

Sept. 14, 1908

"B" COAL TRESTLE AND TUNNEL

----- COST OF CONCRETE WORK -----

Labor:

Wheeling, Mixing & Tamping	294.66
Forms	198.26
Teaming (approximate)	15.00
Shop Labor "	15.00
Superintendence	<u>100.00</u>
	622.92

Supplies:

Cement 1453 sacks @ 50¢	726.50
Sand 4 cars @ 12.00	48.00
Rock 6 " @ 20.00	120.00
Lumber (very approximate)	<u>18.00</u>
	912.50

Cost per yard, Labor	2.224
" " " Material	<u>3.259</u>
Total cost per yard	5.483

Average yds. per man per day - 2.57

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See comp. book #49 pages 2 to 15

CHAMPION COPPER CO.

Draughtsman *[Signature]*

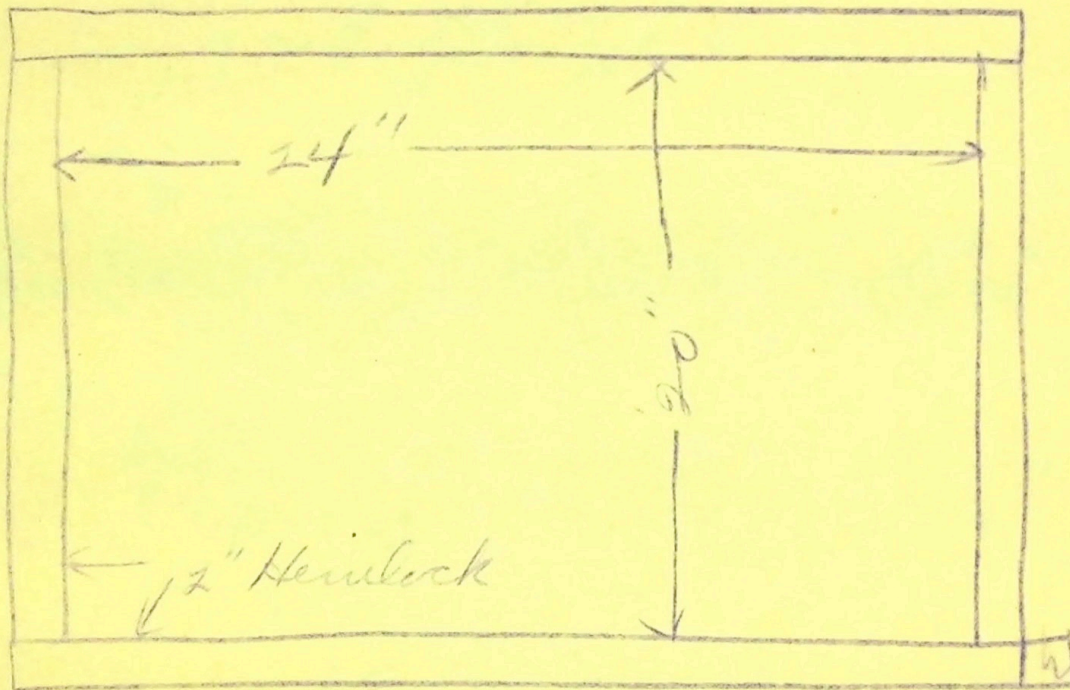
Sketch No.
Adams Township, MI

DRAWING ROOM SKETCH.

Examiner _____

To be returned when Work is Finished.

Painesdale Mich., *Oct. 8* 1908



Box for 'B' Rock House Steam Fire
Total length = 50 feet.

See drawing #1890

CHAMPION COPPER CO.

Draughtsman *[Signature]*

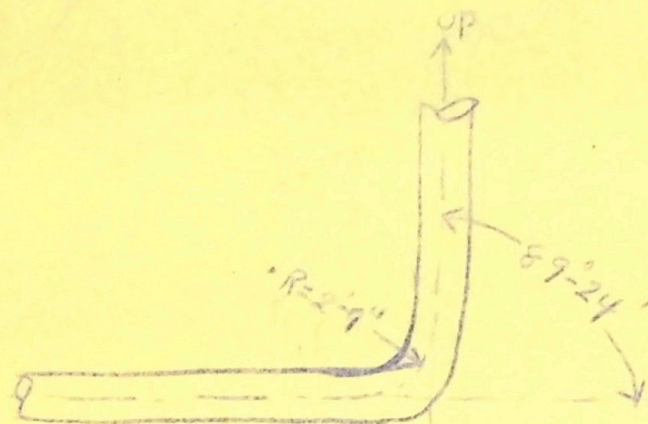
Sketch No. _____

DRAWING ROOM SKETCH.

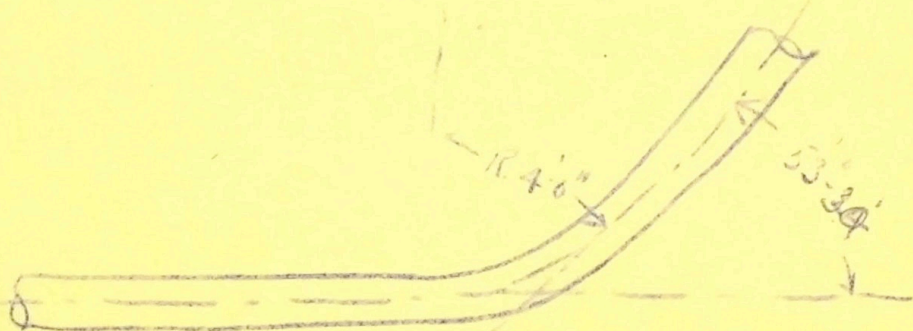
Examiner _____

To be returned when Work is Finished.

