PUEBLO LINES

F.B. 55

TRANSIT BOOK.

12

Hodge & Barbeck
Booksellers

Return to City Engineers Office
City Hall, San Diego, Cal.

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes.	Lks.	Minutes.	Lks.	Minutes.	Lks.
1	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

PUBLISHED BY

EDWARD DENNY & CO.

DRAWING PAPER & MATERIAL, MATHEMATICAL INSTRUMENTS, ETC.,

STATIONERS AND PRINTERS,

SAN FRANCISCO, CAL.

Table for Running on Slopes.

In the following table the first column shows the angle, the second, the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle.	Cor. in links	Angle.	Cor. in links.	Angle.	Cor. in links.	Angle.	Cor. in links
°		°		°		°	
4	0·24	11	1·88	18	5·14	25	10·54
5	0·38	12	2·24	19	5·76	26	11·26
6	0·55	13	2·63	20	6·42	27	12·24
7	0·76	14	3·06	21	7·11	28	13·37
8	0·98	15	3·53	22	7·85	29	14·34
9	1·24	16	4·02	23	8·64	30	15·47
10	1·55	17	4·56	24	9·47	35	22·07

55
Return to City Engineers Office
City Hall, San Diego, Cal.

Index Book 55

Pueblo Lot 1100	2-5
Middletown Add Blks & Nos 29, 30, 31, 32	6
Unnumbered lot bet 121 Middletown and Old Town	11
Pueblo Lot A	14

Survey of a portion of Pueblo

2 Survey of a portion of Pueblo Lot 1100 (2

5

+67 1/2 of 1100 tall white stake

4

3

2

1

S 60 35' W

+89.1 A. 90° 0' Left NE cor 1100 stake in mound of rocks.

5

4

3

2

N 29° 25' W

1

0

Begining at a large stone with cross cut in top being the N.W. cor of Pueblo lot 1103 run as follows

Hamlin { Acton, Williams, Hensley

July 16 1890

S 17° 55' W

+ 18.3 D 80° 37' Left North corner Plg of Old Town

5

4

3

2

S 12° 35' W

1

5 C 9° 37' Left Set Plg.

4

3

2

S 22° 05' W

1

+ 33.3 B 38° 25' Left N.W. of 11.00 Tall white stake in mound of Rocks.

9

8

7

6

3	G	0° 24' Right	N 60° 30' E	△ P29
2				
1			N 60° 05' E	
+ 30.7	F	41° 26' Right		△ plg. (!) Jones says SW. cor of 1100.
4				
3				
2			N 180° 35' E	
1				
+ 75	E	93° 21' Left		P29 E center of Gaines St. on N E line of Old Town.
6				
5				
4				
3				
2				
1				

+78.9	I					N.W. cor of 1103.0
5						
4						
3						
2			N 24° 10' E			
1						
+62.4	H	36°	14' Left		1/2 of 1100	Tall white stake. SW cor of SE 1/4 of 1100 = Sta 106 + 93 on Military Road.
1						

+47 90° 28' Left

12

11 + 12

10 + 62

+ 62

8 + 12

6 + 12

+ 62

+ 62

5

4

3 89° 30' Left

2

1

0 = Mon 1 9° 0' Right Set up at Mon 1 Middle Town Div line B.S. to South cor of Old town. N 22° 0' E

+90	90° 0' Left		□ mon i MT [illegible]
24			
23			
22			
21			
20			
19			
18			
17		S 22° 0' W	
16			
+47	89° 29' Left		□ large stake N cor of lot.
15			
14		N 68° 30' W	
13			

8

Sta	Vert Angle	Stadia Reading	Hor. dist.	
+50	+4° 0'	1.41		Tall stake
+41.9	+2° 30'	0.975		tall stake
8				9.997746 log cor 5° 50'
+11.95	+5° 50'	1.30		9.995490
7				2.113943 log 130.
				9.995490
				2.109433 = 128.7
				1.25
				129.95
				711.95
				841.90
+50				
6				
+50				
5				
+15.2	+13° 40'	3.13		
4				
+50				
3				
+50				
2				
+50				
1				
+50				
+14				
0	-0° 45'	4.18		

No Good

No Good

N 22° 0'

Δ S.D. Ave

Stake marked Witherbee St

Blk 546.

