

W41

4

LEVEL BOOK

400

48

# H. S. CROCKER COMPANY

DRAWING MATERIALS AND  
SURVEYING INSTRUMENTS

SAN FRANCISCO

## TABLES FOR EXCAVATIONS AND EMBANKMENTS

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING

Roadway 18 Feet Wide, Side Slopes 1 to 1.  
For Single Track Excavation.

"Copyright, 1865, by Kueffel & Esser Co."

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

*Calculus*  
*ligans*  
*12' 5"*  
*12' 10"*  
*13'*  
*15' 0"*  
*170 m. allen*  
*23m heavy*  
*Dulzura Conduit*

LORING & CO., AGENTS  
752 FIFTH STREET,  
SAN DIEGO, CALIFORNIA

Developing team Did you receive  
tooth picks What kind of auto graph  
tooth powder  
SDCPA Bill

4 x 9 x 12 - adobe in nasatling

3 x 10 x 18 - loose adobe

2' 6" wide fire pipe

limon

perimeter

what is a mangro in basin

32° curves

cases of tunnels not meeting

Determine capacity consumption  
height of dam cost of dam amount  
water intake

becomes Benedict

grades of rivers Miami State

lesion  
vs struts

bound in geography  
Punta Arenas Callao

Halls alluvial

1521 canal

John

96

102

---

198

Bain

110

110

20

---

240

198

---

438

Sette Vicaria

Das Bild ist mit Locher abgez. aus.

Safepaper by

Mrs. H. F. - negative

Siehe meine Liste

Panorama Camera, Carl Zeiss

Contents Warehouse Cellar

9-21-08 W. Vista

- 1 5 panel 2'6" x 6'6" door
- 2 5 panel 3'0" x 7'0" door
- both with fittings
- 7 Window Screens about 2'6" x 5'8"
- $\frac{5}{12}$  doz Nation al Oilst handle
- $\frac{1}{2}$  doz Wood "longhanded" egg pan shovel
- $\frac{1}{4}$  doz Stuart " " " "
- $\frac{5}{12}$  doz No 5 T. P. M. Co. "11 Inch" collar pads
- $\frac{1}{4}$  doz No 21 T. P. M. Co. "12 Inch" collar pads
- $\frac{5}{6}$  doz 12" wick-broom<sup>1</sup>
- $\frac{1}{6}$  doz 7" Pioner #3 Whitewash Brush
- 2 pan Rubber thigh boot
- $\frac{3}{4}$  doz 15" Brooms
- 1 6' wood saw with handle
- 1 7' saw blade

- 1 8' saw blade
- 2 cans pine tar (probably 8 gal)
- 3 8 lb sledge heads
- 4 pkgs Malthead Roofing Felt
- $\frac{3}{4}$  doz 5x12 Trowels
- $\frac{5}{6}$  doz porcelain Insulators
- 1 18" scythe
- $1\frac{1}{2}$  doz "Hadiwin" long handled egg pt. hovels
- $2\frac{1}{2}$  doz "Hadiwin" short handled " " "
- $\frac{1}{2}$  doz 30" buck-saw blades
- 2 doz 14 qt galv. buckets
- $\frac{5}{6}$  doz 12 qt " "
- $3\frac{1}{2}$  doz pick handles
- $3\frac{7}{12}$  doz Miners Pick handles
- $\frac{3}{4}$  doz axe-handles
- $\frac{1}{4}$  doz "double jock" handles
- $\frac{1}{4}$  doz blacksmith hammer handles
- $\frac{7}{12}$  doz horseshoes

- 2 doz Mule chases
- $6\frac{1}{2}$  cases Kerosine
- 60 lbs 40<sup>0</sup> galv wire nails 5" loose
- 10 " 6 penny wire nails 2" "
- 2 " 60 " " " 6" "
- 75 " Oat
- 150 ft hose in 25 ft lengths
- 48 doz cast iron washers
- 1 12 qt sprinkling can
- 1 coil 2 $\frac{1}{2}$ " Rope
- 1 piece 5" Rope with block
- 4 large blocks
- 1 box battery carbons
- 1 spike-puller
- 1 large canvas bag with leather bottom
- 1 case Gasoline

2 cases Petroleum Sibiriac oil  
4 bales Oakum  
1 bbl pitch  
 $\frac{1}{2}$  bbl tar

~~II~~  
35½ coils fuse  
 $\frac{1}{6}$  doz. lantern  
 $\frac{1}{2}$  doz globes  
1 mallet  
1 handax handle  
1 adze handle  
1 8" sledge head  
3 pick-mattock handles  
4 pick heads  
1 8" steam hammer head  
4 steel wedges for wood chopping  
1 roll 6" belting  
5 bcs 4' Electric Exploders  
about 15 battery and supplies

contents  
Commissary  
Cont.

Contents Commissary Warehouse  
9-21-08

$\frac{7}{14}$  doz balls wick packing  
1 bx gall-cure  
2 curry-combs  
1 bx coat hooks  
1 bx 6" strap hinges  
3 doz 4" elm tape  $\Delta$  file  
 $\frac{5}{12}$  doz 6" " " "  
about 30 lbs Babbit  
4 bars solder  
1 16" Wilson wrench  
1 10" " " "  
2 valves (garden) 1" pipe  $\frac{3}{4}$ " hose  
3 bxs horse nails  
2 4½ x 11" brick trowels  
1 2½ x 4¼ " " "  
2 7" Pican #3 whitewash Brush  
 $\frac{1}{2}$  doz 4½ x 11½ plastering trowel

Lumber 9-21-08 W. West

Pile above Ingle's tent

44 pcs 2x12-16

3 " 2x12-12

Pile in front of warehouse cellar

64 pcs 2x12-12

57 " 2x14-16

108 4x6-9'4" sills - flume 4'4" wide

4 4x4-4'2" posts

2 3x4-2'11" braces

1 pc 12x12-24  
Pile just north of last

5 4x4-4'2" posts

20 pcs 1 1/2 x 12-16

1 3x4-2'11" brace

Pile in curved flume below little beam

34 pcs 1/2 x 3 1/2-16

20 pcs 2x12-16

10 " 2x12-12

Contents Pewee House

9-23-08

3 1/2 Bxs Champion

6 Bxs 1/2 R Giant 2/3

2 Bxs 1/2 Hercules 1 1/4

197  
 16 1/2 x 3 29  
 10 1/4  
 127  
 1 20  
 320  
 320  
 600  
 160  
 940  
 16

13 4x4 - 4'10" posts

37 pcs triangular battens 12'-18'

1 bale Oakum

1 keg 60<sup>d</sup> opika gals

Many good pcs 8x8 & 4x6 about 6

### Indian Camp

13 pcs 2x12-16

$\frac{3}{4}$  keg 10<sup>d</sup> gals

$\frac{1}{4}$  keg 4<sup>d</sup>

$\frac{1}{3}$  keg 10<sup>d</sup> flamm

1 grind-stone

1 blacksmith vise

Some good scrap timber

### Pile at Old Barn

3 4x4-4'2" posts

141 pcs 2x3-16

2 pcs 4x6-20

1 pc 2x12-16

9 pcs 2x14-12

at or near Towler House

48 4x4-4'2" posts

3 4x6-10

35  $\frac{1}{4} \times \frac{3}{4}$  -12 Pin 4 805 5' x 6'

57 pcs  $1\frac{1}{2} \times 12-16$

1 pc  $1\frac{1}{2} \times 12-14$

26 pcs  $1\frac{1}{2} \times 12-12$

2 pcs 2x14-16

2 pcs 12x12-22

1 pc 12x12-16

272 3x4-11'2" brags

84 4x6-8'4" oaks flamm 4'4" wide

4 pcs 2x4-20

2 pcs 4x4-20



Nails at Warehouse Cella

9-21-08 WUESTE

10 kegs	60 <sup>d</sup>	gals
11 kegs	40 <sup>d</sup>	gals
27 kegs	30 <sup>d</sup>	gals
11	20 <sup>d</sup>	gals
$\frac{1}{5}$	10 <sup>d</sup>	
2	8 <sup>d</sup>	
$3\frac{3}{4}$	6 <sup>d</sup>	
$2\frac{3}{4}$	4 <sup>d</sup>	
$\frac{2}{3}$	3 <sup>d</sup>	

9-21-08

appel brought tip 9-8x8-20

1 8x8-24

from Mac Seans

9-22-08

Took out of storehouse Cella

2 Buck saw blades

2 double juck handles

3 pick handles

1 ring washer

Took from Commission garden value

Took from Cella

$\frac{1}{2}$  gal kerosene oil

Leo got 2 pair blades from #2

count of wood #2

9-22-08

at engine about  $\frac{3}{4}$  cord 1 to  $\frac{1}{2}$  per day

at kitchen " 3 " negligible

Dennis brought 12-8x8-16 to Barrett & took load

gave Justin 1 handaxe

Gave Ferguson 2 6" files din taja

appel 2 loads old - pump & bar

Mine 1 load old to Cottonwood

9-23-08

give Brown remaining 6" o.t. files

1) Oringul load wood: also 1 8x8-16 of prop  
to Cottonwood.