Painesdale Mich., *Oct 5* 19 *08*



Bend at Rock House



Bend at +21.32
(Top of Hill)



Bend at Boiler House

Bends for B Rock House

Sept. 22, 1908.

Last night old "B" engine house,
new #4 pulley stand, and part of the
box covering the rock house steam
line, burned down. Fire started
in the steam line box somewhere.
The Rock house was scorched some
between the walls of the engine room,
but no very serious damage.

Ropes not hurt, were kept moving
through fire.

CHAMPION COPPER CO.

Draughtsman

H. M. M. C.

Sketch No. _____

DRAWING ROOM SKETCH.

Examiner _____

To be returned when Work is Finished.

Painesdale Mich.,

Sep. 4 19*08*

For "B" Steam Tunnel.

10 pieces 2" pipe, 12" long

no threads

old pipe will do.

37.34

CHAMPION COPPER CO.

Sketch No. _____

Draughtsman _____

DRAWING ROOM SKETCH.

Examiner _____

To be returned when Work is Finished.

Painesdale Mich., 3-12- 1918

Building one new trestle & extending old trestle.

Cost of New trestle:-	#
106 ft. @ \$12	1272
Extending present trestle 103 ft.	1236
Lowering pipe etc	409
Switch	100
approach to new trestle	150
Abutments for new trestle	50
	<hr/>
	3217

Capacity of above 2 trestles = 5738 Ts.

CHAMPION COPPER CO.

Draughtsman *[Signature]*

Sketch No. _____

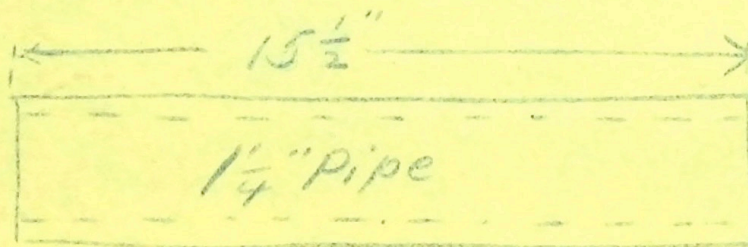
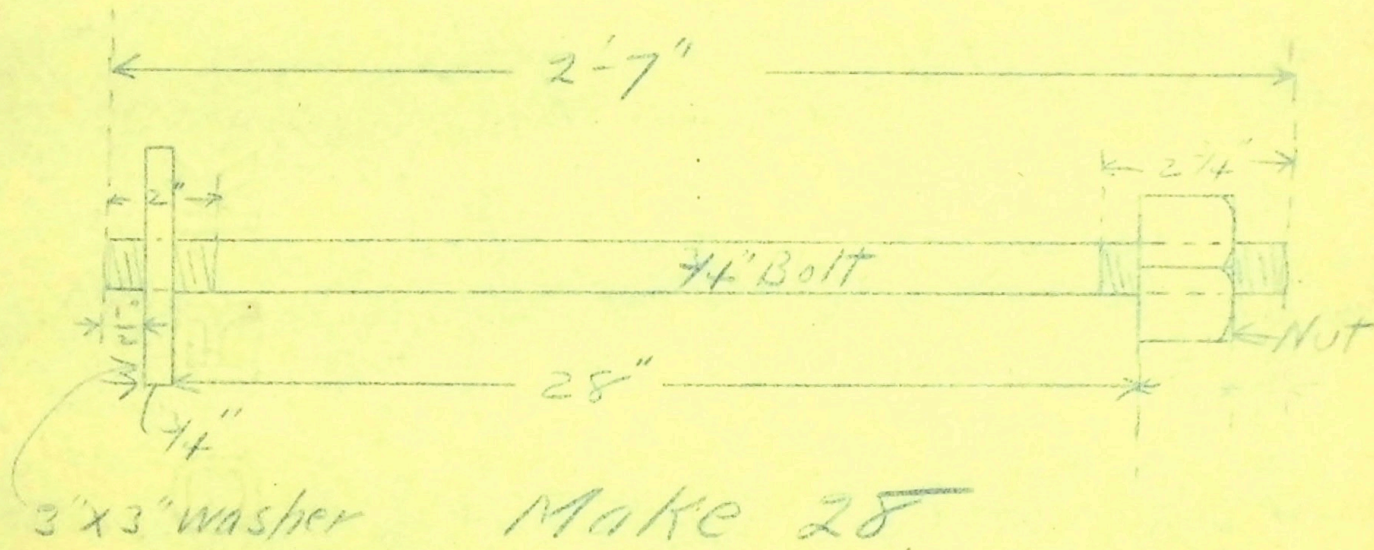
DRAWING ROOM SKETCH.

Examiner _____

To be returned when Work is finished.

Painesdale Mich., *July 21* 19*18*

B Coal Trestles, Anchor Bolts.



*Pipes To Go over Bolts.
Make 28*

Estimate of Concrete
in Extension of B. & O. Trestle

Footings = 1847 cu ft.
Piers = 2352

4199

$\frac{4199}{27} = 156$ yds concrete

Steam Adit = 114 yds.

$\frac{156}{114}$

270 yds in all

Polley's Estimate on

3' Trestles & Tunnel

It finally turned out that there was
276 yds. in the Extension, ^{concrete} alone, as ^{& steam adit}
we had to go deeper than was figured on.

