

DEGREE QUADRANGLE 37°-38°, 120°-121°

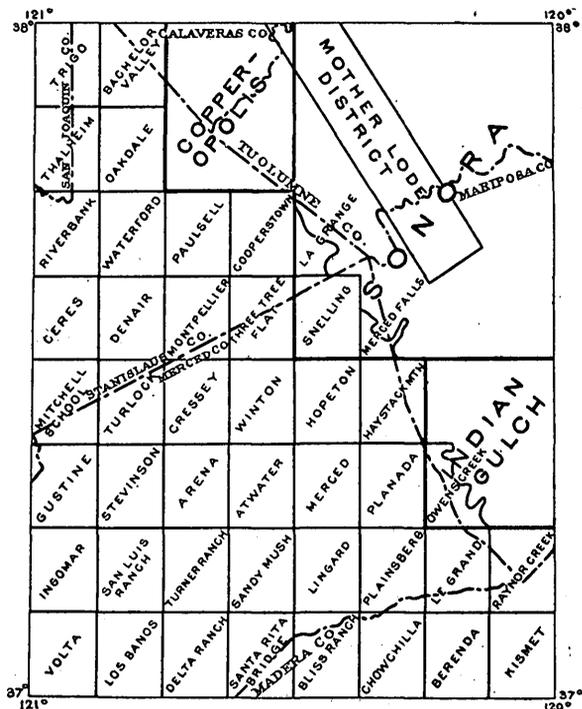


FIGURE 34.—Diagram of degree quadrangle 37°-38°, 120°-121°

BACHELOR VALLEY QUADRANGLE

[Latitude 37° 52' 30"-38°; longitude 120° 45'-120° 52' 30"]

CALAVERAS AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1915

From point 1.4 miles east of Farmcottage School along highways east to Eugene, thence north 8.5 miles, thence east to center of sec. 15, T. 1 N., R. 11 E.

	Feet
St. Joseph's Church, in front of lower step; ground-----	161.1
T. 1 N., R. 10 E., center of sec. 34, in southeast corner of T road south leading to ranch house, in base of telephone pole; nail, marked "U. S. B. M. 169"-----	169.32
Eugene, at east entrance to general store, in concrete platform; aluminum tablet stamped "177 1915"-----	177.016
T. 1 N., R. 10 E., quarter corner between secs. 26 and 35, in road; top of 2 by 3 inch stake-----	181.60

	Feet
Eugene, 1 mile north of, 30 feet south of east and west fence, on west side of road, in gatepost; railroad spike, marked "U. S. B. M. 184"-----	184. 08
Eugene, 1.5 miles north of, in northeast corner of T road east, in large corner fence post; railroad spike, marked "U. S. B. M. 213"-----	213. 04
T. 1 N., R. 10 E., about 0.2 mile south of center of sec. 23, 2 miles north of Eugene, in northeast corner of bridge over creek, in concrete abutment; bronze tablet stamped "180 1915"-----	180. 800
Eugene, 2.6 miles north of, 0.7 mile north of bridge over Hood Creek, on west side of road, on north side of gate, in telephone pole; railroad spike, marked "U. S. B. M. 191"-----	191. 85
Eugene, 3 miles north of, on east side of road, at top of hill, at fence post marked "262;" ground-----	262. 5
T. 1 N., R. 10 E., quarter corner between secs. 11 and 14, in northwest corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 248"-----	248. 97
T. 1 N., R. 10 E., in northeast corner of sec. 13, about 0.15 mile southeast of angle in road, at T road (private) leading north to W. M. Snow's ranch house, on south side of road in line with north and south fence; iron post stamped "230 1915"-----	230. 612
T. 1 N., R. 11 E., sec. 18, at top of small hill, 0.25 mile west of T road to south, on north side of road, at base of gatepost marked "236"; ground-----	236. 4
T. 1 N., R. 11 E., in center of sec. 18, in southeast corner of T road south, in fence post; railroad spike, marked "U. S. B. M. 227"-----	227. 70
T. 1 N., R. 11 E., E. ½ sec. 17, 0.1 mile west of north and south fence, at top of small hill, on south side of road, in fence post; railroad spike marked "U. S. B. M. 361"-----	361. 96
Telegraph City, 1.8 miles west of, at top of hill, on south side of road, at base of fence post, marked "492"; ground-----	492. 3
Telegraph City, 1.6 miles west of, near the Stanislaus-Calaveras county line, at southeast corner of field inclosed by stone fence; point on rock, marked "U. S. B. M. 460"-----	460. 07
Telegraph City, 0.8 mile west of, in sec. 15, T. 1 N., R. 11 E., at angle in road, 150 feet east by 350 feet south of old ranch, on north side of road; iron post stamped "505 1915"-----	505. 476

BERENDA, KISMET, LE GRAND, AND RAYNOR CREEK QUADRANGLES

[Latitude 37°-37°15'; longitude 120°-120° 15']

MADERA, MARIPOSA, AND MERCED COUNTIES

Primary leveling by Roscoe Reeves in 1915

From Le Grand along highways east and southeast to Daulton, thence west along township-line road to sec. 3, T. 10 S., R. 16 E.

	Feet
Le Grand, 20 feet southwest of Santa Fe passenger station, just outside southeast corner of station gardens; iron post stamped "252"-----	253. 162

	Feet
Le Grand, 1 mile east of, 600 feet east of point where road jogs 50 feet south, in east gatepost on south side of road; railroad spike, marked "259"-----	259. 29
Le Grand, 2 miles east of, 250 feet east of farmhouse, on west gatepost to second-class road leading south; railroad spike, marked "269"-----	269. 66
Le Grand, 2.85 miles east of, 275 feet southwest of Vineyard School, in southeast corner of T road forks south; iron post stamped "279"-----	279. 584
Le Grand, 4 miles east of, corner of secs. 13, 14, 23, and 24, T. 8 S., R. 16 E., in northwest corner of road where road jogs north 70 feet, in corner fence post; railroad spike, marked "291"-----	291. 79
Le Grand, 5 miles east of, at point where road turns to the northeast, on corner fence post on north side of road; railroad spike, marked "312"-----	312. 47
Le Grand, 6.25 miles east of, 170 feet northeast of gate to farmhouse, on north side of road, 12 feet above level of road, in sandstone ledge; bronze tablet stamped "343"-----	343. 856
Le Grand, 7.5 miles east of, 0.37 mile northwest of ranch house, on corner fence post northeast side of road; railroad spike, marked "373"-----	373. 98
Le Grand, 8 miles east of, 0.5 mile south of, in corner fence post on north side of road; railroad spike, marked "395"-----	395. 70
Le Grand, 8.4 miles east by 0.5 mile south of, 0.8 mile northwest of Rainer's ranch house, 50 feet south of and 10 feet above level of road; bronze tablet stamped "419"-----	419. 841
Le Grand, 9.7 miles southeast of, 500 feet southeast of Rainer's ranch house, on north gatepost to road; railroad spike, marked "415"-----	416. 08
Rainer's ranch house, 1.3 miles southeast of, 0.2 mile northwest of corner fence post and gate, on face of rocky spur, in fence post; railroad spike, marked "442"-----	442. 54
"The Sharon Home ranch," 1 mile east of, on south bank of Chowchilla River, 50 feet east of the western and 200 feet west of the eastern of two fences crossing stream, in base of cottonwood tree; railroad spike, marked "344"-----	344. 83
"The Sharon Home ranch," about 1 mile east of, 1,500 feet south of Chowchilla River, 90 feet north of second-class road, 160 feet north of old river bank; standard iron post stamped "346"-----	346. 672
"The Sharon Home ranch," 1.5 miles southeast of, 200 feet southwest of road to Daulton, on corner fence post; railroad spike, marked "393"-----	393. 41
Daulton, 4.3 miles northwest of, 0.23 mile southeast of gate, 50 feet southwest of road; painted circle on rock, "395"-----	395. 36
Daulton, 2 miles west of, 1.1 miles north of, 0.9 mile north of ranch house, in corner fence post on east side of road; railroad spike, marked "380"-----	380. 58
Daulton, 2 miles west of, 400 feet south of T-road forks west, 200 feet southwest of ranch house, in east end of concrete culvert; aluminum tablet stamped "362"-----	362. 923
Daulton, 2 miles southwest of, on line of secs. 33 and 4, Tps. 9 and 10 S., R. 18 E., on east side of road, in base of telephone pole; railroad spike, marked "370"-----	370. 69

	Feet
T. 9 S., R. 18 E., southeast corner of sec. 32, in section-corner post; railroad spike, marked "369"-----	369. 63
T. 9 S., R. 18 E., 100 feet north of southeast corner of sec. 31, east side of second-class road; iron post, marked "352"-----	352. 154
T. 9 S., R. 17 E., southeast corner of sec. 36, 4 miles east of Sharon, in corner fence post; railroad spike, marked "322"-----	322. 35
Sharon, 3 miles east of, 200 feet northeast of southeast corner of sec. 35, T. 9 S., R. 17 E., T-road forks west, in telephone pole; railroad spike, marked "304"-----	304. 07
Sharon, 2.08 miles east of, opposite farmhouse, on south side of road; iron post stamped "309"-----	309. 643
Sharon, 0.25 mile south of, 50 feet northwest of railroad crossing, in telephone pole; railroad spike, marked "295"-----	295. 13
Sharon, 1 mile west of, southeast corner of sec. 31, T. 9 S., R. 17 E., 60 feet southwest of crossroads; iron post, marked "285"-----	285. 512
T. 9 S., R. 16 E., southeast corner of sec. 36, south side of road, in telephone pole; railroad spike, marked "271"-----	271. 04
Sharon, 2.9 miles west of, 700 feet east of farmhouse, north side of road, in telephone pole; railroad spike, marked "266"-----	266. 76
Sharon, 3.5 miles west of, at quarter corner on south side of sec. 35, T. 9 S., R. 16 E., in northwest corner of crossroads, in telephone pole; railroad spike, marked "264"-----	264. 85
Sharon, 4.15 miles west of, in northwest corner of crossroads, in power-line pole; railroad spike, marked "259"-----	259. 29
Minturn, 4.9 miles southeast of, opposite milepost 172 on Southern Pacific R. R. (see Bull. 342, p. 17, described as milepost 173); iron post stamped "247"-----	247. 183

BLISS RANCH, CHOWCHILLA, LINGARD, AND PLAINSBERG QUADRANGLES

[Latitude 37°-37° 15'; longitude 120° 15'-120° 30']

MADERA AND MERCED COUNTIES

Primary leveling by Roscoe Reeves in 1915

	Feet
From sec. 2, T. 10 S., R. 14 E., along highways north and northwest to sec. 24, T. 9 S., R. 14 E.	
T. 10 S., R. 14 E., near north quarter corner of sec. 2, 1.7 miles south by 8.5 miles west of Chowchilla, 0.2 mile south of ranch house, 15 feet east of T in fences, in fence post; spike, marked "171" (D. S. Birkett, 1912-13)-----	171. 08
T. 9 S., R. 14 E., sec. 26, 1 mile northeast of Bliss ranch house, 0.2 mile south of triangulation station, in fence post; spike, marked "175"-----	175. 42
T. 9 S., R. 14 E., sec. 26, 1.2 miles northeast of Bliss Ranch house, triangulation station; iron post stamped "184"-----	184. 397
T. 9 S., R. 14 E., near north quarter corner of sec. 28, in large fence post at wire gate; railroad spike, marked "162.5"-----	163. 00
T. 9 S., R. 14 E., southwest corner of sec. 21, in top of section corner post; nail-----	158. 74
T. 9 S., R. 14 E., about 25 feet southeast of southwest corner of sec. 20, 2 miles north of Chowchilla home ranch; iron post stamped "149"-----	149. 841

	Feet
T. 9 S., R. 13 E., southeast corner of sec. 24, 2 miles north by 0.5 mile west of Chowchilla home ranch, in northeast corner of T-road forks east, in telephone pole; railroad spike, marked "143" -----	143. 11

From Le Grand along highways west to Plainsberg School

Le Grand, 1.2 miles west of, in first telephone pole east of cross-roads at corners of secs. 13 and 24, T. 8 S., R. 15 E., and secs. 18 and 19, T. 8 S., R. 16 E.; railroad spike, marked "241" -----	242. 18
Le Grand, 2.2 miles west of, in base of first telephone pole north of corner of roads north and east and corner of secs. 13, 14, 23, and 24, T. 8 S., R. 15 E.; railroad spike, marked "232" -----	232. 82
Le Grand, 3.2 miles west of, 50 feet southwest of crossing of second-class road; iron post stamped "225" -----	225. 455
Plainsberg School, 4.2 miles west of Le Grand, on northeast corner of T-road forks east, in base of power-line pole; railroad spike, marked "216" -----	217. 14

Primary leveling by D. S. Birkett in 1913

From Lingard west along highway to sec. 13, T. 8 S., R. 13 E.