2) See to Mac Seeds 1 4x10 sheet iron

2 Bxs #2 giant

1/2 Bx caps

300 fuse

3 inch barrows

30 pcs of steel

1) Give Duane load wood to Cottonwood

155 hrs from Cottonwood to McSeans

2) See 9-24-08 to Barrett

1 8x8-16

109-7 104-0 102-10 105-2

102-10 106-1 104-10 108-2

101-1 101-5

1045. 15 Bundles pipe

See from Johnson: adding output,

Cottonwood

Obay hauled 1/2 load to pump.

Current at Barrett 9-23-08

Tunnel

1/2

Under Road xing

37

" Cover Gas pipes at 1/2 Tunnel

19

" House Tunnel 1/2

185

Loose

17

In Tunnel 1/2

349

Ribs 1/2

Tunnel 5/8

55

Henry

19

(at end of day)

on Bench

2

Turntable

1

Big Barn

2

3/4

Bench below Road

1

3/4

~~688~~

Patch 9-23-08

Tunnel  $\frac{1}{2}$

4

Nails along Barnett Flumes

Smiley 8<sup>d</sup>  $\frac{3}{4}$  kg 30<sup>d</sup>  $1\frac{3}{4}$  kg

10<sup>d</sup> 2 kg 60<sup>d</sup>  $\frac{1}{2}$  kg

at Road King 5 kg 30<sup>d</sup>

at Cottonwood 1 kg 30<sup>d</sup>

Bolts along from 105 1 bbl wash

2 gals tar

$\frac{1}{2}$  bbl pitch

$\frac{1}{2}$  bale Oakum

Odd timbers 7 6x6-16

2 6x12-16-15<sup>5</sup>

1 6x6-10

24 2x4-16

O'Brien 9-23-08

2 lamps 2 cans 3 ditch cleaners

3 from settler 3 mixers 2 supply - run

$\frac{1}{6}$  handy-run  $\frac{1}{2}$  followup run  $\frac{1}{3}$

17

9-24-08 accepted waste

Wood at Salazima

3

2

$1\frac{1}{2}$

2

2

1

$1\frac{1}{2}$

2

15 cords above house

2

1

3 cords below house

18

9-24-08

3 deer team

Erle Durand 8-8x8-16 Dulzina to Barrett

364 lineal feet

10 Bolls pipe Johnson's Bar  
 Barrett  
 Dulzina

4-6x6-20  
 14-6x6-16  
 6-6x6-8  
 1-6x6-12

contents Big barn 9-24-08

27 Bolls hay 1 per day

3 oke barley 3 " "

contents little Barn 9-24-08

3 Bolls hay 1 per day

3 oke barley 3 " "

Placed order for grain today noon

Chq Per house acct with 1 bx #2

Articles 1 1/4 ; 1 gdr. monkey outfit (5<sup>th</sup> per 705<sup>th</sup> price)

Smiley's Dunks 18-6x12-16  
5-6x12-32

Rails

9-24-08

at Barrett 28.00

coming from Salpica 16.00

Waters 7.00  $116.00 \div 2 = 58.00$

Sta 60 + 58.00 = Sta 118

Ties needed for 2200' track = 730 ties

Ties on hand 9-24-08 280

at Salpica 250 530

Short 200

Fresh-plate 17 Bolls = 425

Needed for 2200' track ( $\times \frac{2}{20}$ ) 220

On plus 200

Spikes on hand negligible

needed for 2200' 3000

short 400 lbs

Bolts needed 880

on hand 30<sup>th</sup> =

Short

9-25-88

16 pcs

1 1/2" rope

304'

1/2 kg 8<sup>d</sup> galv from cellar to water by m

40' 1/2" rope " " - Shackle by m

2 boxes caps borrowed from Camp (S) / m

John

10 ptd show cellar to Shuckles

x shovel handles from cellar to shop

chg cellar with 26 pieces ash gran

chg cellar with 2 Bells tarpaulin

1 Oxen Team (Bama)

8 cottonwood

17 Barret

1 piggy locks Barret

no freight bill

chg Pet Sacana with 1 bx ash gran

" cellar 1 bx Rabbit

Credit

1 tool handle

1 claw bar

3 Rock handles

chg Pdr Ham Acel with 1 Pdr Monkey  
outfit - 50' fur 1 doz sticks pdr

credit Cellar & cellar - pads

chg 1 pair Hardwar shoes to willis,  
Shuckles camp Monroe Dinner or will  
stand yoke

Ed. Durand took from Barretts

4 picks carpenter outfit

6 shovels & locks

1 bar-claw & cellar pads

1 tin 1 ft shoes

5 cots 1 monkey around

3 miter saw 1 handaxe

1 cheam & 4 pcs 1 1/2" pipe (80')

1 dead-man 2 cross bars

1 sledge

1 doz 1/2" claw Brought up

1 doz 3/4" " from cottonwood

36 pcs 1" pipe 20' 720

44 nails 16' 704

9-25 of

Track in to 59400

Pay to 50125  
Smiley Bill

16-20"

33-15"

Job Lot

40-17"

8-8"

16-15"

7-11"

Wants

28-21 1/2"

40-13 1/2"

7-17 1/2"

14-11"

21-15 1/2" Run 16-5

Tunnel 111 = Lot 114

MacLean received on load 432 (9-21)

90 rails 16' 3042'

90 rails 17.8' 1 Key spikes

Tell Salpresa

1 1/2 x 4 x 12 Barnett

125 1 x 12 x 16 22 Johnson 93 Barnett

90 2 x 12 x 8 40 Shepherd 40 Barnett

8 3 x 4 x 6 Barnett

4 1 x 4 x 10 Barnett

8 x 8 Duly

6 x 6 Duly

-3-27

1 x 6 500 P.C. Schmitt

2 x 4 600 700 Wicks Barnett

3 x 12 30

4 x 6 20

Get Salpresa

Composition of Sonds 459-63 and

9-26-08

500 feet to Mac Sean

1 water barrel

Credit Mac Sean 1 expansion bit of Mac

Chg Ford Motor 1 box  $2 \frac{7}{8}$ " gears

Credit cell in log of engine oil can

Tunnel  $\frac{3}{4}$  = 49+55 K48+67

O'Brien & Stebbin 45 3 x 2 swashes

Ditch bit hummer 421

not completed 9-26-08 232

Henry OB wants 0 shovels

8, 10, 14' chains & 1 1/2" 3" steel

hummer. spars

Saw for Leo

oil can for Acton

Contents of Sa Press

500

1x6x16 455 Barrett

200

2x4-16 Shuckler

75

6x6-16 Dulgin

11

8x8-16

20

8x8-18

7

8x8-20

One 1/2 pipe to Decker's stop Barrett

Bags 9-26-08 525 whole 1250

Trapezium frames do 35 for 140

panels 43 brought 175

9-26-08

Received from James Ranch

31 Bales Hay 28 Barley

order whips & caps & aways

9-27-08

Borrowed 500 Plastic caps from J. Ho  
Sent 3 mules to Jannet Ranch  
Credit Allan 1 doz pick handles

9-28-08

Chq Allan 2 pick handles

8-20<sup>00</sup> Rails from brush to T. W. Hill 160'

Credit Allan 1 gross wash

Chq Cottonwood 1 pc  $\frac{3}{8}$  cable 50'

" Shurden 1 "  $\frac{3}{4}$  - 60'

" " 40 pins, pin, 10 house

Credit Allan 2 Cellar pads

Chq " 4 Bldg Sacks

2x  $\frac{1}{2}$  3 bars

9-29-08

Chq Allan 1/2 doz sprin kln can 2 gal

1 bld sacks

1/2 doz mud ship brushes

1 doz air ch. trees  
1/2 doz. wash trees

Trim - Sunday 9-27-08

Sibilly, Acton, Juan Acebedo

O Byrne, P. Mandy, J. Tosney, C. Perez  
a Robin, Mike Deano, Joe Alvarez  
Isabel Rodriguez, Francisco Tangora

Seo Gasparro

H. E. Drinn, G. Diett, Antonio Alcala

B. Gugler, Natie Treora

9-28-08

Water boundaries of Dees Bros

70 studs #2 7/8

150' fence

— X —

Ask Ferguson about oil - can descrip.