The new trestle was not built.

see comp book #49 page 2

Footings

$$4(3 \times 4\frac{1}{2} \times 21) = 1138 \text{ cu ft.}$$

$$(3\frac{1}{2} \times 4\frac{1}{2} \times 21) = 331$$

$$2(2 \times 4\frac{1}{2} \times 21) = 378$$

$$\text{Total} = 1847 \text{ cu ft.}$$

Piers

$$\text{No 1} = \frac{(23 \times 2) + (29 \times 3\frac{1}{2})}{2} (10) = 650 \text{ cu ft.}$$

$$\text{No 2} = \frac{(19 \times 2) + (20 \times 3\frac{1}{2})}{2} (7\frac{1}{2}) = 412 \text{ "}$$

$$\text{No 3} = \frac{(19 \times 2) + (20 \times 3)}{2} (6) = 294 \text{ "}$$

$$\text{No 4} = \frac{(19 \times 2) + (20 \times 3)}{2} (6) = 294 \text{ "}$$

$$\text{No 5} = \frac{(19 \times 2) + (20\frac{1}{2} \times 3\frac{1}{2})}{2} (9) = 495$$

$$\text{No 6} = \frac{(19 \times 2) + (20 \times 3)}{2} (5) = 245$$

$$\text{No 7} = \frac{(19 \times 2) + (20 \times 3)}{2} (6) = 294$$

Total.

Peduct

$$\frac{(3 \times 7) + (4 \times 7)}{2} (1.5) + \frac{(2 \times 7\frac{2}{3}) + (3 \times 7\frac{2}{3})}{2} (5) = 242$$

Estimate of Yardage:
at B Extension of Coal Trestle

Between Sections	Cut	Fill
0-1.	15 yds.	86 yds.
1-2	8 "	108 "
2-3	0 "	121 "
3-4	2 "	117 "
4-5	4 "	126 "
5-6.	10 "	90 "
6-7.	45 "	35 "
Total	81 yds 49 " 126 yds	703.

new trestle

370 yds.

no fill.

277 yds concrete in both trestles
and steam tunnel

B' trestle & abut.

- #1 = $2.75 \times 9 \times 19 = 470$
- #2 = $2.50 \times 6 \times 18 = 270$
- #3 = $2.50 \times 5 \times 18 = 225$
- #4 = $2.15 \times 5 \times 18 = 225$
- #5 = $2.66 \times 8 \times 14 = 283$
- #6 = $2.25 \times 3 \times 18 = 124$
- #7 = $2.25 \times 3 \times 18 = 121$

63 yds,

$$\begin{array}{r} 27 \overline{) 1715} \\ \underline{162} \\ 95 \\ \underline{81} \\ 14 \end{array}$$

1050 rods
current

say 126 yds in two trestles
for walls

84 yds = footings

say 62 yds for steam tunnel

$$\begin{array}{r} 84 \\ \underline{126} \\ 272 \end{array}$$

$$\begin{array}{r} 272 \\ \underline{27} \\ 1904 \\ \underline{549} \\ 27544 \\ \underline{1099} \end{array}$$

say 272 yds total

2d opt. B' Coal testle

- #1. $23 \times 4 \times 2 + 23 \times 3 \times 9 = 805$ 167
3.67
1.6
 - #2 $22 \times 4 \times 2 + 19.5 \times 3 \times 8 = 694$
 - #3 = $22 \times 4 \times 2 + 19.5 \times 3 \times 5 = 468$
 - #4 = $22 \times 4 \times 2 + 19.5 \times 3 \times 8 = 694$
 - #5 = " $+ 19.5 \times 3 \times 3 = 352$
 - #6 = " $+ 19.5 \times 3 \times 3 = 352$
 - #7 = " $+ 19.5 \times 3 \times 3 = 352$
-
- 3833 = 142 yds

Tunnel.

- $34 \times 12 \times 1.80 + 28 \times 9 \times 1.80 + 20 \times 3 \times 1.80 = 1296$
 - $34 \times 12 \times 1.80 + 28 \times 9 \times 1.80 + 20 \times 3 \times 1.80 = 1296$
 - $63 \times 8 \times 1 = 504$
-
- 3096 114 yds

New,

$7 \times 2 \times 19.5 \times 2 = 546$ 21 yds.

277 yds @ $\frac{1}{6} = 1662$ 21
11.4
142
277 yds total.

1251 sacks cement,
134 yds sand = $4\frac{1}{2}$ cars.
221 " Rock = 7.3 cars.

CHAMPION COPPER CO.

