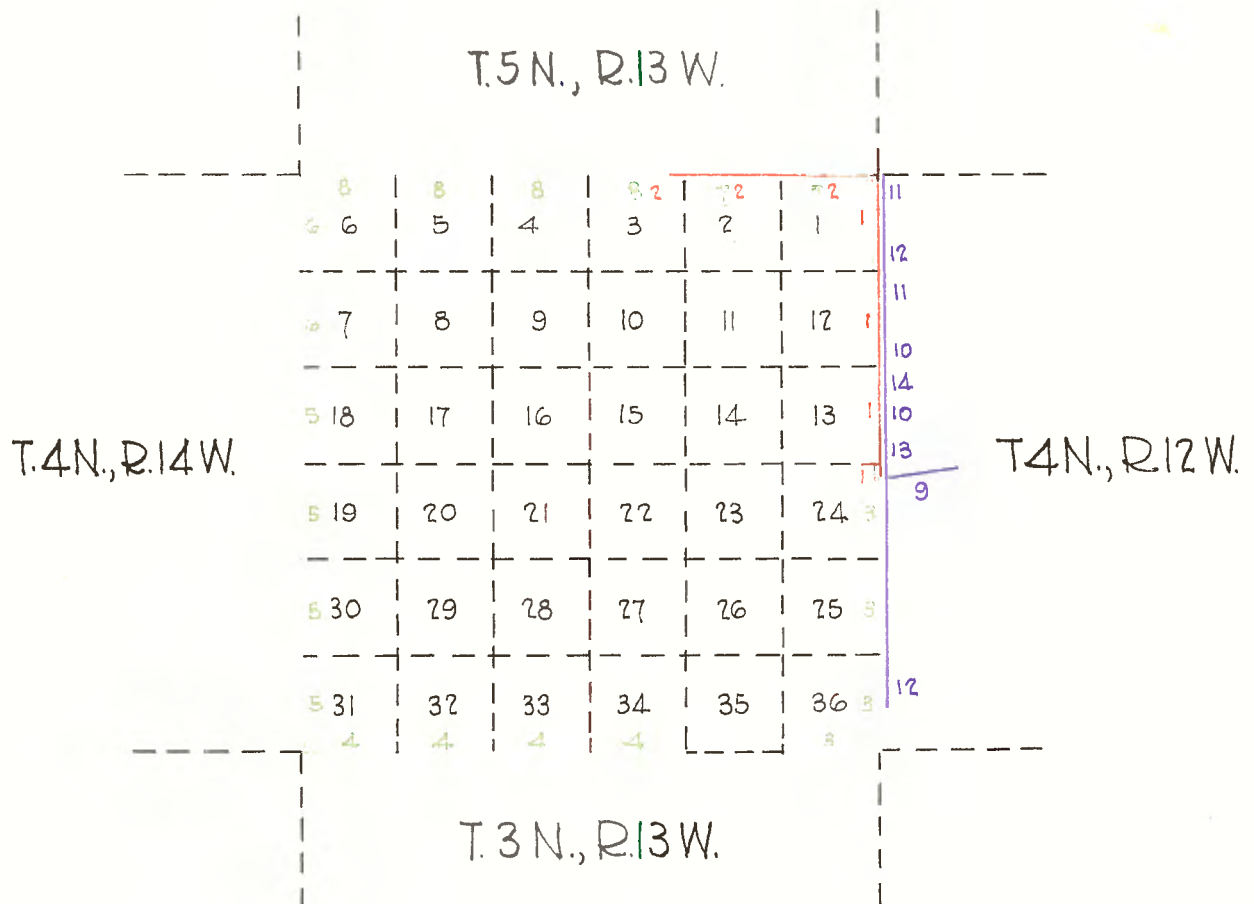


Subdivision

Copied from Notes loaned by
Mr. S. H. Douglass, Saugus.



HENRY HANCOCK	1856
W. T. NORRIS	1879
C. A. ENSIGN	1900

E.B. T.4N.,R.13 W.S.B.M.

Commence the survey and subdivision of Fl. Tp.4N.,R.13 W.,on the 29th.day of April,1856,at cor.of Tps.4 and 5 N. Rs.12 and 13 W., from which cor.I run south on the ~~E~~ W.B.of the Tp.and E.B.of sec.1.
Var,14°6'E.

10.46 To high ledge and make a cross on same,from which I run E.on offset 1.00 ch.to Sta.2;thence S.on offset line 1.54 lks.and W. 100 lks. to true line and measure N.90 lks.to ledge therefore we have

11.10 To ledge and pile of rocks on the top of a hill,ascent 200 ft.
40.00 Set a post for a $\frac{1}{4}$ sec.post,drove a charred stake and raised mound with trench and pits as per inst.on the S.face of hills,

47.00 To center of ravine 1 ch.wide course W.
61.00 To N.bank of another ravine course W.
62.50 To center of same and base of a hill on the E.
80.00 Set a post for a cor.of secs.1,6,7, 12 drove a charred stake and raised a mound with trench and pits as per inst.
Land mountainous,soil 3rd.rate and rocky

South on E.B.of sec.12.

Var.14°6'E.

10.00 To top of W.slope of mountain lobe some 3 chs.W.of summit of same .
21.00 To center of a rocky ravine 15 lks.wide course W. Descend 250 lks..
27.50 To top of W.slope of mountain spur.
34.50 To gulch 50 lks.wide course S.W.
40.00 Set a post for a $\frac{1}{4}$ sec.cor.drove a charred stake and raised a mound of rock on W.face of mountain.
44.00 Across ravine 50 lks.wide course W.
51.50 To top of high lobe.
63.00 Leave E.face of same.
80.00 Set a post for cor.to secs.7,12,13,18 drove charred stake and raised a mound with trench and pits as per inst.
Land mountainous, soil 3rd.rate.