Stake in stone Md. ⊙ cor of unnumbered lot

Set up on Mon 1 Middle town div line B S to S cor of old town

Sta	Vert Angle	Stadia Reading	Hor dist		
24					
23					
22					
21					
+44.2	-1° 0'	7.36			S cor of Blk 557.
20					
19					
18					
17					
16					
15					
14					
13					
12					
+98.05	-1° 0'	8.45			stake
11					
10					
9	+4° 30'	3.46			

No Good

No Good

35.308
20.442
1486.6

1500
200
1700
1486
214

9.998659
2
5.997318

2.539076
9.997318
2.536494 = 344.9
1.25
346.15
841.9
1198.05

+57.5				intersecting NE line of old town (?)
37	16° 18'			
+20.7	-16° 30	1.41		
36				
+30.8	-9° 15'	0.91	9.997053 / 5594106	
35				
34			2.324282 / 9.994106 / 2.318388 = 208.1 / 1.2 / 205.3	
+21.5	-6° 40'	2.11		
33				

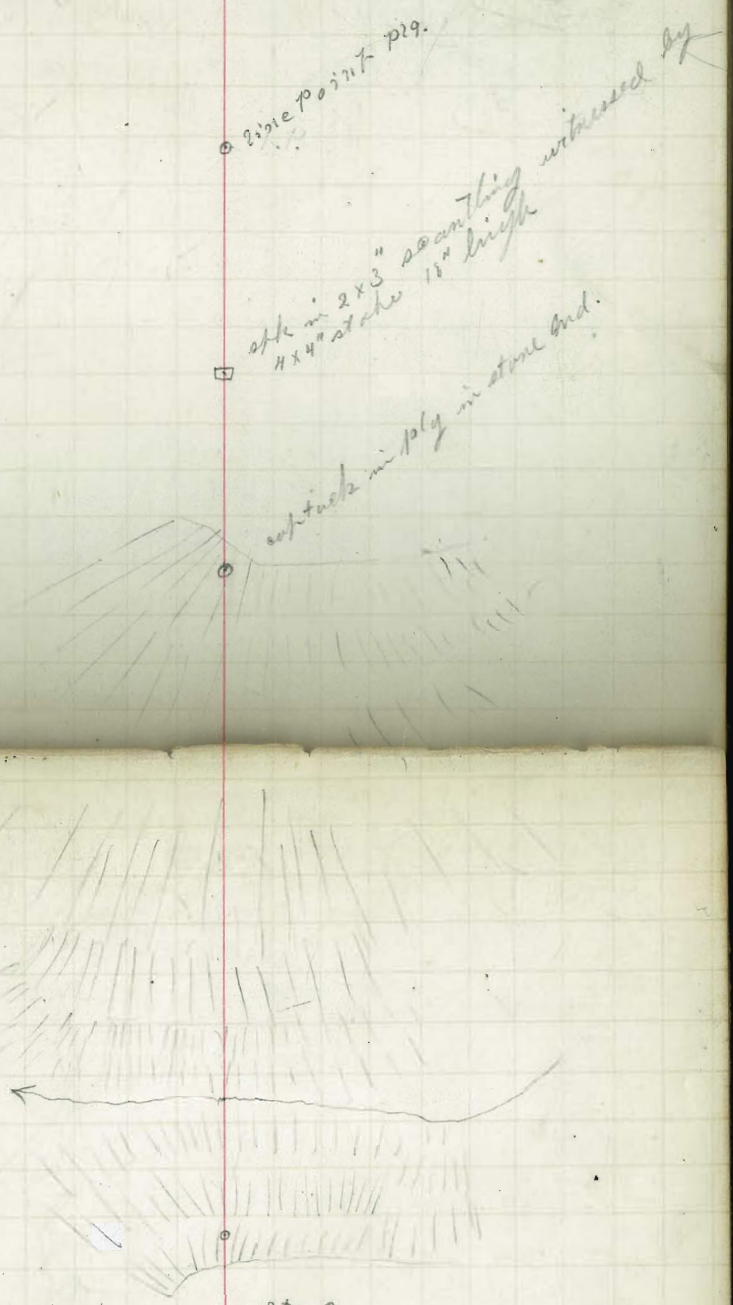
No board

32			33+21.5 / 2 09.3 / 35.30.8	
31				
30			9.999983 / 3.559966	
29				
28			2.781589 / 9.999966 / 2.781555	
+81.4	-1° 30'	5.39	538.9 / 1.2 / 27+81.4 / 33+21.5	
27				
26				
25				

No board

		Vert Angle	Stadia Reading	Hor. dist.
13	S 71° 45' E			
12				
+94.7	⊙	-0° 05'	4.91	492.2
11				
10				
+26.85 ⊙ (86° 14' R)		+2° 10'	2.67	267.85
9	= 928+60			
8				
+47.5	⊙	+4° 0'	1.79	179.35
7				
6				
5				
4	N 22° 05' E			
3				
+23	Bottom of cannon			
2				
1		+7° 22'	6.78	666.85 / 666.35
+81.15	⊙	-17° 45'	1.55	141.85
0	⊙	-6° 42'	0.81	81.15