Draughtsman WQB

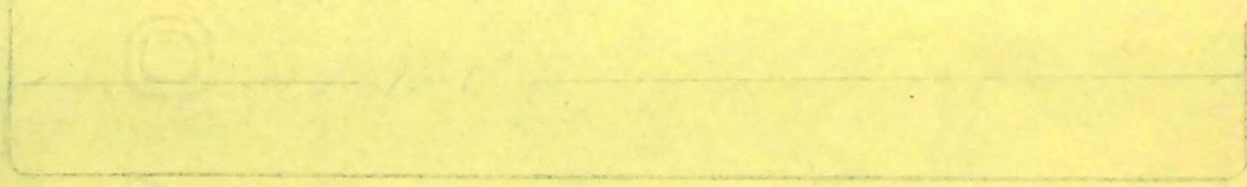
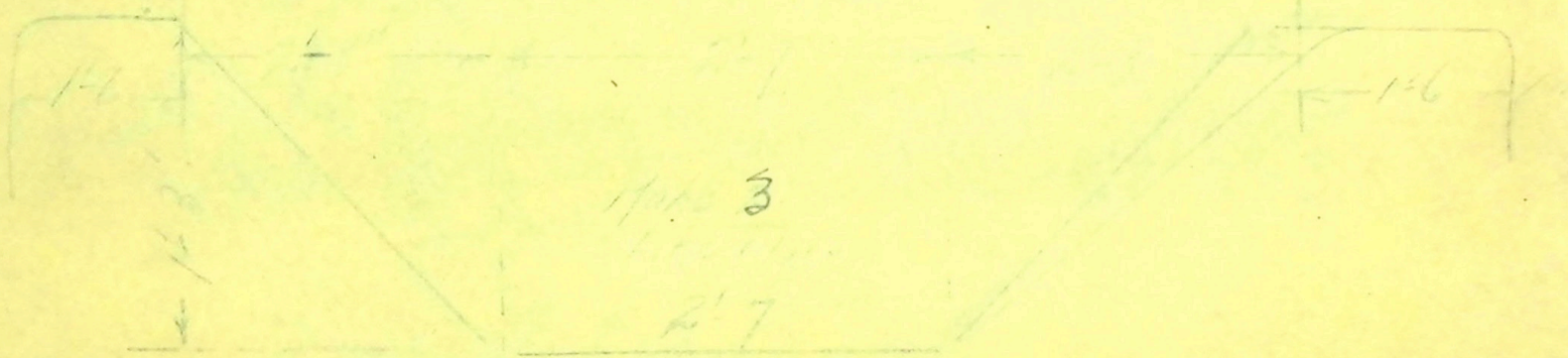
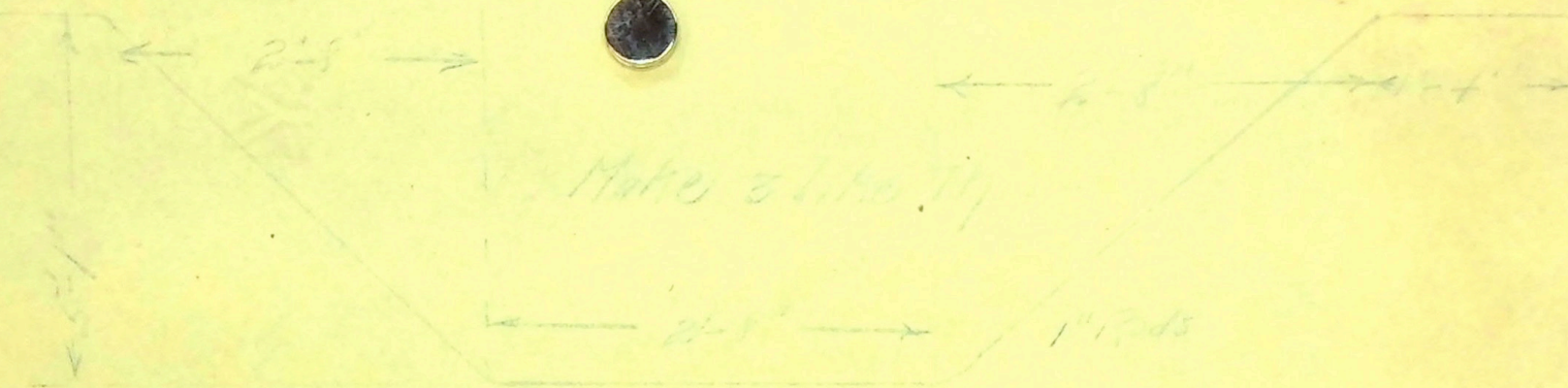
Sketch No. _____

DRAWING ROOM SKETCH.

Examiner _____

To be returned when Work is Finished

Painesdale Mich., 4 22 19



Make 6 like 114
 "B" Coal Trestle Extension

CHAMPION COPPER CO.

DRAWING ROOM SKETCH.

To be returned when Work is Finished.

Draughtsman H. M. M.

Examiner _____

Painesdale Mich., June 11 1914

B Coal Trestle
Extension

- 7 - 12x12 - 12
- 14 - 12x12 - 22
- { 14 - 12x12 - 20
- { 7 - 12x12 - 20
- 20 - 6x8 - 16
- 56 - 3x10 - 16
- 14 - 3x10 - 20
- 7 - 4x10 - 20
- 14 - 3x10 - 14
- 22 - 8x8 - 16
- 7 - 4x16 - 30
- 21 - 2x4 - 10
- 21 - 2x4 - 16
- 21 - 1x6 - 16
- 14 - 10x18 - 30

B New Coal
Trestle

- 12 - 12x12 - 20
- 8 - 12x12 - 22
- 5 - 12x12 - 14
- 3 - 12x12 - 16
- 11 - 12x12 - 12
- 20 - 6x8 - 16
- 7 - 4x10 - 20
- 10 - 3x10 - 20
- 50 - 3x10 - 16
- 10 - 3x10 - 14
- 2 - 3x10 - 18
- 22 - 8x8 - 16
- 7 - 4x16 - 30
- 21 - 2x4 - 10
- 21 - 2x4 - 16
- 21 - 1x6 - 16
- 14 - 10x18 - 30

List given to Parker today

"B" Shaft

	North Rope	South Rope
Drum to Brace	539'	544
Brace to 9th level	1125	1125
9th to 11th level	200	200
	<hr/> 1864	<hr/> 1869

H.C.M.

Nov. 22nd, 1907.

Mr. J. W. Jackson, Supt.,

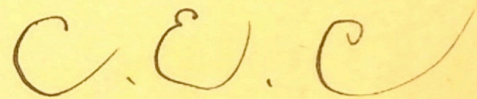
Wisconsin Bridge & Iron Co.,

Houghton, Mich.

