of rail.....	640. 9
Sandyville, road crossing; top of rail.....	598. 8
Sandyville, 1. mile east of, near road crossing, on right of track, in north-west corner of northwest abutment of iron county bridge; bronze tablet stamped "594 ADJ 1903".....	593. 678
Jones crossing; top of rail.....	602. 6
Meadowdale, 300 feet northwest of station, near junction of Biglick road with pike, in face of large rock; bronze tablet stamped "626 ADJ 1903".....	626. 042
Meadowdale, at road crossing; top of rail.....	617. 2
Leroy, about 300 feet southwest of store and post-office and across Sand Creek, in face of outcrop of rock; bronze tablet stamped "646 ADJ 1903".....	646. 038
Liverpool, 1.6 miles east of, northwest side of county road, about 220 feet northeast of railroad crossing, in outcrop of rock; bronze tablet stamped "873 ADJ 1903".....	873. 010

WISEBURG, SOUTHWEST ALONG HIGHWAY, TO SHERMAN.

Cuba, 300 feet north of post-office, on west (opposite) side of road, edge of stream, in top of large boulder; aluminum tablet stamped "673 GRATTON 1903".....	673. 122
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EVANS, EAST ALONG RAILROAD AND TURNPIKE, TO POINT 0.5 MILE EAST OF MARSHALL.

Ripley, 2.9 miles west of, 70 feet south of track, east side of road, in top of low rock; bronze tablet stamped "602 ADJ 1903".....	601. 621
Ripley, railroad crossing at station; top of rail.....	606
Ripley, court-house square, southwest corner, in top of stone post; bronze meridian tablet stamped "615 ADJ 1903".....	614. 566
Hereford, 3.4 miles west of, north of road and near sharp bend to south, in shelf of rock; bronze tablet stamped "824 ADJ 1903".....	823. 894
Hereford, 0.3 mile east of, north of road, in top of large rock; bronze tablet stamped "632 ADJ 1903".....	631. 750
Frozencamp, in north end of west abutment of covered bridge over Big Run; bronze tablet stamped "641 ADJ 1903".....	641. 091
Marshall, 0.5 mile east of, north of road, in face of large rock; bronze tablet stamped "697 ADJ 1903".....	696. 931

RIPLEY, NORTH ALONG ROAD, TO SANDYVILLE.

Ripley, 3.25 miles north of, 0.4 mile south of crossroads and summit, east of road, in top of outcrop of rock; bronze tablet stamped "729 ADJ 1903".....	728. 595
Mentor, 1.4 miles north of, in second step at northeast side of northwest abutment of covered bridge over Sandy Creek; bronze tablet stamped "591 ADJ 1903".....	591. 050

LEROY, NORTHEAST ALONG ROAD, TO PEEWEE.

Leroy, 2.65 miles north of, east of road, near dwelling, in shelf of outcrop of rock; bronze tablet stamped "961 ADJ 1903".....	961. 200
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SPENCER QUADRANGLE.

DUKES, EAST ALONG BALTIMORE AND OHIO RAILROAD, TO SPENCER; THENCE EAST ALONG HIGHWAY TO TRISTAN (DOUBLE-RODDED LINE).

	Feet.
Dukes, at road crossing; top of rail.....	691. 8
Dukes, 0.2 mile east of, 55 feet north of track, southwest corner of large rock; bronze tablet stamped "694 ADJ 1903".....	694. 343
Reedy, in front of station; top of rail.....	676. 2
Reedy, 1.7 miles southeast of, in west corner of culvert over Spring Branch; bronze tablet stamped "684 ADJ 1903".....	684. 031
Kyger, in front of station; top of rail.....	706. 5
Kyger, 700 feet southeast of, in east end of north abutment of county iron bridge over Reedy Creek; bronze tablet stamped "701 ADJ 1903".....	701. 389
Barrs, at road crossing; top of rail.....	898. 7
Barrs, about 80 feet west of signboard, on north side of county road, in face of large rock; bronze tablet stamped "917 ADJ 1903".....	916. 946
Spencer, at rock crossing at station; top of rail.....	719. 2
Spencer, 0.16 mile southeast of, near end of railroad, in west abutment of bridge seat of county bridge over Spring Creek; aluminum tablet stamped "726 ADJ 1903".....	725. 750
Spencer, 3.2 miles east of, 1.1 miles west of Pasco, in top of large rock south of road; aluminum tablet stamped "1071 ADJ 1903".....	1, 071. 304
Pasco, 1.8 miles east of, on right side of road, in northwest corner of large rock; bronze tablet stamped "742 ADJ 1903".....	741. 983

INDUSTRY, WEST ALONG HIGHWAY, TO BURNING SPRINGS; THENCE SOUTHEAST TO CRESTON.

	Feet.
Industry, 4.2 miles west of, in northeast end of southeast abutment on bridge seat of iron bridge over Rock Run; bronze tablet stamped "650 ADJ 1903".....	669. 994
Industry, 4.6 miles west of, left side of road, in root of chestnut tree 20 inches in diameter; nail (Wabash Railroad bench mark).....	656. 76
Burning Springs, 2.8 miles southeast of, 90 feet northwest of a deep hollow, southwest side of road, in top of large rock; bronze tablet stamped "656 ADJ 1903".....	656. 130
Creston, 0.11 mile east of, north side of road, in outcrop of rock; bronze tablet stamped "701 ADJ 1903".....	701. 050

CRESTON, SOUTH ALONG HIGHWAY TOWARD RICHARDSON.

Richardson, 4 miles north of, south side of road, south side of West Fork, north angle of very large rock; bronze tablet stamped "657 ADJ 1903".....	658. 612
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PEEWEE, NORTHEAST ALONG ROAD, VIA ZACKVILLE, TO ROVER.

Pee wee, 0.47 mile northeast of, north of road, in face of ledge of rock; bronze tablet stamped "692 ADJ 1903".....	692. 156
Zackville, 1 mile northeast of, northeast of road, in face of outcrop of rock; bronze tablet stamped "662 ADJ 1903".....	662. 195

SPENCER, WEST ALONG TURNPIKE, TO MARSHALL.

Spencer, 3.1 miles west of, 40 feet northwest of center of turnpike, in face of outcrop of rock; bronze tablet stamped "854 ADJ 1903".....	853. 832
Reedyville, 0.9 mile east of, at center of forks of road; iron post stamped "753 ADJ 1903".....	752. 703
Peniel, triangle at forks of road, in top of large rock; bronze tablet stamped "739 ADJ 1903".....	739. 212

BURNING SPRINGS, SOUTH ALONG ROAD, TO SPENCER.

Evelyn, 1 mile north of post-office, 85 feet southwest of fork of road to Creston, in rock west of road; bronze tablet stamped "660 ADJ 1903"...	Feet. 660. 064
Evelyn, 2.5 miles south of, 0.2 mile south of Spring Creek crossing, in projecting cliff 10 feet west of road; bronze tablet stamped "745 ADJ 1903"...	744. 661
Millard post-office, 1.2 miles south of, north of road at reversed bend north-east of Spring Creek, in large rock; aluminum tablet stamped "696 ADJ 1903".....	696. 001
Wellington post-office, 1 mile southeast of, east of private road at fork, in large rock; bronze tablet stamped "704 ADJ 1903".....	704. 208

KENNA, OTTER, WALTON, AND WINFIELD QUADRANGLES.

CALHOUN, CLAY, JACKSON, KANAWHA, MASON, PUTNAM, AND ROANE COUNTIES.

Leveling in Winfield quadrangle in 1906 by C. H. Burns, in Walton and Kenna quadrangles in 1906 by C. H. Burns and E. S. Dawson, and in Otter quadrangle in 1906 by E. S. Dawson and D. D. Teets, and in 1908 by E. S. Dawson.

OTTER QUADRANGLE.

BEECH, SOUTHEAST ALONG ROAD, VIA MINNORA AND BIG OTTER, TO POINT 4 MILES SOUTH OF BIG OTTER; THENCE WEST, VIA NEWTON, TO AMMA.

Beech, 2.72 miles south of, 30 feet east of Beech Fork, 0.15 mile north of store and dwelling, in large rock; aluminum tablet stamped "766"....	Feet. 765. 489
Minnora post-office, 1.9 miles west of, 1,000 feet west of head of Fink Run, 5 feet south of road along stream bed, 700 feet east of house on right of road, at mouth of deep hollow, at foot of hill, in large stone; aluminum tablet stamped "911".....	911. 253
Minnora, 1.2 miles south of, 15 feet east of road, 25 feet west of West Fork, Little Kanawha River, in top of large stone; aluminum tablet stamped "795".....	794. 243
Minnora, 4.5 miles south of, west of road, 30 feet northeast of house, at sharp bend in road, in pointed rock; aluminum tablet stamped "835"...	834. 982
Stinson, 2 miles southeast of, 200 feet northeast of house, south of road at bend to south, on Stinson Creek, in large boulder; aluminum tablet stamped "921".....	920. 315
Nebo, 1.8 miles south of post-office, west of road, 100 feet northeast of house, near head of Stinson Lick (emptying into Otter Creek), in rock; aluminum tablet stamped "993".....	992. 647
Big Otter, 1.8 miles south of post-office, south of road, 400 feet southwest of house, 600 feet west of deep hollow, in outcrop of cliff; aluminum tablet stamped "868".....	867. 886
Steer Run, 400 feet northwest of mouth of, north of road up left-hand fork of Rush Run (emptying into Otter Creek), in outcrop of rock; aluminum tablet stamped "950".....	949. 571
Newton, 4.4 miles southeast of, north of road, near mouth of Summers Fork, in rock cliff; aluminum tablet stamped "773".....	772. 591
Newton, 2.4 miles southeast of, north of road, 890 feet north of Cutoff Run, 150 feet east of Right Fork of Big Sandy Creek, 3 feet above level of road, in sandstone ledge; aluminum tablet stamped "746".....	745. 526
Newton, 2.4 miles southwest of, 115 feet northwest of road forks, 150 feet northwest of Big Sandy Creek, opposite mouth of Granny Creek, in rock cliff; aluminum tablet stamped "711".....	710. 325

Bloomington, 0.2 mile south of post-office, west edge of road, east edge of woods, in hollow, 20 feet west of Big Sandy Creek, in top of rock outcrop; aluminum tablet stamped "692".....	Feet. 691. 694
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BENCH MARK ON LEFTHAND RUN.

Lefthand, 1.3 miles south of post-office, 1.2 miles north of mouth of Shaver Fork, 300 feet southeast of Lefthand Run, southeast of road, in sandstone; aluminum tablet stamped "760".....	759. 939
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BIG OTTER, SOUTHEAST, TO MOUTH OF DOG RUN ON BUFFALO CREEK.^a

Big Otter, 5 miles south of, 1.2 miles south of mouth of Rush Run, east of road, 250 feet northeast of house, in hollow across Otter Creek, in rock; aluminum tablet stamped "798".....	797. 782
Ivydale post-office (Otter Station), in southwest pier of iron suspension county bridge across Elk River; aluminum tablet stamped "758".....	757. 459

RAND, EAST ALONG COAL AND COKE RAILROAD, TO KING.^b

Rand, 0.12 mile east of, 0.74 mile west of King, 10 feet south of Coal and Coke Railroad track, inside of wide curve near fill and deep hollow to south, in sandstone outcrop; aluminum tablet stamped "654".....	654. 241
King, in front of station; top of rail.....	653. 7

WALTON QUADRANGLE.

AMMA, WEST ALONG ROAD, TO KETTLE.

Amma, 0.25 mile east of post-office, west of road, 150 feet northwest of Big Sandy Creek, 100 feet west of bridge over mouth of Lefthand Run, in rock; aluminum tablet stamped "696".....	695. 672
Amma, 2.6 miles southwest of (0.2 mile northeast of Roadside schoolhouse), 30 feet west of Garner Branch, opposite blacksmith shop, northwest of road, in outcrop of rock; aluminum tablet stamped "657".....	657. 094
Wellford, 160 feet west of post-office, on west side of Lefthand Creek at mouth of Lick Branch, southwest of footbridge over Lefthand Creek, west of road, in outcrop; aluminum tablet stamped "625".....	624. 527
Wellford, 3.6 miles northwest of 2.2 miles west of mouth of Gabes Creek, south of road, 200 feet north of Gabes Creek and house in hollow, 0.85 mile east of summit, in top of rock boulder; aluminum tablet stamped "917".....	916. 263
Wellford, 4 miles west of, 350 feet northwest of foot of mountain, 25 feet north of Small Run, 0.7 mile east of Trail Branch of Little Sandy Creek, north of road, in outcrop of stone; aluminum tablet stamped "803".....	803. 027
Hunt, 3.2 miles northeast of, 150 feet east of hollow and house, 90 feet north of Little Sandy Creek, north edge of road, in boulder; aluminum tablet stamped "692".....	691. 616
Hunt, 125 feet north of post-office, in southwest corner of foundation of store, at forks of road and mouth of Pocatalico Fork of Little Sandy Creek, north of road; aluminum tablet stamped "658".....	657. 534
Kettle, 300 feet south of post-office, west of road, east of Hunt Fork of Green Creek, 420 feet south of Green Creek, in blue sandstone; aluminum tablet stamped "672".....	671. 475

^aThe closure error of this line was excessive, but the line has been adjusted by arbitrarily throwing 1 foot at the south edge of Gassaway quadrangle.

^bLeveling of 1908 by E. S. Dawson.

AMMA, NORTHWEST ALONG ROAD TO SPEED, THENCE SOUTHWEST TO HARMONY.

	Feet.
Lefthand, 1.65 miles northwest of, north of road, 400 feet east of hollow to north, in sandstone outcrop; aluminum tablet stamped "868".....	866. 211
Lefthand, 4.5 miles northwest of, south of road, on north bank of Pocatatico River, in sandstone outcrop; aluminum tablet stamped "771".....	769. 831
Hammack, 425 feet north of post-office, at mouth of Shammon Branch, in sandstone outcrop; aluminum tablet stamped "734".....	732. 761
Hammack, 3 miles north of, 100 feet east of Rush Creek, north of road, in sharp bend of road in field, 60 feet north of center of road, in bluestone outcrop; aluminum tablet stamped "751".....	749. 338
Rushville, 1.65 miles northwest of, in field 220 feet south of road, west of large flat hollow and small mill, in sandstone outcrop; aluminum tablet stamped "907".....	905. 500
Speed, 420 feet west of road forks at post-office building and mouth of Bufalolick Run (emptying into Spring Creek), south of Spring Creek road, in sandstone outcrop; aluminum tablet stamped "794".....	792. 342
Gandeeville, east of post-office, on property of R. C. Blasser, 50 feet south of road forks, in sandstone outcrop; aluminum tablet stamped "803"....	801. 994
Gandeeville, 3.15 miles west of, south of road opposite road forks, east of house and store, in sandstone outcrop; aluminum tablet stamped "764".....	762. 744
Harmony, 1.2 miles north of, 200 feet west of mouth of Wolfcamp Run, at road forks, 60 feet north of road, inside of field on property of T. W. Hughes, in front of house on south side of road, in sandstone outcrop; aluminum tablet stamped "748".....	746. 533

KENNA QUADRANGLE.

HARMONY, WEST ALONG ROAD VIA BELGROVE, TO KENNA; THENCE SOUTHWEST TO MOUTH OF STUMPY RUN
4.4 MILES WEST OF LIBERTY.