Lingard, opposite signboard; top of rail -----	182. 2
Lingard, 1.5 miles west of, 100 feet south of P. J. Wolfjen ranch house, south side of road; spike in gatepost, marked "U. S. 175 B. M." -----	175. 93
T. 8 S., R. 14 E., a quarter of a mile south of southwest corner sec. 10, at T road east to Lingard, northeast corner of intersection; spike in fence post, marked "U. S. 171 B. M." -----	171. 61
T. 8 S., R. 14 E., southeast corner sec. 16, 5 miles south by 3 miles east of Merced, northwest corner of T road; iron post stamped "170 1913" -----	170. 080
T. 8 S., R. 14 E., near corner of secs. 16, 17, 20, and 21, 5 miles south by 2 miles east of Merced, south side of road; spike in fence post, marked "U. S. 161 B. M." -----	161. 97
T. 8 S., R. 14 E., 0.4 mile west of southeast corner sec. 18, 5 miles south by 1 mile east of Merced, 150 feet west of north-south fence, south side of road; spike in telephone pole, marked "U. S. 153 B. M." -----	153. 42
T. 8 S., R. 14 E., near southwest corner sec. 18, 5 miles south of Merced, northeast corner of T road; iron post stamped "148 1913" -----	148. 725
T. 8 S., R. 13 E., southwest corner sec. 13, 5 miles south by 1 mile west of Merced, at point where fence running south intersects electric-power line; spike in base of power-line pole, marked "U. S. 144 B" -----	144. 49

From sec. 3, T. 10 S., R. 13 E., east along highway to Chowchilla

T. 10 S., R. 13 E., southwest corner sec. 1, 2.7 miles south by 14 miles west of Chowchilla, 0.9 mile south by 1.5 miles west of Chowchilla ranch house, 15 feet east of north-south fence, north side of road; spike in fence post, marked "U. S. 130 B. M." -----	130. 62
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	Feet
T. 10 S., R. 13 E., northeast corner sec. 12, 0.9 mile south by 0.5 mile west of Chowchilla ranch house, at angle in road, south side of road; spike in gatepost marked "U. S. 137 B. M."-----	137. 58
T. 10 S., R. 13 E., northeast corner sec. 1, 1.7 miles south by 13 miles west of Chowchilla, 0.1 mile north by 0.5 mile west of Chowchilla ranch house, west side of road, 30 feet south of east-west fence; iron post stamped "138 1913"-----	137. 854
T. 10 S., R. 14 E., NE. $\frac{1}{4}$ sec. 5, 0.3 mile east of Chowchilla ranch house, east end of lane of tall trees, southwest corner of cattle corral; spike in corner fence post marked "U. S. 148 B. M."-----	148. 41
T. 10 S., R. 14 E., near north quarter corner sec. 4, 2 miles east of Chowchilla ranch house, 12 feet south of intersection of fences; spike in gatepost, marked "U. S. 156 B. M."-----	156. 63
T. 10 S., R. 14 E., near quarter corner on north boundary sec. 3, 3 miles east of Chowchilla ranch house, 33 feet west by 33 feet south of intersection of fences, at T fence running north; iron post stamped "163 1913"-----	163. 085
T. 10 S., R. 14 E., near north quarter corner sec. 2, 1.7 miles south by 8.5 miles west of Chowchilla, 0.5 mile south of ranch house, 15 feet east of T in fences; spike in fence post, marked "U. S. 171 B. M."-----	171. 05
T. 10 S., R. 14 E., northeast corner sec. 1, 1.7 miles south by 7 miles west of Chowchilla, 12 feet south of intersection of fences; spike in gatepost, marked "U. S. 182 B. M."-----	181. 98
T. 9 S., R. 15 E., southwest corner sec. 32, 30 feet east by 30 feet north of, 1 mile west of Ash Creek, 1.7 miles south by 6 miles west of Chowchilla; iron post stamped "188 1913"-----	188. 002
T. 9 S., R. 15 E., near southwest corner sec. 33, 1.7 miles south by 5 miles west of Chowchilla, on east bank of Ash Creek; spike in telephone pole, marked "U. S. 199 B. M."-----	199. 39
T. 9 S., R. 15 E., 100 feet east of southwest corner sec. 34, 1.7 miles south by 4 miles west of Chowchilla; spike in telephone fence post, marked "U. S. 202 B. M."-----	202. 08
T. 10 S., R. 15 E., near northeast corner sec. 3, 1.7 miles south by 3 miles west of Chowchilla, 40 feet south by 20 feet west of concrete monument; iron post stamped "208 1913"-----	208. 052
T. 9 S., R. 15 E., near south quarter corner sec. 36, at intersection of south boundary of sec. 36 with Robertson Bvd.; spike in telephone pole, marked "U. S. 221 B. M."-----	221. 08
Chowchilla station, 0.7 mile south by 0.6 mile west of, at angle in Robertson Bvd., west side of boulevard, 200 feet north of road leading west to old ranch house; spike in telephone pole, marked "U. S. 228 B. M."-----	228. 27
From sec. 10, T. 11 S., R. 14 E., north along highway to sec. 3, T. 10 S., R. 14 E.	
T. 11 S., R. 14 E., 0.2 mile south of northwest corner sec. 3, or northwest corner Bk. 3, Chowchilla subdivision No. 3, 150 feet west of crossing of section line with northeast-southwest fence, 30 feet west of gate; spike in fence post, marked "U. S. 138 B. M."-----	138. 93
T. 10 S., R. 14 E., quarter corner between secs. 33 and 34, or quarter corner between Bks. 36 and 37, Chowchilla subdivision No. 4; top of corner post-----	141. 83
T. 10 S., R. 14 E., southwest corner sec. 27, or southwest corner Bk. 30, Chowchilla subdivision No. 4; top of post-----	144. 93

	Feet
T. 10 S., R. 14 E., quarter corner between secs. 27 and 28, or quarter corner between Bks. 30 and 31, Chowchilla subdivision No. 4; top of corner post-----	145.22
T. 10 S., R. 14 E., 300 feet west by 80 feet north of southwest corner sec. 22, or southwest corner Bk. 25, Chowchilla subdivision No. 4, bridge in levee over small creek bed, in southeast corner; spike, marked "U. S. 145 B. M."-----	145.46
T. 10 S., R. 14 E., 75 feet east of southwest corner sec. 15, or northwest corner Bk. 25, Chowchilla subdivision No. 4, on east-west fence; spike in fence post, marked "U. S. 153 B. M."-----	154.03

CERES, DENAIR, RIVERBANK, AND WATERFORD QUADRANGLES

[Latitude 37° 30'-37° 45'; longitude 120° 45'-121°]

STANISLAUS COUNTY

Primary leveling by D. S. Birkett in 1912-13

	Feet
From point 1.6 miles southeast of Modesto along highways east to Hickman, thence north 8.5 miles, thence west and north to point 1.1 miles east of Rurwood School	
Modesto, 2.3 miles southeast of, at intersection of Southern Pacific R. R. and east-west road; midway between cattle guards 115 C and 115 D; top of rail-----	90.1
T. 4 S., R. 9 E., northwest corner of sec. 11, 100 feet east of Ceres highway, south side of road, south side of concrete head gate; chiseled square in top, marked "U. S. 97 B. M."-----	97.35
T. 4 S., R. 9 E., southwest corner of sec. 1, 3 miles east by 2 miles south of Modesto, north side of road; iron post stamped "100 1912"-----	100.304
T. 4 S., R. 10 E., 800 feet west of northwest corner of sec. 7, south side of road; spike in telephone pole, marked "U. S. 108 B. M."-----	107.93
T. 4 S., R. 10 E., 500 feet east of corner of secs. 5, 6, 7, and 8, south side of road, north end of concrete irrigation weir; cross in circle, marked "U. S. 115 B. M." (probably county bench mark, marked "Elev. 114.42 B. M.")-----	115.31
Crossing of Santa Fe Ry., with east-west road, 300 feet southeast of milepost 1087; top of rail-----	121.1
T. 4 S., R. 10 E., near quarter corner of secs. 4 and 9, 1 mile north by 0.3 mile west of Hughson, south side of road, north end of concrete weir, in top; aluminum tablet stamped "124 1912"-----	124.036
Hughson, 1 mile north by 0.3 mile east of, south side of road, in top of north end of concrete weir; chiseled square, marked "U. S. 126 B. M."-----	126.60
T. 4 S., R. 10 E., southwest corner of sec. 2, at point where Ceres Main Branch irrigation ditch after running southwest again turns due west, north side of road; spike in gatepost, marked "U. S. 131 B. M."-----	131.72
Hickman, 3.2 miles west by 0.7 mile south of, 0.2 mile west of point where Ceres Main Branch turns due west, on top of fill for irrigation ditch, north side of road; spike in telephone pole, marked "U. S. 144 B. M."-----	144.50

	Feet
T. 4 S., R. 11 E., in SW. $\frac{1}{4}$ sec. 1, 3 miles west by 0.7 mile south of Hickman, top of concrete weir of Ceres irrigation ditch, top of middle concrete partition; aluminum tablet stamped "145 1912"-----	145. 395
T. 4 S., R. 11 E., SE. $\frac{1}{4}$ sec. 6, 2 miles west by 0.8 mile south of Hickman, south side of concrete weir of Ceres Main Branch irrigation ditch, on top; chiseled square, marked "U. S. 150 B. M."-----	150. 15
Hickman, 0.9 mile south by 1 mile west of, at bridge where north-south road crosses Ceres Main Branch irrigation ditch, near cattle pen, north side of road; spike in telephone pole, marked "U. S. 158 B. M."-----	158. 65
T. 4 S., R. 11 E., near quarter corner between secs. 4 and 9, at point where Ceres Main Branch leaves main canal, in top of north end of north concrete weir; aluminum tablet stamped "159 1912"-----	159. 042
T. 4 S., R. 11 E., near quarter corner between secs. 3 and 4, where irrigation lateral intersects east-west road, 0.3 mile west of Southern Pacific R. R.; spike in telephone pole, marked "U. S. 165 B. M."-----	164. 99
Hickman, 1,000 feet west by 1,200 feet north of railroad station, 150 feet south of T in roads, east end of concrete culvert, on top; chiseled square, marked "U. S. 170 B. M."-----	170. 45
Crossing of Hickman-Waterford highway with Southern Pacific R. R., 0.3 mile northwest of Hickman; top of rail-----	169. 73
Waterford, 0.2 mile south of station, at steel railroad bridge over Tuolumne River, north end of bridge, top of granite coping of concrete abutment, southeast corner; aluminum tablet stamped "160 1912"-----	160. 141
Waterford, in front of semaphore at station; top of rail, marked "166.9"-----	167. 2
Waterford, 1 mile northwest of, on east end of concrete culvert 131 of Southern Pacific R. R.; chiseled square, marked "U. S. 158 B. M."-----	158. 33
Waterford, 2.3 miles north of, 0.5 mile north of Dry Creek bridge, west side of road; spike in corner fence post, marked "U. S. 159 B. M."-----	159. 74
T. 3 S., R. 11 E., southeast corner of sec. 5, 1 mile south of Robinson School, 30 feet north of east-west fence, west side of road; iron post stamped "198 1912"-----	197. 923
T. 3 S., R. 11 E., northeast corner sec. 5, northeast corner of Robinson School yard, at T in roads; spike in fence post, marked "U. S. 216 B. M."-----	216. 80
T. 2 S., R. 11 E., northwest corner sec. 33, at end of lane running east on section line; spike in base of gatepost, marked "U. S. 222 B. M."-----	222. 78
T. 2 S., R. 11 E., southwest corner sec. 21, 40 feet east of present north-south fence, north side of road; iron post stamped "241 1912"-----	241. 513
T. 2 S., R. 11 E., northeast corner sec. 30, at T in roads, private road leading south, south side of road; spike in gatepost, marked "U. S. 222 B. M."-----	222. 38
T. 2 S., R. 10 E., 800 feet west by 200 feet north of southeast corner sec. 24, at crossing of Oakdale-La Grange highway with irrigation ditch, south side of road, in top of concrete arch; aluminum tablet stamped "210 1912"-----	210. 508

	Feet
T. 2 S., R. 10 E., at point where east-west road turns north on west edge of sec. 24, 2.5 miles southeast of Oakdale; spike in fence post, marked "U. S. 203 B. M."-----	203. 49
Oakdale, 2 miles south of, crossing of north-south road with Southern Pacific R. R., between cattle guards 124 C and 124 D; top of rail-----	192. 68
T. 2 S., R. 10 E., center of sec. 26, 2 miles south of Oakdale; spike in gatepost, marked "U. S. 192 B. M."-----	192. 06
T. 2 S., R. 10 E., center of sec. 27, 4.5 miles east of Riverbank, south side of road; spike in gatepost, marked "U. S. 174 B. M."-----	174. 37
T. 2 S., R. 10 E., center of sec. 28, 3.25 miles east of Riverbank, at T in roads, 50 feet east of road leading north, south side of road; spike in fence post, marked "U. S. 181 B. M."-----	180. 98
T. 2 S., R. 10 E., center of sec. 29, 2.5 miles east of Riverbank, at T in telephone line, southeast corner of intersection of roads; iron post stamped "157 1912"-----	156. 890
T. 2 S., R. 10 E., center of sec. 30, 1.5 miles east of Riverbank, at T in road, southeast corner of intersection; spike in telephone pole, marked "U. S. 154 B. M."-----	154. 64
Riverbank, 0.5 mile east of, at T in road, private road leading south; spike in telephone pole, marked "U. S. 138 B. M."-----	137. 99
Riverbank, in front of Santa Fe Ry. station, on main line; top of rail-----	135. 7
Riverbank, 230 feet west by 150 feet south of Santa Fe Ry. station, 10 feet north of edge of road; iron post stamped "133 1912"-----	132. 942
Riverbank, 0.6 mile northwest of, south end of approach to Santa Fe Ry. steel bridge over Stanislaus River, west side of railroad; top of concrete abutment; chiseled square on top-----	127. 70

Precise leveling by C. H. Semper in 1901-2

From Modesto southeast along Southern Pacific R. R. to Turlock

Modesto, 1.6 miles south of, 10 feet south of milepost 116, west side of track, at fence line; iron post stamped "86 B"-----	86. 594
Ceres, in front of station; top of rail-----	88. 8
Esmar, in front of station; top of rail-----	93. 8
Keyes, opposite milepost 122, 75 feet east of side track, on west edge of highway; iron post stamped "92 B"-----	92. 817
Keyes, 2.9 miles south of, opposite milepost 125, east side of track, at fence line; iron post stamped "100 B"-----	100. 628
Turlock, in front of station; top of rail-----	101. 5

COOPERSTOWN, MONTPELLIER, PAULSELL, AND THREE TREE FLAT
QUADRANGLES

[Latitude 37° 30'-37° 45'; longitude 120° 30'-120° 45']

MERCED AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1913

	Feet
From point 3 miles southwest of La Grange west along highway to Hickman	
La Grange, 3.3 miles southwest of, west end of highway bridge over small creek, south side of road; spike in end post of guard rail marked "U. S. 162 B. M."-----	162. 58