South on E.B.of sec.13.

Var.14°6'E.

.50 Across gully 15 lks.wide course W.with water.
19.50 To top of ridge course E.
25.00 Across ravine 50 lks.wide course W.
36.50 Across another " " " " "
37.50 To top of W.slope of hill ascent 50 ft.
40.00 Set a post for a $\frac{1}{4}$ sec.cor.,drove charred stake and raised mound with a trench and pits as per inst.
42.00 To top of ridge course W.
80.00 Set a post for cor.to secs.13,18,19,24,drove a charred stake,and raised mound with trench and pits as per inst.
1st. $\frac{1}{2}$ mile mountainous; last $\frac{1}{2}$ undulating.
Soil 3rd.rate.

South on E.B.of sec.24.

Var.14°6'E.

5.00 To N.bank of canon
5.50 Into same,course N.W.
7.15 A cottonwood 5 in.dia.
7.65 Across a stream 5 lks.wide course N.W.
8.00 Drove stake on S.side of canon and at base of the high Mts.range on the S.,beyond which it is impracticable to measure.

Vol.163-6

April 29, 1856

B.G.J.

Henry Hancock.

S.B. T.5N., R.13W. S.B.M.

Commenced April 28, 1856 at the cor. of Tp. 4 and 5 N., Rs. 12 and 13 W. the same having been established last Oct. in traversing the La Solidar Pass. West on the S.E. of sec. 36.

W

Var. 14° 6' E.

- 1.26 To cedar 10 in. dia. on top of a bank ranging S.E.
29.00 Enter La Solidar Pass and a dry arroyo 8 chs. wide course S.W.
40.00 Set a post for a $\frac{1}{4}$ sec. cor., drove a charred stake and raised a mound with trench and pits as per inst.
- 50.00 To base of Mt. Parkinson and leave dry arroyo; bottom land.
80.00 Set a post for cor. to secs. 1, 2, 35 and 36, drove a charred stake and raised a mound with trench and pits as per inst.
1st. $\frac{1}{2}$ mile sandy; last an inclined plain of 2nd. rate soil.

West on S.E. of sec. 35.

Var. 14° 6' E.

- 22.00 Leave inclined plain.
31.00 To top of S. slope of hill, extending some 20 chs. N. ascent 300 ft.
38.00 To W. base of same.
40.00 Set a post for a $\frac{1}{4}$ sec. cor. on the N.E. face of Mr. Parkinson
Drove a charred stake and raised mound of rock and earth with trench and pits, shallow.
- 75.00 To top of the N.E. slope of Mt. Parkinson
80.00 Set post for cor. to secs. 3, 2, 34, 35 18 in deep; drove a charred stake from which brs. a
Cedar 12 in. dia. S. 12 E. dist. 63 lks.
Another Do. 4 in. dia. N. 30° W. dist. 20 lks.
Land mountainous, soil 3d. rate.

West on the S.E. of sec. 34.

Var. 14° 6' E.

- 6.00 Set post in an irregular mound of rock on the crest of a ridge course N., beyond which it is too mountainous to measure further and from which the highest loxe of Mt. Parkinson brs. S. 19° E. distant some 20 chs.

Vol. 163-7

G.V.J.

Apr. 28, 1856.

Henry Hancock.

--- E.B. T.4N., R.13 W. S.B.M.

As this Tp. has been partially surveyed under a previous contract, I commence the survey from the established cor. to secs. 13 and 24, on E.B. of Tp. which I find standing as per description furnished me. The mound being somewhat destroyed, I rebuild same, making it $4\frac{1}{2}$ ft. in dia. at base by 2 ft. in height and run South on a true line on E.B. of sec. 24.

Var. 14° 25' E.

- 40.00 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia. at base by 2 ft. in height for $\frac{1}{4}$ sec. cor.
47.75 Cross dry gulch 25 lks. wide course N.W. & ascend.

80.00 Set a post 4 in.sq.1 ft.in earth 1 ft.above stone mound $4\frac{1}{2}$ ft.in dia.at base by 2ft.in height for cor.to secs.24,25.
Land mountainous,soil 2nd.rate.
Timber & undergrowth of oak & cedar.

South on a true line on E.B.of sec.25.

Var.14°25'E.

Descend.

19.25 Cross dry gulch 18 lks.wide course N.W.& ascend.
40.00 Set post 4 in.dia.1 ft.in earth 1 ft.above stone mound 4 ft.in dia.
at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.
53.70 Cross near head of gulch course N.E.
80.00 Set post 4 in.sq.1 ft.in earth 1 ft.above stone mound $4\frac{1}{2}$ ft.in dia.
at base by 2 ft.in height for cor.to secs.25 & 36.
Land mountainous,soil 3rd.rate.
Timber & undergrowth of pine,oak & cedar

South on E.B.of sec.36.

Var.14°25'E.

Ascend.

22.50 Summit of ridge,then along same
40.00 Set post 4 in.dia.1 ft.in earth 1 ft.above stone mound 4 ft.in dia.
at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.,from which brs.a
Pine 14 in.dia.N.82 $\frac{1}{2}$ °E.43 lks.dist.
49.80 Leave ridge bearing S.E.& continue along S.W.slope.
75.00 Summit of main divide bet.waters of Santa Clara & San Fernando
valley brs.E.& W.
80.00 The cor.to Tps.3 & 4 N.,R.12 & 13 W.falling on steep hill,a place
not sutiable to build a mound,I mark a yellow pine 36 in.dia.on S.
slope of Gleason mountain 10 chs.E.for witness post to cor.to Tps.
3 and 4 N.,Rs.12 & 13 W.fromwhich brs.a
Yellow pine 36 in.dia. S.17 $\frac{1}{2}$ °E.27 lks.dist.
Land mountainous,soil 2n.rate.
Timber & undergrowth of pine,oak & cedar.

