

CLIFFS SHAFT MINE.

cate the ore beyond.

4TH LEVEL.

"A" SHAFT.

The only work done on this level during the year was the extension of No. 18, referred to last year, to the ore body, which was found to be 12' wide. This was followed west 100 ft. in ore and 50 ft. in mixed ore and soaprock. It is now temporarily stopped. The ore to the west has not been tested. This contract was brought back 300 ft. east of the shaft and a cross-cut driven south 100 ft. in rock, expecting to strike the ore shown on the 5th and 6th levels. While there is ore in the bottom of the drift, there seemed to be no immediate prospect of striking it in the breast and the work was discontinued.

It is proposed to put up a raise from the 5th level to test the ore at this point. It would seem however that the chances of finding it above the 4th level are slim.

4TH LEVEL.

"B" SHAFT.

No. 16 was extended south 100 ft. but did not find the ore shown by the diamond drill. This contract was then moved 200 ft. west to a body of ore which had been exposed by Contract 26. A stope was carried 18 ft. wide, almost due north and struck the hanging at 60 ft. The drift was then turned east, following the hanging. The stope is now 20 ft. wide and has ore in the breast. The ore to the west has not yet been followed.

At No. 26 the drift has been extended 250 ft. west since last year. It has crossed four veins of ore 12', 8', 18', and 16' wide respectively. The third of these veins is now being developed by Contract 16, which is going east. No. 26 is now stoping to meet 16. There is ore to the southwest of the face of the main drift and should continue 300 ft. to correspond with the level above. This is the first year since the mine opened that any ore has Cliffs Shaft.

CLIFFS SHAFT MINE.

been mined from this level. The west end of this level has stopped in quartzite. A horizontal hole was drilled 300 ft. west. At this distance a large vug was encountered and work had to be abandoned. The quartzite here is undoubtedly the result of a fault, and there is no reason why ore should not be found to the west. ✓

The drill has been moved back 30 ft. east of the breast and is now drilling south. To date it has passed through 40 ft. of mixed ore and is now in jasper.

5TH LEVEL.

"A" SHA FT.

At No. 12 the drift has been extended 200 ft. west. The ore for this distance averaged about 8 ft. wide. From the face of this drift a cross-cut was driven 60 ft. northwest in soaprock and has now crossed 12 ft. of ore. This ore is probably the same as that at 7 and 21.

From the east end of the main drift a cross-cut was driven 150 ft. northeast; the first 50 ft. in mixed ore and jasper, the balance in siderite! Work at this point has been abandoned for the present. It will be cheaper to test the ground by a diamond drill rather than by drifting and this will be done later.

300 ft. east of the shaft a cross-cut was driven 28 ft. south in rock and struck a new body of ore discovered by the diamond drill holes from the 6th level.

At 31 a stope 25 ft. wide and 20 ft. high has been carried south 138 ft. across the ore body and has ore still in the breast. West of the shaft a raise has been put up to the 3rd level, all in ore.

5TH LEVEL.

"B" SHAFT.

This level has been opened 110 ft. west and 30 ft. east and from the west end of the drift, a cross-cut carried 70 ft. north. No ore has  
Cliffs Shaft.

CLIFFS SHAFT MINE.

yet been found.

At No. 30 a raise is now being put up to the 4th level for ventilation and when this is completed the west drift will be continued to reach the ore shown at 26 and 16.

6TH LEVEL.

"A" SHAFT.

No work was done west of the shaft, the ore being practically exhausted. From the east end of the main drift two horizontal holes were drilled; one northeast and the other southeast. The former showed all siderite, the latter crossed two veins of ore 21 and 31 ft. wide respectively. For particulars of these holes, see Book of Maps.

A third hole was drilled 300 ft. east of the shaft and after passing through 28ft. of rock crossed 110 ft. of ore.

At 11 a stope has been carried 25 ft. wide and 20 ft. high 128 ft. south and still has ore in the breast, although in the southwest corner a bunch of soaprock has just come in, which may turn the stope southeast.

At 18 a stope 25 x 20 ft. is going east along the footwall and is now 110 ft. from the south cross-cut. At present there is a roll in the foot throwing the ore to the south. This is the second one encountered. The first one pinched out in a few feet and it is believed that a similar condition will follow in this case. The soaprock foot at this point is unusually uniform, standing at an angle of about 65°.

7TH LEVEL.

"A" SHA FT.

At No. 24 the drift is 150 ft. west of the shaft; the first 100 ft. in siderite, the balance in ore. The breast of the drift is in extremely hard jasper and before any more drifting is done on this level the ground is to be tested with a diamond drill. A raise has been put up from the west end of the ore to the 6th level.

Cliffs Shaft.

CLIFFS SHAFT MINE.

At No. 8 the drift was extended 250 ft. and struck the ore shown at 11 on the level above. The ore body on this level has not yet been developed, as it was necessary to put up a raise to the 6th level for ventilation, and this has only just been holed. There seems every reason to expect however that the ore on this level will be as large as on the 5th and 6th. This is undoubtedly the same ore that is shown in Diamond Drill hole "G" in front of Capt. Sedgwick's house 400 ft. east of our present development. There is no reason why this ore should not ultimately connect with the ore in No. 3 Mine.

The hoise is in place and all arrangements completed to sink another level in "A" shaft. By an examination of the extensions shown on the maps, it will be seen that the principal developments have been at 13, 17, and 23, and the sublevels and the new ore body south of the old workings on the 5th, 6th, and 7th levels.

The following estimate of ore in sight was made by our Mining Engineer, Mr. Jopling:

	"A" Shaft	"B" Shaft	Total	Less 10% for rock & loss in mg.
Floors	628,000	506,000	1134000	1021000
Pillars	172,000	155,000	327000	294000
Back of 1st Level	40,000	50,000	90000	81000
Partly developed walls & breasts	123,000	97,000	220000	198000
Totals	963,000	808,000	1771000	1594000
From the above there should be deducted				
Ore left to support Lake Bancroft			195000	175000
" " " " Machy and Buildings			380000	342000
" " " " Excelsior Addition			50000	45000
			625000	562000
Total Available for Mining			1146000	1032000

CLIFFS SHAFT MINE.

In comparing with last year, several places had been overestimated, as the floor of 2nd Level "A", which was found very shallow in places. This with other places overestimated reduced it below that of last year, even with new discoveries on 5th, 6th, and 7th levels "A" shaft, which add about 75,000 tons. The estimate as a whole is conservative.

FATAL ACCIDENTS.

There were two fatal accidents during the year; namely,

Carl Matson                      Jany 28th

Victor Person                    Feby 13th

Matson was a trammer and was killed by a piece of ore rolling down a raise and striking him on the head. He was notified by the miners that they were going to dump a car, but did not move from his car and was consequently in direct line of the falling ore. His death was entirely due to his own carelessness.

Victor Person died from the effects of an injury to his hand, which was caused by the explosion of a stick of dynamite, which caught fire from his candle while he was block holing.

Neither of these accidents can be attributed to any carelessness on the part of the Company nor the Captain.

MINE FIRES.

There have been two fires at the mine during the past year, the first to the Crusher Building on July 31st. The fire started on the second floor just at noon and spread with great rapidity. There was no fire of any kind around the building, and it must have originated from spontaneous combustion. Owing to the good work done by our own men and the Fire Department, only the upper part of the building was burned, and the plant was only idle for three days. The loss was fully covered by insurance.

The second fire occurred at 2 o'clock on Sunday morning, Dec. 1st.

### CLIFFS SHAFT MINE.

and entirely consumed the dry, together with <sup>the</sup> a greater part of its contents. Owing to the inflammable material, it burned with great rapidity and was a total loss. We estimate the loss on the building at \$1750. and to the men's clothing, about as much more. There was only \$500. insurance on the building and \$750. on the clothes. It being Saturday night the loss was confined to the men's digging clothes or otherwise it would have been much greater. Following former precedents, the men were paid one half of the loss. This is the third time the dry at this mine has burned. The premium on this class of buildings is  $2\frac{1}{2}\%$  a year and for this reason they are only insured for a small part of their cost. The loss from the three fires referred to would have gone far towards paying for a fire proof building.

In rebuilding the dry I would recommend a brick structure with metal lockers and metal racks for the clothing, which would render it unnecessary to carry any insurance. The saving on premiums alone would go a long way towards paying the interest on the increased cost over wood.

In the mines working 10 hour shifts the men take their meals in the dry and it is desirable that some clean place be provided for them to eat. The new plans I am having prepared will have a combined dining and lounging room, entirely separate from the change room, and away from the unhealthy odor arising from the drying clothes. For the present we are using the old Boiler House which will answer for the winter.

### NEW HOUSES.

For sometime past there has been a great scarcity of houses in Ishpeming, and many of our men were compelled to live in a few rooms, with no conveniences, for which they paid exorbitant rent. In order to meet the demand and furnish our employes with suitable houses, twenty cottages have been erected on the extension of Empire Street on the shores of Lake Bancroft. 16 of them are of six rooms each and four of them of seven. The plans are included in the Book of Maps and show that they are conveniently arranged, and

CLIFFS SHAFT MINE.

what is a prime necessity in this country, easily and cheaply heated. No outhouses will be allowed, and it is proposed to make this the model location of the Company. The rents will be \$10.00 for the smaller houses and \$12.00 for the larger ones, which is at the rate of 12 to 15% of the men's incomes, and is certainly as much as they can afford to pay.

There is certainly no more practical way of bettering the condition of our employes than by furnishing them good sanitary houses, with pleasant surroundings, at a rental within their means. Such houses increase a man's self respect and make him a better citizen, and I believe a more competent workman.

The houses in the old Location have been kept in good repair. Reference is made to the "Summary of House Repairs" for particulars of the work done during the year. As usual all the Locations of the Company were cleaned in the spring and are in excellent sanitary condition.

On the 1st of December, Capt. Rough, who has been in charge of the mine since it has been reopened, was transferred to the Maas Mine at Negaunee. Under his supervision the mine has been developed until today there is more ore in sight than when the mine closed down. Even with the large amount of exploratory work which has been continuously prosecuted, the cost of mining has been uniformly low and reflects credit on Capt. Rough's ability as a mining man.

The work of sinking the shaft at the Maas Mine is expected to be difficult, from the quicksand overlaying the ore, and he was selected to take charge of it on account of his large experience and ability.

CLIPPS SHAFT.



SALISBURY MINE.

The total tons of ore mined from the different levels during the year is as follows:

<u>LEVEL</u>	<u>TONS</u>
8th	1158
12th	1554
13th	5730
14th	39633
16th	6952
17th	124998
18th	<u>1204</u>
Total Tons	181229

AVERAGE ANALYSES OF MINE SAMPLES FOR 1901.

	<u>Iron</u>	<u>Phos.</u>
Salisbury Bessemer	63.37	.049
Salisbury Ore	62.01	.094

ORE SHIPMENTS FOR 1901.

	<u>POCKET</u>	<u>STOCKPILE</u>	<u>TOTAL</u>	<u>TOTAL LAST YR.</u>
Salisbury Bessemer	44966	53706	98672	38590
Salisbury	61571	16955	78526	107742
Salisbury No. 3		5227	5227	
Total	106537	75888	182425	146332
Last Year	101001	45331	146332	
Increase - 25% -			36093	

Cliffs Salisbury

SALISBURY MINE.

AVERAGE ANALYSES OF SHIPMENTS FOR 1901.

Salisbury                      Iron 60.38

ORE STATEMENT NOVEMBER 30TH, 1901.

	BESSEMER	SALISBURY	SALIS.NO.3	TOTAL	TOTAL LAST YEAR.
On hand Dec. 1, 1900	16297	4234	5538	26069	11766
Output for year	85033	96196	0	181229	160635
Less Stockpile Shrtge			311	311	
Net Product	85033	96196		180918	160635
Total	101330	100430	5227	206987	172401
Shipments	98672	78526	5227	182425	146332
Bal. in stock 11-30-01	2658	21904	0	24562	26069
Inc. in output -13%-				20283	

AVERAGE WAGES AND PRODUCT.

	Surface		Underground		Total	
	1901	1900	1901	1900	1901	1900
Product 180918 tons-1901						
Product 160635 tons-1900						
Average No. men working	41	43	152	143	193	186
Average wages per day	1.86	1.83	2.38	2.39	2.26	2.26
Aver. wages per mo.-25 days-	46.50	45.75	59.50	59.75	56.50	56.50
Aver. Prod. per man per day	14.45	12.19	4.00	3.74	3.12	2.85
Labor Cost per ton	1.28	.150	.599	.629	.728	.788
Diff. in Labor Cost per ton	.022	.040	.040	.012	.060	
Aver. Prod. breaking & trammng			5.43	5.36		
Aver. Wages for Contractors			2.43	2.45		
"     "     "     Miners			2.52	2.53		
"     "     "     Trammers			1.98	2.10		

Salisbury

SALISBURY MINE.

STATEMENT OF EXPLOSIVES USED FOR BREAKING ORE.

KIND	QUANTITY	AVER. PRICE	AMOUNT	AMOUNT 1900.
50% Powder	14265	.12	1696.80	1294.80
40% Powder	4650	.105	488.25	
Fuse	61350	3.97	243.62	154.08
Caps	21575	5.68	122.63	67.37
			2551.30	1516.25
<u>COMPARATIVE.</u>			1901	1900
Total Product			180918	160635
Lbs. Powder per ton of ore			.105	.067
Cost per ton for explosives			.014	.009
Increased Cost per ton			.005	

STATEMENT OF COMPARATIVE WAGES.