9-29-08

Chq pens hum with 1/2 doz #2 3/8 gal 8 w. w.  
Chq Smith 1 doz 6" sh. lign  $\Delta$

Ferguson 3 file #14<sup>00</sup> 1, 12

blacksmith - Tomas hum raw brush



9-29-58  
Track to 62+50

Tarpaulin for Taylor

Felt paper

Various measuring box 26 x 26 x 12"

12 Bbl's cement 150 lbs each 250 lbs each

1/2" o iron 12"

Trapezoidal ditch 49+55 - 59+00

Square ditch 59+00 - 61+25

Trapezoidal 61+25 - 63+50

Sloping outside, square inside 63+50 to 64+50

Credit teller 40' rope

Credit checker 16-2 x 12-18

chg load wood

" John 25.1 fee

±

9-30-58

Send to water 2 white water boards

1 canvas, 15 x 6, 1 fat file,

Taylor's mission board at 56+75  
chg checker with 700' cable  $\frac{1}{2}$

" Drilling with 2 buckets

" Armstrong with 2 buckets

" Cottonwood with 3 buckets

Credit call 50 oke 1, 601 tubing

chg cotton wood with 15 pcs 1 x 6-16

Credit Power house with 3 bcs  $\frac{3}{8}$ "

chg checker fee

" " load wood

order rope of businesses - turn back

10-5-58

Stout telephone that Standard  
Oil Co. sent him postal (which he  
will send on) that they want  
the return of Oil drums 23459,  
133, 112, 212 dates as follows 5-7, 6-11,  
6-23, 6-23. (17290 ""

10-5-08

1 load tied 55 ft to Decker's Camp

Length of Flumes above Dam

7 Slams  
Pine Creek 236' 2-12" bds (2'10 1/2")

30 - 2 x 12 - 16

slams covered

Wilson Brook 218 1/2' 2-12" bds (2'9 1/2")

no material

slams covered

Indian Camp Creek 232' 2-12" bds (2'9 1/2")

no material

slams covered

Cook House Flume 172 5/8' (2'9 1/2")

no material

slams covered

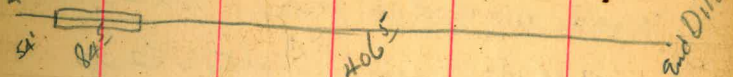
Rocky Point Flume 197' (2'9 1/2")

material

197  
16 ) 394  
32  
6

Yardage Dept Tunnel 35 244 + 50  
259 + 75

431 + 75



Data for a formula for current

Storage per cu yd (in bbls) [ bbls 17" across ]

4' 8" for 3 bbls wide

not 27" long

2' 11" for 2 bbls high

circumference

4' 2" high for 3 bbls

bbls 50 lb 5 1/2

2' 1/2 long

9  
14 ) 126  
126

10-2-58 75 rcs 1x6 Banett to Mac

10-5-58

Wood accepted from Dalazar  
7 cords near Pinalto Camp  
(Tree with BM) agreed to backdate to 9-24  
South of Pinalto  
1+2+1 (taken day before by Maloney)  
+ 6 1/2 = 10 1/2 cords on Oct acct.

10-7

Mr Maloney borrowed from D & Co  
yesterday (10-6) 76<sup>00</sup> gross RR spikes

10-9-58

accepted 6 cords wood for Dalazar

Thanked  
by 10-12-58

10-9-58

Spent to JSM about 10<sup>00</sup> nails

2-3-4-6  
5/16 & 3/4 bolts carriage

Henry's hat can

Henry's measuring box

Henry's Bbls (opening)

Sills or 4x6-20<sup>00</sup>

eyes for 1/2" dia rope

10-12-58

Order 1000 Cast Iron washers

1 doz eyes for 1/2" inch rope

10-13-58

Wood cut by Dunning 1/2

1/2 + 1/2 + 1/2 + 1/2 = 4 cords (1/2 South of Pinalto)

Phone to Purchasing Agent  
Reg 5567 Car wheels

narrow top 58+75 - 61+25

Order Friday

1 doz Provier WW Brn. chs #3

Track bolts Tax (Stockholm) telephone

Garden baler,  $\frac{3}{4}$  iron

hoke, hose

work accepted from Sweden

10-15-58

$\frac{1}{2}$   $1\frac{1}{2}$   $1\frac{1}{2}$  1

$4\frac{1}{2}$

Batter for Pine Creek Bridge

5 flat 2 angles

Stubbins 10-15-58

30 1x6

20 2x4

O'Brien

30 1x6 for 6 panels

8 forms

Telephone

paper, tax 5574

Track bolts

Inventory of Ponds for Wallace

" " Rails at Barnett

Friday

10-16-08

Length water's nails 7<sup>4</sup> 6<sup>4</sup>

Taylor's JS

Irwin's Dovel-pins

Name of Edison pump

ASK Taylor about nails

Teamsters must ask  
for material at  
BIRSMITH SHIP

Books for Melroy

150 posts to water

Blocks to water

Rail to water

Deadening felt to Taylor

Pan & hook for OB

Hammer hdl wedge

Socking tie 10-3-08

Tool bx material for Sheeken

More 2x12 Rvw for Johnson

Rope at Barrett Saw & hoist

Friday

10-16-08

Murray's outfit

Legal must notify Central when in  
and wife leave store

2x12 to cover gasoline tank

24 20<sup>s</sup>

#16-16<sup>s</sup> Rail

76+20

Put Joe Puentes to work at 9:00 AM

Gauge at bx 0.35 at 11 AM

Bx (6'2") min 7 3" high

43  
10  
200

72  
15  
123  
25  
37

16  
4  
20  
6

25  
20  
5

670

1152

7620

83

10-16-58

Taylor wants - cylinder oil  
75-100'  $\frac{3}{8}$ " cable  
100-150' cable for guy line  
150'  $\frac{3}{4}$ " rope

Diaphragm for Edsons #3 Force  
3" ductile 2" discharge

Saw tracks files are  $3 \times \frac{3}{8}$

Saw track bolts are  $1\frac{3}{4} \times \frac{3}{8}$

Powder 10-16-58

15 boxes #2  $\frac{7}{8}$ " Giant  
3 boxes #2  $1\frac{1}{4}$ " Hercules  
3  $\frac{1}{2}$ " boxes Champion  
15 boxes cokes

Stout telephoned Provian  
Car hubs of cut  
 $2 \times 4$ "

10-17-58

To Johnson  
↓ Smith Bolts full paper

To Shuckler  
↓  $1 \times 6$ " nails, cable, buffers, pipe fittings, hose  
from Shuckler

Rails 800

$4 \times 4$ " for Shuckler

Saw for Junie

✓  $8\frac{1}{2}$ " man for water

Slabbing material for water

✓ Phon water about time the Pom

✓ Write notice about new quality

Phon Hill about water cart

Area around beam

Sent Amalgam 10-17-08  
30 -  $\frac{3}{4} \times 13$

40 -  $\frac{5}{8} \times 11$  or  $12$

80 flat washers  $\frac{3}{8}$

4 -  $\frac{3}{4} \times 17$

62 drift 16

80 cast washers  $\frac{3}{8}$

Sent Taylor 10-17-08

1 doz 1" Ts

1 doz 1" unim

Deadening felt

4  $\frac{3}{4} \times 15$

x 100' Bm 1x12

100' Rope

1 kg 6" 8" 10" 20"

1 kg 30 40 60 cast.

10-18-08

opinion plates, brass & bit, Tan, 8x8 stuff  
To Shuckley 1x6, buffers, 1 kg 30" 1 kg 40" (S)

4x4, Tent, 1x12, trim, edamp, bustin  
To Cottonwood, Seal wood, 3x4, nails

Stebbins & ABB track, pipe, platforms,  
sand bins

Ferguson, packing Cottonwood engine, make  
tool-closet, try wood-hoisting scheme,

Wedge, fence around barn, gates, water  
binelast be filled, apply ca for Stebbins panel  
for Bleanth

~~order~~ ax handles, RR spks, fish plate  
cylinder oil

10-18-08

Stebbin at 75+75

OB at 79+75

Gate valve

2x4<sup>s</sup> Ferguson

② Rail to water along 7' dist

37 pcs 4x4 to Sh. etc. 3 4x6 20

17 4x6 - 14

Pipe to PA+50

Little plum 79+00

Phon Taylor to near T<sup>s</sup> ppanch

mur order 10-23-08

Binding from 2 pane glass 15" x 32"  
1/2 garden valve 3 doz ham 1/2 bush 2 doz hand saw

10-19-08

Taylor wants

1-1/2 machine bolt 5" over all, 1/2" head,  
4 1/2" chank & 2 nuts

20 gal tin

1/2 doz 1 1/2" to Johnson

To Cott or wood Pm Armstrong

Rail 4x4 posts, blocking, wood,

10-20-08

6<sup>d</sup> nails to Kimmel

1 garden valve

1/2 doz white wash brush

2 brooms

10-21-08

Egg-beater hammer

10-21-08

wood accepted from Salazar

South  
of creek

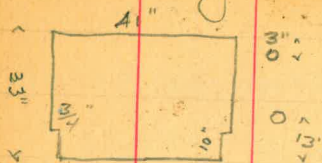
5 1/2, 2 1/2,

West  
of hill 3 1/2

12



Get for Armstrong wage



2 Rods 47" long  $\frac{1}{2}$ "  
wing nut

10-22-08

Get Pitch to Smiley  
Phon about R.R. spikes

- ↓ stop-cocks to OB also bolts
- ↓ Rope to Stebbins
- ↓ Oil for Scott

Neyro wants receipts for 5552, 5550  
lumber & sold tents. (lumber shipped 9-24-08)

10-22-08

Word accepted from Darnson  
 $\frac{1}{4}, \frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{1}{4}, \frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{1}{2}, \frac{1}{4}$  5  
on old Tray Peace.