S.B. T.4N.,R.13 W.S.B.M.

West on S.B.of sec.36.

Var.14°25'E.

Along S.slope of main divide.

15.00 Enter open pine timber & through same.
40.00 Set post 4 in.dia.1 ft.in earth 1 ft.above earth mound 4 ft.in dia.
at base by 2 ft.in height and dug pit 24 x 18 x 12,8 lks. N.for $\frac{1}{4}$
sec.cor.from which brs.a
Pine 24 in.dia.N.20°E.25 lks. dist.
Pine 36 in.dia.S.40 $\frac{1}{2}$ °W.70 lks.dist. ✓
60.00 Summit of main divide & descend.
80.00 Set post 4 in.in sq.1 ft.in earth 1 ft.above stone mound $4\frac{1}{2}$ ft.in
dia.at base by 2 ft.in height for cor.to secs.35,36, 1 and 2.
Land mountainous, soil 3rd.rate.
Timber & undergrowth of pine, oak & cedar.

West on S.B.of sec'.34.

Var.14°25'E.

- 6.50 Summit on main divide,thence along S. slope
40.00 The point for $\frac{1}{4}$ sec.cor.falling on steep side hill,a place not suitable to build mound,I set post 4 in.dia.1 ft.in earth 1 ft.above stone mound 4 ft.in dia.at base by 2 ft.in height 3.76 chs.8.for witness post to $\frac{1}{4}$ sec.cor.
80.00 Set post 4 in.sq.1 ft.in earth 1 ft.above stone mound $4\frac{1}{2}$ ft.in dia. at base by 2 ft.in height for cor.to secs.3,4,33 and 34.
Land mountainous,soil 3d.rate.
Timber & undergrowth of pine,oak and cedar.
-

West on a true line on S.B.of sec.33.

Var.14°25'E.

Ascend

- 7.00 Summit of main divide brs.N.W.& S.E.& descend.
40.00 Set post 1 ft.in earth 1 ft.above stone mound 4 ft.in dia.at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.
Ascend.
51.00 Summit of spur brs.N.E.& S.W.& descend.
80.00 Set post 4 in.sq.1 ft.in earth 1 ft.above stone mound 4 ft. in dia. at base by 2 ft.in height for cor.to secs.4,5,32,33
Land mountainous,soil 2nd.and 3rd.rate
Timber & undergrowth of pine,oak and cedar.
-

Oct.31.1879.

West on S.B.of sec.32.

Var.14°25'E.

Descend.

- 25.25 Cross gulch 20 lks.wide course S.W.& ascend.
40.00 Set post 4 in.dia.1 ft.in earth 1ft.above stone mound 4 ft.in dia. at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.
52.00 Summit of spur brs.N.E.& S.W.& descend.
72.50 Cross deep gulch 30 lks.wide course S.W.& ascend.
80.00 Set post 4 in.sq.1 ft.in earth 1 ft.above stone mound $4\frac{1}{2}$ ft.in dia. at base by 2 ft.in height for cor.to secs.5,6,31,32.
Land mountainous,soil 2nd.rate.
Timber & undergrowth of oak and cedar.
-

West on a true line on S.B.of sec.31.

Va.14°25'E.

Ascend.

- 33.00 Summit of spur brs.N.E.& S.W.& descend.
40.00 Set post 4 in.dia.1 ft.in earth 1 ft.above stone mound 4 ft.in dia. at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.
80.00 Set post 4 in.sq.1 ft.in earth 1 ft.above stone mound 5 ft.in dia. at base by 2 ft.in height for cor.to Tps.3 and 4 N.Rs.13 & 14W.S.B.M.
Land mountainous,soil 2nd.& 3 rd.rate.
Timber & undergrowth of pine,oak and cedar.
-

W.B. T. 4 N., R. 13 W. S.B.M.

North on true line on W.B. of sec. 31 bet. Rs. 13 and 14.
Var. 14°25' E.

Descend.

- 20.00 Enter small valley brs. N.E. & S.W.
26.75 Cross dry gulch 18 lks. wide course S.W. & leave valley
40.00 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia.
at base by 2 ft. in height for $\frac{1}{4}$ sec. cor.
80.00 Set post 4 in. sq. 1 ft. in earth 1 ft. above stone mound $4\frac{1}{2}$ ft. in dia.
at base by 2 ft. in height for cor. to secs. 30, 31, 25, 36.
Land mountainous, soil 2nd. rate.
Timber & undergrowth of oak, pine and cedar.
-

North on a true line on W.B. of sec. 30. Var. 14°25' E.

Ascend.

- 40.00 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia.
at base by 2 ft. in height for $\frac{1}{4}$ sec. cor.
46.50 Summit of main ridge, brs. E. & W. bet. waters of Santa Clara and San
Fernando Valleys and descend.
80.00 Set stone 10x14x16 in stone mound $4\frac{1}{2}$ ft. in dia. at base by 2 ft. in
height for cor. to secs. 19, 30, 24 and 25.
Land mountainous, soil 3 rd. rate.
Timber & undergrowth of pine, oak and cedar.
-

North on true line on W.B. of sec. 29. Va. 14°25' E.

Descend.