	Feet
T. 4 S., R. 13 E., NW. $\frac{1}{4}$ sec. 2, 4.4 miles southwest of La Grange, 0.3 mile north of Lafayette School, northwest corner of highway bridge crossing Turlock irrigation canal, in top of concrete abutment; aluminum tablet stamped "248 1913"-----	248. 680
T. 4 S., R. 13 E., on north edge of sec. 10, near quarter corner between secs. 3 and 10, 1 mile west of Lafayette School, at fork in road, private road turning north; spike in gatepost marked "U. S. 236 B. M."-----	236. 42
T. 4 S., R. 13 E., near quarter corner between secs. 4 and 9, 7.2 miles southwest of La Grange, 100 feet south of point where Turlock ditch turns due west, south side of road; spike in gatepost marked "U. S. 233 B. M."-----	233. 60
T. 4 S., R. 13 E., northeast corner of sec. 8, 7.6 miles southwest of La Grange, at T in roads, road leading south in lane of shade trees to the Alf Davis place, southwest corner of intersection of road; iron post stamped "225 1913"-----	224. 953
T. 4 S., R. 12 E., near southeast corner sec. 1, at point where fill on Turlock ditch ends and cut through hill begins, north side of ditch; spike in telephone pole marked "U. S. 220 B. M."-----	220. 53
T. 4 S., R. 12 E., near quarter corner between secs. 1 and 2, 8 miles east by 0.5 mile south of Hickman, at point where highway leaves Turlock ditch, north side of road; spike in fence post marked "U. S. 207 B. M."-----	206. 99
T. 4 S., R. 12 E., center of sec. 2, 7.4 miles east by 0.5 mile south of Hickman, at T in roads, northwest corner of intersection; spike in fence post marked "U. S. 210 B. M."-----	210. 39
T. 4 S., R. 12 E., 0.2 mile east of quarter corner between secs. 3 and 4, at angle in road, 30 feet east of north-south fence, north side of road; iron post stamped "193 1913"-----	193. 344
T. 4 S., R. 12 E., on north-south line between secs. 4 and 5, 5 miles east of Hickman, near Basso ranch, at T in road, northwest corner of intersection; spike in fence post marked "U. S. 193 B. M."-----	193. 03
T. 4 S., R. 12 E., NE. $\frac{1}{4}$ sec. 6, 3.8 miles east of Hickman, at Forrest Huddleson's ranch, in top of concrete watering tank in barnyard, north side; chiseled square-----	202. 77
Hickman, 3 miles east of, NE. $\frac{1}{4}$ sec. 1, T. 4 S., R. 11 E., at highway bridge crossing Highline irrigation ditch, south side of road, west end of concrete guard rail, in top; aluminum tablet stamped "185 1913"-----	185. 868
T. 4 S., R. 11 E., northeast corner of sec. 2, at wooden highway bridge crossing irrigation ditch, in northwest corner of bridge; spike marked "U. S. 174 B. M."-----	174. 91
T. 4 S., R. 11 E., northwest corner sec. 2, 0.9 mile east of Hickman, at T in roads, southeast corner of intersection, 75 feet east of north-south fence; spike in telephone pole marked "U. S. 169 B. M."-----	169. 28
Hickman, 0.4 mile east of, on north boundary near quarter corner of sec. 3, T. 4 S., R. 11 E., southeast corner of concrete highway bridge crossing Turlock irrigation ditch; aluminum tablet stamped "179 1913"-----	179. 078

From point 6 miles southeast of Oakdale east along highway to point 3 miles northwest of La Grange

	Feet
T. 2 S., R. 11 E., northeast corner of sec. 28, southeast corner of crossroads; spike in fence post marked "U. S. 262 B. M."-----	262. 28
T. 2 S., R. 11 E., northeast corner sec. 27, south side of road; spike in fence post marked "U. S. 252 B. M."-----	252. 22
T. 2 S., R. 11 E., southeast corner sec. 23, 33 feet west of north-south fence on section line, north side of road; iron post stamped "237 1913"-----	237. 417
Sierra Ry. crossing on east-west road; top of rail-----	200. 3
T. 2 S., R. 11 E., near quarter corner between secs. 24 and 25, 585 feet east of Sierra Ry. crossing with east-west road, east end of bridge, north side of road; top of concrete foundation; chiseled square marked "U. S. 195 B. M."-----	194. 93
T. 2 S., R. 12 E., corner of secs. 19, 20, 29, and 30; top of concrete monument with copper bolt marking section corner-----	244. 31
T. 2 S., R. 12 E., near quarter corner between secs. 29 and 30, 0.5 mile east by 1 mile north of Paulsell, at fork in road, southeast corner of intersection; iron post stamped "232 1913"-----	232. 221
Paulsell, 1 mile north by 2 miles east of, near center of sec. 28, T. 2 S., R. 12 E., 250 feet east of north-south fence, north side of road, at angle in fence; spike in fence post, marked "U. S. 259 B. M."---	258. 93
T. 2 S., R. 12 E., near quarter corner between secs. 27 and 28, south side of road; spike in fence post, marked "U. S. 220 B. M."-----	219. 95
T. 2 S., R. 12 E., NE. ¼ sec. 27, 2 miles west of Warnersville, at point where east-west road leaves quarter-section line turning north-east, north side of road; iron post stamped "291 1913"-----	291. 112
Warnersville, 1.6 miles west of, near point where highway joins Sierra Ry. from the northwest, at railroad crossing over dry creek, in top of west concrete foundation, north side of track; aluminum tablet stamped "225 1913"-----	225. 517
Warnersville, 0.5 mile west of, near east end of first trestle west of, in top of north end of cap of bent; spike, marked "U. S. 220 B. M."-----	220. 58
Warnersville, intersection of north-south road with Sierra Ry. southwest corner of intersection, 120 feet east of milepost 16, E. ½ sec. 25, T. 2 S., R. 12 E.; iron post stamped "224 1913"-----	224. 569
Warnersville, 1.2 miles east of, 0.2 mile east of milepost 17, highway crossing with Sierra Ry.; top of rail-----	240. 4
Warnersville, 1.5 miles east of, 1.6 miles west of Cooperstown, at steel highway bridge, south side of Sierra Ry., northwest corner of bridge, on top of concrete abutment; chiseled square, marked "U. S. 233 B. M."-----	233. 65
Cooperstown, 1.2 miles west of, 0.3 mile east of steel bridge over dry creek, highway crossing on Sierra Ry.; top of rail-----	246. 1
Cooperstown, 150 feet west by 135 feet north of Sierra Ry. station, SE. ¼ sec. 21, T. 2 S., R. 13 E., 150 feet east of milepost 19, 50 feet west of and in line with front of F. W. Marston's store; iron post stamped "270 1913"-----	270. 633
Cooperstown, in front of station; top of rail-----	269. 9
Cooperstown, 0.5 mile south of, 0.5 mile south of Sierra Ry. crossing, east edge of county road, on summit of hill, in base of oak tree used by telephone line; spike, marked "U. S. 323 B. M."-----	323. 56

	Feet
Cooperstown, 0.8 mile southeast of, in county road, northeast corner of T road intersection; spike in fence post, marked "U. S. 307 B. M."-----	307.74
Cooperstown, 2.2 miles southeast of, near edge of timber, at angle in road, east side of road; spike in brace of telephone pole, marked "U. S. 300 B. M."-----	300.61
Cooperstown, 2.5 miles southeast of, near quarter corner between secs. 34 and 35, T. 2 S., R. 13 E., 150 feet south of Rydberg Creek, 250 feet north of fork in road, in northwest corner of outcrop of conglomerate rock; aluminum tablet stamped "289 1913"-----	289.631

COPPEROPOLIS QUADRANGLE

[Latitude 37° 45'-38°; longitude 120° 30'-120° 45']

CALAVERAS, STANISLAUS, AND TUOLUMNE COUNTIES

Primary leveling in 1896 by J. B. Lippincott

From Copperopolis southeast to Mount Diablo base line

	Feet
Copperopolis, in front of brick wall of Fontana's store, approximately 2 feet above the store floor and 3 feet above stone foundation, opposite Vendome Hotel; bronze tablet stamped "971"-----	971.659
O'Byrnes Ferry, Stanislaus River, 500 feet north of bridge, on west side of Milton-Jamestown road, in the stone front wall of Pardee's store, between south window and southeast corner of store; bronze tablet stamped "432"-----	432.461
O'Byrnes Ferry, 3 miles east of, at the top of and on the north side of grade, about 3 miles west of the Goodwin ranch; iron post stamped "1090"-----	1,090.906

Primary leveling by D. S. Birkett in 1915

From center of sec. 15, T. 1 N., R. 11 E., along highway east and northeast to Copperopolis

Telegraph City, 0.4 mile west of, at top of hill, on north side of road, at base of fence post marked "600"; ground-----	600.8
Telegraph City, 200 feet west of ranch house, at gate to barnyard on south side of road, in west gatepost; railroad spike scribed "U. S. B. M. 612"-----	612.47
Telegraph City, 0.5 mile east of, at road into wooded pasture to south, at gate marked "729"; ground-----	729.8
Telegraph City, 0.75 mile east of, at sharp curve, 20 feet north of road, on top of large boulder; point marked "U. S. B. M. 826"---	826.41
Telegraph City, 1.75 miles east of, 1.1 miles west of summit on county road, 150 feet east of conspicuous boulder overgrown by tree, on south side of road, in oak tree; railroad spike scribed "U. S. B. M. 1028"-----	1,028.37
T. 1 N., R. 12 E., in sec. 7, at summit of county road between Copperopolis and Telegraph City, 35 feet south of road; iron post stamped "1177 1915"-----	1,177.016
Copperopolis, 4 miles southwest of, 0.65 mile east of summit of county road between Copperopolis and Telegraph City, 10 feet north of road, on solid rock; point marked "U. S. B. M. 965"-----	965.28
Copperopolis, 3.6 miles southwest of, about 1 mile east of road summit; surface of water at small creek crossing April 30, 1915-----	845.0

	Feet
Copperopolis, 3.1 miles southwest of, 1.5 miles northeast of summit of county road between Copperopolis and Telegraph City, 0.45 mile east of small creek, 20 feet south of road at corner of fence, in fence post; railroad spike, marked "U. S. B. M. 908"-----	908. 04
Copperopolis, 2.2 miles southwest of, 1.1 miles southwest of fork in roads leading to Hodson and to Telegraph City, 275 feet east of small creek crossing the Telegraph City road, 25 feet south of road, in pine tree, scribed "U. S. B. M. S19"; railroad spike-----	819. 58
Copperopolis, 1.1 miles southwest of, 220 feet west of fork in roads leading to Telegraph City and to Hodson, 30 feet south of former and 125 feet south of latter road, at fence corner; iron post stamped "907 1915"-----	907. 723
Copperopolis, in front of brick wall of Fontana's store, approximately 2 feet above the store floor and 3 feet above stone foundation, opposite Vendome Hotel; bronze tablet stamped "971" (Bull. 342, p. 121) (Lippincott's b. m.)-----	971. 659

ARENA, CRESSEY, AND WINTON QUADRANGLES

[Latitude 37° 15'-37° 30'; longitude 120° 30'-120° 45']

MERCED COUNTY

Primary leveling by D. S. Birkett in 1912

From point 5 miles east of Turlock east along highway to Hopeton

	Feet
Turlock, 5 miles east of, 0.5 mile east of crossing of Santa Fe Ry. and Turlock-Snelling highway, east end of concrete guard rail on north side of concrete bridge over irrigation ditch, on top; chiseled square, marked "U. S. 162 B. M."-----	161. 16
NOTE.—There is some doubt regarding this elevation, and levelman gives for this bench mark a value 1.521 feet greater, the elevation of a height of instrument.	
T. 5 S., R. 11 E., NE. ¼ sec. 23, 6.8 miles east of Turlock, 1,000 feet west of wooden bridge over irrigation ditch on north-south road, probably on section line, 85 feet south of east-west road, in top of north end of concrete culvert under irrigation ditch; aluminum tablet stamped "154 1912"-----	154. 544
T. 5 S., R. 11 E., northeast corner sec. 23, at intersection of north-south road and Turlock-Snelling road, on floor of wooden bridge over irrigation ditch; marked "154"-----	154. 48
T. 5 S., R. 12 E., SW. ¼ sec. 17, near O. M. Hughson's ranch house, north side of road, southeast corner of fence; spike in fence post, marked "U. S. 168 B. M."-----	168. 10
T. 5 S., R. 12 E., northwest corner sec. 21, 1.5 miles west by 1.2 miles north of Ryer station, south side of road at T road; spike in fence post, marked "U. S. 185 B. M."-----	185. 69
T. 5 S., R. 12 E., about the middle of north edge of sec. 21, at intersection of Turlock-Snelling road with road parallel to Southern Pacific R. R., 50 feet east of railroad, south side of Snelling road; iron post stamped "182 1912"-----	182. 487
T. 5 S., R. 12 E., southwest corner of sec. 15, 300 feet east of north-south section line, in front of Barfield School, north side of road; spike in fence post, marked "U. S. 195 B. M."-----	195. 41

	Feet
T. 5 S., R. 12 E., southwest corner sec. 14, 11.8 miles east of Turlock, at intersection of roads, northeast corner of intersection; iron post stamped "219 1912"-----	219. 772
Ryer, 0.5 mile north by 0.8 mile east of, northwest corner of sec. 26, southeast corner of intersection of roads; spike in base of telephone pole, marked "U. S. 207 B. M."-----	206. 97
T. 5 S., R. 12 E., intersection of Turlock-Snelling road with section line between secs. 25 and 26, 75 feet east of section line, south side of road; spike in base of telephone pole marked "U. S. 191 B. M."-----	191. 54
Hopeton, 4.4 miles west of, near Dry Gulch bridge, 200 feet east of center of creek bed, south side of road; spike in gatepost marked "U. S. 148 B. M."-----	148. 41
T. 5 S., R. 13 E., 0.5 mile west of southeast corner sec. 19, 3.3 miles west of Hopeton, at intersection of fenced lane with highway, south side of road; spike in gatepost marked "U. S. 212 B. M."-----	212. 55
T. 5 S., R. 13 E., SW. $\frac{1}{4}$ sec. 20, 2.6 miles west of Hopeton, on top of hill opposite barn on the Floss Inglsbe place, south side of road; spike in fence post marked "U. S. 230 B. M."-----	230. 81
T. 5 S., R. 13 E., south edge of sec. 17, 1.6 miles west of Hopeton, 100 feet west of bridge over slough, 50 feet north of road; iron post stamped "166 1912"-----	166. 713
Hopeton, 0.5 mile west of, northeast corner sec. 21, T. 5 S., R. 13 E., southwest corner of intersection of roads; spike in deadman marked "U. S. 177 B. M."-----	177. 66

From Arena west along highway 4.5 miles

Arena, 1.4 miles west by 0.3 mile south of, northeast corner of Hartley ranch, 30 feet west of north-south fence; spike in large gatepost marked "U. S. 131 B. M."-----	131. 30
T. 6 S., R. 11 E., near quarter corner between secs. 35 and 36, 1.5 miles south of Livingston, southwest corner of crossroads; iron post stamped "120 1913"-----	120. 503
Livingston, 1.5 miles south by 1 mile west of, near quarter corner between secs. 26 and 27, T. 6 S., R. 11 E.; spike in fence post marked "U. S. 123 B. M."-----	123. 00

**DELTA RANCH, SANDYMUSH, SANTA RITA BRIDGE, AND TURNER RANCH
QUADRANGLES**

[Latitude 37°-37° 15'; longitude 120° 30'-120° 45']

MERCED AND MADERA COUNTIES

Primary leveling by D. S. Birkett in 1913

From southwest corner of sec. 13, T. 8 S., R. 13 E., along highway west 2 miles, thence north 1 mile, thence west to southwest corner of sec. 14, T. 8 S., R. 11 E.	Feet
T. 8 S., R. 13 E., near corner of secs. 14, 15, 22, and 23, 5 miles south by 2 miles west of Merced; spike in base of electric-power pole marked "U. S. 138 B. M."-----	138. 62
T. 8 S., R. 13 E., southwest corner sec. 15, 6 miles south by 3 miles west of Merced, 33 feet north by 33 feet east of intersection of fences; iron post stamped "133 1913"-----	133. 124