Copied into Book 54 Pages 16 to 19

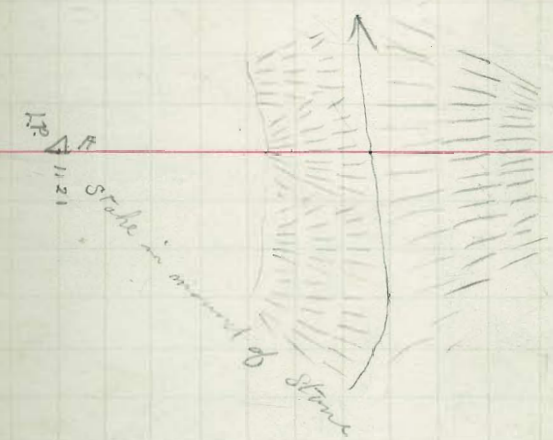


Oct 30 1890
Hamlin
Oliver
William
Hemsley

Survey of Fractional lot containing 14 $\frac{93}{100}$ A
Bounded on South by lot 1121 on NE by lot A and on N.W. by Old Town
Sta 0 is 14' (N 36° 07' E) from Mon 1 Middle town div. line There is an angle of 0° 02' Right at Mon 1 M.T. div line B.S. to S cor. of Old Town.

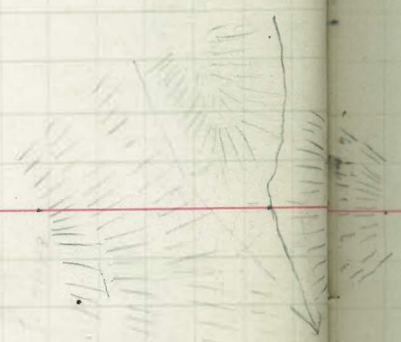
	Vert Angle	Stadia Reading	Hor dist
+46			
28			
27			
+82.5	+0° 30'	4.69	
26	-0° 35'	3.18	
+27.20	⊙ -23° 30'	1.83	
25			
24			
+32.05 ⊙ (147° 41' R)	-1° 15'	1.94	195.15
23			
22			
+51.3			
21			

S 76° 0' W



+23.9			
20			
19			
18			
+95.3	⊙ -16° 06'	2.42	
17	-4° 54'	1.12	112.4
+86.9	⊙ -1° 0'	6.44	✓
16			
15			
14			

Copied into Book 54 Pages 16 to 19



⊙ line point Plg.

12

Sta	Vert Angle	Stadia Reading	Hor dist	Station	Bearing	Dist	Latitude N.	Latitude S.	Departure E.	Departure W.
				0 to 9+26.85	N 36° 05' E	928.60	750.46 ~~749.43~~		546.90 ~~545.88~~	
				9+26.85 to 23+32.05	S 57° 41' E	1405.2		750.87	1187.54	
				23+32.05 to 40+67.45	W	1735.4				1735.4
							749.43	750.87	1733.42	1735.40
								749.43		1733.42
								S 1.44		W 1.98
				14 $\frac{93}{100}$ Acres			750.15	750.15	1734.41	

