

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

GEORGE OTIS SMITH, DIRECTOR

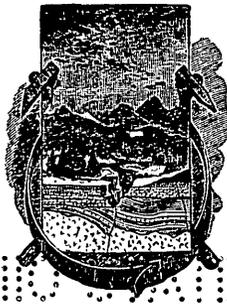
BULLETIN 481 - 90

RESULTS OF SPIRIT LEVELING
IN CALIFORNIA

1907 TO 1910, INCLUSIVE

R. B. MARSHALL, CHIEF GEOGRAPHER

WORK IN SACRAMENTO, SALINAS, AND SAN JOAQUIN VALLEYS
DONE IN COOPERATION WITH THE STATE



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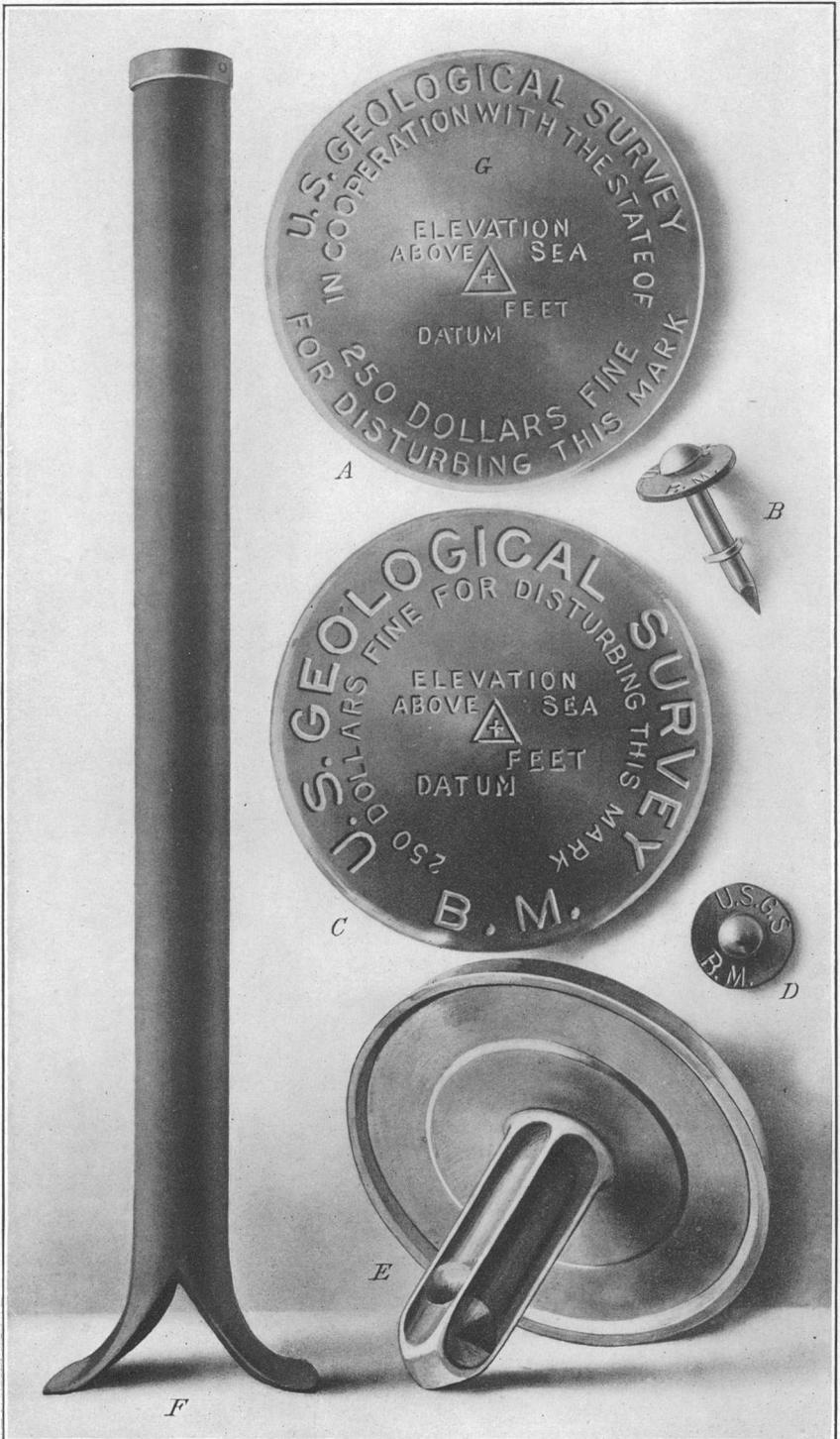
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GEOLOGICAL SURVEY BENCH MARKS.

A, Tablet used in cooperating States. The State name is inserted at G.
 B and D, Copper temporary bench mark, consisting of a nail and copper washer.
 A, C, and E, Tablets for stone or concrete structures.
 F, Iron post used where there is no rock.

RESULTS OF SPIRIT LEVELING IN CALIFORNIA, 1907 TO 1910, INCLUSIVE.

R. B. MARSHALL, Chief Geographer.

INTRODUCTION.

The following results of spirit leveling are supplemental to and accord with the elevations contained in Bulletin 342.

Corrections to Bulletin 342 should be noted as follows:

Page 13, Fairfield; bench mark was moved in 1911; present elevation not known.

Page 23, Chandler; add the following-described bench mark: Chandler, 0.1 mile south of, on east side of railroad, opposite milepost 106, 6 feet from track; iron post stamped "36 B 1902;" elevation, 36.227 feet.

Page 80, change description of first bench mark to read: T. 10 N., R. 19 W., near northwest corner of sec. 4, just south of point where cutoff road to Bakersfield turns west, near telephone pole 1368, 12 feet south of gate across road, 10 feet east of center of road, 2 feet south of post 6 by 8 inches; iron post stamped "1085 L. A.;" elevation, 1,086.919 feet.

Page 81, Santa Barbara; bench mark has been reestablished at northeast side of city hall, 8.5 feet southeast of northeast corner, iron post stamped "37 L. A.;" elevation, 38.007 feet.

Page 81, Santa Barbara, a new bench mark has been established, the description being as follows: Santa Barbara, city bench mark, corner De La Guerra and Anacopa streets (city elevation 32.545); U. S. G. S. elevation, 36.222 feet.

Page 85, Casmalia; bench mark described has been destroyed.

Page 100, the following should be added to the Bishop quadrangle: Laws, 6.5 miles west of, north of road, 0.5 mile west of canal; iron post stamped "4356;" elevation, 4,355.603 feet.

Page 108, Coalinga; bench mark has been moved but its elevation not materially changed.

Page 112, Fresno quadrangle; a portion of the elevations in this quadrangle have been readjusted, the corrected elevations being given in this supplement, pages 95-96.

Page 113, Kaiser quadrangle; the elevations of bench marks on this page are subject to a correction of -0.6 feet.

Page 114, the elevations of bench marks in the Kaiser quadrangle listed on this page have been changed to read as follows:

Bear Meadow, 0.5 mile northwest of, south of trail, on summit west of Bear Meadow, in granite ledge; bronze tablet stamped "7554 F".....	7,561.109
Cassidy Meadow, south side of Rattlesnake Lake, sec. 24, T. 5 S., R. 23 E., east of granite point, in ledge between trail and lake; bronze tablet stamped "5576 F".....	5,582.819

Tollhouse schoolhouse northwest along public road to power house, thence along pipe line to reservoir, thence along ditch to point 2 miles southeast of North Fork.

T. 10 S., R. 23 E., sec. 8, south of intersection of Pine Ridge and power house roads, in top of granite ledge; bronze tablet stamped "2013 F".....	2, 008. 711
San Joaquin, sec. 18, T. 9 S., R. 23 E., light and power house, at northeast corner of building, in granite pillar; bronze tablet stamped "1013 F".....	1, 008. 526
North Fork, sec. 30, T. 8 S., R. 23 E., 2 miles southeast of post office, west of road and ditch, at sharp curve above field and house, in granite boulder 10 by 8 feet; bronze tablet stamped "2503 F".....	2, 498.688

Pages 117, 118, 119, Bridgeport and Mount Lyell quadrangles; the elevations on these pages, beginning with the Bridgeport quadrangle, have had a correction of approximately +4.0 feet made to them. The corrected elevations are published in this supplement, pages 102-105.

Page 127, the elevations of bench marks in the New Almaden and Santa Cruz quadrangles have been changed slightly by readjustment, and the corrected elevations are published in this supplement, pages 66, 67.

Page 139, Antioch quadrangle; elevations of the following bench marks have been changed slightly by a readjustment, and are now accepted as follows:

Fairfield courthouse, 2.8 miles east of, 100 feet east of water tank, on south side of road; iron post stamped "15 B".....	Feet. 14. 670
T. 5 N., R. 1 W., southeast corner of sec. 29, 35 feet north of culvert, on east side of road to north of junction; iron post stamped "15 B" (set in 1896)..	14. 756
Denverton, 5 feet west of northwest corner of blacksmith shop, in front of schoolhouse; iron post stamped "7 B".....	6. 618

Page 140, elevations of the following-described bench marks are now accepted as follows:

Montezuma schoolhouse, southeast corner of yard, west of road; iron post stamped "41 B".....	Feet. 41. 201
Willow Springs schoolhouse, southeast corner of yard, west side of road; iron post stamped "58 B".....	57. 738
Tolands Landing, 3 miles west of, north side of road, 1 foot south of fence line, 8 feet east of gate, 0.2 mile west of feeding shed, 100 feet north of slough; iron post stamped "10 B".....	9. 998
Collinsville, 0.5 mile north of, southwest corner of schoolhouse, at crossroads; iron post stamped "5 B".....	4. 968

Page 142, Fair Oaks quadrangle; the elevations of several of the bench marks in this quadrangle have been changed slightly. The descriptions and corrected elevations are given in this publication, pages 15-17.

Page 151, Greenwood; the elevation of this bench mark has been changed to read "198.472."

Page 152, Squaw Hill Ferry, the elevation of this bench mark has been changed to read "196.162" The elevation of United States Corps of Engineers bench mark No. 6 is 198.273 feet.

Page 153, Corning; the elevation of this bench mark has been changed by a new adjustment to read "303.335."

Pages 153 and 154, elevations of the following bench marks in the Tehama quadrangle have been changed by a new adjustment as follows:

Red Bluff, 6.5 miles south of, west side of road, 3 feet south of telephone pole; iron post stamped "311 B".....	Feet. 310. 302
Red Bluff, 10.5 miles south of, west side of road, 4 feet north of telephone pole; iron post stamped "304 B".....	303. 349
Tehama, 5.5 miles west of, west side of road, Red Bluff at crossroads, 5 feet north of telephone pole; iron post stamped "308 B".....	307. 063
Cone estate, Antelope ranch headquarters, beside walk in front of residence, east side of road; iron post stamped "271 B".....	270. 864

Personnel.—The field work for 1907 was done under R. B. Marshall, geographer, and the later work under T. G. Gerdine, geographer, under the general direction of R. B. Marshall, chief geographer. The names of the various levelmen are given in the introduction to each list. The office work of computation, adjustment, and preparation of lists was done mainly by S. S. Gannett, geographer, and D. H. Baldwin, topographer, and since 1907 under the general direction of E. M. Douglas, geographer.

Classification.—The elevations are classified as precise or primary according to the methods employed in their determination. For precise-level lines instruments and rods of the highest grade are used, each line is run both forward and backward, and every precaution is taken to guard against error. The allowable divergence between the forward and the backward lines in feet is represented by the formula $0.017\sqrt{D}$, in which D is the distance in miles between bench marks. For primary lines standard Y levels are used; lines are run in circuits or are closed on precise lines, with an allowable closing error in feet represented by $0.05\sqrt{D}$, in which D is the length of the circuit in miles, sufficient care being given to the work to maintain this standard. For levels of both classes careful office adjustments are made, the small outstanding errors being distributed over the lines.

Bench marks.—The standard bench marks are of two forms. The first form is a circular bronze or aluminum tablet (C and E , Pl. I), $3\frac{1}{2}$ inches in diameter and one-quarter inch thick, having a 3-inch stem, which is cemented in a drill hole in solid rock in the wall of some public building, a bridge abutment, or other substantial masonry structure. The second form (F , Pl. I), used where masonry or rock is not available, consists of a hollow wrought-iron post $3\frac{1}{2}$ inches in outer diameter and 4 feet in length. The bottom is spread out to a width of 10 inches in order to give a firm bearing on the earth. A bronze or aluminum-bronze cap is riveted over the top of the post which is set about 3 feet in the ground. A third style of bench mark with abbreviated lettering (B and D , Pl. I), is used for unimportant points. This consists of a special copper nail $1\frac{1}{2}$ inches in length driven through a copper washer seven-eighths inch in diameter. The tablets as well as the caps on the iron posts are appropriately lettered, and cooperation by States is indicated by the addition of the State name (G , Pl. I).

The numbers stamped on the bench marks described in the following pages represent the elevations to the nearest foot as determined by the levelman. These numbers are stamped with three-sixteenths-inch steel dies on the tablets or post caps, to the left of the word "FEET." The office adjustment of the notes and the reduction to

mean sea level datum may so change some of the figures that the original markings are 1 or 2 feet in error. It is assumed that engineers and others who have occasion to use the bench-mark elevations will apply to the Director of the United States Geological Survey, at Washington, D. C., for the adjusted values, and will use the markings as identification numbers only.

Datum.—All United States Geological Survey elevations are referred to mean sea level, which is the level that the sea would assume if the influence of winds and tides were eliminated. This level is not the elevation determined from the mean of the highest and the lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level.

Mean sea level is the average height of the water, all stages of the tide being considered. It is determined from observations made by means of tidal gages placed at stations where local conditions, such as long, narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea level as determined from observations in the Atlantic Ocean, the Gulf of Mexico, or the Pacific Ocean.

The connection with tidal stations for bench marks in certain areas that lie at some distance from the seacoast is still uncertain, and this fact is indicated by the addition of a letter or word to the right of the word "DATUM" on tablets or posts. For such areas corrections for published results will be made from time to time as the precise-level lines of the United States Geological Survey or other Government organizations are extended.

Topographic maps.—Maps of the following quadrangles wholly or partly in California have been published by the United States Geological Survey up to June 10, 1911. They may be obtained (except as noted) for 5 cents each or \$3 a hundred, on application to the Director of the Survey at Washington, D. C.

Alturas.	Bakersfield special.
Amargosa region (Nev.-Cal.). ¹ ² (15 cents).	Ballarat (Cal.-Nev.). ²
Anaheim. ³	Banner Hill special.
Antioch.	Bidwell Bar.
Arroyo Grande. ⁴	Big Trees.

¹ Out of print.

² Amargosa region map includes Kawich sheet and parts of Ballarat, Furnace Creek, and Lida sheets.

³ Anaheim and Santa Ana sheets, on scale of 1:62,500, have been reduced and form parts of Corona sheet, on scale 1:125,000.

⁴ Arroyo Grande, Cayucos, Port Harford, and San Luis Obispo sheets, on scale of 1:62,500, have been reduced and form parts of San Luis sheet, on scale of 1:125,000.

Bouldin.	Furnace Creek (Cal.-Nev.). ¹¹
Bruceville. ¹	Galt. ¹
Calabasas. ²	General Grant and Sequoia national parks. ¹²
Camp Mohave (Ariz.-Nev.-Cal.).	Genesee special.
Camulos. ²	Goleta special.
Capistrano.	Goose Creek. ¹
Carbondale. ¹	Grass Valley special.
Carquinez. ³	Guadalupe.
Castle. ¹	Hawthorne.
Cayucos. ⁴	Haywards.
Chico.	Headreach. ¹
Clay. ¹	Hesperia.
Clements. ¹	Holtville.
Colfax.	Honey Lake.
Colusa.	Hueneme.
Concord.	Indian Valley special.
Corona. ⁵	Indio special.
Cosumnes. ¹	Isleton.
Courtland.	Jackson.
Cucamonga.	Jersey.
Cuyamaca. ⁶	Kaiser.
Dardanelles. ⁷	Kaweah. ¹²
Davisville.	Kawich. ¹¹
Deep Creek.	Kernville.
Downey.	Knights Landing.
Downieville.	La Jolla.
Dunnigan.	Lake Tahoe and vicinity (Cal.-Nev.). ^{13 14}
Elcajon. ⁶	(20 cents).
Elk Grove. ¹	Las Bolsas.
Elsinore. ⁸	Las Vegas (Nev.-Cal.).
Escondido. ⁹	Lassen Peak.
Fairoaks. ¹⁰	Lida (Nev.-Cal.). ¹¹
Fernando.	Lincoln. ¹⁰
Florin. ¹	Linden. ¹

¹ Bruceville, Carbondale, Castle, Clay, Clements, Cosumnes, Elk Grove, Florin, Galt, Goose Creek, Headreach, Linden, Lockeford, New Hope, Waterloo, and Woodbridge sheets show Lodi quadrangle on larger scale.

² Calabasas and Santa Susana sheets, on scale of 1:62,500, have been reduced and form parts of Camulos sheet, on scale of 1:125,000.

³ Carquinez sheet, on scale of 1:62,500, has been reduced and forms part of Napa sheet, on scale of 1:125,000.

⁴ Arroyo Grande, Cayucos, Port Harford, and San Luis Obispo sheets, on scale of 1:62,500, have been reduced and form parts of San Luis sheet, on scale of 1:125,000.

⁵ Anaheim and Santa Ana sheets, on scale of 1:62,500, have been reduced and form part of Corona sheet, on scale 1:125,000.

⁶ Elcajon sheet, on scale of 1:62,500, has been reduced and forms part of Cuyamaca sheet, on scale of 1:125,000.

⁷ Yosemite National Park map includes Yosemite and Mount Lyell sheets and part of Dardanelles sheet, together with that part of the park not shown on those three sheets.

⁸ Riverside sheet, on scale of 1:62,500, has been reduced and forms part of Elsinore sheet, on scale of 1:125,000.

⁹ Escondido and Oceanside sheets, on scale of 1:62,500, have been reduced and form parts of San Luis Rey sheet, on scale of 1:125,000.

¹⁰ Fairoaks, Lincoln, Pleasant Grove, Roseville, and Sheridan sheets show parts of Sacramento quadrangle on larger scales.

¹¹ Amargosa region map includes Kawich sheet and parts of Ballarat, Furnace Creek, and Lida sheets.

¹² Sequoia and General Grant national parks map is a combination of parts of Tehipite and Kaweah sheets on same scale.

¹³ Out of print.

¹⁴ Lake Tahoe and vicinity map includes Carson, Markleeville, Pyramid Peak, and Truckee sheets.

Lockeford. ¹	Randsburg.
Lodi. ¹	Red Bluff. ¹⁰
Lompoc.	Redding. ¹⁰
Los Angeles (double sheet-10 cents). ²	Redlands.
Marcuse.	Redondo.
Markleeville (Cal.-Nev.). ³	Rio Vista.
Marysville.	Riverside. ¹¹
Maxwell.	Rock Creek.
Modoc Lava Bed.	Roseville. ⁸
Mother Lode district special (two sheets-10 cents).	Sacramento. ⁸
Mount Diablo.	Salton Sink (photolithograph).
Mount Hamilton.	San Antonio.
Mount Lyell. ⁴	San Bernardino.
Mount Pinos.	San Diego.
Mount Whitney.	San Francisco.
Napa. ⁵	San Geronio.
Needles special (Ariz.-Cal.).	San Jacinto.
Nevada City special.	San Jose.
New Hope. ¹	San Luis. ⁹
Nicolaus.	San Luis Obispo. ⁹
Oceanside. ⁶	San Luis Rey. ⁶
Oil Center special (2 double sheets-20 cents).	San Mateo.
Olancha.	San Pedro.
Palo Alto. ⁷	Santa Ana. ¹²
Parker (Ariz.-Cal.).	Santa Barbara special.
Pasadena. ²	Santa Cruz. ⁷
Placerville.	Santa Monica. ²
Pleasant Grove. ⁸	Santa Paula.
Pleasanton.	Santa Susana. ¹³
Pomona.	Santa Ynez.
Port Harford. ⁹	Sequoia and General Grant national parks. ¹⁴
Pyramid Peak. ³	Shasta. ¹⁵
Ramona.	Shasta special. ¹⁵
	Sheridan. ⁶

¹ Bruceville, Carbondale, Castle, Clay, Clements, Cosumnes, Elk Grove, Florin, Galt, Goose Creek, Headreach, Linden, Lockeford, New Hope, Waterloo, and Woodbridge sheets show Lodi quadrangle on larger scale.

² Los Angeles map includes Pasadena and Santa Monica sheets.

³ Lake Tahoe and vicinity map includes Carson, Markleeville, Pyramid Peak, and Truckee sheets.

⁴ Yosemite National Park map includes Yosemite and Mount Lyell sheets and part of Dardanelles sheet, together with that part of the park not shown on those three sheets.

⁵ Carquinez sheet, on scale of 1:62500, has been reduced and forms part of Napa sheet, on scale of 1:125000.

⁶ Escondido and Oceanside sheets, on scale of 1:62500, have been reduced and form parts of San Luis Rey sheet, on scale of 1:125000.

⁷ Palo Alto sheet, on scale of 1:62500, has been reduced and forms part of Santa Cruz sheet, on scale of 1:125000.

⁸ Fair Oaks, Lincoln, Pleasant Grove, Roseville, and Sheridan sheets show parts of Sacramento quadrangle on larger scales.

⁹ Arroyo Grande, Cayucos, Port Harford, and San Luis Obispo sheets, on scale of 1:62500, have been reduced and form parts of San Luis sheet, on scale of 1:125000.

¹⁰ Redding and Tehama sheets show parts of Red Bluff quadrangle on larger scale.

¹¹ Riverside sheet, on scale of 1:62500, has been reduced and forms part of Elsinore sheet, on scale of 1:125000.

¹² Anaheim and Santa Ana sheets, on scale of 1:62500, have been reduced and form parts of Corona sheet, on scale of 1:125000.

¹³ Calabasas and Santa Susana sheets, on scale of 1:62500, have been reduced and form parts of Camulos sheet, on scale of 1:125000.

¹⁴ Sequoia and General Grant national parks map is a combination of parts of Tehipite and Kaweah sheets on same scale.

¹⁵ Shasta special sheet shows part of Shasta quadrangle on larger scale.

Sierraville.	Truckee. ³
Silver Peak (Nev.-Cal.).	Tujunga.
Smartsville.	Vacaville.
Sonora.	Ventura.
Southern California, sheet No. 1 (double sheet-10 cents).	Vernon.
Southern California, sheet No. 2 (double sheet-10 cents).	Vina.
Southern California, sheet No. 3 (double sheet-10 cents).	Waterloo. ⁴
Tamalpais.	Wellington (Cal.-Nev.).
Taylorville special.	Wheatland.
Tehama. ¹	Willows.
Tehipite. ²	Woodbridge. ⁴
Tejon.	Woodland.
Tesla.	Yosemite. ^{5, 6}
	Yosemite National Park (25 cents). ⁶
	Yosemite Valley map (10 cents). ⁶
	Yuma (Cal.-Ariz.).

PRECISE LEVELING.

Antioch, Courtland, Davisville, and Fair Oaks 15' quadrangles; Bouldin, Isleton, Jersey, and Rio Vista 7½' quadrangles.

SACRAMENTO, SOLANO, AND YOLO COUNTIES.

The following are the results of a precise level line run in 1907 and 1908 by L. F. Biggs from Sacramento down the Sacramento River to Fairfield, tying to bench marks previously established near those places.

The work was done in cooperation with the State.

FAIROAKS QUADRANGLE.

At Sacramento, Capitol to post office.

Sacramento, 300 feet east of Capitol, in top of meridian stone; aluminum tablet stamped "21 B".....	Feet. 20. 865
Sacramento, post office building, north wall, 5 feet above ground, 15 feet east of northwest corner; aluminum tablet stamped "31 B 1905".....	30. 527

DAVISVILLE QUADRANGLE.

Sacramento south along west bank of Sacramento River.

Sacramento, United States Weather Bureau gage at corner of Southern Pacific freight shed, foot of L Street; nail in notch of 30-foot mark.....	29. 519
L Street gage zero (below sea level).....	-0. 481
United States gage zero (below sea level)	-0. 507
Southern Pacific gage zero (below sea level)	-4. 861

¹ Redding and Tehama sheets show parts of Red Bluff quadrangle on larger scale.
² Sequoia and General Grant national parks map is a combination of parts of Tehipite and Kaweah sheets on same scale.
³ Lake Tahoe and vicinity map includes Carson, Markleeville, Pyramid Peak, and Truckee sheets.
⁴ Bruceville, Carbondale, Castle, Clay, Clements, Cosumnes, Elk Grove, Florin, Galt, Goose Creek, Headreach, Linden, Lockeford, New Hope, Waterloo, and Woodbridge sheets show Lodi quadrangle on larger scale.
⁵ Yosemite Valley map shows part of Yosemite quadrangle on larger scale.
⁶ Yosemite National Park map includes Yosemite and Mount Lyell sheets and part of Dardanelles sheet, together with that part of the park not shown on those three sheets.

Pier No. 22, Yolo County, 1 mile northwest of Broderick, on property of Valentine Hauser, 250 feet west of levee, 500 feet west of Sacramento River, on line of wire fence running east and west between two pastures; aluminum tablet in top of pier	Feet. 22. 230
Pier No. 22; copper bolt in base.....	18. 538
Broderick, 3.0 miles south of, west side of road, in front of hop-storing house on Faris place; iron post stamped "B 29 1905 F 1".....	28. 671
Pier No. 20, Yolo County, 5 miles southwest of Broderick, on property of Pauline U. Gruhler, in corner of fence, 230 feet southeast of house, 500 feet west of Sacramento River levee; aluminum tablet in top of pier....	18. 725
Pier No. 20; copper bolt in base.....	15. 080
Riverside, opposite, 300 feet south of Machardos's house, 20 feet south of road; iron post stamped "22 B 1905 F 2".....	22. 315

Sacramento south along east bank of Sacramento River.

Pier No. 21, Sacramento County, in outskirts of Sacramento, on property of W. W. Burler, in northwest corner of hop yard west of and adjoining Riverside Road, 30 feet from levee on east side of Sacramento River, 600 feet west from saloon of E. H. Hoppe, 0.25 mile northwest of end of electric car line, 0.5 mile south of Odd Fellows' Cemetery; aluminum tablet in top of pier.....	21. 177
Pier No. 21; copper bolt in base.....	17. 531
Sacramento, Southern Pacific Railroad bench mark, in base of tree at railroad crossing; spike.....	18. 067
Pier No. 19, Sacramento County, 4 miles north of Freeport and 1.25 miles below brickyard on left bank of Sacramento River, on property of Joe Tash, 225 feet east of levee on south side of private road leading from county road to house of Joe Tash, 125 feet northeast of barn, 300 feet southwest of windmill, and 720 feet southwest of junction of county and private road; aluminum tablet in top of pier	17. 806
Pier No. 19; copper bolt in base.....	14. 128

COURTLAND QUADRANGLE.

Point near Glide Gun Club south along west bank of Sacramento River.

Glide Gun Club, 0.5 mile south of, on fence line between Glide and Content, 300 feet south of Manuel Content's house, 150 feet west of levee, 20 feet south of southwest corner of woodhouse; iron post stamped "16 B 1905 F 3"	16. 012
Pier No. 18, Yolo County, 1.5 miles west of Freeport, on property of Lizzie H. Glide, near oak tree by fence on east side of property, 375 feet south of schoolhouse adjoining levee on right bank of river, and 0.25 mile east from wharf and group of buildings belonging to Lizzie H. Glide; aluminum tablet in top of pier.....	15. 879
Pier No. 18; copper bolt in base.....	12. 261
Freeport, 0.5 mile north of Anton Fernando's house, 40 feet from northeast corner of, west side of road, northeast corner of house lot; iron post stamped "21 B 1905 F 4".....	20. 852
Clarksburg, 0.5 mile north of, 100 feet east of Merritt schoolhouse; inside fence; iron post stamped "14 B 1905 F 5".....	14. 263
Pier No. 16, Yolo County, in town of Clarksburg, on property of Ella P. W. Smith, in south corner of pear orchard inclosed by wire fence, 375 feet southwest of Ella P. W. Smith's house adjoining levee on east side of orchard, 700 feet south of schoolhouse, 1,000 feet northwest of store and post office managed by Cave & Co.; aluminum tablet in top of pier....	13. 429

	Feet.
Pier No. 16; copper bolt in base.....	9. 785
Clarksburg, gage zero below sea level.....	-4. 382
(NOTE.—The foot graduations above 20-foot mark are numbered 1 foot too great; thus, 21 is numbered 22.)	
Clarksburg; 2.2 miles south of, 40 feet south of Ross's house, 200 feet west of Sacramento River; iron post stamped "19-1906 B N"	19. 006
Courtland, 2.0 miles north of, 20 feet east of road, 150 feet west of drainage corral, 260 feet north of levee; iron post stamped "10 1906 B N"	9. 900
Pier No. 14; Yolo County, 1 mile north of Courtland, on property owned by J. L. McFadden, in southwest corner of pasture inclosed by wire fence, 750 feet west of J. L. McFadden's house, 400 feet west of barn, which is 480 feet southwest of house (both buildings adjoin levee); aluminum tablet in top of pier	11. 028
Pier No. 14; copper bolt in base.....	7. 354
Grand Island, north corner of bridge abutment; aluminum tablet stamped "B 20 1906 N"	19. 696
Pier No. 12, Sacramento County, Grand Island, on property of Isaac G. Hall, 0.5 mile south of Vorden, on fence line on south edge of orchard, 10 feet north of road running west from levee, 160 feet west of large frame house, owned by California Transportation Co., in southeast corner of orchard at junction of road and levee, 0.25 mile south of pumping station on west bank of river; aluminum tablet in top of pier.....	10. 337
Pier No. 12; copper bolt in base.....	6. 723

Point near Lisbon school south along east bank of Sacramento River.

Freeport Ferry, in front of ferryman's house, north side of road, in top of hitching post; nail.....	27. 832
Pier No. 17, Sacramento County, 1.5 miles south of Freeport, on property of J. H. Beach, at southeast corner of storehouse, 450 feet south of vertex of angle formed by junction of railroad grade with levee, 75 feet north of house and 200 feet west of barn of J. H. Beach, 35 feet north of private road from levee through property of J. H. Beach, 125 feet northeast of junction of private road with levee; aluminum tablet in top of pier.....	16. 301
Pier No. 17; copper bolt in base.....	12. 583
Pier No. 15, Sacramento County, 4 miles northeast of Courtland, on property of the William Johnston estate, situated in south corner of inclosure south of and adjoining house, 200 feet south of house, 100 feet southwest of windmill, 240 feet northwest of creamery, and 185 feet from intersection of fence with levee; aluminum tablet in top of pier	12. 793
Pier No. 15; copper bolt in base.....	9. 078
Courtland; gage zero (below sea level).....	-4. 501
Courtland, south wall of Bauer, Miller & Newbert's store; aluminum tablet stamped "14 B 1906 N"	13. 755
Pier No. 13, Sacramento County, in town of Paintersville, on property owned by Maggie V. Painter, 2 miles south of Courtland, 3 feet from south side of high board fence of corral, 30 feet east of two large oak trees standing 20 feet apart, 300 feet southeast of house of Maggie V. Painter, 140 feet east of barn on east side of levee below house, 200 feet from levee; aluminum tablet in top of pier	10. 101
Pier No. 13; copper bolt in base.....	6. 402
Vorden; gage zero (below sea level).....	-5. 252

Grand Island, 4 miles south of bridge, 250 feet southeast of E. B. King's house, 150 feet northeast of Sacramento River levee, 100 feet northeast of cross levee; iron post stamped "8 B 1906 N"	Feet. 7. 851
Grand Island Bridge, about 4.1 miles southeast of, 0.9 mile east of E. B. King's house, in base of tree; spike (Sacramento Southern R. R. bench mark)	12. 458

BOULDIN, ISLETON, JERSEY, AND RIO VISTA 7½ QUADRANGLES.

Point near Ryde southwest along northwest side of Sacramento River.

Pier No. 10, Sacramento County, in town of Ryde, on property of W. A. Kesner, 250 feet west of levee in northwest corner of alfalfa patch adjoining levee, 375 feet northwest of W. A. Kesner's house, 750 feet north of pumping station on south side of road near junction with levee; aluminum tablet in top of pier	7. 356
Pier No. 10; copper bolt in base.....	3. 761
Ryde; gage zero (below sea level).....	-4. 626
Ryde, water gage, west end of pier; 15-foot mark.....	10. 374
Pier No. 9, Sacramento County, Andrus Island, on property of Jane Smith, 4 miles north of Isleton, at edge of open space in orchard on wire fence line, 150 feet east of intersection of levee with said wire fence which marks boundary between property of Jane Smith and George Nelson, 1,000 feet southeast of house of Jane Smith and 0.5 mile west of pumping station on Georgiana Slough; aluminum tablet in top of pier	8. 965
Pier No. 11; copper bolt in base.....	5. 246
Pier No. 8, Sacramento County, on Grand Island, on property of Stern & Co., 0.5 mile northeast of Isleton, near end of row of poplar trees running north from levee, 280 feet from junction of said row and levee, 1,000 feet northwest of house, near dividing line between property of Mrs. Buckley and that of Stern & Co.; aluminum tablet in top of pier	5. 847
Pier No. 8; copper bolt in base.....	2. 253
Rio Vista, 1.9 miles north of, 100 feet east of saloon, near ferry landing, 60 feet west of river, east side of road, in top of 6 by 6 inch timber; nail....	9. 269
Rio Vista, ferry; gage zero (below sea level).....	-4. 403
Rio Vista, water gage; spike in 16.4 foot mark.....	12. 361
Rio Vista; gage zero (below sea level).....	-4. 039
Rio Vista, southeast corner of bank building, 2 feet above sidewalk; aluminum tablet stamped "23 B 1905 F 17".....	22. 425
Pier No. 6, Solano County, 0.3 mile south of Rio Vista, 0.3 mile west of southern end of Wood Island, just above edge of swamp in river bottom; tablet in top of pier.....	28. 849
Pier No. 6; copper bolt in base.....	25. 158
Rio Vista, 3.5 miles southwest of, 100 feet from southwest corner of Madison's blacksmith shop, north corner of field, east side of road; iron post stamped "B 54 1907 F 20".....	53. 822

Point near Walnut Grove southwest along southeast side of Sacramento River.

Pier No. 11, Sacramento County, in town of Walnut Grove, on property of Mary L. Wise, 0.5 mile north of post office; near fence on southwest side of corral surrounding barn, in line with short row of fruit trees running northeast from levee, 250 feet northeast of house near levee, 400 feet east of large oak tree on river bank, marking corner in north boundary of property of Mary L. Wise; aluminum tablet in top of pier.....	8. 214
Pier No. 11; copper bolt in base.....	4. 592

	Feet.
Walnut Grove; gage zero (below sea level).....	-1. 394
Georgiana Slough; gage zero (below sea level).....	-5. 829
Isleton; gage zero (below sea level).....	-4. 647
Ida Island, south of east end of G. F. Terschman's house, 85 feet west of, 200 feet south of Sacramento River; iron post stamped "5 B 1906 N".....	4. 943
Pier No. 7, Sacramento County, on Brannan Island, on property of J. Desrosier, 2 miles west of Isleton, and 0.25 mile above Rio Vista Ferry, in northeast corner of orchard, 275 feet south of levee, 225 feet south of house, 110 feet southeast of barn; aluminum tablet in top of pier.....	6. 245
Pier No. 7; copper bolt in base	2. 561

ANTIOCH QUADRANGLE.

Tolands Landing along northeast bank of Sacramento River.

Tolands Landing, summit of Blue Gum Hill, pier 4; aluminum tablet in top	119. 528
Tolands Landing, summit of Blue Gum Hill, pier 4; bolt in base.....	115. 838
Tolands Landing; 12-foot mark, United States water gage.....	8. 292
Tolands Landing; 12-foot mark, California water gage.....	6. 529
Stratton ranch, summit of small hill, pier 2; aluminum tablet in top.....	37. 928
Stratton ranch, summit of small hill, pier 2; bolt in base.....	34. 198
Collinsville; 12-foot mark, United States water gage.....	4. 591
Collinsville; 10-foot mark, California water gage.....	5. 508

PRIMARY LEVELING.

Fairoaks 15' quadrangle; American, Antelope, Arcade, Brighton, Clarksville, Folsom, Mills, and Scott Ranch 7½' quadrangles.

PLACER AND SACRAMENTO COUNTIES.

The elevations in the following list are based on the results of precise leveling along the Southern Pacific Railroad, published in Bulletin 342. Readjusted elevations are given for bench marks in the Fairoaks quadrangle.

The leveling in the Fairoaks quadrangle was done in 1901 by L. D. Ryus and in 1908 by L. F. Biggs and B. A. Jenkins, that in the American, Clarksville, Folsom, and Scott Ranch quadrangles was done in 1908 by Biggs and Jenkins. The State cooperated in the work.

FAIROAKS 15' QUADRANGLE, INCLUDING ANTELOPE, ARCADE, BRIGHTON, AND MILLS 7½' QUADRANGLES.

Sacramento northeast to San Juan school, thence to Fairoaks, south to Soudan, southwest along Southern Pacific Railroad to Router, south to Walsh station, and northwest along Southern Pacific Railroad to Brighton.

Sacramento, 3 miles northeast of State Capitol, at intersection of roads; iron post stamped "39 B".....	Feet. 39. 320
Ben Ali, 2.5 miles east of, 150 feet west of windmill, at intersection of roads; iron post stamped "69 B".....	68. 576
San Juan schoolhouse, 1 mile east of, southeast corner of field, at intersec- tion of roads; iron post stamped "191 B".....	190. 625
Fairoaks Junction, 300 feet east of switch, at southeast corner of field, north of track; iron post stamped "113 B".....	112. 973

	Feet.
Routier, opposite station, north of county road; iron post stamped "69 B" ..	68. 826
Walsh, at southwest corner of field, opposite saloon; iron post stamped "64 B"	64. 043
Sacramento north along Marysville road to forks of road at northwest corner of sec. 19, T. 10 N., R. 5 E., thence east to quarter corner on south side of sec. 10, T. 10 N., R. 6 E., thence south to Fair Oaks.	
Sacramento, 5 miles north of capitol, 250 feet north of house, 100 feet west of corner at L of road; iron post stamped "28 B"	27. 933
T. 10 N., R. 5 E., northwest corner of sec. 19, at intersection of road running east from main road; iron post stamped "31 B"	30. 862
T. 10 N., R. 5 E., southwest corner of sec. 13, 1 mile south of Center Union schoolhouse, east side of road, at angle to north; iron post stamped "89 B"	88. 951
Antelope, 2 miles northeast of, at edge of Southern Pacific Railroad right of way, north of road at crossing, west of track; iron post stamped "146 B" ..	146. 130
T. 10 N., R. 6 E., near center of sec. 26, southeast corner of Sylvan schoolhouse yard at crossroads; iron post stamped "151 B."	151. 212
Forks of road 2.6 miles east of Riego south to center line of T. 10 N., thence east 2.25 miles to Fork road near Dry Creek, thence south and southwest to Sacramento.	
Roseville, 8.6 miles west by 2.6 miles south of, in southwest angle of crossroads, 0.25 mile east of southeast corner of sec. 16, T. 10 N., R. 5 E., 1,000 feet south of white house, in fence corner; iron post stamped "61-R" ..	61. 262
Dry Creek, 0.4 mile west of, west of road, between secs. 14 and 23, T. 10 N., R. 5 E., at grove of oaks, in base of 36-inch oak tree, 60 feet west of second-class road; spike; with aluminum tag stamped "74-84"	74. 91
Sacramento, 9 miles northeast of, east of road through Haggan grant; iron post stamped "66 B 1908 S. B."	67. 007
Sacramento, 8.2 miles northeast of, south bank of small creek, east of road through grant, in base of 10-inch cottonwood tree; spike; aluminum tag stamped "53 87"	53. 38
Sacramento, 5.6 miles northeast of, east of road, at road junction, 50 feet east of gate to ranch house, at fence corner; iron post stamped "50, B. T., 1908, B"	50. 673
Sacramento, 3.2 miles north of, east of road, at road junction; 20 feet south of fence corner; iron post stamped "39 B"	39. 240
Sacramento, 2.4 miles north of, east of road, at fence line, 0.25 mile north of bridge; iron post stamped "U. S. E. D. B. M. 10 33.5"	29. 925
Sacramento, 1.6 miles north of, north of road, 400 feet north of N. E. R. R. crossing; iron post (United States Corps of Army Engineers, ¹ B. M. 8, elev. 28.5)	24. 991
Point near Sylvan school southwest 3.5 miles, thence northwest 4 miles to fork 2.8 miles northwest of Wanega station.	
Sylvan school, sec. 26, T. 10 N., R. 6 E., 2.4 miles southwest of, south of road, opposite Twelvemile House, 25 feet south of southeast corner of porch of hotel; iron post stamped "108 B 1908 B. V."	108. 900
Wanega, 700 feet east of station, west of right of way, 35 feet west of milepost 101, at fence line; iron post stamped "107 B 1908 U. B."	107. 106

¹ Locally known as U. S. Engineer Department.

Roseville south and east 3 miles (part of line to Orangevale).

Roseville, 0.4 mile south of, bridge over creek, in top of floor; spike painted "150 98"..... Feet. 150.08

Riego south 2.7 miles to Fork road, thence east 2 miles.

Riego, 1.3 miles south of, north of road, in top of granite post on county line; aluminum tablet stamped "37 B 1908 B. D. 1"..... 37.551
 Sixmile House, 3.5 miles north of, at intersection of road running east from main road; iron post stamped "31 B"..... 30.862

Point 5.6 miles northeast of Sacramento east via Arcade to point 3.5 miles east of Ben Ali, thence south to vicinity of Del Paso and west to forks of road 2.4 miles northeast of Sacramento and 0.25 mile northeast of bridge over American River.

Sacramento, 5.6 miles northeast of, east of road, at road junction, 50 feet east of gate to ranch house at fence corner; iron post stamped "50 B 1908 B. T."..... 50.673
 Ben Ali, 2.5 miles east of, 150 feet west of windmill at intersection of roads; iron post stamped "69 B"..... 68.576
 Del Paso, 2.4 miles north of, at road crossing, 60 feet northwest of oak tree, 20 feet south of road; iron post stamped "94 B 1908 B. T. 1"..... 93.865
 Del Paso, 0.25 mile west of, at junction of roads, 25 feet west of gate to headquarters of ranch, at telephone pole; iron post stamped "90 B 1908 U. 1"..... 91.030
 Del Paso, 2.2 miles west of, west of road, at gate and junction of road; iron post stamped "44 B 1908 B. V. 1"..... 43.950
 Del Paso, 5.7 miles west of, west of Southern Pacific Railroad, 40 feet east of gate, near telephone pole at fence line; iron post stamped "30 B 1908 B. W. 1"..... 30.405

Twelvemile House east 1 mile, thence north 3.5 miles and west and south to Walsh.

Twelvemile House, 1 mile east by 3.5 miles north of, at southwest angle of fork of roads; iron post stamped "B 1908 133 1"..... 133.105
 Brighton school, 0.5 mile south of, west of road, north of fork road to west; iron post stamped "68 B 1908 2"..... 67.832

Sacramento south 4.3 miles, thence east to Walsh.

T. 8 N., R. 5 E., southwest corner of sec. 19, southwest angle of crossroads; iron post stamped "24 B 1908 3"..... 23.936
 T. 8 N., R. 5 E., south side of sec. 21, southeast angle of intersection with upper Stockton road, opposite road house; iron post stamped "30 B 1908 4"..... 29.820
 T. 8 N., R. 5 E., southeast corner of sec. 23, at northwest angle of crossroads; iron post stamped "42 B 1908 5"..... 42.409

Bench marks in vicinity of Fairoaks.

Fairoaks, 0.7 mile east of, southwest corner of bridge, on concrete; chiseled circle painted "U. S. B. M."..... 151.17
 Fairoaks, 400 feet north of store, in center of road corner, in notch in base of 50-inch oak tree; nail with aluminum tag stamped "181 35"..... 180.78
 Fairoaks, bridge over American River, in west face of south concrete pier; aluminum tablet stamped "89 B 1908 16"..... 88.603
 Fairoaks, in front of railroad station; top of rail..... 104.81

**AMERICAN, CLARKSVILLE, FOLSOM, AND SCOTT RANCH 7½ QUAD-
RANGLES.**

Point 1.8 miles northwest of Slough House.

Slough House, 1.8 miles northwest of, where Grant Line road intersects Sacramento-Jackson road; iron post stamped "150 B 1907 30"..... Feet. 150.652

Forks of road 1 mile east by 3.5 miles north of Twelvemile House east to Bridge House, on Folsom road.