	1901	1900	
<b>SURFACE:</b>			
Total number of days	12519 $\frac{1}{2}$	13172	
Average rate	1.86	1.83	Inc. .03 (1.6%)
Amount	23246.88	24046.20	799.32
<b>UNDERGROUND:</b>			
Total number of days	45566 $\frac{3}{4}$	42972	
Average Rate	2.38	2.39	Dec. .01 (.42%)
Amount	108404.40	102598.52	5805.88
Total Days	58085 $\frac{3}{4}$	56144	
Average Rate	2.26	2.26	
Total Amount	131651.28	126644.72	5006.56
Increase in amount	5006.56		

Salisbury.

SALISBURY MINE.

STATEMENT OF TIMBER USED FOR MINING ORE 1901.

<u>STULL TIMBER</u>				
Size	Lineal Feet	Avg. Per Foot	Amount	Amount Last Yr.
6 to 8"	2050	.02	41.00	217.80
8 to 10"	36151	.031	1111.21	982.30
10 to 12"	45366	.045	2049.38	1437.45
12 to 14"	25111	.065	1625.96	1278.01
14 to 16"	5896	.09	531.64	583.98
16 to 18"				7.84
Total	114574	.0468	5359.19	4507.38
" 1900	111308	.0405	4507.38	4631.12-1899

LAGGING.

5 ft.	250000	53c per 100 ft.	1332.40	
7 ft.	60235	60c " 100 "	361.41	
Poles	32379	.0089	289.87	
Total	342614	.58	1983.68	
1900	247538	.58	1448.19	
Cost of Timber and Lagging	1901		7342.87	
" " " " "	1900		5955.57	

	<u>1901</u>	<u>1900</u>
Total Product	182066	160635
Ft. of timber per ton of ore	.63	.69
" " lagging " " " "	1.88	1.54
" " " " foot of stulls	2.99	2.22
Cost per ton for timber & lagging	.040	.037
Equivalent of stull timber to board measure	356441	310812
Feet board measure per ton of ore	1.96	1.93

Salisbury

SALISBURY MINE.

The cost of mining 180918 tons of ore this year is as follows:

	1901	1900	Increase	Decrease
Product	180918	160635	20283	
General Expense	.083	.084		.001
Maintenance	.054	.046	.008	
Mining Expense	.819	.866		.047
Cost of Production	.956	.996		.040
<u>DEPRECIATION.</u>				
Inventory	.003	.001	.002	
Improvement	.004	.034		.030
New Construction	.004	.005		.001
Steam Shovel	.000			
<u>TOTAL</u>	.011	.040	.002	.029
Less Credits	.000	.001		.001
Total Depreciation	.011	.039		.028
Cost on Stockpile	.967	1.035		.068
Loading and Shipping	.024	.017	.007	
<u>Total Cost</u>	.991	1.052		.061

The increased cost of loading comes from having to load the No. 3 Stockpile by hand. There has been a very gratifying decrease in the cost. The taxes increased 1.5c per ton over 1900, but in spite of this the total cost was 6.1c less.

Salisbury.

SALISBURY MINE.

Following is an estimate of the ore in sight on the different  
levels.

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12th Level	4000 tons
14th "	10000 "
17th "	<u>90000 "</u>
Total	104000 tons

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The ore estimated on the 12th level is between this level and the 8th, in pillars left in the old mine.

On the 14th level the ore estimated is on the footwall east of No.4 shaft.

On the 17th level the ore is between the sill floor and the 16th level.

18TH LEVEL.

No estimate has been made of the ore on this level, as the developments do not warrant it. It is safe to assume however that it will produce as much as the 17th level.

8th LEVEL

No ore was estimated last year on the 8th level, but a rumor that there was a small pillar on this level at No. 1 shaft led to an investigation and 1158 tons were obtained from this point.

14th LEVEL.

The ore from the 14th level has largely overrun the estimate of last year. 39633 tons were mined during the year and there is still 10000 tons estimated for 1902.

As stated in previous reports, it is impossible to make close estimates of ore in the old stopes, as in every case more or less of it is gotten by running from the old timbers.

16TH LEVEL.

This level overran the estimate 4104 tons.  
Salisbury.

SALISBURY MINE.

17th LEVEL.

The 17th level, estimated last year at 183,000 tons, has produced this year 124,998 tons, and it is expected that 90,000 tons is left. The increase is due to the extension of the ore body west, which was not known last year.

Following is the work done during the year:

All the ore above the 8th level is exhausted.

8TH LEVEL.

The exploratory drift started last year to reach the ore shown by diamond drill holes "J<sub>1</sub>" and "C<sub>2</sub>", has been completed. The year's drifting amounted to 523 ft., 331 ft. in rock and 192 ft. in mixed ore. The ore ran from 50 to 55% in Iron and high in Phosphorus. It was uniformly better in the bottom than the top of the drift. This work seems to demonstrate that there is a deposit at greater depth and steps have already been taken to start a drift from the 12th level to reach this ore.

12TH LEVEL.

A cross-cut was driven 50 ft. east of the air shaft and a raise 100' high put up to 20 ft. above the 10th level, to take the pillars remaining around No. 1 shaft. From the top of the raise a sub has been opened connecting with the air shaft. At present the drift is being carried east. There seems to be considerable ore left among the old timbers and there is a reasonable expectation of getting a fair tonnage from here. From this sub raises will be put up to take the ore from under the 8th level. At this point four men are working in two shifts; one shift being idle on account of bad ventilation. The ore is non-Bessemer running about 62% in Iron.

13TH LEVEL.

The 13th level is now exhausted. During the past year 5730 tons have been mined from this level.

Salisbury.

SALISBURY MINE.

14TH LEVEL.

After finishing the work on the 13th level, the men were moved to the 14th and are now taking out the shaft pillars, and the ore on the foot-wall. The ore extended farther east than was anticipated, so that more ore will come from this level than was estimated last year. Only two gangs, of six men each, are now at work here.

The 15th level is exhausted.

16TH LEVEL.

The small amount of ore remaining on this level was mined early in the year and the level abandoned.

17th LEVEL.

This level has turned out better both in quantity and quality than was anticipated on the date of the last annual report. Reference to the map will show that on the west side the ore averages 50 ft. wider than on the 16th and extends 100 ft. farther west. An exploratory drift was carried 185' west of the west main drift to the footwall, the entire distance in mixed ore. The formation encourages the hope that on the 18th we shall find a solid ore body below this. All the ore above the 20 ft. sub has been mined and the ore is now coming from this sub and the sill floor, next the hanging. Thirteen gangs, 78 men, are now mining on this level. All the water from the upper levels is delivered to the pumps on this level, leaving only a small amount to be handled from the 18th.

93 ft. west of the west cross-cut a raise is now being put up to test the ore and at this writing is as high as the 16th level, all in ore. It is 40 ft. west of the supposed western limit of the 16th level. This will give us additional ore at this point, but how much cannot be estimated at this time. The raise will be continued until it strikes the hanging.

Salisbury.



SALISBURY MINE.

18TH LEVEL.

During the year the shaft has been completed to this level and a rock drift 220 ft. long driven to the ore. The foot was found to be very much flatter than on the levels above, standing at an angle of 43° as against 56°. Against this was 20 ft. of very hard blue ore and lying on it an extremely soft porous ore which permitted frequent rushes of water and seriously delayed driving the drift.

On the date of this report, the ore has been crossed 180 ft. It has been high in iron and low in phosphorus, except where the body was crossed by small seams of paint rock, and is much more uniform than the ore on the level above. The flattening of the footwall is not encouraging, but the ore may make far enough south and west to more than compensate for this. Only future developments can prove this, and it would be idle to speculate upon it.

Sinking for another level will begin in a few weeks and the 19th level opened by the time the 18th is exhausted.

FATAL ACCIDENTS.

There has been one fatal accident during the year. Andrew Kregnas was fatally injured on the 19th of April by falling down the shaft. He was conscious when taken to surface, but was unable to say how the accident occurred, except that he was standing on the ladder and fell off.

For full particulars of all mine accidents, reference is made to the Accident Reports and the testimony at the inquests, which are regularly sent you.

GENERAL REMARKS.

The No. 3 Salisbury, which has been in stock for several years, has all been shipped to the Antrim Iron Company. The ground on which this ore was stocked had settled 10 ft. and it was necessary to use a derrick in loading it, which increased the cost, although 19.7 cents is not high under these Salisbury.

SALISBURY MINE.

Conditions.

The old open pit has been fenced at the suggestion of the Mine Inspector, although during the many years that it has remained open, there has been no accident of any kind. It was however a very proper precaution to take.

On Dec. 1st, Capt. Stephens, who has been in charge of this mine for the past two years, was promoted to the Captaincy of the Cliffs Shaft Mine to succeed Capt. Rough, who goes to the Maas Mine in Negaunee. Capt. Matthews, recently in charge of the Imperial and Webster, takes Capt. Stephen's place. While in charge of the Salisbury Mine, Capt. Stephens showed ability of a high order and his promotion was on merit alone.

Salisbury.

SALISBURY.

TILDEN MINE.

AVERAGE ANALYSES OF MINE SAMPLES FOR 1901.

	Iron	Phos.
Tilden Silica	42.09	.037

ORE SHIPMENTS FOR 1901.

	Pocket	Last Year
Tilden Silica	10642	15325
Decrease - 30%-	4683	

AVERAGE ANALYSES OF SHIPMENTS.

	Iron	Phos.
Tilden Silica	42.46	.029

ORE STATEMENT NOVEMBER 30th, 1901.

		Last Year
Output	10642	15325
Shipments	<u>10642</u>	<u>15325</u>
Bal. in stock Nov. 30, 01	0	0
Decrease in output-30%-		

COMPARATIVE WAGES.

	1901	1900	Decrease
Total Number Days	1585 $\frac{1}{2}$	3160	
Aver. Rate per day	1.95	1.96	.01 (.5%)
Total Amount paid	3084.58	6209.56	3124.98

Tilden

TILDEN MINE.

EXPLOSIVES USED FOR BREAKING ORE.

KIND	QUANTITY	AVER. PRICE	AMOUNT	AMOUNT 1900
40% Powder	3250#	.10 $\frac{1}{2}$	341.25	624.75
Black Powder	900#(36Kg)	.057	51.30	89.78
Battery wire	22#	.30	6.60	13.92
Fuse	900'	3.91 pr.M.ft.	3.52	8.94
Exploders	250	29.20 " "	7.30	15.57
Caps	420	5.60	2.35	4.50
			<u>412.32</u>	<u>757.46</u>
			<u>1901</u>	<u>1900</u>
Tons of ore produced			10642	15325
Pounds powder per ton of ore			.390	.491
Cost per ton for explosives			.039	.049
Decreased Cost per ton			.010	.016 Inc.

AVERAGE WAGES AND PRODUCT.

Product 10642 tons - 1901 - Product 15325 tons - 1900 -	TOTAL	
	1901	1900
Average number men working	12	26
" wages per day	1.95	1.96
" " " mo. of 25 days	m 48.75	49.00
" product per man per day	6.71	4.85
Labor cost per ton	2.90	.405
Difference in labor cost per ton	.115	.121
Avg. Product breaking and trammng	10.61	10.42
Average wages for Contractors	1.95	2.22
Amount paid in increased wages		568.80
Trammers only for 1901.		

Tilden.

TILDEN MINE.

STATEMENT OF MINING COST.

	1901	1900	INCREASE	DECREASE
Product	10642	15325		4.683
General Expense	.018	.011	.007	
Maintenance	.000	.005		.005
Mining Expense	.355	.550		.195
Cost of Production	.373	.566	.007	.200
<u>DEPRECIATION</u>				
Inventory		.001		
Total Depreciation		.001		..001
Total Cost	.373	.565		.192

Of the increase of .007 in General Expense, .005 is due to Taxes which are \$33.57 higher than for 1900.

During the year but 10642 tons were mined, most of it coming from the north side of the pit. Practically all the ore on the footwall has been mined and there is only left a body 150 x 75 ft. to the west, the average height above the pit level being 5 ft. Diamond drilling to the west has shown the ore body to be very shallow and the dykes larger and more frequent than in the old pit. For this reason it would not pay to install an expensive plant to take the ore below the pit level. It will be necessary however to sink next year to the bottom of the deposit to get any sort of product. As there will be no stripping, the cost of mining will be no higher than for past years. One of the small hoists we have on hand can be utilized and the cost of equipment will not be large.

Should there be a market for a large quantity of siliceous ore next year, the Ogden Mine can be opened at a small cost. The quality of the ore is not as good as the Tilden, the average of a number of samples taken in 1898 showing Iron 42.72% and Phosphorus .054. Tilden.

TILDEN MINE.

The phosphorus in these samples was probably higher than the average will run when the ore is mined. They were taken from two drifts put into the footwall from the east and west ends of the outcrop. I think it would be safe to figure on .045 Phosphorus, with Iron as given.

The following analyses of the Ogden were made when Messrs. Bradt and Adams had a lease of the property.

The average analyses of thirteen samples taken from the east and west pits and the stockpile gave

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Iron	Phos.
42.66	.034

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The average analysis of the cargo of 986 tons shipped without picking, analyzed by Crobaugh, Cleveland, gave

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Iron	Phos.
40.35	.020

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TILDEN.