+67.45 126° 05' Right to Sta 7+47.5

⊙ = Sta. 0 point of Beginning

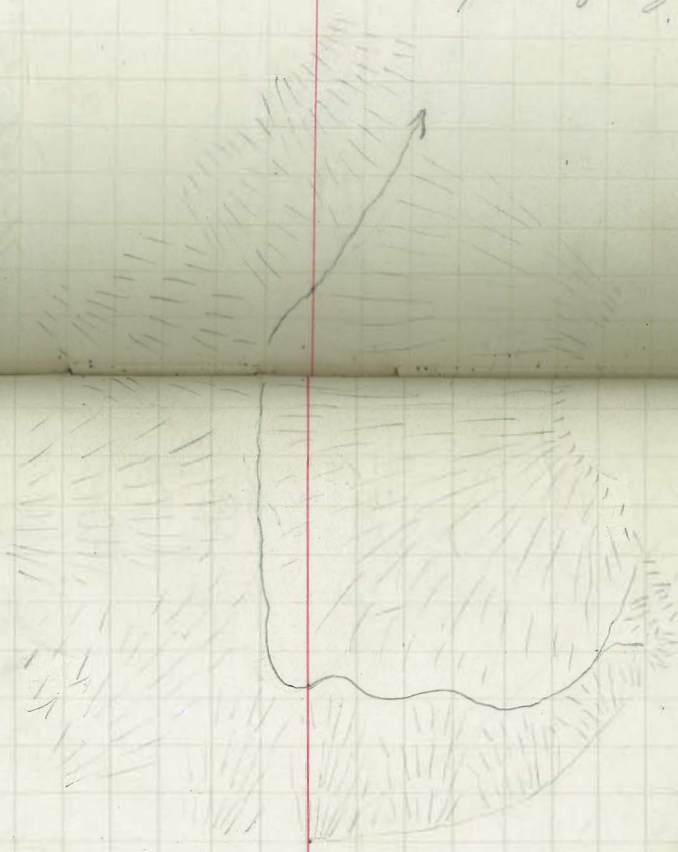
40

39

38

+36

37



Pages 16 – 19

36

35

34

+10

33

-4° 27' 9.57

32 -9° 20' 6.37

+15 ⊙ -16° 10' 2.10

31

30

+97.35 ⊙ -6° 40 1.18

29

⊙ Line point

Copied into Book 54

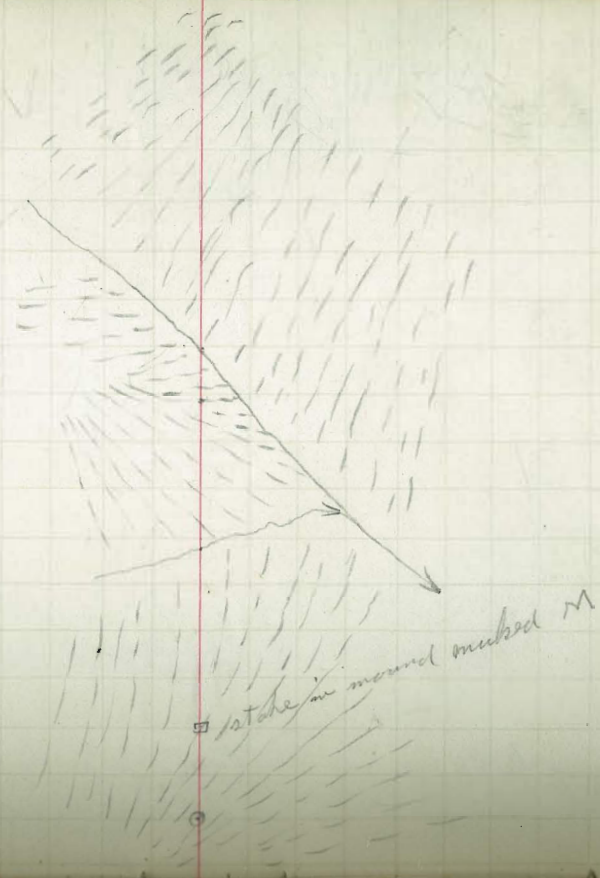
Survey of Pueblo Lot A.

Copied into Book 54 Page 2

Large stone on Old Town line

Survey of Pueblo lot A
Nov 1 1890 Hamlin
Arton
Williams
Hemsley

Station	Hor. Angle	Vert. Angle	Stadia Reading
26			
25			
+ 41			
24			
+ 91			
23			
+ 40			
22			
	N 76° 45' E	⊙ +1° 25'	7.90
21		-9° 10'	5.10
+ 22.39		⊙ -9° 30'	4.59
20		-12° 05'	8.09
+ 42.39		-12° 30'	0.82
19			
+ 35.83		⊙ -1° 40'	1.07
18			
+ 45.73	⊙ 30° 31' Left.	⊙ +10° 40'	0.92
17			
	37° 53' E		
16			
+ 95.19		⊙ -7° 40'	1.52
15			
+ 05.2	0° 58½' Left	-4° 37'	1.90



Station	Hor. Angle	Vert. Angle	Stadia Reading		
41					
40					
39					
38					
37					
+ 98.02 ✓		-0° 55'	6.23		⊙
36					
+ 02.31 ✓		⊙ +2° 55'	1.95		⊙
35					
+ 08.43 ✓		⊙ +6° 40'	0.94		⊙
34					
+ 16.19	90° 08' Left	+15° 35'	0.98		⊡ Stake in mound of Stone SE cor of lot A
33					
32					
31					
30					
+ 60.65		-5° 0'	3.57		⊙ Plg
29					
28					
+ 33.51		⊙ +4° 0'	2.27		⊙ Plg.
27					

N 13° 30' W

to corner SW of lot A

Station	Hor. Angle	Vert. Angle	Rod.
57			
56			
+ 59.20		-10° 35'	4.09
55'			
54			
53			
52			
51			
50			
49			
48			
+ 98.98		-0° 20'	7.59
47			
46			
45			
44			
+ 22.14		+1° 40'	4.76
43 +			
42			