10-23-08

cleaning for platform 86+75  
for Navaro  
reduce Italian

10-24-08

made sled, tail-gate, for pipe,

broom to Shelden hoist - binder twine  
rammer for Douglas  
 $\frac{3}{8}$ " diam with hook

10-24-08

find out about horse-trail  
get tarpaulin for Douglas; also blocking  
and perhaps more lagging.  
Douglas will phone up cement needs

Phon Water if he needs engine oil at Sheld  
sprinkling can for LAB

- 1. Train for Sunday
- 1. Ferguson to John
- 1. 1/2 roll of paper
- 1. Frank Dumas with 6x12
- 1. Scott to take in lumber for
- 1. Henry can build floor
- 1. Frank Dumas to day under tunnel
- 1. Billon's sand
- 1. Small Notary Public
- 1. Get Mulberry papers
- 1. 8x8
- 1. Opitas

12  
50  
16/600 37  
40  
130  
11

38 pcs 7x12-16  
Order date - 26 - 08

1 brooms 24 pcs  
get brooms  
4 travellin wheels

1/2 doz sprinkling cans

10-26-08

- 1. Sewer pipe for John 185' 4" if possible
- 1. Under tunnel to shelter
- 1. order 4 travellin wheels for check
- 1. shields for travellin
- 1. lin of grade 3 1/2 trams
- 1. Tuesday grade in tunnel
- 1. order 1/2 doz sprinkling cans
- 1. Rosa for watering cans
- 1. 50 lbs to John's Crapinca this car
- 1. Print of Dumas to transfer
- 1. Get an pointing travel
- 1. order broom

Flagit

5550

6115 copper

15795 7 lbs corn

50	$\frac{3}{4}$ x 20"	
80	$\frac{5}{8}$ x 10"	
70	$\frac{3}{4}$ x 12"	
68	$\frac{3}{4}$ x 15 $\frac{3}{4}$ "	
20	$\frac{3}{4}$ x 14"	
50	$\frac{3}{4}$ x 16"	dowel pins
20	$\frac{3}{4}$ x 23"	drift bolts
16	$\frac{5}{8}$ x 8"	hiring

2000 collar pads

50 oaks

cylinder out to tetterwood

bar  $\frac{3}{8}$  x  $\frac{1}{4}$  nor way nail rod

10-29-08.

Johnston  
Camp by amount

$\frac{1}{2}$ doz	□ chandel	✓
$\frac{1}{2}$ doz	○ co	✓
50'	hose	✓
$\frac{1}{2}$ doz	whitewash brush	✓
1	level	✓
2	buckets	✓
1	soldering iron	✓
2	MT. bb's	✓
1	misc	x
4	double jack handles	✓
2	"mops 6" long	⊗
1	2" to 1" bushing	✓
2	ball binder pins	✓
2	1" Unions	✓
200'	1 inch pipe	x

10-30-58

Order 1 pk naps or waste  
collar pads  
whip for Miguel

Lengths found

10-8	10-10	11-1		
3N	597	629		
3S	1110	1225	1854	36
6N	295	333		
S	168	204	365	
Shaft N	120	150	86	
S	135	156		

word accepted from Dan

11-1-58

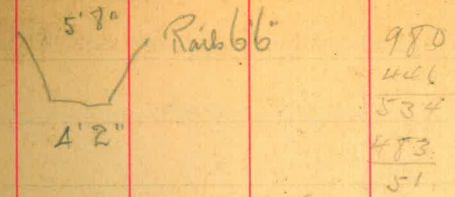
b 3 of Rivin  $\frac{1}{4}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}$  33/4

R9 Rivin  $\frac{1}{4}, 1, \frac{1}{2}$  13/4 5 1/2

R62 + 75 = 3rd Murray's ditch

40 = length 3 1/2 tunnels

12835 do 124 at sta 100



202 pcs 1x6-16<sup>s</sup> 3 at warehouse A  
 45 pcs 2x8-16<sup>s</sup> 14-2-58  
 counted by Smiley

Change Freight Receipt 532 11-1-58  
 10 pcs 8x8-16 from 6240 to 7350

ask LaPron about Bailey on 491  
 11-3-58

750 in 3/4" nail 9' pipe

Chas. Wook telephoned the he has  
 no cattle. Day on Ortega has  
 cattle with one can cut off. Wook's brand  
 e.

11-4-58

Repair tape 500'

Measure Salazar's wood

Rope to skip

Oil to HOB also 4 doz skip wires, 100' rope

5 lbs y misc hardware

Wood accepted from Salazar

Salazar 11-4-58

at camp 3, 3, 2, (0)

203 cords

When road crosses Riv 3, 1 1/2, 2 1/2, (7)

on hill 1, +11 (12) (37)

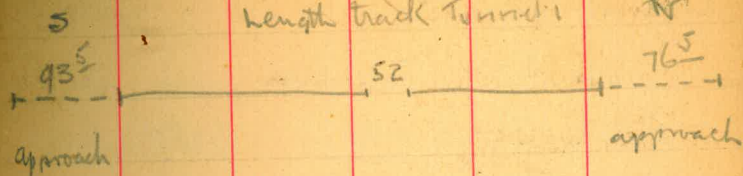
27  
15  
12

to 2000  
2000

11-5-58

2 with brush to Johnson Camp

length track tunnel



1204

93.5

76.5

1374

52

1322

→ length track

11-6-58

Wood accepted from Salazar

4, 1, 2, 3 1/2, 1/2, (11) all the day

1, 1, 1, 1, (4)

(15) (42)

(110, 1133)

(112, 1112)

(110, 1121, 109)

23459 2700  
23384 2600

24 = 5000

combined wt  
SPCA 675

Telephone Janner Ranch  
Recd at Barrett

1 bar  $3 \times \frac{1}{2}$  tire wear

1 bar  $2\frac{1}{2} \times \frac{3}{8}$  inch  
15 6 x 6 - 18

22 6 x 6 - 18

15 6 x 6 - 20

40 5 x 8 - 16

76 4 x 8 - 20

18 6 x 12 - 32

Order

~~whip~~

flat iron

die-plates

lubricating oil

1 doz lanterns

Sunday 11-8-07 at Johnson Camp

Kimmel wants level

wedgete Johnson camp

quage glass to Junie.

Must work - Bird house, horse chug

camp

Trial Levels thru Tunnel 3

424 104.24 100.00

367 100.57

431 104.89

385 101.03

344 104.47

320 101.27

373 105.00

395 101.05

384 104.89

413 100.76

433 105.09

352 101.57

364 105.21

345 101.76

375 105.51

399 101.52

31.28

29.76 ✓

11-11-58

Wuester

Banna

18.90  
.08  
151.20

Notes on Bridge  
Clark Place

- 3) at Little cottage  
20' span  $5\frac{1}{2}$ ' high  
Masonry 10' wide
- 2) at King to home  
Foot-bridge
- 1) at SW  $12'$  wide  $\times 16' \times 6'$   
wood bridge
- A) at Barn  
Rock-work ford  
grated with cement mortar with  
apron on lower side with  
 $\times$  wire under footbridge

11-17-55

Mungos  
R. Winters

- 5) Road to south side of Ranch  
16' span 5' high 20' wide
- 6) at Clark's Dam  
150' of Stone wall, laid in cement  
3' high (to protect Reservoir from  
filling up with debris.)
- wide 4x6 crossing at Schoolhouse
- Flume & chute past near Spruce.
- Wall & trench thru Shuckley orchard
- Flume for Amazon Road xing.
- Trench into natural course



Level at Cottonwood Intake

0 + 00	1193	11193	10000
1 + 00			
+ 75			
+ 50			
+ 75			
2 + 00			
+ 15			
+ 38			
0	6.75	109.28	870 103.23
3 + 98			
4 + 98			

Trench  
width  
5.9  
5.4  
5.2

11-18-58

assumed elev of sand chamber  
west  
Mexican

10000

11.82

13

11.80

15

11.78

18

11.75

20 +  
10.1

11.73

11.1

100.8 = angle point 45° Rt

9.0

102.9 = proposed gate

103.6

104.1

104.5

Billow temporary dam  
River channel

Grades Tunnel 6

102.33

10000

0 + 25

335

10098

+ 75

339

94

1 + 25

343

90

+ 75

347

86

2 + 25

351

82

0

290 103.23

400 100.33

+ 75

245

78

3 + 25

249

74

+ 75

253

70

167.23

400 ✓

11-22-05

assand the

Bm

White

Banner

10323

4 + 75

0

350 103.57 316 100.07

+ 75

5 + 75

+ 75

0

370 103.42 385 99.72

6 + 75

+ 75

0

- 286 106.28

~~286~~

720

415 ✓

257

295

299

303

292

296

100.66

.62

.58

.54

.50

.46

2 pt in roof above last grade hub

Dec 1 1948

Junie wants

canvas or canvas gals in

1 piece shut in 12 x 18

Gettin wants

1 ball binder Tom

Some Laab want

Rivet & Burs, buckles,

Smelika want

screen  $\frac{1}{4}$ "