	Feet
T. 8 S., R. 13 E., near southeast corner sec. 9, 4 miles south by 3 miles west of Merced, 1 mile south of schoolhouse, at angle in road, north side of road; spike in gatepost marked "U. S. 135 B. M."-----	135.71
T. 8 S., R. 13 E., near southwest corner sec. 9, 4 miles south by 4 miles west of Merced, northeast corner of intersection of road; spike in fence post marked "U. S. 128 B. M."-----	128.37
T. 8 S., R. 13 E., 0.1 mile north of southwest corner sec. 8, 4 miles south by 5 miles west of Merced; nail in hub, marked by mound of cowslips and guard stakes, marked "U. S. 121 B. B."-----	121.31
T. 8 S., R. 12 E., northwest corner sec. 13, 4 miles south by 7 miles west of Merced, at angle in road, southeast corner of intersection; iron post stamped "113 1913"-----	113.085
T. 8 S., R. 12 E., northeast corner sec. 15, 4 miles south by 8 miles west of Merced, south side of road, 20 feet west of fence running south; spike in fence post marked "U. S. 107 B. M."-----	107.84
Merced, 4 miles south by 8.8 miles west of, 0.2 mile east of southwest corner of sec. 10, T. 8 S., R. 12 E., near house in grove of trees near J. J. Saunder's place, south side of road, top of north side of concrete watering tank; aluminum tablet stamped "112 1913"-----	112.734
T. 8 S., R. 12 E., northwest corner sec. 16, 4 miles south by 10 miles west of Merced, at angle in road, south side of road; spike in fence post marked "U. S. 102 B. M."-----	101.88
T. 8 S., R. 12 E., southwest corner sec. 8, 0.4 mile southeast of, 4.4 miles south by 11 miles west of Merced, north side of road at cattle pen; spike in fence post marked "U. S. 97 B. M."-----	97.33
T. 8 S., R. 12 E., 66 feet north by 33 feet east of southwest corner sec. 18, 5 miles south by 12 miles west of Merced, at angle in road, east side of road; iron post stamped "93 1913"-----	92.910
T. 8 S., R. 11 E., 0.2 mile west of southwest corner sec. 13, 5 miles south by 13.2 miles west of Merced, northeast corner of wooden bridge crossing dry creek bed; spike marked "U. S. 90 B. M."-----	90.39
T. 8 S., R. 11 E., 0.4 mile west of southwest corner sec. 14, 5 miles south by 14.4 miles west of Merced, southwest corner of wooden bridge; spike marked "U. S. 87 B. M."-----	87.60
 From point 5 miles east of Los Banos east along highway to Santa Rita ranch, thence northeast to sec. 3, T. 10 S., R. 113 E.	
Los Banos, 0.3 mile south by 5.7 miles east of, 30 feet west of north-south fence, 70 feet west of electric-power pole 746, on fence line; iron post stamped "99 1913"-----	98.972
Los Banos, 0.3 mile south by 6.7 miles east of, north side of road; spike in base of electric-power pole 730, marked "U. S. 100 B. M."-----	99.87
T. 10 S., R. 12 E., 0.2 mile west of southeast corner sec. 18, at offset in road and electric-power line, north side of road; spike in base of electric-power pole 710, marked "U. S. 104 B. M."-----	104.45
Los Banos, 0.3 mile south by 9.8 miles east of, opposite Weir Camp of Miller & Lux, southeast corner of T road south; iron post stamped "106 1913"-----	106.330

	Feet
Los Banos, 0.3 mile south by 10.8 miles east of, 2.8 miles west of Santa Rita ranch, 500 feet west of wooden bridge over slough across road, north side of road; spike in base of electric-power pole 671, marked "U. S. 107 B. M."-----	107. 07
Los Banos, 0.3 mile south by 11.7 miles east of, 1.9 miles west of Santa Rita ranch, at T in road and electric-power line, north side of road; spike in base of electric-power pole 655, marked "U. S. 109 B. M."-----	108. 92
Los Banos, 0.3 mile south by 12.8 miles east of, 0.8 mile west of Santa Rita ranch, 100 feet east of T road south, north side of road; spike in electric-power pole, marked "U. S. 110 B. M."-----	110. 59
Los Banos, 0.3 mile south by 13.6 miles east of, northwest corner of barnyard of Santa Rita ranch; iron post stamped "116 1913"---	116. 515
Los Banos, 0.5 mile south by 14.2 miles east of, 0.6 mile southeast of Santa Rita ranch, southwest corner of wooden bridge over Santa Rita Slough; spike marked "U. S. 118 B. M."-----	118. 33
Los Banos, 0.4 mile south by 15.1 miles east of, 2.5 miles east of Santa Rita ranch, near north-south fence, southwest corner of small bridge over irrigation ditch; spike marked "U. S. 114 B. M."---	114. 31
Los Banos, 0.3 mile south by 16.7 miles east of, 3.1 miles east of Santa Rita ranch, southwest corner of steel drawbridge over San Joaquin River, in top of concrete pier; aluminum tablet stamped "124 1913"-----	124. 646
Chowchilla, 4 miles south by 15.5 miles west of, 3 miles west by 2.1 miles south of Chowchilla ranch house, 100 feet west of angle in road; spike in northeast corner of wooden bridge, marked "U. S. 120 B. M."-----	120. 45
T. 10 S., R. 13 E., southeast corner sec. 10, 3.7 miles south by 15 miles west of Chowchilla, 1.9 miles south by 2.5 miles west of Chowchilla ranch house, at angle in road, north side of road, 20 feet west of fence corner; spike in fence post, marked "U. S. 120 B. M."-----	120. 63
T. 10 S., R. 13 E., southeast corner sec. 3, 2.7 miles south by 15 miles west of Chowchilla, 0.9 mile south by 2.5 miles west of Chowchilla ranch house, northwest corner of angle in road; iron post stamped "123 1913"-----	123. 411

GUSTINE, MITCHELL SCHOOL, STEVINSON, AND TURLOCK QUADRANGLES

[Latitude 37° 15'-37° 30'; longitude 120° 45'-121°]

MERCED AND STANISLAUS COUNTIES

Primary leveling by W. H. Monahan in 1909 and by D. S. Birkett in 1912

From sec. 17, T. 5 S., R. 9 E., east along highway to Turlock

	Feet
T. 5 S., R. 9 E., northeast corner sec. 20, 8.5 miles west of Turlock, at intersection with Crows Landing road, northeast corner of schoolhouse yard; iron post stamped "60 1912"-----	61. 007
T. 5 S., R. 9 E., southeast corner sec. 16, north side of road; in top of concrete siphon; aluminum tablet stamped "66 1912"-----	66. 400
T. 5 S., R. 9 E., northeast corner sec. 22, southwest corner of intersection of roads; spike in base of fence post, marked "U. S. 70 B. M."-----	70. 71

	Feet
T. 5 S., R. 9 E., northwest corner sec. 24, southeast corner of intersection of roads; iron post stamped "75 1912"-----	75. 120
Turlock, 4.5 miles west of, near Presbyterian Church, 10 feet east of irrigation lateral, north side of road; spike in base of telephone pole, marked "U. S. 83 B. M."-----	83. 14
Turlock, 3.5 miles west of, southwest corner of Washington School yard, 30 feet east of irrigation ditch, north side of road; iron post stamped "85 1912"-----	86. 034
Turlock, 2.5 miles west of, 1 mile east of Washington School, at southeast corner of T road; spike in telephone pole, marked "U. S. 91 B. M."-----	91.19
Turlock, 1.5 miles west of, near cemetery, southwest corner of T road; spike in telephone pole, marked "U. S. 95 B. M."-----	95. 72
Turlock, 1,000 feet east of west edge of city limit, in 600 block, south side of cemetery road, northeast corner of concrete siphon; chiseled square on top-----	100. 67

From Turlock east along highway 5 miles

Turlock, 0.8 mile east of, southwest corner sec. 13, T. 5 S., R. 11 E., in front of J. G. Lindblum's house, north side of road; spike in base of telephone pole, marked "U. S. 108 B. M."-----	108. 11
T. 5 S., R. 11 E., northwest corner sec. 19, 1.8 miles east of Turlock, opposite Smith's house, south side of road, 33 feet east of fence corner; iron post stamped "112 1912"-----	112. 470
T. 5 S., R. 11 E., southwest corner sec. 17, 2.8 miles east of Turlock, 80 feet east of north-south section line, north side of road; spike in telephone pole, marked "U. S. 116 B. M."-----	116. 09
T. 5 S., R. 11 E., northwest corner sec. 21, 3.8 miles east of Turlock, near Underhill ranch, south side of road; spike in base of large gatepost, marked "U. S. 125 B. M."-----	125. 49
Turlock, 4.2 miles east of, 0.2 mile west of Santa Fe Ry. crossing with Turlock-Snelling road, concrete bridge on bounty road over big irrigation ditch, east end of concrete guard rail, in top; aluminum tablet stamped "151 1912"-----	151. 356
Turlock, 4.4 miles east of, at crossing of Santa Fe Ry. and Turlock-Snelling road; top of rail-----	151. 85

From point 4.5 miles west of Arena west along highway 11.4 miles, thence southwest to Newman

T. 6 S., R. 11 E., quarter corner between secs. 33 and 34, 1.5 miles south by 2 miles west of Livingston, at intersection of roads, northwest corner; spike in fence post, marked "U. S. 120 B. M."-----	120. 52
Livingston, 1.5 miles south by 3 miles west of, at quarter corner between secs. 32 and 33, T. 6 S., R. 11 E., 30 feet north by 30 feet east of present fence; iron post stamped "114 1913"-----	114. 701
Livingston, 1.5 miles south by 4 miles west of, near quarter corner between secs. 31 and 32, T. 6 S., R. 11 E., at northwest corner of T road; spike in fence post, marked "U. S. 109 B. M."-----	109. 40
T. 6 S., R. 10 E., near east quarter corner of sec. 36, 1.5 miles west of Livingston; spike in post, marked "U. S. 105 B. M."-----	105. 83

	Feet
T. 6 S., R. 10 E., 450 feet north of quarter corner between secs. 35 and 36, 1.4 miles south by 6 miles west of Livingston, at southwest corner of T road, 0.2 mile east of Merced River bridge; iron post stamped "98 1913"-----	97. 944
Merced River bridge, 0.4 mile northwest of, and third wooden bridge from east end south side; spike in side, marked "U. S. 90 B. M."--	90. 65
T. 6 S., R. 10 E., 0.2 mile south of, northeast corner of section 34, at T road leading due north to Turlock, south side of road; spike in telephone pole, marked "U. S. 92 B. M."-----	92. 03
T. 6 S., R. 10 E., 0.2 mile south of northeast corner of sec. 33, at intersection of roads, southwest corner; spike in fence post, marked "U. S. 86 B. M."-----	85. 82
T. 6 S., R. 10 E., 0.2 mile south of northeast corner of sec. 32, 1.2 miles south by 9 miles west of Livingston, 25 feet west of southwest corner of intersection of roads, on fence line; iron post stamped "83 1913"-----	82. 849
T. 6 S., R. 10 E., 0.2 mile south of northwest corner of sec. 32, northeast corner of T road; spike in fence post, marked "U. S. 79 B. M."--	78. 18
T. 6 S., R. 10 E., 0.2 mile south of northwest corner sec. 31, at right angle in road, north side of road; spike in fence post, marked "U. S. 73 B. M."-----	73. 45
T. 6 S., R. 9 E., southeast corner sec. 26, 1 mile south by 12 miles west of Livingston, west side of road at T road; iron post stamped "69 1913"-----	69. 593
T. 6 S., R. 9 E., 0.2 mile east of point where Livingston-Newman highway turns south to Newman in northwest quarter of sec. 35, southeast corner of concrete bridge over irrigation ditch; chiseled square, marked "U. S. 67 B. M."-----	67. 03
T. 6 S., R. 9 E., in southwest quarter of sec. 35, 0.6 mile south of point where Livingston-Newman highway turns south to Newman; square on southeast corner of concrete bridge-----	70. 79
T. 7 S., R. 9 E., SE. $\frac{1}{4}$ sec. 3, 4.3 miles northeast of Newman, west end south side of steel bridge crossing Merced River, in top of concrete abutment; aluminum tablet stamped "72 1913"-----	72. 577
Newman, 3.4 miles northeast of, 0.2 mile southwest of steel draw-bridge crossing San Joaquin River, at fork in road; spike in conspicuous signboard, marked "U. S. 65 B. M."-----	65. 53
Newman, 2.5 miles northeast of, on Livingston-Newman highway, east side of road, 500 feet northeast of lone oak tree; spike in base of telephone pole, marked "U. S. 69 B. M."-----	69. 12
T. 7 S., R. 9 E., northwest quarter corner sec. 16, 2 miles northeast of Newman, at fork in road, northwest corner of intersection; iron post stamped "70 1913"-----	70. 371
Newman, 0.5 mile east of, at fork in road, southeast corner of intersection; spike in telephone pole, marked "U. S. 80 B. M."-----	80. 66
Near Gustine	
Gustine, in front of station; top of rail-----	99. 9
Gustine, 0.4 mile northwest of, 5 feet north of milepost 124, 25 feet west of railroad track; spike in fence post, aluminum tag stamped "95"-----	95. 23

HOPETON QUADRANGLE

[Latitude 37° 22' 30"-37° 30'; longitude 120° 22' 30"-120° 30']

MERCED COUNTY

Primary leveling by C. H. Semper in 1905

From Snelling west to Hopeton, thence south to Amsterdam

	Feet
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"	204.477
Hopeton, at southeast corner of fork with private road, in front of store; iron post stamped "185 B"-----	185.426
Hopeton, 2.2 miles south of, southwest end of bridge over Merced River, west margin of road; iron post stamped "172 B" (destroyed)-----	172.245
Amsterdam, 140 feet west of large warehouse, 10 feet east of station signboard, 20 feet north of track; iron post stamped "215 B"-----	215.596

INGOMAR, LOS BANOS, SAN LUIS RANCH, AND VOLTA QUADRANGLES

[Latitude 37°-37° 15'; longitude 120° 45'-121°]

MERCED COUNTY

Primary leveling by W. H. Monahan in 1909 and D. S. Birkett in 1913

From Dunwoodie ranch north along highway to Los Banos, thence northwest along Southern Pacific R. R. to Gustine