Higby, 1.5 miles southeast of, south of road and bank of Higby Creek, 750 feet above right fork of Higby Creek, in sandstone; aluminum tablet stamped "738".....	737. 812
Belgrove, 1 mile southeast of, on north side of road, on bank 70 feet east of private road up deep hollow to north of house and blacksmith shop, in sandstone outcrop; aluminum tablet stamped "704".....	703. 367
Belgrove, 2 miles southwest of, 40 feet south of center of road in field, 60 feet north of house, in sandstone outcrop; aluminum tablet stamped "817"....	816. 152
Kenna, 1.5 miles east of, north of road, 700 feet west of schoolhouse, 380 feet east of road fork to north, in sandstone outcrop; aluminum tablet stamped "747".....	746. 350
Emma, west of road, in corner stone of church; aluminum tablet stamped "980".....	979. 454
Liberty, 100 feet from center of road, opposite post-office, in stone wall of cellar (property of J. M. Carney) on west side; aluminum tablet stamped "779".....	777. 937

HUNT, NORTH TO KETTLE.

Hunt, 3 miles north of, west of Pocatatico Fork, opposite house and west of hollow, 1 mile east of mountain, north of road, in bluestone; aluminum tablet stamped "809".....	808. 569
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KETTLE, WEST ALONG ROAD, TO NEAR SISSONVILLE; THENCE NORTHWEST, TO KENNA.

	Feet.
Island Branch, 0.2 mile east of post-office, north of road, 40 feet north of Pocatamico River, 90 feet west of Camp School, in rock; aluminum tablet stamped "656"	655. 797
Island Branch, 3.1 miles southwest of, 50 feet west of Pocatamico River, 0.2 mile north of Emma Bell schoolhouse, east of road, in sandstone outcrop; aluminum tablet stamped "646"	645. 376
Carney, 0.5 mile west of post-office, north of road, 150 feet north of Pocatamico River, 0.1 mile west of Victory schoolhouse, in bowlder; aluminum tablet stamped "635"	635. 055
Sissonville, 3 miles north of, in south end of east abutment of iron bridge over Left Fork of Pocatamico River; aluminum tablet stamped "625"	625. 393
Loop, 2.65 miles northwest of 1 mile southeast of, Goldtown, 100 feet west of mouth of Dudden Fork, in east end of north abutment of iron bridge; aluminum tablet stamped "643"	643. 148
Goldtown, 1.5 miles northwest of, east of road, 40 feet from center of road, road forks to north, in sandstone foundation of Watts Chapel; aluminum tablet stamped "671"	670. 471
Kenna, 0.8 mile south of, east of road, 380 feet south of house to west, in sandstone outcrop; aluminum tablet stamped "872"	871. 772

SISSONVILLE, SOUTHWEST 3.4 MILES (SINGLE SPUR LINE).

Sissonville, 90 feet south of north end west side of iron bridge over Pocatamico River; aluminum tablet stamped "624"	624. 086
Sissonville, 3.45 miles southwest of, 50 feet west of road, 100 feet west of Pocatamico River, 0.9 mile north of Derrick Creek, in garden of old house, in bowlder; aluminum tablet stamped "615"	615. 245

WINFIELD QUADRANGLE.

LEON, SOUTH ALONG EAST SIDE OF KANAWHA RIVER, TO WOODS STATION, THENCE ACROSS RIVER AND WEST, TO ALBATROSS.

Arbuckle, 0.1 mile south of, 10 feet east of road, in sandstone; aluminum tablet stamped "608"	608. 410
Arbuckle, 2.3 miles south of, in bridge abutment on northeast corner of bridge over Arbuckle Creek; aluminum tablet stamped "567"	567. 040
Buffalo, in stone door sill in west end of M. E. Church, South; aluminum tablet stamped "580"	579. 846
Woods station (3.8 miles south of Buffalo), east of road opposite fork west to Kanawha River ford to Fraziers Bottom, in sandstone; aluminum tablet stamped "590"	590. 290

WOODS STATION, SOUTHEAST ALONG KANAWHA RIVER, TO REDHOUSE SHOALS; THENCE NORTHEAST, ALONG HIGHWAY, TO PARADISE; THENCE NORTH TO ELMWOOD; THENCE WEST, TO GRIMMS LANDING.

Redhouse Shoals, in northeast end of county bridge abutment; aluminum tablet stamped "570"	569. 670
Redhouse Shoals, 3.5 miles northeast of, 0.4 mile west of a road summit, 20 feet south of center of road, in sandstone; aluminum tablet stamped "967"	966. 730
Confidence, 0.8 mile east of, 15 feet north of center of road, in sandstone; aluminum tablet stamped "853"	853. 331
Paradise, 2.3 miles north of, east side of road at crossroads, north of Cherry Fork of Eighteenmile Creek, in sandstone; aluminum tablet stamped "660"	659. 852

Paradise, 4.5 miles north of, in abutment of south end of county bridge over Eighteenmile Creek; aluminum tablet stamped "635".....	Feet. 634. 661
Tribble, 2.2 miles southeast of, 15 feet north from center of road, south of house, hollow north and south, in sandstone; aluminum tablet stamped "713"	713. 223
Elmwood, 0.7 mile east of post-office, on northeast corner of road forks, in sandstone; aluminum tablet stamped "624".....	625. 549
Grimms Landing, 3 miles northeast of, north of road, south of house, in sandstone; aluminum tablet stamped "624".....	625. 868

HUNTERSVILLE AND NICHOLAS 30' QUADRANGLES.

CLAY, KANAWHA, NICHOLAS, FAYETTE, AND GREENBRIER COUNTIES.

These descriptions and elevations are republished from the Appendix to the Twenty-first Annual Report of the Director of the United States Geological Survey, with a few additions. No correction has yet been made of the elevations for the reason that closures made have been of contrary signs.

The leveling was mostly done in 1898-99, by Hargraves Wood. A few additional bench marks were set in 1906 by D. D. Teets and E. S. Dawson.

NICHOLAS QUADRANGLE.

ZELA, EAST TO SUMMERSVILLE.

Zela, 0.1 mile east of, 300 feet west of Crosslanes road, in field 50 feet south, in large sandstone rock; aluminum tablet stamped "1267 KNWA".....	Feet. 1, 267. 646
Summersville, east side of door in base of pilaster in front of court-house; aluminum tablet stamped "1894 KNWA".....	1, 893. 808

ZELA, SOUTH, VIA KESLERS CROSSLANES AND CARNIFAX FERRY, TO MOUNT LOOKOUT; THENCE EAST TO FOWLER KNOB.

Keslers Crosslanes, 600 feet south of store, and crossroads, 100 feet south of S. P. Campbell's house, west of road, in ledge; brass bolt stamped "1567 KNWA".....	1, 567. 409
Mount Lookout, 1 mile southeast of, 250 feet south of schoolhouse, east of road, in ledge of rock; aluminum bolt stamped "2069 KNWA".....	2, 069. 402
Fowler Knob, 400 feet south of, east of road, just north of small branch, in large ledge of rock; aluminum bolt stamped "2195 KNWA".....	2, 195. 382

FOWLER KNOB, SOUTHWEST ALONG ANGLINS CREEK, TO RUSSELLVILLE; THENCE SOUTHEAST OVER MOUNTAIN TO RIVERSIDE.

Miller's ferry (over Meadow River), 0.1 mile north of, east of river, west of road, in ledge of rock; aluminum bolt stamped "1905 KNWA".....	1, 904. 943
Russellville, 90 feet north of, east of road, west of river, in ledge of rock; aluminum tablet stamped "1900 KNWA".....	1, 900. 123
Riverside (at Meadow River), 150 feet northwest of, 300 feet east of ford, west of road, between house and barn, in one of several ledges of rock; aluminum bolt stamped "2324 KNWA".....	2, 324. 014

RIVERSIDE, EAST, VIA BURDETT SCHOOLHOUSE, TO M'CLUNGS; THENCE NORTH TO SNOW HILL; THENCE NORTHWEST TO FOWLER KNOB.

Snow Hill, 8.8 miles southeast of, at northwest intersection of Nicholas road and road to Nutterville, 500 feet north of Grig McClungs's house, in sandstone rock; bronze tablet stamped "3392 KNWA".....	3, 391. 855
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Snow Hill, 6.5 miles southeast of, at angle of Greenbrier-Nicholas county line; top of corner stone.....	Feet. 3, 129. 000
Snow Hill, 200 feet southwest of post-office, 535 feet north of road running west, west of Nicholas road, in rock; aluminum bolt stamped "2943 KNWA".....	2, 943. 583

1.6 MILES NORTHWEST OF SNOW HILL, NORTHEAST TO OPHELIA; THENCE SOUTHEAST TO BEACH KNOB; THENCE SOUTHWEST TO M'CLUNGS.

Ophelia, 0.75 mile south of, 1,500 feet west of crossroads and church, west of farm road, 50 feet north of Summersville road, in rock; bolt stamped "2587 KNWA".....	2, 587. 132
Lile, opposite post-office, west of road, 100 feet west of McMillion Creek, in rock; copper bolt stamped "3121 KNWA".....	3, 121. 290
Grassy Knob, at trail fork, 10 feet north of sign, in large flat rock; aluminum bolt stamped "3581 KNWA".....	3, 585. 7

LEIVASY, NORTHEAST, ROAD UP CROSSING GRASSY CREEK.

Grassy Creek, about 900 feet east of creek crossing, on north side of road up Grassy Creek, in rock; aluminum tablet stamped "2426 KNWA".....	2, 425. 873
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BEECH KNOB, SOUTH TO DUO.

Duo, 0.5 mile northwest of, 200 feet north of forks of road to Rupert, 100 feet north of branch, 50 feet east of road, near small house; in boulder; bolt stamped "3206 KNWA".....	3, 206. 454
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SUMMERSVILLE, NORTH UP MUDDLETY CREEK TO HOOKERSVILLE.

Hookersville, 200 feet west of road to Powell Mountain, at intersection of road up Muddlety Creek, in field, in rock; aluminum tablet stamped "1859 KNWA".....	1, 859. 496
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MUDDLETY, NORTHWEST ALONG ROAD TO BUFFALO CREEK (DOUBLE-HUB SPUR LINE).

Muddlety, 7.3 miles northwest of, at crossing, about 2,000 feet north of Beech Fork, south of road, opposite Liberty Bowl schoolhouse, in rock; aluminum tablet stamped "1747 KNWA".....	1, 746. 593
Enoch, 3.8 miles northwest of, northwest side of Buffalo Creek, opposite point 60 feet north of mouth of Dog Run, in rock cliff; aluminum tablet stamped "826 KNWA" ^a	826. 124

BUFFALO CREEK TO LOW GAP. ^b

Enoch, 3.8 miles northwest of, northwest side of Buffalo Creek, 90 feet north of Dog Run, in boulder; aluminum tablet stamped "828".....	826. 540
Ivydale post-office, 9.1 miles southeast of. 1.1 miles northwest of mouth of Dog Run, west of sawmill, northeast of road, in top of large boulder; aluminum tablet stamped "857".....	855. 608
Ivydale, 5.8 miles southeast of, north of road from Sutton to Clay, on northeast slope of hill, south of Low Gap, in rock outcrop; aluminum tablet stamped "1236".....	1, 234. 884

HOOKERSVILLE, NORTHEAST OVER POWELL MOUNTAIN TO BIRCH RIVER; THENCE EAST TO WELCH GLADE; THENCE SOUTHWEST TO CRAIGSVILLE.

Birch River, 4.2 miles southwest of Powell Mountain, opposite road to Strange Creek, in small ledge of rock; aluminum bolt stamped "2249 KNWA".....	2, 249. 18
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^a Reported removed in 1906. Hole still remains.

^b Three bench marks set in 1906, 2 by E. S. Dawson and 1 by D. D. Teets, levelmen, under E. I. Ireland, topographer. The elevations are by single line, corrected to agree with the datum of this list and are 1 foot less than those brought by single line on Minnora quadrangle.

Birch River, about 300 feet north of post-office, east of Powell Creek, about 0.25 mile north of mouth of Powell Creek, opposite Ivan Bros. & Brown's store, in outcrop of rock; aluminum tablet stamped "1108 KNWA".....	Feet. 1, 108. 365
Boggs, near post-office, 250 feet east of school, 20 feet north of road, in outcrop of rock; bronze tablet stamped "1555 KNWA".....	1, 555. 35
Welch Glade, about 1 mile northwest of, 725 feet southeast of road from top of mountain to Cowen and Glade Run; about 500 feet southeast of house and 0.25 mile northwest of church on east side of road, in rock; bronze tablet stamped "2253 KNWA".....	2, 253. 310
Lanes Bottom (near Camden on Gauley), at "The Camden" in west side in pier to porch; bronze tablet stamped "2062 KNWA".....	2, 062. 025
Craigsville, near east end of, 670 feet east of Cranberry road and hotel, north of road in front of Macon Bose's house; bronze tablet stamped "2288 KNWA".....	2, 288. 157

CRAIGSVILLE, UP BEAVER CREEK TO DELPHI; THENCE WEST DOWN MUDDLETY CREEK TO HOOKERSVILLE.

Hookersville, 5 miles east of, 225 feet east of fork of Muddlety, at crossing of Right Hand Fork, north of road west of crossing, in overhanging rock; aluminum tablet stamped "2005 KNWA".....	2, 004. 842
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CRAIGSVILLE, SOUTHEAST, VIA WOODBINE AND RICHWOOD, TO MANNING KNOB.

Woodbine, 4.5 miles southeast of, on west side of Greenbrier road, south of trail running west, in hollow near maple tree, in rock; bronze tablet stamped "2969 KNWA".....	2, 969. 33
Richwood, 1.75 miles south of, at Greenbrier-Nicholas county line; top of stone.....	2, 874. 02

HUNTERSVILLE QUADRANGLE.

MANNING KNOB, SOUTH TO GRASSY KNOB; THENCE WEST TO DUO.

Richwood, 7.75 miles southeast of, about 2,350 feet southeast of Manning Knob, northeast side of road, 240 feet from foot of descent from Manning Knob going southeast, in large rock; aluminum bolt stamped "3709 KNWA".....	3, 709. 043
Richwood, about 13.75 miles southeast of, southwest of Greenbrier road, 795 feet northwest of road to Duo, in rock; aluminum tablet stamped "4116 KNWA".....	4, 116. 433

CLAY, CLENDENIN, FAYETTEVILLE, AND MONTGOMERY 15' QUADRANGLES (KANAWHA FALLS 30' QUADRANGLE).

CLAY, FAYETTE, KANAWHA, AND NICHOLAS COUNTIES.

Leveling in Clay and Fayetteville quadrangles in 1898 by Hargraves Wood; in Clendenin and Montgomery quadrangles in 1907 by Orr Meredith; in Montgomery quadrangle in 1908 by E. S. Dawson; and in 1908 in all by C. M. Bennett.

CLAY 15' (KANAWHA FALLS 30') QUADRANGLE.

ELK CREEK, EAST VIA LOCKWOOD ON OTTER CREEK, TO ZELA.

Lockwood, 0.1 mile east of, north of road opposite L. N. Simm's house, 200 feet east of R. L. Dickson's house, at east foot of Summers hill, in ledge of rock; bronze tablet stamped "1088 KNWA".....	Feet. 1, 087. 525
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KING, EAST ALONG COAL AND COKE RAILWAY, TO CLAY; THENCE SOUTHEAST, ALONG BUFFALO CREEK AND GAULEY RAILROAD, TO MOUTH OF SAND FORK.