My Dear Sir:-

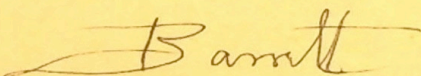
This morning I asked your foreman, Mr. Barrett to put a beam in the bottom of the poor rock bin in the "B" shafthouse which was not shown on the plans, and told him we would settle afterwards whether this beam was extra or not.

Yours respectfully,



Chief Engineer.

C.E.C.



CHAMPION COPPER CO.

Draughtsman *H. Mercer*

Sketch No. 227

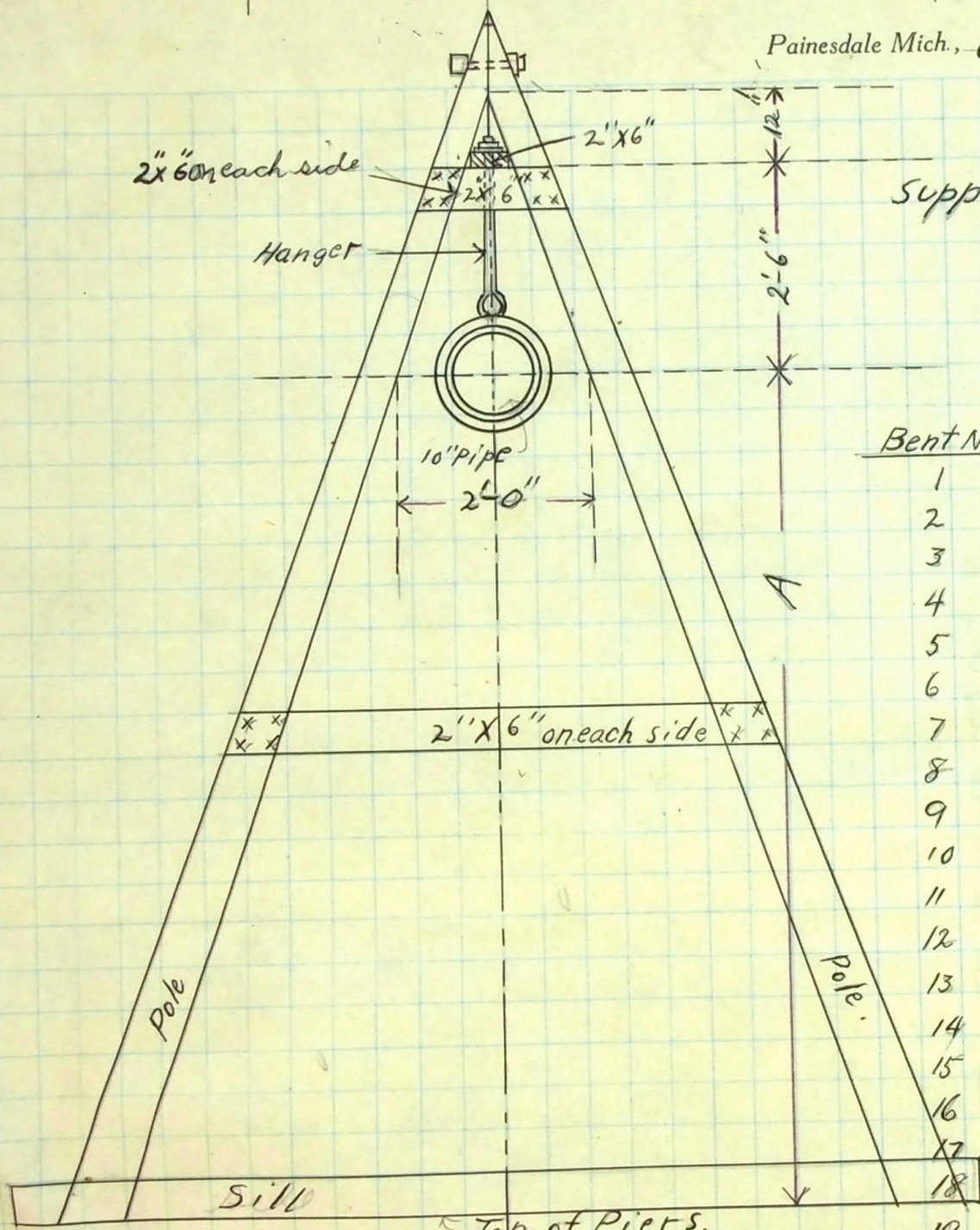
DRAWING ROOM SKETCH.

Examiner *11*

To be returned when Work is Finished.

Painesdale Mich., *Oct. 31* 1907

"B" Hoist.
Supports for Steam Pipe.