	Feet
Dunwoodie ranch, 100 feet north of iron gate leading to dwelling, 10 feet north of road, near fence line; iron post stamped "135 G 1909 Cal"-----	135.113
Dunwoodie ranch, 1.4 miles north of, at corner of driveway to ranch house painted brown with red roof; spike in fence post, aluminum tag stamped "120"-----	128.96
Dunwoodie ranch, 2.4 miles northwest of, 10 feet south of wagon road, 400 feet west of junction of road; spike in fence post, aluminum tag stamped "120"-----	120.18
Los Banos, north edge of town, 75 feet west of railroad, opposite creamery, 25 feet south of canal, on west side of public highway; iron post stamped "117 G 1909 Cal"-----	116.813
Los Banos, 1.1 miles north of, 50 feet west of railroad and culvert 1391; spike in telegraph pole, aluminum tag stamped "116"-----	116.19
Los Banos, 1.8 miles north of, on west side of railroad track; spike in telegraph milepost 139, aluminum tag stamped "116"-----	115.80
Los Banos, 2.8 miles north of, on east side of railroad, on fence line between highway and railroad, 150 feet east of milepost 138; iron post stamped "114 G 1909 Cal"-----	114.026
Los Banos, 3.8 miles north of, on west side of railroad; spike in telegraph milepost 137, aluminum tag stamped "105"-----	104.91
Volta, in front of station; top of rail-----	103.8
Volta, 1.2 miles north of, 25 feet west of railroad; spike in telegraph milepost 135, aluminum tag stamped "100"-----	99.46
Volta, 2.2 miles north of, 25 feet west of railroad track; spike in telegraph milepost 134, aluminum tag stamped "100"-----	99.79

	Feet
Volta, 3.2 miles north of, 25 feet west of railroad track; spike in telegraph milepost 133, aluminum tag stamped "102"-----	102.00
Volta, 4.2 miles north of, at base of telegraph milepost 132, 25 feet west of railroad; iron post stamped "93 G 1909 Cal"-----	92.327
Volta, 5.2 miles north of, 25 feet west of railroad; spike in telegraph milepost 131, aluminum tag stamped "86"-----	85.39
Ingomar, in front of station; top of rail-----	88.2
Ingomar, 0.2 mile northwest of, at base of telegraph milepost 130, 25 feet west of railroad track; iron post stamped "91 G 1909 Cal"-----	90.416
Ingomar, 1.2 miles northwest of, 25 feet west of railroad track; spike in telegraph milepost 129, aluminum tag stamped "93"-----	92.29
Ingomar, 2.2 miles northwest of, 25 feet west of railroad track, 25 feet east of Standard Oil Camp station; spike in telegraph milepost 128, aluminum tag stamped "91"-----	90.33
Ingomar, 3.2 miles northwest of, 25 feet west of railroad track; spike in telegraph milepost 127, aluminum tag stamped "93"-----	93.15
Ingomar, 4.2 miles northwest of, at base of telegraph milepost 126, 25 feet west of railroad; iron post stamped "96 G 1909 Cal"-----	95.979
Ingomar, 5.2 miles northwest of, 25 feet west of railroad; spike in telegraph milepost 125, aluminum tag stamped "97"-----	96.95
 From southeast corner of sec. 16, T. 8 S., R. 11 E., southwest along highway to Los Banos, thence east 5 miles	
T. 8 S., R. 11 E., southeast corner of sec. 16, 5 miles south by 1.5 miles west of Merced, north side of road; iron post stamped "87 1913"-----	87.340
T. 8 S., R. 11 E., near southwest corner of sec. 16, west side of road, 50 feet south of east-west fence; spike in fence post, marked "U. S. 84 B. M."-----	84.73
Los Banos, 12.5 miles northeast of, near San Joaquin bridge, in front of old road house, southwest corner of water trough, in top of circle of paint; nail, marked "U. S. 86 B. M."-----	86.84
San Joaquin bridge, 1.2 miles southwest of, 10 miles north by 3 miles east of Los Banos, almost east of Underwood ranch barn, east side of road; iron post stamped "84 1913"-----	84.333
San Joaquin bridge, 2.1 miles southeast of, 9 miles north by 2.7 miles east of Los Banos, southeast corner of wooden bridge over slough; spike, marked "U. S. 83 B. M."-----	83.60
San Joaquin bridge, 2.8 miles southeast of, 8 miles north by 2.5 miles east of Los Banos, southwest corner of wooden bridge over timbered dry creek; spike, marked "U. S. 83 B. M."-----	83.49
San Luis camp, 0.8 mile northeast of, 7 miles north by 1.8 miles east of Los Banos, 100 feet north of wooden bridge over dry creek; spike in fence post, marked "U. S. 85 B. M."-----	85.13
San Luis camp, 6.5 miles north by 1.6 miles east of Los Banos, 100 feet southeast of cookhouse, top of concrete tank, at southeast corner; aluminum tablet, stamped "89 1913"-----	89.642
San Luis camp, 1 mile southwest of, on road to Los Banos, 50 feet northwest of bridge over irrigation ditch; spike in telephone pole, marked "U. S. 91 B. M."-----	91.04

	Feet
San Luis camp, 2.1 miles southwest of, 5 miles north by 0.5 mile east of Los Banos, near quarter corner between secs. 23 and 24, T. 9 S., R. 10 E., 1.8 miles north of Standard Oil Co.'s Los Banos plant, at angle in road and telephone line, east side of road; iron post, stamped "88 1913"-----	88. 429
T. 9 S., R. 10 E., near quarter corner between secs. 25 and 26, 4 miles north by 0.5 mile east of Los Banos, east side of road; spike in telephone pole, marked "U. S. 90 B. M."-----	90. 65
Los Banos, 2.5 miles north by 0.5 mile east of, northwest corner of grounds of Standard Oil Co.'s Los Banos plant, southeast corner of intersection of road; iron post, stamped "95 1913"-----	94. 979
Standard Oil Co.'s Los Banos plant, 1.7 miles south of, 50 feet north of fence with gate across road, east side of road; spike in telephone pole, marked "U. S. 105 B. M."-----	105. 40
Los Banos, 0.3 mile north by 0.5 mile west of, southwest corner of race-track grounds, southwest corner of T road west; spike in fence post, marked "U. S. 109 B. M."-----	109. 16
Los Banos, 0.3 mile north of, southwest corner of intersection of Fifth St. and first east-west road north of city limits; spike in fence post, marked "U. S. 112 B. M."-----	112. 04
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. 813
Los Banos, in front of Southern Pacific R. R. station; top of rail---	115. 2
Los Banos, northeast concrete pier of city water tower, in top; aluminum tablet, stamped "118 1913"-----	118. 241
Los Banos, south edge of town, 100 feet east of intersection of Seventh St. and Santa Rita road, south side of road; spike in telephone pole, marked "U. S. 117 B. M."-----	116. 86
Crossing of Santa Rita road and Southern Pacific R. R., midway between cattle guards 141 B and 141 C; top of rail-----	117. 61
T. 10 S., R. 11 E., northwest corner sec. 19, 0.3 mile south by 1.5 miles east of Los Banos, at southeast corner of T road south; spike in telephone pole, marked "U. S. 107 B. M."-----	107. 58
T. 10 S., R. 11 E., southwest corner sec. 17, 0.3 mile south by 2.5 miles east of Los Banos, 40 feet east of north-south fence, 0.1 mile east of cattle-dipping corral, north side of road, 3 feet east of electric-power pole 796; iron post, stamped "103 1913"-----	103. 621
Los Banos, 0.3 mile south by 3 miles east of, northeast corner of crossing of Santa Rita road and Santa Fe Ry. grade, in base of electric-power pole 786; spike, marked "U. S. 101 B. M."-----	101. 55
From Salt Slough west along highway to point 4.2 miles northwest of Ingomar	
Underwood ranch, 1 mile northeast of, on west bank of Salt Slough, 100 feet south of crossing, most southerly of group of large willow stumps; spike in top, marked "U. S. 78 B. M."-----	78. 09
T. 8 S., R. 10 E., SE. ¼ sec. 35, southeast corner of fence around Underwood camp on ranch; iron post, stamped "82 1913"-----	82. 010
T. 8 S., R. 10 E., SE. ¼ sec. 16, southwest corner of fence around barn on Fremont ranch, 1.5 miles south of Salt Slough warehouse; iron post, stamped "77 1913"-----	77. 781

	Feet
Fremont camp, 1.2 miles west of, on road from Miller & Lux's Fremont camp to Gustine Gun Club quarters, 800 feet east of small wooden bridge over slough extending north and south, 20 feet north of road; nail in top of hub marked by guard stake, marked "U. S. 75 B. M."-----	75. 72
Fremont camp, 2.1 miles west of, on road from Fremont camp to Gustine Gun Club, east side of road, spike in post of gate in fence northwest-southeast; marked "U. S. 75 B. M."-----	75. 40
T. 8 S., R. 10 E., near west line of sec. 18, 1.5 miles northeast of Gustine Gun Club, on private road leading to Salt Slough warehouse, south of road; spike in tie gatepost, marked "U. S. 75 B. M."-----	74. 57
T. 8 S., R. 9 E., SE. $\frac{1}{4}$ sec. 14, at Gustine Gun Club quarters, southeast corner of fence around buildings; iron post, stamped "76 1913"-----	76. 334
T. 8 S., R. 9 E., southeast corner sec. 15, at angle in road, 1.5 miles east of highway crossing with Southern Pacific R. R., north side of road; spike in telephone pole, marked "U. S. 76 B. M."-----	76. 34
T. 8 S., R. 9 E., southeast corner sec. 16, at T in road leading south, north side of road; spike in telephone pole, marked "85 B. M. U. S."-----	84. 96
Crossing of Southern Pacific R. R. and road leading east to Gustine Gun Club, between cattle guards 125 B and 125 C; top of rail-----	100. 2
From point 5 miles east of Los Banos east along highway to Santa Rita ranch, thence northeast to sec. 3, T. 10 S., E. 13 E.	
Los Banos, 0.3 mile south by 4.7 miles east of, 100 feet west of north-south fence, north side of road, in base of electric-power pole 761; spike, marked "U. S. 98 B. M."-----	98. 41
Primary leveling by W. H. Monahan in 1908	
From 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. 477
Hopeton, at southeast corner of fork with private road, in front of saloon; iron post, stamped "185 B"-----	185. 456
Hopeton, 2.2 miles south of, southwest end of bridge over Merced River, west margin of road; iron post, stamped "172 B"-----	172. 715
Amsterdam, 140 feet west of large warehouse, 10 feet east of station signboard, 20 feet north of track; iron post, stamped "215 B"-----	215. 626
From point about 8 miles southwest of Los Banos along highways to Los Banos, thence northwest along Southern Pacific R. R. via Volta and Ingomar to point about 1.4 miles north of Gustine	
Charleston School, northeast corner of school yard, at junction of wagon road and canal; iron post, stamped "149 G 1909"-----	149. 120
Dinwoodie 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. 157
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

	Feet
Los Banos, 2.8 miles north of, east of railroad, on fence line between road and railroad, 150 feet east of milepost 138; iron post, stamped "114 Cal 1909 G"-----	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" (destroyed)-----	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 foot 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" (destroyed)-----	94.181

Primary leveling by Roscoe Reeves in 1916

South of Gustine

T. 8 S., R. 9 E., SE. ¼ sec. 14, at Gustine Gun Club quarters, south-east corner of fence around buildings; iron post stamped "76"---	76.334
Gustine, 1.5 miles south of, east rail at railroad crossing-----	100.2

LA GRANGE QUADRANGLE

[Latitude 37° 37' 30"-37° 45'; longitude 120° 22' 30"-120° 30']

MERCED AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1913

	Feet
From point 5 miles northwest of La Grange southeast to La Grange, thence southwest 4 miles	
T. 3 S., R. 13 E., near line between secs. 1 and 2, 4 miles southeast of Cooperstown, 100 feet east of Gallup House, 50 feet west of center of creek bed; spike in front of old shack, marked "U. S. 304 B. M."-----	304.48
T. 3 S., R. 13 E., 0.25 mile south of center of sec. 1, 2.5 miles northwest of La Grange, at Live Oak School, northeast corner of yard, west side of road; iron post stamped "380 1913"-----	380.810
La Grange, 1.8 miles northwest of, 1 mile southeast of Live Oak School, 50 feet east of private road leading southwest; spike in telephone pole, marked "U. S. 345 B. M."-----	345.12
La Grange, 1.2 miles northwest of, 400 feet southeast of summit of hill, at fork in road leading to Cooperstown, Sonora, and La Grange, southwest corner of intersection; spike in telephone pole, marked "U. S. 407 B. M."-----	407.03
La Grange, 0.5 mile northwest of, at highway crossing over main irrigation canal, top of concrete abutment, south end of bridge, west side of road; chiseled square, marked "U. S. 279 B. M."-----	279.06
La Grange, 0.2 mile northeast of, at old highway bridge over Tuolumne River, south side of river, east concrete pier; chiseled square on top, marked "U. S. 192 B. M."-----	192.13
La Grange, in front of post office; river-traverse bench mark, marked "255"-----	256.26

	Feet
La Grange, in front of L. Levacci Building, east end of top concrete step; aluminum tablet stamped "258 1913"-----	258.032
La Grange, 1 mile southwest of, 150 feet west of graveyard; top of pointed rock in circle of paint, marked "U. S. 207 B. M."-----	207.14
T. 3 S., R. 15 E., SW. $\frac{1}{4}$ sec. 25, 2.3 miles southwest of La Grange, south end of south approach to Basso Bridge (steel bridge over Tuolumne River), west side of road, in top of concrete abutment; aluminum tablet stamped "173 1913"-----	173.702

Primary leveling by D. S. Birkett in 1915

From La Grange along highways southeast to sec. 32, T. 3 S., R. 14 E.