King station, 0.44 mile east of, 1.18 miles west of Procius post-office, 10 feet north of railroad, on large sandstone boulder; chiseled square; marked "655"	Feet. 654. 89
Procius (Camp station), 0.35 mile east of post-office, 3.91 miles west of Shelley Junction station, 10 feet south of railroad, on short tangent, nearly opposite frame dwelling of Mr. Walker, on sandstone boulder, chiseled square; marked "655"	655. 12
Procius, 0.97 mile east of, 3.29 miles west of Shelley Junction station; 12 feet south of railroad, along long tangent, 1,500 feet east of point opposite dwelling house on north of track, in sandstone outcrop; aluminum tablet stamped "658"	657. 821
Shelley Junction, 0.91 mile west of, 10 feet south of railroad, inside of long, sharp curve, nearly opposite mouth of creek on north side of river, on large sandstone boulder, chiseled square; marked "665"	665. 04
Shelley Junction, 0.39 mile west of, 10 feet southwest of railroad, on 1,000-foot tangent, 380 feet west of switch near Shelley Junction, nearly opposite mouth of Big Laurel Creek, in sandstone outcrop; aluminum tablet stamped "666"	666. 183
Angeline, 1.08 miles east of post-office, 1.07 miles west of Birch station, 30 feet south of railroad, just west of long, sharp curve in track, on sandstone boulder, chiseled square; marked "667"	666. 43
Eldorado, 2.03 miles west of post-office, 30 feet south of railroad, on outside of long curve, 250 feet east of railroad crossing, in sandstone outcrop; aluminum tablet stamped "679"	678. 505
Dorfee, 1 mile east of station, 1.02 miles west of Elkhurst station, 10 feet south of railroad, along short tangent, 380 feet east of point opposite dwelling on north of track, in sandstone outcrop; aluminum tablet stamped "682"	682. 046
Yankee Dam, 0.54 mile east of post-office, 3.4 miles west of Leatherwood station, 10 feet north of railroad, 100 feet west of south end of suspension tram bridge over Elk River to sawmill, on solid sandstone boulder, chiseled square; marked "690"	689. 90
Yankee Dam, 1.07 miles east of post-office, 2.33 miles west of Upper Leatherwood station, 12 feet south of railroad on short tangent, at mouth of small hollow to right, at west end of small fill, in solid sandstone boulder; aluminum tablet stamped "697"	697. 018
Upper Leatherwood, 200 feet west of station, in north end of east abutment to three-span plate-girder bridge over Leatherwood Creek; aluminum tablet stamped "702"	701. 644
Leatherwood station, 1 mile east of (2.07 miles west of Clay), 12 feet south of railroad on short tangent, just east of long curve, nearly opposite deep hollow north of river, on sandstone outcrop, chiseled square; marked "705"	705. 11
Clay, corner of Main and Church streets, 10 feet west of northwest corner of Clay County Bank, in monument; bronze tablet stamped "707"	707. 122
Clay, 1.02 miles east of post-office, 1.88 miles north of Avoca post-office, on north end of capstone of east pier of Queen truss railroad bridge across Buffalo Creek near mouth, chiseled square; marked "707"	707. 43
Avoca, 0.35 mile south of post-office, 5.05 miles north of mouth of Sand Fork, 10 feet east of Buffalo Creek and Gauley Railroad track, on outside of deep curve in railroad and creek, 40 feet east of creek, near bottom of very thick sandstone outcrop; aluminum tablet stamped "725"	724. 963

Avoca, 1.29 miles south of post-office, 4.02 miles north of mouth of Sand Fork, 10 feet north of Buffalo Creek and Gauley Railroad track, at west end of deep side-hill cut in sandstone, 50 feet north of creek, on sandstone outcrop, chiseled square; marked "740".....	Feet. 740. 44
Sand Fork, 2.13 miles north of mouth, 10 feet east of Buffalo Creek and Gauley Railroad track, on outside of heavy curve of creek and track, 40 feet east of creek, near south end of heavy side-hill excavation in stone, 1,200 feet north of point opposite schoolhouse, at bottom of thick sandstone outcrop; aluminum tablet stamped "771".....	771. 392
Sand Fork, 1.1 miles north of mouth, on outside of heavy curve in track, 10 feet east of track, 60 feet east of creek, near bottom of thick sandstone outcrop, chiseled square; marked "787".....	787. 026

UPPER LEATHERWOOD, SOUTH, VIA LEATHERWOOD AND TWENTYMILE CREEKS, TO BELVA.^a

Leatherwood Station, 200 feet west of, in north end of east abutment to three-span plate-girder bridge across Leatherwood Creek; aluminum tablet stamped "702".....	701. 644
Morocco, in front of post-office; top of rail.....	714. 0
Morocco, 0.48 mile south of post-office, 10 feet east of track, 800 feet south of large sawmill, near house and hollow on left, on large white sandstone boulder, chiseled square; marked "732".....	731. 57
Morocco, 2.11 miles south of, 20 feet east of railroad, 500 feet north of small hollow to west, in large sandstone boulder under cedar tree in west edge of creek; aluminum tablet stamped "798".....	797. 945
Morocco, 5.58 miles south of, 200 feet west of railroad, 300 feet south of residence of J. A. Summers, 400 feet south of mouth of Henry's Branch to east, in west margin of creek, in flat sandstone boulder; aluminum tablet stamped "919".....	919. 085
Morocco, 8.56 miles south of, 30 feet west of county road, about one-third way to top of hill on road from Leatherwood Creek to Twentymile, at Clay-Nicholas county line, in solid sandstone boulder, among the roots of large leaning beech tree; aluminum tablet stamped "1266".....	1, 266. 199
Vaughan, 7.73 miles northeast of, 12 feet east of edge of creek at road crossing, 600 feet north of mouth of Boardtree Branch, on sandstone boulder, chiseled square; marked "1019".....	1, 020. 58
Boardtree Branch, 0.82 mile west of mouth, 6.78 miles northeast of Vaughan post-office, 10 feet east of narrow-gage railroad track, 30 feet east of creek in sharp bend of stream, on outside of long curve in railroad track, in rock; aluminum tablet stamped "993".....	994. 401
Boardtree Branch, 2.82 miles west of, 4.88 miles northeast of Vaughan post-office, 20 feet south of track, at north edge of county road at creek crossing, in root on north side of leaning white-oak tree, spike; marked "929" (elevation 7.8 feet above low water at crossing).....	930. 07
Vaughan, 3.8 miles northeast of, 10 feet north of railroad, 300 feet north of county road, 350 feet north of creek, in solid inclined sandstone boulder; aluminum tablet stamped "904".....	905. 646
Vaughan, 1.59 miles northeast of, 10 feet north of railroad, 40 feet north of sharp curve in creek, near road crossing, 600 feet west of point opposite dwelling, 2 feet below coal horizon, on sandstone outcrop, chiseled square; marked "860".....	861. 08
Vaughan, 0.22 mile east of post-office, at upper side of county road, 50 feet north of mouth of hollow extending northeast to Walker Knob, near north end of lumber yard in Vaughan, 30 feet north of Chesapeake and Ohio Railway track, in sandstone outcrop; aluminum tablet stamped "810".....	811. 120

^a The closure error of this line was excessive, but is adjusted by throwing 1 foot at the county line and distributing a remaining 0.4 foot.

Vaughan, 0.8 mile southwest of, in north edge of creek, 20 feet south of Chesapeake and Ohio Railway, 150 feet north of county road, 1,200 feet east of milepost marked "G-12" on east side and "G-13" on west, on large boulder, chiseled square; marked "789".....	Feet. 790.40
Vaughan, 3.3 miles southwest of, in railroad cut, 10 feet north of railroad, opposite mouth of Dorsey Branch, 250 feet north of residence of C. D. Backus, in face of thick sandstone outcrop; aluminum tablet stamped "739".....	740.718
Vaughan, 3.8 miles southwest of, 3.89 miles northeast of Belva station, 10 feet north of railroad, 60 feet north of creek and road, nearly opposite residence on south side of creek, 60 feet west of north end of wooden foot-bridge across Twentymile Creek, on sandstone outcrop; chiseled square, marked "725".....	726.48

CLENDENIN 15' (KANAWHA FALLS 30') QUADRANGLE.

POINT 1.3 MILES NORTHEAST OF COAL FORK STATION ON CAMPBELL CREEK RAILROAD, NORTHEAST, VIA FIVEMILE FORK AND RIGHT FORK OF BLUE CREEK, TO POINT 1.52 MILES NORTHEAST OF QUICK; THENCE SOUTHEAST UP BLUE CREEK, MIDDLE FORK, AND POND FORK, TO POND GAP; THENCE SOUTHWEST TO WARD STATION.

Fivemile Fork, 0.43 mile north of mouth, 125 feet northeast of house, north of road, in sandstone boulder; aluminum tablet stamped "719".....	717.966
Quick, 1.3 miles west of, 0.25 mile west of fork of road north to Coco, between road and Right Fork of Blue Creek, on south edge of road, in sandstone boulder; aluminum tablet stamped "830".....	829.753
Quick, 2.9 miles east of, 0.2 mile east of railroad crossing, in east end of rock cliff lying along railroad east of Sandlick Branch; aluminum tablet stamped "718".....	717.307
Middle Fork, 0.5 mile west of station, 0.4 mile east of Rockcamp Fork, in masonry at west end of railroad bridge; aluminum tablet stamped "768".....	767.601
Middle Fork, 2.38 miles southeast of, 3.25 miles northwest of Blakeley, 0.21 mile southeast of Turner Fork, at north end of railroad trestle, creek and road at foot of cliff, in rock ledge at south side of track; aluminum tablet stamped "865".....	863.469
Blakeley, 0.64 mile north of station, south of track at Kanawha and West Virginia Railroad crossing, 4 feet above track, in sandstone cliff; aluminum tablet stamped "1078".....	1,075.616
Blakeley, in front of station; top of rail.....	1,112.5
Mammoth, 3.75 miles northeast of, 300 feet up from foot of hill at head of Hurricane Fork of Kelly Creek, north of road, in sandstone ledge; aluminum tablet stamped "1273".....	1,270.758

POINT 1.52 MILES NORTHEAST OF QUICK POST-OFFICE, NORTH ALONG PUBLIC HIGHWAYS, VIA FALLING ROCK CREEK AND COAL AND COKE RAILWAY, TO WELLFORD.

Odell, east of road, in southwest corner of stone foundation to dwelling; aluminum tablet stamped "1215".....	1,214.077
Odell, 3.06 miles northeast of, 350 feet north of company store at mouth of Evans Fork of Falling Rock Creek, 60 feet north of road to Apgah at foot of hill; in large sandstone; aluminum tablet stamped "?".....	794.464
Weir, 2.9 miles south of, at north side of creek bottom, 250 feet north of Falling Rock Creek, 0.38 mile east of cannel-coal mine, in boulder; aluminum tablet stamped "714".....	713.929

Weir, 0.16 mile south of post-office, 400 feet south of trestle over Laurel Fork, creek on opposite side of track, north of railroad, in sandstone rock; aluminum tablet stamped "647".....	Feet. 646. 652
Reamer, 1,600 feet west of, south of Coal and Coke Railway track, in capstone of viaduct over Leatherwood Creek; aluminum tablet stamped "618".....	617. 454
Clendenin, 1.14 miles north of, near ford crossing to house on east bank of Big Sandy Creek, west of road near foot of bank, in sandstone outcrop; aluminum tablet stamped "624".....	623. 389

CLEDENIN, EAST ALONG COAL AND COKE RAILWAY, TO RAND.

Clendenin, 0.33 mile north of, 600 feet north of dwelling, at upper side of road up Big Sandy Creek, on sandstone outcrop, chiseled square; painted "621".....	620. 80
Turner, in front of station; top of rail.....	636. 3
Turner, 0.72 mile east of station, 1.1 miles west of Queen Shoals station, 12 feet south of tracks, nearly opposite west house in group of four, in brown sandstone boulder; aluminum tablet stamped "645".....	644. 117
Barren Creek, 0.26 mile west of post-office, 20 feet south of track, opposite east end of warehouse near lampblack factory, on sandstone boulder, chiseled square; marked "644".....	643. 59
Porter, 0.82 mile west of station, 10 feet southwest of track, in blue sandstone outcrop; aluminum tablet stamped "646".....	645. 663
Porter, in front of station; top of rail.....	644. 4
Porter, 0.4 mile east of station, 10 feet south of track, 300 feet east of house on opposite side of track, on brown sandstone boulder, chiseled square; marked "648".....	648. 08

FAYETTEVILLE 15' (KANAWHA FALLS 30') QUADRANGLE.

LOCK 2, EAST ON KANAWHA AND MICHIGAN RAILWAY, TO GAULEY.

Kanawha River Lock 2, top of coping; U. S. Engineer Corps elevation 609.75 (recovered by precise levels).....	613. 808
Kanawha River Lock 2, near north end and in east face of masonry; bronze tablet stamped "614 KNWA" (recovered by precise levels).....	613. 485
Harewood, 600 feet east of coal tipple, in top of coping at north end of Kanawha and Michigan Railway culvert; aluminum bolt stamped "638 KNWA".....	637. 328
Kanawha Falls, 180 feet south of flag station of Kanawha and Michigan Railway, 200 feet north of road crossing of railroad, west of track, nearly opposite house of T. W. Farley, in face of rock at base of cliff; bronze tablet stamped "667 KNWA" (U. S. Engineer Corps elevation 662.488, recovered by precise levels).....	666. 543
Gauley Bridge railway station, at west end of bridge over highway, in south face of abutment at top step of wing wall; aluminum tablet stamped "677 KANAWHA" (recovered by precise levels).....	676. 543

GAULEY, NORTH ALONG CHESAPEAKE AND OHIO RAILROAD, TO POINT 3 MILES NORTH OF BELVA.

Vanetta, 0.04 mile south of post-office, 0.97 mile north of Gauley Bridge, 10 feet north of railroad, 1,000 feet east of Vanetta coal tipple, 400 feet east of Sand Branch, on large sandstone boulder; chiseled square, marked "679".....	680. 60
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Gamoca, 0.32 mile south of post-office, 1.08 miles north of Vanetta post-office, 10 feet south of railroad, on south bank of Gauley River opposite mouth of Big Creek, 2,000 feet west of milepost marked "G-4-G-11," in sandstone outcrop; aluminum tablet stamped "684".....	Feet. 685. 257
Wyndal, 1.55 miles south of post-office, 1 mile north of Gamoca post-office, 10 feet south of railroad, 1,000 feet west of milepost marked "G-5-G-10," on shaly sandstone outcrop; chiseled square; marked "688".....	689. 64
Belva, 0.4 mile south of station, 0.6 mile north of Wyndal post-office, in south face of capstone on east end of south abutment of bridge across Gauley River; shank of old bronze tablet (old bench mark which was stamped "711").....	710. 006
Belva, 2.6 miles northeast of, 20 feet north of railroad, 40 feet south of creek, 220 feet east of point opposite mouth of Bell Creek, on large sandstone boulder, chiseled square; marked "700".....	701. 74
BELVA, EAST ALONG GAULEY RIVER, TO LITTLE ELK CREEK. ^a	
Belva, 4.8 miles east of, 0.5 mile northeast of mouth of Elk Creek, 15 feet northwest of road, in ledge of rock; aluminum bolt stamped "752 KNWA".....	751. 506

FAYETTE, NORTH ALONG HIGHWAY, TO LOCKWOOD.