- 12.00 Cross gulch 15 lks. wide course NE.
40.00 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia.
at base by 2 ft. in height for $\frac{1}{4}$ sec. cor. from which brs. a
Live oak 12 in. dia. N. 19° W. 79 lks. dist.
52.75 Cross gulch 30 lks. wide course E. & ascend.
80.00 Set post 4 in. sq. 1 ft. in earth 1 ft. above stone mound $4\frac{1}{2}$ ft. in dia.
at base by 2 ft. in height for cor. to secs. 18, 19, 13, 24
Land mountainous, soil 2nd. rate.
Timber & undergrowth of pine, oak and cedar.
-

North on a true line on W.B. of sec. 18. Va. 14°25' E.

Ascend.

- 6.50 Summit of spur brs. N.E. & S.W. then along W. slope of same.
40.00 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia.
at base by 2 ft. in height for $\frac{1}{4}$ sec. cor. in low sag and ascend
46.00 Summit of spur and descend
80.00 The point for cor. to secs. 7, 18, 12 and 13 falling on steep bluff,
in place not suitable to build mound, I set post 4 in. sq. 1 ft. in
earth 1 ft. above stone mound $4\frac{1}{2}$ ft. in dia. at base by 2 ft. in height
3.30 chs. N. on edge of valley of Santa Clara river for witness
post to cor. to secs. 7, 18, 12, 13 from which brs. a
Cottonwood 20 in. dia. N. 1° W. 360 lks. dist.
Cottonwood 24 in. dia. N. 10 $\frac{1}{4}$ ° E. 168 lks. dist.
Land mountainous, soil 2nd. and 3rd. rate.
Timber & undergrowth of pine, oak, cedar and cottonwood.

North on true line on W.B. of sec. 7. Va. 14°25' E.
Descend.

3.30 Enter valley of Santa Clara.
8.00 Cross gulch 20 lks. wide course W.
9.34 Center of S.P.R.R. track brs. E. & W.
12.50 Cross road brs. E. & W. leave valley & ascend.
22.31 Summit of spur brs. N.W. & S.E. & descend.
40.00 The point for $\frac{1}{4}$ sec. cor. falling on steep side hill, a place not
suitable to build mound, I continue N. at
43.27 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in
dia. at base by 2 ft. in height for witness post to $\frac{1}{4}$ sec. cor.
48.00 Cross gulch 22 lks. wide course W. & ascend.
80.00 Set post 4 in. sq. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia.
at base by 2 ft. in height for cor. to secs. 6, 7, 1, 12.
Land mountainous, soil 1st and 2nd. rate.
Timber & undergrowth of pine, oak and cedar

North on a true line on W.B. of sec. 6. Var. 14°25' E.
Ascend.

30.50 Top of high spur brs. N. 35° E. & S. 35° W. & descend.
40.00 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia.
at base by 2 ft. in height for $\frac{1}{4}$ sec. cor.
72.00 Cross gulch near its head course S.W.
80.00 Set post 4 in. sq. 1 ft. in earth 1 ft. above stone mound 4 ft. in
dia. at base by 2 ft. in height for cor. to Tps. 4 & 5 N.
Rs. 13 and 14 W. S.B.M.
Land mountainous, soil 2nd. rate.
Timber & undergrowth of pine, oak and cedar.

Nov. 1-1879.

--N.B.T. 4 N., R. 13 W.S.B.M.

East on a random line on N.B. of secs. 6, 5, 4, 3, 2, 1. Set temp. $\frac{1}{2}$ mile
and mile posts at every 40 and 80 chs. and at 6 miles finding no
trace of cor. to Tps. 4 and 5 N., Rs. 12 and 13 W. as called for in
former survey, I set temp. post and proceed to the cor. to secs. 1, 12,
6 and 7, E. 4 N., bet. Rs. 12 and 13 W. where I find a cedar post,
standing in mound and pits as per description furnished me and run
North on a true line bet. sec. 1 and 6. Var. 14°25' E.

40.10 The $\frac{1}{4}$ sec. cor.
77.15 To a point 3.20 chs. W. of the post for temp. cor. to Tp. 4 and 5 N.,
Rs. 12 and 13 W. in running random line E.
80.00 Set post 4 in. sq. 1 ft. in earth 1 ft. above stone mound 5 ft. in dia.
at base by 2 ft. in height for cor. to Tps. 4 & 5 N., Rs. 12 & 13 W. S.B.M.
Therefore the correction will be 3.20 chs. W. and 47 $\frac{1}{2}$ lks. N. per mile.

From the cor. to Tps. 4 and 5 N. Rs. 12 and 13 W. I run
S. 89°40' W. on a true line on N.B. of sec. 1.

Var. 14°25' E.

Descend.

22.75 Cross S.P.R.R. track course S.W. & N.E.
40.00 After diligent search, being unable to find old cor. I set post 4 in.
dia. 1 ft. in earth 1 ft. above earth mound 4 ft. in dia. at base by 2 ft.
in height and dug pit 24 x 18 x 12, 8 lks. N. for $\frac{1}{4}$ sec. cor.
54.75. Cross road brs. S.W. & N.E.

80.00 I find an old post marked appropriately for this cor. on the ground about 1.50 lks. S.W. but no appearance of mound, I therefore set post 4 in. sq. 1 ft. in earth 1 ft. above earth mound $4\frac{1}{2}$ ft. in dia. at base by 2 ft. in height and dug pit 24 x 18 x 12, 8 lks. dist. at 4 angles for cor. to secs. 1, 2, 35, 36.
Land mostly level, soil 1st. rate.
Timber & undergrowth of oak and cedar.

S. 89°40' W. on a true line on N.B. of sec. 2. Va. 14°25' E.

Ascend.

40.00 After diligent search, being unable to find old cor., I set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia. at base by 2 ft. in height for $\frac{1}{4}$ sec. cor.