La Grange, in front of L. Lavacci Building, in east end of top concrete step; aluminum tablet stamped "258 1913"-----	258.032
La Grange, 0.15 mile south of La Grange Hotel, in southeast corner of fork in roads, at fence post marked "300"; ground-----	300.6
La Grange, 0.8 mile southeast of, in northeast corner of steel bridge over Turlock Canal, in concrete abutment; bronze tablet stamped "291 1915"-----	291.645
La Grange, 1.3 miles south of, at top of hill, on east side of road, in fence post; railroad spike, marked "U. S. B. M. 429"-----	429.46
La Grange, 1.8 miles south of, on west side of road; floor of small bridge, marked "370"-----	370.1
La Grange, 2.25 miles south of, at point where private road to southeast passes through gate, at top of hill, at east side of road, in gatepost; railroad spike, marked "U. S. B. M. 422"-----	422.23
La Grange, 2.8 miles south of, on west side of small bridge; floor of bridge, marked "328"-----	328.2
T. 2 S., R. 14 E., in sec. 35, Mount Diablo, B. & M., Tuolumne County, at north end of Don Pedro dam; top of downstream parapet-----	613.524

QUADRANGLE INCLUDING DELTA \circ RANCH, INGOMAR, LOS BANOS, SAN LUIS RANCH, SANTA RITA BRIDGE, STEVINSON, AND TURNER RANCH QUADRANGLES

[Latitude 37°-37° 30'; longitude 120° 30'-121°]

MERCED AND STANISLAUS COUNTIES

Primary leveling by Corps of Engineers, U. S. Army, in 1913-14

	Feet
T. 10 S., R. 13 E., 300 feet north and 1,400 feet east of southwest corner of sec. 35, about 1 mile southeast of Temple warehouse, at base of a large willow tree which is near the center of an isolated group of willows, 300 feet south of main canal, 700 feet northwest of lateral; iron post set in concrete (U. S. C. E. b. m. 377)---	125.990
T. 10 S., R. 13 E., 2,500 feet west of southeast corner of sec. 34, 50 feet west of west bank of Santa Rita Canal, 150 feet south of Poso and Santa Rita canals crossings, on inside of northeast corner of water-tank tower near feeding sheds, 2,500 feet south of Temple warehouse; iron post set in concrete (U. S. C. E. b. m. 378)-----	125.100
Santa Rita bridge, about 1.5 miles south of, 40 feet north of fence, 0.5 mile north of Temple warehouse, in fence line, 75 feet south of south bank of Santa Rita Slough, 225 feet west of west bank of river; iron post set in concrete (U. S. C. E. b. m. 379)-----	125.880

	Feet
Santa Rita bridge, 4,400 feet south of, on west side of river, 81 feet west of west river levee, 235 feet northeast of Santa Rita canal levee, about 500 feet south of sharp bend in river, about 850 feet south of junction of river and canal levees (U. S. C. E. b. m. 380)---	121. 830
Santa Rita bridge, in pier on north side and southwest end of draw span pier of, on main road between Los Banos and Merced; brass cap (U. S. G. S. b. m. 33)-----	124. 726
Santa Rita bridge, 4,400 feet northwest of, about 3,500 feet southeast of Riverside ranch, 320 feet west of head gate in lateral, 45 feet south of lateral at an angle in fence where fence crosses the road; iron post set in concrete (U. S. C. E. b. m. 381)-----	118. 43
Riverside ranch, 2,700 feet northeast of, on north side of road to ranch from river, at angle in fence, 390 feet southwest of center of bridge and head gate on main canal; iron post set in concrete (U. S. C. E. b. m. 382)-----	116. 69
Riverside ranch, about 1.5 miles north of, about 1.25 miles east of Lucerne ranch, 60 feet east of old shed, at base of large willow tree within fence inclosure around shed; iron post set in concrete (U. S. C. E. b. m. 383)-----	113. 96
Lucerne ranch, about 1.5 miles northeast of, 40 feet west of center of bridge and head gate on main canal, where canal makes a distinct angle toward the north; iron post set in concrete (U. S. C. E. b. m. 384)-----	112. 65
Lucerne ranch, about 2 miles northwest of, in Keyes Grove, 400 feet northwest of approach to ford on east bank of river and directly opposite approach on west bank of river, at base of old forked and pruned willow tree; iron post set in concrete (U. S. C. E. b. m. 385)-----	109. 88
Pick Anderson Slough, on south side of, about 2 miles south of intake of Eastside Canal, on prominent knoll, 150 feet east of slough bank and near an old tree on slough bank, at a point where Pick Anderson Slough makes a sharp bend and runs north; iron post set in concrete (U. S. C. E. b. m. 387½)-----	105. 88
Head gate, on fence line, on north bank of river, on west side of Eastside Canal, 450 feet north of intake, 4,500 feet east of upper Turner ranch, 55 feet west of combination bridge and head gate; iron post set in concrete (U. S. C. E. b. m. 389)-----	100. 78
Turner ranch, upper, in northeast corner of yard, about 50 feet northeast of house; iron post set in concrete (U. S. C. E. b. m. 390)---	97. 86
Turner ranch, upper, about 4,000 feet below, about 400 feet downstream from right angle turn, at intersecting fences, on west bank of river; iron post set in concrete (U. S. C. E. b. m. 391)-----	96. 22
Turner ranch, lower, on east side of, in southeast corner of yard, about 15 feet southeast of cabin and about 600 feet southeast of large barn, about 250 feet northeast of river bank; iron post set in concrete (U. S. C. E. b. m. 392)-----	95. 95
Lucerne ranch, about 3 miles northwest of, 900 feet from east (right) bank of river, about 1 mile northwest of Keyes Grove, about 700 feet northwest of river bank at point where river makes a distinct bend to left and 10 feet north of old road following down the river, 900 feet northwest of slough inlet; iron post set in concrete (U. S. C. E. b. m. 386)-----	106. 50

	Feet
Eastside Canal, about 2 miles southeast of intake, on east side of river, 20 feet northwest of combination bridge and head gate over small slough, 30 feet east of river bank, on levee 10 feet east of old road; iron post set in concrete (U. S. C. E. b. m. 387)-----	103.99
Eastside Canal, about 1 mile southeast of intake, on east side of river, 5 feet north of old head gate, on east side of ditch or slough, 10 feet east of old road, 25 feet east of river bank; iron post set in concrete (U. S. C. E. b. m. 388)-----	102.97
Delta farm, about 2.5 miles north of, about 4,200 feet downstream from lower Turner ranch, 75 feet west of west bank of river, about 400 feet north of a point 600 feet east of west end of 4,000-foot straight reach of Miller & Lux's drainage canal, which takes out of Salt Slough at about 3,000 feet south of lower Turner ranch; iron post set in concrete (U. S. C. E. b. m. 393)-----	93.24
Delta farm, about 3 miles north of, at angle in fence line on west bank of river, 50 feet north of small levee at end of a dead slough which is dammed off, 1,000 feet south of three small sloughs which are dammed off, at right-angle turn in river about 1,600 feet northwest of lower end of Miller & Lux's drainage canal and on extension of its center line; iron post set in concrete (U. S. C. E. b. m. 394)-----	90.86
Delta farm, about 5 miles north of, west bank of river, at fence line, at lower end of nearly straight reach of river about 3,600 feet long, just above point at which river makes turn to right, at clump of willow trees, 10 feet west of stump with three large butts; iron post set in concrete (U. S. C. E. b. m. 395)-----	91.11
Mariposa Slough, 6,400 feet north of mouth, on west bank of river, on north bank of northerly one of two dammed-off sloughs which lead to west, at outside point of sharp turn in river to right where small lake is formed by above slough inlet; iron post set in concrete (U. S. C. E. b. m. 396)-----	89.02
Mariposa Slough, 1,000 feet north of mouth, east of river, at southeast corner of building; iron post set in concrete (U. S. C. E. b. m. 397)-----	89.70
Dickerson ferry, 150 feet north of north bank of river, about 500 feet west of north and south fence line paralleling road; iron post set in concrete (U. S. C. E. b. m. 398)-----	85.26
Dickerson ferry, about 1.7 miles northwest of, 40 feet northeast of northeast bank of river, about 550 feet east of slough 40 feet wide, at inlet, about 300 feet east of smaller slough inlet, at upper end of gradual bend to left; iron post set in concrete (U. S. C. E. b. m. 399)-----	82.30
Du Gaines ranch, 400 feet northeast of northeast river bank, 1,800 feet northwest of mouth of Bear Creek, about 50 feet east of house; iron post set in cement (U. S. C. E. b. m. 400)-----	78.99
Du Gaines, about 1 mile north of, east bank of river, about middle of sec. 26, T. 7 S., R. 10 E., at right-angle bend in river to left, at mouth of wide swale or slough entering river, 6 feet north of wire fence; iron post set in concrete (U. S. C. E. b. m. 401)-----	78.57
T. 7 S., R. 10 E., about 800 feet south and 600 feet east of northwest corner of sec. 28, at Pike ranch, 250 feet north of house and on bank of river bottom, blazed oak tree 5 feet in diameter bears N. 50° E. 30 feet; iron post set in concrete (U. S. C. E. b. m. 402)	75.37

	Feet
Salt Slough, about 700 feet above mouth, on north (right) bank of river, about 500 feet south and 1,500 feet west of northeast corner of sec. 30, T. 7 S., R. 10 E.; iron post set in concrete (U. S. C. E. b. m. 403)-----	69. 76
Salt Slough, about 1 mile west of mouth, 150 feet north of north (right) bank of river, about 1,200 feet northwest of point where two channels of river come together, 2.5-foot willow tree bears NW. 66 feet, 1-foot willow bears SW. 180 feet, about 3,400 feet south and 500 feet west of northeast corner of sec. 24, T. 7 S., R. 9 E.; iron post set in concrete (U. S. C. E. b. m. 404)-----	66. 48
T. 7 S., R. 9 E., about 3,000 feet west and 1,600 feet north of southeast corner of sec. 13, 150 feet northeast of northeast bank of river, about 1,200 feet southeast of inlet of slough (50 feet wide), oak tree bears S. 7° E. 420 feet; iron post set in concrete (U. S. C. E. b. m. 405)-----	64. 25
T. 7 S., R. 9 E., about 2,900 feet west and 900 feet north of southeast corner of sec. 11, 140 feet northeast of northeast river bank, about 350 feet north of north bank of slough 60 feet wide, about 1,700 feet southeast of bank of slough 70 feet wide, 1-foot willow tree bears NE. 126 feet, 2-foot willow tree bears E. 225 feet; iron post set in concrete (U. S. C. E. b. m. 406)-----	62. 77
Hills Ferry bridge, 100 feet west of west end of west approach, in south fence line of road, about 200 feet from west bank along road; iron post set in concrete (U. S. C. E. b. m. 407)-----	66. 50
Hills Ferry bridge, 1 mile north of, on west bank in bend of slough, 600 feet south of south bank of river, about 4,200 feet west and 1,100 feet north of southeast corner of sec. 34, T. 6 S., R. 9 E., 1.5-foot blazed oak tree bears N. 15° E. 8 feet, 4-foot blazed white oak bears N. 71 feet; 4-foot blazed white oak bears N. 80° W. 15 feet; iron post set in concrete (U. S. C. E. b. m. 408)-----	64. 85
Hills Ferry bridge, about 2 miles north of, 100 feet east of east bank of river, on west bank of dry lake and about 350 feet north of its inlet, 1-foot blazed white-oak tree bears S. 50° W. 32 feet, 2.5-foot blazed white oak bears S. 22° W. 54 feet, 4-foot blazed white oak bears N. 50° E. 25 feet; iron post set in concrete (U. S. C. E. b. m. 409)-----	61. 46
T. 6 S., R. 9 E., about 3,600 feet west and 400 feet south of northeast corner of sec. 28, about 3.5 miles north of Hills Ferry bridge, east side of river, 250 feet from bank, 600 feet south of inlet of small slough, 4-foot blazed white-oak tree bears N. 10° E. 83 feet, 3-foot blazed white oak bears S. 70° E. 140 feet, 4-foot blazed white oak bears S. 8° W. 80 feet; iron post set in concrete (U. S. C. E. b. m. 410)-----	61. 16
T. 6 N., R. 9 E., about 4,300 feet west and 1,000 feet north of southeast corner of sec. 16, about 1.3 miles southeast of mouth of Orestimba Creek, on levee 100 feet east of east river bank, about 300 feet south of where levee touches river bank, about 500 feet south of wire fence outside of bend in river to right; iron post set in concrete (U. S. C. E. b. m. 411)-----	59. 94

Primary leveling by Roscoe Reeves in 1916

Near Los Banos

	Feet
Los Banos, 1.5 miles west of, at T road forks south, in telephone pole 45-13; spike, painted "125" on pole-----	124.74
Los Banos, 0.5 mile west of, 360 feet west of canal, in telephone pole 46; spike, painted "119" on pole-----	119.37
Los Banos, north edge of town, 75 feet west of railroad tracks, opposite creamery, 25 feet south of canal, on west side of public highway; standard iron post stamped "117 G 1909 Cal"-----	116.883

MERCED, HAYSTACK MOUNTAIN, AND PLANADA QUADRANGLES.

[Latitude 37° 15'-37° 30'; longitude 120° 15'-120° 30']

MERCED AND TUOLUMNE COUNTIES

Primary leveling by Roscoe Reeves in 1915

From point 3.7 miles southeast of Merced Falls southeast along highways to Billy Grade ranch	Feet
Merced Falls, 4.6 miles southeast of, 0.8 mile northwest of intersection of old Millerton and Hornitos roads, near small summit; point on boulder marked "526"-----	526.06
T. 5 S., R. 15 E., sec. 25, 5.5 miles southeast of Merced Falls, at intersection of old Millerton Road and Hornitos-Rotterdam Road, on concrete bridge over small creek, south side and west end; bronze tablet stamped "449"-----	449.943
C. H. L. & W. Co.'s ranch house, 1.5 miles southeast of, in low swale, 15 feet west of road; point on rock, marked "432"-----	432.37
C. H. L. & W. Co.'s ranch, 2.7 miles southeast of, near top of small hill, 150 feet southeast of isolated tree; point on rock, marked "409"-----	409.30
C. H. L. & W. Co.'s ranch, 3.9 miles southeast of, 0.65 mile southeast of conspicuous butte covered with flat strata near road, 60 feet east of road, beside pile of boulders; point on rock, marked "370"-----	370.50
Merced Falls, 10.5 miles southeast of, 1.3 miles northwest of Billy Grade ranch, 300 feet north of Burns Creek crossing, 25 feet northeast of road; iron post stamped "316"-----	316.648
Merced Falls, 11.7 miles southeast of, in base of south gatepost to gate leading to barn at the Billy Grade ranch; railroad spike, marked "327"-----	327.33
From Plainsburg School north and west along highways to Lingard	
Le Grand, 4.2 miles west by 1 mile north of, 1 mile north of Plainsburg, in northwest corner of T road forks west, in power-line pole; railroad spike marked "222"-----	222.35
Plainsburg, 1 mile north by 1 mile west of, 50 feet east of north-and-south fence, on north side of road; iron post stamped "211"-----	212.161
Plainsburg, 1 mile north by 2 miles west of, in front of old ranch house, in base of first telephone pole east of north-and-south fence and on north side of road; railroad spike marked "206"-----	206.35
Plainsburg, 1 mile north by 3 miles west of, in northwest corner of T road forks north, in post; railroad spike marked "197"-----	197.63
Lingard siding, 1 mile north by 1 mile east of, at railroad crossing, in base of power-line pole in front of farmhouse; railroad spike marked "190"-----	190.70