Nuttallburg, 1.47 miles west of, 220 feet west of milepost "Cin.-262," south of track, in very high boulder; aluminum tablet stamped "924".	923. 546
Lansing, 0.36 mile southwest of post-office, east of long overhanging outcrop, 75 feet west of balanced boulder south of road, 2 feet above grade, in sandstone outcrop north of road; aluminum tablet stamped "1583".....	1, 582. 321
Lansing, 0.77 mile northeast of post-office, 60 feet south of wooden culvert over branch where road turns sharply to east, halfway down hill to Mill Creek, west of road, on sandstone outcrop, chisel cut; marked "1717".....	1, 716. 20
Lansing, 1.5 miles northeast of, 200 feet west of house north of road, on south edge of road, on sandstone ledge, chisel cut; marked "1766".....	1, 765. 75
Lansing, 2.2 miles northeast of, 0.17 mile east of pine grove, at slight hollow to south, 50 feet west of bend to north, south of road, in sandstone outcrop; aluminum tablet stamped "1814".....	1, 813. 142
Hico, 1.5 miles southwest of, 40 feet east of road north leading to Thomas Kinkaid's place, 100 feet west of wooden bridge over branch, 140 feet east of branch, north of road, on sandstone outcrop, chiseled square; marked "1885".....	1, 884. 78
Hico, 0.7 mile west of post-office, 175 feet east of Timber Lake schoolhouse, at south edge of road, on Mill Creek, in sandstone outcrop; aluminum tablet stamped "1955".....	1, 954. 011
Deitz, 3.76 miles southwest of, 300 feet east of turnpike road, north of road, on sandstone outcrop, chiseled square; marked "2034".....	2, 032. 90
Deitz, 1.3 miles south of, 75 feet east of first turn in road below top of hill, ground facing north and opposite side of Osborn Creek to church and school, 130 feet east of house on west side of road, 10 feet west of slight hollow, under white walnut tree, in sandstone boulder; aluminum tablet stamped "1798".....	1, 796. 962
Deitz, 0.3 mile west of post-office, 150 feet west of branch, 90 feet north of sharp turn to north where road approaches hollow, west of road, on sandstone ledge; chiseled square; marked "1814".....	1, 813. 55

^a Part of old line to Nicholas quadrangle.

Ramsey, 0.56 mile north of, 30 feet east of Laurel Creek, 600 feet north of Gwinn Branch, opposite side of creek from house, 12 feet west of road, in sandstone boulder; aluminum tablet stamped "1427".....	Feet. 1, 426. 438
Lucas, 500 feet northwest of post-office, on north side of Gauley River, 130 feet west of Wood's ferry landing, north of road in huge conglomerate boulder; aluminum tablet stamped "1006".....	1, 004. 909
Albion, 1.12 miles east of, 125 feet northeast of Pinegrove schoolhouse, 150 feet southwest of wooden bridge over branch, north of road, 1 foot above ground, in sandstone outcrop; aluminum tablet stamped "1306".....	1, 304. 854
Tipton, 0.46 mile southeast of, 90 feet west of short turn to right going down Laurel Fork of Peters Creek, 400 feet northeast of house on left side of creek, west of road, on sandstone outcrop, chiseled point; marked "1332".....	1, 330. 95
Drennen, 0.4 mile south of post-office, 200 feet north of house, on upper side of road, 50 feet southeast of spring by roadside, east of road, on sandstone outcrop, chiseled square; marked "1289".....	1, 288. 07

COTTON HILL, SOUTH ALONG HIGHWAY, TO POINT ON LOOP CREEK 2 MILES WEST OF WRISTON.

Cotton Hill, 1.14 miles west of, 150 feet south of milepost "Cin 253," 7 feet east of track, in top of large rock; aluminum tablet stamped "771".....	770. 240
Beckwith, 0.88 mile west of post-office, 4.08 miles east of Dempsey, on north edge of county road, 150 feet west of fork of road to south, nearly opposite deep hollow and schoolhouse, in solid sandstone boulder; aluminum tablet stamped "1223".....	1, 221. 928
Dempsey, 1.8 miles east of, opposite deep hollow, on north edge of county road, near top of bank, on sandstone outcrop, chiseled square; marked "1321".....	1, 320. 75
Dempsey, 0.98 mile east of post-office, 10 feet northwest of county road, 50 feet northwest of gristmill owned by W. H. Nugen, 20 feet south of blacksmith shop, 200 feet east of Laurel Hill schoolhouse, in sandstone outcrop; aluminum tablet stamped "1325".....	1, 324. 582
Dempsey, at fork of road to south up left fork of Laurel Creek, 200 feet east of Dogged Chapel, on solid sandstone boulder; chiseled square; marked "1345".....	1, 344. 48
Dempsey, 2.03 miles west of, at north edge of county road, 360 feet from foot of hill on Laurel Creek side, in solid sandstone boulder; aluminum tablet stamped "1531".....	1, 530. 264
Wriston, 0.73 mile east of post-office, at south edge of county road, opposite and 300 feet from residence of B. W. Settle, on sandstone outcrop, chiseled square; marked "1535".....	1, 534. 69
Wriston, 0.9 mile west of post-office, 4.05 miles southeast of Kincaid post-office, 20 feet north of Deepwater Railroad track, 400 feet south of county road, at east end of rock cut, 600 feet southeast from residence of K. Kincaid, 1,600 feet east of milepost "DW-13," in sandstone boulder; aluminum tablet stamped "1409".....	1, 408. 031

ROBSON, ON VIRGINIAN RAILWAY FROM MILEPOSTS 7 TO 4.^a

Robson, 0.63 mile south of post-office, just south of Underwood's store, 60 feet south of road crossing, 700 feet north of milepost "DW-6," on top stone at west corner of north abutment of bridge across Loop Creek, chiseled square; marked "1000".....	999. 13
Robson, 1.08 miles north of post-office, 150 feet southwest of Virginian Railway track, 300 feet west of station, 1,200 feet east of milepost "DW-4," in flat sandstone boulder; aluminum tablet stamped "874".....	872. 963

^a Other elevations on this railroad are given in list for Montgomery quadrangle.

DEEPWATER, EAST TO KANAWHA FALLS.

Kanawha Falls, 3,000 feet southwest of station, 500 feet west of hollow, on south end of stone culvert, chiseled square; marked "659".....	Feet. 658. 18
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MONTGOMERY 15' (KANAWHA FALLS 30') QUADRANGLE.

DICKINSON, SOUTHEAST, TO CABIN CREEK JUNCTION; THENCE SOUTH ALONG CHESAPEAKE AND OHIO RAILROAD AND SOUTHWEST 3 MILES UP COAL FORK.

Cabin Creek Junction, 1 mile south of, east of railroad, and creek, 240 feet north of hollow, 0.3 mile south of mouth of Cabin Creek, in outcrop of sandstone; chiseled square; painted "621".....	620. 10
Dry Branch, 0.7 mile northwest of post-office, north of railroad and river, 40 feet east of trail over point, in sandstone cliff; aluminum tablet stamped "621".....	620. 573
Dry Branch, 1.5 miles southeast of, at south end of cut, east of railroad, 0.1 mile north of coal tipple, on top of outcrop of rock, chiseled square; painted "658".....	657. 25
Sharon, 200 feet west of post-office, 75 feet west of railroad bridge over Cabin Creek, opposite mouth of Paint Branch, between station and Cabin Creek, in second stone in abutment at northeast end of bridge over small run; aluminum tablet stamped "668".....	667. 191
Ohley, 1.2 miles northwest of post-office, west of Chesapeake and Ohio Railway, 400 feet north of mouth of Coal Fork, in outcrop of rock; aluminum tablet stamped "742".....	740. 840
Ohley, 4 miles west of, north of road, in bank, 30 feet off road, 0.1 mile northwest of house, in large rock boulder; aluminum tablet stamped "919".....	917. 858

POINT 1.95 MILES WEST OF CEDAR GROVE, NORTHEAST UP KELLY CREEK, TO WARD.

Cedar Grove, 1.95 miles west of, in east abutment of railroad culvert; aluminum tablet stamped "618".....	617. 316
Cedar Grove, 1,500 feet east of station, in masonry at west end of culvert on Kelly Creek and Northwestern Railroad; aluminum tablet stamped "615".....	612. 547
Ward, 900 feet east of station, 15 feet south of railroad, at edge of Kelly Creek, in large boulder; aluminum tablet stamped "717".....	714. 629

POINT 2.13 MILES WEST OF WRISTON, NORTH DOWN LOOP CREEK ALONG VIRGINIAN RAILWAY TO DEEPWATER.^a

Wriston, 2.13 miles west of, 2.82 miles east of Kincaid, 800 feet east of milepost "DW-12," nearly opposite residence of Mr. Kincaid, on top step of south end of small stone culvert, chiseled square; marked "1289".....	1, 288. 62
Kincaid, 0.97 mile south of, 8 feet west of Virginian Railway, on outside of long curve, 100 feet west of Loop Creek, in sharp bend, 500 feet south of milepost "DW-10," in sandstone outcrop; aluminum tablet stamped "1184".....	1, 183. 785
Kincaid, opposite and 200 feet west of post-office, 1,200 feet south of mouth of Lick Branch, on top stone of east corner of north abutment of railroad bridge, chiseled square; marked "1137".....	1, 136. 61
Page, 1.26 miles north of post-office, 8 feet west of Virginian Railway, 250 feet south of milepost "DW-7," opposite coal hollow and town of North Page, in sandstone outcrop; aluminum tablet stamped "1065".....	1, 064. 190

^a Other elevations near Robson will be found in list for Fayetteville quadrangle.

Robson, 3.33 miles north of, 500 feet north of point opposite mouth of Big Right Fork, 60 feet north of milepost "DW-2," on east corner of south bridge seat of double-span triple I-beam bridge 4, chiseled square; marked "769".....	Feet. 768.65
Robson, 4.03 miles north of (0.88 mile south of Deepwater post-office), 200 feet south of point opposite mouth of Little Right Fork, 2,000 feet south of milepost "DW-1," in west corner of north bridge seat of railroad bridge 1 across Loop Creek; aluminum tablet stamped "715".....	714.134
Deepwater, at railroad crossing; top of rail; marked "651".....	649.9
Deepwater, 1,000 feet east of post-office, 30 feet north of Chesapeake and Ohio Railway tracks, on sandstone boulder; chiseled square; marked "647".....	646.38

BALD KNOB, CHARLESTON SPECIAL, GILBERT, LOGAN, MADISON, OCEANA SPECIAL, PEYTONA AND ST. ALBANS 15' (CHARLESTON AND OCEANA 30') QUADRANGLES.

BOONE, KANAWHA, LINCOLN, MASON, McDOWELL, MINGO, PUTNAM, AND WYOMING COUNTIES.

The elevations in the following list are based upon corrected levels of the Great Kanawha River survey of the army engineers, checked by primary leveling from the Ohio River survey precise-level line. Some of the descriptions were previously published under Charleston and Oceana (30') quadrangles. The elevations now given are 3.855 feet greater than by the datum of the old Great Kanawha River levels. The work is now subdivided into 15' quadrangles.

Leveling was done in each quadrangle in 1896 and 1897 by Hargraves Wood; additional elevations were established in 1907 in the Charleston Special by R. A. Kiger, and in 1908 in the Peytona and Madison quadrangles by E. S. Dawson.

The elevations stamped on the standard bench marks set in 1897 and 1908 are mostly 1 foot too high, while the elevations stamped on those set in 1896 and 1907 are generally correct.

CHARLESTON SPECIAL (CHARLESTON 30') QUADRANGLE.

POINT 1.03 MILES WEST OF DANA, EAST TO POINT 1.3 MILES NORTHEAST OF COAL FORK STATION ON CAMPBELL CREEK RAILROAD.

Coal Fork, 1.3 miles northeast of station, 10 feet west of track at west end of cut, in sandstone; aluminum tablet stamped "637".....	Feet. 636.726
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MOUND, EAST TO CHARLESTON; THENCE NORTH TO WALLACE ON TUPPER CREEK.

Mound (Lock 6 on Kanawha River); top of coping stone (elevation by the Engineer Corps, 565.5).....	569.355
Charleston, 2.75 miles northwest of, on sandstone from north wall of stone-arch bridge over Twomile Creek, known as Twomile Bridge; chiseled cross in square.....	596.10
Charleston, 1.25 miles northwest of state capitol, on sandstone wall at southeast corner of stone-arch bridge, 0.5 mile northwest of suspension bridge across Elk River; chiseled cross in square.....	593.70

Charleston, in southwest corner of state capitol; bronze tablet stamped "602-C"	Feet. 600. 703
Patrick, 3 miles north of, 200 feet southwest of Methodist Church known as Wesley Chapel, on Twomile Creek; copper bolt in boulder; stamped "604-C"	603. 826
Wallace, 0.75 mile east of store (8 miles north of Patrick), on south edge of road, 600 feet east of James Wallace's house, in boulder; copper bolt stamped "668-C"	666. 752
Rocky Fork, 3 miles north of, south side of Martin Branch, 0.25 mile above mouth, 175 feet west of first crossing near schoolhouse, in rock ledge 1 foot above grade; copper bolt stamped "592-C"	591. 017
MOUND, NORTH TO TYLER CREEK SCHOOLHOUSE.	
Mound, 2 miles northwest of, 0.25 mile southeast of forks of road near Tyler schoolhouse, in rock 20 feet west of drain; copper bolt stamped "623-C"	623. 371
MOUND, SOUTH UP MIDDLE FORK OF DAVIS CREEK, TO MOUTH OF LONG BRANCH.	
Ruth, 2 miles east of, on west side of Middle Fork of Davis Creek, 900 feet north of mouth of Long Branch, between third and second crossings north of schoolhouse, in large boulder near Davis Creek; copper bolt stamped "C-659"	659. 262
MARMET, SOUTH TO BROWNSTOWN.	
Lock 5 (near Marmet); coping (U. S. Engineer Corps elevation, 572.50)...	576. 355
Rush Creek, 0.75 mile northwest of Chesapeake and Ohio Railway culvert over, in middle one of three ledges of rock west side Right Fork Rush Creek; copper bolt stamped "639-C"	638. 943
ST. ALBANS 15' (CHARLESTON 30') QUADRANGLE.	
POCA, SOUTH ALONG KANAWHA AND MICHIGAN RAILWAY, TO ST. ALBANS.	
Poca station, 300 feet south of, in west side of south abutment of highway bridge over Correly Branch; copper bolt stamped "572-C"	572. 341
Lock 7; top of coping (U. S. Engineer Corps elevation, 555.50)	559. 355
St. Albans, fence line on west side of First street, 60 feet north of north rail of Chesapeake and Ohio Railway track, in center of west base of monument, top of limestone post projecting 1 foot above ground; copper bolt (Coast and Geodetic Survey elevation, 594.78)	594. 691
ST. ALBANS, NORTHWEST ALONG CHESAPEAKE AND OHIO RAILWAY, TO SCOTT STATION.	
St. Albans, in front of station; top of rail	596. 4
Scott, 75 feet south of station, in Pine's orchard, 50 feet south of Chesapeake and Ohio Railway tracks; iron post stamped "693-C"	692. 856
ST. ALBANS, WEST, VIA TACKETT CREEK, TO YOUNG'S STORE; THENCE SOUTH TO GARRETT'S BEND, THENCE NORTHEAST TO ST. ALBANS.	
St. Albans, 5 miles west of, south of road, first house south of Young's store, belonging to John Hodges, in east chimney 6 feet from ground; copper bolt stamped "U. S. G. S.-737"	737. 294
Garretts Bend, 2 miles north of, Trace Fork of Mud River, 200 feet below mouth of Twomile Branch, 400 feet northwest of Anderson McAllister's house, north side of stream, in huge rock; copper bolt stamped "U. S. G. S.-669"	669. 125
Tornado, 1.5 miles southwest of, on road up Falls Creek, on south side of road 150 feet above the first crossing of Falls Creek; iron post stamped "614"	613. 708

PEYTONA 15' (CHARLESTON 30') QUADRANGLE.