55.00 Summit of spur brs. N.E. & S.W. & descend.

80.00 An oak tree 10 in. dia. standing at head of gulch course N.E.
After diligent search, being unable to find old cor. I mark this tree for cor. to secs. 2, 3, 34 and 35.
Land mountainous, soil 2nd. and 3 rd. rate.
Timber & undergrowth of pine, oak and cedar.

S. 89°40' W. on a true line on N.B. of sec. 3. Va. 14°25' E.

Ascend.

7.00 Summit of high spur brs. N.W. & S.E. & descend.

40.00 Set post 4 in. dia. 1 ft. in earth 1 ft. above stone mound 4 ft. in dia. at base by 2 ft. in height for $\frac{1}{4}$ sec. cor.

64.00 Cross gulch 35 lks.wide course S.W.& ascend.
80.00 Set post 4 in.sq.1 ft.in earth 1 ft.above stone mound $4\frac{1}{2}$ ft.in
dia.at base by 2 ft.in height for cor.to secs.3,4,33 and 34.
Land mountainous,soil 2nd.rate.
Timber & undergrowth of pine,oak and cedar.

S.89°40'W.on a true line on N.B.of sec.4. Va.14°25'E.

Ascend.
2.85 Summit of spur brs.N.& S.& descend.
16.50 Cross gulch 24 lks.wide course S.W.& ascend.
28.00 Summit of spur brs.N. & S.& descend.
40.00 Set post 4 in.dia.1 ft.in earth 1 ft.above stone mound 4 ft.in dia.
at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.
80.00 Set post 4 in.sq.1 ft.in earth 1 ft.above stone mound $4\frac{1}{2}$ ft.in dia.
at base by 2 ft.in height for cor.to secs.4,5,33 and 32.
Land mountainous,soil 2nd.and 3rd.rate.
Timber & undergrowth of pine,oak and cedar.

S.89°40'W.on a true line on N.B.of sec.5. Va.14°25'E.

Descend.
10.00 Cross gulch 18 lks.wide course S.& ascend.
23.22 Summit of spur brs.N.& S.& descend.
40.00 Set post 4 in.dia. 1 ft.in earth 1 ft.above stone mound 4 ft.in
dia.at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.
58.75 Cross gulch 40 lks.wide course S.& ascend.
80.00 Set post 4 in:sq. 2 ft.in earth 2 ft.above for cor.to secs.5,6,
31 and 32.
Land mountainous,soil 3rd.rate.
Timber & undergrowth of pine,oak and cedar.

S.89°40'W.on a true line on N.B.of sec.6 Va.14°25'E.

Ascend.
12.50 Summit of spur brs.N.& S.& descend.
40.00 Set post 4 in.dia. 1 ft.in earth 1 ft.above stone mound 4 ft.in
dia.at base by 2 ft.in height for $\frac{1}{4}$ sec.cor.
49.75 Cross dry gulch 18 lks.wide course S.E.& ascend.
61.50 Summit of spur brs.N. & S. & descend.
76.80 The ~~top~~ to Tps.4 and 5 N.,Rs.13 and 14 W.
Land mountainous,soil 3rd.rate.
Timber & undergrowth of pine,oak and cedar.

Vol.162-34.

Nov.3-1879.

G.B.J.

W.H. Norway.

W.B. T.4 N., R.12 W.S.B.M.

Pursuant to special inst.given me by the Surveyor General, I run an offset S.B.or Auxiliary base E.& W.through the middle of the Tp.(T.4 N.,R.12 W.) as follows:

At a point 2.39 ft.S. of the cor.of secs. 13 and 24 in the E.B.of the Tp.in lat.34°25' N.Long.118°05'W.from pointing N.,over the line run for the true meridian,I turn off an angle of 89°58'towards the W.and now run N.89°58'W.on a secant through the Tp.as a random line for the required S.B.setting temp. $\frac{1}{4}$ sec.and sec.cor.at intervals of 40 chs. Sept.17.

At 477.60 chs.intersect the W.B.of the Tp. 416.2 lks. S.of cor.to secs.13 and 24,in T. 4 N.,R.13 W. Said cor.is the post of iron and cement lately set in the ground and a mound of stones with pits thereat,having the letters and figures thereon to designate the cors.to secs.13,18,19 and 24 bet.Rs.14 1/2 and 13 W.on Tps.4 N.,and further marked S.G.F.R. 41 on its N.E. face for post numbered 41 in the bdy.of the San Gabriel Forest Reservation. I verify the position of this iron post,by reference and evidence had upon my former surveys at this cor.,to be that of the original cor.established by Dep.H.Hancock,as described by the Surveyor General.

Sept.17th:to 23,1896.

Sept.23. Having made the measurements of this random line twice with practically the same results,and as the falling from the old cor.exceeds the limits prescribed by the manual,for closing upon it,I establish the true bdy.bet.the N.& S.halves of the Tp.on a parallel of latitude and mark the same as an Auxiliary Base as follows:

N. 2.22 ft.from the secant in its said intersection of the W.B. of the Tp.,set a stone 24 x 16 x 12 ins. 20 ins.in the ground and mound of stones at the edge of the mesa,the brow of E.bluff of Arrastra creek canon,for closing cor. to secs.18 and 19 cut C.C.and 6 grooves on the E.and 3 grooves on each the N.& S. faces;raised a mound of stones 3 ft.base 2 ft.high N.of cor. from which a

Cottonwood 36 in.dia.(in the bottom of the canon) brs.

N.69°50'W.145 lks.dist.

Marked T. 4 N.,R.13 W. S.24 B.T.

Black oak 6 ins.dia.(on slope of bluff) brs. S.54°W.

117 lks.dist.

marked T.4 N.,R.13 W.,S.24 B.T.

Said cor.to secs.13 and 14 stands N.413 lks.dist.

No trees stand near this C.C.in this Tp.