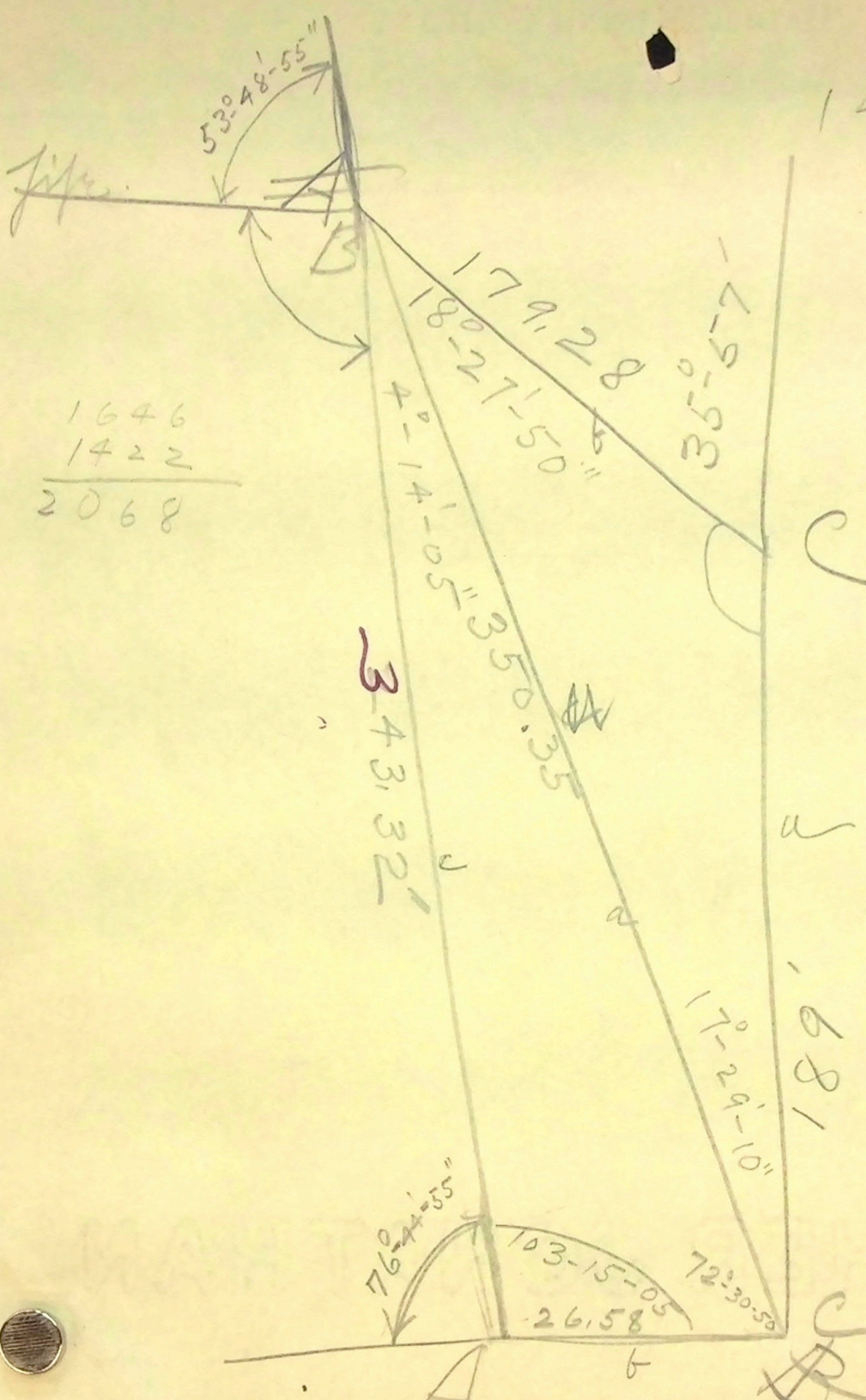


Bent No.	Dist from 1st Bent at Boiler House	A	Elev. N. Pier. Pier.
1	343.32	8.56	560.00
2	327.32	6.45	563.60
3	311.32	4.64	566.90
4	295.32	3.73	569.30
5	279.32	3.72	570.80
6	263.32	4.01	572.00
7	247.32	5.00	572.50
8	231.32	5.99	573.00
9	215.32	9.88	570.60
10	199.32	12.37	569.60
11	183.32	11.96	571.50
12	167.32	11.45	573.50
13	151.32	8.44	578.00
14	135.32	—	—
15	119.32	—	—
16	112.00	—	—
17	96.00	2.84	589.50
18	80.00	8.65	585.90
19	64.00	9.76	587.00
20	48.00	10.97	588.00
21	32.00	12.18	589.00
22	16.00	11.69	591.70
23	0.00	11.60	594.00

See Comp. Book 35 page 90
 " Field Book 176 page 22
 " " " 176 " 7

Red figures = Elevations taken after piers were built, on north pier in each case.

1.7
33
144) 5.1
4



1646
1422

2068

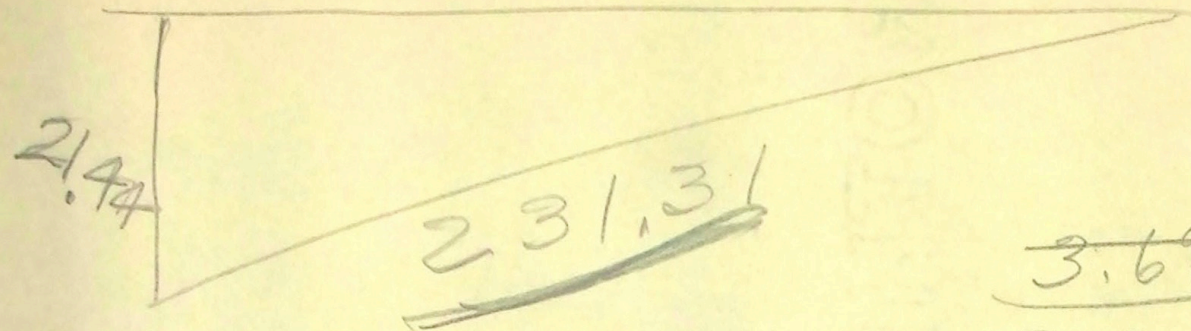
Distance of pipe line to B. Horst
checked and marked out Sept. 11th 07.

C.E.P.