POINT 3 MILES UP COAL FORK OF CABIN CREEK, WEST VIA COAL RIVER AND LAUREL CREEK, TO MOUTH OF ROBINSON CREEK, 1.5 MILES EAST OF UNEEDA.

Ohley, 4.7 miles southwest of, north of road, opposite house, 400 feet north-west of house and hollow, near bend in creek, on rock cliff, chiseled square; painted "983"	Feet. 981. 74
Orange, 3.4 miles east of, south of road, 265 feet north of ridge road and along road up mountain, 0.3 mile east of schoolhouse, in large rock; aluminum tablet stamped "1633"	1, 632. 017
Orange, 2.5 miles east of, north of road, 80 feet west of road fork top of mountain, on sandstone outcrop, chiseled square; painted "1563"	1, 562. 47
Orange, 1 mile east of, east of road and run, on top of small summit, 0.3 mile west of mountain foot, on outcrop of sand rock, chiseled square; painted "940"	939. 60
Orange, 0.5 mile north of post-office, south side of Whiteoak Creek, 300 feet west of mouth of Little Whiteoak Creek, 0.2 mile east of mouth of Whiteoak Creek, in rock cliff; aluminum tablet stamped "734"	732. 963
Orange, 3.2 miles west of, north edge of road, 150 feet west of small hill, 400 feet east of schoolhouse 13, opposite Horse Hollow, in rock cliff; aluminum tablet stamped "735"	733. 697
Orange, 5 miles west of, 20 feet west of road, at bend of river where road comes back to river, on large bowlder, chiseled square; painted "691" ..	690. 30
Seth post-office, 0.3 mile southeast of, north of road, in bank in front of Laurel Church, opposite mouth of Laurel Creek, 0.1 mile northwest of schoolhouse, in outcrop of rock; aluminum tablet stamped "715"	714. 252
Seth, 1.5 miles south of, east of road, west of Laurel Run, opposite hollow, 220 feet east of second house up Laurel Creek, on outcrop of sandstone, chiseled square; painted "689"	688. 57
Nelson, 200 feet southeast of mouth of Hopkins Fork on Laurel Creek, in face of rock cliff; bronze tablet stamped "734-C"	734. 388
Nelson, 300 feet northwest of post-office, west of Laurel Creek, 40 feet west of road, 40 feet south of foot log, 370 feet south of road fork and opposite hollow, in outcrop of rock in bank; aluminum tablet stamped "732"	731. 072
Nelson, 2 miles south of, east of log railroad and county road, 0.8 mile south of schoolhouse, 3 feet from ground, in face of rock cliff; aluminum tablet stamped "863"	862. 283
Nelson, 3.9 miles southwest of, north of railroad, on Laurel Creek, opposite hollow, 0.2 mile west of Skidway, on rock cliff; chiseled square	919. 26
Nelson, 5.7 miles southwest of, south of Laurel Creek, 300 feet from foot of mountain, 300 feet from house, 5 feet from barn, in bowlder in bank; aluminum tablet stamped "1089"	1, 087. 884
Uneeda, 3.3 miles southeast of, north of Robinson Creek, at mouth of hollow, north of house, on outcrop of rock, chiseled square; painted "858" ..	857. 07
BROWNSTOWN, SOUTHWEST, ALONG LENS AND SHORT CREEKS, TO RAGINE; THENCE NORTHWEST, DOWN COAL RIVER, TO COBBS.	
Hernshaw, 1 mile south of, south side of road, on south bank of Lens Creek, near A. Hoffman's house, in 3- by 5-foot ledge rock; copper bolt stamped "722-C"	722. 185
Peytona, 2 miles northwest of, south side of road down Coal River, 100 feet northwest of Laurel Branch, 1 mile below Whiteoak Branch, in ledge of rock; copper bolt stamped "665-C"	665. 401
Cobbs, 200 feet north of mouth of Lick Creek, west side of Coal River road, in rock; copper bolt stamped "648-C"	648. 375

RACINE, SOUTHEAST TO COMFORT; THENCE SOUTHWEST TO NELSON.

Comfort, 0.12 mile north of, 0.5 mile south of mouth of Joes Creek, east of Coal River road, 4 feet above grade, in bottom of rock cliff; copper bolt stamped "673-C".....	Feet. 673. 488
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MADISON 15' (CHARLESTON 30') QUADRANGLE.

ROBINSON CREEK, WEST VIA POND FORK, LITTLE COAL RIVER, PETERS CAVE FORK, AND SULPHUR SPRING FORK, TO GRIFFITHSVILLE.

Uneeda, 1.4 miles southeast of, 40 feet north of road, 700 feet east of house, 700 feet east of mouth of Robinson Creek, and back of barn, in outcrop of rock in field; aluminum tablet stamped "751".....	750. 135
Uneeda, 0.5 mile southeast of post-office, south of road, north of Pond Fork, along narrows, 0.1 mile northeast of hollow, in large rock bowlder; aluminum tablet stamped "723".....	722. 334
Uneeda, 0.8 mile west of post-office, south of road, north of Pond Fork, 400 feet east of schoolhouse, along narrows, on outcrop of rock, chiseled square; painted "718".....	717. 29
Madison, 2 miles southeast of, west of Pond Fork, 220 feet west of road, 0.2 mile south of bend in run, 0.2 mile north of hollow, in rock cliff; aluminum tablet stamped "697".....	696. 068
Madison, in west side of foundation of Boone county jail; aluminum tablet stamped "704".....	703. 221
Madison, 1.1 miles west of post-office, southeast of railroad, 500 feet southwest of milepost 1, on sandstone outcrop; chiseled square.....	693. 12
Danville, 0.5 mile west of post-office, 300 feet west of brickyard, 10 feet west of county road, 10 feet south of railroad, on south abutment of culvert at mouth of John Hill Branch, chiseled square; painted "686"....	684. 50
Danville, 1.5 miles west of, 90 feet west of Hopkins station, 500 feet north of milepost 3, between house and railroad, in east end of foundation of Mr. Hopkins's cellar; aluminum tablet stamped "679".....	677. 402
Danville, 4.5 miles northwest of, west of railroad, 300 feet west of county road, between houses, in west abutment of culvert; aluminum tablet stamped "666".....	664. 384
Danville, 6.5 miles northwest of, east of railroad, 0.2 mile northwest of milepost 8, on rock cliff; chiseled square; painted "669".....	668. 03
Hill, 600 feet west of post-office, south of railroad, 200 feet west of trestle, 600 feet from road crossing and station, in rock cliff; aluminum tablet stamped "667".....	665. 404
Hill, 2 miles northwest of, west of road, near small summit, 500 feet east of house, on sandstone outcrop, chiseled square; painted "658".....	657. 27
Woodville, 300 feet east of post-office (3 miles west of Hill post-office), 170 feet north of mouth of Laurel Fork, west of road, in bowlder; copper bolt stamped "673".....	672. 622
Woodville, 2.4 miles west of, 600 feet north of Sulphur Spring Fork at its mouth, east of road and run, in top of bowlder; aluminum tablet stamped "772".....	770. 923
Woodville, 3.3 miles northwest of, north of road, 600 feet north of Gum Run, on rock, chiseled square; painted "831".....	829. 65
Woodville, 4.2 miles northwest of, north of road, on top of mountain, on rock, chiseled square; painted "1063".....	1,061. 82
Woodville, 5.8 miles northwest of, opposite sawmill, 40 feet off road in field, opposite hollow, 300 feet west of house, in outcrop of rock; aluminum tablet stamped "826".....	824. 747

PRIMARY LEVELING.

59

Woodville, 7.4 miles northwest of, north of Sugartree Fork, north of road, 300 feet east of house, on outcrop of rock, chiseled square; painted "706"	Fect. 704. 66
Woodville, 9.1 miles northwest of, at foot of hill, west of road, north of run, on small rock, chiseled square; painted "671".....	670. 39

GARRETT'S BEND, SOUTH VIA SAND GAP, SUGARCAMP KNOB, AND HILL POST-OFFICE, TO MADISON.

Sand Gap, 500 feet west of forks of road, in huge rock above John A. Mid- kiff's house; copper bolt stamped "U. S. G. S.-1079".....	1, 078. 545
Hill, 3 miles west of, 200 feet above confluence of Laurel Fork and Horse Creek, opposite James McClure's house near last crossing of Laurel, on east bank, in rock ledge; copper bolt stamped "U. S. G. S.-673".....	672. 622
Hill, 2 miles north of post-office, 1 mile above mouth of Trace Branch, on left side of right-hand hollow on Trace Branch of Horse Creek; copper bolt stamped "U. S. G. S.-766".....	765. 931
Hill, 3 miles southeast of, 0.25 mile north of Camp Creek, on east side of road up Little Coal River, 300 feet above B. Stolling's, in small ledge of rock; copper bolt stamped "U. S. G. S.-660".....	660. 170

SINGLE SPUR LINE UP LICK CREEK.

Danville, 4 miles west of, on right fork of Lick Creek, 25 feet east of creek, between two walnut trees, one of which is blazed, in bowlder above coal bank; copper bolt stamped "U. S. G. S.-820".....	819. 403
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LOGAN 15' (OCEANA 30') QUADRANGLE.

MADISON, SOUTH UP SPRUCE FORK, TO SENG POST-OFFICE (PARTLY SINGLE SPUR LINE).

Seng, 2 miles northwest of, 0.12 mile above mouth of Beach Creek on north side of Spruce Fork, 300 feet below splash dam, opposite William Cole- man's barn, in ledge of rock; copper bolt stamped "U. S. G. S.-846".....	845. 309
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HEWETT, SOUTHWEST TO PECK; THENCE UP GUYANDOT RIVER TO MAN.

Hewett, 300 feet above mouth of Hewett Creek, opposite schoolhouse on south side of creek, in ledge of rock; copper bolt stamped "U. S. G. S.- 767".....	767. 029
Pecks Mill, 0.25 mile south of post-office, on northwest side of Mill Creek, 300 feet above mouth, in northwest corner of huge bowlder; copper bolt stamped "U. S. G. S.-653".....	652. 624
Logan, in northeast corner of court-house wall; bronze tablet stamped "678".....	677. 897
Man, 5 miles northwest of, opposite mouth of Rich Creek, 20 feet north of Methodist Episcopal Church, in rock; copper bolt stamped "U. S. G. S.- 725".....	724. 634
George McDonald's field, 1,500 feet below his house, on south side of Guyandot River, in root of cedar tree; nail (bench mark of Norfolk and Western Railroad, elevation 724.465).....	730. 052

MAN, NORTHEAST UP BUFFALO CREEK (SINGLE SPUR LINE).

Man, 2.5 miles northeast of, west side of Buffalo Creek, 3 miles above mouth of Buffalo Creek; copper bolt stamped "U. S. G. S.-808".....	807. 614
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GILBERT 15' (OCEANA 30') QUADRANGLE.

MAN, NORTHEAST UP BUFFALO CREEK (SINGLE SPUR LINE).

Man, 0.25 mile above mouth of Buffalo Creek, opposite Martin Doss's, 60 feet above foot log, west side of Buffalo Creek, in rock; copper bolt stamped "U. S. G. S.-728".....	727. 586
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MAN, SOUTHWEST UP ROCKHOUSE BRANCH (SINGLE SPUR LINE).

Man, 2 miles southwest of, 1 mile above mouth of Rockhouse Branch, on west side, in rock near south end of cliff; copper bolt stamped "U. S. G. S.-792".....	Feet. 791. 824
Man, 1 mile south of, 300 feet above mouth of Big Huff Creek, on east side, in rock; copper bolt stamped "U. S. G. S.-727".....	727. 037

MAN, SOUTH VIA GILBERT, TO WHARNCLIFFE.^a

Gilbert, opposite Alexander Stafford's store, in field; iron post stamped "832".....	831. 646
Wharncliffe, 4 miles north of, on Ben Creek, 300 feet below Laurel Branch, east of road, opposite T. E. Brown's house; iron post stamped "1020".....	1, 019. 815

BENCH MARKS AT WHARNCLIFFE RECOVERED BY LEVELING OF 1909.

Wharncliffe, railroad bridge over Ben Creek, bridge seat of east abutment (bench mark of Norfolk and Western Railroad, elevation 820.39).....	823. 52
Wharncliffe, 0.5 mile south of, at corner of state lines (Ky.-Va.-W. Va.); iron post stamped "825".....	826. 697

WHARNCLIFFE, SOUTHEAST UP BIG SANDY RIVER AND LONG POLE CREEK (SINGLE SPUR LINE.)

Dotson, 4 miles east of, on Long Pole Creek, 1,200 feet below Oak Branch, south of road; iron post stamped "1050".....	1, 051. 819
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MAN, EAST UP BIG HUFF CREEK, TO CYCLONE.

Cyclone, opposite Henschman's house, in rock; copper bolt stamped "U. S. G. S.-854".....	853. 992
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OCEANA SPECIAL (OCEANA 30') QUADRANGLE.

CYCLONE, EAST UP BIG HUFF CREEK AND TONEY FORK.

Cyclone, 7 miles east of, south side of Toney Fork of Big Huff Creek, about 2 miles above mouth, in ledge of rock; copper bolt stamped "U. S. G. S.-1234".....	1, 234. 489
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MOUTH OF TONEY FORK, EAST AND NORTHEAST UP BIG HUFF CREEK, TO ECHART.

Cyclone, 6 miles east of, 600 feet below Lower Gap Branch, east of road up Big Huff Creek, 100 feet above D. H. Cook's store; iron post stamped "1068".....	1, 067. 600
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BALD KNOB 15' (OCEANA 30') QUADRANGLE.

ECHART, NORTH DOWN POND FORK OF LITTLE COAL RIVER, VIA BALD KNOB AND CROOK, TO MOUTH OF ROBINSON CREEK.

Echart, east bank of Pond Fork of Little Coal River, opposite mouth of Skin Fork, in ledge of rock; copper bolt stamped "U. S. G. S.-1423".....	1, 422. 020
Bald Knob, east side of valley opposite Eddy Workman's, in bowlder; copper bolt stamped "U. S. G. S.-1101".....	1, 101. 060
Bald Knob, 3.5 miles northwest of, north side of Cow Creek, 0.75 mile from mouth of Cow Creek, 800 feet from James Gunnoe's, in ledge of rock; copper bolt stamped "U. S. G. S.-1039".....	1, 039. 100

GORDON, EAST UP WEST FORK, TO BROWNS BRANCH (SINGLE SPUR LINE).

Gordon, north side of West Fork, 1,000 feet east of junction of West Fork and Pond Fork to form Little Coal River, in rock; copper bolt stamped "U. S. G. S.-808".....	809. 014
Gordon, 2.5 miles east of, on West Fork, 800 feet below Browns Branch, west of road a little above and nearly opposite small water mill, in ledge of rock; copper bolt stamped "U. S. G. S.-884".....	884. 330

^aAn unadjusted single line closing 1.54 feet low on adjusted elevation at Wharncliffe.