FOSTER MINE.

All the ore that could be handled by steam shovel was loaded last year. This year's shipments were loaded by hand and as much of the ore was in rills left by the steam shovel, it was more than usually expensive to handle. The cost of loading was 13.6 cents per ton.

The overrun to date is 10670 tons and it is estimated that there is still 1200 tons in the stockpile.

ORE STATEMENT NOVEMBER 30th, 1901.

	FOSTER	LAST YEAR
On hand Dec. 1, 1900	2329	3472
Est. Overrun in stockpile	11870	
Total	14199	3472
Shipped during year	12999	1143
Est. Balance in stock Nov. 30, 01	1200	2329

ORE SHIPMENTS FOR 1901.

		Last Year
Foster	12999	1143

AVERAGE ANALYSES OF MINE SAMPLES FOR 1901.

	Iron	Phos.
Foster	51.02	.162

OPTIONS AND LEASES.

No options have been issued during the year. The only outstanding lease is on the E $\frac{1}{2}$  of the SW $\frac{1}{4}$  of Section 19/47/26 held by Jones & O'Brien. No work has been done during the past year, but the ground rent has been regularly paid.

The lease held by the Jackson Iron Company on the N $\frac{1}{2}$  of the SW $\frac{1}{4}$  of Sec. 12 was formally surrendered during the year and the surrender duly recorded and sent to the General Office.

Foster.

Respectfully submitted,

33

*W. J. Sullivan*

Agent.

FOSTER.

OPTIONS & LEASES.



# Iron Cliffs Co.

## Name Department

- 1 Cliffs Shaft Cost Sheet
- 2 Salisbury " "
- 3 Foster " "
- 4 Record of Cost for Shaft Work at Cliffs Shaft
- 5 " " of Diamond Drill Work
- 6 Report of Operating Steam Hoist
- 7 Comp. Stmt. of Genl. Expense
- 8 Record of Fire Insurance on Buildings & Mine Bldgs
- 9 Analysis of Improvement & Tree Condition
- 10 Stmt. of Rented Horses, Cliffs Shaft Mine
- 11 " " Foster Mine
- 12 Record of Delays from Various Causes, Tilden Mine
- 13 " " " " Cliffs Shaft Mine
- 14 " " " " Salisbury Mine
- 15 Stmt. of Cliffs Shaft Ore
- 16 " " " " " "
- 17 " " " " " "
- 18 " " " " " "
- 19 " " " " " " Receivable
- 20 Comparative Statement of Taxes

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The Cleveland-Cliffs Iron Co.

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Cliffs Shaft Mine.

Cost Sheet for ~~Month~~ <sup>Year</sup> of

1901. and 1900.

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# Summary of Supplies Used During

1901 & 1900

THE CLEVELAND-CLIFFS IRON CO. <i>Cliffs Shaft</i> MINE.	COST OF SUPPLIES.		COST PER TON.	
	MONTH. 1901	YEAR. 1900	FOR 1901	FOR 1900
PRODUCT.	273,268	264,330	1901	1900
General Supplies,	453,292	319,435	017	012
Iron and Steel,	268,876	265,114	010	010
Oil, Grease and Candles,	494,260	421,046	018	016
Machinery Supplies,	655,947	681,633	024	026
Building Material,	330,812	149,968	012	006
Explosives,	200,530	182,807	073	069
Mine Timber,	88,427	67,977	003	003
Fuel,	209,810	224,593	077	086
Barn,	1074	5552	000	000
Sundries,	1,083	18,046	004	004
Total Supplies,	650,461	619,578	238	235
Miscellaneous,				
Total,				
As per Cost Sheet,				
Improvement,				
New Construction,			1	
Other Charges,				
Total,				

# THE CLEVELAND-CLIFFS IRO

Cost of Production for the Month of

1901. 1900

CLIFF SHAFT MINE.	MONTH OF 2 months		1901		1900		TONS.		TONS.		TONS.		TONS.	
	LABOR.		SUPPLIES.		TOTAL.		TOTAL.		TOTAL.		TOTAL.		TOTAL.	
	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.
<b>GENERAL EXPENSE.</b>														
Insurance,			892.64	002	290.00	002			402.10	002	402.10	002		
Taxes,			1563.75	007	1513.10	007			1130.66	007	1128.66	007		
Engineering,	492.00	002	70.00	000	60.70	002	419.96	002	18.97	002	438.93	002		
Analysis,	304.71	001	370.00	002	60.00	000	405.71	001	211.98	001	617.69	002		
Relief Fund,			1365.00	000	1365.00	000			102.30	000	1397.30	000		
Mine Office,	1476.88	005	373.90	000	1851.64	007	1400.17	001	414.00	002	1853.64	007		
General Office,	678.53	001	1697.00	006	724.00	004	571.67	002	258.30	007	769.97	009		
Total,	6026.62	009	10020.83	008	2787.10	002	7911.67	002	10085.70	002	23682.37	009		
<b>MAINTENANCE—Repairs of</b>														
Tracks and Yards,	342.00	004	13.80	000	411.50	002	36.57	001	20.17	000	398.75	001		
Docks, Trestles and Pockets,	202.00	000	1647.00	006	2300.00	004	1110.00	002	824.00	002	1202.00	006		
Buildings,	440.00	007	743.00	002	1180.00	004	1010.00	001	28.20	001	489.30	002		
Shop Machinery,	371.00	000	29.20	000	77.20	000	28.00	000	1.00	000	57.20	000		
Boilers,	14.00	000	30.00	000	44.00	002	13.00	001	4.00	001	45.00	002		
Hoisting Machinery,	162.00	001	288.00	001	450.00	002	254.00	001	24.00	001	465.00	002		
Compressors and Air Pipes,	188.00	000	223.00	001	411.00	002	183.77	000	303.86	001	186.63	001		
Portable Machinery,	344.00	001	254.00	001	598.00	002	142.00	000	28.63	001	427.37	001		
Top Tram Engines and Cars,	142.00	001	10.00	000	38.00	001	31.17	001	243.70	001	461.06	002		
Skips and Skip Roads,	147.00	001	10.00	000	38.00	001	19.50	001	18.90	000	34.10	001		
Underground Tracks and Cars,	210.00	007	27.00	004	43.00	001	20.47	001	19.37	007	398.70	005		
Total,	4105.00	010	6022.00	008	10681.00	009	4145.65	010	4311.00	010	8462.50	009		
<b>MINING EXPENSE.</b>														
Air Pipes,	691.00	002	294.00	002	150.00	000	684.00	002	39.00	001	977.00	004		
Compressors,	186.00	000	600.00	002	820.00	002	187.50	007	76.00	009	947.50	006		
Hoisting,	3594.00	012	849.00	012	700.00	006	3630.00	012	219.00	012	7447.00	012		
Wire Rope, Skips and Pulley Stands,									1.95	000	1.95	000		
Pumps,	274.00	010	719.00	010	994.00	010	269.00	010	76.00	010	1056.00	010		
Sinking,	92.00	000	250.00	001	191.00	004	371.00	004	75.00	003	446.00	007		
Drifting,	202.00	006	670.00	005	300.00	002	183.00	000	23.70	009	235.50	008		
Breaking Ore,	7140.00	001	106.00	002	81.00	003	80.00	003	20.00	007	90.00	003		
Tramming,	246.00	000	30.00	000	50.00	001	48.50	000	18.50	000	50.00	000		
Filling,	1092.00	000	112.00	000	117.00	000	182.00	000	12.00	000	194.00	000		
Timbering,	124.00	005	293.00	002	184.00	007	121.00	000	42.70	001	166.70	006		
Mining Captain and Bosses,	498.00	001	416.00	000	714.00	003	781.00	002	5.00	000	488.00	001		
Dry House,	70.00	003	41.00	000	33.00	001	36.00	002	2.00	000	69.00	003		
Top Landing and Tramming,	723.00	002	1140.00	004	337.00	001	769.00	002	28.11	005	869.00	004		
Stocking and Sorting,	144.00	005	71.00	001	15.00	006	157.00	006	10.00	000	167.00	006		
Working Cars,	117.00	000	26.00	000	13.00	000	78.00	000	22.00	000	134.00	000		
Total,	12400.00	000	6270.00	001	24465.00	001	28125.00	001	20539.00	001	50518.00	001		
Cost of Production,	20216.77	700	11146.16	247	25310.00	103	19788.70	740	7447.67	281	27196.37	1028		
Per cent.,							73.7%		27.9%		100%			
<b>EXPLORATORY.</b>														
Exploring in Mines,					310.00	000								
Exploring Outside,														
Total,	100.00	000	20.00	000	330.00	000								
<b>DEPRECIATION.</b>														
Inventory,					29.00	001					151.00	006		
Improvement,					330.00	000					56.00	003		
New Construction,					297.00	000					117.00	000		
Total,					656.00	000					324.00	009		
Total Cost on Stock Pile,	20525.80	744	13319.11	247	29241.00	103	20539.00	740	7447.67	281	27196.37	1028		
<b>LOADING AND SHIPPING.</b>														
Loading by Steam Shovel,			163.56		163.56	004			107.50		107.50	009		
Loading by Hand,														
Bosses and Sorters,			492.25		492.25		13.17		406.00		439.67			
Total Loading Stock Pile,	1816.51		395.21		1856.05	012	2430.76		80.70		2511.10	017		
Loading at Pocket,	41.50		7.50		9.20									
Shipping Expense,														
Total,	1909.51	007	402.71	008	1965.25	012	2439.76	000	1579.82	006	4633.70	015		
Total Cost on Cars,	20514.44	751	13691.81	255	29250.25	103	20539.00	740	7447.67	281	27196.37	1028		
Royalty, Comm'n and Expense, Cleveland Office,					150.00						150.00			
Total Cost,					122.00						150.00			

ACCOUNTS NOT SURK OFF.	Mos.		Mos.		SINKING.		DRIFTING.		COMPARATIVE COST.		COMPARATIVE COST.			
	AMOUNT.	PER TON.	AMOUNT.	PER TON.	FEET.	COST.	PER FT.	FEET.	DOST.	PER FT.	TONS.	TONS.		
New Construction,					Current Mo.				190	00	Mos.	190	1200	1.0
Improvement,					12 Mos	121.15		31.91	190	0.70	Mos.	190	1200	18.18
Total,					12 Mos	100.00		24.60	190	1.07	Mos.	190	1200	25.16

REMARKS.	ANALYSIS OF LABOR.	
	LABOR AS PER COST SHEET.	OTHER CHARGES.
Total		
As per Labor Statement,		
General Pay Roll,		
Total,		

*Handwritten notes:*  
 Total cost of labor 64.00  
 Total cost of equipment 25.30  
 Total cost 89.30



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The Cleveland-Cliffs Iron Co.

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*Salisbury* Mine.

Cost Sheet for Month of

*1901. 8* 190*0*

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Summary of Supplies Used During 1901. & 1900.

THE CLEVELAND-CLIFFS IRON CO. <i>Salisbury</i> MINE. PRODUCT.	COST OF SUPPLIES.		COST PER TON.	
	MONTH. <i>Year 1901</i>	YEAR. <i>1900</i>	1901 FOR #0.	1900 FOR YEAR.
General Supplies,	214714	169839	012	010
Iron and Steel,	90211	96083	005	006
Oil, Grease and Candles,	196829	161455	011	010
Machinery Supplies,	154507	229323	009	014
Building Material,	146682	200286	008	013
Explosives,	339779	279411	019	017
Mine Timber,	761150	653858	042	041
Fuel,	1112721	976980	061	061
Barn,	44937	40665	002	003
Sundries,	99440	93496	006	006
Total Supplies,	3161171	2901396	175	181
Miscellaneous,				
Total,				
As per Cost Sheet,				
Improvement,				
New Construction,				
Other Charges,				
Total,				