590.00
568.56

21.44

230.32



2 | 4.7284106

2.3642053

~~3.6935565~~

2.3623317
1.3312248

4.7246634
2.6624496

2 | ~~7.3871130~~

~~3.6935565~~

180
103-15-05

76-44-55"

*Answer only
PWB Hord*

53047.3
459.7

53507.0

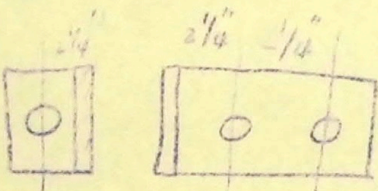
231.31

BALTIC MINING COMPANY.

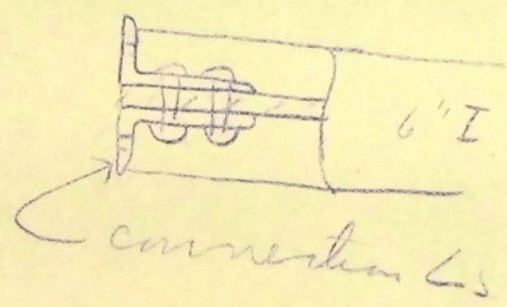
F. MCM. STANTON, AGENT.
F. W. DENTON, SUPERINTENDENT.
WM. C. COLE, CLERK.

PAINESDALE, MICH., *aug. 15, 1907*

- 22*
- 24* pieces 6" I, 5'-10" long.
- 2 " 6" I 5'-3" " with
standard connection angles on one end.
- 4 - 8" I, 9'-6" long.
- 5 - 8" " - 9'-3" "



6 x 4 x 3/8" L, 2 1/2" long.



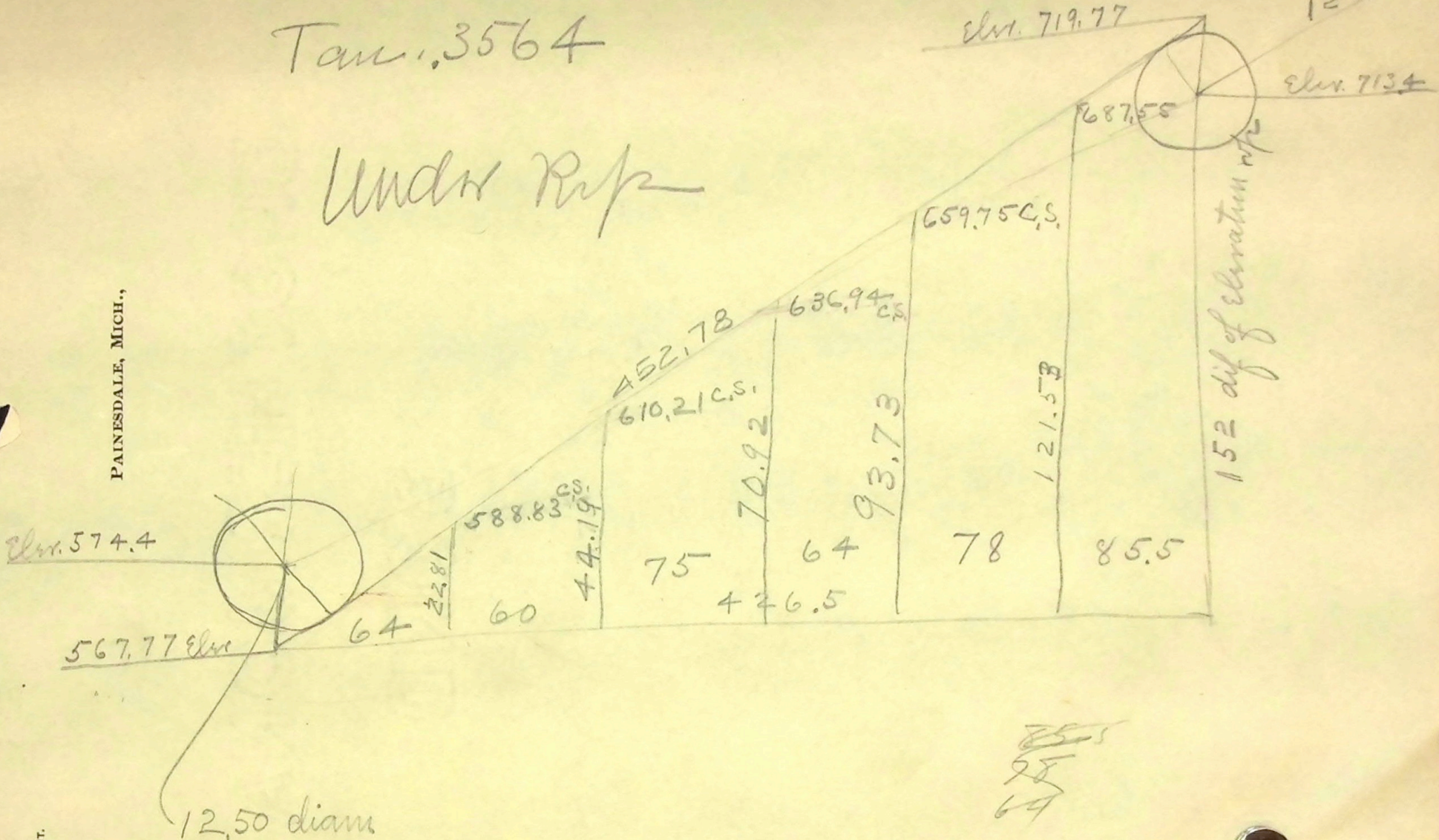
F.M.M.

BALTIC MINING COMPANY.