	Feet
Merced Falls, 3.5 miles southeast of, near forks of Hornitos and Millerton roads, in base of telephone pole on west side of gate; railroad spike marked "504"-----	504.83
Merced Falls, 3.75 miles southeast of, 0.25 mile southeast of forks of Hornitos and Millerton roads, 150 feet east of latter road, on large boulder 3 feet high; bronze tablet stamped "519"-----	519.331

Primary leveling by C. H. Semper in 1905

From Merced along highway to Merced River

Merced, southeast corner of county courthouse; aluminum tablet stamped "171 B"-----	171.561
Merced, 4.3 miles north of, at entrance to Crocker Huffman back ranch, west side of road, 20 feet north of gate; iron post stamped "175 B"-----	175.662
Sixmile House, northeast corner of fork with road to east; iron post stamped "206 B"-----	206.215
Sixmile House, 3.3 miles north of, 65 feet south of bridge over creek, east side of road; iron post stamped "377 B"-----	377.389
Sixmile House, 6.7 miles north of, at northwest corner of fork with road to west; iron post stamped "284 B"-----	284.353

From 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"-----	196.424
Amsterdam, 6.4 miles southeast of, at southwest corner of fork with road to Atwater, at J. J. Gray's ranch house; iron post stamped "175 B"-----	175.773

BERENDA, LINGARD, MERCED, AND PLAINSBURG QUADRANGLES

[Latitude 37°-37° 22' 30"; longitude 120° 07' 30"-120° 30']

MADERA AND MERCED COUNTIES

Precise leveling by C. H. Semper in 1901-2

From Merced southeast along Southern Pacific R. R. to milepost 181

	Feet
Merced, in southeast corner of county courthouse; aluminum tablet stamped "171 B"-----	171.561
Merced, 3.2 miles south of, opposite milepost 154, east side of track, at edge of highway; iron post stamped "178 B"-----	178.950
Milepost 157, opposite, east side of track, at edge of highway; iron post stamped "187 B"-----	188.036
Milepost 160, opposite, east side of track, at edge of highway, iron post stamped "198 B"-----	198.928
Athlone, in front of station; top of rail-----	204.4
Athlone, 2.5 miles south of, opposite milepost 163, east side of track, at edge of highway; iron post stamped "217 B"-----	217.857
Milepost 156, 150 feet south of, east side of track, at edge of highway; iron post stamped "233 B"-----	233.202
Minturn, in front of station; top of rail-----	239.0
Minturn, 1.9 miles south of, opposite milepost 169, east side of track, at edge of highway; iron post stamped "241 B"-----	241.073
Milepost 172, opposite, east side of track, at edge of highway; iron post stamped "247 B"-----	247.181

	Feet
Milepost 175, opposite, east side of track; at edge of highway; iron post stamped "249 B"-----	249. 759
Berenda, in front of station; top of rail-----	250. 7
Berenda, 1.3 miles south of, 18 feet south of milepost 178, west of track, at edge of highway; iron post stamped "248 B"-----	248. 740
Milepost 181, 15 feet south of, west side of track, at edge of highway; iron post stamped "270 B"-----	270. 920

Primary leveling by C. H. Semper in 1905 and L. F. Biggs in 1908

From Merced north along highway to Merced River

Merced, southeast corner of county courthouse; aluminum tablet stamped "171 B"-----	171. 561
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. 665
Sixmile House, northeast corner of fork with road to east; iron post stamped "206 B"-----	206. 218
Sixmile House, 3.3 miles north of, 65 feet south of bridge over creek, east of road; iron post stamped "377 B"-----	377. 392
Sixmile House, 6.7 miles north of, at northwest corner of fork with road to west; iron post stamped "284 B"-----	284. 356

From Amsterdam southeast along railroad to Merced

Amsterdam, 3.3 miles southeast of, north edge of railroad and highway, 4 feet east of milepost 157; iron post stamped "196 B"-----	196. 427
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. 776

From Berenda northeast along Southern Pacific R. R. to Daulton

Berenda, 3 miles north of, 200 feet north of Atchison, Topeka & Santa Fe Ry. crossing, west edge of Southern Pacific R. R. right of way, 10 feet south of milepost 181; iron post stamped "279 B 1909 B. V."-----	279. 211
Talbot, in front of station; top of rail-----	333. 4
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. 713
Daulton, in front of station; top of rail-----	401. 0

From Merced Falls via Hornitos to Mount Bullion School

Merced Falls, at northeast corner of yard of Merced Falls Power Co., on edge of road; iron post stamped "351 B"-----	351. 565
Merced Falls, south corner of bridge over Merced River; top of bolt over pier, painted "350 B. M. 1"-----	349. 77
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. 83
Merced Falls, 3.2 miles east of, 15 feet south of road, 0.94 mile south of ranch house, in base of oak tree 24 inches in diameter; spike with aluminum tag stamped "745 B. M. 3"-----	745. 58

	Feet
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. 55
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 boulder; aluminum tag stamped "829 B 1908 B. A."-----	830. 184
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. 79
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. 66
Hornitos, 3.2 miles east of, 0.5 mile west of Ruth Pierce mine, north side of road, on summit of small ridge, in boulder; aluminum tablet stamped "1094 B 1908 B 13"-----	1, 095. 006
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. 53
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 boulder painted "1153 B. M. 9"; chisel point-----	1, 154. 59
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 boulder; aluminum tablet stamped "1160 B 1908 B. C."-----	1, 161. 803
Mount Bullion, 6 miles west of, 6.9 miles east of Hornitos, north side of road, north bank of canyon, in boulder painted "1434 B. M. 10"; chisel point-----	1, 435. 54
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. 80
Mount Bullion, 4.2 miles west of, on summit of ridge, 25 feet south of road, in boulder; aluminum tablet stamped "1828 B 1908 B. D."-----	1, 829. 173
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, 681. 25
Mount Bullion, 2.5 miles west of, 50 feet west of old house, north side of road, on boulder painted "1837 B. M. 13"; chisel point-----	1, 838. 42
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. 41
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, 218. 02
Mount Bullion, 200 feet east of schoolhouse, 30 feet north of road; iron post stamped "2177 B 1908 B. E."-----	2, 178. 756
(Value from east, 2,175.750; closure error, 3 feet.)	

MERCED FALLS QUADRANGLE

[Latitude 37° 30'-37° 37' 30"; longitude 120° 15'-120° 22' 30"]

MARIPOSA AND MERCED COUNTIES

Primary leveling by D. S. Birkett in 1915

From Merced Falls southeast along highways 3.7 miles

	Feet
Merced Falls, at northeast corner of yard of Merced Falls Power Co., on edge of road; iron post stamped "351 B" (see Bull. 342, p. 115)-----	351.565
Merced Falls, 0.5 mile east of, on extreme north end of concrete abutment to approach of steel highway bridge and on west side of bridge; chiseled square and "U. S."-----	353.37
Merced Falls, 1.4 miles southeast of, 0.85 mile south of steel bridge over Merced River, near top of hill, east side of road, in base of telephone pole; railroad spike marked "456"-----	456.13
Merced Falls, 2 miles southeast of, in northwest corner of forks of Hornitos and Old Mill roads; iron post stamped "437"-----	437.206

OAKDALE QUADRANGLE

[Latitude 37° 45'-37° 52' 30"; longitude 120° 45'-120° 52' 30"]

STANISLAUS COUNTY

Primary leveling by G. L. Hagman in 1911

From point 4.8 miles north of Burnett south to Burnett

	Feet
Burnett, 4.8 miles north of, where road turns west, at southwest corner, on fence line; iron post stamped "167 B 1911"-----	167.232
Burnett, 4 miles north of, north of gate, west side of road, in base of fence post; spike, aluminum tag stamped "190.26"-----	190.67
Burnett, 3.1 miles north of, on west side of road, in base of fence post; spike, aluminum tag stamped "194.27"-----	194.18
Burnett, 2.3 miles north of, on east side of road, north end of gate to private road east, in base of gatepost; spike, painted and scribed "U. S. B. M. 196"-----	197.00
T. 1 S., R. 10 E., northeast corner of sec. 33, near top of hill, at west edge of road; center of top of metal corner post, painted "U. S. B. M. 204"-----	204.40
Burnett, 0.9 mile north of, at east side of road, in base of fence post; spike, aluminum tag stamped "179.28"-----	179.67
Burnett, at northwest corner of road forks; iron post stamped "185 B"-----	186.069

OWENS CREEK AND PLANADA QUADRANGLES

[Latitude 37° 15'-37° 22' 30"; longitude 120° 07' 30"-120° 22' 30"]

MARIPOSA AND MERCED COUNTIES

Primary leveling by Roscoe Reeves in 1915

From Billy Grade ranch south along highways to Le Grand

	Feet
Billy Grade ranch, 0.8 mile south of, 15 feet east of road, on top of half-buried boulder; painted circle, painted "384"-----	384.78
Billy Grade ranch, 1.6 miles south of, 210 feet southwest of gate in north and south fence, 300 feet west of old sheep herder's camp, on east side of road; iron post stamped "364"-----	364.503

	Feet
Le Grand, 8.5 miles north of, 1.5 miles north by 0.6 mile east of Cunningham School, in base of west gatepost to road leading north to Merced Falls; railroad spike, marked "324"-----	325.08
Le Grand, 8.5 miles north of, corners of secs. 5, 6, 7, and 8, T. 7 S., R. 16 E., in southwest corner of T road forks south, in base of corner fence post; railroad spike, marked "319"-----	319.93
Le Grand, 7 miles north of, 800 feet north of Cunningham School, 40 feet north of east and west fence line, on west edge of north and south road; iron post stamped "303"-----	303.512
Le Grand, 5 miles north of, 500 feet southeast of large barn, in base of fence post; railroad spike, marked "281"-----	281.41
Le Grand, 4.1 miles north of, 700 feet north of T road forks north, in west end of north head sill of bridge over Owens Creek; railroad spike, marked "267"-----	267.94

SANDYMUSH QUADRANGLE

[Latitude 37° 07' 30"-37° 15'; longitude 120° 30'-120° 37' 30"]

MERCED COUNTY

Primary leveling by Roscoe Reeves in 1915

From sec. 24, T. 9 S., R. 13 E., along highways west 4 miles, thence northwest and north to sec. 13, T. 8 S., R. 12 E.

	Feet
T. 9 S., R. 13 E., at quarter corner south side of sec. 23, 30 feet northeast of corner of L road north and west, in line of fence; iron post stamped "130"-----	130.500
T. 9 S., R. 13 E., southwest corner of sec. 23, 600 feet north of farmhouse, in corner fence post; railroad spike, marked "128"-----	128.33
T. 9 S., R. 13 E., southwest corner of sec. 21, 0.5 mile east of farmhouse, on north gatepost of second-class road; railroad spike, marked "115"-----	115.80
T. 9 S., R. 13 E., sec. 20, 250 feet east of farmhouse, northeast corner of yard; iron post stamped "110"-----	110.704
T. 9 S., R. 13 E., near center of NW. ¼ sec. 18, in south post of gate in fence line running northwest; railroad spike, marked "107"-----	107.72
T. 9 S., R. 12 E., NE. ¼ sec. 11, 0.5 mile south of the Hoglan ranch house (Miller & Lux), 50 feet east of T in fences, in line of fence; iron post stamped "104"-----	104.383
Hoglan ranch house (Miller & Lux), 500 feet northeast of, in pile at northwest end of bridge over slough; railroad spike, marked "108"-----	108.18
T. 8 S., R. 12 E., southeast corner of sec. 26, 1.5 miles northeast of Hoglan ranch house (Miller & Lux), in corner fence post; railroad spike, marked "110"-----	110.54
T. 8 S., R. 12 E., 750 feet northeast of southwest corner of sec. 24, 250 feet northwest of ranch house, in northeast corner of concrete rim of tank; bronze tablet stamped "117"-----	116.873
T. 8 S., R. 12 E., southwest corner of sec. 13, on east gatepost; railroad spike, marked "110"-----	110.68
T. 8 S., R. 12 E., northwest corner of sec. 13, near north corner common to Sandy Mush and Turner ranch quadrangles; iron post stamped "113" (D. S. Birkett, 1913)-----	113.135

	Feet
Le Grand, 4.1 miles north of, in southeast corner of T road fork south, 20 feet south of corner fence post; iron post stamped "293" -----	293. 652
Le Grand, 3.2 miles north of, 0.9 mile south of T road fork south, on north gatepost to second-class road east; railroad spike, marked "276" -----	276. 47
Le Grand, 2.8 miles north of, 200 feet east of road; iron post stamped "323" (Le Grand triangulation station) -----	323. 916
Le Grand, 1.6 miles north of, on east side of road, in base of corner fence post; railroad spike, marked "257" -----	257. 27
Le Grand, 0.7 mile north of, on concrete wall at south end and on east side of bridge over Mariposa Creek, 3.5 feet southeast of end of wooden bridge; chiseled square, painted "257" (in Le Grand quadrangle) -----	257. 94

SNELLING QUADRANGLE

[Latitude 37° 30' - 37° 37' 30"; longitude 120° 22' 30" - 120° 30']

MERCED AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1915

From sec. 32, T. 3 S., R. 14 E., along highways southeast and south to Snelling

	Feet
Anderson School, 3.2 miles northwest of, 0.55 mile north of Merced-Stanislaus county line, in line with east and west fence, on west side of road, in gatepost; railroad spike, marked "U. S. B. M. 373" -----	373. 78
Merced-Stanislaus county line, 400 feet north of, at dim road to west, at fence corner marked "338"; ground -----	338. 6
La Grange, 4.5 miles south and 1 mile east of, 0.45 mile southeast of Merced-Stanislaus county line, 0.45 mile northwest of ranch house, in line with east and west fence, on west side of road; iron post stamped "351 1915" -----	351. 736
Anderson School, 1.3 miles northwest of, 0.45 mile south of ranch house, on west side of road, in gatepost; railroad spike marked "U. S. B. M. 319" -----	319. 42
Anderson School, 0.4 mile north of, at top of hill, on west side of road, in fence post; railroad spike marked "U. S. B. M. 329" -----	329. 10
Anderson School, 0.1 mile north of, 4 miles north and 0.5 mile east of Snelling, in northeast corner of bridge over Dry Creek, in concrete abutment; bronze tablet stamped "275 1915" -----	275. 693
Anderson School, 0.6 mile south of, in northwest corner of bridge; floor marked "276" -----	276. 5
Anderson School, 1 mile south of, in northwest corner of crossroads, in large corner fence post; railroad spike marked "U. S. B. M. 287" -----	287. 40
Anderson School, 1.25 miles south of, 50 feet south of T road (private) west to ranch house, on south end and on west side of top of concrete arch culvert; chiseled square marked "270" -----	270. 00
Snelling, 1.8 miles north by 0.5 mile east of, about 0.4 mile north of old ranch house, on west side of road, in fence post; railroad spike marked "U. S. B. M. 282" -----	282. 21
Snelling, 1 mile north by 0.5 mile east of, on east side of small culvert; top of culvert marked "313" -----	313. 0