Twelvemile House, 4.5 miles east by 3 miles north of, east of road, at angle; iron post stamped "201 B 1908 6"..... 200.625

Twelvemile House, 8 miles east by 3 miles north of, on summit, 0.5 mile west of ranch house; iron post stamped "250 B 1908 7"..... 250.12

Bridge House north to Folsom.

Scott ranch, 2.2 miles south of, on Sacramento-Latrobe road, at gate to private road from south; iron post stamped "184 B 1908 9"..... 184.400

Scott ranch, 1.6 miles south of, 20 feet west of road, 0.4 mile north of angle in road, in notch in base of 36-inch oak tree; nail with aluminum tag stamped "206 22"..... 206.02

Scott ranch, 1 mile north of, 60 feet west of road, in large boulder; tablet stamped "198 B 1908 8"..... 197.993

Scott ranch, 1.7 miles north of, 200 feet north of private road from west, east of road, in notch in root of 48-inch oak tree; nail scribed and painted "U. S. B. M. 211 20"..... 210.96

Scott ranch, 3.6 miles north of, 100 feet south of big bridge, at east edge of road, in ledge; aluminum tablet stamped "225 1908 B 11"..... 225.423

Folsom, 5 miles south of, 100 feet east of intersection of roads, in center of road; point on large boulder painted "U. S. G. S. B. M. 341 25"..... 341.57

Folsom, 3 miles south of, 60 feet south of Alder Creek bridge, at east edge of road; iron post stamped "237 B 1908 12"..... 237.467

Folsom, northeast corner of Catholic Church lot; iron post stamped "224 B 1908 13"..... 223.998

Folsom, in front of station; top of rail..... 193.5

Folsom west to Fairoaks.

Orangevale, 0.5 mile west by 2 miles south of, at intersection of roads; iron post stamped "246 B 1908 15"..... 246.043

Fairoaks, 2.9 miles northeast of, northwest angle of crossroads, in notch in base of 15-inch oak tree; nail with aluminum tag stamped "249 32"..... 248.81

Folsom southwest along road via Natoma to Salisbury.

Folsom, 100 feet east of bridge over American River, in top of large flat boulder; aluminum tablet stamped "162 B 1908 14"..... 162.109

Folsom, 0.7 mile west of, north of road, at fence line (U. S. Corps of Engineers¹ bench mark "58 1885")..... 185.01

Folsom, U. S. Corps of Engineers bench mark No. 57..... 180.804

Folsom, 3.3 miles west of, north of road, at fence line; iron post stamped "167 7 B. M. 51" (U. S. Corps of Engineers bench mark No. 51)..... 164.182

Folsom, 3.5 miles west of, stone bridge over Alder Creek, southeast corner of granite guard; aluminum tablet stamped "155 B 1908 B. A. 1"..... 155.374

¹Locally known as U. S. Engineer Department.

Natoma, 0.7 mile west of, south of road, at fence line; iron post stamped "139 7 B. M. 43" (U. S. Corps of Engineers bench mark No. 43).....	Feet. 136. 179
Natoma, 1.7 miles west of, south of road, at fence line; iron post stamped "127 3 B. M. 41" (U. S. Corps of Engineers bench mark No. 41).....	123. 787
Natoma, 2 miles west of, southeast corner of bridge over Buffalo Creek, top of granite guard; aluminum tablet stamped "129 B 1908 B. B. 1".....	129. 162

Point near Roseville east and south to Orangevale.

Roseville, 0.4 mile south by 1.9 miles east of, south of road, at fence line, on boulder; chisel point painted "237 B. M. 100".....	237. 11
Orangevale, 5.5 miles north of, south of road junction, in fence corner; iron post stamped "236 B 1908 B. Y.".....	235. 708
Orangevale, 4 miles north of, at junction of road, 50 feet south of bridge at fence corner, in base of 24-inch oak tree; spike with aluminum tag stamped "195 B. M. 102".....	195. 32
Orangevale, 2.5 miles north of, east of road, at junction, in fence corner, 500 feet south of white house; iron post stamped "203 B 1908 B. Z."....	203. 293

Courtland 15' quadrangle; Bouldin, Isleton, Jersey, and Rio Vista 7½' quadrangles.

CONTRA COSTA, SACRAMENTO, SAN JOAQUIN, SOLANO, AND YOLO COUNTIES.

The elevations in the following list are based on the results of precise leveling along the Southern Pacific Railroad and along the Sacramento River, and accord with the results published in Bulletin 342.

The leveling was done in 1905 by R. A. Farmer, in 1906 by C. L. Nelson, and in 1908 by B. A. Jenkins in cooperation with the State.

COURTLAND 15' QUADRANGLE.

Tremont east 4 miles, thence south 6.5 miles, east 2 miles, south 3 miles, and west to Binghamton.

Bulkey's ranch, southeast corner of yard, west side of road; iron post stamped "34 B".....	Feet. 34. 123
Hance Timm's house, 400 feet southeast of, west side of road; iron post stamped "31 B".....	31. 334
Jud King's ranch house, 0.5 mile west of, southeast corner of sec. 36, T. 7 N., R. 2 E., southeast corner of field; iron post stamped "21 B".....	20. 708
T. 6 N., R. 2 E., near northeast corner of sec. 24, southeast corner of pasture fence; iron post stamped "8 B".....	7. 409
T. 6 N., R. 2 E., 1 mile east by 0.25 mile north of Peter's house, southeast corner of field; iron post stamped "17 B".....	17. 121

Jud King's ranch house east 2 miles (double spur line).

Jud King's ranch house, 2 miles east of, on north and south fence line, 50 feet east of levee, 150 feet southeast of dead tree on levee; iron post stamped "9 B".....	8. 777
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Bench mark at forks of Sutter and Steamboat sloughs.

Forks of Sutter and Steamboat sloughs, 0.7 mile north of, 0.25 mile north-west of H. M. Donaldson's ranch house, 300 feet west of Sutter Slough, in northwest corner of Orchard lot; iron post stamped "6 1906 B. N."..	5. 916
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Courtland southeast to Walnut Grove.

Grand Island, at head of Steamboat Slough, 0.5 mile north of bridge, at Kercheval House; zero of gage (below sea level)	Feet. -4.398
Grand Island Bridge, 3 miles east of, 100 feet southeast of schoolhouse, 0.25 mile northwest of pump house, at southeast corner of yard, west side of road; iron post stamped "-2 B. N. 1906" (below sea level).....	-2.498

Courtland north, east, and southeast to Pierson District creamery, thence east to Franklin road.

Courtland, 1.2 miles north of, at east edge of levee, 15 feet south of school, in 24-inch oak tree; nail with aluminum tag stamped "17 41".....	16.274
Franklin, 4.3 miles southwest by 5 miles west of, on south edge of second-class road, 600 feet southeast of creamery, in pyramid on root of 30-inch oak tree; nail with aluminum tag stamped "6 39"	5.54

BOULDIN, ISLETON, JERSEY, AND RIO VISTA 7½ QUADRANGLES.**Tolands Landing south across Sherman Island to north bank of San Joaquin River, thence west to Antioch.**

Tolands Landing, 3.9 miles south of, at south end of road crossing Sherman Island southward from Tolands Landing, at turn 0.5 mile south of pump house, 100 feet north of San Joaquin River, south of road, 0.25 mile east of house; iron post stamped "-1 1906 B. N." (below sea level).....	-1.477
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Bench mark at northeast corner of sec. 9, T. 4 N., R. 2 E.

T. 4 N., R. 2 E., corner of secs. 11, 12, 13, and 14, east side of road; iron post stamped "19 B"	18.900
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Rio Vista north by Steamboat Slough and Sutter Slough to fork of Sutter and Steamboat sloughs.

Rio Vista, 3.7 miles north of, 0.8 mile south of Westgate's place, 250 feet west of river, 200 feet west of house on north side of road; iron post stamped "-1 B. N. 1906" (below sea level).....	-1.130
Walkers Landing, 0.7 mile north of, west side of road, 150 feet west of Steamboat Slough, 250 feet northwest of J. Hollenbeck's house; iron post stamped "4 1906 B. N.".....	3.600

Walnut Grove south along east side of Tyler Island and west to Rio Vista.

Tyler Island, east side of road across island, 200 feet west of Mokelumne River, on ranch "J" of Bauman property, 0.25 mile south of pump house; iron post stamped "-1 N 1906" (below sea level).....	-1.088
Camp C, 140 feet east of house, 100 feet north of Mokelumne River, 100 feet northwest of barn; iron post stamped "0 1906 B. N." (below sea level) ..	-0.282
Tyler Island ferry landing, 150 feet west of, north side of road, 50 feet west of saloon; iron post stamped "3 1906 B. N.".....	3.040

Point 5.1 miles southwest of Bracks Landing via Brack's pump house and Staten Island to Brannan's ranch "J."

Tyler Island, east of road, 200 feet west of Mokelumne River, on ranch "J" of Brannan's property, 0.25 mile south of pump house; iron post stamped "-1 1906" (below sea level).....	-1.088
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Hagansville southwest along North Fork of Mokelumne River to Golden State cannery, thence south and west to Andrus Island pump house, thence north to Isleton.

	Feet.
Hagansville, 250 feet east of Staten Island pump house, on bridge across canal; bolt head painted "U. S. -4 B. M. 36" (below sea level).....	-3. 70
Staten Island pump house, 1.8 miles south of, 20 feet south of house, camp 8, at corner of garden; iron post stamped "-1 B 1908 20" (below sea level).....	-1. 274
Golden State cannery, 100 feet south of, in cottonwood tree; aluminum tag stamped "4-47" (U. S. Corps of Engineers ¹ bench mark 26).....	3. 91
Golden State cannery, 1 mile south of, at southeast corner of China House 100 feet west of Mokelumne River; iron post stamped "-2 B 1908 21" (below sea level).....	-1. 840
Golden State cannery, 1.7 miles southwest of, at angle in canal, 1 mile west of pumping plant; aluminum tag stamped "-8 48" in post painted "U. S. -8 B. M." (below sea level).....	-8. 58
Andrus Island, at Jackson Dam, where Isleton road leaves levee and where Jackson Slough joined main slough before it was drained off, 50 feet west of house, 10 feet west of road; iron post stamped "-1 B 1908 22" (below sea level).....	-1. 229
Isleton, 1.8 miles south of, where road to Golden State cannery leaves Jackson Slough, 50 feet north of barn, at road angle; iron post stamped "B-1908 -1 23" (below sea level).....	-0. 962

Jackson and Lodi 30' quadrangles.

AMADOR, SACRAMENTO, AND SAN JOAQUIN COUNTIES.

The elevations in the following list are based on the results of precise leveling along the Southern Pacific Railroad from Benicia across the Galt and Woodbridge quadrangles.

The leveling was done in 1907 by B. A. Jenkins, except for a portion of that in the Jackson and Lodi quadrangles done by L. F. Biggs, the latter employing yard rod and prism level, and the former the ordinary Y level.

The work was done in cooperation with the State.

JACKSON 30' QUADRANGLE.

Carbondale northeast 4 miles, thence northwest to point 2 miles east of Michigan Bar.

Michigan Bar, 3.6 miles east of, north side of road, 15 feet south of fence; iron post stamped "BB 1907 5 255".....	Feet. 254. 849
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LODI 30' QUADRANGLE.

Florin east 3.5 miles.

Florin, 3.5 miles east of, at intersection of roads; iron post stamped "B 32 1907 63".....	63. 477
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Elk Grove east and northeast along Grant Line road.

Elk Grove, 50 feet west of station; iron post stamped "B 49 1907".....	49. 289
Sheldon, at road corner, 50 feet south of Sheldon saloon; iron post stamped "B 1907 73 31".....	73. 523

Galt northeast along road 5.4 miles to point 1.7 miles west of Conley.

Conley, 1.7 miles west of, at intersection of roads; iron post stamped "B 1907 62 22".....	61. 881
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¹ Locally known as U. S. Engineer Department.

Point south of Arno west via Bruceville schoolhouse to crossing of Stockton road and Western Pacific Railway, thence north via Franklin to point 2 miles north of Union schoolhouse and east to Florin.

Bruceville, 20 feet west of schoolhouse, at edge of steps over fence; iron post stamped "B 1907 21 No. 34"	Feet. 21. 167
Franklin, corner of Masonic Hall; aluminum tablet stamped "B 1907 18 35"	18. 470
Franklin, 6.7 miles north of, 20 feet north of schoolhouse, in angle of fence; iron post stamped "B 1907 15 36"	15. 340

Stockton road crossing on Western Pacific Railway west 3 miles to point 4.3 miles south by 3 miles west of Franklin.

Franklin, 4.3 miles south by 3 miles west of, at southeast corner of bridge across slough; iron post stamped "B 1907 5 37"	4. 814
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Point 2 miles east of Michigan Bar west along road via Liveoak and Slough House to Grant Line, thence along Grant Line road to point 4 miles northeast of Sheldon.

Michigan Bar, northwest corner of schoolhouse; iron post stamped "BB 1907 6 333"	333. 368
Bridge House, 1.4 miles north of, west side of road, 75 feet east of house on summit of rise, at fence corner; iron post stamped "BB 1907 7 154"	154. 383

Road intersection 1.7 miles west of Conley north to Slough House.

Slough House, 13.2 miles southwest of, where first road from W. & R.'s colony intersects road; iron post stamped "B 1907 73 27"	73. 169
Slough House, 6.1 miles southwest of, in front of ranch house, west side of road; iron post stamped "B 1907 123 28"	123. 471
Slough House, 0.8 mile southeast of, in top of south pier of McCracken's bridge; bronze tablet stamped "B 1907 113 29"	113. 477

Point near Conley northeast along road to Carbondale.

Conley, 200 feet northeast of station, railroad crossing; top of rail	74. 8
Clay, northwest corner of schoolhouse; iron post stamped "BB 1907 105 23"	105. 291
Clay, 11 miles northeast of, 200 feet south of Alabama House, at junction of road to Clay, at fence corner; iron post stamped "BB 1907 237"	236. 695
Carbondale, in front of station; top of rail	214. 0

Liveoak south via Wilbur to Alabama House.

Alabama House, 3.5 miles northwest of, 250 feet west of junction of road, 2 feet west of gatepost; iron post stamped "BB 1907 2 180"	180. 109
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Point near Wilbur west along road to point 2.5 miles north of Clay.

Alabama House, 6.9 miles west of, 1.4 miles west of Weiss ranch house, junction of road, south side of road, at fence line; iron post stamped "BB 3 1907 141"	140. 826
Clay, 3.8 miles northeast of, west side of road, 10 feet south of gate to ranch house, 25 feet west of gate to Mound ranch, at junction of road from Slough House to Clay; iron post stamped "BB 1907 4 113"	112. 150
Clay, 2.5 miles north of, where lane from house intersects road; iron post stamped "B 1907 33 103"	103. 260

New Grant gate south to point 1.7 miles south of Dry Creek schoolhouse.

Swifts ranch, 400 feet west of ranch house, 10 feet north of road; iron post stamped "B 1907 153 25"	153. 218
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Bench mark at Tree East triangulation station (by double spur line in 1908).

Slough House, 1 mile southwest of Tree East triangulation station, on land owned by Archie Mull, on Jackson road from Sacramento, near Cosumnes post office, at foot of tree, on west side of road, about 16 inches above ground; iron post.....	Feet. 189. 819
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Lodi east along wagon road to Lockeford, thence north to Dry Creek.

Lodi, 1.2 miles south of, east of railroad at crossing, north of road, at angle of fence; iron post stamped "45".....	45. 286
Lodi, 3.6 miles east of, where road from south joins Lodi-Lockeford road, angle of fence; iron post stamped "B 1907 72".....	71. 523
Lockeford, 5.8 miles north of, southwest corner of Elliott schoolhouse grounds; iron post stamped "B 1907 105 15".....	105. 089

Elliott west along road to cemetery entrance.

Galt, 4.6 miles east of, at intersection of roads; iron post stamped "B 1907 64 16".....	63. 619
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Lockeford east along wagon road to Clements, thence north to point 1.7 miles south of Dry Creek schoolhouse.

Clements, 4.4 miles north of, 20 feet west of road in front of deserted house; iron post stamped "B 1907 214 26".....	213. 752
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Lockeford south along wagon road to Farmington road.

Lockeford, 4 miles south of, where Lodi-San Andreas road crosses Lockeford-Stockton road, 40 feet southeast of, at fence corner; iron post stamped "B 1907 80 9".....	79. 459
Lockeford, 8 miles south of, angle of fence at intersection of roads; iron post stamped "B 1907 72 10".....	71. 583
Farmington, near junction with Farmington road; iron post stamped "67".....	66. 551

Clements south along wagon road to point near Peters.

Clements, 8 miles southeast of, at section corner on north side of road; iron post stamped "B 1907 194 13".....	193. 802
Bellota, northeast corner of post office; iron post stamped "B 1907 130 14".....	130. 232
Peters, near southeast corner of junction of Peters-Linden road; iron post stamped "102".....	101. 825

Galt west along road via New Hope to Walnut Grove.

Galt, 3.5 miles west of, north side of road, 200 feet east of intersection of fence from north; iron post stamped "B 1907 29 17".....	28. 467
New Hope, Don Ray & Co. store, southwest corner of cement porch; aluminum tablet stamped "B 1907 13 18".....	12. 954
New Hope, Don Ray & Co. store, south door of; center of metal doorsill (county bench mark).....	13. 36

Lodi west along road via Woodbridge to Brack's Landing.

Lodi, northwest corner of opera house; aluminum tablet stamped "B 1907 50.21".....	50. 504
Woodbridge, northwest corner of Masonic Hall; aluminum tablet stamped "B 1907 45 19".....	45. 805
Woodbridge, 3 miles west of, intersection of roads; iron post stamped "B 1907 29 20".....	29. 049

Spur from Brack's Landing west 5 miles to point near pumping plant (stopped by overflow).

Brack's Landing, southeast corner of warehouse; iron post stamped "B 1907 6 41"	Feet. 6. 108
Brack's Landing southeast to Kettleman's ranch, thence east to Southern Pacific Railroad milepost 99.	
Brack's Landing, 4.7 miles south of, on Terminus road, north side of road, 400 feet west of levee; iron post stamped "B 1907 38" (erroneously stamped 4)	1. 003
Brack's Landing, 9.6 miles southeast of, 500 feet south of Kettleman's ranch house, in fence corner; iron post stamped "1907 B 9 39"	8. 722
Intersection of Eightmile House and Lower Sacramento roads south to Fivemile House, thence east to Southern Pacific Railroad and north along railroad to milepost 97.	
Fivemile House, 1,000 feet north of, west edge of Lower Sacramento road where lane from west intersects; iron post stamped "B 1907 13 40"	13. 063
Lodi, 7.2 miles south of, 15 feet north of milepost 97; iron post stamped "B 1907 28"	28. 111
Galt southeast and east to road intersection 1 mile east of entrance to cemetery.	
Galt, 30 feet west of track, on line with north end of station; iron post stamped "B 1901 46"	45. 576
Byron and Tracy 15' quadrangles; Holt, Lathrop, Stockton, and Union Island 7½' quadrangles.	

ALAMEDA, CONTRA COSTA, SAN JOAQUIN, AND STANISLAUS COUNTIES.

The elevations in the following list are based on the precise line from Benicia by C. H. Semper.

Most of the leveling was done by L. F. Biggs in 1910, although a part of that in the Byron quadrangle was done in 1907 by B. A. Jenkins. The State cooperated in the work.

HOLT, LATHROP, STOCKTON, AND UNION ISLAND 7½' QUADRANGLES.

Banta west and north to Grant Line bridge, thence southwest to point 0.8 mile south of pump house.

Banta, 1 mile west of, north side of road, in base of telephone pole 42/9; spike with aluminum tag stamped "31"	Feet. 31. 33
Banta, 1.5 miles west of, at T road south, in base of telephone pole 41/29; spike with aluminum tag stamped "33"	33. 04
Banta, 3 miles west of, at T road south to Tracy, in base of telephone pole 40/12; spike with aluminum tag stamped "27"	27. 32
Banta, 3.5 miles west of, at T road north; in base of telephone pole 39/31; spike with aluminum tag stamped "27"	26. 91
Tracy, 2 miles north of, 600 feet north of Bagley's ranch house, east of road at fence corner; iron post stamped "9, 1910, 1"	9. 471
T. 1 S., R. 5 E., corner of secs. 5, 9, 4, and 8, in base of post; spike with aluminum tag stamped "5"	5. 11
Tracy, 3.5 miles north of, 1 mile south of Naylee schoolhouse, where road turns north, in root of poplar tree; copper nail with aluminum tag stamped "7"	6. 89

Tracy, 4.5 miles north of, 50 feet north of Naylee schoolhouse, 200 feet south of Old River steel bridge, west side of road; iron post stamped "11, 1910, 2".....	Fect. 11. 449
Grant Line steel bridge, on southeast corner of abutment; chisel point painted "18".....	18. 03
Grant Line steel bridge; 22.5 foot mark on gage.....	14. 41
Grant Line steel bridge, 2.5 miles west of, 175 feet south of levee, 150 feet south of pump house, on fence line; iron post stamped "2, 1910, 3".....	1. 724

Grant Line bridge north and east to Stockton.

Grant Line bridge, 2.5 miles north of, south side of road, where road crosses levee; iron post stamped "2, 1910, 10".....	1. 489
Grant Line bridge, 2 miles north by 1 mile east of, north side of road; spike in base of corner fence post; aluminum tag stamped "3".....	2. 92
Bridge over Middle River, 200 feet east of, at T road north; iron post stamped "6, 1910, 11".....	5. 603
Middle River, surface of water under bridge November 2, 1910.....	0. 14
Middle River bridge, 2.3 miles east of, 0.6 mile south of Fairchild schoolhouse, at T road south; spike in base of telephone pole, marked "6"....	5. 78
Fairchild schoolhouse, 1.2 miles north of, 2.5 miles southwest of San Joaquin bridge, opposite road house; iron post stamped "2, 1910".....	1. 460
San Joaquin River, surface of water under bridge November 2, 1910.....	0. 1
San Joaquin Bridge, 60 feet east of, north side of road, at fence line; iron post stamped "7, 1910".....	7. 156
Stockton, 2 miles south of, at junction of French Camp and Roberts Island roads, west levee of canal; spike in base of telephone pole; aluminum tag stamped "16".....	15. 37
Stockton, south edge of town, junction of South Center and East Jackson streets; spike in base of telephone pole; aluminum tag stamped "13".....	12. 46
Stockton, west door of north entrance of San Joaquin County courthouse, in angle of wall; bronze tablet stamped "18 B".....	17. 953

Holt along road north to Black Slough Landing (unchecked spur line).

Holt, 300 feet west of station, south edge of right of way, east edge of road leading south; iron post stamped "10, 1910, 15".....	9. 935
Black Slough Landing, south of, southwest corner of bridge over canal; top of bolt painted "-3" (below sea level).....	-1. 40
Black Slough Landing, 90 feet northeast of Gorden's house, on edge of levee, San Joaquin River; brass-capped pipe marked "U. S. E. D. No. 206".....	11. 327

Middle River west and north along road to Holt.

Kingston schoolhouse, 300 feet northeast of, at angle of road to north, west side of road at fence line; iron post stamped "7, 1910, 14".....	6. 422
Stockton, 5.8 miles west of, 200 feet east of milepost 1127, on levee at fence corner; iron post stamped "9".....	8. 805

Point 1.5 miles north of Stockton west to U. S. Corps of Engineers' bench mark 0.2 miles east of Shipyard Island (checked spur line).

Stockton, 1.5 miles north of, 8 feet north of milepost 94, east side of track, near fence line; iron post stamped "20 B" (United States Corps of Engineers value 23.388).....	20. 075
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¹ Locally known as U. S. Engineer Department.

Stockton, 2 miles north of, southwest abutment of bridge over Calaveras River; top of bolt head marked "27".....	Feet. 26. 81
Western Pacific crossing; top of rail.....	28. 5
Stockton, 2 miles north of, on lower Sacramento road, 6 feet south of southeast abutment of bridge over Calaveras River; copper bolt in cap with aluminum tag stamped "19".....	19. 362
Lower Sacramento road bridge, 1.2 miles west of, north levee of canal, 200 feet southwest of fence corner, in stump; copper nail with aluminum tag stamped "20".....	20. 290
Lower Sacramento road bridge, 2.5 miles west of, north edge of levee, at northeast corner of house at Smith's place; iron post stamped "3".....	3. 372
Smith's house, 1 mile west of, spike in base of power pole 5/15; aluminum tag stamped "-1" (below sea level).....	-1. 146
Elmwood Farm No. 2, 800 feet east of barn; spike in base of power pole 6/7; aluminum tag stamped "2".....	1. 683
Shipyard Island, 0.5 mile east of, east bank of San Joaquin River, at pumping station, in top of a pile; copper bolt with aluminum tag stamped "8".....	8. 307
Shipyard Island, 0.2 mile east of, right bank of San Joaquin River, 40 feet back of levee midway between house and barn; iron post marked "U. S. E. D. No. 205" (United States Corps of Engineers value 4.770).....	0. 996

Point 2.5 miles north of Grant Line bridge to Camp No. 1 Landing.

Victoria Island, 0.5 mile east of, 40 feet south of Middle River levee, 5 feet south of red tank house; iron post stamped "4, 1910, 17".....	4. 302
Camp No. 1 Landing, on top of levee, 50 feet north of barn in top of snubbing post; copper nail, with aluminum tag stamped "16".....	16. 40

Point 2.3 miles east of Middle River southeast to French Camp.

Brant Bridge, south end abutment of; aluminum tablet stamped "21, 1910, 30".....	20. 639
Brant Bridge, 1.2 miles east of, at T road south, in telephone pole; spike with aluminum tag stamped "11".....	10. 92
French Camp, 1.3 miles south of, east side of road at T road west, in base of locust tree; spike with aluminum tag stamped "18".....	17. 27
French Camp, 2.1 miles south of, on east side of railroad at road crossing, 200 feet south of milepost 85; iron post stamped "19 B 1901".....	18. 971

TRACY 15' QUADRANGLE.

Point 1 mile west of Ellis south and west to San Joaquin Bridge, thence northwest to Banta.

Ellis, 2 miles south of, at Western Pacific Railway crossing; spike in base of telephone pole; aluminum tag stamped "168".....	168. 22
T. 3 S., R. 5 E., corner of secs. 4, 5, 8, and 9, 2.5 miles south by 1 mile west of Tracy, at Western Pacific Railway crossing; iron post stamped "148, 1910, 5".....	148. 371
Tracy, 3.5 miles south by 1 mile west of, 2 miles south of Jefferson schoolhouse, at railroad crossing; spike in base of telephone pole; aluminum tag stamped "199".....	198. 99
Tracy, 4.5 miles south by 1 mile east of, at crossroads; iron post stamped "140, 1910, 6" (T. 3 S., R. 5 E., corner of secs. 14, 15, 22, and 23).....	139. 628
San Joaquin Bridge, 4 miles west of, at Southern Pacific crossing; spike in base of telephone pole; aluminum tag stamped "83".....	83. 14
San Joaquin Bridge, 0.5 mile west of, at T road; iron post stamped "45, 1910, 7".....	47. 155

San Joaquin Bridge, 1 mile northwest of, east side of road, at second-class road to east; spike in base of telephone pole; aluminum tag stamped "41".....	Feet. 43. 19
San Joaquin Bridge, 2 miles northwest of, opposite T road west, in base of telephone pole, scribed and painted "33;" spike.....	35. 32
San Joaquin Bridge, 4 miles northwest of, 5 miles southeast of Banta, east side of road, opposite power pole 19/2; iron post stamped "37, 1910, 8".....	39. 227
Banta, 3.7 miles southeast of, at crossroads; spike in base of telephone pole; aluminum tag stamped "31".....	33. 14
Banta, 2.5 miles southeast of, opposite second-class road west; spike in base of telephone pole; aluminum tag stamped "23".....	24. 48
Banta, 1.9 miles southeast of, at Western Pacific Railway crossing; spike in base of telephone pole; marked "19".....	20. 75
Banta, 1 mile southeast of, at T road to east; spike in base of telephone pole; aluminum tag stamped "18".....	20. 11
Banta, 10 feet north of milepost 75, south side of track; iron post stamped "22.181".....	22. 119

Point 1 mile west of Ellis east to Tracy.

Ellis, 1 mile west of, 4 feet north of milepost 69; iron post stamped "102.656 B".....	102. 594
Tracy, 2 miles west of, at road crossing; spike in base of telephone pole; aluminum tag stamped "67".....	66. 93
Tracy, 1 mile west of, spike in base of milepost 71; aluminum tag stamped "65".....	64. 72
Tracy, 0.4 mile north of station, 4 feet north of milepost 72, on fence line north side of track; iron post stamped "54, 1910, 8".....	53. 875

Point 3 miles west of Banta south to Tracy.

Banta, 3 miles west of, at T road south to Tracy; spike in base of telephone pole 40/12; aluminum tag stamped "27".....	27. 26
Tracy, 0.4 mile north of station, 4 feet north of milepost 72, at fence line; iron post stamped "54, 1910, 8".....	53. 875

BYRON 15' QUADRANGLE.

Bethany Ferry to Bethany.

Bethany, 100 feet east of station, on edge of right of way; iron post stamped "36, 1910, 4".....	36. 145
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Point 1 mile west of Camp No. 1 Landing to Bixler.

Camp No. 1 Landing, 1 mile west of, south bank of canal, 10 feet south of pumping plant, in top of pile; copper nail with aluminum tag stamped "2".....	2. 42
Old River Farms Co. Landing No. 5, 800 feet east of, south edge of levee at road leading south, 40 feet east of canal, 50 feet south of pump house; iron post stamped "2, 1910, 18".....	1. 727
Old River Farms Co. Landing No. 3, 50 feet north of office, in base of telephone pole; spike with aluminum tag stamped "7".....	6. 77
Coney Island, upper end of, 1,000 feet south of edge of east levee of old river, 150 feet south of warehouse, 5 feet north of old building; iron post stamped "7, 1910, 19".....	7. 158
Old Ferry, 1 mile north of, west bank of canal, northwest corner of house, in root of willow tree; copper nail with 0 aluminum tag stamped "1".....	0. 65
Mouth of Italian Slough, north levee, at landing; nail in top of snubbing post; aluminum tag stamped "11".....	11. 02

Italian Slough, 0.7 mile north of, at junction of road west to Byron, at west edge of levee, near northwest corner of house; iron post stamped "1, 1910, 24"	Feet. 1. 356
Italian Slough, 2 miles north of, west levee of Old River, 10 feet south of house, in root of willow tree; copper nail with aluminum tag stamped "0"	0. 59
Mansion House, 1.3 miles south of, west levee of Old River, 20 feet north of old house, in base of willow tree; spike with aluminum tag stamped "1"	1. 45
Mansion House, 1,000 feet north of, west levee of Old River, opposite canal between Victoria and Woodward Island, at northeast corner of old house; iron post stamped "3, 1910, 25"	2. 952
Mansion House, 1.3 miles west of, south bank of Indian Slough, at pump house, in base of power pole; spike with aluminum tag stamped "2" ..	1. 77
Mansion House, 2.5 miles west of, 2 miles south and 1 mile east of Bixler, 200 feet south of white house, 40 feet west of Indian Slough, at end of lane; iron post stamped "6, 1910, 26"	6. 584
Bixler, 2 miles south of, at crossroads, in base of gum tree; spike with aluminum tag stamped "12"	11. 93
Bixler, 1 mile south of, at crossroads, in base of power pole 0/20; spike with aluminum tag stamped "9"	9. 61

Bethany north and west to Oakley.

Bethany, 1.5 miles northwest of, at T road west, in base of telephone pole; spike with aluminum tag stamped "43"	42. 78
Mountain House school, 0.5 mile north by 1 mile west of, at T road north to Billy Campbell's ranch; iron post stamped "76, 1910, 20"	75. 781
Byron, 5.2 miles south of, at power line crossing, in base of power pole 68/12; spike with aluminum tag stamped "81"	81. 20
Byron, 3 miles southeast of, at junction of road to south, in base of power pole 1/8; spike with aluminum tag stamped "14"	13. 72
Byron, 1.5 miles south of, at junction of road to Byron Hot Springs, east of railroad right of way; iron post stamped "23, 1910, 21"	23. 171
Byron, south edge of town, 200 feet south of railroad crossing, in base of power pole 4/12; spike with aluminum tag stamped "25"	25. 43
Byron, 2 miles west of, at junction of road to west, on fence line; iron post stamped "165, 1910, 22"	164. 891
Byron, 3 miles west by 2 miles north of, 1,500 feet east of Marsh Creek bridge, 700 feet east of junction of Martinez and Brentwood roads, 150 feet north of road at point of hill, in bowlder outcrop; aluminum tablet stamped "209, 1910, 23"	208. 856
Brentwood, 0.5 mile southwest of, 800 feet south of storehouse west of road, in base of 60-inch oak tree; spike with aluminum tag stamped "160"	159. 98
Stone House, 1 mile north of, west bank of Marsh Creek, 100 feet south of windmill, in base of sycamore tree; spike with aluminum tag stamped "111"	111. 34
Stone House, 2 miles north of, 60 feet west of Marsh Creek, 2 feet west of house; iron post stamped "27 1910 100"	100. 723
Brentwood, 1 mile west of, west abutment of steel bridge over Marsh Creek; aluminum tablet stamped "81, 1910, 28"	81. 119
Brentwood, 1.5 miles northwest of, in base of milepost 81, Southern Pacific Railroad; spike with aluminum tag stamped "82"	82. 60
Brentwood, 2 miles northwest of, at road crossing, east of right of way; iron post stamped "95, 1910, 29"	95. 249

Ohara, 0.5 mile southeast of, at junction of road to north, in base of telephone pole; spike with aluminum tag stamped "84".....	Feet. 84.22
Oakley, 1 mile west of, at crossroads, in base of power pole 18/14; spike with aluminum tag stamped "28".....	29.50
Oakley, west end of station, 30 feet south of track; iron post stamped "19".....	19.180

Middle River northeast to Empire Cut (unchecked spur line).

Middle River, 1 mile north of, in base of power pole 1/3; spike with aluminum tag stamped "-2" (below sea level).....	-1.947
Middle River, 1.8 miles northeast of, west side of bridge over slough, in floor; copper nail marked "1".....	0.868
Middle River, 3 miles northeast of, at Empire Cut Landing No. 12, in base of power pole 3/8; spike marked "-0" (below sea level).....	-0.060
Middle River, 3 miles northeast of, at Empire Cut Landing No. 12, in base of power pole 3/9; spike marked "0".....	0.255

Tule west along Atchison, Topeka & Santa Fe Railway to point 3 miles east of Antioch.

Tule, in front of signboard; top of rail.....	11.3
Middle River, in front of station; top of rail.....	16.1
Middle River, at southeast corner of cannery; iron post stamped "B 1907 3, 3".....	3.292
Orwood, in front of station; top of rail.....	13.8
Werner, in front of signboard; top of rail.....	12.0
Bixler, in front of signboard; top of rail.....	15.0
Bixler, 200 feet southeast of signboard, at road corner, 20 feet east of section corner; iron post stamped "B 1907 15 4".....	14.322
Knightsen, west end of station, 40 feet south of track; iron post stamped "B 1907 27 5".....	26.460
Oakley, in front of station; top of rail.....	18.4

Dunnigan 15' quadrangle; Knights Landing, Lincoln, Marcuse, Nicolaus, Pleasant Grove, Rocklin, Roseville, Sheridan, and Vernon 7½' quadrangles.**COLUSA, PLACER, SUTTER, AND YOLO COUNTIES.**

The following elevations are based upon results of precise leveling along the Southern Pacific Railroad published in Bulletin 342.

The leveling in the Dunnigan quadrangle was done in 1904 by C. H. Semper and in 1908 by W. H. Monahan; in the Marcuse, Nicolaus, Knights Landing, and Vernon quadrangles in 1904 by Semper, in 1905 by G. C. Douglas, and in 1908 by L. F. Biggs and Monahan; in the Lincoln, Pleasant Grove, Roseville, and Sheridan quadrangles in 1908 by Biggs and Monahan; and in the Rocklin quadrangle in 1908 by Biggs. The work was done in cooperation with the State.

DUNNIGAN 15' QUADRANGLE.**Hershey southeast along Southern Pacific Railroad to Yolo.**

Hershey, 50 feet west of track, at road crossing, 50 feet north of Colusa-Yolo County line; iron post stamped "137 B".....	Feet. 137.126
Dunnigan; 60 feet north of station, at edge of park fence; iron post stamped "67 B".....	67.018

	Feet.
Dunnigan, 3.2 miles south of, 50 feet east of milepost 101, 60 feet east of track, at road crossing; iron post stamped "45 B"	44.955
Zamora (Blacks Station post office), 0.6 mile north of, 0.2 mile south of milepost 98, east of track, at corner of fence on right of way at public road crossing, sec. 17, T. 11 N., R. 1 E.; iron post stamped "46 B"	45.841
Ronda station, east of track at corner of right of way fence at road crossing near milepost 94.7; iron post stamped "54 B"	54.193

College City southeast and south to point near Dunnigan.

John's school, 1.1 miles north of, fence at southeast angle of crossroads; iron post stamped "43 B"	43.017
Spanish ranch house, 1.6 miles north of, south side of county line, at entrance to ranch; iron post stamped "47 B"	47.024
Vombreyman's ranch, at fence line, northeast angle of road to north; iron post stamped "36 B"	35.702

Sam Hines ranch via Howell Point to Rough and Ready Landing.

Wilkins Slough school, at west end of fence, road in front of school; iron post stamped "32 B"	32.140
Wilkins Slough school, 2.3 miles south of, at road to J. M. Miller's ranch house; iron post stamped "34 B"	34.163
Howells Point, entrance to landing, Yolo-Colusa County line; iron post stamped "37 B"	37.383
Howells Point, 1.8 miles south of, gate leading to Ern Miller's ranch house; iron post stamped "31 B"	31.071
Rough and Ready Landing, at junction of canal and river, south side of canal, 40 feet west of large oil tank; iron post stamped "40 B"	40.633

Knights Landing west 4.9 miles, thence north to Rough and Ready Landing.

Blacks Station post office, 4.3 miles east of, at crossroads to Yolo and Grimes Landing, northeast corner angle of roads; iron post stamped "41 B"	41.177
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Zamora (Blacks Station post office) east 4.3 miles.

Blacks Station post office, 2.5 miles east of, at corner of gate to barnyard of F. Schliemann's ranch house; iron post stamped "49 B"	49.093
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Dunnigan southwest and south along county road to point near Brimley ranch.

Brimley ranch, 1 mile north of, summit between Dunnigan and Fairview schoolhouse, east side of road; iron post stamped "333 B"	333.203
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Point 6.3 miles west by 1 mile north of Marcuse via Kirkville to point near Sutter School.

Kirkville, 2.5 miles south of, 3 miles north of Sutter schoolhouse, at angle in road at east side, 500 feet south of deserted building, where road turns east from river 0.5 mile in angle of road and north again 2 miles south of Perry Hyatt's place; iron post stamped "Prim. Trav. Sta. No. 160 CAL 1908 33"	32.860
Sutter schoolhouse, in county road, 2 feet from fence near northeast corner of schoolhouse yard; iron post stamped "Prim. Trav. Sta. No. 161 CAL 1908 36"	35.744

Kirkville north by road to point 3.6 miles north of Salem School.

Kirkville, 2 miles north of, east of road which passes through small grove of oak trees, 0.5 mile south of Mr. Correll's place, at base of small oak tree; iron post stamped "Prim. Trav. Sta. No. 200 1908 28"	28.259
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Salem school, 1.4 miles north of, on east side of road, under large black-oak tree, 2,000 feet north of H. Poffenberger's place; iron post stamped "Prim. Trav. Sta. No. 210 CAL 1908 42"..... Feet.
42. 411

KNIGHTS LANDING, MARCUSE, NICOLAUS, AND VERNON 7½' QUADRANGLES.

Rough and Ready Landing southeast along river road to Knights Landing station.

Derby Camp, 1.3 miles east of, north edge of river levee, opposite Chinese camp; iron post stamped "39 B"..... 39. 432
Knights Landing, bridge over Sacramento River, top of south abutment, south end of west wing wall; aluminum tablet stamped "41 B"..... 41. 553
Knights Landing station, 30 feet east of track, at corner of road, opposite north side of station; iron post stamped "32 B"..... 31. 825

Knights Landing south along river road to Grays Bend.

Knights Landing, 4 miles southeast of, west side of road at foot of levee, south line of Mr. Roseberry's place; iron post stamped "30 B"..... 30. 132

Grays Bend east down river road to Elkhorn weir.

Knights Landing, 10.6 miles southeast of, 0.25 mile north of Doyle's house, 40 feet west of junction of river road and lane, north side of road; iron post stamped "29 B"..... 28. 958

Point near Riego northwest to Ryan, thence north to Pleasant Grove station.

Sankey, 2 miles southwest of Northern Electric Railroad station; Ryan triangulation station, 20 feet northwest of windmill; iron post stamped "34 B 1908 B. E. 1"..... 34. 564
Pleasant Grove, Northern Electric Railroad station, east of track, west of road, at fence line, 10 feet south of power pole; iron post stamped "32 B 1908 B. F. 1"..... 31. 975

Pleasant Grove station north 7 miles, thence west via Nicolaus to Chandler.

Alamos, in front of station; top of rail..... 35. 1
Striplin, 100 feet east of station, east of right of way, at fence corner; iron post stamped "33 B 1908 B. M. I"..... 33. 359
Nicolaus, in front of station; top of rail..... 41. 9
Nicolaus, southwest corner of school yard; iron post stamped "33 B 1908 B. N. I"..... 32. 864
Nicolaus, 1.4 miles west of, in center of road, in base of 48-inch oak tree; spike with aluminum tag stamped "31 B. M. 146"..... 30. 72
Chandler, in front of station; top of rail..... 36. 6
Chandler, 0.1 mile south of, opposite milepost 106, 6 feet east of track; iron post stamped "36 B 1902"..... 36. 227

Forks of road 3.3 miles northwest of Riego west to Verona School, thence north to Nicolaus.

Verona, 2 miles east of, Barney Mound triangulation station; iron post stamped "35 B 1908 B. R. I"..... 34. 899
Verona, 1 mile east of, southwest of road, 150 feet south of warehouse, in base of 30-inch oak tree; spike with aluminum tag stamped "33 B. M. 153"..... 33. 55
Verona, 25 feet north of northeast corner of schoolhouse, at fence line; iron post stamped "28 B 1908 B. P. I"..... 28. 592
McNamara ranch house, 1.2 miles southwest of, 75 feet north of Mahon's dairy ranch, at section line, east of levee; iron post stamped "38 B 1908 B. O. I"..... 38. 316

McNamara ranch house, 100 feet west of, south of road, at fence; iron post stamped "40.2" (U. S. E. D. bench mark No. 37)	Feet. 36. 877
Nicolaus, 3.2 miles southwest of, south of river road, in base of 36-inch cottonwood tree; spike with aluminum tag stamped "27 B. M. 149"	27. 10
Point 4 miles north of Chandler west to point 3.5 miles south of Bear River Bridge, thence north to point 10 miles south of Marysville.	
Wheatland, 4 miles south by 4.8 miles west of, north of road, 300 feet north of intersection of roads; iron post stamped "59.9 B. M. 27"	56. 187
Bear River Bridge, 1.1 miles south of, 250 feet west of Western Pacific Railway at bend of road, at fence line; iron post stamped "47.5 B. M. 21"	43. 861
Bear River Bridge, 150 feet north of, east of road, at fence line; iron post stamped "46 B 1908 B. B. 2"	46. 448
Point 4 miles west by 2 miles north of Marcuse to Marcuse.	
Marcuse, 2.6 miles west by 1 mile north of, at southwest corner of crossroads; iron post stamped "31 1908"	31. 208
Marcuse, 0.4 mile north of, on west side of railroad at fence line, 5 feet north of milepost 109; iron post stamped "33 B 1902"	32. 878
Point 3.4 miles west by 1 mile north of Marcuse west toward Kirkville.	
Marcuse, 5.8 miles west by 1 mile north of, west of road, 300 feet west of levee, driven in ground; iron peg marked "25"	24. 94
Point 4.5 miles northeast of Kirkville.	
Kirkville, 4.5 miles northeast of, south of road in tule swamp, standing out prominently; iron post stamped "22 CAL 1908"	22. 115
Point near Sutter School to Knights Landing.	
Knights Landing, 2.6 miles north of, on east side of river road under black-walnut tree, 1,200 feet north of white house with yellow-green roof; iron post stamped "Prim. Trav. Sta. No. 142 CAL 1908 35"	34. 748
Knights Landing, at railroad station, 30 feet east of track at corner of highway and on line of north side of station; iron post stamped "32 B 1902" ..	31. 825
Point on Southern Pacific Railroad 3 miles south of Chandler west to old railroad grade, thence northeast to forks of road 2.6 miles west of Marcuse.	
Chandler, 3 miles south of, on west side of railroad, 10 feet from track, opposite milepost 103; iron post stamped "38 B 1902"	38. 006
Marcuse, 2.6 miles west by 6.2 miles southwest of, at north end of abandoned trestle of Southern Pacific Railroad and at south end near center of old grade, near end of line of willow trees; iron post stamped "22 CAL 1908"	21. 468
Marcuse, 2.6 miles west by 5 miles southwest of, in base of tree on west side of old grade railroad bed; spike with aluminum tag stamped "22"	22. 13
Marcuse, 2.6 miles west by 1.9 miles southwest of, west of old railroad bed; iron peg driven flush with ground, marked "26"	26. 17
Marcuse, 2.6 miles west by 1 mile southwest of, west of old railroad bed; iron peg driven flush with ground, marked "27"	26. 91
Point 3.4 miles west by 1 mile north of Marcuse southwest 2.25 miles (doublespur line).	
Yuba City, 16.6 miles southwest of, on levee about 3 miles west of Marcuse, near old cabin; iron post stamped "Prim. Trav. Sta. No. 305 38 CAL 1908"	38. 402

LINCOLN, PLEASANT GROVE, ROSEVILLE, AND SHERIDAN 7½' QUADRANGLES.**Wheatland southeast along Southern Pacific Railroad to Roseville.**

Sheridan, 300 feet south of station, northeast corner of brick warehouse; iron post stamped "114 B 1908 B. E."	Feet. 114. 007
Sheridan, 2.7 miles south of, east of track, 10 feet east of milepost 123; iron post stamped "110 P. B. M. F."	110. 016
Lincoln, 2 miles north of, east of track, 15 feet east of milepost 120, at fence line; iron post stamped "141 P. B. M. G."	141. 458
Lincoln, 30 feet east of track, north end of station; iron post stamped "163 H"	163. 197
Lincoln, Burdge Hotel, northeast corner of concrete sidewalk; aluminum tablet stamped "167 I"	167. 687
Lincoln, 3.9 miles south of, east of track, in fence line, 20 feet northeast of milepost 114; iron post stamped "124 K"	124. 188
Roseville, 3.5 miles north of, east of track, in fence line, 20 feet northeast of milepost 111; iron post stamped "131 L"	131. 589
Roseville, in northeast corner of school yard; iron post stamped "159 B. B. M."	159. 935

Roseville west along road to point near Riego.