# THE CLEVELAND-CLIFFS IRON CO.

Cost of Production for the Month of 1901 1901

MINE.	MONTH OF <u>12 months</u> 19 <u>01</u> 19 <u>01</u> TONS.						12 MONTHS..... 19 <u>00</u> 1 <u>60.635</u> TONS.					
	LABOR.		SUPPLIES.		TOTAL.		LABOR.		SUPPLIES.		TOTAL.	
	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.
<b>GENERAL EXPENSE.</b>												
Insurance,			225.83	001	225.83	001			762.18	005	262.18	005
Taxes,			484.72	025	484.72	025			1872.11	010	1593.11	010
Engineering,	217.21	001			217.21	001	191.30	001	60	000	191.92	001
Analysis,	290.65	002	1181.83	007	1472.48	009	281.10	003	1199.70	007	1475.80	009
Relief Fund,			726.30	002	726.30	002			726.00	005	726.00	005
Mine Office,	1710.61	006	315.78	002	1424.39	008	1182.81	007	1470.00	003	1470.00	003
General Office,	4821.25	024	1463.24	003	6284.49	027	5710.65	026	1920.18	017	7699.83	026
<b>Total,</b>	<b>6089.52</b>	<b>026</b>	<b>5468.01</b>	<b>047</b>	<b>11557.53</b>	<b>073</b>	<b>7327.78</b>	<b>071</b>	<b>6051.83</b>	<b>021</b>	<b>13419.71</b>	<b>022</b>
<b>MAINTENANCE—Repairs of</b>												
Tracks and Yards,	860.47	005	95.93	000	956.40	005	690.83	002	60.12	001	750.66	005
Docks, Trestles and Pockets,	557.67	003	323.89	002	881.56	005	143.31	001	23.42	000	176.33	001
Buildings,	146.07	001	122.74	000	268.81	001	135.08	001	130.10	001	265.18	002
Shop Machinery,			73.84	001	73.84	001	590	000	381.21	001	137.11	001
Boilers,	101.32	000	133.02	001	234.34	001	104.49	001	362.48	002	466.97	003
Hoisting Machinery,	184.43	001	1428.74	008	1613.17	009	184.64	001	902.12	002	1086.77	007
Compressors and Air Pipes,	47.23	000	194.34	001	241.57	001	361.8	000	66.10	001	102.23	001
<i>Wound</i> Pumps,	270.38	003	612.62	004	883.00	007	577.62	005	173.86	002	951.66	006
Portable Machinery,									80.04	000	80.04	000
Top Tram Engines and Cars,	597.8	000	70.26	001	668.06	001	415.7	000	340.00	000	755.7	000
Skips and Skip Roads,	1133.90	007	1621.12	004	2755.02	011	708.26	001	134.66	003	1142.62	007
Underground Tracks and Cars,	1538.18	009	632.75	003	2170.93	012	1141.45	007	926.46	006	3067.66	013
<i>Steam Bumps</i>	8.00	000	48.11	000	56.11	000	8.88	000	158.12	000	67.00	000
<b>Total,</b>	<b>5229.92</b>	<b>029</b>	<b>4059.04</b>	<b>055</b>	<b>9288.96</b>	<b>084</b>	<b>3779.01</b>	<b>022</b>	<b>3600.74</b>	<b>022</b>	<b>7379.75</b>	<b>046</b>
<b>MINING EXPENSE.</b>												
Air Pipes,	229.21	001	109.64	001	338.85	002	223.92	002	200.69	001	432.53	003
Compressors,	139.87	001	221.33	012	361.20	013	135.62	001	194.84	013	330.46	021
Hoisting,	249.09	019	517.77	031	766.86	050	332.47	021	473.70	030	815.87	051
Wire Rope, Skips and Pulley Stands,									25.11	000	25.11	000
<i>Wound</i> Pumps,	262.81	016	344.82	019	607.63	035	294.71	015	301.32	020	606.09	035
Sinking,	487.18	020	102.11	002	589.29	022	189.95	010	338.83	001	189.33	011
Drifting,	670.30	037	701.12	002	1371.42	039	1002.96	026	400.51	002	1123.52	029
Breaking Ore,	697.10	028	803.92	023	1501.02	051	603.67	027	800.84	017	631.69	023
Tramming,	155.89	012	431.87	002	587.76	014	175.83	009	202.10	002	178.45	011
Filling,												
Timbering,	773.28	021	390.16	014	1163.44	035	645.21	023	1220.10	043	1383.57	036
Mining Captain and Bosses,	407.28	002	407.28	002	814.56	004	394.70	002	394.70	002	789.40	004
Dry House,	622.85	002	820.00	000	1442.85	002	893.20	002	520.00	000	647.30	002
Top Landing and Tramming,	276.67	010	112.85	002	389.52	012	278.04	017	225.01	003	323.61	020
Stocking and Sorting,	347.23	007	720.00	000	1067.23	007	310.64	002	99.69	001	410.33	008
<i>Wound</i> Pumps,	87.19	000	381.00	000	468.19	000	411.39	002	166.66	000	468.05	002
<i>Steam Bumps</i>	43.96	000	31.20	000	75.16	000	12.52	001	42.70	001	27.92	002
<b>Total,</b>	<b>10100.00</b>	<b>040</b>	<b>26125.00</b>	<b>105</b>	<b>36225.00</b>	<b>145</b>	<b>11621.52</b>	<b>020</b>	<b>22420.00</b>	<b>040</b>	<b>13911.52</b>	<b>046</b>
Cost of Production, Per cent.,	133.73	73	110.39	63	214.12	56	95.12	74	79.00	52	201.59	94
<b>EXPLORATORY.</b>												
Exploring in Mines,												
Exploring Outside,												
<b>Total,</b>												
<b>DEPRECIATION.</b>												
Inventory,					70.00	000					167.20	001
Improvement,					670.00	000					547.63	034
New Construction,					115.00	000					73.20	002
<i>Total</i>					1950.00	000					637.63	037
<i>Unadjusted</i>					200	000					600	002
<b>Total,</b>					1970.00	000					1237.63	039
<b>Total Cost on Stock Pile,</b>	<b>133,729.73</b>	<b>739</b>	<b>94,665.83</b>	<b>83</b>	<b>217,395.56</b>	<b>917</b>	<b>116,215.2</b>	<b>020</b>	<b>22,420.00</b>	<b>040</b>	<b>163,225.2</b>	<b>103</b>
<b>LOADING AND SHIPPING.</b>												
Loading by Steam Shovel,	132.72	001	1799.90	007	1932.62	008	30.00	000	1037.03	004	1070.18	004
Loading by Hand,	960.34	007	6707	007	7667.34	014	270.39	001	717	000	2775.64	019
Bosses and Sorters,												
Total Loading Stock Pile,												
Loading at Pocket,	1537.72	007	641.6	001	2179.32	008	134.64	001	462.5	002	1392.34	010
Shipping Expense,												
<b>Total,</b>	<b>2132.76</b>	<b>018</b>	<b>1971.5</b>	<b>011</b>	<b>4104.26</b>	<b>019</b>	<b>1611.03</b>	<b>010</b>	<b>1000.15</b>	<b>007</b>	<b>2752.63</b>	<b>017</b>
<b>Total Cost on Cars,</b>	<b>136,171.99</b>	<b>754</b>	<b>111,301</b>	<b>84</b>	<b>228,472.99</b>	<b>931</b>	<b>12,913.00</b>	<b>020</b>	<b>23,420.00</b>	<b>040</b>	<b>165,971.63</b>	<b>105</b>
Royalty, Comm'n and Expense, Cleveland Office,												
<b>Total Cost,</b>												

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The Cleveland-Cliffs Iron Co.

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*Paster* Mine.

*Cost Sheet for Month of*

*November* 1901

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# Summary of Supplies Used During \_\_\_\_\_ 190\_\_\_\_\_

THE CLEVELAND-CLIFFS IRON CO.	COST OF SUPPLIES.		COST PER TON.	
MINE.	MONTH.	YEAR.	FOR	FOR
PRODUCT.			MO.	YEAR.
General Supplies,				
Iron and Steel,				
Oil, Grease and Candles,				
Machinery Supplies,				
Building Material,				
Explosives,				
Mine Timber,				
Fuel,				
Barn,				
Sundries,				
Total Supplies,				
Miscellaneous,				
Total,				
As per Cost Sheet,				
Improvement,			3	
New Construction,				
Other Charges,				
Total,				

# THE CLEVELAND-CLIFFS IRON CO.

Cost of Production for the Month of 1st Months of 1901

MINE.	MONTH OF _____		TONS.		1st MONTHS 1901		1st MONTHS 1900			
	LABOR.		SUPPLIES.		TOTAL.		TOTAL.			
	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.	AMOUNT.	COST PER TON.		
<b>GENERAL EXPENSE.</b>										
Insurance,							57	26	67	80
Taxes,							243	96	279	13
Engineering,									29	90
Analysis,							584			96
Relief Fund,										
Mine Office,							895			
General Office,										
Total,							916	81	369	18
<b>MAINTENANCE—Repairs of</b>										
Tracks and Yards,										
Docks, Trestles and Pockets,										
Buildings,										
Shop Machinery,										
Boilers,										
Hoisting Machinery,										
Compressors and Air Pipes,										
Pumps,										
Portable Machinery,										
Top Tram Engines and Cars,										
Skips and Skip Roads,										
Underground Tracks and Cars,										
Total,										
<b>MINING EXPENSE.</b>										
Air Pipes,										
Compressors,										
Hoisting,										
Wire Rope, Skips and Pulley Stands,										
Pumps,										
Sinking,										
Drifting,										
Breaking Ore,										
Tramming,										
Filling,										
Timbering,										
Mining Captain and Bosses,										
Dry House,										
Top Landing and Tramming,										
Stocking and Sorting,										
Total,										
Cost of Production,							315	81	369	18
Per cent.,										
<b>EXPLORATORY.</b>										
Exploring in Mines,										
Exploring Outside,										
Total,										
<b>DEPRECIATION.</b>										
Inventory,										
Improvement,										
New Construction,										
<i>Unclaimed Rights Co.</i>									37	52
<i>Sale of Equipment</i>									26	62
Total,									364	04
Total Cost on Stock Pile,									5	14
<b>LOADING AND SHIPPING.</b>										
Loading by Steam Shovel,									31	27
Loading by Hand,							356	61	162	
Bosses and Sorters,										
Total Loading Stock Pile,										
Loading at Pocket,										
Shipping Expense,										
Total,							356	61	162	027
Total Cost on Cars,							671	28	364	1
Royalty, Comm'n and Expense, Cleveland Office,										
Total Cost,										

	ACCOUNTS NOT SUNK OFF.		SINKING.		DRIFTING.		COMPARATIVE COST.		
	AMOUNT.	PER TON.	AMOUNT.	PER TON.	FEET.	COST.	PER FT.	FEET.	
New Construction,					Current Mo.			190	Mos.
Improvement,					Mos.			190	Mos.
					Mos.			190	Mos.
Total,									

REMARKS.

**ANALYSIS OF LABOR.**  
Labor as per Cost Sheet,  
Other Charges,

Total,  
As per Labor Statement,  
General Pay Roll,  
Total,

PIONEER IRON COMPANY.

Statement of Expense of Explorations and Diamond Drilling for the  
Month of November, 1901.

Labor and Supplies	Total for Month		Total for Year		Total to Date	
Mining Captain	75	40	1307	40	2843	71
General Equipment					87	45
Explorations:						
Sec. 6    SW of SE					2366	86
SE of SE					18	42
Sec. 7    NE of NE			33	75	1660	36
SW of SW					28	00
NW of NE					1711	14
SE of NW					38	50
NE of NW					63	09
NW of Nw					38	75
Sec. 8    NW of NW			22	50	1350	25
NE of NW					2275	38
SE of NW					304	52
SW of NW					357	65
NE of SW			44	75	76	50
Watchman			228	80	228	80
Total Explorations	75	40	1637	20	13449	38
Total Diamond Drilling			1910	81	8674	55
Total Exp. for Labor	75	40	3548	01	22123	93
Supplies Explorations	12	00	134	43	5360	04
Supplies Diamond Drilling	10	13	2824	99	15880	72
General Expense Accounts			234	99	1826	06
Total Exp. for Supplies	22	13	3194	41	23066	82
Total Exp. for Labor Supplies	97	53	6742	42	45190	75

770





IRON CLIFFS COMPANY.

Record of Cost for Shop Work at Cliffs Shaft Shop for year ending Nov.30,  
1901.

	Machine Shop		Blacksmith Shop		Carpenter Shop	
	1900	1901	1900	1901	1900	1901
Average no. of men	2 $\frac{1}{2}$	3	10	10	2	2
Total no. of hrs. worked	6715	8762 $\frac{1}{2}$	29192 $\frac{1}{2}$	29282 $\frac{1}{2}$	5730	5945
Hrs. on shop tools, etc.	386 $\frac{1}{2}$	226	282	385 $\frac{1}{2}$	74	62
Hrs. on various persns	72 $\frac{1}{2}$	16	69	20	3	25
Hrs. on mine accts (CS)	6256	8520 $\frac{1}{2}$	28841 $\frac{1}{2}$	28877	5653	5860
Total Cost per hr.	.288	.253	.237	.237	.216	.219
Cost pr. hr. on shop tools	.288	.253	.237	.237	.216	.219
Cost pr. hr. various accounts	.305	.260	.239	.240	.219	.221
Cost pr. hr. Mine accts.	.305	.260	.239	.240	.219	.221
Total Labor Cost	1444.31	1826.03	5900.53	5964.52	1223.34	1285.53
Cost per hr.	.215	.208	.202	.204	.213	.216
Total Supply Cost	489.18	392.36	1030.89	989.25	16.67	15.46
Cost per hr.	.073	.045	.035	.033	.003	.003
Total labor & supply cost	1933.49	2218.39	6931.42	6953.77	1240.01	1300.99
Profit on work done for var. persons & mines other than C S	9.74	2.26	7.75	1.62	.23	2.76
Aver. chgs. per hr. to vars. pers. & mines	.413	.394	.362	.310	.300	.329
Profit per hr. vars. persons & mines	.134	.134	.112	.070	.093	.108
<u>SUPPLIES USED AS</u>						
<u>FOLLOWS.</u>						
General Supplies	83.96	39.31	723.73	731.43	10.75	11.22
Iron & Steel	8.07	2.83	3.62	4.39		
Oil, grease, & candles	28.55	32.04	1.70	4.51	.50	.12
Machy Supplies	50.55	1.40	23.22	12.68		
Building Material	.20		5.65	.64		
Fuel	303.10	297.70	151.57	148.84	.76	
Sundries	14.75	19.08	121.40	86.76	4.66	4.12
Total	489.18	392.36	1030.89	989.25	16.67	15.46

IRON CLIFFS COMPANY.