	Feet
Snelling, 0.8 mile north by 0.5 mile east of, at top of hill, on west side of road, in fence post; railroad spike marked "U. S. B. M. 331"-----	331. 58
Snelling, 0.3 mile north by 0.5 mile east of; top of small wooden bridge over small creek, marked "255"-----	255. 8
Snelling, 0.5 mile east of, at T road north, 20 feet south of Yosemite Valley R. R., on east side of road, at southeast corner, on top of concrete culvert over irrigation ditch; chiseled square marked "U. S. B. M. 265"-----	265. 55
Snelling, at southwest corner of Lewis and Third streets; iron post stamped "259 B" (Bull. 342, p. 115)-----	259. 448

SONORA QUADRANGLE

[Latitude 37° 30'-38°; longitude 120°-120° 30']

MARIPOSA, MERCED, STANISLAUS, AND TUOLUMNE COUNTIES

Primary leveling by J. B. Lippincott in 1896

From Mount Diablo base northeast via Sonora to point near Soulsbyville	Feet
Goodwin's ranch, 1 mile east of house, 6 miles west of Jamestown, on north side of road; iron post stamped "1389"-----	1, 390. 068
Goodwin's wine cellar, on north step of, about 6 miles west of Jamestown and 3.5 miles north of Chinese camp; copper plug stamped "1176"-----	1, 176. 732
Jamestown, half a block west of Sisson's Hotel, in front wall in the east end of the brick building with iron doors and a stone pavement on south side of road; bronze tablet stamped "1403"-----	1, 403. 438
Sonora, in south post of east entrance in street wall of courthouse; bronze tablet stamped "1825"-----	1, 825. 53
Sonora, east edge of court of Victoria Hotel, facing Washington St., in outside wall 1 foot south of gate; copper bolt stamped "1794"-----	1, 794. 792
Soulsbyville, on north side of road to, at junction about 3 miles east of Sonora, near fence at Cherokee ranch; iron post stamped "2144"-----	2, 144. 643

Primary leveling by C. H. Semper and R. A. Farmer in 1905

From Merced River northeast to Snelling, thence east to Merced Falls, thence northeast to Coulterville, thence east to point 2.4 miles southeast of Bower cave.

Snelling, 1.7 miles southwest of, 640 feet north of Merced River roller mills, 60 feet southeast of end of bridge over Merced River, at fence line; iron post stamped "243 B"-----	243. 554
Snelling, at southwest corner of Lewis and Third streets; iron post stamped "259 B"-----	259. 448
Snelling, 2.7 miles east of, on south side of road, in line with east side of I. J. Buckley's brick ranch house; iron post stamped "291 B"-----	291. 466
Merced Falls, at northeast corner of yard of Merced Falls Power Co., on margin of road; iron post stamped "351 B"-----	351. 565
Merced Falls, 2.9 miles north of, at summit of mountains, 30 feet west of road; iron post stamped "764 B"-----	764. 265
Webbs, at southwest corner of yard fence, at edge of road; iron post stamped "1046 B"-----	1, 046. 393

	Feet
Peter Senges, at gate leading to ranch house; iron post stamped "1128 B"-----	1, 128. 398
Peter Senges, 1.5 miles north of, at junction of Piney Creek with Merced River, 125 feet south of creek and 700 feet west of river, near corner of fence; iron post stamped "556 B"-----	556. 419
Baxter post office, northeast corner of yard fence; iron post stamped "1250 B"-----	1, 250. 352
Baxter, 3.1 miles north of, at junction of roads to Coulterville and Horseshoe Bend, 10 feet south of stage station office; iron post stamped "858 B"-----	858. 405
Coulterville, opposite southeast corner of Jeffrey's Hotel, at corner of street; iron post stamped "1676 B"-----	1, 676. 532
Coulterville, 2.5 miles east of, 0.6 mile east of forks of road, at horseshoe bend in road, south side of fence line, near oak tree 4 feet in diameter; iron post stamped "2211 B"-----	2, 211. 474
Coulterville, 5.7 miles east of, at summit of mountain, 0.4 mile east of Mountain View saloon, 15 feet south of road; iron post stamped "3346 B"-----	3, 346. 479
Bean Creek bridge, 1.5 miles east of, in front of W. H. Dudley's ranch house, at northwest corner of front-yard fence; iron post stamped "2984 B"-----	2, 984. 503
Bower Cave, at road crossing North Fork of Merced River, 50 feet east of river, at north edge of road; iron post stamped "2349 B"-----	2, 349. 478
Bower Cave, 2.4 miles southeast of, at northeast corner of school yard; iron post stamped "2939 B"-----	2, 939. 509

THALHEIM QUADRANGLE

[Latitude 37° 45'-37° 52' 30"; longitude 120° 52' 30"-121°]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by G. L. Hagman in 1911

At point 5.7 miles north of Burnett

	Feet
Burnett, 5.7 miles north of, on west side of road, in base of telephone pole; spike, aluminum tag stamped "163.25"-----	163. 20
From Burnett to Burwood School	
Burnett, 1 mile west of, in base of telephone pole 33-6; spike, aluminum tag stamped "176.29"-----	177. 10
Burnett, 2 miles west of, in base of telephone pole 32-8; spike, aluminum tag stamped "160.30"-----	160. 39
Burnett, 3 miles west of, in base of telephone pole 31-10; spike, aluminum tag stamped "154.31"-----	154. 17
Escalon, 3 miles east of, at southwest corner of T road south; iron post stamped "147 B 1911"-----	147. 688
Escalon, 3 miles east by 0.7 mile south of, on west side of road, in base of gatepost; spike, aluminum tag stamped "145.40"-----	145. 68
Burwood School, 2.8 miles northeast of, north side of road, in base of corner fence post; spike, aluminum tag stamped "154.39"-----	154. 06
Burwood School, 1.8 miles northeast of, at T road north, southwest corner of base of fence post; spike, aluminum tag stamped "141.38"-----	141. 66
Burwood School, 1.1 miles east of, northeast corner of T road; iron post stamped "141 B 1911"-----	140. 866

	Feet
Santa Fe Ry. crossing; top of west rail-----	134. 5
Burwood School, 0.7 mile west of, in base of fence post, at southwest corner of T road; spike, aluminum tag stamped "127.37"-----	127. 22
Burwood School, 1.6 miles west of, south side of road, in base of fence post; spike, aluminum tag stamped "122.36"-----	122. 49
Escalon, 2.8 miles south of, in top of northwest abutment of bridge over Stanislaus River; aluminum tablet stamped "88 B 1911"---	SS. 711
From point 2.8 miles south of Escalon north along highways to point 3 miles south of Farmington	
Escalon, 1.7 miles south of, on east side of road, in base of corner fence post; spike, aluminum tag stamped "116.41"-----	116. 26
Escalon, 0.8 mile south of, on west side of road, in base of corner fence post; spike, aluminum tag stamped "113. 42"-----	113. 39
Escalon, 500 feet west of station, at road crossing; top of rail-----	118. 4
Escalon, McPherson's brick store, in front face of east wall; aluminum tablet stamped "117 B 1911"-----	117. 285
Escalon, 1 mile north of, on east side of road, in base of telephone pole 26-2; spike, aluminum tag stamped "116.43"-----	116. 40
Escalon, 2 miles north of, on east side of road, in base of telephone pole 25-3; spike, aluminum tag stamped "120.44"-----	120. 16
Escalon, 3 miles north of, at northeast corner of crossroads; iron post stamped "112 B 1911"-----	112. 726
Escalon, 4 miles north of, on east side of road, in base of telephone pole 23-3; spike, aluminum tag stamped "109.45"-----	109. 13
Escalon, 4.5 miles north of, where road is crossed by power line, northeast corner of T road east, in base of telephone pole; spike, aluminum tag stamped "109.46"-----	109. 30
Escalon, 5.5 miles north of, southwest corner of T road west; iron post stamped "107 B 1911"-----	107. 062

TRIGO QUADRANGLE

?Latitude 37° 52' 30"-38°; longitude 120° 52' 30"-121°]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by G. L. Hagman in 1911

From Farmington north 4 miles

	Feet
Farmington, in front of station; top of west rail-----	112. 7
Farmington, south of Central Hotel, at watering trough, in base of telephone pole; spike, aluminum tag stamped "108.13"-----	108. 16
Farmington, 1,800 feet south of, in northwest abutment of bridge over Little John Creek; aluminum tablet stamped "109 B" (this bench mark is on an unchecked spur line)-----	109. 780
Farmington, 1 mile north of, on east side of road, in base of telephone pole; spike, aluminum tag stamped "112.14"-----	112. 66
Farmington, 2 miles north of, on east side of road, in base of telephone pole; spike, aluminum tag stamped "150.15"-----	150. 71
Farmington, 3 miles north of, at junction of Copperopolis Road, in southwest corner of road crossing; iron post stamped "148 B 1911"-----	148. 557
Farmington, 4 miles north of, at T road, northwest fence corner, in base of fence post; spike, aluminum tag stamped "161.16"-----	161. 08

From Farmington east along highways to point 7.7 miles north of Burnett		Feet
Farmington, 1.1 miles east of, at southwest corner of road forks, opposite county water tank, in base of telephone pole; spike, aluminum tag stamped "115.19"-----		115.85
Farmington, 1.5 miles south of, private T road east, in base of telephone pole 19-10; spike, aluminum tag stamped "107.48"-----		106.73
Farmington, 0.9 mile south of, east side of road, in base of telephone pole 18-13; spike, aluminum tag stamped "110.49"-----		109.53
Farmington, 2.2 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "122.20"-----		122.20
Farmington, 2.6 miles southeast of, on top of northeast abutment of steel bridge over Little John Creek; chiseled mark, painted "U. S. B. M. 122"-----		122.70
Farmington, 3.5 miles southeast of, at southwest corner of T road south; iron post stamped "129 B 1911"-----		129.864
Farmington, 4.5 miles southeast of, on south side of road, in base of telephone pole; spike, aluminum tag stamped "134.21"-----		135.95
Farmcottage School, 0.4 mile west of, on south side of road, in base of telephone pole; spike, aluminum tag stamped "141.22"-----		142.84
Farmcottage School, 0.6 mile east of, south side of road, in base of telephone pole; spike, aluminum tag stamped "165.23"-----		166.88
Farmcottage School, 1.4 miles east of, southeast corner of T road south; iron post stamped "160 B 1911"-----		161.284
Burnett, 7.7 miles north of, at east side of road, in base of gate post; spike, aluminum tag stamped "166.24"-----		166.86

Near Farmington

Farmington, 3 miles south of, southeast corner of T road east, in base of telephone pole 20-12; spike, aluminum tag stamped "106.47"-----	105.74
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ARENA, ATWATER, CRESSY, AND TURLOCK QUADRANGLES

[Latitude 37° 15'-37° 30'; longitude 120° 30'-120° 52' 30"]

MERCED AND STANISLAUS COUNTIES

Precise leveling by C. H. Semper in 1901-2

From Turlock southeast along Southern Pacific R. R. to Milepost 149		Feet
Turlock, 0.6 mile south of, opposite milepost 128, on east edge of highway; iron post stamped "103 B"-----		103.364
Turlock, 3.6 miles south of, 5 feet north of milepost 131, west side of track; iron post stamped "111 B"-----		111.714
Milepost 134, 27 feet south of; iron post stamped "116 B"-----		116.875
Milepost 137, 5 feet north of, west side of track, at fence line; iron post stamped "129 B"-----		129.238
Livingston, in front of station; top of rail-----		131.0
Livingston, 2.5 miles south of, opposite milepost 140, east side of track, at edge of highway; iron post stamped "142 B"-----		142.265
Arena, in front of station; top of rail-----		140.9
Arena, 2.9 miles south of, opposite milepost 143, east side of track, at fence line; iron post stamped "154 B"-----		154.312
Atwater, in front of station; top of rail-----		148.1
Buhach, 60 feet north of station, opposite milepost 146; iron post stamped "153 B"-----		153.111

	Feet
Buhach, in front of station; top of rail-----	155.8
Milepost 149, opposite, east side of track, at edge of road; iron post stamped "154 B"-----	154.807

VOLTA QUADRANGLE

[Latitude 37°-37° 07' 30"; longitude 120° 52' 30"-121°]

MERCED COUNTY

Primary leveling by Roscoe Reeves in 1916

From west border of quadrangle east along highways to point near Los Banos

	Feet
T. 10 S., R. 9 E., 2 telephone poles west of northeast corner of sec. 19, in telephone pole 38-12; spike painted "294" on pole-----	294.03
T. 10 S., R. 9 E., southwest corner of sec. 15, in telephone pole 39-14; spike painted "259" on pole-----	259.14
T. 10 S., R. 9 E., southwest corner of sec. 14, in telephone pole 40-14; spike painted "234" on pole-----	234.53
T. 10 S., R. 9 E., southwest corner of sec. 14, north edge of road; iron post stamped "233"-----	233.085
Los Banos, 5 miles west of, west side of canal, in telephone pole 41-18; spike painted "148" on pole-----	147.80
T. 10 S., R. 10 E., southwest corner of sec. 18, in telephone pole 42-13; spike painted "125" on telephone pole-----	125.63
T. 10 S., R. 10 E., 0.25 mile west of southeast corner of sec. 18, in northwest corner of crossroads; iron post stamped "129"-----	129.695
Los Banos, 2.5 miles west of, 300 feet west of Los Banos Creek, in telephone pole 44-8; spike painted "136" on pole-----	135.98

From point near center of quadrangle north along highways to Volta (spur line leveled twice to determine elevation of reset post at Volta)

Volta, 2 miles south of, north side of canal, in telephone pole; spike painted "122" on pole-----	122.51
Volta, 0.75 mile south of, 600 feet south of T road east, in front of red house, in telephone pole; spike painted "110"-----	110.80
Volta, in front of station; top of rail-----	103.8
Volta, 1,230 feet north of station, west side of track, 15 feet north of telephone pole; iron post stamped "101"-----	101.402

NOTE.—This post is 250 feet west of site of old bench mark described in Bull. 481, p. 85, and removed in 1916, the corrected elevation of which was 101.380.

Los Banos, 1.5 miles west of, at T road south, in telephone pole 45-13; spike "125" painted on pole-----	124.74
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