Sta	Hor Angle	Vert Angle	Rod		
73					
72					
71					
+35.91		-1° 56'	7.58		
70					
69					
68					
67					
+73.93		-1° 35'	3.61		⊙ Stake marked lot 5
66					
65					
64					
+29.79		+1° 0'	3.43		▽ seat stake lot 4
63					
62	S 75° 35' W.				
61					
60					
+55.85	90° 31' left	+11° 05'	3.87		⊡ NE cor of Pueblo lot A 4x4" stake set in mnd.
59					
58					

N 35° 32½' E

Sta	Hor Angle	Vert Angle	Rod		
89					
88					
87					
86					
		+0° 10'	5.03	504.23	
85					
84					
83					
82					
81					
		-1° 28'	5.59	559.87	
80					
79					
78					
+94.38	54° 02' Left	+4° 15'	2.18		⊙ 4x4" Stake in stone md. N.W. cor of Lot A
77					
76					
75					
74					

3 22° 0' W Mag

		S71° 50' E			
		tr 8'a 11+54			
+ 93	93° 47' Left				spike in scantling witnessed by 4"x4" stake
98					
		-5° 50'	1.43	142.77	
97					
96					
		-2° 30'	1.61	161.94	
95					
94					
93					
92					
91					
		+1° 10'	5.13	514.04	
90					

Survey of Johnston Heights

Sta		Index angle	Bearing	Vert Angle	Rod	
14						
13						
12						
11						
10						
9						
D	+53.18			-0° 45'	6.585	
8						
7						
6						
5						
4						
C	+27.57	89° 46' Right	N89° 46' E	+2° 0'	5.25	L.P.
3						
2						
B	+44.42			+1° 20'	1.82	L.P.
1						
A = 0		36° 0' Right	N36° 0' E	+4° 20'	1.44	West cor of Pueblo lot A

Copied into Book 84 Page 11

N 75° 45' E

N 22° 0' E

Survey of Johnstown Heights Add Nov 8 1890 Hamlin. Acton. Williams. Hemsley.

Magnet. Var. 14°

	30					
I	+ 75.13			-3°40'	1.08	L.P.
	29					
	28					
	27					
H	+62.41			-3°55'	3.13	L.P.
	26					
	25					
	24					
	23					
	22					
G	+86.33			-2°40'	4.76	L.P.
	21					
	20					S 14° 20' E
	19					
F	+85.09	179° 45' Right	30° 15' E	-0° 20'	3.00	Pig in mound of rocks = NE cor. of Johnstown Heights
	18					
	17					
	16					
E	+12.84			-0° 10'	3.71	L.P.
	15					

to Stn 15+95' on SW line of A

M	+60.38	301° 13' Right	58° 37'			Plug in stone md by large Stake SW cor of Lot A
	33					
L	+70.29			-10° 40'	0.92	
	32					
K.	+78.94			+0° 30'	0.91	
	31					
J	+83.33	270° 21' Right	N 89° 39' W	+9° 30'	0.97	4x4" stake in md. of Rock S.E. cor. of Johnstown Heights

S 76° 20' W.

Sta		Index Angle	Bearing	Deflection ∠	Dist	
	12					
I	+70.25	0° 33' Left	N0°33'W	+0°45'	1.54	NE cor of cemetery.
	11					N 85° W
H	+00.12	14° 07' Left	N14°27'W	+1°30'	1.69	
	10					
	9					
	8					
G	+99.46	11° 39' Right	N11°39'E	6°30'	2.02	4x4" Stake SE cor of cemetery and N.E. Cor 1121
F	+62.38	82° 47' Right	N82°47'E	-26°50	0.445	
E	+10.14	(11° W)		-8°0'	0.52	L.P.
	7					
	6					
D	+98.55			-2°10'	1.105	Line point
	5					
	4					
	3					
	2					N 76° 30' E
C	+85.32	90° 13' Right	S89°37'E	-0°20'	4.12	L.P.
	1					N 13° 30' W
B.	91.34			+6°40	0.94	L.P.
A		0° 26' Right	N0°28'E	+16°35'	0.98	Plug in mound of Stone SE cor of lot A

Probably not found

cemetery bence 4.75' north true cor.

cemetery

18" Sta 1+85

Line from SE cor of lot A connecting it with the NE cor of 1121. thence North between unnumbered lots on West and East line of to the SE cor 1120 & SW cor of 1119 thence West to old Town.

Var 1½°

Nov 10 1890

Hamlin
Atty
William
Hemsley.