Walton want

Seed book

Ammonia

grub

16  
100  
1600

236  
11  
236  
236  
2596  
1600  
1600  
16) 2596 (62)

4  
16  
500  
400  
720

236  
472

Dec 10

Must bring to Pan Creek

- 65 4 0

grades Tunnel C

7 + 25 249 103.79 10628 213m 33

+ 75 341

8 + 25 345

0 382 103.57 424 99.55

+ 75 307

9 + 25 311

+ 75 315

3.43 99.94

421 99.16 ✓

433

424

12-2-08

grade +1.0

above 6 + 75 see 2 page 100.42

west

Barron

back

38

34

30

26

22

2 Grades on JSM plug

west grade pin

wood choppers team  
 Ramon Castro  
 Juan Gonzalez  
 Jose Garmes

$$263 + 50 = 3\frac{1}{2} N$$

12-6 1 team  
 Friday 1 team

A	B	C	D	E
$3'1\frac{3}{8}"$	$3'1\frac{1}{4}"$	$3'3\frac{3}{8}"$	$3'1\frac{1}{2}"$	$3'1\frac{1}{8}"$
$3'1\frac{1}{2}"$	$3'1\frac{1}{4}"$	$3'1\frac{1}{4}"$	$3'1\frac{1}{8}"$	$3'1\frac{1}{8}"$
$3'1\frac{1}{4}"$	$3'2\frac{1}{16}"$	$3'5\frac{1}{16}"$	$3'3\frac{3}{16}"$	$3'1\frac{1}{8}"$
$3'3\frac{3}{4}"$	$2'11\frac{13}{16}"$	$2'11\frac{13}{16}"$	$2'11\frac{13}{16}"$	$3'5\frac{1}{8}"$

caulking tools boots  
 cement  
 water  
 ask Messini about report  
 cement etc  
 clean guns  
 top reports  
 post reports

cement 12-9-88  
 Barn 14  
 Cottonwood 8

Pr. In

Cement Barn 18' wide  
stalls (double) 10' wide  
2 1/2' passage way in front of stalls  
along division 8' wide at bottom



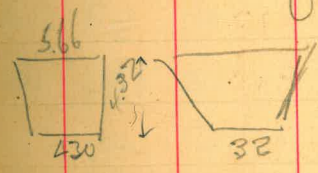
origin of Dago  
age of mangrove bushes

Altitude Distance SD 5

see Prax am	778
pop walking horse	1187
lockator from	1440
Upper dist	1713
Warner place	2083
Elmwood & Jamel Kay	2309
Jamel Ranch	2655
Durman	3324
Thomson	3386
Barnett Dr	3885

Dutchman stream

24 apr 1907	SD Riv. Sakind	91
26	Sweetwater Durman	27
26	Pine creek at Ba.	21
27	" " at Barn	30
27	cotton wood at Barn	71
18	Shaw's Bay Pass	173
6 mm	" " "	105
17 apr	Thurcilla	27
19	San Pascual	82
29	Sweetwater Junction	28



Summary of slabbing.

Material	Quantity	Item #	Value	Notes
tonnel in	49	1	236	
Sta 100	64	2	219	
99	4	3	232	
93450	10	⑤ 4	173	
		④ 5	197	
		6	276	Barnes King
24 18	3	7	539	
40 13 1/2		8	522	
3 stone pipes		9	164	
2 doz caps to Scott		10	40	Plata
2 x 4's to W.B.		11	63	Smithwick
2 ordn		12	142	Kingwood
150 Bbl cement		13	40	
binds iron		14	180 1/2	
pitch		15	829	Johnson
		16	40	
		17	34	Compo King

40  
324 1/2  
52  
27 1/2  
119 1/2

Kingwood  
Bucation

Sum Back to me  
Gavin acton June  
Pull cups  
Crayon

1205  
26  
18 1/2  
20 1/2  
317  
16) 774  
164  
134  
128

49



William Morris Book

Education of the genius

By explanation than it became

known to us

Let lawyers or chaplains come first  
and talk for the poor folk

A Society established for the general  
advancement of Mechanical Science  
and more particularly for promot-  
ing the acquisition of that species  
of knowledge which constitutes the  
profession of a civil engineer, being  
the art of directing the great sources  
of power in nature for the use  
and convenience of man.

R J Cassin 940 Sojourner

Chico Smith thru 4 Tunnel

220 103.20 101.00

0	+50	322
	+75	311
	+50	310
	+75	321
1		326
	+75	339
	+50	337
	+75	341
2		341

0 114 103.07 127 101.93

	+75	324
	+50	326
	+75	343
3		339
	+75	344
	+50	337

334

127 ✓

Die 22 1908

Werte

R. Felix

98	100.00
09	99.98
10	96
99	94
94	92
81	90
83	88
79	86
79	84
99.83	82
71	80
64	78
58	76
63	74
70	72

01

3+75

10307

4

+25

0

275 103.00 282 100.25

+50

+75

5

+25

+50

+75

6

+25

0

262 102.86 276 100.24

+50

+75

7

+25

537 559

336

71 01 49.70

334

73 05 68

336

71 05 66

331

49.69 05 64

347

53 62

350

50 60 240 100.60 ✓

349

51 58

344

56 56

346

54 54

354

46 52

352

48 50

340

46 48

342

44 46

340

46 44

346

40 42

old list

10286

7+50

+75

8

+75

+50

0

119

102.79

126

101.60

+75

9

+75

+50

+75

10

+75

+50

+75

11

+75

119

126 ✓

354

356

362

362

357

365

358

353

349

366

362

363

361

367

366

392

32

30

24

24

29

14

21

26

30

13

17

16

18

12

13

18.87

06

02

07

old hub

9940

38

36

34

32

30

28

26

24

22

20

18

16

14

12

10

765

100 14

56

10279  
0 150 102.66 165 101.16

11 +50 358  
+75 350

12 356  
+25 366

+50 367  
+75 364

13 +25 372  
+50 385

+75 370  
0 384

151 102.52 165 101.01

14 +25 369  
+50 362

+75 357  
15 360  
364

08 99.08  
16 10 06

10 06 02  
00 02

98.99 00  
99.02 04 98.98

98.94 96  
81 94

96 04 92  
82 90

83 88

90 04 86  
95 11 84

92 10 82  
88 08 80

10252

15 425

+50

+75

16

+25

+50

0

383

10233

364

106.16

+75

17

+25

+50

+75

18

+25

+50

+75

19

+25

370

370

372

370

372

380

357

362

357

357

368

373

369

375

380

375

380

0582

0582

0580

0582

0580

072

76

71

76

76

65

60

64

58

53

58

53

04

06

06

10

10

04

10

07

14

16

07

04

10

06

03

10

07

9978

76

74

72

70

68

66

64

62

60

58

56

54

52

50

49

48

46

Summed

0  
19 +56  
+75  
20  
+25  
+50  
+61

391

10236

10198

356

10589

352

354

354

352

356

42

44

44

46

42

02

04

08

06

9844

42

40

38

36

35

inverted

760

9938 ✓

Dec 27 1908

order hay & grain

Brown

bottens

rails

To spillway

6x6

cement

Smiley

18" above wall

X house broom for Waters

Length of S track

144

17

8

10

15

9

896

1099

2

32198

732.6

5860.8

293

Vendor

731-10th street

nbt sunset

2 (3'10"  $\frac{3}{4}$  3" thread)





372 10372

10000

0 +50  
+50

+50

2

+50

3

352 103.24 304 106.76

+50

+75

4

+75

+50

5

+50

349 102.79 303 106.27

372

372

397

374

384

405

394

371

369

375

361

363

377

371

divided

divided

10278

6

+50

7

+50

+75

8

+75

+50

9

0

252

102.72

246

105.24

+50

10

+50

11

+50

12

+50

321

332

364

348

348

348

339

350

345

356

363

364

365

368

375

372

10272

12 +50

13

+50

0

411 102.21

360 106.32

+75

14

+50

15

+75

+50

+85

16

+50

17

0

359 102.23

357 98.64

+50

18

+75

+50

392

385

393

378

344

339

343

344

355

349

360

367

362

364

370

362

376

375

378

376

18 + 96  
Bm

10223

375

98.48 ✓

376

375

10223

18 + 96  
Bm

1-21-09.