Roseville, southeast corner of brick church, 4 feet above ground; aluminum tablet stamped "159 N"	159. 661
Roseville, 2.6 miles west of, north of road, at Rosecrest, 50 feet west of live-oak tree (forked) 24 inches in diameter; iron post stamped "153 O"	153. 819
Roseville, 5.9 miles west of, north of road, on summit between two drains; at fence line; iron post stamped "103 P"	103. 272
Roseville, 8.6 miles west of, west of road, 20 feet east of road junction, 3 feet south of fence; iron post stamped "63 Q"	63. 609
Riego, in front of station; top of east rail	43. 8
Riego, 500 feet southeast of Johnson ranch house, at bend of road, south of road, 10 feet west of telephone pole; iron post stamped "40 B 1908 B. C. 1"	39. 954
Johnson ranch house, 1 mile northwest of, east of second-class road, in base of locust tree; spike with aluminum tag stamped "32 112"	32. 344

Roseville northeast along Southern Pacific Railroad toward Rocklin.

Roseville, 2.1 miles east of, north of track, in base of milepost 110; spike with aluminum tag stamped "201 96"	201. 49
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Pleasant Grove along road east 4 miles, thence south to crossroads 2.6 miles east of Riego.

Pleasant Grove, at road junction, 75 feet northwest of hotel, 15 feet east of windmill, at fence corner; iron post stamped "47 B. 1908 B. G. 1"	47. 516
Pleasant Grove, 2.7 miles east of, in northeast angle of second-class road junction, 5 feet east of fence corner; iron post stamped "75 B 1908 B. H. 1"	74. 792
Falconer ranch, 1.9 miles south of, west of road, at section line; iron post stamped "64 B 1908 B. I. I."	63. 617
Forks of road 7 miles west of Roseville north and east, thence north and west to forks of road 2.7 miles east of Pleasant Grove.	
Roseville, 5 miles west of; Kaseborg triangulation station at west end of cabin; iron post stamped "106 B 1908 B. J. 1"	106. 153
Pleasant Grove, 250 feet west of schoolhouse, west side of road, at fence corner; iron post stamped "106 B 1908 B. K. 1"	105. 662

Pleasant Grove north along road 9.25 miles, east 3.7 miles, and north to Wheatland.

Pleasant Grove, 3.5 miles north of, west of road at intersection of roads. 150 feet south of house, in southeast corner of lot; iron post stamped "50 B 1908 B. X. 1".....	Feet. 50. 478
Pleasant Grove, 7.1 miles northeast of, south of road, at intersection of roads at point where line turns west, 25 feet north of gate; iron post stamped "53 B 1908 B. Y. 1".....	54. 877
Wheatland, 4 miles south by 3.7 miles west of, south of road, at intersection of roads where power line turns south, 25 feet east of power poles 34-20; iron post stamped "61 B 1908 B. Z. 1".....	61. 805
Wheatland, 4 miles south of, south of road, at intersection of roads, 25 feet west of gate, where power line turns west, 50 feet south of power pole 31 6; iron post stamped "82 B 1908 B. A. 2".....	82. 000
Wheatland, 0.5 mile south of, east of road, at fence line; iron post stamped "83.3 B. M. 48" (United States Corps of Army Engineers ¹ B. M. 48).....	79. 600

Forks of roads 9.2 miles north of Pleasant Grove west along road.

Wheatland, 4 miles south by 4.7 miles west of, south of road, at intersection of road from north, at section line, in base of fence post; spike with aluminum tag stamped "55 B. M. 182".....	55. 65
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Forks of roads 5.9 miles north of Pleasant Grove east to Lincoln.

Lincoln, 4.4 miles west of, south of road at road crossing, at fence corner; iron post stamped "104 B 1908 B. L. 1".....	104. 242
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Pleasant Grove northeast and north to crossroads 4.4 miles west of Lincoln.

Pleasant Grove, 6.6 miles northeast of, at northeast corner of intersection of roads; iron post stamped "104 B 1908 B. S. 1".....	103. 829
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Lincoln north along road 6.6 miles, thence west to Sheridan.

Lincoln, 3.4 miles north of, at northwest corner of road intersection; iron post stamped "174 CAL 1908".....	173. 900
Lincoln, 5.1 miles north of, at northeast corner of T road east, on top of stone; chiseled square marked "173".....	190. 95
Lincoln, 6.6 miles north of, 4.5 miles east of Sheridan, at northwest corner of road intersection; iron post stamped "258 CAL 1908".....	258. 593
Sheridan, 2 miles east of, at southeast corner of bridge over small stream, 175 feet west of T road north, in post; spike with aluminum tag stamped "117".....	117. 65

Point near Wheatland west 2 miles to Sheridan.

Wheatland, 3.1 miles east of, north of road, 800 feet east of intersection of roads, in fence line; iron post stamped "78.2 B. M. 49" (United States Corps of Army Engineers bench mark).....	74. 536
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Point 3.1 miles east of Roseville.

Roseville, 3.1 miles east of, south of right of way, 10 feet north of fence corner, 200 feet south of milepost 111; iron post stamped "219 B 1908 B.W.".....	218. 625
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¹ Locally known as U. S. Engineer Department.

ROCKLIN 7½ QUADRANGLE.

At Rocklin.

Rocklin, 60 feet northeast of station, in foundation at southwest corner of roundhouse; aluminum tablet stamped "244 B 1908 B. X."..... Feet. 244.429

Browns Valley, Gillsizer Slough, Grimes, Marysville Butte, Meridian, Ostrom, Smartsville, Spencerville, Sutter, Tisdale Weir, Wheatland, and Yuba City 7½ quadrangles, and Smartsville special quadrangle.

COLUSA, NEVADA, SUTTER, AND YUBA COUNTIES.

The elevations in the following list are based on the results of precise leveling along the Southern Pacific Railroad published in Bulletin 342.

The leveling in the Grimes, Marysville Butte, Meridian, and Tisdale Weir quadrangles was done in 1904 by C. H. Semper and E. M. Fry, in 1908 by W. H. Monahan, and in 1909 by W. H. Barringer; in the Gillsizer Slough, Ostrom, Sutter, and Yuba City quadrangles in 1908 by L. F. Biggs and Monahan, and in 1909 by Biggs; in the Browns Valley, Smartsville, Spencerville, and Wheatland quadrangles in 1908 by Biggs and Monahan; and in the Smartsville special quadrangle in 1908 by Biggs. The work was done in cooperation with the State.

GILLSIZER SLOUGH, OSTROM, SUTTER, AND YUBA CITY 7½ QUADRANGLES.

Marysville north by Southern Pacific Railroad and east along road to Sevenmile House.

Marysville, 225 feet west of track, at southeast corner of railroad park; iron post stamped "61-B 1902".....	Feet. 61.202
Marysville, 2.5 miles north of, south of railroad, at fence line, 5 feet north of milepost 145; iron post stamped "65-1".....	65.400
Marysville, 5.7 miles north of, 50 feet south of railroad, at fence corner, 800 feet north of milepost 148; iron post stamped "73-2".....	71.896
Sevenmile House, 3 miles west of, at northeast corner of bridge over Nigger Jack Slough; top of painted bolt with aluminum tag stamped "75 5".....	74.43
Sevenmile House, 2.3 miles west of, northeast corner of granite milepost; notch marked "80 6".....	79.45
Sevenmile House, 1 mile west of, east of road, 50 feet north of junction, 5 feet west of power pole; iron post stamped "90 3".....	89.724

Point 1.2 miles southwest of Brophy School west to Marysville.

Brophy school, 1.2 miles southwest of, south of road, north of fence, opposite house on small rise; iron post stamped "84 21".....	83.815
Marysville, 3.7 miles east of, north of road, 5 feet north of fence line, 1,000 feet northwest of house on mound; iron post stamped on rim "74.8" (United States Corps of Army Engineers ¹ B. M. 71, their elevation 74.8 feet).....	70.236
Marysville, 3.2 miles east of, north of road, at fence line, opposite house; iron post stamped on rim "U. S. E. D. 75" (United States Corps of Army Engineers B. M. 73, their elevation 75 feet).....	70.323

¹ Locally known as U. S. Engineer Department.

Marysville southeast toward Earle.

Marysville, 2.5 miles southeast of, at northwest corner of crossroads; iron post stamped "68 CAL 1908".....	Feet- 68.490
Marysville, 4.3 miles southeast of, on tiling at northwest corner of T road; chiseled square; aluminum tag stamped "65".....	65.38

Marysville along Southern Pacific Railroad to Ostrom.

Marysville, 2.7 miles south of, 50 feet east of milepost, 139, at fence, east of track; iron post stamped "61 B 1908 A. B.".....	61.239
Marysville, 5.7 miles south of, east of track, 40 feet east of milepost 136, at fence; iron post stamped "56 B 1908 B. B.".....	56.535

Point near Plumas School west to Marysville road, thence south.

Bear River Bridge, 3.7 miles north of, east of road, at intersection of road, 250 feet east of old house; iron post stamped "49 B 1908 B. C. 2".....	48.722
Bear River Bridge, 2.4 miles north of, southeast corner of bridge over small creek; top of painted bolthead and aluminum tag stamped "46 186".....	45.93

Marysville south along road via Howard station to forks of road 2.5 miles north of Bear River Bridge.

Howard, 1 mile south of station, 60 feet east of Northern Electric Railroad right of way, at bend of road, in fence corner; iron post stamped "53 B 1908 B. D. 2".....	53.529
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Yuba City west, south, west, and south to point 4 miles west by 2 miles north of Marcuse.

Marysville, 0.9 mile south of station, west of railroad, at fence line, 5 feet north of milepost 121; iron post stamped "58 B 1902".....	57.712
Yuba City, 3.4 miles southwest of, in southeast corner of Lincoln schoolyard; iron post stamped "52".....	52.003
Grant School, at northwest corner of yard, at crossroads; iron post stamped "299 1908 41 Prim. Trav. Sta.".....	41.296
Grant School, 3.6 miles south of, in southwest corner of bridge over pond; top of bolt with aluminum tag stamped "36".....	36.02
Grant School, 4.8 miles south of, west of road, 150 feet north of Christopher's ranch house; iron post stamped "35 CAL 1908".....	35.381

Point 2 miles south by 0.5 mile east of Sutter City east along road to fork of roads 2.2 miles southwest of Yuba City.

Sutter City, 2 miles south by 0.5 mile east of, in east corner of junction of T roads; iron post stamped "44 CAL 1908".....	43.656
Sutter City, 2 miles south by 2.2 miles east of, in culvert over road; spike with aluminum tag stamped "46".....	46.14
Sutter City, 2 miles south by 3.5 miles east of, in southwest corner of schoolhouse yard; iron post stamped "50 CAL 1908".....	50.171
Sutter City, 2 miles south by 4.5 miles east of, north of road, in front of small cottage, in base of tree; spike with aluminum tag stamped "51".....	51.39

Grant School west and north toward Sutter City.

Grant School, 2.5 miles west of, west of road at fork of road from north; iron post stamped "Prim. Trav. Sta. 36 CAL 321 1908".....	36.087
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Point 5.7 miles northeast of Marysville along road west and north to point 2.6 miles north of Wooddrift schoolhouse.

Wooddrift schoolhouse, 0.4 mile west of, 60 feet northeast of junction of Marysville road, at fence corner; iron post stamped "69 B 1909 B. A.".....	68.902
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Wooddrift schoolhouse, 0.4 mile west by 1 mile north of, center of road, in base of 36-inch oak tree; spike with aluminum tag stamped "72 B.M. 3"	Feet. 71. 81
Wooddrift schoolhouse, 2 miles north of, 300 feet south of section line, west side of road, in base of 40-inch live oak tree; spike with aluminum tag stamped "75 B.M. 4"	74. 78
Point 7.1 miles northeast of Marysville northeast 10 miles, thence west to Honcut (portion of line).	
Nigger Jack Slough, 3.2 miles north of, southwest corner of intersection of east-west road; iron post stamped "95 B 1909 B.T."	94. 609
Yuba City west along county road to Sutter City.	
Yuba City, 3.8 miles west of, north edge of road, at section line west edge of ditch, 30 feet north of bridge; iron post stamped "53 B 1909 B.K."	52. 831
Sutter City north, east, and north along county road 7 miles.	
Sutter City, 1 mile north by 1 mile east of at section line, west end of large gate to second-class road, in base of gate post; spike with aluminum tag stamped "56 B.M. 40"	55. 94
Sutter City, 1 mile north by 2 miles east of, north side of road, southeast corner of eucalyptus grove at intersection of road to north; iron post stamped "53 B 1909 B.L."	53. 494
Sutter City, 2 miles east by 2 miles north of, west edge of road, in base of 40-inch oak tree; spike with aluminum tag stamped "57 B.M.41"	57. 27
Sutter City, 2 miles west by 3.1 miles north of, 0.3 mile south of Union schoolhouse, west edge of road, 200 feet north of dry creek, in base of 20-inch oak tree; spike with aluminum tag stamped "62 B.M.42"	62. 70
Union schoolhouse, northeast corner of school yard; iron post stamped "66 B 1909 B.M."	65. 855
GRIMES, MARYSVILLE BUTTE, MERIDIAN, AND TISDALE WEIR 7 1/2 QUADRANGLES.	
Colusa southeast to Sycamore.	
Sycamore, at east margin of highway, opposite saloon, between locust trees; iron post stamped "48 B"	48. 129
Forks of road 2.7 miles south of Sycamore south and west to Arbuckle.	
Grimes Landing, northwest corner of Main and Second streets; iron post stamped "47 B"	47. 089
Sam Hines' ranch, in north west angle of roads; iron post stamped "32 B"	32. 108
Sam Hines' ranch, 2.6 miles west of, 145 feet west of levee, south of road; iron post stamped "26 B"	25. 932
College City, 1.5 miles north and east of, 1,100 feet west of bridge over slough, at southeast angle of road to south; iron post stamped "36 B"	35. 824
Point 3.6 miles north of Salem School northwest via Eddys Ferry to Meridian.	
Eddys Ferry, 4.5 miles southeast of, at west corner where road turns at an angle of 90 degrees to right; iron post stamped "Prim. Trav. Sta. No. 215 CAL 1908 41"	41. 089
Eddys Ferry, 1 mile north of, on top of levee, in dredge cut, 500 feet west of road and 300 feet north of residence of Gerdine's dairy, first house on left side of road from Eddys Ferry; iron post stamped "Prim. Trav. Sta. No. 222 CAL 1908 47"	46. 554
Eddys Ferry, 3.4 miles northwest of, in front of large red brick house, in base of fig tree; spike with aluminum tag stamped "49"	48. 93

Meridian, 2.2 miles south of, at base of levee, west side of road, 150 feet south of C. D. Crookan's house; iron post stamped "Prim. Trav. Sta. No. 227 CAL 1908 51".....	Feet. 50. 717
Meridian, at northeast corner of G. W. Wood's yard, intersection of county road to Colusa and ferry road; iron post stamped "Prim. Trav. Sta. No. 260 CAL 1908 51".....	51. 291

Meridian east to vicinity of Sutter City.

Meridian, 3.5 miles east of, in base of levee on Butte Slough, north of road, in angle opposite first house from Slough schoolhouse; iron post stamped "Prim. Trav. Sta. No. 265 CAL 1908 45".....	45. 064
Sutter City, on southeast corner of Colusa and Acacia streets, at the corner of Clement's barnyard; iron post stamped "Prim. Trav. Sta. No. 277 CAL 1908 67".....	67. 194

Point 2 miles southwest of Duckhunter clubhouse southwest to river road 3.7 miles southeast of Eddys Ferry.

Grant School, 2.5 miles west of, thence 3.5 miles southwest of, south of road, in tule swamp, 300 feet northeast of small lake; iron post stamped "30 1908 CAL".....	29. 654
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Point 3.5 miles east of Meridian northwest and east along highway to Pennington.

West Butte, 3.1 miles southeast of, lower side of road, on boulder; chisel point painted "48 U.S.B.M. 61".....	47. 75
West Butte, 0.5 mile east by 1.5 miles south of, in front of Tarke's ranch (white house), east side of road, in boulder; aluminum tablet stamped "54 B 1909 B.V.".....	53. 691
West Butte, 2.2 miles north of, north side of road, 800 feet east of shacks on hillside above road, 15 feet north of center of roadway, in boulder; aluminum tablet stamped "67 B 1909 B.W.".....	67. 297
Noyesburg, 1.4 miles north by 0.3 mile east of schoolhouse, east side of road, 100 feet south of white house, on top of small knoll, 5 feet west of east fence line along road, in large boulder; aluminum tablet stamped "71 B 1909 B.X.".....	71. 190

Colusa south along highway to Meridian.

Colusa, Colusa County courthouse, 2 miles southeast of, east side of road, in base of 4-inch sycamore tree; copper brad with aluminum tag stamped "59 B. M. 52".....	58. 82
Colusa, 5 miles southeast of, east side of levee road, 0.25 mile southeast of farmhouse, 2 miles northwest of Kent, 2 feet north of telephone pole painted "U. S. B. M.;" iron post stamped "58 B 1909 B.T.".....	58. 336
Meridian, 4 miles northeast of, 0.3 mile south of Kent, east side of road, in front of brown house and 100 feet north of entrance to yard; iron post stamped "54 B 1909 B. N.".....	54. 671
Meridian, 3.1 miles north of, 1.2 miles south of Kent, east side of road, in front of white house, in base of large fig tree; spike with aluminum tag stamped "54 B. M. 57".....	54. 53

Union schoolhouse south along highway to Colusa (portion of line).

Colusa, north wall of Colusa County courthouse, 15 feet west of main entrance; aluminum tablet stamped "60 B 1904".....	60. 375
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**BROWNS VALLEY, SMARTSVILLE, SPENCERVILLE, AND WHEATLAND
7½ QUADRANGLES AND GREATER PART OF SMARTSVILLE SPECIAL
QUADRANGLE.**

**Sevenmile House east by road to Parks Bar Bridge crossing river, thence southwest
by road to point 1.2 miles southwest of Brophy school.**

Sevenmile House, 1.6 miles east of, 50 feet east of junction of road, 10 feet north of telephone pole, north of road; iron post stamped "143 4"...	Feet. 143. 088
Sevenmile House, 4.5 miles east of, 500 feet east of road junction to Browns Valley, north side of road, 150 feet west of dwelling, in bowlder; aluminum tablet stamped "191 5".....	190. 921
Sevenmile House, 6.3 miles east of, west of road, 50 feet east of junction of road, in base of 36-inch pine tree; spike with aluminum tag stamped "247 12".....	246. 46
Barrier No. 1, 0.3 mile northwest of, 18 feet south of section post 14, 150 feet north of Yuba River; iron post stamped "204.7" (U. S. E. D. B. M. No. 26).....	200. 111
Barrier, on top of north abutment; chisel point painted "220 14".....	220. 14
Barrier, 0.7 mile southeast of, 400 feet southeast of draw, 400 feet from bar gate, north bank of river, 600 feet south of cabin on knoll, 10 feet north of river, 5 feet south of wire fence, on rock; chisel point painted "214".....	213. 69
Parks Bar Bridge, 1 mile southwest of, south of road, 20 feet south of bridge over small creek, in base of 24-inch white oak tree; spike scribed and painted "266 B. M. 42".....	265. 49
Brady ranch, 0.3 mile southwest of, north of road, at summit of rise, 15 feet north of fence, in country bowlder; aluminum tablet stamped "349 18".....	348. 486
Heigson's ranch, 0.1 mile southwest of, north of road, 15 feet south of fence, on summit of rise, in country bowlder; aluminum tablet stamped "227 19".....	226. 831
Lane ranch, 200 feet north of house, north of road, southeast corner of corral; iron post stamped "97 20".....	96. 824

Ostrom southeast along Southern Pacific Railroad to Wheatland.

Ostrom, 2.3 miles south of, east of track, 5 feet north of milepost 133; iron post stamped "71 B 1908 B. C.".....	71. 242
Wheatland, north end of railroad station, 5 feet east of telephone pole; iron post stamped "86 B 1908 B. D.".....	86. 104
Wheatland, water tower, northwest corner of granite foundation; chisel point; iron foot plate stamped "91 B. M. 61".....	90. 71
Wheatland, in front of north end of station; top of rail.....	85. 8

Wheatland north to fork of road 2.1 miles west of Brady ranch.

Wheatland, 5 miles northeast of, at northeast corner of T roads, near corner of fence; iron post stamped "101 CAL 1908".....	101. 052
Earle, 300 feet southwest of schoolhouse, at southwest corner of crossroads; iron post stamped "116 CAL 1908".....	115. 894
Earle, 2 miles north of, at west side of road, 450 feet north of lane leading to house on east side of road, on rock; chiseled square marked "123".....	123. 45
Earle, 3.5 miles north of, in southeast corner of lane fence leading to house on right; iron post stamped "189".....	189. 471

Earle west by road to point 4.3 miles southeast of Marysville.

Earle, 4 miles west of, 390 feet west of gate leading to the Boardman ranch house; iron post stamped "74 CAL 1908".....	73. 763
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Parks Bar Bridge east via Smartsville to Mooney Flat and bridge over Deer Creek.

Parks Bar Bridge, north side of road, 30 feet north of bridge, 10 feet east of oak tree, in bowlder; aluminum tablet stamped "252".....	Feet. 251. 387
Parks Bar Bridge, on northeast abutment; top of bedplate.....	244. 05
Parks Bar Bridge, on southwest abutment; top of bedplate.....	247. 58
Smartsville, 1.4 miles north of, at northeast corner of bridge over Yuba Creek, top of truss; painted bolt with aluminum tag stamped "345 16".....	344. 21
Smartsville, 250 feet east of schoolhouse, south of road, 10 feet south of junction of road, on large bowlder painted "619 18;" chisel point.....	618. 97
Smartsville, southeast corner of porch foundation to Reardon's hotel; aluminum tablet stamped "684 9".....	683. 321
Smartsville, 0.6 mile south of, east of road at road junction, on bowlder painted "792 19;" chisel point.....	791. 20
Smartsville, 1.2 miles north of, east of road, 100 feet east of crossroads, 15 feet north of ditch on summit of hill, in bowlder; aluminum tablet stamped "996 10".....	955. 552

Point 4.5 miles west of Bridgeport south and west along south bank of Yuba River to Parks Bar.

Mouth of South Fork of Yuba River, 4.4 miles southwest of, south bank of river, at James Bar, 25 feet west of cable over river, on rock painted "373 33;" chisel point.....	372. 69
Mouth of South Fork of Yuba River, 5.7 miles southwest of, opposite draw, south side of river, 1,000 feet west of barn on opposite bank of river, 50 feet west of claim stake, on rock painted "346 34;" chisel point.....	345. 97
Mouth of South Fork of Yuba River, 6.5 miles southwest of, southwest point of mouth of draw, 500 feet west of draw, on opposite side of river, steep rocky point, 50 feet above river bed, in large bowlder; aluminum tablet stamped "354 16".....	353. 865
Mouth of Deer Creek, 200 feet east of, on bench, east bank of creek, south bank of Yuba River, in top of knot in 30-inch two-forked oak tree scribed and painted "329 35;" spike.....	328. 01
Mouth of Deer Creek, 0.7 mile southwest of, south side of river, upper end of gorge at bend of river opposite steep bluff underneath overhanging rock, on bowlder painted "287 37;" chisel point.....	286. 47
Narrows, 15 feet east of north anchorage of cable, on rock point; aluminum tablet stamped "318 17".....	317. 733
Parks Bar Bridge, 2.6 miles east of, at end of long sand bar, 15 feet south of 36-inch live-oak tree, overhanging bank, on bedrock painted "259 39;" chisel point.....	269. 13
Parks Bar Bridge, 0.5 mile east of, north bank of river, on point between two draws, 20 feet north of water's edge, on rock painted "227 41;" chisel point.....	237. 18

SMARTSVILLE SPECIAL QUADRANGLE (PART NOT INCLUDED IN THE WHEATLAND 15' QUADRANGLE).**Point near Mooney Flat northeast to Bridgeport, thence west 4.5 miles.**

Mooney Flat, 1.3 miles northeast of schoolhouse, north of road, 15 feet south of 36-inch bull pine tree, on bowlder painted "797 23;" chisel point.....	795. 03
Mooney Flat, 2 miles northeast of schoolhouse, south of road, opposite round hill, in large bowlder; aluminum tablet stamped "1011 11".....	1, 010. 840
Mooney Flat, 3 miles northeast of, north of road, 50 feet west of end of lane, near top of ridge, on bowlder painted "1168 24;" chisel point.....	1, 166. 78

Mooney Flat, 4.1 miles northeast of, east of road, on summit of ridge, bend of road, on steep bluff, on large boulder painted "1223 26;" chisel point.	Feet. 1, 222. 72
Anthony House, 1 mile northeast of, north of road, 20 feet east of ditch, on summit of rise, on boulder painted "1259 29;" chisel point.....	1, 259. 20
Anthony House, 1.6 miles northeast of, south of road, at ditch crossing, 500 feet east of cemetery, in boulder; aluminum tablet stamped "1334 12"...	1, 333. 936
Rapps ranch, 0.7 mile northeast of, north of road, on boulder painted "1000 30;" chisel point.....	1, 000. 305

Bangor 15' quadrangle; Biggs, Butte City, Butte Creek, Cherokee, Clear Creek, Dayton, Dry Creek, Durham, French Crossing, Gridley, Honcut, Keefers, Nelson, Newhard, Nord, Oroville, Palermo, and Pennington 7½' quadrangles.

BUTTE, COLUSA, GLENN, SUTTER, AND YUBA COUNTIES.

The elevations in the following list are based upon the results of precise leveling along the Southern Pacific Railroad published in Bulletin 342.

The leveling was done in 1909 in the Biggs, Butte Creek, Butte City, Cherokee, Clear Creek, Dry Creek, Dayton, Durham, French Crossing, Gridley, Honcut, Pennington, Palermo, Newhard, Nelson, and Oroville quadrangles by L. F. Biggs and W. H. Barringer; in the Bangor, Keefers, and Nord quadrangles by L. F. Biggs.

The work was done in cooperation with the State.

BANGOR 15' QUADRANGLE.

Point 7.1 miles northeast of Marysville, northeast 10 miles, thence west to Honcut (portion of line).

Honcut, 4 miles southeast of, south end of large gate, at second-class road to Honcut, 150 feet north of house, west edge of road; iron post stamped "119 B 1909 B. U."	Feet. 118. 719
Honcut Creek, 1 mile southwest of, 10 feet east of road, 1,000 feet south of Bryden ranch house, on 3 by 2 foot boulder; chisel point painted "158 B. M. 69"	157. 65
Honcut Creek, 0.7 mile south of, 0.5 mile north of Bryden ranch, at junction of road to east, west side of road, in base of 24-inch oak tree; spike with aluminum tag stamped "208 B. M. 72"	207. 96
Honcut, 4.5 miles northeast of, Honcut Creek bridge, northeast pier; aluminum tablet stamped "168 B 1908 B. W."	168. 248
Honcut, 4.3 miles northeast of, 0.2 mile west of Honcut Creek, at intersection of north-south road, in base of stump; spike with aluminum tag stamped "194 B. M. 73"	193. 99

Bryden ranch east 2.8 miles (spur line).

Bryden ranch, 1.3 miles southeast of, 400 feet east of junction of road, 10 feet west of road, in base of 24-inch oak tree; spike with aluminum tag stamped "324 B. M. 70"	324. 20
Buckeye schoolhouse, 2 miles north of, south side of road, on hill above creek, in base of 36-inch oak tree; spike with aluminum tag stamped "292 B. M. 71"	291. 80
Buckeye schoolhouse, 2.6 miles northeast of, 2 miles north of Chinn Butte triangulation station, on first section line east of butte, 20 feet north of road at section line; iron post stamped "334 B 1909 B. V."	334. 190

**BUTTE CITY, BUTTE CREEK, FRENCH CROSSING, AND PENNINGTON 7½
QUADRANGLES.**

Biggs west to Princeton.

	Feet.
Biggs, 0.7 mile north of, west edge of railroad right of way, where wagon road turns west, in base of telephone pole; spike with aluminum tag stamped "91 B. M. 83".....	90.320
Biggs, 1.8 miles west of, southeast corner of bridge over drain, in concrete abutment; aluminum tablet stamped "86 B 1909 B.".....	85.967
Biggs, 2.6 miles west of, northwest corner of bridge over drain in top of concrete abutment; spike with aluminum tag stamped "84 B. M. 85".....	84.57
Biggs, 3.2 miles west of, northwest corner of bridge over Spring Valley Mining Co.'s canal, in top of cord; bolt head with aluminum tag stamped "90 B. M. 86".....	89.84
Biggs, 3.6 miles west of, 100 feet west of junction of road to north, south side of road, in base of telephone pole; spike with aluminum tag stamped "79 B. M. 87".....	79.44
Biggs, 4.7 miles west of, south side of road, at junction of road to north, in base of telephone pole; spike with aluminum tag stamped "76 B. M. 88".....	76.12
Biggs, 5.4 miles west of, at Landlow schoolhouse, northeast corner of school yard; iron post stamped "77 B 1909 B. A.-1".....	77.488
Landlow schoolhouse, 1 mile west of, south side of road, 100 feet west of old barn, in base of cottonwood tree; spike with aluminum tag stamped "72 B. M. 94".....	72.14
East fork of Butte Creek, 0.4 mile west of, south side of road, at section line northeast corner of field; iron post stamped "70 B 1909 B. C. 1".....	70.106
West fork of Butte Creek, northwest corner of bridge over, in floor; spike with aluminum tag stamped "72 B. M. 98".....	72.24
Union schoolhouse, 2 miles east of, at intersection of north-south road northeast corner of field, in base of fence post; spike with aluminum tag stamped "71 B. M. 100".....	70.88
Union schoolhouse, 2 miles east of, northeast corner of intersection of north-south road; iron post stamped "72 B 1909 B. D. 1".....	71.900
Union schoolhouse, 1 mile east of, north edge of road, on section line, in base of fence post; spike with aluminum tag stamped "71 B. M. 101".....	71.65
Union schoolhouse, 200 feet north of, 3 miles south of Butte City, 150 feet north of Marvin Chapel, northeast corner of churchyard, at intersection of north-south road; iron post stamped "74 B 1909 B. E. 1".....	74.161
Union schoolhouse, 1.5 miles west of, 0.2 mile south of, at Flannigan's ranch, in yard, in base of 48-inch oak tree; copper brad with aluminum tag stamped "78 B. M. 36".....	78.69
Princeton, at ferry crossing, on east river bank, in base of 36-inch oak tree; spike with aluminum tag stamped "72 B. M. 37".....	72.60
Sacramento River, at Prince Ferry; surface of water, May 25, 1909.....	65.6

Point 7.4 miles west of Biggs north along highway to Wilson (portion of line).

Biggs, 7.4 miles west by 1.5 miles north of, 2 miles west by 1.5 miles north of Landlow schoolhouse, 20 feet south of northwest corner of fence, 0.25 mile west of white barn, in base of fence post; spike with aluminum tag stamped "77 B. M. 2".....	76.37
Landlow schoolhouse, 2 miles west by 2.5 miles north of, at intersection of county and second-class road, 150 feet east of ranch house, 10 feet west of telephone pole; iron post stamped "81 B 1909 B. A.".....	80.645

Landlow schoolhouse, 2 miles west by 5 miles north of, southeast corner of field, west of road, at fence corner; iron post stamped "92 B 1909 B. B."	Feet. 92. 056
Landlow schoolhouse, 2 miles west by 6 miles north of, west side of road, in base of fence post near gate; spike with aluminum tag stamped "91 B. M. 5"	90. 74
Point 2 miles west of Landlow schoolhouse west and south to Union schoolhouse.	
Landlow schoolhouse, 2.3 miles west by 2.5 miles north of, 6.7 miles east of Butte City, in floor of Butte Creek bridge; copper brad with aluminum tag stamped "84 B. M. 27"	84. 03
Butte City, 5 miles east of, on north side of road, near section fence line, in base of telephone pole; spike with aluminum tag stamped "77 B. M. 28"	77. 056
Butte City, 3.5 miles east of, county road bridge over small slough, white house on west bank of slough, in floor at east end of bridge; copper brad with aluminum tag stamped "84 B. M. 29"	83. 62
Butte City, 3.3 miles east of, at intersection of north-south and east-west roads, 1,500 feet east of ranch house in clump of trees and long barn on north side of road, northeast corner of roads; iron post stamped "80 B 1909 B. M."	79. 983
Butte City, 2.3 miles east of, at intersection of private road to south, south side of road, in base of fence post at gate; spike with aluminum tag stamped "81 B. M. 30"	80. 72
Butte City, 1.2 miles east of, at intersection of north-south and east-west roads, in fence post which is evidently also a bench mark for some other survey, southeast corner of road crossing; 20-penny nail with aluminum tag stamped "81 B. M. 31"	80. 26
Butte City, at Nelson road entrance, 1,000 feet east of Dr. Gatliff's drug store, in base of telephone pole at street corner; spike with aluminum tag stamped "85 B. M. 32"	84. 58
Butte City schoolhouse, opposite, in corner of fences, at south end of blind street running north-south; iron post stamped "87 B 1909 B. N."	86. 200
Butte City, 1.2 miles east by 1 mile south of, east side of road, at section fence line, in base of 12 inch by 12 inch post; spike with aluminum tag stamped "77 B. M. 33"	76. 31
Butte City, 1.2 miles east by 2.2 miles south of, in center of county road, in base of large blazed oak tree; copper brad with aluminum tag stamped "78 B. M. 34"	77. 65
Union schoolhouse, 300 feet north of, 3 miles south by 1.2 miles east of Butte City, 150 feet north of Marvin Chapel, northeast corner of churchyard, at intersection of north-south road; iron post stamped "74 B 1909 B. E.-1"	74. 163
Parrott district schoolhouse south along highway to point 3.3 miles east of Butte City (portion of line).	
Butte City, 3 miles east by 2.4 miles north of, east edge of road, at second class road to west, in base of telephone pole; spike with aluminum tag stamped "90 B. M. 75"	87. 84
Butte City, 3 miles east of, 1.4 miles north of, east edge of road, in base of second telephone pole south of bridge over drain; spike with aluminum tag stamped "85 B. M. 76"	82. 87
Butte City, 3 miles east by 0.2 mile north of, southwest corner of bridge over slough, in floor; copper nail with aluminum tag stamped "85 B. M. 77"	82. 94

Union schoolhouse south along highway to Colusa (portion of line).

	Feet.
Union schoolhouse, 1 mile south of, in front of Boehmer's ranch, in base of telephone pole; spike with aluminum tag stamped "71 B. M. 38".....	71. 41
Union schoolhouse, 1.5 miles south of, at Afton post office, on west side of road, in base of telephone pole; spike with aluminum tag stamped "70 B. M. 39".....	70. 13
Union schoolhouse, 1.5 miles south by 1 mile west of, 25 feet east of east bank of Drum Kelley Slough, south side of road, in base of 48-inch oak tree; spike with aluminum tag stamped "75 B. M. 40".....	74. 75
Union schoolhouse, 1.5 miles south by 2 miles west of, 2 miles west of Afton post office, at intersection of road running south to Colusa, 0.5 mile north of Warfield's ranch, north side of road; iron post stamped "77 B 1909 B. O.".....	76. 797
Afton, 2 miles west by 1 mile south of post office, crossing of road over Sacramento River levee, 0.5 mile south of Warfield's ranch, east side of road, in base of telephone pole; spike with aluminum tag stamped "83 B. M. 41".....	83. 60
Afton, 2 miles west by 2 miles south of post office, 1 mile north of Harmony schoolhouse, east of road at turn, 50 feet east of levee, in base of telephone pole; spike with aluminum tag stamped "76 B. M. 42".....	75. 84
Harmony schoolhouse, 12 miles northeast of Colusa, in front of schoolyard and 5 feet north of gate; iron post stamped "76 B 1909 B. P.".....	76. 153
Harmony schoolhouse, 0.3 mile south of, at turn in road, 1,000 feet west of ranch house, in base of telephone pole; spike with aluminum tag stamped "75 B. M. 43".....	74. 76
Harmony schoolhouse, 1.3 miles south of, 0.2 mile west of, entrance to Moulton ranch, east side of road, in base of 12 by 12 inch gatepost; spike with aluminum tag stamped "70 B. M. 4".....	70. 39
Harmony schoolhouse, 2 miles south of, 2 miles north of Butte Creek schoolhouse, 20 feet north of entrance to ranch house, 2 feet north of telephone pole; iron post stamped "71 B 1909 B. Q.;" pole painted "U. S. B. M.".....	70. 820
Butte Creek schoolhouse, 1 mile north of, 300 feet east of ranch house on west side of road, in base of gatepost of section line fence on east side of road; spike with aluminum tag stamped "70 B. M. 45".....	70. 01
Butte Creek schoolhouse, in southwest corner of yard, in base of tree; spike with aluminum tag stamped "68 B. M. 46".....	67. 98
Butte Creek schoolhouse, 1 mile south of, near gate on east side of road, 500 feet north of two large barns, 300 feet north of road crossing over Sacramento River levee; iron post stamped "67 B 1909 B. R.".....	67. 258
Butte Creek schoolhouse, 2 miles south of, 6 miles north of Colusa, 1,500 feet south of jog in road on east side, in base of 24-inch oak tree; spike with aluminum tag stamped "62 B. M. 47".....	62. 32
Colusa, 5 miles north of, turn in road to south, 600 feet south of Farnsworth ranch, in base of fence post at corner; spike with aluminum tag stamped "64 B. M. 48".....	64. 61
Colusa, 4 miles northeast of, 0.6 mile north of Washington schoolhouse, 20 feet east of oak tree 40 inches in diameter, near gate; iron post stamped "59 B 1909 B. S.".....	58. 910
Colusa, 3.4 miles northeast of, at Washington schoolhouse, in base of tree in road; spike with aluminum tag stamped "62 B. M. 49".....	61. 69

Gridley west and south to Liveoak (portion of line).

Gridley, 3.8 miles west of, north of road at point where telephone line crosses to south of road, in base of telephone pole; spike with aluminum tag stamped "75 B. M. 18".....	74. 27
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Gridley, 4.8 miles west of, north of road, at junction of north-south road, in base of telephone pole; spike with aluminum tag stamped "72 B. M. 19".....	Fet. 71. 32
Gridley, 5.7 miles west of, 0.5 mile north of Butte schoolhouse, at junction of road to south, north of road, 5 feet west of signpost; iron post stamped "71 B 1909 B. G.".....	70. 543
Butte schoolhouse, yard of, in base of gatepost; spike with aluminum tag stamped "71 B. M. 20".....	70. 71
Butte schoolhouse, 0.5 mile south of, southwest corner of field at intersection of east-west road, in base of telephone pole; spike with aluminum tag stamped "67 B. M. 21".....	66. 91
Butte schoolhouse, 1.5 miles south of, east of road at section line, in base of fence post; spike with aluminum tag stamped "71 B. M. 22".....	70. 73
Butte schoolhouse, 2.5 miles south of, 2.1 miles north of Pennington, west edge of road, at intersection of east-west road, 500 feet west of large barn; iron post stamped "71 B 1909 B. H.".....	71. 192
Pennington, 1.2 miles north of, west side of road, at fence line, in base of fence post; spike with aluminum tag stamped "68 B. M. 23".....	67. 71
Pennington, 0.2 mile west of, at intersection of east-west road, northwest corner of concrete culvert; bolt head with aluminum tag stamped "79 B. M. 24".....	79. 05
Pennington, northwest corner of schoolyard, at fence line; iron post stamped "82 B 1909 B. I.".....	83. 577
Pennington, 1.8 miles southeast of, south side of road, at junction of road to east, large gate to lane, in base of gatepost; spike with aluminum tag stamped "76 B. M. 26".....	75. 01
Pennington, 3 miles east of, 5 miles west of Live Oak, south side of road, at entrance of lane to house, in base of gatepost; spike with aluminum tag stamped "70 B. M. 27".....	69. 61
Point 3.5 miles east of meridian northwest and east along highway to Pennington (portion of line).	
Noyesburg, 2.5 miles northeast of schoolhouse, 6.7 miles west of Pennington, 200 feet east of turn in road, 150 feet east of sheep dipping corral, in base of fence corner post; spike with aluminum tag stamped "62 B. M. 68".....	62. 70
Pennington, 5.5 miles west of, opposite private road to north, south side of road at turn, in base of telephone pole; spike with aluminum tag stamped "86 B. M. 69".....	86. 61
Pennington, 5.1 miles west of, at private road intersection to south, 20 feet north of gate at turn in road to northeast; iron post stamped "84 B 1909 B. Y.".....	85. 110
Pennington, 4 miles west of, at turn in county road, small bridge over drainage ditch, at south side of road, in stringer; copper brad painted "64 B. M. 70".....	64. 56
Pennington, 3 miles west of, at turn in road to north, 2,000 feet south of large grove of oak trees, on northwest corner of road intersection, in fence corner; iron post stamped "75 B 1909 B. Z.".....	76. 467
Pennington, 1.5 miles west of, at road corners north-south and east-west, in base of 36-inch oak tree; copper brad with aluminum tag stamped "80 B. M. 71".....	81. 06
Landlow schoolhouse south to point 5.7 miles west of Gridley.	
Biggs, 5.4 miles west of, at Landlow schoolhouse, northeast corner of school yard; iron post stamped "77 B 1909 B. A.-1".....	77. 488

Landlaw schoolhouse, 1.1 miles south of, west side of road, where road turns west, in base of fence post; spike with aluminum tag stamped "73 B. M. 89".....	Feet. 72. 76
Landlaw schoolhouse, 2.2 miles south of, west side of second-class road, through Balfour Guthrie ranch, 0.5 mile north of Guthrie house, in base of telephone pole; spike with aluminum tag stamped "69 B. M. 90".....	69. 20
Landlaw schoolhouse, 3 miles southeast of, 0.5 mile south of Balfour Guthrie ranch house; west bank of Spring Valley Mining Co. canal, 20 feet north of road; iron post stamped "75 B 1909 B. B.-1".....	75. 372
Balfour Guthrie ranch, 1 mile south of, 0.5 mile south of Spring Valley Mining Co. canal, on second-class road, west side of road, in base of fence post; spike with aluminum tag stamped "67 B. M. 91".....	67. 00
Gridley, 7.7 miles west of, at junction of second-class road through Guthrie ranch, in base of telephone pole; spike with aluminum tag stamped "67 B. M. 92".....	67. 08
Gridley, 6.6 miles west of, north edge of road, in base of telephone pole; spike and aluminum tag stamped "67 B. M. 93".....	66. 98
Gridley, 5.7 miles west of, 0.5 mile north of Butte schoolhouse, at junction of road to south, north edge of road, 5 feet west of signpost; iron post stamped "71 B 1909 B. G.".....	70. 543

DAYTON, DURHAM, NELSON, AND NEWHARD 7½ QUADRANGLES.