STEUBENVILLE AND WELLSVILLE QUADRANGLES.

BROOKE AND HANCOCK COUNTIES.

Leveling in Wellsville quadrangle in 1902 by A. T. Bagley and in Steubenville quadrangle in 1902 by J. A. Buford.

WELLSVILLE QUADRANGLE.

EAST LIVERPOOL, OHIO, SOUTH TO FAIRVIEW.

Chester, 2 miles south of, 0.25 mile east of Locust Grove Cemetery, Allison triangulation station; bronze tablet in top of marble post, stamped "1337 STBNVL" Feet. 1, 337. 156

NEW CUMBERLAND, NORTHEAST ALONG ROAD TO FAIRVIEW, THENCE EAST TO KENDALL, PA.

Fairview, on the north side of Tri-State Normal School, at base of stone frame to front door; aluminum tablet stamped "1196 STBNVL" 1, 195. 638

STEUBENVILLE QUADRANGLE.

WELLSBURG, NORTH TO CROSS CREEK, THENCE EAST UP SAME ABOUT 5 MILES; THENCE NORTH TO COLLIERIES; THENCE NORTHWEST TO HOLLIDAYS COVE; THENCE SOUTHWEST TO STEUBENVILLE, OHIO.

Rockdale, 0.2 mile west of, southeast corner of bridge over Cross Creek, opposite Wabash concrete bridge, in stone abutment; chiseled cross..... 672. 400

Colliers Station, at northwest corner of bridge, in stone abutment, aluminum tablet stamped "824 STBNVL" 823. 597

Hollidays Cove, 0.5 mile east of, Pittsburg, Cincinnati, Chicago and St. Louis Railway bridge 39, in coping stone at southwest corner; chiseled square..... 741. 90

HOLLIDAYS COVE, NORTH TO NEW CUMBERLAND.

Zalia (Penrith), 100 feet south of church, on east side of road, opposite lower end of Toronto street at Ferry, in big bowlder; bronze tablet stamped "704 STBNVL" 703. 720

New Cumberland, southwest corner of D. S. Schiller Foundry Company's works, Front and Ferry streets, in west end of door stoop; chiseled square (U. S. Engineer Corps bench mark 56 A) 670. 66

NEW CUMBERLAND, EAST TO COMETTSBURG, PA.; THENCE SOUTHWEST TO HOLLIDAYS COVE.

New Cumberland, 3.25 miles east of; at northeast corner of bridge; T cut in stone..... 935. 14

SCHOOLHOUSE ON CROSS CREEK, SOUTHEAST TO INDEPENDENCE, PA.; THENCE WEST TO WELLSBURG.

Rockdale, 2.5 miles east of; at schoolhouse, covered bridge on Parmar Run near junction with Cross Creek, in southwest corner of abutment; chiseled cross..... 754. 35

Wellsburg, 1 mile east of; stone horse block in front of Jacob's house; aluminum tablet stamped "1001 STBNVL" 1, 000. 935

CAMERON, NEW MARTINSVILLE, AND WHEELING QUADRANGLES.

BROOKE, MARSHALL, OHIO, TYLER, AND WETZEL COUNTIES.

Leveling in Wheeling quadrangle in 1901 by W. A. Freret, jr.; in Cameron quadrangle in 1902 by G. L. Gordon; and in New Martinsville quadrangle in 1903 by R. E. McFadden, and in 1904 by G. L. Gordon.

WHEELING QUADRANGLE.

WHEELING, EAST ALONG NATIONAL PIKE VIA ELM GROVE, TO TRIADELPHIA.

Wheeling, north front of city building, 37 feet east of northwest corner; chiseled square (U. S. Engineer Corps bench mark 90-A).....	Feet. 678. 251
Wheeling, 1.1 miles east of post-office, Baker Street Bridge on Wheeling Creek, on southwest corner of coping stone at southeast end of bridge; chisel mark.....	651. 23
Elm Grove, 1 mile southeast of, bridge over Little Wheeling Creek near its junction with Wheeling Creek, on top of west coping wall, in third stone from center; cut.....	694. 75
Triadelphia, M. E. Church brick building, in foundation stone of south face at southwest corner; aluminum tablet stamped "745 GRAFTON".....	744. 570

TRIADELPHIA, SOUTHEAST ALONG HIGHWAYS, UP MIDDLE WHEELING CREEK AND NORTH TO VALLEY GROVE.

Twilight, 0.6 mile west of, northeast abutment of bridge over Wagners Run, northeast corner of stone; chisel mark.....	802. 03
Twilight, 3.1 miles northeast of, near junction of Haneytown pike and Middle Wheeling Creek road, bridge over Middle Wheeling Creek, northeast wing retaining wall, corner of fourth stone from top; chisel mark.....	949. 79
Valley Grove, Baltimore and Ohio Railroad (Pittsburg division), bridge 174, in north face of south pier; bronze tablet stamped "953 GRAFTON"....	952. 648

VALLEY GROVE, ALONG NATIONAL PIKE AND NORTH UP M'GRW RUN, TO BETHANY.

Bethany, 5.1 miles south of, southeast abutment wall of wooden bridge over Longs Run, on southeast corner of third stone from top; chisel mark....	1, 020. 87
Bethany, 2 miles south of, at northeast corner of M. E. Church, on top stone at southeast stone step; chisel mark.....	954. 32
Bethany, 0.3 mile west of, in front face of Bethany College, north side of first entrance west of main entrance, east face of stone water table; aluminum tablet stamped "932 GRAFTON 1901".....	931. 774

BETHANY, ALONG PIKE, TO SHORT CREEK.

Bethany, 2.6 miles west of, west end of bridge over Buffalo Creek, on northeast corner of top stone of north wing wall; chisel mark.....	743. 82
Short Creek, brick store and post-office, in west face, 25 feet from southwest corner and 2 feet above ground; aluminum tablet stamped "668 GRAFTON 1901".....	667. 963
Short Creek, 0.1 mile south of, west side of railroad track, Pittsburgh, Cincinnati, Chicago and St. Louis Railway bridge 12 over Short Creek, on top of south abutment; chiseled square, marked "U. S. B. M. □" (U. S. Engineer Corps bench mark 81 A).....	652. 724

CAMERON QUADRANGLE.

MOUNDVILLE, EAST ALONG PUBLIC ROADS, VIA LIMESTONE AND BEULA STATION, TO ROCKLICK.

Moundville, Marshall County court-house, in front of building, 17.2 feet east of center of doorway; on top of water table of foundation (U. S. Engineer Corps bench mark 101-B).....	690. 510
Limestone, brick dwelling of R. H. Peters, in top stone of foundation of front, 2.7 feet northwest of center of door; bronze tablet stamped "1377 GRAFTON".....	1, 376. 784
Pleasant Valley, 0.4 mile southeast of, brick dwelling of J. W. Cunningham, on top of stone at front gate; chiseled square.....	1, 317. 05
Beelers Station, on northeast corner of first step above stone platform; chiseled square.....	1, 356. 54

ROCKLICK, SOUTH ALONG PUBLIC ROADS AND BALTIMORE AND OHIO RAILROAD, VIA CAMERON AND WOODRUFF, TO BELLTON.

	Feet.
Rocklick, 0.3 mile south of, south side of southeast corner of schoolhouse, in second stone; aluminum tablet stamped "1464 GRAFTON".....	1,463.805
Cameron, 1.8 miles northeast of, M. E. Church at northeast angle of cross-roads, on top at south end of retaining wall; chiseled square.....	1,074.79
Cameron, west end of brick public school building, 0.9 foot north of southwest corner in water table; bronze tablet stamped "1170 GRAFTON"...	1,169.864
Woodruff, 0.7 mile northwest of, west end of stone culvert, center of top; chiseled square.....	1,015.98
Bellton, 0.1 mile north of, in southeast corner of north abutment of railroad bridge 136, 2.7 feet above bridge seat; bronze tablet stamped "888 GRAFTON".....	887.579

BELLTON, WEST ALONG PUBLIC ROADS, VIA ADALINE, TO LYNN CAMP.

Kausooth post-office, 2.4 miles west of, on top of west abutment of bridge over Big Run, 12.5 feet right of center of bridge; chiseled square.....	768.40
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LYNN CAMP, NORTHWEST ALONG PUBLIC ROADS AND BALTIMORE AND OHIO RAILROAD, VIA MEIGHEN AND ROSBYS ROCK, TO MOUNDVILLE.

Meighen, at schoolhouse No. 5, east side, 8 feet from southeast corner, in top stone of foundation; bronze tablet stamped "691 GRAFTON".....	690.667
Rosbys Rock, northeast abutment of iron bridge over Grave Creek, 12 feet southeast of center of bridge, 1 foot below bridge seat; bronze tablet stamped "779 GRAFTON".....	778.326
Rosbys Rock, 4 miles northwest of, on top of northwest corner of south abutment of railroad bridge 146 over Grave Creek; chiseled square.....	680.75
Moundville, Marshall County court-house, south front of, 17.2 feet east of center of doorway; bronze tablet stamped "690 GRAFTON".....	689.284

LONE OAK SCHOOLHOUSE, NORTH ALONG PUBLIC ROADS TO HAZELDELL, SCHOOLHOUSE (SINGLE SPUR LINE).

Hazeldell or Irish Ridge schoolhouse, center of southwest corner stone; bronze tablet stamped "1322 GRAFTON".....	1,321.542
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NEW MARTINSVILLE QUADRANGLE.

PROCTOR, SOUTHEAST ALONG HIGHWAYS, TO HALLS MILLS.

Proctor, Baltimore and Ohio Railroad bridge 317 over Proctor Creek, in west end south abutment; bronze tablet stamped "632 GRAFTON 1902".....	632.114
Marion, 0.2 mile east of post-office, opposite Marion Moore's store building; south of creek, on stone; chiseled square.....	881.62

NEW MARTINSVILLE, SOUTHWEST ALONG EAST SIDE OF OHIO RIVER, TO SISTERSVILLE; THENCE SOUTHEAST TO MIDDLEBOURNE.

New Martinsville, in county court-house, facing Main street, near Main street entrance; bronze tablet stamped "630 GRAFTON 1903".....	630.282
Lively crossing; top of rail at flag station.....	630
Mendota; top of rail at flag station.....	628.1
Paden, in front of station; top of rail.....	630
Stewarts crossing, in front of station; top of rail.....	633
Sistersville, in city hall, in sill on south side; bronze tablet stamped "649 STBNVL".....	648.606
Luzon, iron bridge over Pursley Creek, at foot of hill, on top stone of southeast foundation; circle.....	736.97
Luzon, 0.5 mile southeast of, east side of road, opposite Kellar's old store building, on stone; square.....	1,055.41

Luzon, 2.5 miles southeast of, on northeast abutment of iron bridge over Point Pleasant Creek near where it empties into Middle Island Creek, on top stone; chiseled square.....	Feet. 684. 56
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MIDDLEBOURNE, NORTHEAST ALONG HIGHWAY, TO POLARD; THENCE EAST TO CONAWAY; THENCE NORTH-EAST TO READER; THENCE NORTHWEST, ALONG BALTIMORE AND OHIO RAILROAD (SHORT LINE), TO NEW MARTINSVILLE.

Polard, 0.5 mile northeast of post-office, on rock north of road near Elk Creek; chiseled square.....	745. 46
Conaway, in southeast corner of James W. Mayfield's cellar, facing post-office; aluminum tablet stamped "840 GRAFTON 1903".....	841. 033
Reader, 2 miles northwest of, on southwest abutment of large railway bridge 121 over Fishing Creek; chiseled square.....	680. 73
Flannagan, in front of flag station; top of rail.....	678
Reader, 3 miles northwest of, on southwest abutment of bridge 110, over Fishing Creek; chiseled square.....	676
Porter Falls, 0.6 mile northwest of, on southeast abutment of small bridge; chiseled square.....	670. 64
Minnie, in front of flag station; top of rail.....	647. 2
Minnie, 360 feet west of flag station, on southwest abutment of railway bridge 74; chiseled square.....	646. 28
Bard, in front of telegraph office; top of rail.....	641. 2
Minnie, 6 miles northwest of, on north end of small railway culvert over Bank Run; chiseled square.....	621. 24

BELLEVILLE, MARIETTA, PARKERSBURG, AND ST. MARYS QUADRANGLES.

JACKSON, PLEASANTS, RITCHIE, AND WOOD COUNTIES.

Leveling in St. Marys quadrangle in 1903 by R. E. McFadden, and in 1904 by G. L. Gordon; in Marietta and Parkersburg quadrangles in 1902, and in Belleville quadrangle in 1903, by J. W. Hodges.

ST. MARYS QUADRANGLE.

LITTLE, SOUTHWEST ALONG HIGHWAY, TO UNION MILLS; THENCE SOUTH TO ELLENBORO.

Arvilla, in south end of east abutment of iron bridge over Middle Island Creek; bronze tablet stamped "634 ADJ 1904".....	Feet. 634. 482
Union Mills, 0.4 mile southeast of mouth of McKim Creek, 100 feet north of Charles Little's blacksmith shop, in top of north end of east abutment of iron bridge; bronze tablet stamped "614 GRAFTON 1903".....	614. 877
Adlai, 135 feet east of road, 75 feet south of J. H. Fleming's house, in rock; bronze tablet stamped "777 GRAFTON 1903".....	777. 320

TUNNEL 9, WEST ALONG BALTIMORE AND OHIO RAILROAD, TO TUNNEL 10.

Ellenboro, 1.8 miles east of, on south end of east abutment of railroad bridge 27; chiseled square.....	807. 70
Ellenboro, road crossing at station; top of rail.....	784
Ellenboro, 150 feet west of station, in east abutment of south end of bridge over small stream from north; bronze tablet stamped "780 GRAFTON 1903".....	780. 135
Tunnel 10, 1 mile east of, on top of stone, south end east abutment of bridge 28; chiseled square.....	760. 67

RAVENROCK, SOUTHWEST ALONG OHIO RIVER RAILROAD, TO FRENCH CREEK.

Ravenrock, 200 feet southeast of station, northeast side of large rock above a spring; aluminum tablet stamped "647 ADJ 1903".....	Feet. 646.981
Ravenrock, in front of station; top of rail.....	623.2
Spring Run, in front of station; top of rail.....	621.4
Grape Island, railroad crossing at station; top of rail.....	621.8
St. Marys, 0.76 mile northeast of, on southeast end of southwest abutment of railroad bridge over Middle Island Creek; chiseled square.....	621.17
St. Marys, corner of Second and Washington streets, First National Bank Building, facing Second street, 1.1 feet from southwest corner of building and 4.5 feet above street; aluminum tablet stamped "628 ADJ 1903".....	628.097
St. Marys, on water table of post-office building, south of entrance facing Main street; chiseled square.....	624.29
Vaulcluse, in front of station; top of rail.....	626

UNION MILLS, WEST ALONG HIGHWAYS, TO ST. MARYS.

Union Mills, 2.05 miles west of, on north end pier of iron bridge over Willow Island Creek; chiseled square.....	610.87
Union Mills, 3.6 miles west of (1.7 miles east of St. Marys), in north end of east abutment of iron bridge over Broad Run; bronze tablet stamped "608 ADJ 1903".....	608.185

NUTTERS FARM, NORTH ALONG HIGHWAY 6 MILES TO MOUTH OF DOUGLAS RUN (CHECKED SPUR LINE).