From said point of intersection at 2.22 ft.S.of this cor.I run and note

N.89°58'E.on the secant sec.18.

At the intersection of the secant and W.B.of the Tp. 2.22 ft.S. of the closing cor.to secs.18 and 19,already described, from the back sight over the secant,I turn off the angle 89°56'to the left as given in the tables of the manual for our North. From said closing cor.I now run North

Va.14°15'E.

On the true E.B. of sec. 24, T. 4 N., R. 13 W., over mesa through dense brush.

- 4.13 The iron post No. 41 S.G.F.R. bdy. and cor. to secs. 13 and 24 already described.
Land even mesa, soil stony, loam, 2nd. rate. +30
No timber, on mesa; brushy land 4.13 chs.

North on a random line for E.B. of sec. 13, T. 14 N., R. 13 W.
Var. 14° 15' E.

- 39.05 Fall 88 lks. E. of the $\frac{1}{4}$ sec. cor.
76.07 Int. N.B. sec. 18, at 2.20 chs. E. of C.C. secs. 7 and 18 of T. 4 N., R. 12 W.
Hence the W.B. of sec. 18 is the sum 4.13 chs. of the E.B. of sec. 24 and 76.07 chs. of the E.B. of sec. 13, 80.20 chs. total.
79.50 Fall 232 lks. E. of cor. to secs. 12 and 13, described at page 39 of this subdivision.
From said cor. I run on true course of E.B. of sec. 13,
South 2° 03' E.

Var. 14° 15' E.

Through open brush.

- .30 Bottom of dry arroyo 4 ft. deep 24 lks. wide in ravine course SW.
1.90 Point of spur bearing N.W. +40
3.00 Ravine course N.W. -40
3.43 C.C. for secs. 7 and 18, described at page 39 subdivisions.
21.00 High ridge, spur bearing W. +170
26.25 Ravine arroyo, course N. of W. -100
32.75 Ridge of spur bearing W. +50
34.50 Ravine course W. -25
37.00 Ridge of spur bearing N. of W. +40
39.10 Ravine course W. -40
40.45 The established $\frac{1}{4}$ sec. cor. in E.B. of sec. 13, T. 4 N., R. 13 W. a late post of manzanita in a mound of stones and marked $\frac{1}{4}$ S. on W. and S.G.F.R. on E. faces, with the old post set alongside, also a mound of stones alongside. +20
~~11.65~~ Thence S. 1° 16' E.
1.65 High ridge W. slope of Mt. +60
3.30 Ravine course N. of W. -30
7.05 Ridge, low divide bearing E. & W. +40
10.55 Ravine course S. of W. -50
13.30 Spur, ridge bearing W. +20
21.15 Ravine (wash 120 lks. wide course W.) -40
22.35 Spur bearing S. S. W. +10
27.05 Road bearing E. & W. in wash 60 lks. wide 4 ft. deep course W. -40
28.55 Spur bearing N. of W. +30
33.55 Ravine course W. -25
36.55 Point of spur bearing W. +15
37.05 Ravine course W. -15
38.35 Ridge of spur bearing W. +35
39.05 The iron post cor. secs. 13 & ~~14~~²⁴ in N. edge of brushy mesa -10
Land broken and brushy foot hills and spurs.
Soil light loam, 2nd. rate. No timber.
Mountainous land 79.50 chs.

North on a random line to E.B. of sec. 12, T. 4 N., R. 13 W.
Var. 14° 15' E.

- 39.17 Fall 23 lks. E. of $\frac{1}{4}$ sec. cor.
76.80 Int. the N.B. of sec. 7 at 111 lks. E. of C.C. for secs. 6 & 7, hence the length of the W.B. of sec. 7 is the sum of 3.43 chs. of E.B. sec. 13 & 76.80 chs. of E.B. of secs. 12 making 80.23 chs. total.

78.10 Fall 114 lks.E.of cor.to secs.1 and 12,described at page 5,
subdivisions,whence from said cor.I run
on the true course of E.B.sec.12, S.1°20'E. Var.13°45'E.
Ascending the mpuntain through cedar openings.
1.30 C.C.for secs.6 and 7,described at page 44 of subdivisions.
3.75 Brow of broad mountain top. Over mesa inclining to W.
11.00 Descend head of spur bearing W.S.W.
23.00 Foot of slope-ravine from S.E.to W. Ascend -225
27.00 Ridge of spur bearing W. Descend +100
38.70 Gully,course S.W.
38.93 The $\frac{1}{4}$ sec.cor.in E.B.of sec.12, T.4N.,R.13 W.a post recently
set in a mound of stones and earth marked $\frac{1}{4}$ S.on W. and
S.G.F.R.on E.face.
Thence S.0°20'E.
3.42 Arroyo in bottom of valley course W. -175
11.07 Ridge bearing N.E.& S.W. +150
18.07 Head of valley in mountain side,course S.E. - 75
21.07 Ridge in E.end of mountain about 2.50 chs.E.of a peak +25
25.07 Gully in mountainside course S.E. -130
Through tall greasewood
26.57 Ridge of spur bearing S.E. +20
39.17 Cor.to secs.12 and 13, T.4 ~~E.~~^{N.},R.13 W.
Land mountainous,soil 2nd.and 3rd.rates.
No timber except spare stool cedar
Mountainous land 78.10 chs.

North on a randon line to the E.B.of sec.1, T.4 N.,R.13 W.
Var.13°45'E.