J

+25.48

13

+1° 20'

2.08

N 14° 30' W

25

E		N 13° 50' W		-3° 20'	5.39 = 538.43	
D	0° 0'	S 74° 20' W	N	-0° 15'	2.555 = 256.74	⊙ Stake old stub a little to one side of mound about 2' north.
C	91° 47' Left	S 88° 13' W		-0° 40'	4.125 = 413.69	
B	90° 0' Left	S 76° 10' W	W	+0° 30'	9.045 = 905.68	⊙ SE cor old stub of stake with charcoal around it
A	1° 37' Right	N 12° 15' W	N 1° 37' E	+1° 0'	3.095 = 310.65	⊙ Sta 43+22

Beginning at Sta 43+22 TS on Sta on Preliminary line along East of Lot A Using Var of 13° 50' said line bears N 0° 20' E, from said line turned to N 1° 37' E to old mound which is the S.E. cor of the NE 1/4 of Lot A

50.9

To stake in mound of Rock also set for NW cor lot A

To stake in mound of Rocks set for NW cor of lot A

(S75° 35' W)	90°28' Left	S89° 32' W	+3° 10'	5.20 = 519.66	
H (S77°30'W)	88°31' Left	N88°31'W	+3° 15'	5.09 = 508.53	N.W. cor.
G	10° 37' Right	N10°37'E	-19° 35'	0.44 = 40.35	
F	2° 13' Left	N2°13'W	-1° 40'	4.85 = 485.84	

N 3° 15' W

N 16° 0' W

3x4" stake 10" high set in pile of Rock marked T on SE side.

Sta	Indep	Bearing	Vert Angle	Stadia		
F			-22° 30'	A4	= 38.90	
E			-1° 0'	4.84	= 485.10	⊙ set cor 136.25 South of Sta E
D			-3° 30'	5.38	= 537.25 ✓	
C	0° 31' Left	N 0° 31' W	-10'	2.58	= 259.25 ✓ (off 21' E) SW. cor. of NE 40 A	⊙ plug in old mound
B			-0° 40'	4.12		S 0° 31' E / -3° 30' (98.5) ⊡ plug in mound to NE cor of Johnstown Heights
A	90° 41' Left	S 89° 19' W	+30'	4.05	SE cor	⊡ plug in stone md.

N 14° 10' W

S 75° 30' W

found old stone 134.10 South of Sta E and .55 East of line marked T on N.E.

Beginning at SE. cor of the N.E. 1/4 of Pueblo lot A used a var. of 13° 50'. and Rain S 89° 26 1/2' W

Nov 14 1890

off .62'

			0°.6'	6.06 = 607.25'	
	179°01 Right	S89°59'E	-2°10'	1.18 = 118.90 to old mound of stone NE cor of N 1/2 of NE 1/4 of lot A	
			-1°0'	1.65' = 166.20	
		S14°30'E			
	179° 22' R	30°38'E	+12°40'	3.90 = 372.50	4x4" stake marked T on SW the N.E. cor of NE 1/4 A
			-2°30'	5.30 = 530.19 to line / omit on line produced beyond cor	
			-13° 0'	3.96 = 377.21	
			-30'	3.25 = 326.22	
			+1° 0'	2.52 = 253.17	
			+3°10'	1.92 = 192.65	
			+10°20'	1.455 = 142.06	
	N 75°30'E				
	89° 15' Right	N89°15'E	+22°20'	.285 = 25.63	4x4" stake NW cor of NE 1/4 of lot A marked T.on SE

Stick 0.62 W

q

⊙ SE cor

S 89° 51' E

P 179° 09' R" -3° 0' 1.71 = 171.78

Survey of N.E. 1/4 of Pueblo lot A

copied into Book 54 Page 28

13

12

11

10

B +05.68 -0°40' 4.125 ○ Line point

9

8

7

6

5

4

3

2

1

A = 0 90°41' Left S 89°19' W. +0°30'. 9.045. □ S.E. Cor. of NE 1/4 of Lot A Plug in mound