Durham east along highway to Oroville-Chico road.

Durham, at Southern Pacific Railroad crossing; top of rail.....	160. 7
Durham, 0.8 mile east of, southeast corner of bridge over Butte Creek, in floor; copper nail with aluminum tag stamped "167 B. M. 11".....	166. 77
Durham, 1.8 miles east of, north edge of road, 300 feet east of bridge over drain, 1 mile east of Butte Creek, in base of 20-inch oak tree; spike with aluminum tag stamped "155 B. M. 12".....	155. 29
Durham, 2.9 miles east of, south side of bridge over dry creek, in floor; spike painted "161 B. M. 13".....	161. 37
Durham, 4 miles east of, at junction of Durham-Oroville-Chico roads, 10 feet west of signpost; iron post stamped "181 B 1909 B.3".....	181. 556

Point 7.4 miles west of Biggs north along highway to Nelson (portion of line).

Landlaw schoolhouse, 2 miles west by 6.8 miles north of, east side of north abutment of concrete culvert over small creek; aluminum tablet stamped "93 B 1909 B. C.".....	92. 171
Landlaw schoolhouse, 2 miles west of by 7.3 miles north, county wagon bridge over Butte Creek, north end, in floor; copper brad with aluminum tag stamped "100 B. M. 6".....	99. 83
Landlaw schoolhouse, 2 miles west by 8.4 miles north of, 5.3 miles west of Nelson, 1 mile west of county bridge on Oroville road over Butte Creek, at turn in Oroville road and power line; iron post stamped "100 B 1909 B. D.".....	99. 987
Nelson, 4.3 miles west of, county bridge over Butte Creek on Oroville road, in stringer over southwest pier; painted bolt with aluminum tag stamped "111 B. M. 7".....	111. 01
Nelson, 3.3 miles west of, northeast corner of field, opposite Chinese ranch house, in base of fence post; spike with aluminum tag stamped "105 B. M. 8".....	104. 40
Nelson, 2.1 miles west of, northwest corner of field, opposite private road to ranch house, south side of Oroville road; iron post stamped "108 B 1909 B. E.".....	107. 847

Nelson, 1.1 miles west of, in front of ranch house on north side of road, in base of telephone pole; spike with aluminum tag stamped "112 B. M. 9".	Feet. 111. 54
Nelson, 700 feet north of station, on east side of railroad, 5 feet north of milepost 173; iron post stamped "120 B 1902".....	119. 767

Chico west along highway to St. John.

Chico, State normal school, southwest corner of building, front face; aluminum tablet stamped "201 B 1902".....	200. 776
Chico, west end of town, south side of road, at intersection of river road and road to south, in base of telephone pole; spike with aluminum tag stamped "177 B. M. 20".....	177. 08
Chico, 0.7 mile west of, where road bends to south, 15 feet south of gate to Morehead ranch, in base of telephone pole; spike with aluminum tag stamped "174 B. M. 21".....	174. 31
Chico, 1.2 miles west of, south side of road, at intersection of road to south, in base of telephone pole; spike with aluminum tag stamped "166 B. M. 22".....	165. 78
Chico, 2 miles west of, south edge of road, 800 feet west of water tank, 60 feet east of oak tree; iron post stamped "154 B 1909 B-5".....	153. 893
Chico, 2.8 miles west of, north edge of road, opposite river road schoolhouse, in base of 40-inch oak tree blazed on south side; copper nail with aluminum tag stamped "143 B. M. 23".....	142. 67
Chico, 4 miles west of, 1.2 miles west of river road schoolhouse, south side of road, 100 feet west of cross fence line, in base of telephone pole; spike with aluminum tag stamped "131 B. M. 24".....	131. 04
Chico, 4.4 miles west of, 1.5 miles west of river road schoolhouse, where road bends northwest, north end of gate to second-class road through Phelan ranch, in base of telephone pole; spike with aluminum tag stamped "129 B. M. 25".....	129. 03
Chico Landing, 0.6 mile south of, northwest corner of bridge over slough, in cap; spike with aluminum tag stamped "136 B. M. 26".....	134. 42
Chico Landing, east edge of road, 30 feet north of lane to house, opposite boat landing, 3 feet from signpost; iron post stamped "132 B 1909 B. 6".....	132. 180
Chico Landing, 0.8 mile west of, north edge of Northern Electric Railroad right of way, 150 feet east of end of trestle, in base of 30-inch oak tree; spike with aluminum tag stamped "130 B. M. 27".....	129. 54
Seco station, Northern Electric Railroad, southwest corner of cattle guard; copper nail with aluminum tag stamped "140 B. M. 28".....	138. 71
St. John, Northern Electric Railroad station, at road crossing; top of rail..	139. 5
St. John, 300 feet south of Stony Creek, 40 feet northeast of intersection of crossroads, in southwest corner of school yard; iron post stamped "143 B".....	142. 996

Point 4.4 miles west of Chico south to Parrott school district (portion of line).

Chico, 4.4 miles west of, 1.5 miles west of river road schoolhouse where road turns northwest, in base of telephone pole at north end of gate to second-class road through Phelan ranch; spike with aluminum tag stamped "129 B. M. 25".....	129. 03
Chico Landing, 2 miles southwest of, east edge of road, east end of field gate, in base of 24-inch oak tree; spike with aluminum tag stamped "120 B. M. 29".....	119. 76
Phelan hog ranch, 5 feet west of field gate, west edge of second-class road, 3.2 miles south of Chico Landing; iron post stamped "123 B 1909 B. 7".....	123. 408

	Feet.
Phelan hog ranch, 0.7 mile south of, south end of field, east bank of creek, at field gate, in base of 24-inch oak tree; spike with aluminum tag stamped "120 B. M. 30".....	119. 82
Parrott schoolhouse, 0.6 mile north of, 0.8 mile south of large brick house, east side of road, at fence corner, in base of 24-inch oak tree; spike with aluminum tag stamped "117 B. M. 31".....	117. 51
Parrott schoolhouse, southwest corner of school yard, at intersection of second-class road; iron post stamped "112 B 1909 B. 8".....	112. 033
Parrott schoolhouse, 1.3 miles south of, 250 feet northeast of house, on Parrott ranch, 15 feet west of road, in base of 24-inch oak tree; spike with aluminum tag stamped "106 B. M. 71".....	106. 28
Parrott schoolhouse, 2.4 miles south of, 200 feet south of large gate, west edge of road, in base of 24-inch oak tree; spike with aluminum tag stamped "101 B. M. 72".....	100. 78
Parrott schoolhouse, 3.6 miles south of, at Parrott triangulation station, 20 feet north of road, 100 feet west of large new barn; iron post stamped "109 B 1909 B. 19".....	108. 905
Parrott triangulation station, 1.8 miles south of, southwest corner of yard of white house, in base of fence post; spike with aluminum tag stamped "102 B. M. 73".....	102. 06
Butte City, 3 miles east by 5 miles north of, where road turns east, 15 feet east of fence corner; iron post stamped "102 B 1909 B. 20".....	102. 286
Butte City, 3 miles east by 4 miles north of, opposite intersection of T road to west, in base of telephone pole; spike with aluminum tag stamped "95 B. M. 74".....	95. 34

Parrott schoolhouse northeast to Dayton, thence north to Chico.

Dayton, 3.1 miles west of, 100 feet east of slough, south side of road, in base of telephone pole; spike with aluminum tag stamped "110 B. M. 32".....	108. 64
Dayton, 2.8 miles west of, south side of road, opposite large barn, 0.5 mile west of Butte City road, in base of 36-inch oak tree; spike with aluminum tag stamped "116 B. M. 33".....	115. 64
Dayton, 2.2 miles west of, south side of road, northeast corner of field at intersection of Butte City-Dayton roads; iron post stamped "119 B 1909 B. 9".....	119. 032
Dayton, 0.7 mile southwest of, where road jogs to south and west, east end of gate to ranch, in base of 40-inch oak tree; spike with aluminum tag stamped "131 B. M. 6".....	131. 13
Dayton, west end of town, 100 feet west of large gate to lane, south side of road, in base of telephone pole; spike with aluminum tag stamped "137 B. M. 5".....	136. 78
Dayton, 1 mile east of, southeast corner of field, at crossroads, in base of telephone pole; spike with aluminum tag stamped "141 B. M. 4".....	141. 12
Chico, 3.7 miles southwest of, north edge of road, at bend in road, in base of telephone pole 1699; spike with aluminum tag stamped "143 B. M. 3".....	143. 30
Chico, 2.7 miles southwest of, east edge of road, southwest corner of field, at intersection of road to Durham; iron post stamped "155 B 1909 B. 1".....	154. 986
Chico, 1.9 miles southwest of, north edge of road, 400 feet east of large barn, in base of telephone pole; spike with aluminum tag stamped "165 B. M. 2".....	165. 27
Chico, 0.9 mile southwest of, north side of road, opposite T road east, south of gate to field, in base of telephone pole; spike with aluminum tag stamped "174 B. M. 1".....	174. 221
Chico, 0.5 mile south of, on east side of railroad, 5 feet north of milepost 5; iron post stamped "185 B 1902".....	184. 842

Dayton east to Durham.

	Feet.
Dayton, 1 mile east of, northwest corner of field at crossroads; iron post stamped "142 B 1909 B. 2"	142. 241
Durham, 3 miles west of, south side of T road to south, north end of gate, in base of fence post; spike with aluminum tag stamped "150 B. M. 7" ..	149. 85
Durham, 2 miles west of, south side of road, at T road north, 50 feet west of cross fence, in base of fence post; spike with aluminum tag stamped "156 B. M. 8"	156. 38
Durham, 1.4 miles west of, east side of road, at intersection of north and south road, in base of 36-inch oak tree; spike with aluminum tag stamped "157 B. M. 9"	158. 02
Durham, 0.9 mile west of, at intersection of road, southwest corner of field, in base of telephone pole; spike with aluminum tag stamped "155 B. M. 10"	154. 89
Durham, in front of station; top of rail	159. 1
Durham, 0.4 mile south of, east of railroad, 270 feet north of milepost 179, 5 feet from telephone pole; iron post stamped "152 B 1902"	152. 288

Sterling Junction northwest to Chico.

Sterling Junction, east edge of road, north edge of railroad right of way, at road crossing, in base of oak tree; spike with aluminum tag stamped "201 B. M. 15"	201. 27
Barber, 1 mile east of, southeast corner of trestle over creek; painted bolt-head with aluminum tag stamped "200 B. M. 14"	200. 45

KEEFERS AND NORD 7½ QUADRANGLES.

Chico northwest along highway to Vina.

Chico, 1.7 miles north of normal school, northwest corner of bridge over Big Chico Creek; painted bolt-head with aluminum tag stamped "194 B. M. 51"	194. 34
Big Chico Creek, 0.7 mile northeast of, north edge of road, at turn north, in base of telephone pole; spike with aluminum tag stamped "205 B. M. 52" ..	203. 74
Chico, 3.3 miles northeast of, west edge of road, at lane to ranch, in base of fence post; spike with aluminum tag stamped "202 B. M. 53"	201. 67
Chico, 3.8 miles northeast of, west edge of road, at intersection of road to west, in base of fence post; spike with aluminum tag stamped "193 B. M. 54"	193. 48
Chico, 4.6 miles northeast of, northwest corner of bridge over Mud Creek, in cap; copper nail with aluminum tag stamped "194 B. M. 55"	194. 04
Chico, 5.3 miles northeast of, east edge of road, at junction of road to east, where road jogs northwest, 50 feet south of gate to second-class road; iron post stamped "249 B 1909 B. 14"	248. 607
Chico, 6.5 miles northeast of, 350 feet south of road to east, at cross-fence line, on summit of ridge, in base of fence post; spike with aluminum tag stamped "293 B. M. 56"	292. 64
Chico, 7.2 miles northeast of, east of road, 20 feet south of intersection of road to Richardson's spring, in base of 20-inch live oak tree; spike with aluminum tag stamped "308 B. M. 57"	308. 14
Junction of Chico and Richardson's Spring roads, 1 mile west of, at east end of gate to second-class road, in base of fence post; spike with aluminum tag stamped "304 B. M. 58"	304. 10

	Feet.
Junction of Chico and Richardson's Spring roads, 2 miles west of, north edge of road, opposite east end of orchard at gate to second-class road, in base of 24-inch oak tree; spike with aluminum tag stamped "233 B. M. 59".....	232. 80
Chico, 6 miles north of, in sec. 28, T. 23 N., R. 1 W., at T road along south bank of Rock Creek, opposite southeast corner of peach orchard; iron post stamped "227 B 1909 B. 15".....	227. 252
Shannon ranch, opposite house, north edge of road, in base of 24-inch locust tree; spike with aluminum tag stamped "198 B. M. 60".....	199. 13
Shannon ranch, 1.2 miles west of, 50 feet north of intersection of Chico-Vina-Cohasset roads, 0.5 mile south of Rock Creek Bridge, in base of power pole; spike with aluminum tag stamped "177 B. M. 61".....	177. 38
Rock Creek, northwest corner of bridge, in cap; copper nail with aluminum tag stamped "183 B. M. 62".....	183. 09
Rock Creek Bridge, 1 mile northeast of, 2.5 miles south of Antelope schoolhouse, west edge of road, at second-class road through Shannon ranch; iron post stamped "195 B 1909 B. 16".....	195. 091
Antelope schoolhouse, 1.5 miles south of, west edge of road, at cross-fence line, in base of fence post; spike with aluminum tag stamped "219 B. M. 63".....	218. 91
Antelope schoolhouse, 50 feet south of southwest corner of school yard, in base of fence post; spike with aluminum tag stamped "261 B. M. 64"....	260. 76
Antelope schoolhouse, 1 mile north of, west edge of road, southeast corner of field on county line, in base of fence post; spike with aluminum tag stamped "285 B. M. 65".....	285. 15
Pine Creek, southwest corner of bridge, in cap; copper nail with aluminum tag stamped "293 B. M. 66".....	293. 04
Live Oak schoolhouse. 0.6 mile north by 0.6 mile west of, 2.6 miles east of triangulation station at Stanford sheep ranch headquarters, south edge of road, where road turns west, in bowlder buried flush with ground; aluminum tablet stamped "283 B 1909 B. 17".....	283. 068
Stanford sheep ranch headquarters, 1.6 miles east of, south edge of road, at fence corner, in base of fence post; spike with aluminum tag stamped "227 B. M. 67".....	227. 16
Stanford sheep ranch headquarters, 1 mile east of, north edge of road, in base of fence post; spike with aluminum tag stamped "229 B. M. 68".....	228. 65
Stanford sheep ranch headquarters, 250 feet southwest of house, 5 feet north of tree; triangulation station; iron post stamped "238 B 1909 B 18"....	238. 035
Stanford sheep ranch headquarters, 0.8 mile north of, west edge of irrigation ditch, in base of 10-inch willow tree; spike with aluminum tag stamped "258 B. M. 68".....	257. 90
Stanford sheep ranch headquarters, 1.4 miles north of, 4.4 miles east of Vina, at intersection of east-west road, north end of gate, in gate post; spike with aluminum tag stamped "280 B. M. 69".....	279. 98
Stanford sheep ranch headquarters, 2.6 miles north of, 3.4 miles east of Vina, opposite house, north side of road, at intersection of north-south road, in base of fence post; spike with aluminum tag stamped "262 B. M. 70"....	262. 00
Vina, 0.4 mile south of, on east side of railroad, 30 feet north of milepost 204; iron post stamped "202 B 1902".....	202. 206

CHEROKEE, CLEAR CREEK, DRY CREEK, AND OROVILLE 7½ QUADRANGLES.

Oroville northwest along highway and electric railroad to Sterling Junction.

Oroville, Southern Pacific Railroad station, 200 feet south of, south side of road, east side of track, 6 feet east of railroad property line post; iron post stamped "205 B 1909 J.".....	204. 824
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	Feet.
Oroville, northwest corner of steel bridge over Feather River, in concrete abutment, at end of railing top of bolt head; stamped B, painted "191 B. M. 44"	192. 41
Oroville, 0.6 mile north of, at crossroads, in base of signpost "Chico-Cherokee;" spike with aluminum tag stamped "267 B. M. 45"	268. 04
Oroville, 1.5 miles north of, 15 feet east of fence line, where power line crosses road, in base of power pole 445; spike with aluminum tag stamped "266 B. M. 46"	267. 54
Oroville, 2.6 miles northwest of, northwest corner of field, 250 feet south of large barn, at foot of small ridge; iron post stamped "300B 1909 B 12"	301. 735
Oroville, 3.9 miles northwest of, east edge of road, at T road to west, in base of power pole 372; spike with aluminum tag stamped "291 B. M. 47" ..	291. 93
Oroville, 4.8 miles northwest of, east edge of road, in base of power pole pole 21/29; spike with aluminum tag stamped "311 B. M. 48"	312. 45
Oroville; 5.8 miles northwest of, at Wick's ranch, at junction of road to northeast, 100 feet east of blacksmith shop; iron post stamped "265 B 1909 B 13"	265. 053
Oroville, 6.8 miles northwest of, 1 mile northwest of Wicks, south side of road at intersection of second-class road, in base of fence post; spike with aluminum tag stamped "264 B. M. 49"	264. 15
Dry Creek, 1.2 miles southeast of, south side of road, at junction of road to south, in base of fence post; spike with aluminum tag stamped "251 B. M. 50"	251. 46
Rio Seco schoolhouse, north of, northwest corner of field, 500 feet east of Dry Creek, at intersection of Marysville-Oroville roads; iron post stamped "190 B 1909 B-10"	189. 744
Dry Creek, 1.4 miles northwest of, south side of road, at second-class road, in base of power pole 13/19; spike with aluminum tag stamped "223 B. M. 38"	222. 68
Butte Creek, 5.7 miles southeast of, east edge of road, in base of power pole 13/6; spike with aluminum tag stamped "184 B. M. 37"	183. 60
Butte Creek, 4.6 miles southeast of, east of road, 100 feet south of bridge over drain, in base of power pole 12/3; spike with aluminum tag stamped "166 B. M. 36"	165. 80
Durham, 4 miles east of, at intersection of Durham-Chico-Oroville roads, 10 feet west of signpost; iron post stamped "181 B 1909 B-3"	181. 556
Butte Creek, 3 miles southeast of, east edge of road, opposite transforming station on power line, in base of power pole 1; spike with aluminum tag stamped "172 B. M. 35"	171. 71
Butte Creek, 1.6 miles southeast of, north edge of road, at junction of Chico-Oroville-Paradise roads, in base of power pole 1/4; spike with aluminum tag stamped "172 B. M. 34"	172. 01
Butte Creek, 1.2 miles southeast of, south edge of road, in base of power pole 1/10; spike with aluminum tag stamped "177 B. M. 19"	177. 38
Butte Creek, 0.8 mile southeast of, north edge of road, 600 feet east of water trough, in base of 36-inch oak tree; spike with aluminum tag stamped "185 B. M. 18"	184. 58
Butte Creek, 30 feet west of approach to bridge, north side of road, in base of power pole 2/18; spike with aluminum tag stamped "191 B. M. 17" ..	191. 44
Carmino, 200 feet north of Northern Electric Railroad station, west edge of county road, 50 feet north of large gate, at junction of Chico-Oroville road; iron post stamped "191 B 1909 B 4"	191. 217
Sterling Junction, 0.8 mile south of, seventh telephone pole south of mile-post 3, east side of right of way, in base of telephone pole; spike with aluminum tag stamped "203 B. M. 16"	202. 87

Oroville west along highway to Tres Vias, thence north to Rio Seco schoolhouse.

	Feet.
Oroville, northeast corner of courthouse, 4.5 feet from ground, in concrete wall; aluminum tablet stamped "173 B 1909 B I".....	172. 736
Oroville, 2.5 miles west of, at road crossing, reverse curve in Northern Electric Railroad track, in base of telegraph pole; spike with aluminum tag stamped "178 B. M. 16".....	177. 99
Oroville, 3.5 miles west of, at road crossing, northeast corner of right-of-way fence; iron post stamped "203 B 1909 B H".....	203. 425
Oroville, 5 miles west of, 1 mile east of Tres Vias, at trestle on Northern Electric Railroad and long fill in embankment, in base of power pole; spike with aluminum tag stamped "169 B. M. 15".....	169. 39
Oroville, 6 miles west of, 200 feet southwest of Northern Electric Railroad station at Tres Vias, northwest corner of Floral schoolhouse yard; iron post stamped "160 B. M. 1909 B. G.".....	160. 307
Oroville, 7 miles west of, 1 mile west of Northern Electric Railroad station at Tres Vias, north side of road, opposite private roadway to south in base of power pole 1/0; spike with aluminum tag stamped "128 B. M. 14".....	128. 17
Shippee road, 1.2 miles south of Northern Electric Railroad station, southwest corner of barnyard, in base of power pole; spike with aluminum tag stamped "122 B. M. 43," at intersection of road to east.....	122. 48
Shippee road, Northern Electric Railroad station, north edge of right of way, in base of power pole 19/10; spike with aluminum tag stamped "125 B. M. 42".....	125. 20
Rio Seco schoolhouse, 0.6 mile west of, 2 miles south of, west of road at T road east, opposite power pole 18/14; iron post stamped "136 B 1909 B 11".....	136. 474
Rio Seco schoolhouse, 0.6 mile west by 1 mile south of, east edge of roads, in base of power pole 17/10; spike with aluminum tag stamped "153 B. M. 41".....	153. 29
Rio Seco schoolhouse, 0.6 mile west of, northwest corner of bridge over creek, in cap; copper nail with aluminum tag stamped "162 B. M. 40".....	162. 28
Rio Seco schoolhouse, east end of gate to school yard, in base of gate post; spike with aluminum tag stamped "182 B. M. 39".....	182. 43
Rio Seco schoolhouse, 1.4 miles north of, northwest corner of field, 500 feet from Dry Creek, at intersection of Marysville and Oroville roads; iron post stamped "190 B 1909 B-10".....	189. 744

BIGGS, GRIDLEY, HONCUT, AND PALERMO QUADRANGLES.**Point 7.1 miles northeast of Marysville northeast 10 miles, thence west to Honcut (portion of line).**

Nigger Jack Slough, 3.8 miles north of, southeast corner of second-class road to east, in base of fence post; spike with aluminum tag stamped "102 B. M. 66".....	101. 60
Nigger Jack Slough, 4.9 miles north of east edge of road, at section line, in base of fence post; spike with aluminum tag stamped "106 B. M. 67".....	107. 26
Honcut, 3 miles northeast of, at junction of roads, opposite schoolhouse, at small gate to school yard, in base of 20-inch oak tree; spike with aluminum tag stamped "137 B. M. 75".....	137. 03
Honcut, 1.3 miles east of, at intersection of north-south road, west end of old store, at fence line; iron post stamped "116 B 1909 B X".....	115. 714
Honcut, 0.8 mile east of, northwest corner of bridge over Honcut Creek, in top of cord; spike with aluminum tag stamped "114 B. M. 76".....	113. 13

Point 2.6 miles north of Wooddrift schoolhouse north and east along road to Palermo.

Wooddrift schoolhouse, 3.2 miles north of, 30 feet south of road running east, 300 feet south of blacksmith shop, east side of road; iron post stamped "78 B 1909 B. B.".....	Feet. 77. 261
Honcut, at large gate in northwest corner of school yard, in base of gate post; spike with aluminum tag stamped "80 B. M. 6".....	79. 91
Honcut, 1 mile north of, opposite Yuba dairy ranch, center of road, in base of 30-inch oak tree; spike with aluminum tag stamped "83 B. M. 7".....	82. 34
Honcut, 2.2 miles north of, west side of road, 350 feet south of barn, in base of 36-inch oak tree; spike with aluminum tag stamped "85 B. M. 8".....	84. 64
Honcut Creek, north bridge over, northeast corner of; painted bolt head with aluminum tag stamped "80 B. M. 9".....	79. 36
Honcut Creek, 0.8 mile north of, east side of road, at junction with road running east; iron post stamped "87 B 1909 B. C.".....	86. 338
Honcut Creek, 1.5 miles north of, 150 feet south of road running west, west edge of road, in base of 30-inch oak tree; spike with aluminum tag stamped "92 B. M. 10".....	91. 90
Central schoolhouse, 300 feet south of, 150 feet south of road leading east, east side of road, in base of 40-inch oak tree; spike with aluminum tag stamped "97 B. M. 11".....	96. 31
Central schoolhouse, 1.1 miles north of, 4.9 miles east of Gridley, northeast corner of field; iron post stamped "101 B. 1909 B. D.".....	100. 383
Union schoolhouse, 2 miles north of, west side of road, opposite bend, in base of telephone pole; spike with aluminum tag stamped "102 B. M. 47".....	101. 90
Union schoolhouse, 3 miles north of, west side of road, at bend of road, 1,000 feet north of lane to house, in base of telephone pole; spike with aluminum tag stamped "103 B. M. 48".....	103. 06
Union schoolhouse, 4.1 miles north of, 4.8 miles southwest of Palermo, west edge of road, at section line, southeast corner of small alfalfa field, 500 feet south of house; iron post stamped "119 B 1909 B. O.".....	118. 895
Union schoolhouse, 4.6 miles north of, 4.3 miles southwest of Palermo, west side of road, at intersection of road to east, in base of telephone pole; spike with aluminum tag stamped "111 B. M. 49".....	110. 65
Palermo, 3.1 miles west by 0.6 mile south of, center of road, 0.2 mile north of small house, in base of 30-inch oak tree; spike with aluminum tag stamped "127 B. M. 50".....	126. 31
Palermo, 2.6 miles west of, at intersection of east-and-west road, southwest corner of road, 600 feet west of house; iron post stamped "139 B 1909 B. P.".....	138. 735
Palermo, 1.6 miles west of, 25 feet west of intersection of north-south road, in base of telephone pole; spike with aluminum tag stamped "138 B. M. 51".....	137. 90
Palermo, 1.1 miles west of, southwest corner of bridge over small creek, in top of cord; bolt head with aluminum tag stamped "154 B. M. 52".....	153. 29

Honcut Creek east to Honcut, thence north to Oroville.

Honcut Creek, 0.8 mile north of, east side of road, at intersection of road to east; iron post stamped "87 B 1909 B. C.".....	86. 338
Honcut, 2.8 miles west of, northwest corner of bridge over creek, in top of cord; bolt head with aluminum tag stamped "81 B. M. 61".....	80. 52
Honcut, 2 miles west of, east edge of Western Pacific Railway right of way, at road crossing, in base of telephone pole; spike with aluminum tag stamped "83 B. M. 60".....	82. 28

	Feet.
Honcut, 1.3 miles west of, south side of road, in base of fence post; spike with aluminum tag stamped "88 B. M. 59".....	88. 12
Honcut, northwest corner of school building; iron post stamped "106 B 1909 B. S.".....	106. 062
Honcut, north edge of town, east edge of railroad right of way, in base of milepost 137; spike with aluminum tag stamped "99 B. M. 58".....	98. 89
Honcut, 2 miles north of, east edge of railroad right of way, in base of milepost 138; spike with aluminum tag stamped "100 B. M. 57".....	100. 00
Honcut, 3 miles north of, east edge of right of way, in base of milepost 139; spike with aluminum tag stamped "112 B. M. 56".....	111. 95
Palermo, 4 miles south of, at Coxes Lane, 250 feet north of milepost 140, east edge of right of way; iron post stamped "121 B 1909 B.R.".....	120. 704
Palermo, 3 miles south of, southeast corner of trestle, at milepost 141; bolt head with aluminum tag stamped "122 B. M. 55".....	121. 89
Palermo, 2 miles south of, in base of milepost 142; spike with aluminum tag stamped "131 B. M. 54".....	131. 02
Heerst, in front of Western Pacific Railway station; top of east rail.....	139. 9
Palermo, 1 mile south of, southeast corner of trestle over creek, opposite milepost 143; bolt head with aluminum tag stamped "149 B. M. 53".....	149. 01
Palermo, in front of Southern Pacific Railroad station; top of rail.....	154. 6
Palermo, southwest corner of brick schoolhouse, 5 feet above ground; aluminum tablet stamped "170 B 1909 B. Q.".....	169. 287
Oroville, Southern Pacific Railroad station, 4.8 miles south of, 0.5 mile north of Palermo Station, 20 feet south of signboard 143/C, south of road crossing and east side of track, in base of telegraph pole; spike with aluminum tag stamped "161 B. M. 21".....	160. 87
Oroville, 3.7 miles south of, along railroad track, at first road crossing south of Villa Verona, in corner of right-of-way fence; iron post stamped "205 B 1909 B. K.".....	205. 291
Oroville, 2.5 miles south of, on west side of railroad track, in base of telegraph pole; aluminum tag stamped "221 B. M. 20".....	220. 81
Oroville, Southern Pacific Railroad station, 1.5 miles south of, east side of right of way, in base of telegraph pole; spike with aluminum tag stamped "198 B. M. 19".....	197. 78
Oroville, Southern Pacific Railroad station, 1 mile south of, east side of track, in base of signboard "Station 1 mile;" spike with aluminum tag stamped "178 B. M. 18".....	177. 87
Gridley, east 4 miles, thence north by road and electric railroad to Tres Vias.	
Gridley, in front of station; top of rail.....	92. 9
Gridley, 50 feet east of railroad track, south of road, 500 feet south of station, in base of telephone pole 15; spike with aluminum tag stamped "90 B. M. 15".....	89. 93
Gridley, 0.7 mile east of, south of road, opposite brown house; in base of 40-inch oak tree; spike with aluminum tag stamped "94 B. M. 14".....	93. 73
Gridley, Northern Electric Railroad crossing at station; top of east rail.....	97. 6
Gridley, 1.8 miles east of, center of north-south road, 1,500 feet east of Northern Electric Railroad, in base of 40-inch oak tree; spike with aluminum tag stamped "94 B. M. 13".....	93. 04
Gridley, 1.8 miles east of by 1.2 miles north of, 500 feet east of Oro Rancho station on Northern Electric Railroad, in base of 60-inch oak tree; spike with aluminum tag stamped "98 B. M. 77".....	97. 74
Oro Rancho, 0.4 mile northeast of, 30 feet north of Butte County canal, at Allen ranch, in base of telephone pole; spike with aluminum tag stamped "101 B. M. 78".....	100. 73

	Feet.
Butte County Canal, surface of water; May 5, 1909	95. 5
Oro Rancho, 1.4 miles northeast of, west side of road opposite Reed ranch house, in base of gatepost; spike with aluminum tag stamped "99 B. M. 79"	98. 943
Biggs, 3 miles east of, 0.3 mile east of Northern Electric Railroad, at intersection of road west, northeast corner of orchard; iron post stamped "109 B 1909 B. Y."	108. 884
Hume (Northern Electric Railroad station), road-crossing sign north of road and east side of track, in base of signpost; spike with aluminum tag stamped "110 B. M. 26"	109. 76
Tres Vias, 5 miles south of, 1 mile north of Hume, at road crossing, in base of north pole of overhead crossing poles; spike with aluminum tag stamped "114 B. M. 25"	113. 96
Tres Vias, 3.9 miles south of, at road crossing, in deep cut, in embankment, on north side of road, in base of post of cattle guard; spike with aluminum tag stamped "129 B. M. 24"	129. 48
Tres Vias, 3 miles south of, at road crossing; iron post stamped "121 B 1909 B. L."	121. 004
Tres Vias, 2 miles south of, at road crossing, east side of track, in base of right of way post; spike with aluminum tag stamped "135 B. M. 23"	134. 86
Tres Vias, 1.1 miles south of, at road crossing, in base of north pole of overhead crossing poles; spike with aluminum tag stamped "153 B. M. 22"	152. 96
Tres Vias, 200 feet south of Northern Electric Railroad station, 6 miles west of Oroville Floral schoolhouse, northwest corner of school yard; iron post stamped "160 B 1909 B. G."	160. 307

Biggs east 3 miles.

Biggs, 1.3 miles north of, west edge of railroad right of way, where wagon road turns west, in base of telephone pole; spike with aluminum tag stamped "91 B. M. 83"	90. 32
Biggs, in front of station; top of rail	93. 8
Biggs, 1.3 miles east of, southeast corner of intersection of north-south road, in base of telephone pole; spike with aluminum tag stamped "96 B. M. 82"	95. 898
Biggs, 2.1 miles east of, southeast corner of bridge over Butte County canal, in bulkhead; spike with aluminum tag stamped "106 B. M. 81"	105. 86
Biggs Junction, Northern Electric Railroad station, east line of right of way, in base of telephone pole; spike with aluminum tag stamped "107 B. M. 80"	106. 39

Point 3.9 miles east of Gridley west to Feather River.

Gridley, 3.9 miles east of, northwest corner of steel bridge over slough, in cord; spike with aluminum tag stamped "100 B. M. 12"	98. 35
Gridley, 2.7 miles east of, southwest corner of bridge over Feather River, in concrete abutment; aluminum tablet stamped "102 B 1909 B. E."	100. 424
Gridley, 2.7 miles east of, on southwest pier of Feather River Bridge; 25-foot mark on water gauge	99. 381
Gridley, 2.7 miles east of, surface of water in Feather River, April 22, 1909 ..	85. 6

Point 1 mile north of Silsby east and north via highway to point 2 miles west of Tres Vias.

Silsby, in front of station signpost; top of rail	108. 3
Silsby, 1,000 feet south of station signpost, at road crossing, 150 feet east of track, on north side of road, in base of right-of-way fence post; spike, with aluminum tag stamped "102 B. M. 10"	101. 85

Silsby, 1 mile east of, small bridge over creek, in floor at west end; copper brad with aluminum tag stamped "109 B. M. 11"	Feet. 108. 87
Silsby, 2 miles east of, southeast corner of field, in base of fence post; spike with aluminum tag stamped "108 B. M. 12"	108. 43
Silsby, 3.2 miles east of, 8 miles west by 1 mile south of Oroville, at cross- roads, 50 feet north of power pole 22/6; iron post stamped "112 B 1909 B.F."	112. 276
Oroville, 8 miles west of, at intersection of county roads and power lines, in base of power pole 21/4; spike with aluminum tag stamped "123 B. M. 13"	123. 35

Point 2 miles west of Liveoak south via highway 4 miles.

Liveoak, 2 miles west of, north side of road, at intersection of north-south road, in base of fence post; spike with aluminum tag stamped "71 B. M. 29"	71. 28
Liveoak, 2.8 miles west of, 4 miles north of Union schoolhouse, east side of road, at section corner, in base of fence post; spike with aluminum tag stamped "70 B. M. 46"	70. 46
Union schoolhouse, 3.2 miles north of, 1 mile east of, north side of road, 10 feet east of bridge over drain, in base of fence post; spike with alumi- num tag stamped "69 B. M. 45"	68. 04
Union schoolhouse, 2 miles north by 1 mile east of, north edge of road, at section line, 500 feet east of small house; iron post stamped "65 B 1909 B. N."	64. 884

Gridley west and south to Liveoak (portion of line).

Gridley, 1 mile west of, south side of road, at corner of road leading south, in base of power pole; spike with aluminum tag stamped "87 B. M. 16" ..	86. 85
Gridley, 1.5 miles west of, south of road, at junction of road south, in base of telephone pole; spike with aluminum tag stamped "85 B. M. 17"	84. 59
Gridley, 2.8 miles west of, 200 feet west of place where telephone line crosses to north side of road, north edge of road, at section line; iron post stamped "81 B 1909 B. F."	81. 048
Liveoak, 4 miles west of, 3.7 miles southeast of Pennington, south side of road, opposite small house, 15 feet east of gate; iron post stamped "72 B 1909 B. J."	71. 769
Liveoak, 3.3 miles west of, on southwest corner of concrete culvert over drain; chisel point painted "72 B. M. 28"	72. 24
Liveoak, 2.3 miles west of, north side of road, at intersection of north-south road, in base of fence post; spike with aluminum tag stamped "71 B. M. 29"	71. 28
Liveoak, 1.4 miles west of, south side of road at intersection of north-south road, in base of telephone pole; spike with aluminum tag stamped "73 B. M. 30"	73. 09
Liveoak, opposite north end of large warehouse, west edge of railroad right of way, 25 feet south of railroad crossing, in base of telephone pole; spike with aluminum tag stamped "74"	74. 25

Etna Mills, Hoopa, Preston, Sawyer Bar, Seiad, and Yreka quadrangles.

HUMBOLDT AND SISKIYOU COUNTIES.

The elevations in the following list are based upon bench marks at Montague, Hornbrook, and Hoopa, and upon mean sea level datum in agreement with elevations given in Bulletin 342, in which bulletin

are published additional elevations in Yreka quadrangle and vicinity. The prism level and yard rods were used on this work, and certain large errors in the field computations account for the discrepancies between stamped and published elevations.

The leveling was done by L. F. Biggs in 1907, except for a portion of the work in the Hoopa quadrangle done by him in 1906. The descriptions of the bench marks established in 1906 are here republished from Bulletin 342 in order to complete the list. The work was not in cooperation with the State.

YREKA QUADRANGLE.

Montague west along road via Yreka and Forest House to Fort Jones.

	Feet.
Montague, 1 mile south of, east of railroad, second telegraph pole north of milepost 376; iron post stamped "2518 B 1902".....	2, 518. 845
Montague, 1.5 feet west of northeast corner of Montague Hotel; aluminum tablet stamped "B-B-1907-2538".....	2, 537. 665
Montague, 1.7 miles west of, at northwest corner of Shasta River Bridge, 2 feet above abutment, 1 foot below aluminum tag; bolt head with aluminum tag stamped "B-2-2455".....	2, 455. 07
Yreka, high school, in stone foundation of left pillar of east approach; aluminum tablet stamped "B-B-1907-2-2616".....	2, 615. 926
Yreka, courthouse and jail, in cement foundation of northeast corner of jail; aluminum tablet stamped "B-B-1907-3-2625".....	2, 624. 886
Yreka, 4.6 miles southwest of, 0.2 mile east of Forest House, 10 feet north of road, in cut slate ledge; aluminum tablet stamped "B-B-1907-4-3056".....	3, 056. 010
Summit of divide between Yreka and Fort Jones, 400 feet east of, north edge of road, in slate boulder 3 by 3 by 3 feet; aluminum tablet stamped "B-B-1907-5-4117".....	4, 117. 440
Summit of divide between Yreka and Fort Jones, 20 feet south of road, in base of pine tree 36 inches in diameter; spike with aluminum tag stamped "B-13-4159".....	4, 159. 41
Fort Jones, 8 miles northeast of, 6 feet west of road, 6 feet north of creek, in base of alder tree 14 inches in diameter, spike; aluminum tag stamped "B-15-3411".....	3, 411. 55
Fort Jones, 6.8 miles northeast of, 6 feet east of road, in base of pine tree 42 inches in diameter; spike with aluminum tag stamped "B-16-3178".....	3, 178. 83
Fort Jones, 5.5 miles northeast of, 6 feet north of road, at rocky point, in slate ledge; aluminum tablet stamped "B-B-1907-6-2935".....	2, 936. 120
Fort Jones, 4.4 miles northeast of, 250 feet north of schoolhouse, 15 feet north of road, in base of oak tree 36 inches in diameter; spike with aluminum tag stamped "B-17-2916".....	2, 916. 82
Fort Jones, 3.2 miles northeast of, 6 feet south of road, in boulder; aluminum tablet stamped "B-B-1907-2829".....	2, 829. 300
Fort Jones, 1 mile northeast of, 40 feet east of forks of road leading north, in base of pine tree 36 inches in diameter; spike with aluminum tag stamped "B-20-2771".....	2, 771. 00
Fort Jones, in northwest corner of Berm's brick building used as livery stable; aluminum tablet stamped "B-1907-8-2747".....	2, 747. 365

Yreka west and south via Mount Vernon mine house to Fort Jones.

Yreka, 4.3 miles west of, south of road, 25 feet north of ditch at point of rocks, in large boulder; aluminum tablet stamped "B-B-1907-72-3107".....	3, 107. 296
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Yreka, 7.5 miles west of, north of road at summit, 500 feet west of Mount Vernon mine house, in ledge; aluminum tablet stamped "B-B-1907-73-4435"	Feet. 4, 435. 593
Yreka, 10.1 miles west of, north of road, 500 feet east of De Silva ranch, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B-223-3475"	3, 475. 10
Yreka, 11.9 miles west of, north of road at Hi U Gulch, in large boulder; aluminum tablet stamped "74-B-B-1907-3215"	3, 215. 090
Fort Jones, 4.5 miles northeast of, north of road, 250 feet west of old shack, in base of pine tree 14 inches in diameter; nail with aluminum tag stamped "B-224-3017"	3, 016. 83
Fort Jones, 4 miles northeast of, 300 feet west of Dan's ranch house, north of road, at foot of pine tree, in rock ledge; aluminum tablet stamped "B-B-1907-75-2932"	2, 934. 460

Fort Jones south 8 miles (part of line to Etna Mills).

Fort Jones, 1 mile southwest of, 20 feet east of lane, in base of pine tree 48 inches in diameter; spike with aluminum tag stamped "B-21-2736"	2, 736. 05
Fort Jones, 3 miles southwest of, 50 feet east of road, in base of pine tree 48 inches in diameter; spike with aluminum tag stamped "B-23-2746"	2, 744. 64
Fort Jones, 4 miles southwest of, 20 feet east of road, in base of oak tree 36 inches in diameter; spike with aluminum tag stamped "B-24-2758"	2, 756. 87
Fort Jones, 6.5 miles southwest of, 7.8 miles north of Etna, northwest corner of schoolhouse, in corner stone; aluminum tablet stamped "B-1907-9-2756"	2, 754. 800
Etna Mills, 6 miles northeast of, 30 feet west of road, in base of pine tree 24 inches in diameter; spike with aluminum tag stamped "B-26-2808"	2, 804. 20

Fort Jones southwest 7 miles (part of line to Etna Mills).

Fort Jones, 1.1 miles south of, bridge over Scott River, above southwest pier; top of bolt with aluminum tag stamped "B-188-2722"	2, 722. 10
Fort Jones, 2.7 miles south of, 30 feet north of big gate in rail fence, east of road, in base of pine tree 36 inches in diameter; nail with aluminum tag stamped "B-189-2735"	2, 735. 73
Fort Jones, 4.7 miles south of, 125 feet east of Kitten Creek schoolhouse, east of road, in base of oak tree 30 inches in diameter; nail with aluminum tag stamped "B-191-2768"	2, 768. 06
Greenview, in center of front wall of Denny Bar Co.'s store; aluminium tablet stamped "B-B-1907-64-2812"	2, 812. 000
Greenview, 1.2 miles south of, west of road, 25 feet west of corner of rail fence, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B-192-2803"	2, 803. 28

Hamburg southeast along road to point 5 miles south of Scott Bar.

Hamburg, 1.6 miles southeast of, in northeast corner of bridge over Scott River; key bolt stamped "B-1582," aluminum tag stamped "B-1582-167" ..	1, 582. 91
Scott Bar, northeast corner of Simon's warehouse; aluminum tablet stamped "B-B-1907-58-1685"	1, 687. 135
Scott Bar, 5.3 miles south of; west of road, in large boulder; aluminum tablet stamped "B-B-1707-59-2153"	2, 154. 988

Point 12.8 miles northwest of Fort Jones southeast 4.6 miles.

Fort Jones, 10.3 miles northwest of, north of road, on large boulder; chisel point painted "U. S.-179-2737"	2, 736. 22
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Fort Jones, 8.2 miles northwest of, north of road, 1,000 feet east of Pinkerton's ranch, in rock ledge; aluminum tablet stamped "B-B-1907-63-2655"	Feet. 2, 653. 896
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Fort Jones northwest to Meamber School.

Fort Jones, 3.4 miles west of, north of road, opposite house, in base of oak tree 36 inches in diameter; nail with aluminum tag stamped "B-185-2721"	2720. 53
Fort Jones, 6.4 miles west of, north of road, at bend, 1,000 feet north of house, in base of pine tree 60 inches in diameter; nail with aluminum tag stamped "B-183-2726"	2725. 60

Mouth of Scott River east to Hornbrook.