38.94 Fall 23 lks.E.of $\frac{1}{4}$ sec.cor.

Oct.17,1896

78.15 Int.N.B.of the Tp.at 63 lks.E.of the cor.to Tps.4 and 5 N.,Rs.12
and 13 W.an iron post filled with cement,and marked by figures
and letters E.thereon;T.5 N. S.31 on N.E.,S.G.F.R.
42 R.12 W. S. 6 on S.E. T.4 S.1 on S.W.and R. 13 W. S. 36 on N.W.
faces and set in a mound of earth and stones with pits.
The length of the W.B.of sec.6 is the sum of 1.30 chs.of E.B.of
sec.12,and 78.15 chs.of E.B.of sec.1,making 79.45 chs.total
From the said Tp.cor.I run on the true course of E.B.sec.1,
T.14 N.,R.13 W., S.0°35'E.

Var.14°45'E.

.15 Road brs.E.& W. In W.edge of wash of Soledad Canon at foot of
bluff and mountain.
.50 Top of bluff and cross wire fence bearing E.& W. +20
at 30 lks.E.of N.W.cor.of inclosure,ascend mountain.
1.15 Old trail bears E. & W.on hillside.
9.80 Foot of perpendicular rock dike 20 ft.high in side of mountain
bearing nearly E.& W.
(The conditions in the course of the random permit of measuring
the dist.without offsetting by stepping the chain down with plumb
line).
9.85 Top of rock dikes. +150
12.00 Rock peak and summit of mountain brg.N.W.& S.E. +50
18.00 Brow of S.W.slope of mountain -40
Descend rocky slopes.
39.21 The $\frac{1}{4}$ sec.cor.in E.B.sec.1,T.4 N.,R.13 W.a new post marked $\frac{1}{4}$ S.
on W.and S.G.F.R.on E.faces,set together with the old $\frac{1}{4}$ sec.post
in a mound of stones -100
Thence S.0°20'E.

Var.14°E.

Continue descent of mountain.
 7.94 Foot of mountain-ravine from N. of E. to N. of W. wash 10 lks. wide --60
 8.54 Cross wire fence bearing S. & E. on N. & enter Houser's inclosure
 10 50.55 Houser's road to Acton bearing N. of W. & S. of E. His house brs.
 S. $48\frac{1}{4}^{\circ}$ E. dist. 3.65 chs. from this point.
 18.94 Cross wire fence N.W. & S.E. at top of bluff o leave enclosure &
 descend. +40
 20.79. Enter bottom of ravine (course N. of W. below) & up same. -40
 22.29 Leave ravine which comes from E. & ascend mountain, through cedar
 (stumps) and scattering oak brush.
 38.94 The cor. to secs. 1 and 12 on the N.E. slope of Mt. -200
 Land mountainous, soil N. $\frac{1}{2}$ mile rocky and poor 4th. & 5th. rate
 S. $\frac{1}{2}$ mile, 3rd. rates. and 4th
 Timber considerable stool cedar in S $\frac{1}{2}$ but has been largely
 removed. Mountainous land 78.15 chs.

Sept. 14-1896.

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 RETRACEMENT OF
 Part of E. B. T. 4 N., R. 13 W. S. B. M.

June 13, 1900

Not being able after diligent search of the ground in the vicinity of the cor. (from which the brush had recently been burnt) to find any marks of the cor. to secs. 24 and 25, T. 4 N., R. 13 W. as described by the Surveyor General, and as the topography written in the field notes of the Sep. Surveyor (W. N. Norway) does not agree with the ground N. of S., I go to the summit of Mt. Gleason and seek the $\frac{1}{4}$ cor. on the E. B. of sec. 36, shown by more recent surveys of the Eagle and Last Chance Mines, to exist. I find a pine post marked $\frac{1}{4}$ S. W. C. in a good mound of stones, from which a pine tree 22 ins. dia. marked $\frac{1}{4}$ S., B. T. brs. N. $82\frac{1}{2}^{\circ}$ E. dist. 43+ lks. The origin and signification of the "W. C." on the post, which, also is shorter than described in the filed notes furnished me, are unknown to me, but the presence of the marks and age of the cuts upon the Wit. tree, confirm this stake and mound as the true $\frac{1}{4}$ sec. cor. sought. Set a stone 26 x 8 x 5 ins. marked $\frac{1}{4}$ on E. face in the center of the mound of stones, and in the surface of the ground, with the old stake and rebuild and enlarge the mound around them. This cor. is near the top of the steep valley sloping W. N. Wly. down to the Red River Springs, in sec. 36; the said wit. tree stands on the ridge of the narrow divide lying N. & S. and situate about 12 or 15 chs. N. N. E. from the highest point of the (W) Mt. I find points on the N. brow of the Mt. in the alignment of the said $\frac{1}{4}$ sec. cor. and the established cor. to secs. 13 and 24, viz. The iron post set as such cor. and as a cor. of the S. G. Forest Reservation, which I can sight with my transit; by referring to the established line bet. secs. 18 and 19, the bearing of the range line is found to be N. $0^{\circ}20'$ E. Hence from the $\frac{1}{4}$ sec. cor. I run in said course N. $0^{\circ}20'$ E. to retrace the bdy. bet. the T's. 4 N., Rs. 12 and 13 W. S. B. M.

Va. $14^{\circ}30'$ E.

1.90 Ascend thro. scrubby oak and thorn brush.
 Top of curving ridge, coming from said witness tree; at 10 lks. E. of a "blow out" of rocks forming the apex of a low hill on the divide and brow of the steep slope of the Mt. Wly. to the Springs along a brushy ridge.

4.00 The ridge departs to the W. of this course to a shoulder of the high Mt. whence a long high spur runs to the N.W. Begin to descend steep slopes facing N. and leave thorny scrub for open brush, with occasional trees on the side of the Mt.

Note: The description given by the Surveyor General makes the point of leaving this ridge (i.e. the beginning to follow the ridge as run, going (south) apparently at 17.50 chs. N. of the $\frac{1}{4}$ sec. cor. The topography entered in the original field notes, is meagre for the changes over this line, nor are the points noted especially remarkable among the others; nor do the "descend" and "ascend" noted at the sec. cors. apply to the ground with any meaning.