Keep men busy

make out program at night

Patrol

mmms will appoint permanent patrolman

twice a day & at night in rainy weather

Phone reports - thru central  
10:20 am or intake

River, ditch & reservoir survey

Mark stations

Reduce wages

Miguel, Pete

cut out paper manure - fertilizer

Reduce expenses

Clabbing

500 Van Kute sec

250 cottonwood #3-4 sec

Rocks in ditch

Methods of removal, shears, ponds

Store

open & turn a week

Keep out Indians

Pump on Dam

Pump at Edwards place

Road ditches  
Secondary roads  
3-4 Road number pins - ballast

Gates  
See Swan  
to keep out Indians

Key diam

Turning water over ditch

Add emb on rock walls above dam site  
to 6" concrete  
Saw off expansion joints

Place flash boards 8 or 10" at bottom

Don't turn off water except as last resort

Put straps on gates

Scrap at Dulzura & save ballast

Trails to be made

$\frac{3}{4}$  Tunnel

2 Tunnel

Running boards to be made on flumes

Sta 100 above slab - digger bench to be dug

Tool bars & shears to be made

Fill in hollows on inside of berm  
 $\frac{1}{2}$  Tunnel

Brace Flumes (horizontal)

1 1/2 Tunnel (12)

Prop up rocks with 8 x 8<sup>s</sup> footing, wedge  
bet 11 & 12 flumes  
bet 3 & 4 tunnels

Build up rock walls under rocks & debris

(X) 1 1/2 Tunnel  
3-4 sec

Slab

1 1/2 Tunnel S	100"	can't use (ills)
1 1/2 " S	80	
(X) 1 1/2 " N	32	
1 3/4 " S	30 (pebbles)	
4 " N	40	

Photograph Clark place

Keep walk bbls full on building

Get in tools

Culverts

Wing. for on at 205

8 - 3/16 pie

Stop creek 209

Rocks in ditch

1.25

Scraper work Dubzine pie  
Sandballast - pile up lagging etc

Sand chambers.

Telephone

Have done phone in into house

Fire patrol of bldg by work

1-24-09

Raise concrete lining N of 16 Tunnel

concrete at end Flume 3

Support rock North of Wilson creek

2 sand chambers under Pin Creek Bridge

3x6x2 to 4 with gates

Concrete spillway at Pin Creek



Slabbing recommended by RW

Flume HS

15'

ditto

100'



Cottonwood Intake  
From shaft built up  
Pump out channel & wide

Abandon upper sand chamber

Polish all chambers rigidly

Build bottom at lower cottonwood intake  
V / both 1 to 8.

Hydraulic Equations

$$1.9 - \frac{1}{8} - \frac{3}{16} = 1.6 - \text{Barrett Road King}$$

$$\text{Pump link} - 0.2 = 2.1 \text{ gate, both } 12''$$

$$2.5 - \frac{1}{8} - \frac{3}{16} = 2.5 - \text{Barrett Road King}$$

Pant can.

put seats in boat, Pant no ladder

Angus - seen John the fur impeller  
with slide - brass can as also shown 12

Present to Mrs. W's

Burrows

Slabbing south of 306

Signs of wagon

hammers

Ditch timber - Paloge with  
miller  
? The chamber box in cottonwood?  
Signs of water pool.

Truck for Harry Ranch

Cottonwood Spillway 4' 4 1/2" wide  
2 1/2" deep

Will culvert at old Shicklin place  
pass 40 million gallons?

water in creek (Ding)

gangue 2-1-09

BR King 23, 25

2-2-09

BR King 20

Cement on Beach taken wood shed

21 bet  $1\frac{1}{2}$  -  $1\frac{1}{2}$

Wankam A 2-10-09

22  $1\frac{1}{2}$  S

$1\frac{1}{2}$  Big Bar 4 obbls burn

4  $1\frac{3}{4}$  N

37 bls good

$\frac{4}{47}$

1 on Van Kirk beach

Harness

Salazar's Star stock

Have bad places on lower ditch patch

Make more ganges.

Powder acct. of inventory.

B 7

C 12

10

29

17

content Pine Creek Sand Chamber

6' x 10'5" - top surface

3' x 3' = bottom surface

37' door

Pine Creek Sand Chamber

gate 15' x 23'

overall 8'9"

bolts 18" below crest

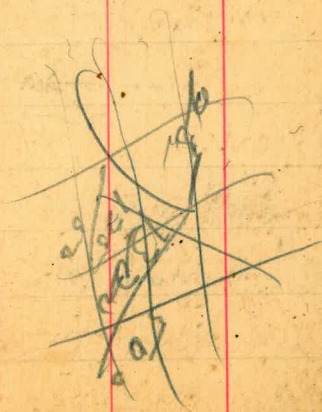
Pine Creek Diversion Dam gate

17' x 23' overall 47' must be 2' longer

fish plate 

3'2"
0 0

2 x 4



4' 8 1/2" = gang of track

7' 7" = bottom gang

\*

3000 bbl heavy cement

Shuts 16x80 x 8 or 9

cut boards 200' Radius

grade of top 3" in 100'

Dinner Room old 24x50 with stall

150 mm

with 30x24 print room for 20+

with 8 chair table

100 2x45.16

Bathrooms

6 porcelain ag. tubs

black and shiny } with

light tan } slant

12

14 Ocean cruise

4 20x20x7

4 12x17x8

NE 59.71 59.73

NW 65.54 65.62

SW 62.35 62.43

SE 58.19 58.27

Parent sign	
High sign 2 1/2 mi	
Dulzura rd 4 mi	
James Ranch 10	
" Store 13	
Canada 19	
Lemington 25	
San Diego 34	
Potero 8 mi	
Campo 18	
Rubys 34	
Jambor 40	
Mr Spring 49	
Coyote wells 64	
Bridge 96	
Parkings 82	
El Centro 62	
Holtville 101	

Search for Section Bounding  
3-16-09 Waste, Waterman.

Bm 270	11.90	180.97	169.073	on bench
70			630	174.67
30	849	183.16		
370			314	180.02
270	11.59	191.61		
170			1134	180.27
70	266	182.93		
60			1015	172.79
10	012	172.90		
20			952	163.38
20	080	164.18		
Bm 30			653	157.65 on Flat PK

Search Spillway

Bm 55	067	169.74	169.07
	038	158.77	1135 159.39
Bm 15			1016 148.66

Levels Ward Spring to Bdo. Sta

Top of well	314	303.14	3000	Ward Spring
			1115	29 1.99
	002	292.01		
			1161	28 0.40
	070	281.10		
			1043	27 0.67
	006	270.73		
			937	26 1.36
	011	261.47		
			1131	25 0.16
	874	250.40		
			078	24 0.62
	008	240.70		
Lowest plain pipe line			105	23 9.65
	058	240.23		
			648	23 3.75
	1032	244.07		
	1525		7118	

3-17-09

Ward Spring

	244.07	073	243.34
	1171	25 5.05	
		073	254.32
	1174	26 6.06	
		269	26 3.37
	1200	27 5.37	
Pipe at Well			780 26 7.57
		030	27 6.07
	1090	28 5.97	
		091	29 4.99
	1050	29 5.49	
		500	29 0.49
	952	200.02	
		1112	28 8.90
	041	27 9.31	
		1093	27 8.38
	032	27 8.70	
		1039	26 9.31
	6711		4287

099	269.30		269.21
		1130	258.00
07A	258.74		
		1136	247.39
053	247.91		
		1153	236.38
052	236.90		
		1135	225.55
148	227.03		
		1112	215.91
069	216.60		
		1122	205.38
145	206.83		
		1093	195.90
134	197.24		
		1074	186.50
169	188.19		
		1084	177.35
043		10039	✓

686	184.21		177.35
			17541 ✓
			17.61
			17.76
X	Chick Sands from Baghouse to	Bm 169.073	
	3-18-09	W. W. Bannan	
552	163.17		157.65
		895	154.22
			300
			17541
266	156.88		12459
		214	154.74
1152	166.06		
		138	164.68
1073	175.41		
		082	174.59
479	179.38		
		1030	169.08 ✓
	Arthropod BM	212	Beggs
250	160.15		157.65
		356	156.59
3502		2359	✓

Measure from Washington to Belyda

0200 = Washington  
 9490 = sun  
 10+03 = slow rain - pipe  
 13+50 = pencil  
 15+45 = end pipe Dulinkukhai  
 29+00 = pr arrow above Belyda  
 90° ft  
 32+40 = Belyda

Pyrothum ducks at 1433'

Morena Mission  
 4-17-09 1174' N49°24' W

Level around Belyda

	910	166.75		157.65
Belyda bank			448	162.27
0	494	160.79	10.90	155.85
0	923	164.09	593	154.86
0	841	160.95	1155	152.54
0	1098	166.32	561	155.34
0	1215	166.70	1177	154.55
0	1052	165.68	1154	155.16
0	1080	164.90	1158	154.10
0	205	163.89	306	161.84
Bm opp Green Cottage			288	163.01
			889	155.00
			9.20	155.00
			9.09	155.00
			579	155.00
			595	155.00
			11.32	155.00
			11.70	155.00
			1068	155.00



230 Top Res  
220 Bot. Res

45000

4000  
7000  
2500  
600000

1650  
7000

must be this or more  $\rightarrow$  8.53% = hydraulic grade  
top of water 40' above bottom

64631.7

-1

1.76

230

160

700/700

1.53

157

800

282

700/500

1.7

162

3.