Survey of N.E. 1/4 of Pueblo Lot A

Measurements were taken by Stadie

Used variation of N 13°50' W. and set plate at 0

Nov 14 1890

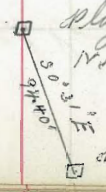
Hamlin Transit

Oxton

Williams

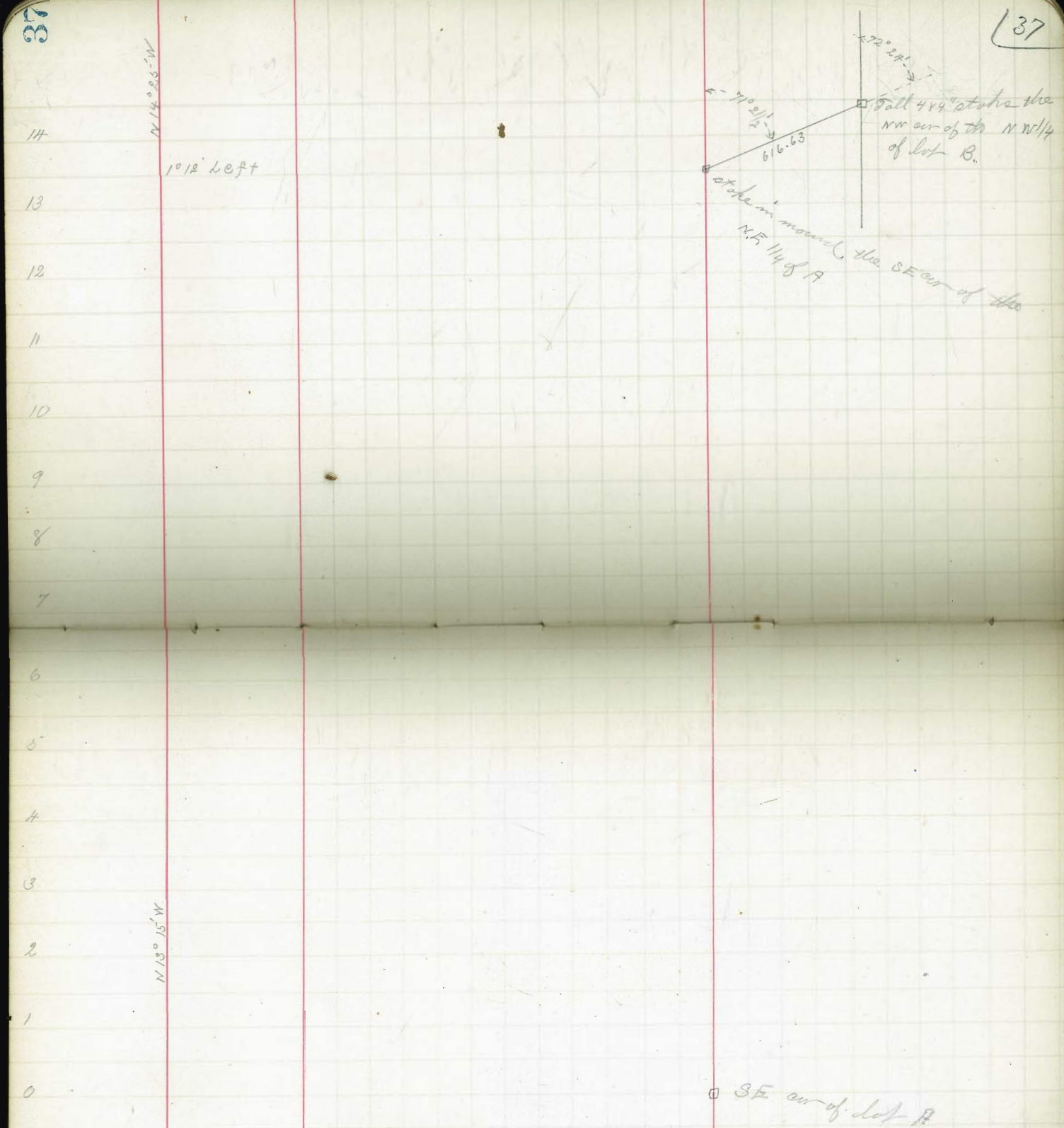
Hemsley

C	+19.37	0°31' Left	N 0°31' W	-0°10'	258



Plug in mound SW cor of NE. 1/4 of Lot A.

Plug in mound which is the NE cor of Johnston Heights



Survey of Pueblo lot A Dec 11. 1890

Hamlin { Arthur
William
Hemsley

146

479

Sta	Index Angle	Bearing	Vert Angle	Rod	
					West
	170° 10' Left		-3° 0'	5.02	Bottom
	173° 07' Left		-5° 0'	3.80	"
	152° 53' Left		+2° 40	3.90	West
	107° 30' Left		+2° 30'	3.20	"
	90° 20' Left		+1° 30'	5.05	head of canyon West
	58° 0' Left		-30'	3.43	West side "
	70° 40' Left		-26° 50'	1.80	"
	20° 25' Left		-22° 20'	2.43	Bottom
	41° 15' Right		+6° 20'	2.37	
	63° 10' R		+8° 0'	2.04	head of C
C ⊙	98° 0' Left		+17° 30	0.84	
	(N 18° 11' W mag)				
	4° 28' L ⊙		-2° 0'	4.97	← to Sta C = Sta F on West line
	9° 16' R		+1° 0'	3.28	
	20° 50 R		+1° 30	3.17	
	16° 30' R		+1° 0'	2.56	
B ⊙	76° 45 R		-40'	2.17	head of lateral canyon
					to Sta B
	3° 30' Left ⊙		-3° 20'	1.65	
A ⊙	144° 0' Right		-0° 30	2.20	head of canyon
D.	130° Left ⊙		-5° 20'	0.67	