Goose Creek, 3 miles southwest of, 3 miles north of Nutters Farm, northwest side of road and Goose Creek, in shelf in rock outcrop; bronze tablet stamped "761 ADJ 1903".....	760.970
Goose Creek, 0.4 mile west of, southeast bank of Goose Creek, 0.2 mile northeast of junction of road down Douglas Run and 320 feet southeast of road, in face of rocky cliff; bronze tablet stamped "808 ADJ 1903"....	807.872

PARKERSBURG QUADRANGLE.

PARKERSBURG, EAST ALONG HIGHWAY, TO TALLYHO.

Parkersburg, corner of Fifth and Julian streets, at southeast corner of custom-house and post-office, on top of foundation water table; chiseled square marked U.S. □ B.M. (U. S. Engineer Corps bench mark 183-A)....	615.806
Parkersburg, custom-house and post-office, on south side near west end in water table; bronze tablet stamped "616 GRAFTON 1902".....	615.231
Parkersburg, 3.2 miles east of, on south side of pike, on south foundation of small bridge; chiseled square.....	602.43

POHICK, SOUTH ALONG OHIO RIVER RAILROAD, TO PARKERSBURG.

Kellar, in front of station; top of rail.....	613
Briscoe station, opposite highway to post-office, in face of rock ledge facing Ohio River; bronze tablet stamped "594 GRAFTON 1902".....	593.662

MARIETTA QUADRANGLE.

TALLYHO, EAST ALONG HIGHWAY TO DEERWALK; THENCE NORTH TO WILLOW; THENCE NORTHEAST ALONG RAILROAD TO FRENCH CREEK.

Tallyho, 1.5 miles southeast of, opposite Shiloh United Brethren Church, at forks of road, in large boulder; aluminum tablet stamped "714 GRAFTON 1902".....	713.560
Borland, 100 feet east of post-office, on south side of Bull Creek; bronze tablet stamped "683 GRAFTON 1902".....	682.728
Belmont, 0.5 mile northeast of, on top of south abutment west end of railway bridge 66 over French Creek; chiseled square.....	614.28

WILLOW, WEST ALONG OHIO RIVER RAILROAD TO WILLIAMSTOWN; THENCE SOUTH ALONG SAME TO POHICK.

Willow Island station, in northeast corner of foundation wall of Jos. I. Norris's dwelling; aluminum tablet stamped "616 GRAFTON 1901".....	Feet. 615. 448
Compton, in front of station; top of rail.....	615
Williamstown, in front of station; top of rail.....	610
Pohick, in front of station; top of rail.....	616

BELLEVILLE QUADRANGLE.

PARKERSBURG, SOUTH ALONG HIGHWAY, VIA NEWPORT AND MINERAL WELLS, TO ROCKPORT.

Mineral Wells, 1.2 miles southwest of, in face of abutment of small iron bridge over Badgley Fork, northwest end; aluminum tablet stamped "593 GRAFTON 1903".....	593. 409
Fountain Spring, north abutment of iron bridge over Tygart Creek, on top; chiseled square.....	622. 34
Saulsbury, 1.2 miles south of, east of road, on northeast end of Valley Belle schoolhouse, on top of corner stone; chiseled square.....	653. 76
Rockport, opposite schoolhouse No. 2, at forks of road, on top of large rock; aluminum tablet stamped "700 GRAFTON 1903".....	700. 497

ROCKPORT, WEST ALONG HIGHWAY, TO BELLEVILLE.

Sloan, 0.2 mile west of, on rock north of road; chiseled square.....	726. 89
Oak, 0.8 mile west of, on stone of small culvert on north side of road; chiseled square.....	619. 74
Belleville, 0.8 mile south of, 0.2 mile south of road crossing, in small ravine east of track, in top of rock; aluminum tablet stamped "595 GRAFTON 1903".....	595. 172
Pond Creek, 1,200 feet north of, on northwest corner of capstone of culvert (U. S. Engineer Corps bench mark 204-A).....	599. 227

AT NEW ENGLAND (SET FROM U. S. ENGINEER CORPS B. M. "195-A").

New England, 0.5 mile west of Baltimore and Ohio Railroad station, on west abutment of railroad culvert over Beadle Run, 7 feet north of south end of culvert, 1,200 feet above Mushapha Island, 23 feet west of center of railway, and .008 foot higher than adjoining army engineers' bench mark; aluminum tablet stamped "591 GRAFTON 1903".....	590. 712
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ROCKPORT, SOUTH ALONG HIGHWAY, TO WISEBURG.

Rockport, 1 mile south of, on southwest abutment of small bridge over Tygart Creek, chiseled square.....	761. 58
Rockport, 6 miles south of, on Sandy Creek, 240 feet north of old Wiseburg post-office, north side of road, in top of rock; aluminum tablet stamped "663 GRAFTON 1903".....	662. 901

GLENWOOD, KENO, POINT PLEASANT, AND RAVENSWOOD QUADRANGLES.

CABELL, JACKSON, MASON, AND PUTNAM COUNTIES.

Leveling in Keno quadrangle in 1904 by F. W. Hughes; and in Glenwood, Point Pleasant, and Ravenswood quadrangles in 1905, by G. L. Gordon.

KENO QUADRANGLE.

SET FROM U. S. ENGINEER CORPS BENCH MARK 211-A.

Brewster (formerly Williams), 450 feet north of station, in top of Baltimore and Ohio Railroad culvert over Williams Run, 28 feet west of center of track, 7 feet south of northwest corner of culvert; aluminum tablet stamped "589 ADJ 1903".....	Feet. 581. 340
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POINT PLEASANT QUADRANGLE.

GALLIPOLIS, OHIO, CROSSING BY RECIPROCAL READINGS, TO WEST VIRGINIA; THENCE NORTH ALONG RAILROAD TO WEST COLUMBIA.

Gallipolis Ferry, 1 mile south of Baltimore and Ohio Railroad station, in top at southwest corner of open culvert; aluminum tablet stamped "582 ADJ 1903"..... Feet. 581. 765

POINT PLEASANT, NORTH ALONG BALTIMORE AND OHIO RAILROAD, TO WEST COLUMBIA; THENCE EAST ALONG PUBLIC HIGHWAY, TO LOCUST GROVE SCHOOLHOUSE.

Point Pleasant, highway on top of stone foundation northwest corner of Mason County court-house; chiseled square and letters U. S. B. M.) (army engineers' bench mark 264-A)..... 569. 049

Point Pleasant, west side of "Cornstalk Monument" in Mason County court-house yard; bronze tablet stamped "570-A"..... 569. 431

Point Pleasant, Lock 11, zero of gage..... 513. 94

Linn (York station), Mr. Hoggs's brick house, at northwest corner of top stone of foundation, northwest face; bronze tablet stamped "586 ADJ 1903"..... 586. 084

Maggie, railroad bridge over small run, west end of south abutment; bronze tablet stamped "569 ADJ 1903"..... 568. 734

Spilman, 0.2 mile east of, south of track, in south face of outcrop of rock; bronze tablet stamped "576 ADJ 1903"..... 576. 008

West Columbia, 2.4 miles east of, on left side of Tenmile Creek, opposite Locust Grove schoolhouse, in shelf of rock cliff; bronze tablet stamped "603 ADJ 1903"..... 603. 406

DEBBY, NORTHWEST, ALONG KANAWHA AND MICHIGAN RAILROAD, TO POINT PLEASANT.

Ambrosia, road crossing; top of rail..... 566. 6

Ambrosia, 0.1 mile north of, east of road, 30 feet south of end of covered bridge over Rockcastle Creek, in shelf of rock; bronze tablet stamped "577 ADJ 1903"..... 576. 792

Ambrosia, 2.5 miles northwest of, iron bridge over Threemile Creek, southeast pier, south corner of bridge seat; bronze tablet stamped "554 ADJ 1903"..... 553. 645

GLENWOOD QUADRANGLE.

ELWELL, SOUTH ALONG BALTIMORE AND OHIO RAILROAD, TO GLENWOOD.

Elwell, road crossing; top of rail..... 560. 2

Ben Lomond, road crossing; top of rail..... 559. 2

Ben Lomond, 0.2 mile south of, railroad bridge 1841, north abutment, east of track; aluminum tablet stamped "557 ADJ 1903"..... 557. 245

Apple Grove station, 570 feet north of, top of west end of railroad culvert; aluminum tablet stamped "579 ADJ 1903"..... 578. 864

Apple Grove, road crossing; top of rail..... 578. 1

Ashton, road crossing; top of rail..... 561. 9

Ashton, 0.86 mile south of, 150 feet northeast of trestle over Eighteenmile Creek, 10 feet east of track, in top of squared stone foundation of water tank; aluminum tablet stamped "561 ADJ 1903"..... 561. 071

Glenwood, 2,250 feet north of upper landing, 236 feet south of U. S. post light at foot of straight ripple, 125 feet north of mouth of Gwyno Run, on 15 by 10 bowlder 4 feet high; chiseled square (army engineers' bench mark 284-A)..... 517. 797

Glenwood, road crossing; top of rail..... 558. 8

Glenwood, bridge over small run, southwest abutment, north end of bridge seat; aluminum tablet stamped "544 ADJ 1903"..... 543. 775

GLENWOOD, SOUTH ALONG HIGHWAY, TO SWANN; THENCE NORTHEAST TO ALBATROSS; THENCE NORTH TO DEBBY.

	Feet.
Glenwood, 2.84 miles south of, east of road, in face of rock outcrop; aluminum tablet stamped "592 ADJ 1903".....	591. 944
Glenwood, 5.9 miles south of, west of road, in face of rocky cliff; aluminum tablet stamped "587 ADJ 1903".....	587. 029
Swann, 0.1 mile north of, near church at northeast angle of forks of roads, under chestnut tree, on top of large stone; chiseled square.....	830. 158
Swann, 2.3 miles northeast of, north of road, in face of rock ledge; aluminum tablet stamped "577 ADJ 1903".....	577. 045
Bryan, 0.6 mile northeast of, north of road, east end of face of rock cliff; aluminum tablet stamped "837 ADJ 1903".....	837. 152
Ellen, 2.1 miles east of, northwest of road, in shelf of outcrop of rock; aluminum tablet stamped "638 ADJ 1903".....	638. 021
Albatross, 0.08 mile northeast of, between road and run, in top of large rock; aluminum tablet stamped "701 ADJ 1903".....	701. 068
Albatross, 2.5 miles northeast of, Riverview schoolhouse, north corner stone; center of northeast face; aluminum tablet stamped "936 ADJ 1903".....	936. 106
Albatross, 6.7 miles north of, 300 feet northeast of saddle of ridge, west of road, in face of outcrop of rock; aluminum tablet stamped "846 ADJ 1903".....	846. 105
Siloam, 1.7 miles northeast of, bend of road to right on east side, in top of large stone; aluminum tablet stamped "660 ADJ 1903".....	660. 014
Flaxton, 0.11 mile north of, east of road, in shelf of outcrop of rock; aluminum tablet stamped "856 ADJ 1903".....	856. 092
Flaxton, 2 miles north of, north of road and creek at crossing of upper Nine-mile Creek, in outcrop of rock; aluminum tablet stamped "638 ADJ 1903".....	638. 335

RAVENSWOOD QUADRANGLE.

AT SHERMAN.

Sherman, near Baltimore and Ohio Railroad station, on northwest pier of railroad bridge over Little Sandy Creek; chiseled square (U. S. Engineer Corps bench mark 216-A).....	587. 823
Sherman, 150 feet south of station, in north pier of railroad bridge, northeast corner of coping; aluminum tablet stamped "589 ADJ 1903".....	588. 681

AT RAVENSWOOD.

Ravenswood, top of northwest corner of north pier of Baltimore and Ohio Railroad bridge 128.4 over Sandy Creek; chiseled square (U. S. Engineer Corps bench mark 219-A).....	585. 617
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MILLWOOD, ALONG BALTIMORE AND OHIO RAILROAD, TO GRAHAM STATION; THENCE WEST, ALONG HIGHWAYS, TO LOCUST GROVE SCHOOLHOUSE.

Millwood, on northeast corner of capstone of east pier of railroad bridge over Little Mill Creek, 9.5 feet west of center of track, 1 foot south by 1 foot east of northeast corner of pier; chiseled square, marked "U. S. B. M." (U. S. Engineer Corps bench mark 230-A).....	577. 868
Millwood, east pier of railroad bridge at south end; aluminum tablet stamped "578 ADJ 1903".....	577. 879
Letart, 0.9 mile southeast of, county bridge over Tombleson Run, in east end of northwest pier; bronze tablet stamped "569 ADJ 1903".....	569. 505
Letart, in front of station; top of rail.....	580. 6
Graham station, 4.13 miles south of, dwelling east of highway, 15 feet west of track, in shelf of outcrop of rock; bronze tablet stamped "581 ADJ 1903".....	581. 207

	Feet.
Graham station, road crossing; top of rail.....	579. 4
Graham, 0.4 mile west of, south of road, northeast of John Spencer's house, in shelf of rock; bronze tablet stamped "651 ADJ 1903".....	651. 009
Graham, 3.3 miles west of, west side of Union Church, 8 feet north of south- west corner, in stone foundation; bronze tablet stamped "681 ADJ 1903".	681. 177

MILLWOOD, SOUTHEAST ALONG RAILROAD UP MILL CREEK, TO EVANS.

Angerona, 2.95 miles northwest of, south of track, 30 feet east of trestle over small run, in shelf of outcrop of rock; aluminum tablet stamped "589 ADJ 1903".....	588. 590
Angerona, road crossing near station; top of rail.....	583. 1
Evans, 1.1 miles west of, at two schoolhouses, northeast corner stone of schoolhouse nearest track, in north face; bronze tablet stamped "642 ADJ 1903".....	641. 578
Evans, in front of station; top of rail.....	606. 5

EVANS, WEST ALONG HIGHWAY, TO ROLLINS; THENCE SOUTH TO LEON; THENCE WEST TO DEBBY.

Evans, 2.4 miles southwest of, in southeast angle of forks of roads; iron post stamped "930 ADJ 1903".....	929. 925
Evans, 5.6 miles southwest of, west of road, at foot of steep grade, in top of low outcrop of rock; bronze tablet stamped "921 ADJ 1903".....	920. 767
Baden, 0.09 mile northeast of; northwest of road, in outcrop of rock; bronze tablet stamped "968 ADJ 1905".....	967. 737
Rollins, triangle at crossroads at run, in top of long stone planted 3 feet in ground; bronze tablet stamped "626 ADJ 1903".....	625. 758
Rollins, 3.3 miles south of, 0.2 mile north of road forks, northwest of road, south end of ledge of rock in top; bronze tablet stamped "665 ADJ 1903".	664. 870
Leon, bridge over Thirteenmile Creek near mouth, north abutment, in west end of bridge seat; bronze tablet stamped "559 ADJ 1903".....	558. 863
Debby post-office, near Beech Hill station, railroad crossing; top of rail..	567
Beech Hill, in front of station, opposite side of track, in west face of out- crop of rock; aluminum tablet stamped "572 ADJ 1903".....	571. 528

CEREDO, GUYANDOT, AND MILTON 15' (HUNTINGTON AND KENOVA 30') QUADRANGLES.

CABELL, LINCOLN, PUTNAM, AND WAYNE COUNTIES.