Mouth of Scott River, 2.3 miles east of, west of road, in base of oak tree 24 inches in diameter; nail with aluminum tag stamped "B-197-1581"	1, 582. 94
Mouth of Scott River, 3.9 miles east of, north of road, 0.5 mile west of Everill ranch house, in slate ledge; aluminum tablet stamped "B-B-1907-65-1593"	1, 595. 041
Mouth of Scott River, 5 miles east of, at southeast corner of bridge over Klamath River, top of pier; aluminum tag stamped "B-198-1608"	1, 610. 48
Oak Bar, 1 mile south of, west of road, in base of pine tree 30 inches in diameter; nail with aluminum tag stamped "B-200-1635"	1, 637. 17
Oak Bar; surface of water, September, 1907	1, 630. 00
Oak Bar, 500 feet east of hotel, north of road, in large boulder; aluminum tablet stamped "B-B-1907-66-1660"	1, 662. 384
Oak Bar, 1.5 miles east of, west of road, in base of madrone tree 30 inches in diameter; nail with aluminum tag stamped "B-202-1683"	1, 685. 31
Oak Bar, 3.3 miles east of, south of road, at Quigley's Ferry, in base of pine tree 30 inches in diameter; nail with aluminum tag stamped "B-204-1699"	1, 700. 62
Walker, 1,000 feet west of post office, 10 feet east of road, in boulder; aluminum tablet stamped "B-B-1907-67-1722"	1, 724. 255
Walker, 100 feet east of post office, in base of oak tree 60 inches in diameter; nail with aluminum tag stamped "B-205-1704"	1, 706. 27
Walker, 2.5 miles east of, south of road, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B-207-1729"	1 730. 81
Walker, 3.8 miles east of, north of road, in base of oak tree 40 inches in diameter; nail with aluminum tag stamped "1758"	1, 759. 96
Walker, 5.2 miles east of, south of road at bend, 10 feet east of dry bed of creek, in large boulder; aluminum tablet stamped "B-B-1907-1810" ...	1, 812. 225
Gottville, south bank of Klamath River at bend of road, in rock ledge; aluminum tablet stamped "B-B-1907-69-1882"	1, 907. 161
Gottville, 2 miles east of, 6 miles east of ferry landing, west of road, in base of oak tree 30 inches in diameter; nail with aluminum tag stamped "B-212-1858"	1, 882. 73
Gottville, 3.1 miles east of, south of road at bluff over river, in ledge of rock; aluminum tablet stamped "B-B-1907-70-1951"	1, 975. 740
Gottville, 5.3 miles east of, 1,000 feet east of junction of roads to Yreka and Hornbrook; north of road, in base of pine tree 20 inches in diameter, nail; aluminum tag stamped "B-214-1948"	1, 950. 96
Gottville, 6.7 miles east of, north of road, in base of oak tree 10 inches in diameter, nail; aluminum tag stamped "B-215-1963"	1, 965. 46

	Feet.
Gottville, 8.6 miles east of, steel bridge across Klamath River, in floor; nail.	2, 003. 00
Gottville, 8.6 miles east of, 25 feet north of bridge over Klamath River, west of road, in rock ledge; aluminum tablet stamped "B-B-1907-71-2003"	2, 004. 557
Gottville, 10 miles east of, south of road, in base of oak tree 40 inches in diameter; nail with aluminum tag stamped "B-216-2014"	2, 015. 85
Mouth of Shasta River; water surface, Oct. 2, 1907	2, 010. 6
Hornbrook, 4.3 miles west of, south of road, in base of oak tree 10 inches in diameter; nail with aluminum tag stamped "B-217-2044"	2, 045. 65
Hornbrook, 3 miles west of, north of road at junction of road and river trail, in large bowlder; aluminum tablet stamped "B-B-1907-72-2069"	2, 071. 447
Hornbrook, Klamath River at; under swinging bridge; surface of water Oct. 3, 1907	2, 059. 00
Hornbrook, 0.8 mile south of, west of railroad, 200 feet south of milepost 394, at fence line; iron post stamped "B-2114-1903"	2, 115. 298
Hornbrook, 2.2 miles north of, east of railroad, 30 feet north of milepost 397, at fence line; iron post stamped "2306-B-1903"	2, 306. 975

SEIAD QUADRANGLE.

Cottage Grove northeast along road to Seiad, thence southeast to Meamber school-house.¹

Cottage Grove, 0.5 mile north of, west of trail, 500 feet north of small stream, in bowlder; aluminum tablet stamped "B-B-1907-42-847"	843. 363
Cottage Grove, 1.5 miles north of, east of trail, 1,000 feet west of mouth of Independence Creek, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B-113-1057"	1, 052. 94
Cottage Grove, 2.4 miles north of, east of trail, 1,000 feet north of New York Ravine, in base of pine tree 18 inches in diameter; nail with aluminum tag stamped "B-114-1240"	1, 236. 56
Cottage Grove, 4.6 miles north of, 25 feet east of trail, 150 feet north of Crawford Creek, 10 feet north of cluster of pine trees, in large bowlder; aluminum tablet stamped "B-B-1907-43-1290"	1, 285. 965
Cottage Grove, 7 miles north of, at Siskiyou mine, north of trail, on summit of hill 200 feet north of mine, in base of pine tree 36 inches in diameter, nail; aluminum tag stamped "B-117-1619"	1, 614. 96
Happy Camp, 9.8 miles south of, 40 feet north of bridge over Clear Creek, in country bowlder; aluminum tablet stamped "B-B-1907-44-979"	974. 863
Cottage Grove, 11.3 miles north of, east of trail, 200 feet north of cabin, in base of pine tree 10 inches in diameter; nail with aluminum tag stamped "B-119-1036"	1, 032. 32
Happy Camp, 3.6 miles south of, west of trail, 200 feet south of summit of hill, in bowlder; aluminum tablet stamped "B-B-1907-45-1535"	1, 531. 026
Happy Camp, 1.2 miles south of, 75 feet north of barn on Gride ranch, in base of oak tree 39 inches in diameter; nail with aluminum tag stamped "B-122-1147"	1, 143. 13
Happy Camp, southwest corner brick wall of Eclipse saloon; aluminum tablet stamped "B-B-1907-46-1092"	1, 088. 455
Happy Camp, 2.8 miles north of, west of road, in base of oak tree 14 inches in diameter; nail with aluminum tag stamped "B-127-1194"	1, 189. 76
Happy Camp, 4.8 miles north of, 100 feet north of summit of hill north of trail, in rock ledge; aluminum tablet stamped "B-B-1907-1727"	1, 723. 443

¹ On this line a computed gross error of 1 yard between Scott Bar and Meamber schoolhouse was arbitrarily adjusted locally at Wilke's ranch, where another yard error possibly exists.

	Feet.
Happy Camp, 8.7 miles north of, east of road, in large boulder; aluminum tablet stamped "B-B-1907-48-1232"	1, 227. 845
Nolton, 2 miles east of, 10 feet north of bunk house on Martin's ranch, in large boulder; aluminum tablet stamped "B-B-1907-49-1296"	1, 291. 472
Nolton, 3.9 miles east of, south of road, nail; in base of maple tree 36 inches in diameter, aluminum tag stamped "B-136-1341"	1, 336. 68
Lowden, in front of schoolhouse, in base of oak tree; nail with aluminum tag stamped "B-139-1386"	1, 381. 49
Seiad, 0.8 mile south of, east of road, on east bank of Klamath River, in rock ledge; aluminum tablet stamped "B-B-1907-55-1446"	1, 448. 039

NOTE.—The line crosses here to the south bank of Klamath River.

Seiad, 3.8 miles east of, north of road, in base of maple tree 36 inches in diameter, nail; aluminum tag stamped "B-162-1437"	1, 438. 96
Seiad, 6.2 miles east of, south of road, 1,000 feet east of Burhardt's ranch house, in boulder; aluminum tablet stamped "B-B-1907-56-1514"	1, 515. 633
Hamburg, 1 mile southeast of, 250 feet east of Willard house, nail in base of oak tree 24 inches in diameter; aluminum tag stamped "B-165-1532" ..	1, 533. 54
Hamburg, 1.2 miles southeast of, south of road, 1,000 feet west of mouth of Scott River, in large boulder; aluminum tablet stamped "B-B-1907-57-1547"	1, 548. 683
Scott Bar, 8.6 miles southwest of, west of road, 25 feet south of shed at Kleaver ranch, in large boulder; aluminum tablet stamped "B-B-1907-60-2112"	2, 113. 660
Scott Bar, 10.9 miles southwest of, east of road, 25 feet north of bridge over Scott River, in large boulder; aluminum tablet stamped "B-B-1907-161-2233"	2, 234. 835
Fort Jones, 15 miles west of, west of road, 1,000 feet east of Canyon Creek, on large boulder; chisel point painted "U. S. 177-2355"	2, 357. 25
Fort Jones, 12.8 miles west of, 100 feet north of Wilke's ranch house, east of road, on large rock; chisel point painted "U. S.-178-2499"	2, 490. 27

Lowden north to Watkins, Oreg.

Lowden, 0.8 mile north of, east of road, in base of oak tree 36 inches in diameter; nail with aluminum tag stamped "B-141-1545"	1, 541. 41
Lowden, 3.7 miles north of, east of trail, at end of wagon road, in base of oak tree 48 inches in diameter; nail with aluminum tag stamped "B-143-1842"	1, 838. 38
Lowden, 6.2 miles north of, west of trail, 4.1 miles west of summit between Lowden and Eileen, in small quartz boulder; aluminum tablet stamped "B-B-51-1907-4033"	3, 927. 926
Lowden, 7.6 miles north of, east of trail, 300 feet east of cabin on Wetzel & Well's claim, in base of fir tree 24 inches in diameter; nail with aluminum tag stamped "B-146-5340"	5, 235. 98
Eileen, 4.1 miles south of, on summit between Lowden and Eileen, 15 feet north of trail, in slate ledge; aluminum tablet stamped "B-B-1907-52 6189"	6, 185. 403
Eileen, 2.1 miles south of, 250 feet south of corral, west of trail, in base of fir tree 48 inches in diameter; nail with aluminum tag stamped "150-5446" ..	5, 442. 01
Eileen, 1.2 miles south of, 25 feet east of junction of trail to Blue Ledge and Eileen, 250 feet south of Sophia mine, in base of pine tree 36 inches in diameter; nail with aluminum tag stamped "B-152-4765"	4, 760. 59
Eileen, 0.3 mile south of, 0.3 mile north of Blue Ledge mine, east edge of road, in rock ledge; aluminum tablet stamped "B-B-1907-53-3829"	3, 825. 352

Eileen, 0.6 mile north of, 250 feet north of bridge over small stream, west of road, in base of sugar pine tree 72 inches in diameter; nail with aluminum tag stamped "B-155-3340".....	Feet. 3,335.51
Hutton, 0.5 mile north of, east of road, 250 feet east of flume, in rock ledge; aluminum tablet stamped "B-B-1907-2127".....	2,122.034
Watkins, Oreg., 800 feet south of post office, 150 feet north of Applegate Creek, 570 feet southwest of corner of secs. 35 and 36, T. 40 S., R. 4 W., and secs. 1 and 2, T. 41 S., R. 4 W., 10 feet west of big gate; iron post stamped "B-1904-1849".....	1,852.367
Watkins, Oreg., 0.9 mile north of, 4 feet southeast of southeast corner of schoolhouse, in root of tree; nail.....	1,843.13

PRESTON QUADRANGLE.

Torgerson's ranch north to Cottage Grove.

Somes Bar, 8.8 miles north of, west bank of Klamath River, in base of oak tree 30 inches in diameter; nail with aluminum tag stamped "B-102-661".....	656.73
Somes Bar, 11.8 miles north of, south of gulch, 200 feet south of small stream, east of trail, in small boulder; aluminum tablet stamped "B-B-1907-39-900".....	895.588
Somes Bar, 13.2 miles north of, 500 feet north of bridge over Rock Creek, south of trail, in base of oak tree 14 inches in diameter; nail with aluminum tag stamped "B-104-720".....	715.34
Somes Bar, 15.8 miles north of, east of trail, 0.5 mile south of corral on top of hill, in base of sugar pine tree 36 inches in diameter; nail with aluminum tag stamped "B-107-1433".....	1,429.04
Somes Bar, 17 miles north of, 0.2 mile north of summit of Dillon Mountain, west of trail, in small boulder; aluminum tablet stamped "B-B-1907-40-1801".....	1,797.102
Somes Bar, 19.5 miles north of, 500 feet north of summit between Dillon Creek and Cottage Grove, east of trail, in base of fir tree 36 inches in diameter; nail with aluminum tag stamped "B-110-1261".....	1,255.50
Cottage Grove, 1.5 miles south of, 2.1 miles north of Dillon Creek, west of trail, corner of corral at Aubrey's ranch, in large boulder; aluminum tablet stamped "B-B-1907-41-787".....	780.877
Cottage Grove, 1.5 miles south of, river at J. C. Aubrey's ranch; surface of water, August, 1907.....	750
Cottage Grove, 0.7 mile south of, 21.2 miles north of Somes Bar, east of trail, in base of 12-inch forked madrone tree; nail with aluminum tag stamped "B-111-869".....	862.93

ETNA MILLS QUADRANGLE.

Point 6 miles northeast of Etna Mills southwest to Etna Mills, thence north.

Etna Mills, 3.3 miles northeast of, 16 feet north of road, in boulder; aluminum tablet stamped "B-1907-10-2778".....	2,775.356
Etna Mills, 2.2 miles east of, at southwest corner of bridge over Scott River, in floor above pier; spike stamped "B," aluminum tag stamped "B-30-2791".....	2,786.89
Etna Mills, 2.2 miles east of, Scott River, under bridge; surface of water, June 14, 1907.....	2,776
Etna Mills, northeast corner of Blake's hotel in brick wall; aluminum tablet stamped "B-1907-11-2933".....	2,930.372
Etna Mills, center of Denny Bar Co.'s store, in front brick wall; aluminum tablet stamped "B-1907-12-2945".....	2,942.072

Greenview, 2.4 miles south of, west of road, 25 feet south of Washington district school, in base of pine tree 36 inches in diameter; nail with aluminum tag stamped "B-193-2816".....	Feet. 2,816.49
Etna Mills southwest to Snowden.	
Etna Mills, 2 miles southwest of, at forks of road to mill, in base of pine tree 24 inches in diameter; spike with aluminum tag stamped "B-33-3122"...	3,117.98
Etna Mills, 3 miles southwest of, north of road, in flat rock; aluminum tablet stamped "B-1907-13-3443".....	3,439.800
Etna Mills, 5 miles southwest of, 6 feet north of road, in base of pine tree 36 inches in diameter; spike with aluminum tag stamped "B-35-3864"....	3,861.70
Etna Mills, 5.8 miles southwest of, east of road, in granite rock; aluminum tablet stamped "B-1907-14-4243".....	4,244.170
Etna Mills, 7.7 miles southwest of, 300 feet north of bridge, 20 feet east of road, in base of fir tree 24 inches in diameter; spike with aluminum tag stamped "B-37-5156".....	5,151.25
Etna Mills, 9.4 miles southwest of, 20 feet east of road, at summit between Etna Mills and Sawyer Bar, in slate ledge; aluminum tablet stamped "B-1907-15-5969".....	5,965.470
Summit, 2.9 miles west of, on south edge of road, in rock; aluminum tablet stamped "B-1907-16-4190".....	4,187.696
Summit, 5 miles southwest of, at north edge of road, 1,500 feet west of small bridge, in base of fir tree 48 inches in diameter; nail with aluminum tag stamped "B-41-3450".....	3,446.15

SAWYER BAR QUADRANGLE.**Snowden west along road down Salmon River to Somes Bar.**

Snowden, 0.6 mile west of, 400 feet west of bridge, west side of creek, north of road; aluminum tablet stamped "B-17-1907-2979".....	2,974.612
Snowden, 2.4 miles west of, in southwest corner of steel bridge; bridge spike with aluminum tag stamped "B-44-2598," spike stamped "B"...	2,593.73
Snowden, 5.3 miles west of, 10 feet north of fork in road, in large boulder; aluminum tablet stamped "B-1907-18-2425".....	2,420.440
Sawyer Bar, east end of, north of road, in large slate ledge; aluminum tablet stamped "B-19-1907-2173".....	2,171.794
Sawyer Bar, 3.1 miles west of, north of road, in rock ledge; aluminum tablet stamped "B-1907-20-1995".....	2,022.460
Sawyer Bar, 6.1 miles west of, north of road, at entrance to small gulch, in granite rock; aluminum tablet stamped "B-1907-21-1787".....	1,914.360
Sawyer Bar, 8.9 miles west of, south of road at cut making horseshoe; aluminum tablet stamped "B-B-1907-22-1677".....	1,716.340
Sawyer Bar, 10.9 miles west of, south of road, in base of live oak tree 14 inches in diameter; nail with aluminum tag stamped "B-54-1429"....	1,456.71
Forks of Salmon, 2.4 miles east of, north of road, 500 feet west of bridge, in rock; aluminum tablet stamped "B-1907-23-1484".....	1,511.430
Forks of Salmon, 400 feet east of Bennett's store, north of road, in boulder; aluminum tablet stamped "B-B-1907-24-1214".....	1,241.884
Forks of Salmon, 3.2 miles west of, 400 feet west of old Hyde mine, south of trail, 15 feet from edge of bluff over river, in large boulder; aluminum tablet stamped "B-B-1907-25-1124".....	1,151.340

NOTE.—The line crosses here to the southwest side of Salmon River.

Forks of Salmon, 5.8 miles west of, 600 feet east of small bridge, south of trail, in large boulder; aluminum tablet stamped "B-B-1907-26-1208"...	1,235.834
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Forks of Salmon, 7.8 miles west of, 500 feet north of summit between Forks of Salmon and Buttlers Flat, east of road, in large boulder; aluminum tablet stamped "B-B-1907-27-2531".....	Feet. 2,555.390
Buttlers Flat, 0.4 mile west of, north of road on edge of bluff, in large boulder; aluminum tablet stamped "B-B-1907-28-858".....	882.250
Buttlers Flat, 1.9 miles west of, south of trail, in base of madrone tree 24 inches in diameter; spike with aluminum tag stamped "B-70-1616".....	1,640.58
Buttlers Flat, 3 miles west of, 3.04 miles east of summit between Buttlers Flat and Somes Bar, 15 feet north of trail, in boulder; aluminum tablet stamped "B-B-1907-29-1779".....	1,793.654
Somes Bar, 50 feet west of store; point on rock, painted "501".....	525.27

HOOPA QUADRANGLE.

Somes Bar north to Torgerson's ranch.

Somes Bar, 0.9 mile north of, north side of Salmon River, south of trail, in base of madrone tree 18 inches in diameter; nail with aluminum tag stamped "B-93-551".....	547.27
Somes Bar, 4 miles north of, west of trail, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B-96-1504".....	1,499.70
Somes Bar, 4.3 miles north of, east of trail, between two small streams, in boulder; aluminum tablet stamped "B-B-1907-37-1498".....	1,494.113
Somes Bar, 6.7 miles north of, 1.7 miles south of Torgerson's ranch, west of trail, in base of oak tree 24 inches in diameter; nail with aluminum tag stamped "B-99-699".....	691.63
Somes Bar, 8.3 miles north of, 150 feet north of corral near bridge over small stream at Torgerson's ranch, in top of large boulder; aluminum tablet stamped "B-B-1907-38-680".....	675.438
Torgerson's ranch, Klamath River; surface of water, August 12, 1907....	591

Somes Bar southwest down Salmon River to Witchpec, thence south up Trinity River to point 7.5 miles north of Hoopa.

Somes Bar, 0.2 mile west of, south of trail, in large boulder; aluminum tablet stamped "B-B-1907-564-30".....	588.046
Junction of Salmon and Klamath rivers, 0.5 mile south of, at bend in trail, west of trail, in boulder; aluminum tablet stamped "B-B-1907-31-503".....	526.895
Somes Bar, 3.2 miles west of, north of trail at edge of bluff over Klamath River, in base of oak tree 12 inches in diameter; nail with aluminum tag stamped "B-76-809".....	830.73
Orleans, 2.6 miles east of, 500 feet east of Reise's house, west of trail, in large boulder; aluminum tablet stamped "B-B-1907-32-869".....	889.820
Orleans, 1 mile east of, 25 feet east of blacksmith shop at Perche's ranch, north of trail, in base of madrone tree 24 inches in diameter; nail with aluminum tag stamped "B-79-537".....	558.28
Orleans, 0.5 mile east of, north of trail, 100 feet east of ford, in large boulder; aluminum tablet stamped "B-B-1907-33-372".....	392.901

NOTE.—The line crosses here to the north side of Klamath River.

Orleans, 2.3 miles west of, south of trail, in base of madrone tree 6 inches in diameter; nail with aluminum tag stamped "B-81-422".....	443.16
Orleans, 5.5 miles west of, north of trail, in boulder; aluminum tablet stamped "B-B-1907-34-674".....	694.887
Orleans, 8.6 miles west of, south of trail, in base of madrone tree 30 inches in diameter; nail with aluminum tag stamped "B-86-396".....	417.68
Orleans, 10 miles west of, 25 feet west of bridge over Bluff Creek, west of trail, in large boulder; aluminum tablet stamped "B-B-1907-35-326".....	346.760

	Feet.
Witchpec, 3.5 miles east of, south of trail, in base of tan oak tree 56 inches in diameter; nail with aluminum tag stamped "B-86-381".....	402. 02
Witchpec, 0.9 mile east of, south of trail, in base of oak tree 24 inches in diameter; nail with aluminum tag stamped "B-90-393".....	414. 16
Witchpec, 250 feet south of Rippey's house, 20 feet south of trail, 900 feet north of junction of Klamath and Trinity rivers, in large boulder; aluminum tablet stamped "B-B-1907-36-346".....	366. 950

NOTE.—The line here crosses to the south side of Klamath-Trinity River.

Hoopa, 7.5 miles north of, west edge of trail, in slate rock; aluminum tablet stamped "B-B-25-1906".....	1, 006. 208
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NOTE.—The remaining bench marks in this list are republished from Bulletin 342.

Point near China Flat along road to Hoopa.

China Flat, 6.3 miles north of, on west edge of road, in rock; aluminum tablet stamped "B-B-21-1906".....	1, 354. 915
Hoopa, 2.4 miles south of, 1,300 feet south of mile tree 63, 1,700 feet north of bridge, on west edge of road, in boulder; aluminum tablet stamped "B-B-22-1906".....	386. 042
Hoopa, 1,000 feet north of Bigard's store, in right edge of steps to United States Indian agent's office; aluminum tablet stamped "B-B-1906-23-352".....	351. 270

Hoopa north along road and trail 7.5 miles (single spur line).

Hoopa, 3.2 miles north of, 150 feet south of Soctish Creek, west edge of road, in rock; aluminum tablet stamped "B-B-24-1906".....	308. 482
Hoopa, 7.5 miles north of, on west edge of trail, in slate rock; aluminum tablet stamped "B-B-25-1906".....	1, 006. 208

Hoopa southwest along trail and road, to forks of road 3.4 miles northwest of Berry ranch house.

Hoopa, 3.8 miles west of, 20 feet west of Fourmile Creek, in large boulder; aluminum tablet stamped "B-1906-1716".....	1, 715. 199
Hoopa, 6 miles west of, 10 feet south of trail, in boulder; aluminum tablet stamped "B-1906-27-2899".....	2, 900. 323
Bear's ranch, 4.5 miles east of, on north edge of trail, in highest point of rock; aluminum tablet stamped "B-1906-28-3495".....	3, 494. 856

Capitola, Morgan Hill, New Almaden, Pajaro, Point Sur, Salinas, San Jose, and Santa Cruz quadrangles.

ALAMEDA, MONTEREY, SAN MATEO, SANTA CLARA, AND SANTA CRUZ COUNTIES.

The elevations in the following list are based upon an adjusted height at San Jose published in Bulletin 342, and accord with precise leveling along the Southern Pacific Railroad main line published in the same bulletin.

Leveling in all of these quadrangles, except Point Sur, was done in 1908 by B. A. Jenkins. Additional work was done in the Salinas quadrangle in 1908 by T. H. Moncure, in the San Jose quadrangle in 1909 by L. F. Biggs, and in 1903 by S. E. Blout, and in the New Almaden and Santa Cruz quadrangles in 1899 by C. C. Ward. The leveling in Point Sur quadrangle was done in 1909 by L. F. Biggs.

The work of 1908 and 1909 was done in cooperation with the State.

CAPITOLA 15' QUADRANGLE.

Watsonville northwest and west along Southern Pacific Railroad to Del Mar.

Watsonville, 20 feet east of mansion house, north of street, opposite city square brick building; aluminum tablet stamped "S. F. 33 1908 20"....	Feet. 32. 369
Endicott, 1.9 miles south of, in east end of culvert "G-105;" aluminum tablet stamped "S. F. 66 1909 21".....	65. 741
Aptos, 4.9 miles south of, 200 feet north of milepost 108, in west end of culvert; aluminum tablet stamped "S. F. 75 1908 22".....	74. 484
Aptos, 1 mile south of, east end of culvert 111-F; aluminum tablet stamped "S. F. 104 1908 23".....	103. 928
Aptos, 1,400 feet south of station, east of track, in south abutment of new steel bridge; aluminum tablet stamped "S. F. 99 1908 24".....	98. 233
Aptos, in front of station; top of rail.....	107. 4
Capitola, 0.5 mile south of, on culvert 115, east end; chiseled circle painted "U. S. 88 B. M. No. 42".....	87. 70
Capitola, in front of station; top of rail.....	64. 8
Capitola, 0.3 mile north of, east of track, north end of new steel bridge, in cement abutment; aluminum tablet stamped "S. F. 55 1908 25".....	54. 724
Capitola, 0.8 mile north of, on east end of culvert 116-B; chiseled circle painted "U. S. 63 B. M. No. 43".....	62. 32
Del Mar, in front of station; top of rail.....	58. 9

SANTA CRUZ 30' QUADRANGLE.

Del Mar west to Santa Cruz, thence north 3 miles.

Seabright, in front of station; top of rail.....	46. 8
Santa Cruz, 0.9 mile north of station, at southeast corner of San Lorenzo River bridge, in guard rail; bolt head painted "U. S. 28 B. M. No. 45".....	28. 14
Santa Cruz, 100 feet north of station, in Southern Pacific Railroad grass plot; iron post stamped "S. F. 14 1908 26".....	13. 570
Santa Cruz, east side of entrance to Santa Cruz County courthouse, in base of arch; aluminum tablet stamped "S. F. 18".....	17. 559
Santa Cruz, northwest corner of brick building facing Pacific Avenue, next building south of courthouse; aluminum tablet stamped "S. F. 18 1908 27".....	17. 269
Santa Cruz, 2.8 miles north of, west end of cement culvert; chiseled circle painted "U. S. 170 B. M. No. 47".....	169. 50

SAN JOSE 15' QUADRANGLE.

Irvington south along Southern Pacific Railroad to San Jose.

Milepost 37; iron post stamped "46.563 B".....	46. 703
Milepost 40, 350 feet south of, opposite small bridge, east side of track; iron post stamped "11.301 B".....	11. 465
Milepost 43, 475 feet south of, at highway crossing, west of track; iron post stamped "37.505 B".....	37. 694
Milepost 56, 50 feet east of, east of track; iron post stamped "69.117 B".....	69. 330

At San Jose.

San Jose, 150 feet east of Southern Pacific Railroad standard-gage station, in circular base of iron water stand about 2 feet in diameter; log bolt (Coast and Geodetic Survey bench mark).....	91. 76
San Jose, southwest corner of St. James and First streets, opposite St. James Square, set horizontally in west end of lower edge of stone banister on north side of entrance to Santa Clara County Hall of Records; aluminum tablet stamped "98 S. F.".....	98. 317

San Jose southeast along railroad 8.6 miles.

San Jose, in northeast corner of Trinity Parish Episcopal Church; aluminum tablet stamped "S. F. 98 1908 36"	Feet. 97. 264
San Jose, at 21 North Fourth Street, in southeast corner of brick warehouse and office of Sperry Flour Co.; tablet stamped "S. F. 96 1908 1"	96. 111
San Jose, 2 miles south of, 300 feet north of brickworks, west of railroad, in base of semaphore; bolt head painted "U. S. 112 B. M. No. 1"	112. 47
San Jose, 3.5 miles south of, 50 feet west of milepost 54, west of track, 400 feet north of Franklin schoolhouse; iron post stamped "S. F. 130 1908 2"	130. 490
San Jose, 6.5 miles south of, west of track, 50 feet west of milepost 57; iron post stamped "S. F. 176 1908 B"	175. 790
Edenvale, in front of station; top of rail	183. 5

San Jose southwest along Southern Pacific Railroad to point 2 miles north of Los Gatos.

San Jose, in front of narrow-gage station; top of rail	96. 6
Campbell, in front of station; top of rail	199. 7
Campbell, 1.1 miles southwest of, 100 feet east of tank, in cement culvert; aluminum tablet stamped "S. F. 225 1908 35"	224. 902
Vasona, in front of station; top of rail	276. 1

NEW ALMADEN 15' QUADRANGLE.**Point 8.6 miles southeast of San Jose to milepost 61.**

San Jose, 9.7 miles south of, 800 feet south of milepost 60, 50 feet north of road to Mrs. L. Little's ranch house, where it crosses railroad, at west edge of wagon road; iron post stamped "S. F. 199 1908 4"	198. 764
Pomar, in front of station; top of rail	205. 1

Point near Zeyante north to point 1 mile north of Los Gatos.

Glenwood, 1.4 miles southwest of, at southwest corner of tunnel 4, in wing; aluminum tablet stamped "S. F. 787 1908 B. O."	786. 985
Glenwood, in front of station; top of rail	888. 96
Laurel, in front of station; top of rail	899. 3
Wrights, 1.4 miles southwest of, at west end of tunnel 2, in wing; aluminum tablet stamped "S. F. 902 1908 31"	901. 151
Wrights, 0.2 mile west of station, at northeast end of tunnel 2, in wing; aluminum tablet stamped "S. F. 898 1908 32"	897. 847
Aldercroft, 300 feet south of, on northeast corner of cement culvert 60-A; chiseled circle painted "U. S. 731 B. M. No. 61"	730. 45
Alma, 0.8 mile southwest of, 400 feet south of private road crossing, west of railroad; in bowlder; aluminum tablet stamped "S. F. 621 1908 B. 3"	620. 944
Alma, 0.6 mile northeast of, opposite Lexington, in cement culvert; aluminum tablet stamped "S. F. 535 1908 34"	534. 652
Los Gatos, 1.1 miles southwest of, on cement culvert; chiseled circle painted "U. S. 428 B. M. No. 64"	427. 76
Los Gatos, opposite station, in east corner of yard around Hotel Lindon, on Santa Cruz Avenue; iron post stamped "S. F. 412"	411. 789

MORGAN HILL 15' QUADRANGLE.**Milepost 61, near Pomar, southeast along Southern Pacific Railroad to Gilroy.**

San Jose, 12.5 miles south of, 0.2 mile north of Coyote, 150 feet south of road crossing, opposite milepost 63, west of track; iron post stamped "S. F. 253 1908 5"	253. 189
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	Feet.
Coyote, in front of station; top of rail.....	254. 7
Coyote, 3 miles south of, 30 feet east of milepost 66, west of road, 150 feet north of railroad crossing; iron post stamped "S. F. 300 1908 6".....	300. 467
Coyote, 6 miles south of, east of track, 20 feet east of milepost 69, 100 feet west of Madrone post office; iron post stamped "S. F. 344 1908 7".....	343. 846
Madrone, in front of station; top of rail.....	347. 5
Morgan Hill, in front of station; top of rail.....	348. 2
Morgan Hill, 1.3 miles south of, east of track, 10 feet south of milepost 72; iron post stamped "S. F. 332 1908 8".....	332. 425
Tennant, in front of station; top of rail.....	331. 0
San Martin, in front of station; top of rail.....	287. 6
Morgan Hill, 4.3 miles south of, east of road, 10 feet east of milepost 75, 500 feet south of Martin schoolhouse; iron post stamped "S. F. 280 1908 9".....	279. 637
Rucker, in front of station; top of rail.....	242. 0
Gilroy, 2.8 miles north of, 6 feet south of milepost 78, 50 feet south of private road crossing; iron post stamped "S. F. 224 1908 10".....	224. 445
Gilroy, in southeast corner of city hall; aluminum tablet stamped "S. F. 190 1908 11".....	199. 963
Gilroy, in Southern Pacific Railroad grass plot, west of track, 100 feet south of station; iron post stamped "S. F. 197 1908 12".....	197. 016
Gilroy, in front of station; top of rail.....	196. 6

PAJARO 15' QUADRANGLE.

Gilroy south and west along Southern Pacific Railroad to Watsonville.

Carnadero, in front of station; top of rail.....	171. 5
Gilroy, 3.2 miles south of, 80 feet south of milepost 84, south of track; iron post stamped "S. F. 167 1908 13".....	166. 653
Miller, in front of station; top of rail.....	156. 5
Gilroy, 6.4 miles south of, 0.2 mile east of Sargent, south of track, 30 feet west of milepost 87; iron post stamped "S. F. 138 1908 14".....	137. 862
Sargents, in front of station; top of rail.....	139. 2
Sargents, 2.8 miles west of, north of track, 170 feet east of milepost 90; iron post stamped "S. F. 144 1908 15".....	144. 080
Chittenden, in front of station; top of rail.....	128. 6
Chittenden, 1.7 miles west of, 650 feet west of milepost 93, 900 feet east of rock crusher, south of track; iron post stamped "S. F. 124 1908 16".....	123. 648
Logan, in front of station; top of rail.....	117. 2
Aromas, in front of station; top of rail.....	98. 2
Chittenden, 4.8 miles west of, south of track, 50 feet south of milepost 96; iron post stamped "S. F. 66 1908 17".....	66. 227
Vega, in front of station; top of rail.....	62. 6
Pajaro, 1.1 miles east of, 20 feet west of milepost 99; iron post stamped "S. F. 36 1908 18".....	36. 372
Pajaro, in front of station; top of rail.....	26. 7
Watsonville, 0.5 mile south of, at northeast corner of Pajaro bridge in top of pier; aluminum tablet stamped "S. F. 30 1908 19".....	29. 567
Watsonville, in front of station; top of rail.....	26. 9

Pajaro south to point 0.6 mile south of Castroville.

Pajaro, 1.8 miles south of, 50 feet west of milepost 102, on line between right of way and county road; iron post stamped "S. F. 19 1908 37".....	18. 777
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Pajaro, 4.8 miles south of, 100 feet north of milepost 105, at east edge of track; iron post stamped "S. F. 3 1908 38".....	Feet. 3. 518
Elkhorn, in front of station; top of rail.....	8. 3
Pajaro, 8.1 miles south of, 2.4 miles north of Castroville, 800 feet south of milepost 108, east of track; iron post stamped "S. F. 21 1908 39".....	21. 091
Castroville, in front of station; top of rail.....	22. 5
Castroville, 0.6 mile south of, 400 feet south of milepost 111, east of track, opposite south end of Y; iron post stamped "S. F. 20 1908 40".....	19. 519

SALINAS 15' QUADRANGLE.

Point near Castroville southeast along Southern Pacific Railroad to point 2 miles southeast of Chualar.

Salinas, 5.2 miles northwest of, 20 feet north of milepost 114, east of railroad; iron post stamped "S. F. 28 1908 41".....	28. 117
Graves, in front of signboard; top of rail.....	36. 6
Salinas, at south end of steps at east entrance to Salinas High School, in cement banister; aluminum tablet stamped "S. F. 53 1908 42".....	52. 957
Salinas, at west end of steps at south entrance to Monterey County jail, in stone banister; aluminum tablet stamped "S. F. 53 1908 43".....	53. 413
Salinas, in front of station; top of rail.....	48. 8
Salinas, 200 feet south of station, at north end of Southern Pacific Railroad park; iron post stamped "S. F. 49 1908 44".....	49. 325
Salinas, 4.6 miles southeast of, 100 feet west of milepost 123, on line between right of way and county road; iron post stamped "S. F. 68 1908 54".....	67. 986
Spence, in front of station; top of rail.....	84. 3
Spence, 0.6 mile southeast of, 10 feet north of milepost 126; iron post stamped "S. F. 91 1908 53".....	90. 088
Chualar, 0.2 mile north of station, 20 feet south of road crossing, at north edge of town, on line between right of way and county road; iron post stamped "S. F. 109 1908 52".....	108. 117
Chualar, in front of station; top of rail.....	102. 2

Salinas north and northwest to Castroville.

Santa Rita, 0.5 mile north of, at road junction; iron post stamped "S. F. 115 1908 45".....	115. 401
Castroville, 0.7 mile south by 1.7 miles east of, 7.1 miles northwest of Salinas, at north edge of road; iron post stamped "S. F. 61 1908 46".....	61. 074
Castroville, 0.6 mile south of, 400 feet south of milepost 111, east edge of right of way, opposite south end of Y; iron post stamped "S. F. 20 1908 40".....	19. 518

Point 3.8 miles north of Salinas east to Natividad, thence south to Spence.

Salinas, 3.8 miles north of, 0.4 mile north of Santa Rita, at road junction; iron post stamped "S. F. 1908 45 115".....	115. 401
Natividad, 100 feet south of saloon, at fence corner; iron post stamped "S. F. 161 1908 57".....	160. 809
Natividad, 3.7 miles southeast of, 0.5 mile south of limestone quarry, at angle in road, at east edge of road; iron post stamped "S. F. 185 1908 56".....	184. 652
Spence, 2 miles northeast by 1 mile north of, at east edge of road; iron post stamped "S. F. 133 1908 55".....	132. 920

Point 2 miles southeast of Salinas southwest to Spreckles, thence southeast and northeast to Chualar.

Spreckles, 2 miles northeast of, 50 feet south of road junction, north of road, opposite Harkin's ranch house; iron post stamped "S. F. 65 1908 47"...	Feet. 65. 312
Spreckles, office of Spreckles Sugar Co., at south end of steps at main entrance, in cement banister; aluminum tablet stamped "S. F. 62 1908 48".	61. 890
Alfred Hansen's ranch house, 3.2 miles northwest of, 100 feet west of forks of road, in fence corner; iron post stamped "S. F. 81 1908 49".....	80. 770
Chualar, 2.3 miles southwest by 3.1 miles northwest of, opposite Alfred Hansen's ranch house, at west edge of road; iron post stamped "S. F. 96 1908 50".....	95. 033
Chualar, 2.3 miles southwest of, northwest angle of fork road, at west corner of new steel bridge over Salinas River, in cement pier; aluminum tablet stamped "S. F. 90 1908 51".....	89. 120

Point near Spreckles southwest and south to Washington School, thence east to Lincoln School, thence northeast to point 2 miles northwest of Hansen ranch house.

Spreckles, 2.25 miles west by 1 mile south of, north of road, opposite second-class road from southeast; iron post stamped "138 104".....	138. 224
Spreckles, 3 miles west by 2 miles south of, in center of road, in south side of blazed sycamore tree; painted nail and aluminum tag marked "165 105".....	165. 25
Spreckles, near Toro Creek; surface of water in, September 8, 1908.....	215. 2
Spreckles, 4.5 miles west by 3 miles south of, in southwest forks of junction of Monterey and Salinas and Corral De Tierra roads; iron post stamped "291 107".....	291. 322
Washington school, in yard of, at southeast corner of school; iron post stamped "506 110".....	505. 69
Lincoln school, in yard of, at northeast corner of school; iron post stamped "951 113".....	951. 418
Divide at head of Pine Canyon, in northwest corner of road forks at divide between Corral De Tierra (valley) and Pine Canyon; iron post stamped "1988 116".....	1, 988. 568
Pine Canyon, mouth of, 500 feet west of W. V. Brady's ranch house, sharp turn of road around point, on lower side of road; iron post stamped "652 119".....	652. 103

Chualar southwest to a point 1.3 miles southeast of Chualar bridge.

Chualar, 2.6 miles west of, 75 feet west of bridge over Salinas River, at intersection of north-south road, at fence line; iron post stamped "100 B 1909 B.3".....	99. 631
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POINT SUR 30' QUADRANGLE.**Chualar southwest and southeast to point 4 miles southwest of Soledad (portion of line).**

Chualar bridge, 2.4 miles southeast of, 800 feet south of road to west, on east side of road, in base of forked oak tree; copper nail scribed and painted "147 B.M.13".....	147. 24
Chualar bridge, 3.5 miles southeast of, west side of road, opposite Wooster house, 0.5 mile north of Somavia schoolhouse; iron post stamped "132 B 1909 B.4".....	132. 016

Cape San Martin, Paraiso Springs, Priest Valley, and San Miguel 30' quadrangles,
and Gonzales 15' quadrangle.

KERN, KINGS, MONTEREY, AND SAN LUIS OBISPO COUNTIES.

The elevations in the following list are based upon precise leveling along the Southern Pacific Railroad.

The greater part of leveling in the quadrangles of this list was done in cooperation with the State in 1908 by W. H. Monahan. Additional leveling was done in 1909 in the Paraiso Springs quadrangle by L. F. Biggs.

GONZALES 15' QUADRANGLE.

Chualar southeast along Southern Pacific Railroad to point about 1 mile southeast of Gonzales.

	Feet.
Chualar, 1.2 miles southeast of, west of road, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "108".....	107. 70
Chualar, 3 miles southeast of, 20 feet north of railroad milepost 132, west of road; iron post stamped "CAL 1908 114 B".....	114. 220
Chualar, 4 miles southeast of, east of road, 5 feet north of bridge, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "113".....	113. 12
Chualar, 5 miles southeast of, west of road, in telephone pole; spike with aluminum tag stamped "117".....	117. 28
Gonzales, north edge of town, in corner of fence line between main highway and railroad; iron post stamped "CAL 1908 126 B".....	125. 545
Gonzales, 1 mile southeast of, east of road, 50 feet east of railroad, in telephone pole; spike with aluminum tag stamped "139".....	138. 97

SAN MIGUEL 30' QUADRANGLE.

Point 3 miles southeast of San Ardo southeast along railroad to Bradley, thence northeast along highways to Stone Canyon.

San Ardo, 4.3 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "461".....	460. 30
San Ardo, 5.2 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "491".....	490. 17
San Ardo, 6.5 miles southeast of, in base of target 1897; aluminum tablet stamped "1908-493-B".....	492. 283
San Ardo, 7.3 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "501".....	500. 18
San Ardo, 8.21 miles southeast of, in foundation of relay post; spike with aluminum tag stamped "493".....	491. 89
San Ardo, 9.2 miles southeast of, west of track, 100 feet from river bank, in telegraph pole; spike with aluminum tag stamped "507".....	505. 79
San Ardo, 10.1 miles southeast of, in stone culvert under railroad; aluminum tablet stamped "504-B-1908".....	503. 171
San Ardo, 11.35 miles southeast of, on west side of railroad, in telegraph pole; spike with aluminum tag stamped "518".....	517. 05
San Ardo, 12.2 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "525".....	524. 34
Bradley, north edge of town, in corner of line fence, 20 feet west of railroad, 1,000 feet north of grain shed; iron post stamped "CAL-1908-541-B".....	540. 248

	Fect.
Bradley, in front of station; top of rail marked "545".....	544. 9
Bradley, south edge of town, in corner of fence, 200 feet south of red section house; iron post stamped "552".....	552. 026
Bradley, 2.8 miles southeast of, north of road, in base of large oak tree; spike with aluminum tag stamped "743".....	743. 45
Bradley, 4.1 miles southeast of, north of road, at base of hill, in large oak tree; spike with aluminum tag stamped "892".....	891. 66
Bradley, 4.9 miles east of, north of road, 100 feet east of large oak tree, on line fence; iron post stamped "1026".....	1, 025. 914
Bradley, 6.1 miles east of, south of road, in base of small oak tree; spike with aluminum tag stamped "1256".....	1, 256. 50
Bradley, 8 miles east of, north of railroad, 1,000 feet east of road crossing, in telegraph pole; spike with aluminum tag stamped "1008".....	1, 007. 76
Bradley, 9.1 miles east of, north of railroad, 0.5 mile east of the Hamilton ranch dwelling, in telegraph pole; spike with aluminum tag stamped "1074".....	1, 073. 62
Bradley, 10.2 miles east of, south of railroad, 10 feet west of large oak tree; iron post stamped "1125-CAL-1908-B".....	1, 124. 660
Bradley, 11.3 miles east of, north of railroad, 100 feet north of railroad cut and 100 feet south of Indian Creek, in telegraph pole; spike with aluminum tag stamped "1171".....	1, 170. 72
Bradley, 13 miles east of, north of railroad, 100 feet north of road crossing, in telegraph pole; spike with aluminum tag stamped "1273".....	1, 273. 18
Bradley, 14.2 miles east of, north of railroad, between highway and railroad, 100 feet east of road and railroad bridge, in telegraph pole; spike with aluminum tag stamped "1343".....	1, 342. 64
Bradley, 15 miles east of, south of road, 100 feet north of railroad and 15 feet south of small oak tree on south side of road, 100 feet north of gulch, 1,800 feet north of oil derrick; iron post stamped "1908-CAL-1432-B".....	1, 431. 805
Bradley, 16.1 miles east of, south of track, 1,000 feet southwest of small house on north side of track, in telegraph pole; spike with aluminum tag stamped "1523".....	1, 523. 21
Bradley, 17.3 miles east of, north of railroad, 150 feet east of gulch on north, in telegraph pole; spike with aluminum tag stamped "1614".....	1, 614. 08
Bradley, 18.3 miles east of, east of railroad, 16 feet north of stream and railroad bridge, 100 feet east of road bridge and small house on west, in telegraph pole; spike with aluminum tag stamped "1695".....	1, 695. 26
Bradley, 20.7 miles east of, 200 feet west of power house at summit of mountain, 200 feet west of elevated railroad, on stone; chiseled square and aluminum tag stamped "2710".....	2, 710. 48
Stone Canyon, south side of mine railroad, 50 feet north of road, 400 feet west of opening of the Stone Canyon Consolidated Coal Co.'s mine, 300 feet north of company store, in large stone; aluminum tablet stamped "1908-CAL-2773-B".....	2, 773. 564

Bradley west along highway 9 miles.