5.50 Triangulation point "A" from which a flag at the $\frac{1}{4}$ sec. cor. bet. secs. 18 and 19 (given at 37.60 chs. E. of the C.C. to secs. 18 and 19) brs. N. $11^{\circ}30'$ E.
Hence we have ----- log 37.60 chs. ----- 1.575188

	Log. sin. $78^{\circ}30'$	9.991193
	Comp. " $11^{\circ}10'$	0.712952
and 190.25 chs. + Log.	2.279333	
Add 5.50 " run to \triangle "A"		
and 4.13 " from C.C. to cor. 13, 24		

Result 199.88 chs. from the $\frac{1}{4}$ sec. cor. of sec. 36 to cor. to secs. 13 & 24, whence, find the proportionate length of a mile (80.00) chs. to be 79.95 chs.

From \triangle A measure +4.70 chs. slope 31° = hor. dist. +4.02

Just W. of a point of rocks 10' high

Enter gully descending N.

Leave same turning N.E. forming the inclosing angle of slopes facing N. & E. -225

Thence along the E. slope of the Mt. spur which is broken by numerous deep channels descending E. and thro. thick brush.

Note: Tho. a chain was run over this line, the country is so broken and the brush being indifferently cut away, the results were used only to approximate the position of the sec. cor.

40.00 Search for cor. to secs. 25 and 36, without finding any trace of same. There is no appearance that fires have run over this vicinity, nor are there indications that lines of survey have been cut to this ground, and it is not believed that any cor. has been regularly located hereabouts.

June 13-1900

From the point of intersection of the S.B. of sec. 19, of T. 4N., R. 12 W. with the Tp. bdy. aligned from the $\frac{1}{4}$ sec. cor. in sec. 36, and the cor. to secs. 13 and 24 as described foregoing, I run the W. bdy. of sec. 19, being a part of the Tp. Range line as follows N. $0^{\circ}20'$ E.

.20 Across dry arroyo 10 lks. wide course W. Ascend bluff,
1.70 Top of bluff bearing E. & W. +12
2.00 Cross the Hansen, Kelly road brg. E & W. (this is the Kelly trail, made passable for wagons, from the Arrastra Canon road to some point a little above the S. line of sec. 19)
Enter burnt area, and descend easy slopes into head of gulches running N.

- 3.64. Triangulation point "B" from which the $\frac{1}{4}$ sec. cor. bet. secs. 18 and 19, (given at 37.60 chs. E. of the C.C. to secs. 18 & 19 and which is the same base used from the triang. point (Δ A) on Mt. Gleason brs. N. $26^{\circ}28'E$. --- Hence
- | | |
|------------------------|-----------------|
| Log 37.60 chs. | 1.575188 |
| " sin. $63^{\circ}32'$ | 9.951917 |
| Comp do $26^{\circ}8'$ | 0.356092 |
| And 76.42 chs. = log | <u>1.883197</u> |
- Add dist. from C.C. 18-19 to old cor. to secs. 13, 24, which is given 4.13 chs. by Surveyor Gen., and the total dist. found from Δ B to E. bdy. of sec. 24 is 80.55 chs., the proportionate length of the E. R. of sec. 24 is found as preceding to be 79.95 chs. of this measurement; thence Δ B is too far S. and thence I lay off 60 lks. $N. 0^{\circ}20'E$. and at
- 4.24 Set a stone 18 x 6 x 6 ins. 12 ins. in the ground bounded by stones on an Ely. slope, to re-establish the cor. to secs. 24 and 25, of T. 4N., R. 13 W., marked with 2 notches on S. and 4 notches on N. edges, and raised a mound of stones 2 ft. base and $1\frac{1}{2}$ ft. high at W. side. (This point fell upon a gathering of stones having some resemblance to a partially obliterated cor. which considering the character of secs. 24 and 19, it is more reasonable to suppose would not have been omitted here, but I find no point of stake in the ground or other facts to clearly identify it as the original cor. The brush having been burned away has made it practicable to observe the cor. described, if present).
Along the E. base of a flat hill at about 4 chs. W. of Arroyo in a valley running N.
- 42.50 Foot of N. slope of hill, into arroyos and washes, course N. NE.
Enter brush -50
- 44.00 Search for E. $\frac{1}{4}$ sec. cor. of S. 24 without avail.
Over mesa land broken by deep arroyos or water channels.
- 62.50 Winding branch of Arrastra Canon, 12 ft. deep crs. N. N. W.
- 72.00 NE. bluff of same H. Hansen's cabin stands E. about 5.00 chs. dist. on a small plat of bottom land, in Arrastra Canon, which he has improved.
- 74.80 Across brushy mesa to bluff of Arrastra creek brg. E. & W.
- 76.55 Foot of bluff into creek, crs. W. about 400 chs. ~~about~~ forks;
small stream of water running--- *above*
- 77.05 N. bank of creek 6 ft. high +6
- 77.80 Cross road N. by W., & S. by E., 20 lks. W. of Hanson's road gate.
- 78.85 Across bottom brg. N. of W. and soon bends to N., ascend stony bluff
- 79.85 Top of same, brush recently burned away +15
Along the N. margin of stony mesa
- 80.06 Fall 2 lks. W. of apex of stone set for C.C. to secs. 18 and 19, which is 4.13 chs. S. of cor. to secs. 13 and 24, as recorded in survey of 1896
Land broken and stony, soil 3rd. and 4th. rates. No timber.

June 15, 1900

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C. A. Ensign

B. G. J.

U. S. Dep. Sur.