Leveling in 1901 in Ceredo, Guyandot, and Milton quadrangles by J. W. Hodges; and in the Guyandot and Milton quadrangles in 1907, by E. S. Dawson.

CEREDO 15' (KENOVA 30') QUADRANGLE.

KENOVA, EAST ALONG CHESAPEAKE AND OHIO RAILROAD, TO CENTRAL CITY.

	Feet.
Kenova, Union Station, in west side of door sill of men's entrance to wait- ing room; aluminum tablet stamped "567 K".....	566. 918
Ceredo, in front of station; top of rail.....	553. 6
Kellogg, in front of station; top of rail.....	553
Kellogg, 1.3 miles east of, south of track, on small culvert; chiseled square.	564. 59

CEREDO, SOUTHEAST ALONG NORFOLK AND WESTERN RAILWAY, TO SHOALS.

Ceredo, at road crossing near station; top of rail.....	569
Buffalo station, 7 feet from track, in southwest abutment of bridge over Buffalo Creek; aluminum tablet stamped "565 GRAFTON".....	562. 455
Buffalo, in front of station; top of rail.....	563

GUYANDOT 15' (HUNTINGTON 30') QUADRANGLE.

CENTRAL CITY, EAST ALONG CHESAPEAKE AND OHIO RAILROAD, TO BARBOURSVILLE.

	Feet.
Central City, in front of station; top of south rail of south track.....	549
Huntington, in front of station; top of rail.....	565
Huntington, southeast corner of Tenth street and Second avenue, between Chesapeake and Ohio and Baltimore and Ohio railroads, brick building occupied in 1899 by Sehon, Blake & Stevenson, wholesale grocery company, in west face of stone foundation, 18.8 feet south of west corner and 1.5 feet below floor (U. S. Engineer Corps bench mark 307-A).....	547. 463
Huntington, court-house at corner of Fourth avenue and Eighth street, in north corner of northeast entrance; aluminum tablet stamped "566 GRAFTON".....	563. 833
Wilson, at road crossing; top of rail.....	556
Barboursville, 0.5 mile north of, 3.1 miles east of Wilson station, in southeast abutment of railway bridge over Mud River; aluminum tablet stamped "572 ADJ 1903" (established as a substitute for bench mark destroyed in reconstruction of bridge).....	571. 760

SHOALS, SOUTH ALONG NORFOLK AND WESTERN RAILWAY, TO WAYNE.

Shoals station, at road crossing; top of rail.....	572
Lavalette, in front of station; top of west rail.....	565
Dickson, opposite mail crane at station; top of rail.....	581
Ardel (Herbert), opposite mail crane at station; top of rail.....	588
Ardel (Herbert post-office), across Twelvepole Creek, opposite M. E. parsonage, west of public highway, in large boulder; bronze tablet stamped "591 GRAFTON".....	588. 585
Craig, in front of station; top of rail.....	597
Wayne, 1 mile north of, on coping stone at northeast corner of culvert; chiseled square.....	588. 90

SHOALS, NORTHEAST TO HODGES.

Hodges, 125 feet north of road, opposite John Hodges's dwelling, on east of road leading to Huntington, in small boulder; aluminum tablet stamped "710 GRAFTON".....	708. 184
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HERBERT, NORTHEAST ALONG ROAD, TO SARAH; THENCE NORTH TO BARBOURSVILLE.

Bowen, 3.8 miles southwest of, on Booten Branch, 0.5 mile east of junction with Millers Fork, south of road, in boulder; bronze tablet stamped "623 GRAFTON".....	620. 775
Poppa (Winslow), west of road nearly opposite post-office, in top of large boulder; aluminum tablet stamped "612 GRAFTON".....	609. 584
Martha, northeast abutment of highway bridge over Guyandot River, in top stone; bronze tablet stamped "563 GRAFTON".....	561. 190

POPPA, SOUTH TO NEAR BARTRAM.

Bartram, 0.2 mile south of post-office, at mouth of small run, near store, in southeast corner of foundation of old barn of W. E. Adkins; aluminum tablet stamped "643".....	642. 267
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MILTON 15' (HUNTINGTON 30') QUADRANGLE.

BARBOURSVILLE, EAST ALONG CHESAPEAKE AND OHIO RAILWAY, TO HURRICANE; THENCE ALONG HIGHWAY TO YOUNG'S STORE.

Ona, in W. T. Sanford's dwelling, in third stone from ground at northeast corner of foundation; bronze tablet stamped "634 GRAFTON".....	631. 957
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	Feet.
Ona, at road crossing; top of rail.....	633
Milton, corner of railroad and Pike street, at southeast corner of street, in foundation stone of J. S. Kane's vacant store building; bronze tablet stamped "585 GRAFTON".....	583. 226
Milton, at road crossing; top of rail.....	585
Walton, opposite switch; top of rail.....	623
Hurricane, 0.1 mile west of station, opposite small highway bridge, north of track, in top stone of culvert; bronze tablet stamped "669 GRAFTON".....	666. 688

HAMLIN, SOUTHEAST ALONG PUBLIC HIGHWAYS, TO GRIFFITHSVILLE.

Sweetland, 0.2 mile east of post-office, 200 feet north of Middle Fork, north of road in bend, in rock boulder; aluminum tablet stamped "657".....	658. 229
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SALT ROCK, SOUTH ALONG HIGHWAYS, TO WEST HAMLIN.

West Hamlin, 300 feet east of station, in steps at northwest corner of Baptist Church; aluminum tablet stamped "595".....	595. 085
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ONA, SOUTH, VIA FUDGES AND CAVILL CREEKS, TO GUYANDOT RIVER AT ROACH (SINGLE SPUR LINE).

Fudges (5 miles south of Ona), in stone chimney two stones above ground; bronze tablet stamped "736 GRAFTON".....	733. 360
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HURRICANE, SOUTH TO NYE; THENCE SOUTHWEST TO HAMLIN; THENCE NORTHWEST TO SARAH.

Nye, in top stone of northwest pier of county bridge over Trace Fork of Mud River; bronze tablet stamped "625 GRAFTON".....	623. 468
Hamlin, in third stone from top in northeast end of abutment wall of bridge over Mud River; bronze tablet stamped "645 GRAFTON".....	642. 516
Salt Rock, in third stone from top in northeast end of retaining wall of highway bridge over Guyandot River; bronze tablet stamped "586 GRAFTON".....	583. 536

MIDKIFF AND WAYNE 15' QUADRANGLES; HUNTINGTON AND WARFIELD 30' QUADRANGLES.

LINCOLN AND WAYNE COUNTIES.

This work extends south from several bench marks in Guyandot and Milton quadrangles. The closure errors were somewhat excessive.

The leveling was done in 1907 by E. S. Dawson.

WAYNE 15' (HUNTINGTON 30') QUADRANGLE.

HERBERT, SOUTH ALONG NORFOLK AND WESTERN RAILWAY, TO PRESTON; THENCE NORTHEAST ALONG PUBLIC HIGHWAYS, TO COVER GAP; THENCE NORTH ALONG PUBLIC HIGHWAYS, TO A POINT 7 MILES NORTH OF NESTLOW.

	Feet.
Herbert, 2.2 miles south of, 450 feet south of road crossing, west of railroad and road, on rock in bank; chiseled square.....	596. 76
Wayne, 3 feet north of main door in east side of Wayne County court-house; aluminum tablet stamped "707".....	706. 639
Wayne, 3.4 miles south of, 70 feet south of railroad crossing, in northwest abutment of railroad bridge over Patrick Creek; aluminum tablet stamped "607".....	607. 527
Sidney, in northeast abutment of iron railroad bridge over Twelvepole Creek at station; aluminum tablet stamped "626".....	625. 759
Sidney, 1.2 miles south of, 50 feet north of track, 50 feet south of Twelvepole Creek, in bluff opposite "slow" sign, on rock; chiseled square.....	636. 82

	Feet.
Genoa, 150 feet west of station, in southwest corner of culvert; aluminum tablet stamped "647".....	647. 323
Genoa, 3 miles south of, 40 feet west of road crossing, 300 feet north of Towdey coal mine (abandoned), in abutment of iron bridge over Twelvepole Creek; aluminum tablet stamped "660".....	660. 071
Ferguson, 0.1 mile east of post-office, 300 feet west of Mr. Ferguson's house, in abutment of culvert over creek; aluminum tablet stamped "668"....	668. 407
Quaker, 0.9 mile south of post-office, south of road, in northwest abutment of iron bridge over Twelvepole Creek; aluminum tablet stamped "685".....	684. 895
Quaker, 2.2 miles south of, 70 feet east of county road, 200 feet east of mile-post "N 528-C 184," on center of abutment at north end of iron bridge 978; chiseled square.....	687. 44
Dunlow, 1.7 miles southeast of, 40 feet east of county road, 0.5 mile northwest of Preston, east bank of railroad, on sandstone; chiseled square....	702. 89
Preston, 2.8 miles northeast of, on north side of Missouri Creek, 140 feet east of hollow to right, 600 feet west of foot of mountain, on sandstone; chiseled square.....	889. 35
Preston, 4 miles northeast of, 300 feet west of Fork Run, 150 feet west of small house, 0.6 mile west of mountain foot, south of road, north of Milam Creek, in large boulder; aluminum tablet stamped "832".....	832. 334
Preston, 6 miles northeast of, 0.1 mile east of old dam, 0.1 mile west of East Fork, in Milam Creek, on large sandstone; chiseled square.....	734. 51
Spry, 0.7 mile southwest of, north of old sawmill, 0.5 mile west of mouth and 10 feet north of Milam Creek, 600 feet east of house, in boulder; aluminum tablet stamped "708".....	708. 215
Spry, 1 mile north of, east of road, 150 feet east of Twelvepole Creek, in bank, on sandstone; chiseled square.....	714. 71
Spry, 2 miles north of, south of road on top of small summit, 100 feet north of road forks, in sandstone; aluminum tablet stamped "697".....	697. 360
Kiahsville, 0.3 mile southeast of post-office, east of road, 300 feet east of mouth of Cove Creek, 300 feet from ford, in large boulder; aluminum tablet stamped "674".....	674. 606
Kiahsville, 3.6 miles east of, north of Cove Creek, south of road, 200 feet east of house, 800 feet east of old sawmill, in sandstone; aluminum tablet stamped "762".....	761. 814
Covegap, 2 miles northwest of, east of road, halfway down hill to divide, in bank on edge of road, in sandstone; aluminum tablet stamped "1152" ..	1, 152. 275
Covegap, 3.45 miles north of, west of road, 60 feet north of road fork to Four-mile Creek, 80 feet north of summit, on edge of road, in sandstone; aluminum tablet stamped "1178".....	1, 177. 933
Covegap, 4.8 miles north of, west of road in hollow, 70 feet west of graveyard, on sandstone; chiseled square.....	1, 174. 15
Covegap, 8.4 miles north of, at head of Beech Fork, 200 feet west of store at mountain foot, north of Beech Fork, south of road opposite hollow, in sandstone; aluminum tablet stamped "871".....	871. 146
Nestlow, 0.4 mile north of post-office, 10 feet east of Beech Fork and west of road, 0.2 mile north of store, on sandstone; chiseled square.....	767. 42
Nestlow, 3.45 miles north of, north of road, north of Beech Fork, 400 feet west of mouth of Wolfpen Branch, 0.1 mile east of schoolhouse and church, in large boulder; aluminum tablet stamped "694".....	693. 536

MIDKIFF 15' (HUNTINGTON 30') QUADRANGLE.

WEST HAZLIN, SOUTH ALONG PUBLIC HIGHWAYS, TO COVEGAP.

	Feet.
Sheridan, 100 feet east of railroad, west of road at forks near small white house by beech tree, in sandstone; aluminum tablet stamped "601"...	601. 487
Laverne post-office (Brown City station), 70 feet west of railroad, in sandstone foundation of chimney southeast corner of house; aluminum tablet stamped "604".....	604. 279
Midkiff, 1 mile south of, under fence west of railroad and road, in front of old house and store called "Rockville," 600 feet north of Tenmile Creek, in rock; aluminum tablet stamped "599".....	599. 404
Bradyville, 1.8 miles south of, south of railroad, north of road, near east end of tangent, near whistle post, in sandstone; aluminum tablet stamped "609".....	608. 515
Ranger, 2.05 miles south of, east of Fourteenmile Creek by blacksmith shop, 0.4 mile south of East Fork, in sandstone outcrop; aluminum tablet stamped "605".....	605. 485

WEWANTA, SOUTHEAST ALONG HIGHWAYS, TO FERRELLBURG; THENCE NORTH ALONG HIGHWAYS, TO GRIFFITHVILLE.

Fourteen, 0.8 mile east of post-office, in bank, halfway up mountain, north of road, in sandstone; aluminum tablet stamped "1052".....	1, 052. 353
Atensville, 0.25 mile northwest of, east of railroad between Eden Park and Atensville stations, opposite mouth of Dry Branch, in southeast end of culvert, in sandstone; aluminum tablet stamped "617".....	618. 034
Fry, in south abutment of culvert over Green Shoal Branch, fourth stone from top; aluminum tablet stamped "603".....	603. 876
Fry, 2.9 miles northeast of, 300 feet north of house, 0.2 mile north of mouth of Abbott Branch and sawmill, west of road, west of Big Ugly Creek, in large boulder; aluminum tablet stamped "634".....	634. 528
Leet, 2 miles north of, east of run, west of road, 300 feet north of foot of mountain and head of Big Creek, in boulder; aluminum tablet stamped "675".....	675. 825
Leet, 5.5 miles north of, south of Upton Branch, 0.5 mile east of head of Upton Branch, in bank near hollow, in large rock; aluminum tablet stamped "834".....	834. 555
Leet, 6.75 miles north of, north of road, east of Upton Branch, along edge, 300 feet north of foot of mountain, on sandstone; chiseled square.....	747. 68
Spurlockville, 1.1 miles northwest of, west of road and Mud River, on edge of small summit, in sandstone; aluminum tablet stamped "726".....	727. 023
Palermo, 0.4 mile northwest of post-office, 50 feet west of mouth of Parsner Creek, 50 feet north of Mud River, west of road forks, in sandstone; aluminum tablet stamped "691".....	692. 360
Bernie, 0.8 mile west of, east of Parsner Creek, in bank opposite hollow, on rock; chiseled square.....	751. 65
Bernie, 0.1 mile west of post-office, north of Parsner Creek and road, opposite old sawmill, in large sandstone; aluminum tablet stamped "807"...	808. 062
Bernie, 3 miles north of, east of road, east of Sycamore Fork, on top of small hill, opposite house, in rock cliff; aluminum tablet stamped "715".....	716. 099
Bernie, 3.8 miles north of, east of road, east of Sugar-tree Fork, opposite house and hollow, on rock cliff; chiseled square.....	664. 608

GRIFFITHSVILLE, NORTHWEST TO HAMLIN.

Griffithsville, 1 mile northwest of post-office, west of road, west of Middle Fork, in bank on small hill, in rock cliff; aluminum tablet stamped "667"	Feet. 668.319
Griffithsville, 3.4 miles northwest of, east side of Middle Fork, at mouth of Seary Creek, on sandstone; chiseled square.....	648.60

WARFIELD 30' QUADRANGLE.

NEAR PRESTON.

Preston, 0.6 mile east of, 800 feet east of Wells Branch station, in northwest abutment of bridge 975 over mouth of Missouri Branch at mouth; aluminum tablet stamped "704".....	704.665
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