San Ardo, 11.4 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "517".....	517. 05
Jolon, 21.8 miles southeast of, in barnyard of Ed Porter ranch, in large oak tree; spike with aluminum tag stamped "498".....	498. 23
Jolon, 20.9 miles southeast of, north of road, in telephone pole; spike with aluminum tag stamped "550".....	550. 18
Jolon, 19.9 miles southeast of, west of road, under large oak tree, 1,000 feet south of ranch house on east; iron post stamped "1908-CAL-597-B".....	596. 97

Jolon, 18.9 miles southeast of, west of road, 1,000 feet south of white patent wire gate leading to ranch on west, in telephone pole; spike with aluminum tag stamped "632".....	Feet. 632. 35
Jolon, 17.2 miles southeast of, east of road, north of white barn at top of grade, in telephone pole; spike with aluminum tag stamped "742".....	742. 32
Jolon, 16.3 miles southeast of, east of road in angle, in telephone pole; spike with aluminum tag stamped "767".....	766. 93

CAPE SAN MARTIN 30' QUADRANGLE.

Point 5 miles north of Jolon along highway south and east to point 9 miles west of Bradley.

San Lucas, 14.7 miles southwest of, at junction of roads, 0.75 mile west of "Lockwood;" iron post stamped "1908-CAL-1104-B".....	1, 104. 089
San Lucas, 16.2 miles southwest of, west of road, in telephone pole; spike with aluminum tag stamped "1014".....	1, 014. 11
San Lucas, 17.1 miles southwest of, north of road, 500 feet from white house at foot of hill, in telegraph pole; spike with aluminum tag stamped "1023".....	1, 023. 16
Jolon, at east edge of town, in forks of roads, 3 feet east of signpost which reads "Bradley 25 miles-Pleyto 14.5 miles-San Lucas 19.5 miles;" iron post stamped "1908-CAL-959-B".....	959. 100
Jolon, 1.9 miles south of, in field 25 feet west of road, in large oak tree; spike with aluminum tag stamped "924".....	924. 54
Jolon, 4.9 miles southeast of, west of road, 1,000 feet southwest of white house; iron post stamped "1908-CAL-949-B".....	949. 350
Jolon, 5.9 miles southeast of, east of road, 700 feet south of where road turns due east to "Lockwood," in telephone pole; spike with aluminum tag stamped "950".....	950. 41
Jolon, 6.8 miles southeast of, south of road, 1,000 feet west of where road turns due west, in telephone pole; spike with aluminum tag stamped "969".....	968. 87
Jolon, 8.1 miles southeast of, west of road, in front of house painted brown, in telephone pole; spike with aluminum tag stamped "990".....	990. 21
Jolon, 8.9 miles southeast of, north of road; 200 feet north of the Patterson ranch house, in telephone pole; spike with aluminum tag stamped "978".....	977. 77
Jolon, 10 miles southeast of, east of road, under large oak tree at edge of line fence; iron post stamped "1908-CAL-945-B".....	945. 425
Jolon, 10.9 miles southeast of, east of road, top of grade, in small oak tree; spike with aluminum tag stamped "1058".....	1, 057. 80
Jolon, 12.1 miles southeast of, at base of hill on west side of road, in telephone pole; spike with aluminum tag stamped "1008".....	1, 008. 20
Jolon, 13 miles southeast of, east of road at summit of hill, in automobile danger signpost; spike with aluminum tag stamped "1121".....	1, 121. 34
Jolon, 14 miles southeast of, west of road where road angles to east, in base of telephone pole; spike with aluminum tag stamped "971".....	970. 89
Jolon, 14.1 miles southeast of, west of road under small oak tree, 10 feet west of road; iron post stamped "1908-CAL-852-B".....	852. 537

PARAISO SPRINGS 30' QUADRANGLE.

Gonzales southeast along railroad to point 2.6 miles southeast of San Lucas.

Gonzales, 2.1 miles southeast of, east of road, 50 feet southeast of railroad, in telephone pole; spike with aluminum tag stamped "150".....	149. 76
Gonzales, 2.98 miles southeast of, west of road at railroad crossing, in corner of fence, 20 feet from railroad; iron post stamped "1908-CAL-158-B".....	158. 328

	Feet.
Gonzales, 4 miles southeast of, west of road, 50 feet west of railroad, in telephone pole; spike with aluminum tag stamped "170".....	170. 296
Gonzales, 5 miles southeast of, on west side of road, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "169".....	168. 98
Camphora, in corner of fence at angle in road, 75 feet northeast of gray house; iron post stamped "1908-CAL-173-B".....	173. 146
Camphora, 1.5 miles southeast of, east of road, 50 feet east of railroad, in telephone pole; spike with aluminum tag stamped "170".....	169. 90
Camphora, 2.5 miles southeast of, east of road, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "180".....	180. 22
Soledad, north edge of town, in corner of fence between road and railroad; iron post stamped "1908-185-B".....	184. 524
Soledad, south edge of town, at fence corner, 30 feet east of railroad track; iron post stamped "1908-CAL-189-B".....	189. 119
Soledad, 0.3 mile southeast of, at road crossing; top of rail marked "192".....	192. 33
Soledad, 1.1 miles southeast of, 25 feet east of railroad, in telephone pole; spike with aluminum tag stamped "196".....	195. 53
Soledad, 3 miles southeast of, west of railroad, in telephone pole; spike with aluminum tag stamped "223".....	222. 63
Soledad, 3.6 miles southeast of, east of railroad, 300 feet north of milepost 147; iron post stamped "1908-CAL-204-B".....	204. 142
Soledad, 5 miles southeast of, 5 feet west of track in switch post; spike with aluminum tag stamped "207".....	207. 03
Soledad, 6 miles southeast of, east of track, 200 feet north of road crossing, in telegraph pole; spike with aluminum tag stamped "211".....	210. 65
Soledad, 7 miles southeast of, east of railroad, near point of curve, on cement culvert; chiseled square marked "218".....	218. 26
Soledad, 7.7 miles southeast of, east of railroad, 20 feet south of culvert of highway under railroad, 300 feet east of white schoolhouse; iron post stamped "1908-CAL-224-B".....	223. 831
Metz, in front of station; top of rail marked "239".....	239. 32
Metz, 1.1 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "248".....	247. 57
Metz, 1.7 miles southeast of, west of railroad; iron post stamped "1908-CAL-244-B".....	243. 541
Metz, 3 miles southeast of, west of railroad, near curve and switch, in telegraph post; spike with aluminum tag stamped "244".....	243. 90
Metz, 5.3 miles southeast of, east of railroad, 1,000 feet north of milepost 158; iron post stamped "1908-260-B".....	259. 881
Metz, 6.2 miles southeast of, east of railroad, 1,000 feet north of milepost 159, in telegraph pole; spike with aluminum tag stamped "263".....	263. 229
Metz, 7.1 miles southeast of, east of railroad, 1,000 feet north of milepost 160, in telegraph pole; spike with aluminum tag stamped "271".....	270. 95
Metz, 8.2 miles southeast of, east of railroad at edge of fence, 1,000 feet north of milepost 161; iron post stamped "CAL-1908-281-B".....	280. 650
Metz, 9.1 miles southeast of, east of railroad, 1,000 feet north of milepost 162, in telegraph pole; spike with aluminum tag stamped "297".....	296. 96
Metz, 10.4 miles southeast of, east of railroad, in milepost 163; spike with aluminum tag stamped "325".....	324. 63
Kings City, in front of station; top of rail marked "337".....	336. 7
Kings City, corner of Broadway and First Street, in cement walk of the Camino Real hotel; aluminum tablet stamped "335-B".....	335. 070
Kings City, south edge of town, in corner of line fence west side of railroad, 200 feet south of railroad water tank; iron post stamped "1908-CAL-338-B".....	338. 228

	Feet.
Kings City, 1.1 miles southeast of, east of railroad, 1,000 feet south of milepost 165, in telegraph pole; spike with aluminum tag stamped "316" ..	316. 07
Kings City, 2 miles southeast of, east of railroad, 1,000 feet south of milepost 166, in telegraph pole; spike with aluminum tag stamped "315"...	314. 81
Kings City, 3 miles southeast of, east of railroad, also switch, 1,000 feet south of milepost 167; iron post stamped "1908-CAL-321-B"	320. 890
Kings City, 3.9 miles southeast of, west of railroad, 1,000 feet south of milepost 168, in telegraph pole; spike with aluminum tag stamped "336"...	335. 70
Kings City, 5 miles southeast of, west of railroad, 1,000 feet south of milepost 169, in telegraph pole; spike with aluminum tag stamped "371" ..	370. 70
Kings City, 6 miles southeast of, east of railroad, 1,000 feet south of milepost 170, in telegraph pole; spike with aluminum tag stamped "383"	382. 62
Kings City, 6.9 miles southeast of, west of railroad, 5 feet from same at edge of concrete culvert; iron post stamped "1908-CAL-394-B"	393. 613
Kings City, 7.8 miles southeast of, east of railroad, in milepost 172; spike with aluminum tag stamped "393"	392. 94
San Lucas, north edge of town, in fence corner, 40 feet from center of railroad, 200 feet north of road crossing; iron post stamped "1908-CAL-394-B"	393. 985
San Lucas, in front of station; top of rail.....	403. 82
San Lucas, south edge of town, in corner of fence, with red house, 10 feet from center of railroad; iron post stamped "1908-CAL-408-B"	407. 543
San Lucas, 1.6 miles southeast of, west of railroad, 100 feet south of road crossing, in telegraph pole; spike with aluminum tag stamped "407"...	407. 300
San Lucas, 2.6 miles southeast of, west of railroad, 100 feet north of block signal, in telegraph pole; spike with aluminum tag stamped "410"....	410. 03

San Lucas southwest along highway to point 5 miles north of Jolon.

San Lucas, 2.2 miles west of, east of road, north of white barn, in telephone pole; spike with aluminum tag stamped "375"	374. 64
San Lucas, 2.9 miles west of, 175 feet west of point where road turns due west for Jolon, in fence post; spike with aluminum tag stamped "452" ..	451. 76
San Lucas, 4 miles west of, south of road, in telephone pole; spike with aluminum tag stamped "535"	534. 66
San Lucas, 5.3 miles southwest of, in fence corner, 700 feet west of yellow house on right of road; iron post stamped "1908-CAL-652-B"	652. 236
San Lucas, 6.2 miles west of, north of road, in base of white oak tree; spike with aluminum tag stamped "689"	688. 72
San Lucas, 7 miles southwest of, 150 feet south of mud brick house on bank, in telephone pole; spike with aluminum tag stamped "785"	784. 70
San Lucas, 8.1 miles west of, north of road, in telephone pole; spike with aluminum tag stamped "956"	955. 98
San Lucas, 9.3 miles west of, at angle in road, west of road, in telephone pole; spike with aluminum tag stamped "1247"	1, 246. 54
San Lucas, 10.1 miles southwest of, west of road, 35 feet south of telephone pole; iron post stamped "1908-CAL-1434-B"	1, 433. 663
San Lucas, 10.9 miles southwest of, west of road at forks of road, 100 feet south of summit, in telephone pole; spike with aluminum tag stamped "1673"	1, 673. 52
San Lucas, 12.1 miles southwest of, south of road, in telephone pole; spike with aluminum tag stamped "1418"	1, 418. 36
San Lucas, 13.2 miles southwest of, south of road, in telephone pole; spike with aluminum tag stamped "1237"	1, 237. 06

Kings City northeast along highway 10 miles toward Loanoak.

Kings City, 1 mile northeast of, north of road, in telephone pole; spike with aluminum tag stamped "396"	Feet. 396. 06
Kings City, 2.1 miles northeast of, north of road, in telephone pole; spike with aluminum tag stamped "465"	464. 92
Kings City, 2.98 miles northeast of, north of road, at clump of trees, on north, in telephone pole; spike with aluminum tag stamped "483"	483. 12
Kings City, 4 miles northeast of, south of road, 1,000 feet east of old barn at curve in road, in telephone pole; spike with aluminum tag stamped "563"	562. 96
Kings City, 5 miles northeast of, east of road, 1,000 feet east of white wire gate leading to ranch house in valley; iron post stamped "1908-CAL-664-B"	663. 535
Kings City, 7.1 miles northeast of, in fence post on south side of road, west of summit of range; spike with aluminum tag stamped "959"	959. 18
Kings City, 7.4 miles northeast of, north of road, at summit of range, in telephone pole; spike with aluminum tag stamped "1048"	1, 048. 29
Kings City, 8 miles northeast of, in fence post opposite gate leading to road in valley at angle in road; spike with aluminum tag stamped "928"	927. 77
Kings City, 9.3 miles northeast of, at base of hill, 100 feet from San Lorenzo Creek, 200 feet east of dam, in fence post; spike with aluminum tag stamped "697"	696. 82
Kings City, 10.3 miles northeast of, west of San Lorenzo Creek, 5 feet from base of cottonwood tree, 20 feet from bank of creek; iron post stamped "1908-CAL-723-B"	723. 035

Point 0.6 mile southeast of Somavia schoolhouse southeast along county road to a point 4 miles southwest of Soledad.

Somavia schoolhouse, 0.6 mile southeast of, west side of road, in base of live oak tree 40 inches in diameter; copper nail with aluminum tag stamped "143 B. M. 14"	143. 38
Somavia schoolhouse, 1.6 miles southeast of, 500 feet south of large barn, in base of 30-inch live oak tree; copper nail scribed and painted "135 B. M. 15"	135. 31
Gonzales, 2.9 miles west of, 50 feet west of bridge over Salinas River, northwest corner of intersection of road; iron post stamped "110 B 1909 B-1" ..	110. 281
Gonzales, 2.9 miles west of, 0.8 mile southeast of, at intersection of road to west, in base of fence post; scribed and painted "165 B. M. 3;" spike ..	164. 81
Gonzales, 2.9 miles west by 2.1 miles southeast of, west side of road, at bend, on summit of small ridge, in base of 36-inch live oak tree scribed and painted "208 B. M. 4;" spike	206. 97
Gonzales, 2.9 miles west by 3.3 miles southeast of, west edge of road, at section line, in base of fence post scribed and painted "209 B. M. 5;" spike	209. 12
Gonzales, 2.9 miles west by 4.9 miles southeast of, east edge of road, at section line, southeast corner of field, in base of 30-inch oak tree scribed and painted "322 B. M. 6;" copper nail	321. 72
Gonzales, 2.9 miles west by 5.9 miles southeast of, west edge of road, 0.4 mile north of junction of road to Camphora, in base of fence post scribed and painted "289 B. M. 7;" spike	286. 69
Subranis schoolhouse, in southeast corner of school yard, at junction of road to Camphora; iron post stamped "211 1909 B B-2"	211. 886

Subranis schoolhouse, 1.1 miles southeast of, south side of road, in base of 40-inch oak tree scribed and painted "159 B. M. 8;" copper nail.....	Fect. 156. 66
Subranis schoolhouse, 1.9 miles southeast of, east edge of road, north end of gate to second-class road through Spreckles Sugar Co.'s ranch, in base of gatepost scribed and painted "218 B. M. 9;" spike.....	215. 28
Subranis schoolhouse, 2.8 miles southeast of, at J. Whisman's ranch, 5 feet east of mail box, in base of fence post; spike with aluminum tag stamped "194 B. M. 23".....	191. 88
Mission schoolhouse, 0.3 mile northwest of, southwest corner of field, at intersection of road to east; iron post stamped "238 B 1909 B-7".....	235. 091
Mission schoolhouse, 1.3 miles southeast of, east edge of road, at lane to east, in base of gatepost; spike with aluminum tag stamped "210 B. M. 24".....	207. 17
Soledad south up Arroyo Seco Creek to a point 4 miles southwest of Greenfield, thence northeast via Greenfield to Metz.	
Soledad, 1 mile south of, 50 feet north of bridge over Salinas River, in base of telegraph pole 3086; spike with aluminum tag stamped "196 B. M. 35".....	195. 50
Soledad, 1.7 miles south of, at intersection of King City and Paraiso Hot Spring roads, in base of telegraph pole; spike with aluminum tag stamped "196 B. M. 36".....	195. 30
Soledad, 2.9 miles south of, 0.5 mile south of bridge over Arroyo Seco Creek, at intersection of road; iron post stamped "185 B 1909 B-12".....	184. 744
Soledad, 4.8 miles south of, northwest corner of bridge over canal, in floor; copper nail with aluminum tag stamped "203 B. M. 37".....	203. 30
Soledad, 6.2 miles south of, west edge of road, 250 feet north of grove of trees, at cross fence, in base of fence post; spike with aluminum tag stamped "315 B. M. 38".....	315. 21
Soledad, 6.8 miles south of, 25 feet east of intersection of road to west, 0.3 mile south of white barn; iron post stamped "375 B 1909 B-13".....	375. 128
Soledad, 7.7 miles south of, east edge of road, at second-class road, in base of gatepost; spike with aluminum tag stamped "396 B. M. 39".....	395. 80
Soledad, 8.8 miles south of, 0.2 mile north of point where road bends southwest, in base of telephone pole; spike with aluminum tag stamped "378 B. M. 40".....	377. 93
Greenfield, 4.3 miles west of, on section line, 1 mile north of Arroyo Seco Creek; iron post stamped "376 B 1909 B-14".....	376. 160
Greenfield, 2.3 miles southwest of, southeast corner of field, 15 feet south of irrigation canal; iron post stamped "329 B 1909 B-15".....	329. 512
Greenfield, 1.7 miles southwest of, southeast corner of field, 300 feet south of house, 700 feet south of crossroad, in base of fence post; spike with aluminum tag stamped "313 B. M. 42".....	312. 24
Greenfield, 0.6 mile northwest of, at intersection of road, in base of telephone pole 3322; spike with aluminum tag stamped "277 B. M. 43"....	276. 07
Greenfield schoolhouse, at large gate to school yard; iron post stamped "286 B 1909 B-16".....	285. 865
Greenfield, southeast end of town, at crossroad, south end of concrete culvert over irrigation ditch; aluminum tablet stamped "287 B 1909 B-11".....	286. 804
Greenfield, 2 miles northeast of, north edge of road, at second class road to ranch, in base of fence post; spike with aluminum tag stamped "246 B. M. 34".....	246. 73
Greenfield, 0.9 mile northeast of, east side of road, opposite windmill, in base of fence post; spike with aluminum tag stamped "244 B. M. 33".....	243. 84

Kings City southwest to bridge, thence northwest to Greenfield.

	Feet.
Kings City, 0.9 mile southwest of, in floor of bridge over irrigation ditch; spike with aluminum tag stamped "313 B. M."	312. 89
Kings City, 1.9 miles southwest of, 200 feet south of bridge over Salinas River, at intersection of road; iron post stamped "330 B 1909 B-8"	329. 812
Kings City bridge, 1 mile northwest of west side of road, in base of telephone pole 3736; spike with aluminum tag stamped "321 B. M. 26"	321. 27
Kings City Bridge, 2.1 miles northwest of, west edge of road, in base of telephone pole 3693; spike with aluminum tag stamped "348 B. M. 27" ..	347. 60
Kings City Bridge, 3 miles northwest of, west edge of road, where road turns around steep bluff, 5 feet north of telephone pole 3656; iron post stamped "338 B 1909 B-9"	338. 329
Kings City Bridge, 4.2 miles northwest of, west edge of road, in base of telephone pole 3609; spike with aluminum tag stamped "282 B. M. 28"	282. 06
Kings City Bridge, 5.3 miles northwest of, west side of road, in base of telephone pole 3565; spike with aluminum tag stamped "308 B. M. 29"	308. 08
Kings City Bridge, 6.4 miles northwest of, 3.2 miles southeast of Greenfield, 5 feet north of telephone pole 3520, on line between barn and windmill; iron post stamped "317 B 1909 B-10"	317. 045
Greenfield, 1 mile southeast of, in base of telephone pole 3398; spike with aluminum tag stamped "267 B. M. 32"	266. 67

Point 1.2 miles southeast of Gonzales northeast to Gloria schoolhouse, thence southeast and southwest to Camphora.

Gonzales, 1.6 miles southeast of, at intersection of road to east, in base of telephone pole; spike with aluminum tag stamped "143 B. M. 15"	143. 38
Gonzales, 4.7 miles east by road, west bank of old creek bed, 0.5 mile south of Gloria schoolhouse; iron post stamped "515 B 1909 B-5"	514. 836
Gloria schoolhouse, 1.9 miles south of, where road jogs east, opposite house in small grove of trees, in base of 24-inch pine tree; spike scribed and painted "396 B. M. 19"	395. 80
Gloria schoolhouse, 3 miles southeast of, northeast corner of field, 500 feet east of barn, where road turns to south; iron post stamped "338 B 1909 B-6"	338. 458

Camphora southwest to Subranis schoolhouse.

Camphora, 1.6 miles southwest of, east edge of road, north bank of river, in base of fence post; spike with aluminum tag stamped "147 B. M. 45" ..	146. 67
Camphora, 2.7 miles southwest of, 100 feet north of bend of road, opposite small house, in base of cottonwood tree; spike with aluminum tag stamped "141 B. M. 46"	140. 95

Gonzales southwest to Gonzales bridge.

Gonzales, 0.9 mile west of, north end of bridge over canal, in floor; copper nail painted "128 B. M. 1"	127. 67
Gonzales, 2.1 miles west of, opposite intersection of road to south, in base of fence post scribed and painted "124 B. M. 2;" spike	124. 06

PRIEST VALLEY 30' QUADRANGLE.**Point 2.6 miles southeast of San Lucas southeast along railroad to point 3 miles southeast of San Ardo.**

San Lucas, 4.6 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "397"	396. 26
San Lucas, 5.6 miles southeast of, east of track, 1,000 feet south of deserted building, in telegraph pole; spike with aluminum tag stamped "408"	406. 56

San Lucas, 6.6 miles southeast of, west of railroad, 100 feet south of road crossing; iron post stamped "1908-CAL-429-B".....	Fect. 427. 722
San Lucas, 7.5 miles southeast of, west of railroad, 100 feet north of block signal 1805, in telegraph pole; spike with aluminum tag stamped "403".	401. 75
San Lucas, 8.6 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "419".....	417. 39
San Ardo, in front of station; top of rail marked "458".....	457. 0
San Ardo, 0.1 mile southeast of, east of railroad, 1,000 feet south of water tank, in base of target 1833; aluminum tablet stamped "1908 CAL-459-B".....	457. 718
San Ardo, 1.3 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "445".....	443. 495
San Ardo, 2.3 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "445".....	443. 97
San Ardo, 3.1 miles southeast of, east of track, in culvert under railroad corner; aluminum tablet stamped "466-B".....	465. 191

From point 10 miles northeast of Kings City along highway east to Loanoak, thence southeast via Priest Valley to Crump's ranch, thence northeast 3.7 miles.

Kings City, 12.7 miles southeast of, south of road, at ranch house, in gate post leading to straw yard; spike with aluminum tag stamped "820"...	820. 05
Loanoak, 0.8 mile east of, north of road, in telegraph pole; spike with aluminum tag stamped "925".....	924. 79
Loanoak, 1.6 miles southeast of, south of road, 500 feet west of Andrew Hopkins's residence, 400 feet west of where road crosses creek, in telephone pole; spike with aluminum tag stamped "945".....	944. 67
Loanoak, 2.3 miles southeast of, southeast corner of road intersection, 800 feet north of schoolhouse; iron post stamped "1908-CAL-1027".....	1, 027. 138
Kings City, 17.1 miles southeast of, north of road, west of Pet Bengard's ranch dwelling, 5 feet south of creek, in telephone pole; spike with aluminum tag stamped "1029".....	1, 028. 74
Kings City, 18.5 miles southeast of, south bank of Lewis Creek, 500 feet west of Pet Bengard's ranch house, in telegraph pole; spike with aluminum tag stamped "1107".....	1, 107. 30
Kings City, 20.97 miles southeast of, north of road, on bank of Lewis Creek, 25 feet north of where road crosses creek, 500 feet north of Ernest Bengard's residence, in telephone pole; spike with aluminum tag stamped "1300".....	1, 299. 66
Loanoak, 9.4 miles southeast of Kings City, 22.8 miles southeast of, east of road, on fence line of the C. O. T. Co.'s pump station No. 4; iron post stamped "1908-CAL-1404-B".....	1, 404. 467
Kings City, 23.6 miles southeast of, south of road, 500 feet east of Miller & Lux goat ranch, 25 feet south of Lewis Creek, at angle in road, in telephone pole; spike with aluminum tag stamped "1455".....	1, 454. 57
Kings City, 24.7 miles southeast of, 100 feet north of where road crosses creek, in leaning cottonwood tree; spike with aluminum tag stamped "1518".....	1, 517. 65
Kings City, 25.6 miles southeast of, north of road, 10 feet south of Lewis Creek, 600 feet south of schoolhouse, in telephone pole; spike with aluminum tag stamped "1580".....	1, 579. 92
Kings City, 26.8 miles southeast of, on south side of road, 50 feet north of Lewis Creek, 200 feet west of where road crosses creek, in large pine tree; spike with aluminum tag stamped "1669".....	1, 669. 04

	Feet.
Kings City, 27.7 miles southeast of, across creek in San Benito County, on James Bengard's ranch, 50 feet west of creek, in telephone pole; spike with aluminum tag stamped "1725".....	1, 724. 68
Loanoak, 15.3 miles southeast of, on Bengard ranch, in front of residence by side of fence, 20 feet north of barnyard gate; iron post stamped "1908-CAL-1766".....	1, 765. 832
Bengard ranch, 100 feet east of, north of road, in telephone pole; spike with aluminum tags stamped "1843".....	1, 842. 79
Bengard ranch, 2.4 miles east of, north of road, 150 feet east of where road crosses Lewis Creek and enters big cut, in leaning cottonwood tree; spike with aluminum tag stamped "1944".....	1, 944. 07
Bengard ranch, 3.1 miles east of, north of road, 50 feet north of angle in road, 150 feet north of Lewis Creek, in telephone pole; spike with aluminum tag stamped "1988".....	1, 987. 91
Bengard ranch, 5.1 miles southeast of, south of road, 1,000 feet south of white ranch house, 100 feet north of Lewis Creek, where road crosses creek; iron post stamped "1908-CAL-2198".....	2, 197. 909
Bengard ranch, 6.2 miles southeast of, north of road, 500 feet south of Griffin residence, in telephone pole; spike with aluminum tag stamped "2254".....	2, 254. 44
Bengard ranch, 7.4 miles southeast of, north of road, 0.5 mile southeast of Palmer Bros.' store, in telephone pole; spike with aluminum tag stamped "2327".....	2, 327. 56
Bengard ranch, 8.1 miles southeast of, north of road, 200 feet east of gate leading to ranch with white house, in telephone pole; spike with aluminum tag stamped "2372".....	2, 372. 51
Bengard ranch, 9.5 miles southeast of, 300 feet north of Maren's ranch house, in telephone pole; spike with aluminum tag stamped "2490".....	2, 490. 36
Bengard ranch, 10.1 miles southeast of, 20 feet north of road on summit of divide, in base of large oak tree; spike with aluminum tag stamped "2580".....	2, 579. 95
Bengard ranch, 11.3 miles southeast of, north of road under large cottonwood tree; iron post stamped "1908-CAL-2057".....	2, 057. 142
Bengard ranch, 12.1 miles southeast of, north of road, 0.8 mile north of C. O. T. Oil Co.'s pumping station, in pine tree; spike with aluminum tag stamped "1968".....	1, 968. 27
C. O. T. Oil Co.'s pumping station, 0.25 mile southeast of, in telephone pole on north bank of creek, 100 feet north of road; spike with aluminum tag stamped "1863".....	1, 863. 41
C. O. T. Oil Co.'s pumping station, 1 mile southeast of, north of road, in telephone pole; spike with aluminum tag stamped "1794".....	1, 794. 08
C. O. T. Oil Co.'s pumping station, 2.2 miles southeast of, north of road, 20 feet north of creek, in cottonwood tree; spike with aluminum tag stamped "1681".....	1, 681. 01
C. O. T. Oil Co.'s pumping station, 2.6 miles southeast of, south of road under cottonwood tree, 300 feet west of where road crosses creek; iron post stamped "1908-CAL-1661-B".....	1, 660. 88
C. O. T. Oil Co.'s pumping station, 3.96 miles east of, north of road, 100 feet west of gulch, in telephone pole; spike with aluminum tag stamped "1603".....	1, 603. 41
C. O. T. Oil Co.'s pumping station, 4.7 miles east of, north of road, 50 feet north of creek where pipe line crosses creek, in telephone pole; spike with aluminum tag stamped "1528".....	1, 527. 85

C. O. T. Oil Co.'s pumping station, 5.9 miles east of, north of road, 100 feet south of Bennett's ranch house, in telephone pole; spike with aluminum tag stamped "1458".....	Feet. 1,457.60
Crump's ranch, east of road, under oak tree, 25 feet east of entrance to dwellings; iron post stamped "1460-B".....	1,459.899
Crump's ranch, 0.8 mile east of, at forks of road, near sign post "Fresno Hot Springs" in base of telephone pole; spike with aluminum tag stamped "1448".....	1,448.02
Crump's ranch, 1.5 miles east of, northeast of road at angle to small gulch, in telephone pole; spike with aluminum tag stamped "1544".....	1,543.77
Crump's ranch, 3.7 miles east of, north of road, 500 feet west of creek, in telephone pole; spike with aluminum tag stamped "1163".....	1,163.31
Coalinga and Panoche 30' quadrangles; Tracy 15' quadrangle; Copperopolis, Crows Landing, Holt, Ingomar, Los Banos, Newman, Peters, Stockton, Volta, and Westley 7½' quadrangles.	

FRESNO, MERCED, SAN JOAQUIN, AND STANISLAUS COUNTIES.

The elevations in this list are based on the results of precise leveling along the Southern Pacific Railroad published in Bulletin 342, to which bulletin reference should be made for additional elevations in this area.

Leveling in all the quadrangles of this list except the Copperopolis, Holt, and Peters quadrangles was done in 1908 by W. H. Monahan. Additional work was done in the Coalinga quadrangle in 1903 by W. V. Hardy, in 1907 by J. W. Muller, and in 1908 by L. F. Biggs; in the Stockton, Copperopolis, and Peters quadrangles in 1896 by J. B. Lippincott, and in the Holt and Stockton quadrangles in 1907 by B. A. Jenkins. The State cooperated in the work of 1907 in the Stockton quadrangle and in all work done in 1908.

COALINGA 30' QUADRANGLE.

Bench mark 4 miles west of Lethent west along Southern Pacific Railroad to Alcalde.

Huron, 4.3 miles northeast of, 50 feet south of track, 3 feet east of telegraph milepost 276; iron post stamped "306 G".....	Feet. 306.166
Huron, schoolhouse, 2.5 feet south of entrance; iron post stamped "380 G".....	380.231
Arroya Posa Jhena, 1 mile southwest of, 50 feet south of track, 3 feet east of telegraph mile pole 285; iron post stamped "455 G".....	455.147
Ora, 4 miles east of, 50 feet south of track, 8 feet north of wagon road, 5 feet east of telegraph mile pole 290; iron post stamped "569 G".....	569.216
Ora, 2.1 miles east of, 50 feet south of track, 5 feet east of telegraph mile pole 292; iron post stamped "606 G".....	606.101
Ora, 2.5 feet west of telegraph pole marked with name of station, south of oil tanks, 50 feet south of tracks, 2 feet north of wire fence; iron post stamped "647 G".....	647.187
Coalinga, southwest end of station; iron post stamped "671 G". (This bench mark has been moved, but its elevation is not materially changed).	671.152
Coalinga, 1.7 miles southwest of, in mouth of Waltham Canyon, 800 feet north of ranch house, 50 feet south of track, 10 feet northwest of road junction; iron post stamped "716 G".....	716.110
Alcalde, 70 feet north of station, between station signboard posts; iron post stamped "852 G".....	852.214

Point 1.7 miles southwest of Coalinga north and east to California Limited Oil Co.'s property, thence south to Ora.

	Feet.
Coalinga, 3 miles west of, 20 feet east of road, 120 feet northeast of southwest corner of sec. 30, T. 20 S., R. 15 E.; iron post stamped "No. 1, 1907 G 766".....	766. 123
Coalinga, 5 miles northwest of, 1 mile north of Associated Oil Co.'s pump plant, 30 feet east of section corner, 10 feet east of road; iron post stamped "824 No. 2, 1907 G".....	823. 565
Coalinga, 7.5 miles northwest of, 1,000 feet north of big tank house where road crosses summit, 40 feet east of road; iron post stamped "1,244 No. 3, 1907 G".....	1, 244. 256
Coalinga, 8 miles north of, on Oil City road, 50 feet west of large drain, 10 feet southwest of junction of roads; iron post stamped "1,157 No. 4 1907 G".....	1, 157. 562
Coalinga, 12 miles north of, 400 feet south of California Limited Oil Co.'s office, 300 feet north of big machine shops, 10 feet south of road, 2 feet east of fence on section line between secs. 21 and 22, T. 19 S., R. 15 E.; iron post stamped "1,467 No. 5, 1907 G".....	1, 466. 988
Coalinga, 10.5 miles northeast of, on fence line between property of Standard Oil Co. and California Limited Oil Co., on north and south line, south end of fence, top of iron fence post 8 inches in diameter, 4 feet high; painted point; post painted "U.S.B.M. 973"; aluminum tag stamped "973" tacked on post brace.....	973. 12
Coalinga, 9 miles northeast of, 400 feet west of Standard Oil Co.'s pump plant No. 1, 100 feet southwest of large black oil tank, 30 feet southwest of junction of roads; iron post stamped "806 No. 6, 1907 G".....	806. 343
Coalinga, 6.5 miles northeast of, on road to Standard Oil Co.'s pump plant No. 1, 40 feet south of junction of four roads, 50 feet west of Coalinga and Fresno signboard; iron post stamped "816 No. 7, 1907 G".....	816. 281
Coalinga, 4 miles northeast of, on road to Standard Oil Co.'s pump plant No. 1, 50 feet west of road; iron post stamped "718 No. 8, 1907 G".....	718. 470
Ora, 100 feet west of station, 50 feet south of Southern Pacific Railroad track, 400 feet south of Southern Pacific Co.'s big oil tanks, on W. V. Hardy's level line; iron post stamped "647 G".....	647. 187

Jones ranch northwest to Coalinga.

Jones ranch, 500 feet west of house, at fence corner; iron post stamped "1062 B 1908 50 B".....	1, 061. 093
Kranhagen's ranch, 1.9 miles northwest of, 15 feet east of road; iron post stamped "1117 B 1908 51 B".....	1, 116. 466
Kranhagen's ranch, 4 miles northwest of, 0.8 mile west of L. Kranhagen's house, 30 feet south of section corner at road junction; iron post stamped "923 B 52 B 1908".....	922. 327
L. Kranhagen's house, 0.9 mile northwest of, 500 feet east of schoolhouse, 50 feet south of creek, south of road; iron post stamped "806 B 1908 B 53".....	805. 665
Alvis ranch, 0.4 mile northwest of house, 25 feet south of junction of roads; iron post stamped "672 B 1908".....	671. 558
Coalinga, 5.5 miles southeast of, 20 feet east of road, 25 feet northeast of wash, 350 feet north of cabin, at junction of road; iron post stamped "737 B 1908 B 55".....	736. 516
Coalinga, 2.5 miles southeast of, at junction of roads, 0.5 mile south of ranch house; iron post stamped "647 B 1908 B 56".....	646. 322

Point about 5 miles west of Alcalde to Coalinga, thence east and north to point about 13 miles southeast of Hayes.

	Feet.
Crump's ranch, 5.2 miles east of, south of road, 50 feet south of Lewis Creek, in Warthan Canyon; iron post stamped "1076 B 1908 CAL"	1, 076. 003
Coalinga, 1.7 miles southwest of, in mouth of Warthan canyon, 800 feet north of ranch house, 50 feet south of track, 10 feet northwest of road junction; iron post stamped "716 G"	716. 110
Coalinga, in front of station; top of rail.....	669. 8
Ora, 2.5 feet west of telegraph pole marked with name of station, south of oil tanks, 50 feet south of track, 2 feet north of wire fence; iron post stamped "647"	647. 187
Ora, 2.1 miles east of, 50 feet south of track, 5 feet east of telegraph mile pole 292; iron post stamped "606 G"	606. 093
Ora, 4 miles east of, 50 feet south of track, 8 feet north of wagon road, 5 feet east of telegraph milepost 290; iron post stamped "569 G"	569. 202
Ora, 8 miles northeast of, 20 feet west of wagon road, opposite small canyon on right; iron post stamped "648 B 1908 CAL"	648. 448
Coalinga, 9 miles northeast of, 400 feet west of Standard Oil Co.'s pump plant No. 1, 100 feet southwest of a large black oil tank, 30 feet southwest of junction of roads; iron post stamped "806 G 1907 No. 6"	806. 253
Standard Oil Co. pumping station, 2.8 miles north of, 25 feet east of wagon road, on side of hill; iron post stamped "653 CAL 1908 B"	653. 276
T. 19 N., R. 16 E., sec. 2, 10 feet west of wagon road, 250 feet south of the Imperial Co.'s pumping plant; iron post stamped "635 CAL 1908 G" ..	634. 997
Imperial Oil Co.'s pumping station, 4.1 miles north of, at foothill of range, and 10 feet south of wagon road; iron post stamped "503 CAL 1908 G" ..	502. 692
Imperial Oil Co.'s pumping station, 6.4 miles north of, on line fence, 785 feet from southwest corner of Ladd's ranch; iron post stamped "504 CAL 1908 G"	503. 941
Ladd's ranch, 3.5 miles northwest of, 1.5 miles northwest of clump of cottonwood trees, opposite large canyon on left; iron post stamped "480 CAL 1908 G"	479. 900
Ladd's ranch, 8 miles northwest of, 2,798 feet south of gulch, leading from canyon; iron post stamped "553 CAL 1908 G"	553. 260
Ladd's ranch, 11.9 miles northwest of, south edge corner of new barn at base of foothills, on a small plateau, 100 feet north of ravine; iron post stamped "578 CAL 1908 G"	577. 969

Crump's ranch south to Stone Canyon.

Stone Canyon, 7.5 miles northeast of, 1,000 feet northeast of G. E. Frame's ranch house, in large oak tree on west side of road; spike with aluminum tag stamped "1341"	1, 341. 05
Stone Canyon, 5.8 miles east of, on top of mountain 700 feet east of large canyon, on north side of road; iron post stamped "1908-CAL-1699-B" ..	1, 699. 199
Stone Canyon, 4 miles east of, south of road, on top of knoll where road turns to left, in base of small oak tree; spike with aluminum tag stamped "2593"	2, 593. 33
Stone Canyon, 3 miles east of, 5 feet north of road where road leaves underbrush and enters open, in base of small oak tree; spike with aluminum tag stamped "3173"	3, 173. 07
Stone Canyon, 1.3 miles east of, 10 feet north of road, east of gulch, in base of large oak tree; spike with aluminum tag stamped "2883"	2, 882. 72

PANOCHÉ 30' QUADRANGLE.

Point about 13 miles southeast of Hayes to Jamison ranch, about 8 miles southwest of Los Banos.

	Feet.
Ladd's ranch, 14.9 miles northwest of, 50 feet east of creek, 10 feet east of road leading from Cantua Creek to Cheney ranch; iron post stamped "495 CAL 1908 G".....	494. 820
T. 15 S., R. 13 E., at corner of SW. $\frac{1}{4}$ sec. 35; iron post stamped "492 CAL 1908 G".....	491. 700
Ladd's ranch, 20.1 miles northwest of, between wagon road and creek, 400 feet north of point where road crosses creek; iron post stamped "555 CAL 1908 G".....	555. 176
Ladd's ranch, 23.2 miles northwest of, west of wagon road leading north from Cantua Creek to Cheney ranch, 100 feet south of point where road crosses ravine; iron post stamped "584 CAL 1908 G".....	583. 854
Hayes, on road leading from Mendota and Fresno to mouth of big Panoche canyon, 95 feet north of Hayes store, 60 feet south of road, under red gum tree; iron post stamped "503 CAL 1908 G".....	502. 493
Hayes, 3.9 miles northwest of, near base of foothills, 1 mile east of large canyon and 0.5 mile south of large swale; iron post stamped "616 CAL 1908 G".....	616. 131
Hayes, 7 miles northwest of, 10 feet west of road leading northwest from Hayes to Avery ranch; iron post stamped "529 CAL 1908 G".....	529. 014
Little Panoche Creek, 45 feet north of north bank, 1.5 miles northeast of Avery ranch; iron post stamped "407 CAL 1909 G".....	406. 730
Little Panoche Creek, 3.4 miles northwest of, 10 feet west of wagon road leading north from Avery ranch, near base of foothills; iron post stamped "384 CAL 1909 G".....	383. 329
Little Panoche Creek, 6.4 miles northwest of, 15 feet west of wagon road, 1,650 feet south of old deserted building, 0.5 mile east of foothills; iron post stamped "341 CAL 1909 G".....	340. 704
Little Panoche Creek, 10 miles northwest of, at forks of road, 75 feet west of San Joaquin & Kings River Canal and irrigation company's projected canal; iron post stamped "150 CAL 1909 G".....	149. 940

INGOMAR, LOS BANOS, AND VOLTA 7½' QUADRANGLES.

Snelling west to Hopeton, thence south to Amsterdam.

Snelling, 4.5 miles southwest of, at corner of fork with road to north, at fence corner of J. G. Ruddle's ranch; iron post stamped "204 B".....	204. 037
Hopeton, at southeast corner of fork with private road, in front of saloon; iron post stamped "185 B".....	184. 986
Hopeton, 2.2 miles south of, southwest end of bridge over Merced River, west margin of road; iron post stamped "172 B".....	172. 245
Amsterdam, 140 feet west of large warehouse, 10 feet east of station sign-board, 20 feet north of track; iron post stamped "215 B".....	215. 156

Point about 8 miles southwest of Los Banos along highways to Los Banos, thence northwest along Southern Pacific Railroad via Volta and Ingomar to point about 1.4 miles north of Gustine.

Charleston schoolhouse, northeast corner of school yard, at junction of wagon road and canal; iron post stamped "149 G 1909".....	149. 136
Dimwoodie ranch, 100 feet north of, iron gate leading to dwelling and 10 feet north of road, near fence line; iron post stamped "135 CAL 1909 G".....	135. 165
Los Banos, north edge of town, 75 feet west of railroad, opposite creamery, 25 feet south of canal on west side of road; iron post stamped "117 CAL 1909 G".....	116. 883

Los Banos, 2.8 miles north of, east of railroad between road and railroad, on fence line, 150 feet east of milepost 138; iron post stamped "114 CAL 1909 G".....	Feet. 114. 096
Volta, in front of station; top of rail marked "104".....	103. 9
Volta, north end of town, 500 feet northeast of schoolhouse and 25 feet west of track, at base of telegraph milepost 136; iron post stamped "102 CAL 1909 G".....	101. 850
Volta, 4.2 miles north of, 25 feet west of railroad, at base of telegraph milepost 132; iron post stamped "93 CAL 1909 G".....	92. 397
Ingomar, 0.2 mile north of, at base of telegraph milepost 130, 25 feet west of railroad; iron post stamped "91 CAL 1909 G".....	90. 486
Ingomar, 4.2 miles north of, at base of telegraph milepost 126, 25 feet west of railroad; iron post stamped "96 CAL 1909 G".....	96. 049
Gustine, in front of station; top of rail marked "101".....	99. 95
Gustine, 1.4 miles north of, 5 feet east of milepost 123, 25 feet west of railroad; iron post stamped "94".....	94. 181

CROWS LANDING AND NEWMAN 7½ QUADRANGLES.

Point 1.4 miles north of Gustine along Southern Pacific Railroad via Newman and Crows Landing to Emerald.