646,317

45242.19  
07.67

LHR.P. Wood shingles	doz	10.50
Great Copper Rivets #30	1b	4.5
Pivoting bolts		1.50
400 level books		50
389 X steel.		50
Lumber crayon	doz	85
$\frac{5}{8} \times 1\frac{1}{8}$ pick steel	100	550
$\frac{1}{4} \times 3$ carriage bolts	100	380
$\frac{5}{16} \times 2$	50	205
$\times 2\frac{1}{2}$	50	220
$\times 3$	50	235
$\times 3\frac{1}{2}$	50	250
$\frac{3}{8}$ drill steel Bla Dia	100	750
Stanley pocket levels		40
2" copperized filler		84
$\frac{1}{4} \times 1\frac{1}{2}$ large carriage bolts	10	80
$\times 2$	10	85
$\frac{1}{4}$ " wood iron washers	200	
$\frac{3}{16}$ " " "	100	

Washers RR picks 7"	Key	7.15
5x1 RR pick handles	doz	4.50
$\frac{1}{2}$ ply Malthroid Roofing	Sq	1.60
3x caps	10	6.50
Q.P. Fuse	infir	550
3x arc handle	doz	4.10
Borax	1b	10
Big vein Blk Smith coal	Ton	18.00
#1 Giant	1b	.19
4" Archimedes handles	doz	70
10 $\frac{1}{2}$ " Brick trowel	doz	7.50
Crustan hoes	doz	6.60
50" Chalkline	doz	45
Steel thumb tacks	100	65
1" Blk return bends		27
1" Blk pipe	100ft	6.40
6" Painter trowel	doz	5.50
16" archimedes handles	doz	80
5x mason hammer	1b	1.3

3 1/2" ex sledge hds	doz	300
4" steel sledge hammer	100 lb	750
3" DF striking hammer	100 lb	1100
3 1/2" ex sledge hds	doz	760
Cross pin sledge	100 lb	700
8" double face striking hmn	100 lb	800
16" & 18" crow-bars	100 lb	500
LHSP had choulds	doz	725
LHSP " "	"	"
DHSP " "	"	"
AZ 1 sub. wheel banners		405
No 1 ing Dist	gal	10
" 263 2" prospecting hammer	doz	1000
4" Tri Brand Wrenches	doz	1020
1 set 10" SC Durocap car		
Wheel Pads 18" gauge		1450
1203 chack canvas 10x20		900
5" 200# plain gauge		200
2" knick pop outlet valve		810

6" 2" 8 ft saws	doz	17.00
7" 5 ft saws		160
14" steel squares	doz	710
3 1/2" ex sledge hds	doz	300
10" DF striking hmn	100 lb	800
14" X pin sledge	100 lb	700
1 1/2" x 1 reducer	doz	126
20 qt mule pail	"	600
2 levels	"	800
18" 4x4 36" floor cloth		270
2 1/2" duck valve		228
Mobiloi	gal	70
Gasoline		22 1/2
Clintox welding cup	lb	10
4" Starnell Hand saw block	doz	46
10" " " " "	"	60
bb1		165

Bm Blgda 1062 167.21

173 = end pipe

156.59

1121 176.66

176 165.45

1149 187.42

073 175.93

1158 198.94

006 187.36

1147 209.80

061 198.33

1097 219.95

082 208.98

1117 230.10

102 218.93

Bm (flipped)

1009 140.05

034 229.76

5" 2" Run

877 139.50

1032 129.73

Data

Bot spring 8'2" below top wall

Lower outer pipe 7' below top wall

Intermediate outer pipe 3'4" below top

Upper outer pipe 1'10" below top

Reduced to Meaner Datum

Pipe elevation at:

Top wall ward spring

282.24

Sheet metal overflow pipe

280.4

Intermediate pipe

279.0

Bottom pipe

274.2

Saw point at Roadside

218.78

Kellinick Cottage

249.8

	Rough	lines	Back	to Tank
1+25	94	2584		250.00
Stand pipe				51 53.3
0	066	252.93	673	252.17
4				09 51.9
0	7.92	252.68	807	244.76
3				22 50.5
0	562	255.19	311	249.57
4 0	576	254.81	614	249.05
4				<del>614</del> 249.05
5				57 49.1
6				7.1 47.7
7				95 46.3
8				99 44.9
9				113 43.5
1				127 42.1
0	588	248.99	1170	243.11
10				83 40.7
11				17 39.3
12				11.1 37.9
13				125 36.5
D.	185	248.43	641	242.58

24443

9.3 35.1

10.7 33.7

365

259

113

35.1

46.6

35.8

3413

35.9

54

242.57

4

246.58

26.5

10.08

31.80

16.5

47

1545

75

1470

17

31

274

48

26

490 234.65

229.75

69 227.7

943 238.36  
24

572 221.93

120 226

17 + 100

BWA

1163 226.73

1433

1735

1433  
302

1525  
75  
1450

17  
1470  
3200  
16  
48

224  
48  
226

150

30  
120  
108

9 to 1

27

60

54

90

81

120

108

150

129

150

157

130

189

110

218

90

248 70

278 50

308 30

338 10

039 169.46

169.07

1140 158.06

326 161.32

150

235 153.13

1054 150.78

188 143.46

1155 141.58

372 137.59

959 133.87

130

120 121.30

1069 121.90

047 117.66

1111 117.19

110

152 108.36

1082 106.84

063 97.05

1194 96.42

90

283 88.84

1044 86.61

001 78.16

1067 78.17

70

111 67.93

1132 66.82

001 57.22

1072 57.21

50

056 46.04

1174 45.48

145 36.55

1094 35.10

30

143 26.91

1107 25.48

1013 26.42

051 16.98

1044 16.47

10

226 8.41

1083 06.15

477 3.64

BWA



Photos

Brush Dam cottonwood  
a typical culvert access ditch  
From head town up valley  
Surgun Glen  
John Flinn  
Bee Cave (Homes)

1550  
14750  
-----  
3300  
165  
-----  
49.5

274.2  
49.5  
-----  
224.7

Shane Pete

Painkill statistics  
Puff  
Distances  
Grades  
Semi-Moist  
Spauld & Don  
Merriman  
Setting & Accomplishments  
USGS & USS and office Sit.

Battens  
masonry  
neopole  
caveat

An octopus  
The year  
Station in camp  
The jungle  
Stinky & Co  
Marie Corbett  
Ellen White Wilson  
Animals  
Purinton

Sittl Brof Rich  
Lambert Gold lace  
Hans Holbein



Cost of Cottonwood Fuel

Nov	Sabor	slim	water	200	225	250	300
18				3			
19			1				
20	1		1				
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
Dec							
1							
2							
3							

Cement

Shen Team Pete

1	
2	2
	2
	2
	2
14	2
	1
	$\frac{1}{2}$
2	
9	
12	
6	
6	
6	

Tue Sunday 10-25-08

W. O. Byrne  
 C. Ramos  
 Tosny  
 Bue  
 Kimmie  
 Mike Sullivan  
 Angel Bessa  
 George Church  
 Sam Kovitch  
 Isabel Rodriguez  
 Jose Rodriguez  
 O. Perez  
 Timgora  
 Mike Decano  
 Jane Castella  
 Appel Shro  
 Leo Gapan

G. R. Stebbin  
 Nat Fern  
 B. G. G. G.  
 Blest  
 Alvarez  
 Ann  
 Doyle

J. S. S.  
 M. e. Army  
 Amintang  
 ton  
 mengoza  
 actor  
 Siberty  
 Dan  
 Pillo  
 Rlyke

Sunday  
 P. P. P.  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30

57 (B) 12 8 x 8 - 16 8 - 8 x 8 - 11 12 Bbl  
 18 (B) 7 x 8 16 x Bbl  
 19 15 Bbl  
 20 16 Bbls  
 21 (B) 4 drums 10 Bbls & Kgs 15 fish  
 22 25 Bbls (B)  
 23 55 Bbls (B)  
 24 25 Bbls (B)  
 25 (A) 25 Bbls 10 Bricks & Kgs water  
 26 25 Bbls 5 (B) 1 PKg harness  
 27 20 Bbls nurse 20 Dan (Ban)  
 28 25 Bbls (Ban)  
 29 25 Bbls (Ban)  
 30 57 Bbl Annie grocer

Estadística

Cualquiera de los trabajadores que  
de venga del trabajo sin avisar  
á su ~~est~~ mayordomo sera  
Despedido por orden ~~del~~

Ingeniero mayor

52+75 10-9-25  
LUBB  
T. 52+85

A9+55

58+75

61+20

65+22

OB

□

X

Junct. T. 80B

□

Trin Sunday 10-4-08

Pipe laying { Kimmel  
3 { Van Kirk  
Bid

OByrne (excavating - laying track)