Cost of Diamond Drill Work - Cliffs Shaft Mine.

Year ending Nov. 30th, 1901.

LABOR	DAYS	AMOUNT	COST PER FOOT
Foreman and setter	61 $\frac{3}{4}$	229.59	.191
Operating	389 $\frac{1}{2}$	830.27	.690
Shop Labor and repairing		9.07	.008
Total	451 $\frac{1}{4}$	1068.93 ✓	.889
SUPPLIES			
Fuel and light		113.06 ✓	.094
Oil and waste		11.90	.010
Bits and tools		47.16 ✓	.039
Repairs, etc.		91.89 ✓	.076
Carbon - 35-22/64 krts.		1633.74 ✓	1.358
General Supplies		2.25	.002
Total		1900.00	1.579
ADDITIONS TO EQUIPMENT			
Rental, etc.		173.75	.144
Total Cost		3142.68 ✓	2.612
Cost per foot 1899			2.998
		<u>1901</u>	<u>1899</u>
Total feet drilled		1203	2383
Average feet per day of 10 hours	180 $\frac{1}{2}$	6.66	6.54
Average feet per man per day	451 $\frac{1}{4}$	2.66	2.60
Feet per karat of carbon		34.04	17.05
Average cost for carbon per karat		46.23	35.24

No diamond drilling at Cliffs Shaft Mine in 1900.

IRON CLIFFS COMPANY.

Report of Operating Steam Shovel No. 3, Season 1901.

No of days Shovel Worked	1901	1900				
	94	100				
Average No. of hours Worked per day	4.36	5.65				
Total No. tons loaded	104905	131651				
Average tons per day loading	1116	1317				
No. of men working with Shovel	10	11				
Average tons per man per day	111.6	119.7				
Average wages per day for Runners	2.50	2.50				
" " " " " Operating	1.75	1.75				
Labor cost per ton Operating	.020	.020				
Supply " " " "	.003	.004				
<b>Total</b>	<b>.023</b>	<b>.024</b>				
	Tons	Tons	1901	1900	1901	1900
	1901	1900	Amount	Cost	Amount	Cost
Hard Ore		23601			761.26	.032
Lake	17948	55237	601.02	.033	1235.58	.022
Cliffs Shaft	42106	26719	1015.83	.024	787.95	.029
Salisbury	37867	24951	979.47	.026	647.29	.026
Michigamme	6984		152.55	.022		
Foster		1143			31.27	.027
<b>Total</b>	<b>104905</b>	<b>131651</b>	<b>2748.87</b>	<b>.026</b>	<b>3463.35</b>	<b>.026</b>
<u>OPERATING SHOVEL</u>						
Labor			2146.94	.020	2691.70	.020
Supplies			303.19	.003	558.46	.004
<b>Total</b>			<b>2450.13</b>	<b>.023</b>	<b>3250.16</b>	<b>.024</b>
<u>REPAIRS TO SHOVEL</u>						
Labor & Supplies			298.74	.003	213.19	.002
<b>Total Operating &amp; Repair Cost</b>			<b>2748.87</b>	<b>.026</b>	<b>3463.35</b>	<b>.026</b>

IRON CLIFFS COMPANY

Comparative Statement of General Expense Accounts for Five years  
ending November 30th, 1901.

General & Mine Office.	1901	1900	1899	1898	1897
Superintendent	4385.59	4655.53	4609.53	3926.03	3339.71
Clerks	5510.89	5997.06	5419.56	5027.67	3821.99
Master Mechanic	1953.74	1905.93	1293.74	654.75	645.41
Watchman	458.10	456.45	472.15	154.41	
Choreman	168.01	171.60	157.92	117.79	109.31
Stationery & Printing	384.61	378.76	325.20	350.40	242.07
Telephones & Telegraph'g	402.86	318.02	364.40	307.60	255.67
Traveling	229.86	39.69	243.86	166.29	19.25
Fuel and Light	372.50	407.11	254.32	197.58	242.93
Water and Ice	46.23	72.81	46.25	49.72	29.80
Livery & Stable Expense	632.25	554.34	503.21	494.96	32.50
Postage and Box Rent	114.42	139.60	81.80	84.57	62.80
Papers & Periodicals	13.67	13.15	14.00	12.25	14.75
Freight & Express	17.37	19.15	20.71	15.67	10.08
Donations	480.78	892.36	97.03	576.67	149.66
Petty Office Expense	71.78	73.76	87.45	48.19	29.29
Exchange	316.00	307.00	261.00	222.00	128.00
Revenue Tax	5.25	204.37	152.99	141.52	
Rent			185.00	330.00	330.00
Furniture & Fixtures	51.98	93.50	141.59	118.90	5.12
Legal	322.96	332.17	437.97	300.00	277.43
Advertising		15.00	15.00	27.50	26.25
Miscellaneous	100.18	161.55	23.80		
Uncollectable Debts					5.00
Janitor	104.90	96.54			
<b>Total</b>	<b>16043.93</b>	<b>17305.45</b>	<b>15208.43</b>	<b>13324.47</b>	<b>9777.02</b>
<u>General Expense Accounts</u>					
Fire Insurance	709.05	657.44	587.11	550.89	672.51
Boiler Insurance	83.97	83.97	68.42	64.52	64.52
Taxes	20528.95	13212.95	13298.90	13485.78	14835.52
Engineering.	1841.00	2110.95	1387.04	2104.60	1081.70
Analysis	2164.71	2100.12	2004.72	3557.90	2164.38
Relief Fund	2142.60	2174.10	2102.10	2022.60	1241.10
<b>Total</b>	<b>27470.28</b>	<b>20339.53</b>	<b>19448.29</b>	<b>21786.29</b>	<b>20059.73</b>
<b>GRAND TOTAL</b>	<b>43514.2.</b>	<b>37644.98</b>	<b>34656.77</b>	<b>35110.76</b>	<b>29836.75</b>

IRON CLIFFS COMPANY.

Record of Fire Insurance on Dwellings & Mine Buildings

For the Year Ending November 30th, 1901.

	Amount Insurance Carried	Premium Accruing for 1901	Fire Loss Paid 1901.
<u>CLIFFS SHAFT MINE</u>			
Dwellings	7800.00	39.00	108.52
Mine Buildings	26750.00	414.28	3465.04
Total	34550.00	453.28	3573.56
<u>SALISBURY MINE</u>			
Dwellings	17350.00	84.30	
Mine Buildings	5350.00	114.21	
Total	22700.00	198.51	
<u>FOSTER MINE</u>			
Dwellings	2550.00	18.48	
Mine Buildings	1750.00	38.78	
Total	4300.00	57.26	
Total I. C. Co.	61550.00	709.05	3573.56

<u>DETAIL OF FIRE LOSS</u>			
<u>CLIFFS SHAFT.</u>			
July 31st.	Crusher Building and Machinery		
	Estimated Loss on Building	2311.02	
	Amount of Insurance Paid	2000.00	
	LOSS		311.02
	Estimated Loss on Machinery	1465.04	
	Amount of Insurance Paid	1465.04	
	Dwelling #3 Insurance #78		
Sept. 20th	Estimated Loss on Dwellings	108.52	
	Amount of Insurance Paid	108.52	

2311.02  
 1465.04  
 108.52  
 3884.58  
 3573.56  
 311.02

IRON CLIFFS COMPANY

Analysis of Improvement and New Construction,

November 30th, 1901.

<u>CLIFFS SHAFT MINE</u>	Inventory Nov.30'00	Expend'r for year	Total	Deprec'n for year	Invent. Nov.30'0
<u>Improvement</u>					
Fire Protection		105.43	105.43	105.43	
General Office		23.25	32.25	32.25	
New Heating System		2400.50	2400.50	2400.50	
Carriage House		930.40	930.40	930.40	
<b>Total</b>		<b>3468.58</b>	<b>3468.58</b>	<b>3468.58</b>	
Boarding House Dep.	1638.54		1638.54	1638.54	
<u>Salisbury Mine</u>					
<u>Improvement</u>					
Fire Protection		6.18	6.18	6.18	
Stock Pile Dock		667.34	667.34	667.34	
<b>Total</b>		<b>673.52</b>	<b>673.52</b>	<b>673.52</b>	
<u>Steam Shovel #3</u>	2751.58		2751.58	1517.68	1233.90
Cliffs Shaft Dep.	799.10				
Salisbury "	718.58				
	<u>1517.68</u>				
<u>TOTAL IRON CLIFFS CO.</u>	<b>4390.12</b>	<b>4142.10</b>	<b>8532.22</b>	<b>7298.32</b>	<b>1233.90</b>
Divided as follows,-					
Cliffs Shaft Mine				4267.68	
Salisbury Mine				1392.10	
Treasurer - Boarding House				<u>1638.54</u>	
( Does not include Inven- tory depreciation)				<b>7298.32</b>	

IRON CLIFFS COMPANY.

CLIFFS SHAFT MINE

Statement of Rented Houses, Showing Rent Received, Cost of Repairs, etc.

For the Year Ending November 30th, 1901.

House No.	Present Occupant	Lot No.	Rent Rec'd	Repairs	Insurance	Taxes	Total Expense
a	Jas. H. Rought		144.00	44.40	10.00	56.57	110.97
b	Campbell & Whittington		138.00	38.70	6.00	37.15	81.85
c	A. J. Youngbluth		120.00	166.79	5.00	33.61	205.40
1	Terry Dougherty		63.00	24.42	2.00		26.42
2	Luke & Oatman		120.00	29.46	3.00		32.46
3	Dan Campbell		60.00	37.05	1.00		38.05
4	Beale & Schadt		102.00	22.71	4.00		26.71
5	Dennette & Crawford		115.00	16.57	3.00		19.57
75	David Powers		57.50	15.95	2.50		18.45
76	Denny Maloney		65.00	110.10	2.50		113.60
	Herman Elson		360.00	6.36	33.75		40.11
	Total		1344.50	513.51	72.75	127.33	713.59
	Total - 1900		971.25	694.09	72.75	56.98	823.82

Net Earnings for Year	1901 630.91	1900 216.16
Per Cent Earnings on Insurance Valuation	7%	2.8%
Insurance Valuation	10300.00	7800.00
Per Cent Earnings for 1900 including rent on Boarding House		5.6%

IRON CLIFFS COMPANY

FOSTER MINE

Statement of Rented Houses, Showing Rent Received, Cost of Repairs, etc.

For the Year Ending November 30th, 1901.

House No.	Present Occupant	Lot No.	Rent Rec'd	Repairs	Insurance	Taxes	Total Expense
1							
2							
3							
4							
5							
6							
7							
8							
9	Chas. Cox		6.00				
10							
11							
12							
13							
14							
15							
16							
Total			6.00		18.50		18.50

Net Loss	<u>1901</u> 12.50	<u>1900</u>
Net Earnings		110.00
Per Cent Earnings on Ins.Valuation		4.3%
Insurance Valuation	2550.00	2550.00

NOTE-

Repairs were made on Captain's Home 217.20



IRON CLIFFS COMPANY

TILDEN MINE

RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH,1901

	Hours Delay	Tons Lost	Percent of Time Lost		
			1901	1900	
Compressor & Air Pipes				.043	
No R.R.Cars				.116	
Top Tram Engines & Cars	2	30	.025		
Car Shortage	20	300	.250		
Rain & Snow	18	270	.225	.365	
Miscellaneous	10	200	.125	.015	
<b>TOTAL</b>	<b>50</b>	<b>800</b>	<b>.625</b>	<b>.539</b>	
Holidays	30	456	.375	.461	
<b>TOTAL INCLUDING HOLIDAYS</b>	<b>80</b>	<b>1256</b>	<b>1.000</b>	<b>1.000</b>	
No.Days 10 Hrs. per Day	8				
Actual Product for Year	10642				
Average Product Pr Day for Yr	152				
No.Full Days Worked for Yr	67				
Number Days Idle	8				
Lost Product (Exc.Holidays)	800				
<b>FIXED CHARGES</b> Accounts Not Effected When Mines Are Idle			<b>Tons</b>	<b>Cost</b>	<b>Amount</b>
General Expense (Except Analysis & (Relief Fund)				.012	138 73
Taxes					
Maintenance					
Mining Captain				.038	397 98
Depreciation					
<b>TOTAL</b>				<b>.050</b>	<b>536 71</b>
Total Cost on Stock Pile for Yr. (Actual		10642		.373	3972 38
Less Fixed Chgs. Cost Pr Ton				.050	
Cost of Lost Product		800		.323	258 40
Possible Product & Cost		11442		.370	4230 78
Loss or the Difference Between Actual & Possible Cost & the Amt.		11442		.003	34 33
Ditto 1900		16925		.015	253 88

IRON CLIFFS COMPANY

CLIFFS SHAFT MINE.

RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH,1901

	Hours Delay	Tons Lost	Percent of time lost.	
			1901	1900
Fatal Accidents	40	1600	.074	.143
Skips, Skip Roads & Bell Line	2	100	.004	.046
Hoisting Machinery	40	1800	.074	.043
Top Tram Engines & Cars	10	500	.019	.019
Crusher Repairs	110	4000	.204	.077
Fire in Mine & Plant (Crusher Bldg)	65	3000	.120	
Rain & Snow	2		.004	.002
Miscellaneous				.002
<u>TOTAL</u>	269	11000	.449	.332
Holidays	270	12420	.501	.668
<u>TOTAL INCLUDING HOLIDAYS</u>	539	23420	1.000	1.000
No. Days, 20 Hrs. per Day	27			
Actual Product per Year		273268		
Average Product pr Day for Yr.		920		
No. Full Days Mine Worked for Yr.		286		
Number of Days Idle		27		
Lost Product (Excluding Holidays)		11000		

FIXED CHARGES Accts. Not Effected When Mines Are Idle.	Tons	Cost	Amount
General Expense (Exc. Analysis & R. Fund)		.095	25932 10
Maintenance		.039	10683 10
Air Pipes		.005	1285 99
Pumping		.036	9934 44
Mining Captain		.009	2500 00
Exploring		.012	3142 68
Depreciation		.029	7983 15
<u>TOTAL</u>		.225	61461 46
Total Cost on Stock Pile for Yr. (Actual)	273268	1.078	294439 86
Less Fixed Chgs. Cost per ton		.225	
Cost of Lost Product	11000	.853	9383 00
Possible Product & Cost	284268	1.069	303822 86
Loss or the Difference between Actual and Possible Cost and the Amount	284268	.009	2558 41
Ditto for 1900	266991	.002	533 98

IRON CLIFFS COMPANY .

SALISBURY MINE  
RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH,1901

	Hours Delay	Tons Lost	Percent of Time Lost	
			1901	1900
Fatal Accidents				
Skips, Skip Roads & Bell Lines	46	400	.116	.145
Hoisting Machinery	24	600	.060	.022
Shaft & Shaft House Repairs				
Miscellaneous				
<u>TOTAL</u>	70	1000	.176	.167
Holidays	328	8295	.824	.833
<u>TOTAL INCLUDING HOLIDAYS</u>	398	9295	1.000	1.000
No. Days - 24 Hrs Per Day	16 2/3			
Actual Product for Year		180918		
Average Product Pr Day for Yr		603		
No. Full Days Mine Worked For Yr		296 1/3		
Number of Days Idle		16 2/3		
Lost Product (Exc. Holidays)		1000		
<u>FIXED CHARGES</u>		<u>Tons</u>	<u>COST</u>	<u>Amount</u>
Accts. Not Effected When Mines Are Idle				
Gen. Expense (Except Analysis & (Relief Fund			.070	12826 10
Maintenance			.054	9824 98
Air Pipes			.002	348 84
Pumping			.035	6343 20
Mining Captain			.010	1800 00
Depreciation			.011	1960 37
<u>TOTAL</u>			.182	33103 49
Total cost on Stock Pile for Yr. (Actual		190918	.967	174865 93
Less Fixed Chgs. Cost Pr Ton			.182	
Cost of Lost Product		1000	.785	785 00
Possible Product & Cost		181918	.965	175650 93
Loss or Difference Between Actual And Possible Cost and the Amt.		181918	.002	363 84
Ditto 1900		161045	.001	161 05

Statement of CLIFFS SHAFT for year ending Nov. 30, 1901.

	<u>Tons</u>	<u>Tons</u>
In stock at mine Dec. 1, 1900	75594	
Produced during year	<u>273268</u>	
Total Cliffs Shaft		348862
Other ores shipped as Cliffs Shaft		
Beresford		<u>19998</u>
Total		<u><u>368860</u></u>

Shipped

Coarse Cliffs Shaft		
Granite City	28	
East St. Louis	28	
Ashtabula	<u>12613</u>	
Erie	13002	
Buffalo	<u>6268</u>	
Total - Coarse Cliffs Shaft -	<u>21881</u>	31938

Crushed Cliffs Shaft

Pioneer Furnace	6383	
Northwestern Iron Co.	5017	
Antrim Iron Co.	3882	
Elk Rapids Iron Co.	14114	
Spring Lake Iron Co.	7531	
Manistique Furnace	316	
Cleveland	<u>9767</u>	
Ashtabula	43006	
Erie	39606	
Buffalo	<u>82855</u>	
Total - Crushed Cliffs Shaft -	<u>175734</u>	212477

In stock at mine Nov. 30, 1901.		<u>124445</u>
Total		<u><u>368860</u></u>

Statement of SALISBURY BESSEMER for year ending Nov. 30, 1901.

	<u>Tons</u>	<u>Tons</u>
In stock at mine Dec. 1, 1900	16297	
Produced during year	<u>86181</u>	
Total		<u>102478</u>
Salisbury Bessemer transferred to other grades - Lake Bessemer -		
Note,- Salisbury Bessemer was all shipped from dock as Lake Bessemer		98672
In stock at mine Nov. 30, 1901		<u>3306</u>
Total		<u>102478</u>

Statement of BUFFALO and CAMEO for year ending Nov. 30, 1901.

	<u>Tons</u>	<u>Tons</u>
C.C.I.Co.'s proportion - Original Est.		
Buffalo	60000	
Cameo	<u>15000</u>	
Total	75000	
Received from Regent Iron Company		
Buffalo		64645
Cameo		<u>10335</u>
Total		<u>74980</u>
Amount still due - Buffalo -	20	
Shipped		
Buffalo as Salisbury		64645
Cameo as Salisbury		<u>10335</u>
Total		<u>74980</u>

# IRON CLIFFS COMPANY.

*Corrected Report*

Weekly Mine Report for the Week Ending

*November 30th*

1901

GRADES	TONS FOR WEEK		PREVIOUS FOR MONTH	TOTAL FOR MONTH	OVERRUNS AND SHORTAGES	TOTAL FROM DEC. 1, 1900	Transferred To and Transferred From	IN STOCK DEC. 1, 1900	TOTAL	SHIPMENTS TO DATE	BALANCE ON HAND	AVERAGE DAILY ORE HOIST				
	ROCK	ORE										WEEK	MONTH	YEAR		
Barnum, <i>Overrun</i>																
Cliffs Shaft,	246	<sup>207</sup> 6439	18297	<sup>207</sup> 24736		273268		75594	348862	224417	124445	1081	998	920		
Total from Hard Ore Mines,	246	6646	18297	24943		273268		75594	348862	224417	124445	1081	998	920		
Salisbury Bessemer, <i>Overrun</i>	150	<sup>32</sup> 1728	4802	<sup>32</sup> 6530		85033		16297	101330	98672	2658	248	262	283		
Salisbury,		<sup>36</sup> 2460	5924	<sup>36</sup> 8384		96196	3129	4234	97301	75397	21904	352	337	320		
Salisbury No. 3,					311	311		5538	5227	5227	0					
Foster,					11870	11870		2329	14199	12999	1200					
Tilden,						10642			10642	10642	0			152		
Total from Hematite Mines,	150	4256	10726	14982	11859	203430	3129	28398	228699	202937	25762	600	599	756		
Grand Total,	396	10902	29023	39925	11559	476698	3129	103992	577561	427354	150207	1681	1597	1675		
Rock, previous for Month,	1262															
total " "	1658															
" " from Dec. 1, 1900	23792															

OVERRUNS SHOWN IN BLACK; SHORTAGES IN RED; TRANSFERS TO IN BLACK; TRANSFERS FROM IN RED.

*Transfers  
Salisbury to Lake 3129*

*13151  
12994  
154*

IRON CLIFFS COMPANY.

Detail of Accounts Payable, November 30th, 1901.

Benefit and Suspense Funds-

Cliffs Shaft	Benefit	1536.19
"	"	
"	Suspense	1536.19
Salisbury	Benefit	2801.86
"	"	
"	Suspense	1562.98
Foster	Benefit	394.35
"	"	
"	Suspense	186.93
Cliffs Shaft	Brass Checks	398.00
Salisbury	"	223.50
Foster	"	6.25
Fire Loss		<u>2589.13</u>

Total Representative Accts. Payable 11235.38

Accrued Taxes Unpaid	20528.95
Est. of Carl Matson	474.40
Pay Rolls	29389.49
J. C. Hodge	20.40
Bills Audited-	

Negaunee Land Department	3.50
Crew Levick Company	23.17
Prize Awards	18.00
Benefit & Suspense	174.24
J. J. Leffler	2.40
Mrs. A. Williams	1.00
F. Braastad & Company	22.28
J. C. Altschwager	6.00
Trembath Brothers	10.50
F. W. Read & Company	1.05
Jno. W. Jochim Hdwr. Co.	29.41
Standard Oil Company	6.19
I. E. Swift Co.	19.21
Crucible Steel Company	1.49
Machinists' Supply Co.	.65
Jones & Laughlins Co., Ltd.	4.70
Cleveland Iron Mining Co.	872.34
A. B. Miner, Cashier	27.00
Felch & Vandeventer	568.00
Ishpeming City Water Works	49.50
Negaunee Land Department	23.50
Cleveland Iron Mining Co.	29.00
D. S. S. & A. Ry. Co.	<u>10.45</u>

Total Bills Audited 1903.58

Total Accounts Payable 57316.84 \$63552.20

IRON CLIFFS COMPANY.

Detail of Accounts Receivable, November 30th, 1901.

Revenue Tax Collector	28.40	
Paymaster's Account	28.39	
Cleveland-Cliffs Iron Company	3855.84	
Cleveland Iron Mg. Company	527.85	
Pioneer Iron Company	12.00	
R. W. Clason	31.78	
Superior Posten	100.00	
Ishpeming Floral Company	37.50	
Standard Oil Company	85.31	
The D. Clint Prescott Co.	.50	
Neg. & Ish. St. Ry. & Elec. Co.	7.50	
James H. Rough	47.00	
W. M. Sterling	10.70	
Herman Kitto	8.00	
John S. Mennie	1.00	
		<hr/>
Total Accounts Receivable	4781.57	

Unearned Premiums Boiler Insurance	15.64	
Unearned premiums Fire Insurance	187.24	<hr/>

Total Rep. Accts. Receivable 202.88

GRAND TOTAL \$4984.45



IRON CLIFFS CO.-DEP'T OF MINES.

COMPARATIVE STATEMENT OF TAXES FOR YEARS 1901 AND 1900.

DESCRIPTION	1901		1900	
	VALUATION	TAXES	VALUATION	TAXES
<u>CITY OF ISHPEMING</u>				
Loys 4-5-6-Block 3	3200	5601	2160	2546
Lot 14-Block 5	2100	3678	1400	1649
That part of Lot 1 of (NW $\frac{1}{4}$ of NW $\frac{1}{4}$ ) Sec. 10-47-27, which lies N & W of the C&NW Ry. Co's right of way, except that part of same which is included in the Excel. I. Co's Addtn to the City of Ishpeming, and except the right of way of the D.S.S. & A. Ry., the C. NW Ry., & the L.S. & I. Ry., across said land in an Ely and W-ly direction about 30 Acres.				
NW $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 9-47-27 Except the right of way of the L.S. & I. Ry. across said land about 37 acres.	544000	951781	787500	927437
SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 9-47-27 except the rights of way of the C&NW Ry., THE DSS&A Ry. & the LS&IRy. across said land in a NE-ly and SW-ly direction about 35 A.	3600	6292	2300	2711
SW $\frac{1}{4}$ of NE $\frac{1}{4}$ Sec. 15-47-27 40 A.	250	440	155	184
S $\frac{1}{2}$ of NW $\frac{1}{4}$ " 15-47-27 80A.	87500	152943	47325	55733
Personal - Cliffs Shaft	329340	576210	153381	180635
Personal - Salisbury	169660	296836	86454	101816
Ex. I. Co's 1st Add. Lots 4-5 Block 4	1900	3328	1235	1448
" " " 7 " 4	600	1051	400	471
Total City Taxes	1142150	1998160	1082310	1274630
Collection Fees -1% -		19982		12747
Grand Total		2018142		1287377
Rate (Not including fees)		1.75		1.177
Increase over last year	59840	723530		
<u>TILDEN TOWNSHIP</u>				
SE $\frac{1}{4}$ Sec. 22-47-27 160 A.	800	1768	800	1744
SW $\frac{1}{4}$ " 23-47-27 160 A.	8640	19072	8640	18826
NW $\frac{1}{4}$ " 26-47-27 160 A.	480	1060	480	1048
NE $\frac{1}{4}$ " 27-47-27 160 A.	480	1060	480	1048
SW $\frac{1}{4}$ of SE $\frac{1}{4}$ Sec. 23-47-27 40 A.	320	707	320	698
Personal Property	4690	10352	4690	10218
Total Township Taxes	15410	34019	15410	33582
Collection Fees -1%-		340		336
Grand Total		34359		33918
Rate (Not incl. fees)		2.21		2.179
Total City & Township	1157560	2052501	1097720	1321295
Rate (Not incl. fees)		1.756		1.192
Amount of Taxes as per statement Charged as follows:				
Cliffs Shaft	884740	1563421	948376	1128066
Salisbury	257410	454721	133934	159311
Poster	10941	24396	12410	27312
Tilden	4469	9963	3000	6606
Total	1157560	2052501	1097720	1321295
Cliffs Shaft				
Taxes as per Cost Sheet		1563815		
" " " Payable Voucher		1563421		
Error in fees not discovered until after balance sheets was completed.		394		
Increase over 1900	59840	731206		
% Increase over 1900 -	5.17	35.6		



THE CLEVELAND-CLIFFS IRON CO.

ASHLAND MINE.

Inventory of Supplies May 1st, 1901.

SUMMARY OF ACCOUNTS.