Newman, south end of station, 10 feet west of track, 5 feet east of telegraph pole; iron post stamped "88 CAL 1909 G".....	87. 827
Newman, in front of station; top of rail marked "89".....	88. 4
Newman, 4.4 miles north of, 5 feet north of telegraph milepost 116, 25 feet east of track; iron post stamped "104 CAL 1909 G".....	103. 644
Crows Landing, 125 feet east of station, 300 feet south of telegraph milepost 114; iron post stamped "111 CAL 1909 G".....	111. 185
Crows Landing, in front of station; top of rail marked "111".....	112. 6
Crows Landing, 3 miles north of, 10 feet north of telegraph milepost 111, 25 feet east of track; iron post stamped "114 CAL 1909 G".....	113. 351
Emerald, in front of station, top of rail marked "103".....	102. 8
Emerald, 25 feet east of track, 5 feet north of telegraph pole, with sign reading "Emerald;" iron post stamped "102 CAL 1909 G".....	101. 940

COPPEROPOLIS, HOLT, PETERS, STOCKTON, TRACY, AND WESTLEY 7½ QUADRANGLES.

At Stockton.

Stockton, southwest corner of Scott Avenue (south side of Mormon Channel) and Center Street, on north iron doorsill, west end of Cool Corner saloon; "Cool Corner" bench mark.....	15. 633
Stockton, southwest corner of Scott Avenue and Center Street, 18 feet from curb corner and 12 feet north of iron doorsill; iron post stamped "16"....	15. 973
Stockton, at southeast head of channel, corner of Weber Avenue and Eldorado Street, east of steps at corner post; iron plate.....	12. 714
Stockton, on top of stone post on north side of courthouse and west side of walk.....	16. 1
Stockton, San Joaquin courthouse, in angle of wall at north entrance, west of door and near columns, between north door and first window west of it; bronze tablet stamped "18".....	17. 953
Stockton, Southern Pacific Railroad passenger station, Milton and Oakland branch; top of rail.....	18. 7

Stockton northeast along Milton road and Southern Pacific Railroad to Peters.

J. B. Marsh's house, at northeast corner of entrance to lean-to; iron post stamped "34".....	33. 605
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Emerald northwest along Southern Pacific Railroad to Tracy.

	Feet.
Emerald, 3.3 miles north of, east of track, 5 feet north of telegraph milepost 105; iron post stamped "111 CAL 1909 G".....	110. 531
Westley, 200 feet east of, front of station; iron post stamped "86 CAL 1909 G".....	85. 864
Westley, 3.3 miles north of, 25 feet east of track, 5 feet south of milepost 98; iron post stamped "85 CAL 1909 G".....	85. 260
Westley, 6.3 miles north of, 25 feet east of track, 5 feet south of telegraph milepost 95; iron post stamped "100 CAL 1909 G".....	99. 602
Westley, 9.3 miles north of, 25 feet east of track, 10 feet north of telegraph milepost 92; iron post stamped "100 CAL 1909 G".....	99. 436
Westley, 12.3 miles north of, 25 feet east of track, 10 feet south of telegraph milepost 89; iron post stamped "75 CAL 1909 G".....	74. 850
Westley, 15.3 miles north of, at Southern Pacific Railroad and Western Pacific Railway crossing; top of rail marked "78".....	77. 89
Westley, 15.3 miles north of, 75 feet east of Southern Pacific Railroad, 100 feet north of Western Pacific Railway at crossing, 10 feet south of milepost 86; iron post stamped "78 CAL 1909 G".....	78. 042
Tracy, 18 feet north of milepost 72; iron post stamped "53 927 B".....	53. 865
(This bench mark was destroyed and a new one erected by Biggs, 1910.)	

Stockton west along Atchison, Topeka & Santa Fe Railway to Tule switch.

Stockton, in front of station; top of north rail.....	17. 8
Stockton, 5.8 miles west of, 200 feet east of milepost 1127 where levee joins railroad embankment, on levee at fence corner; iron post stamped "1907 9 B 1".....	8. 805
Holt, 180 feet north of station, at edge of right of way on fence line; iron post stamped "2 1907 B 2".....	1. 921

Bakersfield, Caliente, Cholame, Huasna, Lost Hills, McKittrick, and Tejon quadrangles.**KERN, KINGS, AND SAN LUIS OBISPO COUNTIES.**

The elevations in the following list are based upon the precise-level line from Benicia by C. H. Semper in 1901-2, and are in accord with the elevations given in Bulletin 342.

The leveling was done in the Bakersfield quadrangle in 1903 by L. D. Ryus, in 1908 by L. F. Biggs, and in 1910 by K. W. Trimble; in the Caliente and Tejon quadrangles in 1910 by K. W. Trimble and G. L. Hagman; in the Cholame and Lost Hills quadrangles in 1908 by L. F. Biggs; in the McKittrick quadrangle in 1908 by L. F. Biggs and in 1910 by G. L. Hagman, and in the Huasna quadrangle in 1908 by L. F. Biggs. None of the work was done in cooperation with the State.

BAKERSFIELD QUADRANGLE.**Bakersfield south along Union Avenue road to T. 32 S., Rs. 27 and 28 E.; thence northwest along highways to Connor station.**

T. 30 S., R. 28 E., southeast corner of sec. 18, on east side of Union Avenue road at road fork, in base of corner fence post; marked and scribed "U. S. B. M. 372"; nail.....	Feet. 372. 26
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	Feet.
T. 30 S., R. 28 E., southeast corner of sec. 19, in northeast fork of cross-roads, at corner of fence; iron post stamped "363 B"	362.588
T. 30 S., R. 28 E., southeast corner of sec. 30, north side of Union Avenue road, in root of poplar tree; marked and scribed "U. S. B. M. 355"; nail.	354.75
T. 30 S., R. 28 E., southeast corner of sec. 31, in northeast fork of cross-roads, 50 feet north of Greenfield store, in base of corner fence post; marked and scribed "U. S. B. M. 346"; nail.....	345.91
T. 31 S., R. 28 E., southeast corner of sec. 6, southeast corner of road fork, in base of corner fence post; marked and scribed "U. S. B. M. 338"; nail.	338.28
T. 31 S., R. 28 E., southeast corner of sec. 7, on north side of Union Avenue road, at corner of fence; iron post stamped "330 B"	330.416
T. 31 S., R. 28 E., southeast corner of sec. 18, on east side of Union Avenue road, in base of elm tree near telephone pole; marked and scribed "U. S. B. M. 322"; nail.....	322.16
T. 31 S., R. 28 E., southeast corner of sec. 19, on west side of Union Avenue road, in northwest corner of crossroads in root of elm tree; marked and scribed "U. S. B. M. 313"; nail.	313.13
T. 31 S., R. 28 E., southeast corner of sec. 31, on east side of second-class road, at corner of fence; iron post stamped "297 B".....	297.015
T. 31 S., R. 28 E., southwest corner of sec. 31, on east side of road, in base of corner fence post; marked and scribed "U. S. B. M. 300"; nail.....	300.24
T. 32 S., R. 28 E., southwest corner of sec. 7, in top of center support of bridge over irrigating ditch; marked and scribed "U. S. B. M. 281"; nail.	280.56
T. 32 S., R. 28 E., southwest corner of sec. 18, on north-south fence line at north end of gate; iron post stamped "282 B".....	281.663
T. 32 S., R. 28 E., southwest corner of sec. 30, on north-south fence line, in base of fence post; marked and scribed "U. S. B. M. 329"; nail.	328.73
T. 32 S., R. 28 E., southwest corner of sec. 31, at corner of fence; iron post stamped "352 B"	352.408
T. 32 S., R. 27 E., southwest corner of sec. 36, in base of corner fence post; marked and scribed "U. S. B. M. 345"; nail.	344.75
Sicarte Lodge, 2 miles west of, on northwest-southeast fence line, in base of fence post; marked and scribed "U. S. B. M. 295"; nail.	295.16
Sicarte Lodge, 3 miles west of, 5 feet north of second-class road along north-west-southeast fence line; iron post stamped "297 B".....	296.497
T. 32 S., R. 27 E., southeast corner of sec. 18, on west side of Santa Media Road, in northwest corner of road fork, at corner of fence; iron post stamped "294 B"	294.357
T. 32 S., R. 27 E., southeast corner of sec. 7, in northwest corner of crossroads, in base of corner fence post; marked and scribed "U. S. B. M. 288"; nail.	288.28
T. 32 S., R. 27 E., southeast corner of sec. 6, on east side of Santa Media road, in base of telephone pole; marked and scribed "U. S. B. M. 291"; nail.	290.56
Point about 2 miles southeast of Rio Bravo west along Southern Pacific Railroad to point 1.1 miles west of Buttonwillow.	
Milepost 335, 180 feet west of, in base of telephone pole; painted and scribed "U. S. B. M. 322"; spike.	321.64
Milepost 337, 180 feet west of, at beginning of railroad curve, in base of telegraph pole; painted and scribed "U. S. B. M. 315"; spike.....	315.01
T. 29 S., R. 25 E., at southwest corner of sec. 17, 1,300 feet west of milepost 339, at east edge of private road crossing, north edge of railroad right of way, in fence corner; iron post stamped "300 B".....	300.541

T. 29 S., R. 24 E., near southeast corner of sec. 14, 1,450 feet west of milepost 341, at north edge of railroad right of way, in base of telegraph pole; painted and scribed "U. S. B. M. 290"; spike.....	Feet. 289. 79
Bowerbank, 0.8 mile east of, 1,300 feet west of milepost 343, at east edge of road where it crosses railroad, at north edge of right of way, in fence corner; iron post stamped "291 B".....	290. 607
Bowerbank, 1.5 miles west of, where fence along railroad begins, at north edge of right of way, in base of telegraph pole; painted and scribed "U. S. B. M. 292"; spike.....	292. 64
Milepost 346, 500 feet west of, at east edge of private road where it crosses railroad, at north edge of right of way, in base of telegraph pole; painted and scribed "U. S. B. M. 278"; spike.....	277. 71
Buttonwillow, 0.8 mile east of, 350 feet east of point where main road crosses railroad, at north edge of right of way, in base of telegraph pole; painted and scribed "U. S. B. M. 272"; spike.....	271. 84
Buttonwillow, 165 feet east of station, at north edge of highway, in fence corner; iron post stamped "269 B".....	268. 893
Kern along Sunset Railroad southwest, west, and northwest, to sec. 36, T. 29 S., R. 25 E.	
Kern, at station, iron post stamped "B".....	421. 877
T. 30 S., R. 28 E., southeast corner of sec. 6, on west side of Union Avenue road at crossing, north side of railroad right of way; iron post stamped "392 B".....	392. 296
T. 30 S., R. 27 E., southeast corner of sec. 15, 1.7 miles west of Wibble orchard, at west side of wagon road, at north edge of railroad right of way; iron post stamped "369 B".....	369. 247
Gosford, in front of station, top of rail.....	362. 0
T. 30 S., R. 27 E., northwest corner of sec. 20, 1.7 miles west of Gosford, at south side of road opposite crossing of road to ranch house; iron post stamped "358 B".....	358. 551
T. 30 S., R. 26 E., near quarter corner on south side of sec. 15, 1,200 feet west of milepost 328, north edge of right of way; iron post stamped "346 B".....	346. 813
T. 30 S., R. 26 E., sec. 7, 1.5 miles west of Stevens, 200 feet south of track, at corner of fence, 500 feet west of milepost 331, 20 feet east of gate; iron post stamped "337 B".....	337. 748
T. 29 S., R. 25 E., south of northwest corner of sec. 36, on east side of county road, north edge of railroad right of way; iron post stamped "327 B"....	327. 610
Point on Sunset Railroad north along wagon road to Rio Bravo School, thence east to Atchison, Topeka & Santa Fe Railway track.	
T. 29 S., R. 25 E., near quarter corner on east side of sec. 11, at southeast corner of Rio Bravo schoolhouse yard; iron post stamped "332 B"....	332. 278
T. 28 S., R. 26 E., quarter corner on south side of sec. 32, opposite north corner common to secs. 4 and 5, T. 29 S., north side of wagon road, at west edge of railroad right of way; iron post stamped "339 B".....	339. 643
Southeast along Atchison, Topeka & Santa Fe Railway to Kern.	
T. 29 S., R. 26 E., near southeast corner of sec. 14, 0.25 mile east of Rosedale, 1 mile north of Rosedale post office, west side of county road, north line of railroad right of way; iron post stamped "360 B".....	360. 612
T. 29 S., R. 27 E., quarter corner on east side of sec. 29, 4 miles west of Bakersfield, west side of public road, north line of railroad right of way; iron post stamped "387 B".....	387. 366

Point 1 mile east of Oil triangulation station southwest along road 3 miles, thence southwest across country to point 1 mile southeast of Jewetta.	
T. 28 S., R. 27 E., SW. $\frac{1}{4}$ sec. 25, 1.5 miles north of Standard Oil Co.'s storage reservoirs, east bank of ravine, west side of Bakersfield and Poso Creek road; iron post stamped "730"	Feet. 730: 355
Oil triangulation station southwest across country to sec. 14, T. 28 N., R. 27 E., thence south to point near Jewetta.	
T. 28 N., R. 27 E., at center of sec. 14, 2 miles southwest of Oil triangulation station; iron post stamped "864"	864: 260
Kern along Southern Pacific Railroad to Gosford Junction, thence southwest along Sunset Railroad to Sunset.	
Kern, 130 feet east of northeast corner of station, at south end of road and corner of fence; iron post stamped "421 B"	421: 877
Gosford Junction, 2 miles south of, 25 feet west of intersection of roads, 25 feet north of ditch, in base of signal post scribed and painted "351;" nail	351: 50
Gosford Junction, 3 miles south of, at road crossing, north of road, east of track, in fence corner; iron post stamped "343 1"	342: 975
Gosford Junction, 6 miles south of, 30 feet west of track at section line, 15 feet north of ditch, 0.5 mile south of milepost 15; iron post stamped "320 2"	319: 966
Connor, 500 feet east of station, north of track, at corner of secs. 31, 32, 5, and 6, Tps. 31 and 32 S., R. 27 E.; iron post stamped "293 3"	292: 962
Connor, in front of station; top of rail	292: 6
Connor, 2 miles west of, at corner of secs. 35, 36, 1, and 2, Tps. 31 and 32 S., R. 26 E.; iron post stamped "291 B 1908 4 B"	290: 975
Millux, 0.4 mile west of, 25 feet north of track, at corner of secs. 32, 33, 4, and 5, Tps. 31 and 32 S., R. 26 E.; iron post stamped "291 B. 1908 B 5"	290: 976
Millux, 2.3 miles west of, 500 feet north of switch from main line along levee of Buena Vista Lake, 250 feet north of milepost 26, 30 feet north of track; iron post stamped "298 B 1908 B 6"	297: 892
Buena Vista Lake; surface of water January 9, 1908	290: 5
T. 32 S., R. 26 E., 110 feet west of corner of secs. 7, 8, 12, and 13, 2.3 miles west of, by 1.6 miles south of Millux, at road crossing, in base of signal post scribed and painted "299 B. M. 13;" spike	298: 74
Millux, 2.3 miles west by 2.9 miles south of, east of track, 200 feet north of bridge 29-A, 10 feet east of third telephone pole east of milepost 29; iron post stamped "314 B 1908 7 B"	312: 911
Sunset, 7.3 miles northeast of, south of track, 600 feet south of bridge 32-B, at milepost 32; iron post stamped "409 B 1908 8 B"	408: 877
Sunset, 4.4 miles northeast of, 25 feet south of track, at milepost 35; iron post stamped "564 B 1908 9 B"	563: 886
Sunset, 1.4 miles northeast of, 25 feet east of track at road crossing, 25 feet north of bridge 38 B; iron post stamped "686 B 1908 10 B"	685: 836
Sunset, in front of station; top of rail	766: 6
Sunset, at north end of station; iron post stamped "767 B 1908 11 B"	767: 431
Sunset west toward Job's ranch.	
Sunset, 1.5 miles west of, east of road, on rock painted "938 B. M. 21;" chisel point	937: 89
Sunset, 3.9 miles west of, 500 feet west of junction of road to Job's ranch, north of road, on rock painted "1339 B. M. 23;" chisel point	1, 339: 63
Sunset, 6.6 miles west of, 30 feet south of road, 300 feet west of spring at foot of steep grade, 25 feet west of edge of gulch; iron post stamped "1807 B 1908 12 B"	1, 806: 589

Sunset northwest toward McKittrick.

Sunset, 1.8 miles northwest of, west of road at railroad crossing; iron post stamped "852 B 1908 38 B"	Feet. 851. 256
Sunset, 5.4 miles northwest of, east of road, 2,000 feet west of old derrick, 100 feet north of drain; iron post stamped "752 B 1908 37 B." (Disturbed, according to letter from R. J. Reed, dated Aug. 9, 1910).....	751. 750
McKittrick, 15.2 miles southeast of, east of road, at crossroads; iron post stamped "1115 B 1908 36 B." (Disturbed, according to letter from R. J. Reed, dated Aug. 9, 1910)	1, 115. 06
McKittrick, 12.1 miles southeast of, east of road, 50 feet north of junction, 1,000 feet north of large drain; iron post stamped "1126 B 1908 36 B." (Disturbed, according to letter from R. J. Reed, dated Aug. 9, 1910).....	1, 125. 743

CALIENTE QUADRANGLE.

Point 5 miles east of Edison south along highways to T. 32 S. and T. 12 N., thence west to sec. 32, T. 32 S., R. 28 E.

Edison, 4 miles east by 0.8 mile south of power tower 89; top of east lower brace, painted "U. S. B. M. □ 779" and stamped "779 B □"	778. 93
Edison, 4 miles east by 2 miles south of, on top of east lower brace of power tower 99; chiseled square painted "U. S. □ B. M. 724" and stamped "724 B □"	723. 82
Edison, 4 miles east by 2.9 miles south of, on power line of Edison Electric Co., just north of point where line goes over hill, 60 feet north of second-class road, 18 feet south of power tower 106; iron post stamped "657 B".	657. 303
Edison, 4 miles east by 3.9 miles south of, top of west lower brace of power tower 115, painted "U. S. B. M. □ 596" and stamped "596 B □;" chisel mark	595. 61
Edison, 4 miles east by 5 miles south of, on top of east lower brace of power tower 124, painted "U. S. □ B. M. 553;" chisel mark.....	553. 06
Rockpile School, 1 mile west of, on Edison Electric Co.'s power line, 12 feet south of tower 132; iron post stamped "516 B"	516. 171
Rockpile School, 1 mile west by 1 mile south of, on top of east lower brace of power tower 140, painted "U. S. □ B. M. 485;" chisel mark.....	484. 96
Rockpile School, 1 mile west by 2 miles south of, on top of east lower brace of power tower 147, painted "U. S. □ B. M. 458;" chisel mark.....	458. 17
Rockpile School, 1 mile west by 3 miles south of, on top of east lower brace of power tower 155, painted "U. S. □ B. M. 429;" chisel mark.....	429. 29
T. 31 S., R. 29 E., southeast corner of sec. 36, 120 feet southeast of Edison Electric Co.'s power tower 163; iron post stamped "409 B".....	408. 821
Edison Electric Co.'s power tower 171, on north lower brace, painted "U. S. □ B. M. 416;" chisel mark.....	416. 26
Edison Electric Co.'s power tower 179, 200 feet north of road to Tehachapi, on west lower brace, painted "U. S. □ B. M. 474;" chisel mark.....	473. 85
T. 32 S., R. 29 E., near south quarter corner of sec. 10, at east line of north-south road; iron post stamped "442 B"	441. 837
T. 32 S., R. 29 E., near north quarter section corner of sec. 27, where telephone line turns east, in base of telephone pole painted and scribed "U. S. B. M. 558;" spike	555. 83
T. 32 S., R. 29 E., near south quarter corner of sec. 34, on west margin of second-class north-south road; iron post stamped "561 B"	560. 537
T. 32 S., R. 29 E., near south quarter corner of sec. 33, in base of fence post painted and scribed "U. S. B. M. 535;" spike	532. 63
T. 32 S., R. 29 E., near south quarter corner of sec. 31; iron post stamped "473 B"	472. 929

T. 32 S., R. 28 E., 0.6 mile east of the southeast corner of sec. 33, at northeast margin of county road where it turns south, on fence line; iron post stamped "438 B"	Feet. 438. 077
Sec. 34, T. 32 S., R. 28 E., south along county road to point 3 miles south of Rose station.¹	
Rose, 10.7 miles north of, on county road, in base of telephone pole 1010, painted and scribed "U. S. B. M. 495;" spike	495. 09
Rose, 8.5 miles north of, on county road where it goes through gate, in base of telephone pole at fence corner painted and scribed "U. S. B. M. 635"; spike	635. 08
Rose, 7.6 miles north of, in southwest corner of road where it turns east, near fence corner and telephone pole 1142; iron post stamped "711 B" ..	710. 501
Rose, 6.6 miles north of, on county road, in base of telephone pole 1184, painted and scribed "U. S. B. M. 748"; spike	747. 66
Rose, 5 miles north of, at northeast corner of T road where telephone line turns south, near telephone pole 1238; iron post stamped "763 B"	763. 445
Rose, 2.8 miles north of, on county road, in base of telephone pole 1322, painted and scribed "U. S. B. M. 956"; spike	956. 10
Edison Electric Co.'s power tower 179, east along highway via Cummings Valley to point 1.2 miles southwest of Tehachapi.¹	
Edison Electric Co.'s power tower 179, 1 mile east of, at fence corner where road turns north, in base of fence post painted and scribed "U. S. B. M. 557"; spike	556. 63
Edison Electric Co.'s power tower 179, 3.1 miles east of, where road runs around projecting hill, on north side of road, in base of fence post painted and scribed "U. S. B. M. 1285"; spike	1, 284. 87
Edison Electric Co.'s power tower 179, 3.7 miles east of, where road runs around top of west end of a long, narrow hill projecting westward, 25 feet west of center of road, in top of granite boulder; aluminum tablet stamped "1495 B"	1, 495. 07
San Martinez Spring, 1.1 miles east of, on west side of road where it runs up ravine, in root of oak tree painted "U. S. B. M. 2495"; copper nail	2, 495. 30
Roland Hill's white shack, 0.4 mile southwest of, 50 feet west of road, in base of large oak tree painted "U. S. B. M. 2791"; spike	2, 791. 23
West Junction of Cummings Valley and Bear Valley roads, 395 feet south of, 15 feet south of road on granite boulder painted "U. S. B. M. 2914"; chisel mark	2, 913. 64
West Junction of Cummings Valley and Bear Valley roads, 18 feet west of center of road; iron post stamped "2935 B"	2, 934. 125
West Junction of Cummings Valley and Bear Valley roads, 1 mile east of, where road crosses saddle, at north edge of road, in base of 12-inch oak tree painted and scribed "U. S. B. M. 3256"; spike	3, 256. 16
West junction of Cummings Valley and Bear Valley roads, 2.2 miles east of, at west edge of road, in base of 15-inch oak tree painted and scribed "U. S. B. M. 3102"; spike	3, 101. 82
West junction of Cummings Valley and Bear Valley roads, 3.1 miles east of, 25 feet north of road, in root of big oak tree painted and scribed "U. S. B. M. 3387"; copper nail	3, 386. 68
Jacks Camp, 35 feet north of road, at barn, in base of big oak tree painted and scribed "U. S. B. M. 3495"; spike	3, 493. 67
Jacks Camp, 1.2 miles east of, near top of steep grade, 10 feet south of edge of road, in top of granite boulder; aluminum tablet stamped "3815 B" ..	3, 813. 924

¹ No adjustment has been made of this line, owing to an excessive closure error.

Cummings Valley, top of grade west from, where road crosses saddle, 40 feet west of road, in root of big oak tree painted and scribed "U. S. B. M. 4041"; copper nail.....	Feet 4,041.30
Cummings Valley School, 1 mile south of, at north edge of road, in base of southeast corner of well derrick painted and scribed "U. S. B. M. 3847"; spike.....	3,847.33
Cummings Valley School, in southeast corner of school lot; iron post stamped "3827 B".....	3,825.667
Cummings Valley School, 1.5 miles north of by 1.5 miles east of, in southwest corner of crossroads, in base of telephone pole painted and scribed "U. S. B. M. 3904"; spike.....	3,904.13
Cummings Valley School, 3.5 miles northeast of, where road turns northeast before entering canyon, in northwest fence corner; iron post stamped "3953 B".....	3,951.667
Dick Brite ranch, 0.8 mile west of, at north edge of road, in base of big oak stump painted and scribed "U. S. B. M. 4148"; copper nail.....	4,147.78
Dick Brite ranch, 1.4 miles east of, where road turns south, at southwest corner, in base of telephone pole painted and scribed "U. S. B. M. 4300"; spike.....	4,299.63
Tehachapi, 5 miles west of, at low place where road is crossed by drain, 105 feet west of gate, at north edge of road, in base of telephone pole painted and scribed "U. S. B. M. 4187"; spike.....	4,187.33
Tehachapi, 4.5 miles west of, where road turns north, in northwest fence corner; iron post stamped "4253 B".....	4,251.508
Tehachapi, 2.4 miles west of, at top of rise, at south edge of road, in base of telephone pole painted and scribed "U. S. B. M. 4048"; spike.....	4,047.91
Tehachapi, 1.2 miles southwest of, at low place where road is crossed by drain, at north edge of road, in base of telephone pole painted and scribed "U. S. B. M. 3985"; spike.....	3,984.73

McKITTRICK QUADRANGLE.

Point 1.1 miles west of Buttonwillow southwest along highway and Southern Pacific Railroad to McKittrick.

Milepost 350, 340 feet west of, 50 feet east of private crossing, at north edge of right of way, in base of telephone pole painted and scribed "U. S. B. M. 262"; spike.....	262.02
Lokern, 0.5 mile east of, where road turns and crosses railroad, at north edge of road, on telephone line; iron post stamped "268 B".....	267.697
Milepost 355, 435 feet south of, 150 feet north of point where highway crosses railroad, in base of telephone pole painted and scribed "U. S. B. M. 477"; spike.....	477.70
Milepost 356, 195 feet south of, in base of telephone pole scribed and painted "U. S. B. M. 555"; spike.....	555.74
McKittrick, 4.9 miles northeast of, 12 feet south of milepost 357; iron post stamped "641 B".....	641.763
McKittrick, 3.9 miles northeast of, 180 feet south of milepost 358, in base of telephone pole painted and scribed "U. S. B. M. 731"; spike.....	731.22
McKittrick, 2.9 miles northeast of, at milepost 359, in base of telephone pole painted and scribed "U. S. B. M. 794"; spike.....	794.17
McKittrick, 1.9 miles northeast of, 180 feet south of milepost 360, in base of telephone pole painted and scribed "U. S. B. M. 891"; spike.....	891.26
McKittrick, 0.9 mile east of, 180 feet west of milepost 361, in base of telephone pole painted and scribed "U. S. B. M. 982"; spike.....	982.47

Point 11.8 miles southeast of McKittrick northwest 5.3 miles.

	Feet.
McKittrick, 9.7 miles southeast of, 100 feet west of road; iron post stamped "1197 B 1908 35 B"	1,196.869
McKittrick, 6.5 miles southeast of, east of road, 50 feet south of drain, 800 feet west of old derrick; iron post stamped "1275 B 1908 34 B"	1,275.053

Point near Job's ranch northwest to Simmler.

Job's ranch, about 1.5 miles northwest of, north of road, 150 feet north of wire fence, on small rock, painted "2750 B. M. 27"; chisel point.....	2,749.65
Job's ranch, 2.5 miles northwest of, on summit, 25 feet north of road, 200 feet northwest of junction of roads; iron post stamped "2871 B 1908 B B"	2,870.864
Job's ranch, 6.4 miles northwest of, north of road; point on small rock painted "2389 B. M. 30"	2,388.692
Job's ranch, 8.5 miles northwest of, 1,000 feet north of two small houses, 20 feet north of road; iron post stamped "2,239 B 1908 14 B"	2,238.729
Job's ranch, 10.6 miles northwest of, north of road; point on small rock painted "2097 B. M. 33"	2,097.20
Job's ranch, 13 miles northwest of, 100 feet west of windmill at sheep camp, 50 feet north of house; iron post stamped "2158 B 1908 15 B"	2,157.716
Kern County Land Co. ranch (R. Scott, foreman), 1 mile north of, west of road, in small rock; aluminum tablet stamped "2178 B 1908 16 B" ..	2,177.429
Kern County Land Co. ranch, 5.5 miles north of, 40 feet west of water tank; iron post stamped "1943 B 1908 17 B"	1,942.878
Kern County Land Co. ranch, 6.8 miles north of, north of road; point on small rock painted "1942 B. M. 37"	1,942.30
Miller & Lux cattle station, 2.3 miles southeast of, north of road; point on small rock painted "1935 B. M. 39"	1,934.73
Miller & Lux cattle station, 150 feet south of water tank, at fence corner; iron post stamped "1949 B 1908 18 B"	1,949.257
Carissa Chemical Co. soda works, 2.4 miles northwest of, north of road; point on small rock painted "1939 B. M. 43"	1,938.68
Hathaway Wells, at pump near fence; iron post stamped "1930 B 1908 19 B" ..	1,929.866
Simmler, 3.1 miles south of, east of road; point on small rock painted "1952 B. M. 48"	1,950.57
Simmler, 250 feet north of post office, 50 feet north of old flour mill, T. 30 S., R. 19 E., northwest corner; iron post stamped "2047 B 1908 20 B" ...	2,046.783

Point 12 miles southeast of McKittrick northwest to point 8.5 miles northwest of Fraziers Spring.

McKittrick, 3.5 miles southeast of, east of road, 5 feet north of telephone pole; iron post stamped "1410 B 1908 33 B"	1,409.43
McKittrick, southeast corner of schoolhouse lot; iron post stamped "1110 B 1908 32 B"	1,110.114
McKittrick, in front of station; top of east rail	1,050.4
McKittrick, 3.7 miles northwest of, south of road, 150 feet east of junction of roads, 150 feet west of pumping station, 15 feet south of road; iron post stamped "1244 B 1908 31 B"	1,243.756
Fraziers Spring, 1.8 miles northwest of, east of road, 10 feet north of junction; iron post stamped "910 B 1908 30 B"	909.567
Fraziers Spring, 4.8 miles northwest of, east of road, at junction of roads, 100 feet west of drain; iron post stamped "935 B 1908 29 B"	935.031
Fraziers Spring, 8.5 miles northwest of, 75 feet east of road, 500 feet north of canyon, at saddle, top of boulder; aluminum tablet stamped "1333 B 1908 28 B"	1,332.271

HUASNA 30' QUADRANGLE.**Simmler northwest to point 7.6 miles southwest of Somner's ranch.**

	Feet.
Simmler, 4.7 miles northwest of, 20 feet west of well at fence corner; iron post stamped "2040 B 1908 21 B"	2, 039. 78
Simmler, 8.9 miles northwest of, southwest corner of sec. 35, T. 28 N., R. 17 E., 1 mile north of house with red roof; iron post stamped "2094 B 1908 22 B"	2, 093. 940

CHOLAME 30' QUADRANGLE.**Point 7.6 miles southwest of Somner's ranch to Somner's ranch.**

Somner's ranch, 4.3 miles southwest of, west of road, on summit between Simmler and Somner's ranch; iron post stamped "2347 B 1908 23 B" ..	2, 347. 018
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Point 4.4 miles southeast of Orchard's well northwest via Dudley to Jones ranch.

Orchard's well, 1.2 miles southeast of, 2,000 feet north of derrick, at junction of roads; iron post stamped "652 B 1908 41 B"	651. 248
Orchard's well, 1.4 miles northwest of, 3.8 miles southwest of Dudley, west of road, at junction; iron post stamped "613 B 1908 42 B"	612. 850
Dudley, 1.5 miles south of, east of road, at junction; iron post stamped "655 B 1908 43 B"	655. 039
Dudley, 0.4 mile north of, at crossroads, 5 feet north of section corner; iron post stamped "685 B 1908 44 B"	685. 229
Dudley, 3.9 miles north of, east of road; iron post stamped "535 B 1908 45 B." (Reported to have been disturbed in letter from R. J. Reed, dated Oct. 24, 1910)	534. 935
Dudley, 6.6 miles north of, east of road; iron post stamped "572 B 1908 B 46." (Reported to have been disturbed in letter from R. J. Reed, dated Oct. 24, 1910)	571. 452
Anderson oil well, 1.8 miles southeast of, 0.5 mile north of cabin, at junction of roads, east of road; iron post stamped "666 B 1908 47 B"	665. 108
Anderson oil well, 0.3 mile northwest of, south of road; iron post stamped "872 B 1908 48 B"	872. 127
Jones ranch, 4.3 miles southeast of, 0.4 mile north of ranch house, west of road, 100 feet north of juncton; iron post stamped "1171 B 1908 49 B" ..	1, 170. 607
Jones ranch, 1.6 miles southeast of, east of road; point on rock painted "1047 B. M. 109"	1, 046. 25

LOST HILLS 30' QUADRANGLE.**Somner's ranch northeast to forks of road 0.5 mile northeast of Rock Corral.**

Somner's ranch, 1,000 feet east of house, on east bank of wash, in top of boulder; aluminum tablet stamped "1637 B 1908 24 B"	1, 637. 060
Somner's ranch, 3.5 miles northeast of, 20 feet west of wash, north of road, 100 feet north of wire fence, on rock painted "1350 B. M. 61;" chisel point.	1, 349. 57
Somner's ranch, 8.2 miles northeast of, 0.5 mile west of Rock Corral, east of road; point on small rock painted "1005 B. M. 64"	1, 008. 581
Rock Corral, 0.5 mile east of, at junction of Coalinga-McKittrick road, 50 feet south of bank of wash; iron post stamped "949 B 1908 24 B"	948. 969

Point 8.5 miles northwest of Braziers Spring northwest to forks of road 4.4 miles southeast of Orchard's well.

Rock Corral, 12.6 miles southeast of, east of road, 200 feet south of drain, on large boulder, painted "1166 B. M. 70;" chisel point.	1, 166. 14
Rock Corral, 11.3 miles southeast of, at road junction, 25 feet southeast of drain, east of road; iron post stamped "1175' B 1908 27 B'	1, 174. 803

Rock Corral, 6.8 miles southeast of, east of road, 50 feet east of junction; iron post stamped "1039 B 1908 26 B".....	Feet. 1,038.838
Rock Corral, 3.6 miles southeast of, southeast of east side of road, 2,000 feet southeast of small drain; iron post stamped "912 B 1908 25".....	911.290
Rock Corral, 0.5 mile east of, at junction of Coalinga and McKittrick roads, 50 feet south of bank of wash; iron post stamped "949 B 1908 24 B".....	948.969
Rock Corral, 4.02 miles northwest of, east of road; iron post stamped "706 B 1908 39 B".....	706.863
Rock Corral, 8.1 miles northwest of, east of road, at junction of roads; iron post stamped "547 B 1908 40 B".....	547.003

TEJON QUADRANGLE.

Point near southwest corner of sec. 4, T. 10 N., R. 19 W., south along highway to point 3.1 miles south of Rose station.

NOTE.—No adjustment has been made of this line, owing to an excessive closure error.

T. 10 N., R. 19 W., near northwest corner of sec. 4, 20 feet west of center of road, just south of point where cut-off road to Bakersfield turns west near telephone pole 1368; iron post stamped "1085 LA".....	1,086.919
Rose, 0.7 mile north of, west side of road where telephone line turns east in base of telephone pole 1408, painted "U. S. B. M. 1199;" spike....	1,199.09
Rose, 0.7 mile south of power tower 300, on west lower brace, marked "U. S. □ B. M.;" chisel mark.....	1,367.16
Rose, 1.5 miles south of, power tower 308, on south lower brace, marked "U. S. □ B. M.;" chisel mark.....	1,535.03

Fresno, Mariposa, and Merced 30' quadrangles.

FRESNO, MADERA, MARIPOSA, AND MERCED COUNTIES.

The elevations in the following list are based on the results of precise leveling along the Southern Pacific Railroad, published in bulletin 342.

Leveling was done in the Fresno quadrangle in 1901, 1902, and 1903, by L. D. Ryus, in the Merced quadrangle in 1905 by C. H. Semper, and in the Fresno, Mariposa, and Merced quadrangles in 1908 by L. F. Biggs. The work of 1908 was done in cooperation with the State; previous leveling was not cooperative.

FRESNO QUADRANGLE.

Fresno east along stage road to Kingriver post office.

	Feet.
Fresno, Southern Pacific Railroad passenger station; aluminum tablet....	289.983
Fresno, 3 miles east of station, 400 feet west of crossing of Sunnyside car line and Ventura Avenue, 1 mile east of Fresno schoolhouse, at south edge of road; iron post.....	304.849
Fresno, 6 miles east of, northeast corner of Sunnyside vineyard, north side of Centerville road, west side of Fowler road, at intersection; iron post stamped "323 B".....	323.024
Fresno, 9 miles east of, on south edge of Centerville road, 40 feet east of section line, opposite square yellow house; iron post.....	348.49
Centerville, 4 miles west of, 50 feet west of corner of section, at road crossing, between wheat ranches, south edge of road; iron post.....	372.77
Centerville (Kingriver postoffice), 1 mile west of, 0.25 mile east of Fowler ditch, south edge of county road; iron post.....	393.35

Fresno along Southern Pacific Railroad east to Las Palmas, thence north via Clovis to Pollasky, thence along highway west to closure on precise-level line at Madera (adjusted with Biggs's 1908 running).

	Feet.
Barton, 1.2 miles east of, in southeast corner of vineyard, north of school-house, east of wagon road, south of track; iron post.....	316. 64
Tarpy, 150 feet north of station platform, at southwest corner of NW. $\frac{1}{4}$ section 20, T. 13 S., R. 21 E., on ditch bank west of track; iron post....	347. 200
Clovis, west edge of railroad right of way, 75 feet south of first switch block south of planing mill; iron post.....	355. 690
Gordon, 150 feet north of south end of switch, at west edge of railroad right of way; iron post stamped "391".....	390. 650
Pollasky, 450 feet south of station, opposite milepost 231, at east edge of railroad right of way; iron post stamped "337".....	339. 135
Pollasky, 6.25 miles west of, 75 feet north of corner of small pasture at rocky point, south side of road; iron post stamped "451".....	451. 355
Cottonwood schoolhouse, 0.5 mile north of, north side of road, against fence of adobe ranch; iron post stamped "342".....	342. 288
Madera, 4 miles east of, 200 feet east of first small hill south of Sugar Pine and Madera road, 20 feet south of lumber flume, at north side of public road; iron post stamped "304".....	304. 347

Clovis northeast along road to point near Letcher.

Clovis, 3 miles northeast of, 50 feet north of flume section house 7, east side of road; iron post.....	408. 650
Collins ranch, 1.1 miles east of, southwest of section house 6, south side of road, opposite curve in flume; iron post.....	460. 349
Letcher, 0.5 mile north of, in granite rock in pasture, 50 feet east of county road; aluminum tablet stamped "601 F".....	596. 691

MARIPOSA 30' QUADRANGLE.

Point near Ahwahnee southeast along road to point 2 miles southeast of North Fork post office.

Ahwahnee, 1.2 miles east of, 200 feet north of junction of Fresno Flats and Raymond road, 30 feet west of road, in boulder; aluminum tablet stamped "2323 B 1908 B. K.".....	2, 320. 205
Ahwahnee, 2.2 miles southeast of, 15 feet west of road, at second-class road junction, in base of 30-inch pine tree; spike with aluminum tag stamped "2130 B. M. 38".....	2, 127. 43
Fresno Flats, 2.7 miles west of, north of road, opposite ranch house, in base of 48-inch oak tree; spike with aluminum tag stamped "2209 B. M. 40".....	2, 206. 90
Fresno Flats, 1.4 miles west of, 25 feet south of road, 300 feet south of ranch house, 500 feet east of bridge over small creek, in base of 48-inch oak tree; spike with aluminum tag stamped "2347 B. M. 41".....	2, 344. 50
Fresno Flats, sec. 14, T. 7 S., R. 21 E., 50 feet east of China Creek, at fence in granite boulder; aluminum tablet stamped "2271 B 1908 B. L.".....	2, 268. 558
Fresno Flats, 1.2 miles east of, south of road, north one of two pine trees, in base of 48-inch tree; spike with aluminum tag stamped "2599 B. M. 43".....	2, 596. 34
Fresno Flats, 3.8 miles east of, north of road, 1.5 miles west of summit of ridge, between Fresno Flats and Crane Valley, on granite boulder painted "3247 B. M. 46"; chisel point.....	3, 248. 12
Fresno Flats, 4.3 miles southeast of, 10 feet west of road, at road junction, 1 mile west of summit of ridge between Fresno Flats and Crane Valley, in granite boulder; aluminum tablet stamped "3508 B 1908 B. M.".....	3, 504. 448

	Feet.
Fresno Flats, 8.3 miles east of, 7 miles west of North Fork, 100 feet north-east of road, 150 feet south of creek, in base of 48-inch pine tree; spike with aluminum tag stamped "3324 B. M. 49".....	3, 321. 69
North Fork, 6.7 miles northwest of, 100 feet north of road, 250 feet west of barn at San Joaquin Light & Power Co. dam 1, in boulder; aluminum tablet stamped "3317 B 1908 B. N.".....	3, 316. 658
North Fork, 5.9 miles west of, 150 feet south of south end of San Joaquin Light & Power Co. flume 4, on bridge over ditch, on concrete cap painted "3253"; chisel point.....	3, 250. 59
North Fork, 4.3 miles northwest of, 200 feet west of flume, 50 feet north of road, in base of 48-inch pine tree; spike with aluminum tag stamped "3210 B. M. 52".....	3, 207. 19
North Fork, 2.5 miles northwest of, northeast corner of San Joaquin Light & Power Co. power house, in foundation; aluminum tablet stamped "2827 B 1908 B. O.".....	2, 824. 671
North Fork, 1.7 miles northeast of, at headquarters of Sierra National Forest, 250 feet southeast of office, in base of 40-inch oak tree; spike with aluminum tag stamped "2951 B. M. 53".....	2, 948. 69
North Fork, 500 feet northeast of post office, on Sierra National Forest line, corner of saloon, in granite boulder; aluminum tablet stamped "2642 B 1908 B. P.".....	2, 638. 877

Point 1.2 miles southeast of North Fork post office southwest to Pollasky.