Bosmer

Savin

Perez

Aljndro

Jose Ramirez

Isabel Rodriguez

Snediker (stopping sidewalk)

Joe Alvarez

Benson

F. Boots

P. Spence

1/2 do

Adonis  
Angel Ramirez

Action  
Bastament

Bellon

Pedro Perez

Yo Carl

Thos. Bicket

1/2 do Jim Scott

Siberty

Juan Acabado

Peter Daramas

Taylor

Ferguson

Sarris

McAfee

From my

12 bbl plants

10. pin

pipe 75-50

Rail 65-50

spiked to 65

Synopsis of Unfilled Lumber Orders

10-3-58

	16	16	16	16	16
	1/2 x 4	1 x 6	1 x 12	2 x 12	3 x 12
5541		500			
5552		500			
5555			2000'		
5559				40	
5560					
5563		600			

1350  
 250  
 1100  
 343  
 757  
 157  
 600  
 329  
 Barnett  
 271  
 113

2000'  
 1488'  
 512'  
 512'

40  
 27  
 13  
 10  
 3  
 Barnett

	16	16	20	16	20
	6 x 6	6 x 6	6 x 6	8 x 8	8 x 8
5570	40	20	20	40	20
5574					
5581				60	

	16	16	16	16	16
	2 x 4	6 x 6	7 x 8	8 x 9	8 x 9
				5	20
	200	60	60	2	8
					11
					12
			60		
	400				

600  
 7  
 583  
 121  
 462  
 1/2 waith 2A  
 23000  
 400  
 218  
 182  
 152  
 18  
 42  
 7  
 35  
 120  
 13  
 107  
 22  
 87  
 Barnett  
 Warshman  
 Warshman

	16	16	6 x 12	8 x 8	16
	2 x 8	1 x 6	(32)	(15)	
	60				
		450			
			18	20	

Tenement Ward at Barrett

	OBygn	Jwin	Teham	Smediker	Doyle
9-24	10	2½	½		
25	12	2½	⅓		
26	10	—	—		
27	—	3½	—		
28	11	4¾	¼		
29	11	—	¼		
30	11	—	½		
10-1	9	Dalyman 108bl for picture	½	7	
2	12		—	9	
3	12		—	13	
4					
5	12		½	10	
6	12		½	11	
7	10		½	11	
8	11		½	15½	
9	12			15½	
	155	13½	4½	92	

	<sup>155</sup> OBygn	<sup>134</sup> Jwin	<sup>113</sup> Teham	<sup>123</sup> Smediker	Stebbins	Doyle
10-10	11				15	1
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						

Curry Farm

Run 4 ft x 4 - 20

1 x 4 - 8

70 x 16 - 9 - 20

Square Top

3.89 +

Measuring Box 10-6-58

OB 26 x 26 x 12

4.69 cu ft

T 24 x 24 x 11 1/2

3.83 cu ft.

Taylor's Frame



Fish plates

1/2 x 15



25 in Bundle

3/4 x 3/4 x 2 1/2

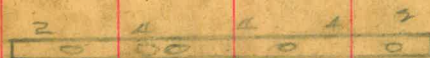
Ties 4 x 6 x 30

Insulators 3 x 5 x 28

2 apart

you will 1 1/2

4 in Fish Plate



4 x 1 x 16

change necessary for connection

3/4 4 inch rails

## Nails

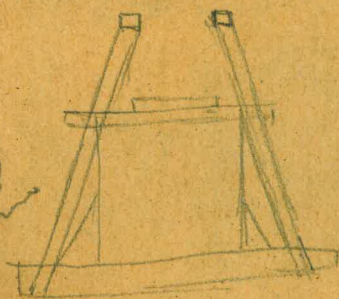
## Flumes

2d	1	716
3d fine	1 $\frac{1}{2}$	626
3d	1 $\frac{1}{4}$	440
4d	1 $\frac{1}{2}$	300
5d	1 $\frac{3}{4}$	210
6d	2	163
7d	2 $\frac{1}{4}$	123
8d	2 $\frac{1}{2}$	93
10d	3	66
12d	3 $\frac{1}{4}$	50
20d	4	32
30d	4 $\frac{1}{2}$	19
40d	5	16
50d	5 $\frac{1}{2}$	13
60d	6	10

## Telephone rings

1 long 1 short	San Presa
2 short	San Diego
5 short	Barrett
4 short	Collinwood
1 long 3 short	in arena
2 long 1 short	camp 1
2 long 3 short	Johns
1 long 4 short	High Valley
1 long 2 short	Jumbra
mean 437	Union Bldg

50 4 $\frac{1}{2}$  x 7 $\frac{1}{2}$   
 50 2 x 4 $\frac{1}{2}$   
 2 $\frac{1}{2}$  x 3 $\frac{1}{2}$   
 3 washers  
 4





DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
FOR SINGLE TRACK EMBANKMENT.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0										0
1	8.5	7.2	7.3								1
2	10.0	8.7	8.8	7.5	7.6	7.8	7.9	8.1	8.2	8.4	2
3	11.5	10.2	10.3	9.0	9.1	9.3	9.4	9.6	9.7	9.9	3
4	13.0	11.7	11.8	10.5	10.6	10.8	10.9	11.1	11.2	11.4	4
5	14.5	13.2	13.3	12.0	12.1	12.3	12.4	12.6	12.7	12.9	5
6	16.0	14.7	14.8	13.5	13.6	13.8	13.9	14.1	14.2	14.4	6
7	17.5	16.2	16.3	15.0	15.1	15.3	15.4	15.6	15.7	15.9	7
8	19.0	17.7	17.8	16.5	16.6	16.8	16.9	17.1	17.2	17.4	8
9	20.5	19.2	19.3	18.0	18.1	18.3	18.4	18.6	18.7	18.9	9
10	22.0	20.7	20.8	19.5	19.6	19.8	19.9	20.1	20.2	20.4	10
11	23.5	22.2	22.3	21.0	21.1	21.3	21.4	21.6	21.7	21.9	11
12	25.0	23.7	23.8	22.5	22.6	22.8	22.9	23.1	23.2	23.4	12
13	26.5	25.2	25.3	24.0	24.1	24.3	24.4	24.6	24.7	24.9	13
14	28.0	26.7	26.8	25.5	25.6	25.8	25.9	26.1	26.2	26.4	14
15	29.5	28.2	28.3	27.0	27.1	27.3	27.4	27.6	27.7	27.9	15
16	31.0	29.7	29.8	28.5	28.6	28.8	28.9	29.1	29.2	29.4	16
17	32.5	31.2	31.3	30.0	30.1	30.3	30.4	30.6	30.7	30.9	17
18	34.0	32.7	32.8	31.5	31.6	31.8	31.9	32.1	32.2	32.4	18
19	35.5	34.2	34.3	33.0	33.1	33.3	33.4	33.6	33.7	33.9	19
20	37.0	35.7	35.8	34.5	34.6	34.8	34.9	35.1	35.2	35.4	20
21	38.5	37.2	37.3	36.0	36.1	36.3	36.4	36.6	36.7	36.9	21
22	40.0	38.7	38.8	37.5	37.6	37.8	37.9	38.1	38.2	38.4	22
23	41.5	40.2	40.3	39.0	39.1	39.3	39.4	39.6	39.7	39.9	23
24	43.0	41.7	41.8	40.5	40.6	40.8	40.9	41.1	41.2	41.4	24
25	44.5	43.2	43.3	42.0	42.1	42.3	42.4	42.6	42.7	42.9	25
26	46.0	44.7	44.8	43.5	43.6	43.8	43.9	44.1	44.2	44.4	26
27	47.5	46.2	46.3	45.0	45.1	45.3	45.4	45.6	45.7	45.9	27
28	49.0	47.7	47.8	46.5	46.6	46.8	46.9	47.1	47.2	47.4	28
29	50.5	49.2	49.3	48.0	48.1	48.3	48.4	48.6	48.7	48.9	29
30	52.0	50.7	50.8	49.5	49.6	49.8	49.9	50.1	50.2	50.4	30
31	53.5	52.2	52.3	51.0	51.1	51.3	51.4	51.6	51.7	51.9	31
32	55.0	53.7	53.8	52.5	52.6	52.8	52.9	53.1	53.2	53.4	32
33	56.5	55.2	55.3	54.0	54.1	54.3	54.4	54.6	54.7	54.9	33
34	58.0	56.7	56.8	55.5	55.6	55.8	55.9	56.1	56.2	56.4	34
35	59.5	58.2	58.3	57.0	57.1	57.3	57.4	57.6	57.7	57.9	35
36	61.0	59.7	59.8	58.5	58.6	58.8	58.9	59.1	59.2	59.4	36
		61.2	61.3	60.0	60.1	60.3	60.4	60.6	60.7	60.9	
			61.5	61.6	61.8	61.9	62.1	62.2	62.4		

Calculated by Julien A. Hall, M. Am. Soc. C. E.

*Handwritten notes on the left page:*  
 1000 pipe  
 1 15 1/2 ...  
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