	Page.	Amount.
General Supplies	1 - 4	724.85.
Iron and Steel.	5 - 8	1243.35
Oil, Grease and Candles.	9	191.40
Machinery Supplies.	10 -16	813.64
Building Material.	17	653.92
Explosives.	18	259.49
Mine Timber.	19	16394.88
Fuel.	20	9130.00
Barn.	21	<u>163.70</u>
Total.		29575.23.

ASHLAND MINE.

GENERAL SUPPLIES.

8	No. 2 Chimneys	.85	.57
5-1/2	Lbs. Solder	.20	1.10
12	Battery Zincs	.05	.60
3	Doz. Lantern Wicks	.04	.12
3	File Brushes	.25	.75
9	No. 4 Squirt Cans	1.75	1.31
16	Pieces Chalk		.10
4	4 ft. Crosscut Saws	2.16	8.64
96	Lbs. Barb Wire	.03-1/2	3.36
2	Scoop Shovels	.95	1.90
6	Shovels	7.25	3.62
4	Shovels	7.25	2.41
1-1/2	Lbs. Salt	1.25	1.88
4-1/3	Doz. Hammer Handles	.85	3.63
5	Doz. Double Pick Handles	.85	4.25
7	S. S. Miners' Lamps	1.50	.87
2	10" Iron S. Blocks	2.40	4.80
7	Sledge Handles	.85	.49
1	10 Gal. W. J. Oil Can		.70
2	5 Gal. W. J. Oil Cans-Old-	.25	.50
1	Oil Pump	"	.00
3	2 Gal. Measures	"	.00
1	Large Funnel	"	.00
1	Small Funnel	"	.00
3	Doz. Oak Push Buttons	.60	1.80
3	Doz. S. S. Miners' Lamps	1.50	4.50
6	1 qt. Oilers	3.60	1.80
5	1 pt. Oilers	1.75	.73
8	Lbs. Graphite	.18	<u>1.44</u>

Amount For'd

51.92

ASHLAND MINE.

GENERAL SUPPLIES (CONTINUED)

	Amount For'd	51.92
1 Hand Saw Handles	.25 pr.	.15
3 Saw Handles ( 1 man )		.37
31 1/2" Spring Cutters- <del>7.35-70</del> off .02-		.62
72 3/8" " " - <del>4.33-70</del> off .02-		1.44
10 Lbs. Swedes Tacks	.15	1.50
4 Sheaves for 8" Tackle Block	.25	1.00
107 Babbitt	.13	13.91
1-1/2 Lbs. 5/16 Copper Wire	.28	.42
390 Lbs. Old Babbitt	.05	19.50
10-1/4 Lbs. Barb Wire Staples	.03-1/2	.35
2 14 Lb. Sledges-No handles-28#	.09	2.52
23 7# S. Hammers-196#	.06	11.76
3 Cant Hooks-Complete-	2.00	6.00
14 Shovels Handles. Per doz.	1.50	1.75
5 Cant Hook Handles Each	1.00	5.00
18 Double Bit Axes Per Doz.	1.25	1.87
2 Single Bit Axes Per Doz.	1.25	.21
22 P. Pick Handles	.85	1.55
1 3 Gal. W. J. Oil Can		.42
4 2 Gal. W. J. Oil Cans	.32	1.28
6 1 Gal. W. J. Oil Cans	.24	1.44
9 8 c.p. Incandescent Lamps	.14	1.26
16 16 c.p. " "	.16-1/2	2.64
70 Sockets-Keyed-		.70
54 Lantern Globes	.75	3.37
2 Wood Water Pails	.20	.40
89 Lbs. White Waste	.06-1/4	5.56
102 Lbs. Colored Waste	.04	4.08
8 Wheelbarrows-Iron Wheel-Wood Tray-	1.50	<u>12.00</u> 103.07
Total		103.07
	Amount For'd	154.99

ASHLAND MINE.

GENERAL SUPPLIES (CONTINUED)

	Amount For'd		154.99
13 Lbs. Rope_Manila-1/2"-	.10-3/4	1.39	
62 Lbs. " " -3/4"-	.10-3/4	6.66	
34 Lbs. " " -1" "	.10-3/4	3.68	
4-3/4 Doz. R. P. Shovels	7.25	34.44	
9 W. H. Brooms	4.50	3.37	
225 Lbs. No. 8 Galv. Wire	.04	9.00	
2 Tons Hard Coal-In Shed-	6.50	13.00	
14 16' Ladders-224 ft.-	.20	44.80	
5600 Ladder Rounds	14.00	<u>78.40</u>	194.71
6 1/2" Round Files-12"	7.50	3.75	
6 1/2 Round " 12"	11.80	5.90	
6 1/2 " " 12"	11.80	5.90	
9 F. B. " 12"	9.70	7.26	
11 12" Mill "	7.50	6.88	
13 10" " "	5.60	6.07	
12 8" " "	4.30	4.30	
13 6" " "	3.50	3.80	
3 8" Flat B. "	5.30	1.32	
10 6" Taper "	3.10	2.58	
6 8" Taper "	5.40	2.70	
5 10" Taper "	8.10	3.37	
3 16" Round "	14.70	<u>3.67</u>	
		57.50	
	Less 70 %	<u>40.25</u>	17.25
			366.95
	Amount forwarded		366.95

ASHLAND MINE.

GENERAL SUPPLIES (CONCLUDED)

		Amount For'd		366.95
3	15" Coes Wrenches	24.00	6.00	
1	6" Coes Wrenches	9.00	<u>.75</u>	
			6.75	
	Less 45%		<u>3.04</u>	3.71
1	24" Trim Wrench		6.00	
1	24" " Jaw Only		2.00	
1	24" " Ins. Jaw		.65	
1	14" " Frame Only		<u>.45</u>	
			9.10	
	Less 50-10		<u>5.00</u>	4.10
				<u>7.81</u>
	Total			7.81
Total General Supplies				374.76
Amount of Supplies charged out				<u>504.15</u>
Total				878.91
Less amount purchased in May				<u>154.06</u>
Amount of Inventory as May 1st.				724.85.

ASHLAND MINE.

I R O N   &   S T E E L.

150	Lbs. Grooved Steel	.02-1/4	10.88
75	" 1-1/2 x 1/4 Auger Steel	.05-1/2	4.12
38	" 1-1/2 Sq. Tool Steel	.12	4.56
40	" 1-1/4 Sq. " "	.12	4.80
21	" 3/4 Oct. " "	.06-1/2	1.36
13	" 5/8 Oct. " "	.06-1/2	.84
130	" 1 x 3/4 Pick "	.05	9.00
20	" 1-1/4 x 5/8 " "	.05	1.00
112	" 1-3/8 Rd. F. Screw Steel	.03	3.36
68	" 3" Sq. Soft Steel	.02	1.36
25	" 1-1/2 x 1/2 Swede Iron	.04-1/2	1.13
11700	" 30# T. Rail - 2000# 1 ton	30.00	175.50
11675	" 16# T. Rail - 2000# 1 ton	30.00	175.12
50	Prs. 30# Rail Splices	.30	15.00
284	" 16# " "	.10	28.40
6466	Lbs. Com. Iron	2.10	135.79
8846#	" Soft Steel	2.10	185.77
1080	" Drill Steel	.06-1/2	70.20
67	" Angle Iron	2.10	1.41
773	" Swedes Iron	.04-1/2	34.79
9	Kegs 60d Nails	2.75	24.75
12	" 40d "	2.75	33.00
1	" 30d "	2.75	2.75
4	" 20d "	2.75	11.00
3	" 10d "	2.75	8.25
8	" 8d "	2.85	22.80
73	Lbs. 8d "	2.85	2.08
42	" 40d "	2.75	1.15
15	" 10d "	2.75	.41
42	" 6d "	3.50	1.47
90	" 30d "	2.75	2.47
3	" Shingle Nails	3.50	.10
			974.62
Amount For'd			974.62
5			974.62



ASHLAND MINE.  
IRON & STEEL (CONTINUED)

		Amount For'd	974.62
2	Kegs 3/8 x 3 R. R. Spikes	2.25	4.50
145	Lbs. 5/8 x 3 R. R. Spikes	2.25	3.26
175	" 16# Rail Splice Bolts	.03	5.25
220	" 30# " " "	.03	6.60
95	" 16# " " "	.03	2.35
103	" 1/2 x 4 R. R. Spikes	2.25	2.31
120	3/8 x 1-1/2 Carriage Bolts	1.50	1.80
100	2 " "	1.50	1.50
250	2-1/4 " "	1.57	3.92
250	2-1/2 " "	1.64	4.10
50	3 " "	1.73	.89
100	3-1/2 " "	1.92	1.92
50	5 " "	2.34	1.17
50	5-1/2 " "	2.43	1.24
24	1/2 x 1-1/2 " "	3.00	.72
200	2-1/2 " "	3.00	6.00
100	3 " "	3.00	3.00
50	3-1/2 " "	3.20	1.60
50	4 " "	3.40	1.70
50	4-1/2 " "	3.60	1.80
50	5 " "	3.80	1.90
100	5-1/2 " "	4.00	4.00
50	6 " "	4.20	2.10
50	6-1/2 " "	4.40	2.20
50	7 " "	4.60	2.30
68	7-1/2 " "	4.80	3.26
26	8 " "	5.00	1.30
45	8-1/2 " "	5.20	2.34
31	9 " "	5.40	1.67
4	9-1/2 " "	5.60	.22
	Less 60 - 31.59-	<u>52.65</u>	
	Amounts for'd	21.06	24.77
			974.62

ASHLAND MINE.

IRON & STEEL (CONTINUED)

				Amounts for'd	21.06	24.77	974.62
16	5/8-2-1/2	Carriage Bolts		5.00	.80	21.06	
17	3	" "		5.00	.85		
17	3-1/2	" "		5.30	.90		
66	5	" "		6.20	4.09		
76	5-1/2	" "		6.50	4.94		
71	6	" "		6.30	4.83		
24	7-1/2	" "		7.70	1.84		
29	3	" "		8.00	2.32		
3	2-1/2	" "		8.30	<u>8.25</u>		
					20.82		
				Less 60%	<u>12.50</u>	8.32	
70	1/2 x 2-1/2	Machine Bolts		4.12	2.88		
23	3	" "		4.38	1.00		
29	3-1/2	" "		4.64	1.34		
50	5/8 x 2-1/2	" "		5.96	2.98		
35	3	" "		6.34	2.22		
12	3-1/2	" "		6.72	.81		
48	3/4 x 3-1/2	" "		9.20	4.42		
20	4	" "		9.70	1.94		
50	5	" "		10.70	<u>5.35</u>		
					22.94		
				Less 60%	<u>13.77</u>	9.17	
3	Lbs. 3/4	Hex. Nuts Thr.		3.90	.07		
200	" 7/8	" " "		3.50	7.00		
185	" 1-1/4	Sq. " "		3.20	5.92		
45	" 1/2	" " "		4.20	1.89		
35	" 1-1/4	Hex. " Blank		3.50	<u>1.22</u>	16.10	<del>88.52</del>
						22.59	79.42
							1054.04

ASHLAND MINE.  
IRON & STEEL (CONCLUDED)

#	Amount For'd	\$1054.04
28 Lbs. 3/8 Cut Washers	.04-1/2 1.26	
18 " 5/8 " "	.04-1/2 .81	
18 " 3/4 " "	.04-1/2 .81	
9 " 1" " "	.04-1/2 .40	
360 " 1-1/4 Cast Washers	1.75 6.30	
100 " 1" " "	1.75 1.75	
96 " 3/4 Hex. Nuts Threaded	3.90 3.74	
64 " 3/4 " " Blank	3.90 2.50	
25 " 5/8 Sq. " Threaded	3.50 .88	
75 " 5/8 " " Blank	3.50 2.63	
75 " 1/2 " " "	4.20 3.15	
550 " 1-1/4" " "	3.20 17.60	
100 " 1-1/8 " "	3.20 3.20	
200 " 1" " " "	3.20 6.40	
14 " 7/16 Hex. " Threaded	4.20 .59	
20 " 9/16 Sq. " "	4.30 .86	
38 " 3/4 " " "	3.90 3.43	
60 " 7/8 Hex. "	3.70 2.22	
42 " 1" " "	3.20 1.34	
70 " 5/8 x 2-1/2 Rivets	.04 2.80	
30 " 3/4 x 3	.04 3.20	
	65.87	65.87
	65.87	
	<del>Amount For'd</del> ----	1119.91
	Total Iron & Steel	
Amount of Supplies charged in May		140.36
Total		1260.27
Less amount purchased in May		16.92
Amount of Inventory as May 1st.		1243.35

ASHLAND MINE.

OIL, GREASE, AND CANDLES.

188	Lbs. Drilling Compound	.05	9.40
75	" L. D. Axle Grease	.03-1/4	1.69
42	Gal. Eld. Oil	.15-1/2	6.51
44	" Ker. Oil	.11-1/2	5.06
40	" Balt. Oil	.03-1/2	3.40
200	Lbs. Sunshine	.05	10.00
75	" Dillay Fat	.05	3.75
70	" Lub. Grease	.06	4.20
1092	" E. L. Candles	.03-3/4	95.55
1	50 Gal. Oil Tank		2.00
26	Gal. Marine Valve Oil	.32	8.32
17	" Capital Cylinder	.30	5.10
20	" Atlantic Red	.15	3.00
28	" Renown Engine	.20	<u>5.60</u>
		Total	163.58
	Amount of Supplies charged in May		<u>439.73</u>
		Total	603.31
	Less Amount purchased in May		<u>411.91</u>
	Amount of Inventory as May 1st.		191.40



ASHLAND MINE.