North Fork, 2.8 miles southwest of, south of road, 25 feet west of road junction, in base of 30-inch oak tree; spike with aluminum tag stamped "2894 B. M. 57".....	2, 891. 26
North Fork, 5.4 miles southwest of, north of road, at junction of Crane Valley-North Fork roads, in base of 36-inch oak tree; spike with aluminum tag stamped "2653 B. M. 60".....	2, 650. 03
North Fork, 6 miles southwest of, west edge of road, 3.4 miles southeast of Cleveland District schoolhouse, 600 feet east of ranch house, in granite boulder; aluminum tablet stamped "2586 B 1908 B. Q.".....	2, 583. 10
North Fork, 8.2 miles southwest of, west of road, 1,000 feet north of ranch house, in fence corner, in base of 36-inch oak tree; spike with aluminum tag stamped "1955 B. M. 62".....	1, 951. 97
Oneals, 6.3 miles northeast of, 25 feet west of road, 200 feet west of Mountain View schoolhouse, in granite boulder; aluminum tablet stamped "1305 B 1908 B. R.".....	1, 301. 506
Oneals, 3.9 miles northeast of, at central station, 100 feet south of house, in base of 36-inch pine tree; spike with aluminum tag stamped "1250 B. M. 66".....	1, 246. 75
Oneals, 2.8 miles northeast of, west of road, 100 feet west of junction of road, in base of 24-inch oak tree; spike with aluminum tag stamped "1387 B. M. 67".....	1, 383. 52
Oneals, 0.5 mile west of, 200 feet north of Oneals ranch house, at intersection of roads, in granite boulder; aluminum tablet stamped "1246 B 1908 B. S.".....	1, 242. 822
Oneals, 2.8 miles southwest of, on summit of Cop Hill, on granite boulder painted "1336 B. M. 71;" chisel point.....	1, 332. 70
Oneals, 5.8 miles southwest of, 6 miles north of Pollasky, 150 feet south-east of intersection of Pollasky and Madera roads, in granite boulder; aluminum tablet stamped "611 B 1908 B. T.".....	608. 175

Pollasky, 3 miles north of, 100 feet southeast of pump, 30 feet south of road, in base of 36-inch cottonwood tree; spike with aluminum tag stamped "418 B. M. 76".....	Feet. 414. 58
Pollasky, northeast corner of bridge over San Joaquin River, on concrete guard, 5 feet from fence corner; aluminum tablet stamped "U".....	330. 014
Pollasky, 450 feet south of station, opposite milepost 231, at east edge of right of way of railroad; iron post stamped "337".....	339. 135
Daulton southeast to point 6 miles west of Pollasky, thence to point 2.3 miles north of Pollasky.	
Daulton, 150 feet north of station, west edge of railroad right of way, 10 feet south of gate, at fence line; iron post stamped "400 B 1908 B. X.".....	400. 140
Daulton, 3.1 miles southeast of, west of road, at gate to Daulton ranch, on main road between Raymond and Berenda, 15 feet north of gate, on fence line; iron post stamped "561 B 1909 B. E. 1".....	561. 095
Daulton, 7 miles southeast of, 300 feet south of head of irrigation ditch, 60 feet west of Fresno River, 200 feet north of ford, in granite bowlder; aluminum tablet stamped "386 B 1909 B. F. 1".....	386. 748
Fresno River ford at Adobe ranch, 1.8 miles southeast of, 0.7 mile north of red house, 60 feet north of second-class road, northwest of triangulation station, on bowlder painted "419 B. M. 110;" chisel point.....	419. 01
Fresno River ford at Adobe ranch, 9.7 miles southeast of, 350 feet northwest of triangulation station, 10 feet south of gate to field on second-class road, 0.5 mile west of large barn; iron post stamped "471 B 1909 B. G. 1".	470. 601
Fresno River ford at Adobe ranch, 12 miles southeast of, 1 mile east of Adobe triangulation station, 25 feet west of creek at old house, on bowlder painted "446 B. M. 112"; chisel point.....	445. 70
Pollasky, 6.2 miles west of, 75 feet north of corner of small pasture, at rocky point south of road; iron post stamped "451".....	451. 355
Pollasky, 6 miles west of, 150 feet south of fence corner at intersection of roads, driven in crack in granite bowlder painted "466 B. M. 80"; spike.	467. 92
Pollasky, 4.9 miles west of, 20 feet east of road in base of fence post painted "535 B. M. 17"; spike (redetermined Ryus bench mark.).....	534. 98
Pollasky, 4.4 miles west of, 500 feet west of schoolhouse, 5 feet south of road, on granite bowlder painted "503 B. M. 79"; chisel point.....	505. 56
Pollasky, northeast corner of bridge over San Joaquin River, on concrete guard, 5 feet from fence corner; aluminum tablet stamped "U".....	330. 014
Daulton northeast along railroad and highway to Ahwahnee.	
Daulton, in front of station; top of rail.....	400. 5
Daulton, 150 feet north of station, west edge of railroad right of way, 10 feet south of gate, at fence line; iron post stamped "400 B 1909 B. X.".....	400. 140
Jesbel station, 25 feet south of milepost 192, west edge of railroad right of way; iron post stamped "527 B 1909 B. Y.".....	526. 972
Raymond, 2.7 miles south of, at railroad crossing, west margin of road, in granite bowlder; aluminum tablet stamped "864 B 1909 B. Z.".....	863. 812
Raymond, in front of station; top of rail.....	925. 3
Raymond, 20 feet south of Raymond livery stable, opposite station, west margin of road, in granite bowlder; aluminum tablet stamped "936 B 1909 B. A. 1".....	937. 182
Raymond, 1.2 miles north of, west side of road, in base of 24-inch oak tree; spike; with aluminum tag stamped "1053 B. M. 91".....	1, 053. 722
Raymond, 1.9 miles north of, at intersection of road to Fresno Flats, 200 feet south of house, spike in base of 30-inch oak tree with aluminum tag stamped "1263 B. M. 92".....	1, 264. 090

	Feet.
Raymond, 2.7 miles north of, at intersection of roads, at rocky point, on granite boulder painted "1257 B. M. 93"; chisel point	1, 258. 17
Raymond, 5 miles north of, at small draw, 2.7 miles south of Summit House, east of road, in granite boulder; aluminum tablet stamped "1356 B 1909 B. B. 1"	1, 355. 672
Raymond, 6 miles north of, 1.6 miles south of Summit House, 25 feet east of road, in base of 30-inch oak tree; spike with aluminum tag stamped "1632 B. M. 95"	1, 632. 21
Raymond, 8 miles north of, 0.3 mile north of Summit House, west edge of road, on summit of ridge, in granite boulder; aluminum tablet stamped "2042 B 1909 B. C. 1"	2, 041. 841
Grub Gulch, 2.7 miles south of, on summit of ridge, east edge of road, in base of 20-inch oak tree; spike with aluminum tag stamped "1992 B. M. 99"	1, 992. 07
Grub Gulch, 1.3 miles south of, west side of road, 50 feet west of fence corner, in base of 36-inch pine tree; spike with aluminum tag stamped "2154 B. M. 100"	2, 153. 85
Grub Gulch, 0.3 mile north of, on summit of ridge between Grub Gulch and Ahwahnee, south side of road, 2,000 feet south of old McCloud ranch, at bend in road, in granite boulder; aluminum tablet stamped "2495 B 1909 B. D. 1"	2, 494. 717
Grub Gulch, 1.7 miles north of, 300 feet west of old house, at bend of road, 150 feet south of draw, in base of 36-inch oak tree; spike with aluminum tag stamped "2257 B. M. 102"	2, 256. 612
Grub Gulch, 3.9 miles north of, 50 feet west of road, at junction of Poisior Switch and Ahwahnee roads, on granite boulder painted "1943 B. M. 104;" chisel point.	1, 942. 823
Mount Bullion schoolhouse east along road to Ahwahnee.¹	
Mount Bullion, 200 feet east of schoolhouse, 30 feet north of road; iron post stamped "2177 B 1908 B. E."	2, 175. 256
Mount Bullion, 2.4 miles east of, north side of road, in base of 36-inch pine tree; spike with aluminum tag stamped "2332 B. M. 17"	2, 330. 18
Mariposa, 0.7 mile west of, 400 feet west of cemetery, 20 feet south of road, on boulder painted "2049 B. M. 20;" chisel point.	2, 046. 39
Mariposa, courthouse, southeast corner of Hall of Records, 4 feet above ground; aluminum tablet stamped "2022 B 1908 B. F."	2, 018. 967
Mariposa, 2.2 miles east of, 300 feet west of Mormon Bar Hotel, south of road, on boulder painted "1767 B. M. 22;" chisel point.	1, 765. 27
Mormon Bar, 2.3 miles east of, 1.5 miles west of Bootjack, 40 feet north of road, 300 feet west of summit of hill, in boulder; aluminum tablet stamped "2456 B 1908 B. G."	2, 453. 936
Bootjack, 0.2 mile east of, at intersection of Yosemite and Hites Cove roads, in base of 48-inch oak tree; spike with aluminum tag stamped "2244 B. M. 25"	2, 241. 97
Bootjack, 2.6 miles east of, 150 feet north of road junction, at Thompson ranch, 10 feet west of road, in large boulder; aluminum tablet stamped "2232 B 1908 B. H."	2, 228. 114
Bootjack, 4.6 miles east of, 60 feet west of road, on summit of ridge between Bootjack and Chowchilla, on large boulder painted "2976 B. M. 28;" chisel point.	2, 973. 67

¹ The error of closure between Merced Falls via Bullion to Ahwahnee was 3.556 feet, but as the portion between Mount Bullion and Ahwahnee was retraced by secondary levels this part has been adjusted, leaving an outstanding error west of Bullion of 3.227 feet to be located later. See the Merced quadrangle list.

Bootjack, 6.1 miles east of, 0.9 mile west of Chowchilla schoolhouse south of road at ranch house, east bank of creek, in base of 40-inch pine tree; spike with aluminum tag stamped "2820 B. M. 30".....	2,817.48	Feet.
Chowchilla schoolhouse, 0.3 mile east of, 50 feet south of intersection of Wawona and Warwane roads, 100 feet north of barn, in boulder; aluminum tablet stamped "2963 B 1908 B. I.".....	2,960.532	
Chowchilla schoolhouse, 2.4 miles east of, 1.5 miles west of Grants Springs, 50 feet east of Chowchilla Creek, opposite ranch house, in base of 36-inch oak tree; spike with aluminum tag stamped "2296 B. M. 32".....	2,293.12	
Grants Springs, midway between spring house and old house, in base of 30-inch cedar tree; spike with aluminum tag stamped "2872 B. M. 33".....	2,868.89	
Ahwahnee, 3.1 miles west of, 150 feet west of road, on summit between Grants Springs and Ahwahnee, in boulder; aluminum tablet stamped "3336 B 1908 B. J.".....	3,333.346	
Ahwahnee, 1.9 miles west of, at junction of road to Summerdale and Miami sawmill and Raymond road, in base of 36-inch oak tree; spike with aluminum tag stamped "2928 B. M. 35".....	2,926.03	
Ahwahnee, 1.2 miles west of, west side of road, at junction of second-class road, on boulder painted "2800 B. M. 36;" chisel point.....	2,797.92	
Ahwahnee, 1.2 miles east of, 200 feet north of junction of Fresno Flats and Raymond road, 30 feet west of road, in boulder; aluminum tablet stamped "2323 B 1908 B. K." (Junction bench mark).....	2,320.205	

MERCED 30' QUADRANGLE.**Merced north along highway to Merced River.**

Merced, southeast corner of county courthouse; aluminum tablet stamped "171 B".....	171.118
Merced, 4.3 miles north of, at entrance to Crocker Huffman back ranch, west of road, 20 feet north of gate; iron post stamped "175 B".....	175.222
Sixmile House, northeast corner of fork with road to east; iron post stamped "206 B".....	205.775
Sixmile House, 3.3 miles north of, 65 feet south of bridge over creek, east of road; iron post stamped "377 B".....	376.949
Sixmile House, 6.7 miles north of, at northwest corner of fork with road to west; iron post stamped "284 B".....	283.913

Amsterdam southeast along railroad to Merced.

Amsterdam, 3.3 miles southeast of, north margin of railroad and highway, 4 feet east of milepost 157; iron post stamped "196 B".....	195.984
Amsterdam, 5.4 miles southeast of, at southwest corner of fork with road to Atwater, at J. J. Gray's ranch house; iron post stamped "175 B".....	175.333

Berenda northeast along Southern Pacific Railway to Daulton.

Berenda, 3 miles north of, 200 feet north of Atchison, Topeka & Santa Fe Railway crossing, west edge of Southern Pacific Railroad right of way, 10 feet south of milepost 181; iron post stamped "279 B 1909 B. V."....	278.711
Talbot, in front of station; top of rail.....	332.8
Talbot, 800 feet north of station, west edge of railroad right of way, at road crossing; iron post stamped "331 B 1909 B. W.".....	331.187
Daulton, in front of station; top of rail.....	400.6

Merced Falls via Hornitos to Mount Bullion schoolhouse.¹

Merced Falls, at northeast corner of yard of Merced Falls Power Co., on margin of road; iron post stamped "351 B".....	351.125
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¹ Unadjusted line closing 3.227 feet high at Mount Bullion schoolhouse.

	Feet.
Merced Falls, south corner of bridge over Merced River; top of bolt over pier painted "350 B.M. 1".....	349.335
Merced Falls, 1.7 miles east of, 100 feet south of road, on summit of small hill, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "499 B.M. 2".....	499.405
Merced Falls, 3.2 miles east of, 15 feet south of road, 0.04 mile south of ranch house, in base of oak tree 24 inches in diameter; spike with aluminum tag stamped "745 B.M. 3".....	745.170
Merced Falls, 4.9 miles east of, 1,000 feet west of road junction, 20 feet south of road; chisel-point on boulder painted "910 B.M. 4".....	910.149
Merced Falls, 5.5 miles east of, 1 mile south of Hornitos, 15 feet east of road, near sharp turn in road, 25 feet north of oak tree, in bowlder; aluminum tag stamped "829 B 1908 B.A.".....	829.791
Hornitos, 0.9 mile east of, north side of road, at east end of olive orchard, in base of oak tree 24 inches in diameter; spike with aluminum tag stamped "871 B.M. 6".....	872.410
Hornitos, 2.2 miles east of, south side of road, west bank of drain, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "980 B.M. 7".....	981.292
Hornitos, 3.2 miles east of, 0.5 mile west of, at Ruth Pierce mine, north side of road, on summit of small ridge, in bowlder; aluminum tablet stamped "1094 B 1908 B. 13".....	1,094.649
Hornitos, 4 miles east of, southwest corner of intersection of road to Indian Gulch, 1,000 feet east of Ruth Pierce mine, in base of fence post; spike with aluminum tag stamped "1144 B.M. 8".....	1,145.183
Hornitos, 4.7 miles east of, 2 miles east of Ruth Pierce mine, 500 feet south of house, 250 feet east of drain at bend of road, on bowlder painted "1153 B.M. 9"; chisel point.....	1,154.244
Hornitos, 6.4 miles east of, north side of road, 0.4 mile west of Molony ranch house, on west line of Merced grant at junction of Cathray Valley and Mariposa road, on bowlder; aluminum tablet stamped "1160 B 1908 B. C.".....	1,161.560
Mount Bullion, 6 miles west of, 6.9 miles east of Hornitos, north side of road, north bank of canyon, in bowlder painted "1434 B. M. 10"; chisel point.....	1,435.210
Mount Bullion, 5.3 miles west of, east side of road, on summit of rise, at ruin of old house, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "1702 B.M. 11".....	1,703.481
Mount Bullion, 4.2 miles west of, on summit of ridge, 25 feet south of road, in bowlder; aluminum tablet stamped "1828 B 1908 B.D.".....	1,828.865
Mount Bullion, 3.5 miles west of, 60 feet northeast of creek, 150 feet east of water trough, north side of road, on rock painted "1680 B.M. 12"; chisel point.....	1,680.944
Mount Bullion, 2.5 miles west of, 50 feet west of old house, north side of road, on bowlder painted "1837 B.M. 13"; chisel point.....	1,838.122
Mount Bullion, 1.2 miles west of, east side of road, opposite mine, west bank of creek, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "1964 B.M. 14".....	1,965.121
Mount Bullion, 0.5 mile west of north side of road, on summit of hill, in base of pine tree 24 inches in diameter; spike with aluminum tag stamped "2217 B.M. 15".....	2,217.746
Mount Bullion, 200 feet east of schoolhouse, 30 feet north of road; iron post stamped "2177 B 1908 B.E.".....	2,178.483

Bridgeport, Hawthorne, and Mount Lyell quadrangles.

MONO AND TUOLUMNE COUNTIES.

The elevations in the following list are based on a bench mark at Bridgeport, of which the elevation now adopted is 4 feet greater than that given in Bulletin 342. This correction was determined by leveling between Hawthorne, Nev., and Mohave, Cal., and allows for orthometric error from Mohave and a small correction at Mohave.

The leveling was done by C. M. Weston in 1909 and C. R. Smith in 1898, without State cooperation.

BRIDGEPORT QUADRANGLE.

Bodie via stage road to Bridgeport, thence northwest via stage road to State line.

Bodie, 1.1 miles east of, 50 feet east of first dam above stamp mill, 10 feet south of road, on boulder painted "8303;" chiseled square.....	Feet. 8, 301. 67
Bodie, northwest corner of Main and Green streets, 3 feet from hydrant, between two large wooden posts; iron post stamped "8375".....	8, 373. 881
Bodie, 1.2 miles northwest of, about 1,000 feet southeast of summit in road, on east side of road, on boulder painted "8462;" chiseled square.....	8, 460. 35
Bodie, 2.2 miles northwest of, 200 feet west of bend in road around point, on boulder on southwest side of road, painted "8326;" chiseled square..	8, 324. 93
Bodie, 3.5 miles northwest of, at Murphy Springs, on east side of road, 10 feet east of watering tub; iron post stamped "8112".....	8, 110. 549
Bodie, 4.7 miles northwest of, east of summit in road, 10 feet north of road, on boulder painted "8131;" chiseled circle.....	8, 129. 24
Bodie, 6.1 miles northwest of, 30 feet south of north junction of old and new roads, 10 feet southwest of center of old road, on boulder painted "8065;" chiseled square.....	8, 063. 78
Bodie, 7.5 miles northwest of, 100 feet south of crossing of old and new roads, 15 feet west of new road, on boulder painted "7716;" chiseled square..	7, 714. 90
Bodie, 8.7 miles northwest of, at old Mormon ranch, 2 feet from northwest corner of barn, on south side of road; iron post stamped "7425".....	7, 423. 682
Bodie, 10 miles northwest of, 100 feet west of top of small rise in road, north of green pasture, on south side of road, on boulder painted "7271;" chiseled square.....	7, 269. 64
Clearwater Creek crossing, 20 feet north of bridge; iron post stamped "7196 O".....	7, 205. 250
Bodie, 10.4 miles northwest of, north of road, opposite creek in canyon, 3 feet above road, around point on ledge; chiseled circle painted "7141".....	7, 139. 79
Bodie, 12 miles northwest of, 8 feet south of road, between road and Clearwater Creek in deep canyon, in large 25-foot boulder; aluminum tablet stamped "6935".....	6, 933. 724
Bodie, 13 miles northwest of, 40 feet east of junction of Green and Clearwater creeks, 15 feet west of turn in road, on boulder painted "6835;" chiseled square.....	6, 833. 81
Bridgeport, 6 miles south of, 300 feet north of high point of ledge east of road, 12 feet west of road, on boulder painted "6723;" chiseled square.....	6, 722. 00
Tollgate, Bridgeport-Bodie road, near northeast corner of house; iron post stamped "6643 O".....	6, 651. 705
Bridgeport, 2.7 miles south of, on south slope of low ridge, 15 feet west of road, on low ledge painted "6505;" chiseled square.....	6, 503. 90

Bridgeport, 1 mile south of, 175 feet west of culvert, in base of telephone pole painted "6471," first pole south of pasture gate on west side of road; spike.....	Feet. 6, 469. 13
Bridgeport, at southwest corner of courthouse; iron post stamped "6465 O".....	6, 473. 436
Bridgeport, 2.4 miles east of, 150 feet east of corner of pasture fence on north side of road, 5 feet north of fence and on edge of dry channel, on boulder painted "6448;" chiseled square.....	6, 446. 25
Bridgeport, 2.9 miles east of, at Stewart's ranch, 3 feet south of corner fence post at west turn from main road; iron post stamped "6449".....	6, 447. 686
Bridgeport, 3.8 miles northeast of, 70 feet north of dry channel, 25 feet west of road, on boulder painted "6465;" chiseled square.....	6, 464. 05
Bridgeport, 5 miles northeast of, 200 feet east of river and 15 feet west of road, on boulder 1 foot high, painted "6431;" chiseled square.....	6, 429. 25
Bridgeport, 5.9 miles northeast of, about 900 feet east of old ranch, in field on north side of road and 10 feet north of fence on large boulder painted "6416;" chiseled square.....	6, 414. 42
Bridgeport, 6.7 miles northeast of, 400 feet southwest of bridge over East Walker River and 25 feet east of road, at foot of high cliff, in large boulder; aluminum tablet stamped "6398".....	6, 396. 466
Bridgeport, 7.5 miles northeast of, 5 feet north of road and about 50 feet north of river, on boulder painted "6362;" chiseled square.....	6, 353. 36
Bridgeport, 8.6 miles northeast of, 25 feet west of and 4 feet above river, 75 feet south of long narrow island, 12 feet east of road, on boulder painted "6312;" chiseled square.....	6, 310. 20
Bridgeport, 10.2 miles northeast of, 55 feet west of road and 130 feet west of river, on east side of high bluff, in granite ledge; aluminum tablet stamped "6202".....	6, 200. 721
Bridgeport, 11 miles northeast of, on east side of road, 75 feet west of river and 3 feet east of wire fence, on boulder 4 feet high, painted "6132;" chiseled square.....	6, 130. 82
Bridgeport, 12.3 miles northeast of, 1,000 feet south of Sam Philatro's ranch, 15 feet east of road, on small rise, on boulder painted "6066;" chiseled square.....	6, 064. 17
Bridgeport, 13.1 miles northeast of, 0.6 mile northeast of Sam Philatro's ranch, on west side of road, opposite stone embankment, on boulder painted "6011;" chiseled square.....	6, 009. 11
Bridgeport, 13.7 miles northeast of, on California-Nevada State line, survey of 1873, 25 feet west of road; iron post stamped "5966".....	5, 954. 665

Point 2.5 miles west of Blackburn's ranch to Bridgeport.

Hardy (Blackburn's ranch), about 2.5 miles west of, on rock ledge 1,400 feet east of bridge over West Walker River, in a bend of the road, on south side of grade; copper bolt stamped "6703" (elevation by corrected line from Stockton, 6,702.518).....	6, 710. 247
Hardy (Blackburn's ranch), at junction of Sonora-Mono toll road and Carson Road, 60 feet east of Little Walker River; iron post stamped "6942".....	6, 949. 779
Summit between Blackburn's ranch and Bridgeport, 15 feet east of road; iron post stamped "7540 O".....	7, 548. 776
Hunttoon station, on right side of road, 100 feet below water trough; iron post stamped "6837 O".....	6, 845. 978
Bridgeport, 3 miles northwest of, east side of road, at north side of Sinnamon's Lane; iron post stamped "6496 O".....	6, 504. 547

Point 10 miles southeast of Bridgeport via State road to Mono Lake.

Bridgeport, 10 miles southeast of, at sheep camp, 50 feet above water trough across road; iron post stamped "7350 O".....	Feet. 7, 358. 769
Hector's station, on Bodie-Lundy road, across road from dwelling house at edge of orchard and garden; iron post stamped "6760 O".....	6, 769. 285
Jordan Creek crossing of Bodie-Lundy road, 150 feet south of bridge, on north side of road; iron post stamped "6779 O".....	6, 787. 387
Mono, 4 feet east of southwest corner of sec. 19, T. 2 N., R. 26 E., about midway between post office and schoolhouse, on hillside, about 350 feet in elevation above lake and about 2,000 feet in horizontal distance from lake shore; iron post stamped "6761 O"; witnessed by mound of rocks..	6, 769. 711
Mono Lake, surface of water, July 27, 1898.....	6, 421. 3
Mono Lake, surface of water, October, 1909.....	6, 426

HAWTHORNE QUADRANGLE.

State line on Hawthorne-Bodie road to Bodie.

Fletcher, 8.1 miles southwest of, on California-Nevada State line, survey of 1873, 25 feet south of milepost 283, 300 feet east of old stone house, at Sun- shine, 15 feet north of road; iron post stamped "7524".....	7, 522. 624
Fletcher, 10.3 miles southwest of, at Gregory's ranch, southwest of house, 20 feet east of road, on ledge, painted "7821;" chiseled square.....	7, 819. 62
Fletcher, 10.9 miles southwest of, opposite old stamp mill, in face of high ledge on south side of road, 20 feet north of northwest corner of ledge; aluminum tablet stamped "7908".....	7, 906. 451
Bodie, 4 miles northeast of, 6 feet east of road, between Bodie Creek and road, 3 feet north of telephone pole, on bowlder painted "8018;" chiseled square.....	8, 016. 45
Bodie, 2.7 miles east of, in front wall of H. C. Blanchard's stone house at tollgate, 6 feet west of southeast corner of house; aluminum tablet stamped "8133".....	8, 131. 444

MOUNT LYELL QUADRANGLE.

Mono post office southeast to Rush Creek.

Ney's ranch, sec. 4, T. 1 N., R. 26 E., near Mono Lake shore, in large bowlder on north side of road and 200 feet east of blacksmith shop; aluminum tablet stamped "6423 O".....	6, 431. 471
T. 1 N., R. 26 E., sec 13, Rush Creek crossing, junction of lake road with Rush Creek road from Farrington station; iron post stamped "6442 O"..	6, 450. 571
Ney's ranch (shore of Lake Mono) south along road to junction of road in sec. 9, T. 2 S., R. 27 E.	
T. 1 N., R. 26 E., northeast corner of sec. 33, Farrington station, 50 feet south of dwelling, inside fence at edge of road Walter Lake; iron post stamped "6854 O".....	6, 862. 729
T. 1 S., R. 27 E., sec. 29, Owens River road, 7 miles southeast of Farrington station, at head of short, steep grade, at upper edge of grove of trees, 10 feet left of road; iron post stamped "7601 O" (elevation brought from Mohave, 7,612.182).....	7, 609. 827
T. 2 S., R. 27 E., sec. 9, Long Valley and Owens River road, at junction of with Bodie and Benton wagon road, on north side of road; iron post stamped "7938 O" (elevation brought from Mohave, 7,948.998).....	7, 946. 643

Farrington south to Silver Lake.

Grant Lake, at outlet, 10 feet east of road; iron post stamped "7068 O"....	7, 077. 228
Silver Lake, at outlet; iron post stamped "7217 O".....	7, 225. 937

Ney's ranch up Leevining Creek road to Sec. 23, T. 1 N., R. 26 E.

T. 1 N., R. 26 E., quarter corner between secs. 23 and 24; iron post stamped "7467 O"..... 7, 476. 097 Feet.

Farrington southwest along road and trail to Mono Pass, thence west along trail to Snow Flat.

Walker Lake, 100 feet north of outlet, at upper end of wagon road where Bloody Canyon trail begins, near dwelling of A. Grose, 100 feet from lake and 123 feet from fence; iron post stamped "7929 O"..... 7, 938. 030
 Walker Lake; surface of water, September 1, 1898..... 7, 935. 6
 Sardine Lake; surface of water, September 26, 1898..... 9, 885. 1
 Mono Pass, 30 feet north from shore of Summit Lake and 4 feet to right of trail; iron post stamped "10599 O"..... 10, 607. 604
 Dana Fork, trail at point where sheep trail branches to right through timber alongside hill and where stream turns west to main trail, continuing northwest down to meadows, in rock at southwest corner of cabin; aluminum plug stamped "U. S. G. S. 9738 Ft. B. M. O."..... 9, 746. 563
 Soda Springs, 3.5 miles east of, on north side of Tioga road where trail comes in from the meadows to the eastward of road, in outcropping ledge of rock; aluminum bolt stamped "U. S. G. S. 9270 Ft. B. M. O."..... 9, 278. 794
 Soda Springs, 100 feet west of, in large granite boulder on south side of trail; aluminum bolt stamped "U. S. G. S. 8594 Ft. B. M. O."..... 8, 602. 681
 T. 1 S., R. 23 E., southeast corner of sec. 1, Diablo meridan; iron post stamped "8555 O"..... 8, 564. 118
 Cathedral Creek, in conspicuous rock in north side of creek bed, 50 feet from road; aluminum bolt stamped "U. S. G. S. 8337 Ft. B. M. O."..... 8, 346. 076
 Lake Tanaya, on west shore of, in large boulder between road and lake shore about 300 feet east of three log cabins in grove of trees; aluminum tablet stamped "U. S. G. S. 8146 Ft. B. M. O."..... 8, 154. 447
 Lake Tanaya; surface of water, September 17, 1898..... 8, 150
 Snow Flat, 300 feet southwest of wooden culvert in road crossing, in large granite boulder, on west side of road; aluminum tablet stamped "U. S. G. S. 8705 Ft. B. M. O." (recovered in 1905 by leveling from Merced, and correction made)..... 8, 714. 341

Dana Fork trail north to Tioga.

Tioga Pass summit, on rock on east side of road; aluminum tablet stamped "9941 Ft. B. M. O."..... 9, 950. 188
 Tioga mine, in ledge of rock, at southwest corner of assay office; round iron plug set in cement and marked "9795"..... 9, 803. 745

At Miller Bridge.¹

Miller Bridge, sec. 11, T. 5 S., R. 25 E., 15 feet east of bridge over Middle Fork of San Joaquin River, in granite ledge; bronze tablet stamped "4556 F"..... 4, 567. 252

Crucero and Ivanpah 1° quadrangles.**SAN BERNARDINO COUNTY.**

The elevations in the following list are based on an approximate elevation at Barnwell on the Coast and Geodetic Survey precise level line.

The leveling was done in 1909 by L. F. Biggs without State cooperation.

¹ Determined by single unadjusted line by L. D. Ryus in 1901 from Fresno.

IVANPAH QUADRANGLE.

State line 11.6 miles east of Barnwell west along Atchison, Topeka & Santa Fe Railway to Barnwell (part of circuit from Las Vegas, Nev.).

	Feet.
Barnwell, 10 miles east of, in base of milepost 10; spike with aluminum tag stamped "4381".....	4,378.36
Barnwell, 9 miles east of, in base of milepost 9; spike with aluminum tag stamped "4502".....	4,499.59
Barnwell, 8.5 miles east of, 50 feet north of railroad, 150 feet east of milepost 9½; iron post stamped "4643 B 1909 18".....	4,640.309
Hitt, 200 feet east of station, in base of telephone pole; spike with aluminum tag stamped "4611".....	4,608.97
Barnwell, 5 miles east of, in base of milepost 5; spike with aluminum tag stamped "4599".....	4,596.61
Barnwell, 4 miles east of, 50 feet north of railroad, 100 feet west of milepost 4; iron post stamped "4578 B 1909 19".....	4,576.179
Barnwell, 3 miles east of, in base of milepost 3; spike with aluminum tag stamped "4543".....	4,540.79
Barnwell, 2 miles east of, in base of first telephone pole east of milepost 2; spike with aluminum tag stamped "4610".....	4,608.39
Barnwell, 1 mile east of, in base of milepost 1; spike with aluminum tag stamped "4702".....	4,700.44
Barnwell, San Bernardino County, 72 feet east of Menvel Hotel, 39.36 feet east of east corner of Atchison, Topeka & Santa Fe Railway freight-house platform, 62.32 feet southeast of railroad track, on level with base of rail; square hole in top of stone post, set in sandy soil and dry clay, lettered "U. S. B. M.".....	4,807.325
Barnwell southwest along road to Government Holes, thence northwest to Cima, thence west to point 12 miles southeast of Silver Lake (portion of circuit via Silver Lake and Riggs, Cal., to Stump Springs, Nev., in which an excessive error has been adjusted).	
Barnwell, 1.1 miles southwest of, west edge of road, in base of yucca tree; spike with aluminum tag stamped "4910".....	4,910.51
Barnwell, 2.3 miles southwest of, east edge of road, in base of yucca tree; spike with aluminum tag stamped "5046".....	5,045.65
Barnwell, 4 miles southwest of, 500 feet south of wash, on first slope of ridge, 50 feet north of road, east of New York Mountain triangulation station; iron post stamped "4957 B 1909 20".....	4,956.552
Barnwell, 4.7 miles southwest of, east edge of road, east bank of wash, in yucca tree; spike with aluminum tag stamped "4807".....	4,807.14
Barnwell, 6 miles southwest of, south edge of road, in base of yucca tree; spike with aluminum tag stamped "4871".....	4,870.81
Barnwell, 7.3 miles southwest of, 300 feet south of junction of road to Youngs Camp, 50 feet west of road, on small knoll; iron post stamped "5119 B 1909 21".....	5,118.186
Forks of road to Youngs Camp, 1.2 miles south of, 20 feet north of road, on summit between Government Holes and Barnwell, in base of yucca tree; spike with aluminum tag stamped "5200".....	5,199.88
Forks of road to Youngs Camp, 2 miles southwest of, south edge of road on ridge between two washes, in base of yucca tree; spike with aluminum tag stamped "5109".....	5,109.30
Government Holes, 4.7 miles northeast of, 60 feet north of road, in one of pile of granite boulders; aluminum tablet stamped "5027 B 1909 22"....	5,027.086
Government Holes, 3.3 miles northeast of, on point of ridge at junction of three washes, in stump; copper nail with aluminum tag stamped "4914".....	4,913.93

Government Holes, 2.1 miles east of, at junction of road to Rock Springs, 1,000 feet north of spring, on boulder painted "4776"; chisel point.....	Feet. 4, 776. 18
Government Holes, 1.1 miles northeast of, 50 feet north of road, on large boulder painted "4922"; chisel point.....	4, 922. 25
Government Holes, 1,000 feet northeast of house, 150 feet north of road, west edge of long granite boulder; aluminum tablet stamped "5019 B 1909 23".....	5, 018. 355
Government Holes, 1.9 miles northwest of, 60 feet north of road, on large flat at summit; iron post stamped "5167 B 1909 24".....	5, 166. 517
Government Holes, 4.3 miles northwest of, north edge of road, at rocky point, on boulder painted "4854"; chisel point.....	4, 853. 58
Government Holes, 5.1 miles northwest of, north edge of road, large boulder painted "4705"; chisel point.....	4, 704. 33
Cima, 7.6 miles southeast of, 0.5 mile east of junction of old Government road to San Bernardino where road leaves Cedar Canyon, north edge of canyon, 50 feet west of road; iron post stamped "4625 B 1909 25".....	4, 624. 917
Cima, 7 miles southeast of, at junction of old Government road, on boulder painted "4480"; chisel point.....	4, 480. 08
Cima, 5.9 miles southeast of, west edge of road, in base of yucca tree; spike with aluminum tag stamped "4330".....	4, 329. 69
Cima, 4.8 miles southeast of, 1.7 miles south of Death Valley mine, east edge of road, at base of round butte, in base of yucca tree; spike with aluminum tag stamped "4340".....	4, 339. 84
Cima, 3.1 miles southeast of, 1,000 feet west of main building at Death Valley mine, 30 feet west of road; iron post stamped "4370 B 1909 26".....	4, 369. 643
Cima, 1.7 miles southeast of, west edge of road, 200 feet west of telephone line, in base of yucca tree; spike with aluminum tag stamped "4282".....	4, 283. 08
Cima, in front of San Pedro, Los Angeles & Salt Lake Railroad station; top of rail.....	4, 188. 5
Cima, 800 feet south of station, 2.5 telegraph poles south of milepost 254, west edge of right of way; iron post stamped "4204 B 1909 27".....	4, 203. 623
Cima, 1.3 miles west of, south edge of road, in base of yucca tree; spike with aluminum tag stamped "4201".....	4, 200. 85
Cima, 2.3 miles west of, south edge of road, in crotch of yucca tree; nail with aluminum tag stamped "4173".....	4, 182. 44
Cima, 3.4 miles west of, 40 feet north of road; iron post stamped "4116 B 1909 28".....	4, 106. 075
Cima, 4.7 miles west of, 50 feet south of road, in base of yucca tree; spike with aluminum tag stamped "4051".....	4, 050. 13
Cima, 6.1 miles west of, 50 feet north of junction of old Government road to San Bernardino and road to Cima; iron post stamped "3932 B 1909 29".....	3, 931. 744
Cima, 7.2 miles west of, 1.2 miles west of forks of road, south edge of road at rock point, on boulder painted "3817"; chisel point.....	3, 817. 97
Marl Spring, 1,000 feet northeast of, 50 feet north of road, on summit of ridge; iron post stamped "3904 B 1909 30".....	3, 903. 752
Marl Spring, 1.8 miles northwest of, east edge of road, on summit of pass; iron post stamped "4556 B 1909 31".....	4, 555. 877
Marl Spring, 3.7 miles west of, north edge of road, on boulder painted "4079"; chisel point.....	4, 098. 50
Marl Spring, 4.7 miles west of, north edge of road, in top of stake; nail with aluminum tag stamped "3788".....	3, 807. 38
Marl Spring, 5.8 miles west of, 1,000 feet west of place where road passes over hard formation, 500 feet west of large mesquite tree, 15 feet east of road; iron post stamped "3535 B 1909 32".....	3, 554. 099

Marl Spring, 10.4 miles west of, south edge of wash, 100 feet south of large lava boulder, 1 mile east of long black point, opposite middle one of three round buttes; iron post stamped "2762 B 1909 33".....	Feet. 2,761.566
Marl Spring, 11.4 miles west of, south edge of road, on boulder painted "2602"; chisel point.....	2,600.77
17-Mile Point, 1.9 miles east of, at narrowest part of wash, south side of road, on boulder painted "2213"; chisel point.....	2,212.34
17-Mile Point, 1 mile east of, 900 feet east of crossroad, south edge of wash, 100 feet west of two large boulders in wash, in bedrock; aluminum tablet stamped "2106 B 1909 34".....	2,105.069
17-Mile Point, 200 feet east of signboard, on extreme north point of granite boulder painted "1965"; chisel point.....	1,964.02
17-Mile Point, 1 mile northwest of, north edge of road, on boulder painted "1837"; chisel point.....	1,836.06
17-Mile Point, 4.6 miles northwest of, 12.2 miles southeast of Silver Lake, 30 feet north of road, at large flat; iron post stamped "1532 B 1909 35"....	1,531.518

Kingston Spring northeast along road to Culver's ranch near State line (part of circuit from Barnwell in which an excessive error has been adjusted).

Kingston Spring, midway between spring and cabin; iron post stamped "2271 B 1909 45".....	2,267.390
Kingston Spring, 3.3 miles northeast of, 50 feet south of road, 25 feet south of mesquite tree, on boulder painted "2349"; chisel point.....	2,347.16
Kingston Spring, 5 miles northeast of, 200 feet north of junction of road to north, west end of small ridge; iron post stamped "2514 B 1909 46".....	2,512.210
Kingston Spring, 6.7 miles northeast of, south edge of wash, 2,000 feet west of place where road leaves main wash, on black rocky point, in ledge; aluminum tablet stamped "2647 B 1909 47".....	2,645.148
Kingston Spring, 10.3 miles northeast of, west edge of road, on boulder painted "3173"; chisel point.....	3,171.53
Kingston Spring, 11.3 miles northeast of, 25 feet west of road where road leaves wash, 2 miles south of summit of pass; iron post stamped "3320 B 1909 48".....	3,318.011
Kingston Spring, 13.5 miles northeast of, on summit of pass between Kingston Spring and Sandy, 15 feet east of road; iron post stamped "3585 B 1909 49".....	3,582.710
Sandy, 10.3 miles west of, in forks of road to Horse Springs; iron post stamped "3145 B 1909 50".....	3,143.097
Sandy, 9 miles west of, west edge of road, 0.5 mile south of point of long ridge, on boulder painted "2978"; chisel point.....	2,976.67
Sandy, 5 miles west of, 0.5 mile north of Haverstick ranch, at junction of Sandy and Horse Springs roads; iron post stamped "2616 B 1909 51"....	2,613.762
Haverstick ranch, 2.3 miles north of, in base of windmill tower; spike with aluminum tag stamped "2645".....	2,642.97

CRUCERO QUADRANGLE.

Point 12 miles southeast of Silver Lake northwest to Silver Lake, thence north along Tonopah & Tidewater Railroad to Riggs, thence northeast to Kingston Springs (part of circuit from Barnwell in which an excessive error has been adjusted).

Silver Lake, 8.8 miles southeast of, 20 feet north of road; in large flat; iron post stamped "1386 B 1909 36".....	1,385.050
Silver Lake, 5.7 miles east of, 25 feet north of road; iron post stamped "1150 B 1909 37".....	1,148.552

	Feet.
Silver Lake, 4.3 miles east of, 15 feet south of road, on bowlder painted "1004"; chisel point.....	1, 002. 45
Silver Lake, 2.7 miles south of, 0.5 mile north of place where road enters bed of dry lake, 50 feet west of road; iron post stamped "908 B 1909 38" ..	907. 209
Silver Lake, .1.3 miles south of, 30 feet west of road, on bowlder painted "908"; chisel point.....	905. 79
Silver Lake, 150 feet south of Tonopah & Tidewater Railroad station, 100 feet north of water tank, north edge of right of way, 2 feet from telephone pole; iron post stamped "910 B 1909 39"	909. 092
Silver Lake, 0.7 mile north of, in base of milepost 50; spike with aluminum tag stamped "939"	938. 33
Silver Lake, 1.7 miles north of, in base of milepost 51; spike with aluminum tag stamped "942"	941. 28
Silver Lake, 2.7 miles north of, in base of milepost 52; spike with aluminum tag stamped "928"	926. 48
Silver Lake, 3.7 miles north of, east edge of right of way, at milepost 53; iron post stamped "910 B 1909 40"	908. 791
Silver Lake, 4.7 miles north of, in base of milepost 54; spike with aluminum tag stamped "964"	962. 97
Silver Lake, 5.7 miles north of, in base of milepost 55; spike with aluminum tag stamped "969"	968. 16
Silver Lake, 6.7 miles north of, in base of milepost 56; spike with aluminum tag stamped "985"	984. 37
Silver Lake, 7.7 miles north of, 2 feet from seventh telephone pole south of milepost 57, east edge of Tonopah & Tidewater Railroad right of way; iron post stamped "981 B 1909 41"	979. 858
Riggs, 0.8 mile south of, in base of milepost 58; spike with aluminum tag stamped "970"	968. 58
Riggs, in front of station; top of rail.....	969. 3
Riggs, 1.3 miles north of, in base of milepost 60; spike with aluminum tag stamped "1035"	1, 034. 07
Riggs, 2.1 miles north of, north edge of Tonopah & Tidewater Railroad right of way, 20 feet north of milepost 61; iron post stamped "1103 B 1909 42"	1, 101. 411
Riggs, 3.2 miles north of, in base of milepost 62; spike with aluminum tag stamped "1080"	1, 078. 52
Milepost 63, Tonopah & Tidewater Railroad, 1.2 miles northeast of, 8 miles west of Kingston Spring, 25 feet north of road; iron post stamped "1410 B 1909 43"	1, 408. 641
Kingston Spring, 3.5 miles west of, 30 feet south of road, at small bare flat; iron post stamped "1926 B 1909 44"	1, 925. 122
Kingston Spring, 1 mile west of, north edge of wash, on black rocky point, on bowlder painted "2091"; chisel point.....	2, 089. 36

Hanford 30' quadrangle.

KINGS COUNTY.

The elevations in the following list are based on the United States Geological Survey bench mark at Hanford, the accepted elevation of which is 250.385 feet.

The leveling was done in 1907 under the direction of the water-resources branch by W. V. Hardy.

HANFORD 30' QUADRANGLE.

Hanford south along Atchison, Topeka & Santa Fe Railway to Corcoran (checked spur line).¹

	Feet.
Hanford, east side of entrance to courthouse, in top of stone balustrade; bronze tablet stamped "250".....	250. 385
Hanford, 1.2 miles south of, 50 feet northwest of road crossing, 75 feet south of telegraph pole (M. P. 967), in base of telephone pole painted "U.S.G.S. B.M. 240"; spike.....	239. 96
Hanford, 2 miles south of, at Brown's brickyard, west side of track, in base of telegraph pole; railroad spike marked "U.S.G.S.B.M.".....	241. 82
Hanford, 3.4 miles south of, west side of track, in base of telegraph pole painted "U.S.B.M. 232"; railroad spike.....	232. 00
Odessa, 350 feet south of signboard, west side of track, in base of telegraph pole (M. P. 964) painted "U.S.G.S.B.M. 232"; railroad spike.....	232. 42
Odessa, 40 feet west of railroad, 15 feet north of wagon road, sec. 13, T. 19 S., R. 21 E.; iron post stamped "232 H.".....	231. 939
Odessa, 1 mile south of, west side of track, in base of telegraph pole painted "U.S.G.S.B.M. 228;" railroad spike.....	227. 51
Guernsey, 2 miles north of, west side of track, in base of telegraph pole (M. P. 962) painted "U.S.G.S.B.M. 222"; railroad spike.....	221. 86
Guernsey, 1 mile northwest of, west side of track, in base of telegraph pole (M. P. 961) painted "U.S.G.S.B.M. 219"; railroad spike.....	218. 91
Guernsey, in top of second post south of small flower lot; nail.....	223. 25
Guernsey, 80 feet north of station, 30 feet west of track, at southeast corner of small park; iron post stamped "221 H.".....	220. 891
Guernsey, 1 mile southeast of, west side of track, in base of telegraph pole (M. P. 959) painted "U.S.G.S.B.M. 216"; railroad spike.....	215. 61
Guernsey, 2 miles southeast of, west side of track, in base of telegraph pole (M. P. 958) painted "U.S.G.S.B.M. 215"; railroad spike.....	215. 28
Guernsey, 3 miles southeast of, west side of track, in base of telegraph pole (M. P. 957) painted "U.S.G.S.B.M. 213"; railroad spike.....	213. 36
Cross Creek, on trestle; top of west rail.....	218. 40
Guernsey, 4 miles southeast of, west side of track, in base of telegraph pole (M. P. 956) painted "U.S.G.S.B.M. 214"; railroad spike.....	213. 47
Guernsey, 5 miles southeast of, west side of track, in base of telegraph pole (M. P. 955) painted "U.S.G.S.B.M. 210"; railroad spike.....	210. 36
Bean, 1,000 feet northwest of, west side of track, in base of telegraph pole (M. P. 954) painted "U.S.G.S.B.M. 211"; spike.....	211. 24
Bean, 1,000 feet northwest of station, 45 feet west of railroad track, 40 feet north of wagon road, on north boundary of sec. 3, T. 21 S., R. 22 E.; iron post stamped "211 H.".....	210. 938
Corcoran, 2.1 miles northwest of, west side of track, in base of telegraph pole (M. P. 953) painted "U.S.G.S.B.M. 208"; railroad spike.....	208. 06
Corcoran, 1.1 miles northwest of, west side of track, in base of telegraph pole (M. P. 952) painted "U.S.G.S.B.M. 204"; railroad spike.....	203. 979
Corcoran, 0.5 mile northwest of, at road crossing; top of rail.....	208
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Corcoran, hotel, at foot of east stairway; north edge of east end of concrete doorsill.....	204. 90
Corcoran, east side of schoolhouse, near south end of steps; iron post stamped "203 H.".....	202. 927

¹Permanent bench marks are on unchecked side shots.

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