PAINESDALE, MICH.,

Tam., 3564

Under Rip



625

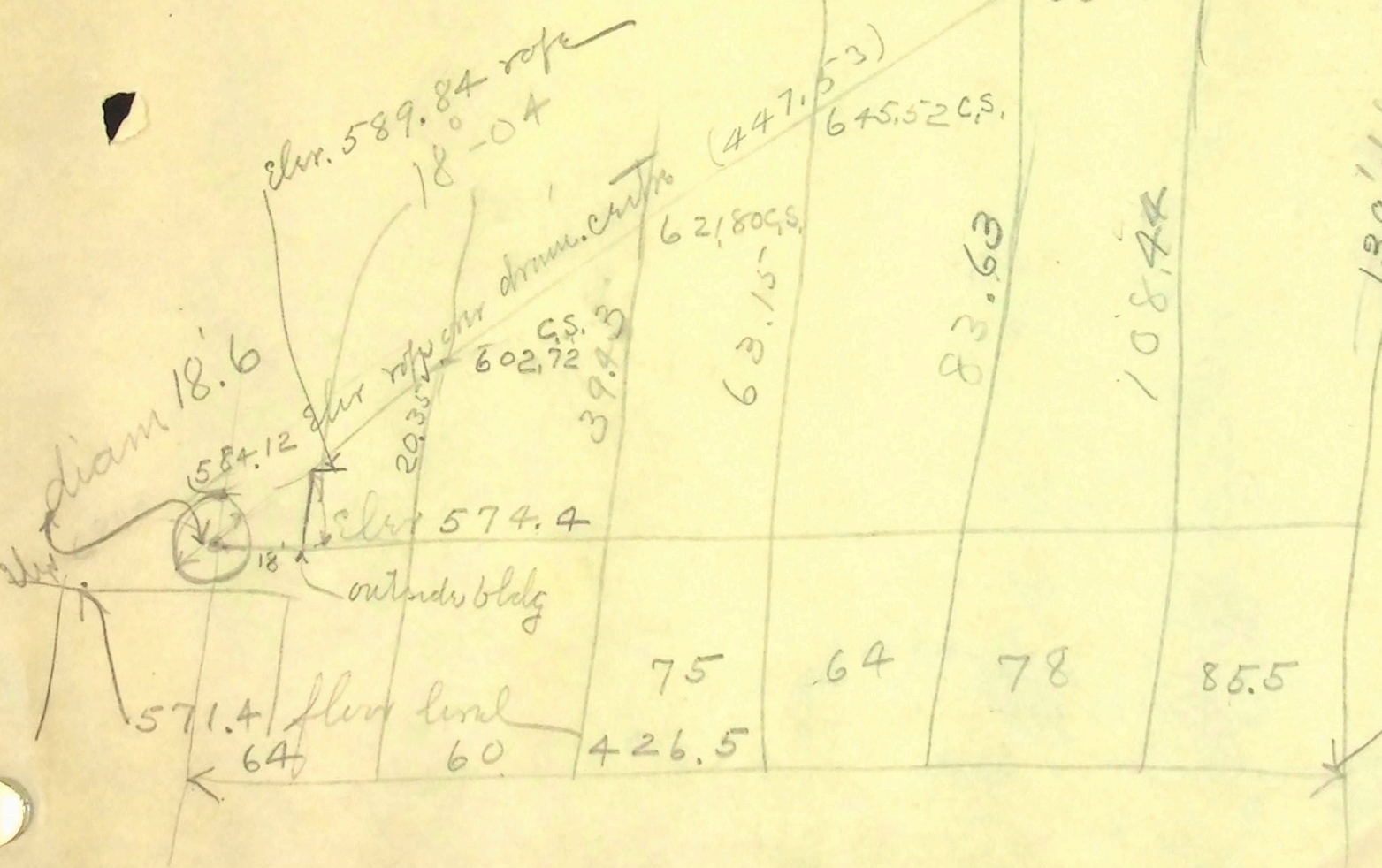
~~25.5~~
25
69

6.27

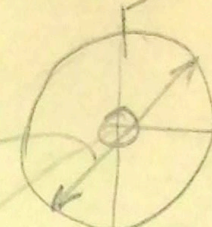
F. McM. STANTON, AGENT.
F. W. DENTON, SUPERINTENDENT.
WM. C. COLE, CLERK.

Upper rope B
 22.8

Tau 318



diam. 12'



F. MOM, STANTON, AGENT.
 F. W. DENTON, SUPERINTENDENT.
 WM. C. COLE, CLERK.

690.81 CG	64
666 CG	60
645.52 CG	75
62.80 CG	64
63.15	78
83.63	85.5
108.44	
139' difference in elev.	
185.6' of rope	
9.52'	
426.5	

PAINESDALE, MICH.

BALTIC MINING COMPANY.

713.4
574.4
139

BALTIC MINING COMPANY.

F. McM. STANTON, AGENT.
F. W. DENTON, SUPERINTENDENT.
WM. C. COLE, CLERK.

PAINESDALE, MICH.,

Req. # 748,
2 ycs sand straw 17' long 6" x 12"
for rope hubs sills
tel in

BALTIC MINING COMPANY.

F. McM. STANTON, AGENT.
F. W. DENTON, SUPERINTENDENT.
WM. C. COLE, CLERK.

PAINESDALE, MICH.,

Req July 16th

61 gal iron tubes 17' long
4" diam. out of #22 iron

BALTIC MINING COMPANY.

F. McM. STANTON, AGENT.
F. W. DENTON, SUPERINTENDENT.
WM. C. COLE, CLERK.

PAINESDALE, MICH.,

Sand stone org June 28th 07

78 cords red sand stone
\$0 per " " " sill ~~7~~' long
2 " " " " " 10' "
1 " " " " " 14' "

all 6x12

4200 sq ft. Carveys extra
heavy Roofing