Canyon along W side of NE 1/4 of A

Set up at Sta D on south line of N 1/2 of NE 1/4 of Lot A and set instrument in meridian and pass along East side of canyon. Sta's marked in capitals are transit points

269° 27'

Sta	Index Angle	Bearing	Vert Angle	Rod	
	154° 45' Left		-7° 30'	2.18	Bottom
	153° 05' Left		+ 15'	2.87	Mast
	142° 35' Left		+ 15'	3.07	"
	112° 15' Left		+ 40'	2.20	"
	92° 20' Left		0.0	3.13	"
B ⊙	61° 0' Left		+ 30'	2.63	"

Sta	Index Angle	Bearing	Vert Angle	Rod.

Course	Dist	N	S	E	W
S 89° 19' W	1319		15.73		1319
N 0° 31' W	1320	1319.94			11.90
N 89° 15' E	1317	17.24		1316.18	
		14.18			

73° 16' right from NE of A 58

15.55 to stake set for NE cor of A on slope 22° 15

Sta	Bearing	Dist.	Lat. N	Lat. S	Dep. E	Dep. W
B to C		905.68				

Course	Dist	N	S	E	W
N 0°24' W (N)	1282.7	1282.7			
N 4°41' W (N4°17' W)	37.6	37.5			2.8
		1320.2			
	1320.2)	2.8000 (.00212			
		26404			
		15960			
		13202			
		27580			
North	797.7	797.7			
S 8°07' E	660.1		660.6	1.4	
		137.7)	1.400 (.0102		3.5
			1377		
			2300		

Cos
.9972
37.6
59832
69804
29916
37.49472

.07469
37.6
44814
52283
22407
2.808344

Coefficient for reducing inclined stadia measurements to the horizontal

Angle °	0'	10'	20'	30'	40'	50'	
0	1.00000	.999992	.999967	.999924	.999865	.999789	0
1	.999696	.999586	.999459	.999315	.999154	998977	1
2	.998782	.998571	.998343	.998098	.997836	.997557	2
3	.997261	.996949	.996619	.996273	.995910	.995531	3
4	.995134	.994721	.994291	.993844	.993381	.992901	4
5	.992404	.991891	.991360	.990814	.990250	.989670	5
6	.989074	.988461	.987831	.987185	.986522	.985843	6
7	.985148	.984436	.983708	.982963	.982202	.981424	7
8	.980631	.979821	.978995	.978152	.977294	.976419	8
9	.975528	.974621	.973698	.972759	.971804	.970833	9
10	.969846	.968843	.967824	.966790	.965739	.964673	10
11	.963591	.962494	.961380	.960252	.959107	.957948	11
12	.956772	.955581	.954375	.953153	.951916	.950664	12
13	.949396	.948113	.946815	.945502	.944174	.942831	13
14	.941473	.940100	.938711	.937309	.935891	.934459	14
15	.933011	.931550	.930073	.928582	.927077	.925557	15
16	.924022	.922474	.920911	.919334	.917742	.916137	16
17	.914517	.912883	.911236	.909574	.907899	.906209	17
18	.904507	.902790	.901060	.899316	.897558	.895787	18
19	.894003	.892206	.890395	.888571	.886733	.884883	19
20	.883020	.881143	.879254	.877352	.875437	.873510	20
21	.871569	.869617	.867652	.865674	.863684	.861681	21
22	.859667	.857640	.855601	.853550	.851487	.849412	22
23	.847326	.845227	.843117	.840996	.838862	.836718	23
24	.835461	.832394	.830215	.828025	.825825	.823613	24
25	.821390	.819156	.816911	.814656	.812390	.810113	25
26	.807826	.805529	.803221	.800903	.798575	.796236	26
27	.793888	.791529	.789161	.786783	.784396	.781998	27
28	.779591	.777175	.774749	.772314	.769870	.767416	28
29	.764954	.762483	.760002	.757513	.755015	.722509	29
30	.749994	.747471	.744939	.742399	.739850	.737294	30

cement
2.3
2.8
3.0
outside

Return to City Engineers Office
City Hall, San Diego, Cal.

Return to City Engineers Office
City Hall, San Diego, Cal.

TRAVERSE TABLE FOR TRANSIT BOOK,

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

Published by Edward Denny & Co., Stationers, Drawing Materials, Mathematical Instruments, Etc., San Francisco.