MACHINERY SUPPLIES(CONTINUED)

	Amount For'd		\$154.19
1-1/2 Lbs. Wicking	.14	.21	
41 " Square Bar. for Worth 60 Pump		24.60	
22 " 1/16 Graph. Sheeting	.55	12.10	
13 " 1/16 Rainbow "	.45	5.85	
61 " 1/8 " "	.45	27.45	
50 " 1/16 Cloth Insertion-No price			
6 " 1/8 C. B. S. Sheet P.	.11	.66	
6-1/2 " 1/2" Sq. Duck Packing	.45	2.92	
7-1/2 " 1/2" " Hydraulic "	.65	<u>04.87</u>	78.66
22-1/2 " 5/8" " Packing			
11-1/2 " 3/4" " " }			
51 " 7/8" " " }			
		} No price	
3-1/2 Prs. 10" Flanges	11.50	40.25	
5 " 10" " - 2nd Hand	5.75	28.75	
1 10" Cast Elb. -Been used-	6.75	<u>6.75</u>	
		75.75	
	Less 90%	<u>68.18</u>	7.57
2 U. S. Caps for Prescott Sinker			
2 U. S. Caps for P.Sinker in No.7		00.00	
1 No. 12 Hancock Inspirator		7.50	
2 Flue Expanders	1.00	2.00	
125 Lbs. Vulcanized Fibre	.50	62.50	
1 Bushing- 4-1/2 ft. No price.		00.00	
50 ft. 1" Red J. Air Hose	.39	19.50	
12 " 1" Hose	.26	3.12	
50 " 3/4" Garden Hose	.07	3.50	
32 Lbs. Brass Valve Guards	.30	9.60	
37 " Brass Springs for Pumps	.30	11.10	
263 3 x 8 Brake Shoes-Basswood-	.15	39.45	
150 3 x 5 " " -Old-	.05	7.50	
50 3 x 8 " " -Maple-	.05	<u>2.50</u>	
		168.27	
	Amount For'd	<u>408.69</u>	

ASHLAND MINE.

MACHINERY SUPPLIES(CONTINUED)

	Amount For'd		408.69
50 3 x 5 Brake Shoes - Maple-	.05	2.50	
16 Skip Wheels 1456# at 2-3/4c		40.04	
40 1/2 x 1-3/4" Cap Screws for Skip	.55	1.83	
12 Ft. Belt Lacing	.01-1/4	.15	
1 Gland for Prescott Sinkers		<u>2.75</u>	47.27
4 3/4 x 18 W. G. Glasses	6.60	2.20	
10 3/4 x 12 "	4.32	3.60	
6 5/8 x 12 "	3.60	1.80	
4 1/2 x 16 "	4.80	<u>1.60</u>	
		9.20	
	Less 80-10%	<u>7.54</u>	1.66
3 Gauge Cocks	1.35	4.05	
1 Pet Cock		<u>.40</u>	
		4.45	
	Less 70%	<u>3.12</u>	1.33
1 2" Jenkins' Valve		8.00	
	Less 70%	<u>5.60</u>	2.40
1 No. 25 Nut for Ratchett Jack Brass			1.00
2 2" Globes Valves	5.30	10.60	
2 1-1/2 " "	3.50	7.00	
1 1-1/4 " "	2.52	2.52	
1 1" " "	1.80	1.80	
5 3/4" " "	1.26	6.30	
2 1/4" " "	.72	1.44	
4 2" Gate Brass Valves - Per pr.-	7.50	15.00	
1 1" " " "		2.50	
2 2" Check Valves	14.78	29.50	
1 3/4" " "	1.50	<u>1.50</u>	
		78.16	
	Less 70%	<u>54.71</u>	23.45
	Amount For'd		485.80

MADE IN U.S.A.

ASHLAND MINE.

MACHINERY SUPPLIES(CONTINUED)

		Amount For'd		485.80
5	1-1/2" Unions	.58	2.90	
1	1-1/4 "	.46	.46	
7	1" "	.33	2.31	
9	3/4" "	.27	2.43	
4	1/2" "	.22	.88	
5	3/8" "	.20	1.00	
8	1/4" "	.18	<u>1.44</u>	
			11.42	
Less 70%			<u>7.99</u>	3.43
2	3" Bushings	.30	.60	
3	2-1/2" "	.21	.63	
9	2" "	.14	1.26	
5	1-1/2" "	.09	.45	
3	1-1/4" "	.07	.21	
10	1" "	.06	.60	
8	3/4" "	.05	.40	
14	1/2" "	.04	.56	
1	3/8" "	.04	<u>.04</u>	
			4.75	
Less 70%			<u>1.43</u>	1.43
1	2" Reducer	.45	.45	
1	1-1/2" "	.28	.28	
2	6" to 4" "	2.70	5.40	
4	5" Tees	3.00	12.00	
1	4"	1.75	1.75	
1	3"	1.10	1.10	
2	2-1/2	.75	1.46	
4	2"	.41	1.64	
6	1-1/2	.29	1.74	
3	1+1/4	.23	.69	4.86
9	1	.15	1.35	27.86
			<u>27.86</u>	
13 Amount For'd				<u>490.66</u>



ASHLAND MINE.  
MACHINERY SUPPLIES(CONTINUED)

	Amount For'd		490.66
6 3/4" Tees	.12	.72	
4 1/2"	.09	.36	
6 1/4"	.08	.48	
1 8" Elbow		6.75	
3 3" Elbows	.75	2.25	
1 2-1/2"	.50	.50	
3 2"	.28	.84	
4 1-1/4"	.16	.64	
3 1"	.10-1/2	.31	
9 3/4"	.08	.72	
6 1/2"	.06	.36	
4 1/4"	.05	.20	
1 7" Plug		1.85	
1 6"	1.20	1.20	
1 5"	.88	.88	
2 4"	.42	.84	
3 2-1/2"	.18	.54	
3 2"	.10	.30	
6 1-1/2"	.07	.42	
6 1-1/4"	.05	.30	
8 1"	.04	.32	
6 3/4"	.03	.18	
4 1/2"	.02	.08	
8 3/8"	.02	.16	
3 1/4"	.02	.06	
		49.12	
	Less 70%	34.41	14.71
	Amount For'd		505.37

ASHLAND MINE.  
MACHINERY SUPPLIES (CONTINUED)

	Amount For'd		505.37
9 5" Nipples	1.55	13.95	
2 3"	.48	.96	
1 5" Fl. Unions	3.15	3.15	
1 4"	2.10	2.10	
1 3"	1.50	1.50	
1 2-1/2"	1.25	1.25	
2 2"	1.00	2.00	
3 1-1/2"	.78	2.34	
1 7"	5.50	5.50	
12 12"	16.00	<u>192.00</u>	
		224.75	
	Less 70%	<u>157.32</u>	67.43
2 5" Couplings	1.65	3.30	
8 1"	.13	1.04	
3 1-1/2"	.21	.63	
1 1-1/4"	.17	.17	
12 3/4"	.10	1.20	
27 1/2"	.07	1.89	
7 3/8"	.06	.42	
6 1/4"	.05	<u>.30</u>	
		8.95	
	Less 70%	<u>6.26</u>	2.69
1 4" Angle Globe	19.00	19.00	
1 5" S. W. Gate	25.00	25.00	
2 5" Angle Globe-Flanged-	31.00	62.00	
2 8" Elbows	6.75	13.50	
2 7" Elbows	4.70	<u>9.40</u>	
		128.90	
	Less 65%	<u>83.79</u>	45.11
	Amount For'd	<u>115.23</u>	115.23
			<b>620.69</b>

ASHLAND MINE.  
MACHINERY SUPPLIES (CONTINUED)

Amount For'd

620.60

Power Drill Parts.

SULLIVAN.

5	Feed Screw Nuts	3.25	16.25
9	Chuck Bushings	1.75	15.75
12	Ratchett Springs	.03	.36
6	Leather Packings	.10	.60

RAND NO 2.

14	Rocker Pins		11.20
18	Steam Chest Studs		4.32
54	" " " Nuts		2.72
2	Standards		20.00
9	Rockers		39.60
3	Chuck Bushings		12.00
7	Feed Nuts		28.00
11	Jam Nuts		4.40
5	G. & H. Bushing		21.00
7	Cylinder Buffer		7.00
9	G. & H. Packings		3.60
16	P. P. Springs		1.80
7	Chuck Keys		3.50
84	#Chuck Forgings		9.24
2	Rotating Bars		10.80
3	P. Screw Handles		2.40
107	1/16" Asb. Sheeting	4.28	<u>218.52</u>

Total Machinery Supplies. 839.42

Amount charged in May - 117.87

Total 957.29

Less amount purchased in May 145.65

Amount of Inventory as May 1st. 813.64

ASHLAND MINE.

BUILDING MATERIAL.

		Amount	For'd
8	12 x 30 Glass	.22	1.76
1	2 x 23	.22	.22
42	Lbs. Bldg. Paper	.02	.84
2	Window Sash 14 x 24- 4lt.	1.76	3.52
25	Lbs. Poultry Netting		1.00
12990	Ft. Ass't Maple & Birch	13.00	168.87
240	" 2 x 4 - 16 Spruce	16.75	4.02
4550	" 1" Boards Pine	7.00	31.85
2562	6 x 6 - 14 61 pcs. pine	14.00	35.37
280	4 x 16 - 14 10 " "	13.50	3.78
675	8 x 8 - 14 9 " "	14.00	9.45
535	10 x 10 - 14 5 " "	15.00	3.78
300	10 x 12 - 30 1 " "	15.50	4.65
11200	2" Hemlock	10.00	112.00
6336	3" "	11.00	69.69
280	6 x 8 - 14 5 pcs. Heml.	10.00	2.80
840	12 x 12 - 14 5 " "	10.00	8.40
2160	12 x 12 - 20 9 " "	10.00	21.60
528	12 x 12 - 22 2 " "	10.00	5.28
2592	12 x 12 - 24 9 " "	10.00	25.92
640	8 x 12 - 16 5 " "	10.00	6.40
1307	14 x 20 - 14 4 " "	20.00	26.14
326	14 x 14 - 20 1 " "	15.00	4.89
320	ft. 8 pcs. 12" Flat	.07	22.40
16	" 1 pc. 15 x 15 Hewn	.20	3.20
Received in May			
992	" Hem. 8 x 8 - 12-14-16	11.50	11.41
648	" " 6 x 12 - 12	15.75	10.21
Amount charged in May		604.95	
		73.29	
		678.24	
Less amount purchased in May		24.32	
Amount of Inventory		653.92	

ASHLAND MINE.  
EXPLOSIVES.

		Amount for'd	
4550	Ft. Fuse D. T.	3.85	17.51
50	6' Elec. Exploders	3.20	1.60
8	Lbs. Connecting Wire	.40	3.20
2	Blasting Batteries	5.00	10.00
300	Ft. Leading Wire	.01	3.00
23	½ Blasting Caps	5.25	120.75
1	Rundle P. Heater		6.00
100	Lbs. 27% 1-1/4	9.20	9.20
200	" 40% 1-1/4	.10-1/2	<u>21.00</u>
			192.26
Amount charged in May			<u>826.53</u>
		Total	1018.79
Less amount purchased in May			<u>759.30</u>
Amount of Inventory as May 1st.			259.49

ASHLAND MINE.  
MINE TIMBER.

Amount For'd

Back Balance as May 1st. 1901.

35032 pcs. Timber 7 ft.		8933.16	
21024 ft. Poles	.01-1/2	315.36	
1147-3/4 Cords 7' lagging		3730.18	
855-1/2 " 8' "	3.50	2994.25	
1158 pcs. 10' "	.07-1/2	<u>86.85</u>	16059.80
123 ft. 3 Poles 12" Top 41' long		21.00	
246 " 6 " 10" 41'		42.00	
320 " 8 " 10" 40'		56.00	
80 " 2 " 8" 40'		14.00	
39 " 1 " 10" .06		6.24	
26 " 1 " 12" .16		4.16	
182 " 7 " 10" .16		29.12	
56 " 2 " 8" .16		8.96	
960 " 32 " 10" .16		<u>153.60</u>	<u>335.08</u>
Total of Mine Timber			16394.88

ASHLAND MINE.

FUEL.

180 Tons Hocking Coal	3.20.	\$576.00
3144 Cords Hard Wood	2.25	7074.00
800 " Soft "	1.85	<u>1480.00</u>
Total		9130.00

SMITH PREMIER  
LINEN  
MADE IN U.S.A.

MADE IN U.S.A.  
SMITH BARRETT  
LINEN  
SMITH BARRETT  
HOLLING

ASHLAND MINE.

BARN.

15315 #Baled Hay	14.00	109.21
3000 #Loose "	15.00	22.50
160 # Horse Shoes	4.04	6.40
20 # Toe Calks	.68	1.60
10 # 3 H. S. Nails.	.17	<u>1.70</u>
	Total	139.41.
Amount charged in May		<u>59.59</u>
	Total.	199.00
Less amount purchased in May		<u>35.30</u>
Amount of Inventory as May 1st.		163.70





THE CLEVELAND-CLIFFS IRON CO.

ASHLAND MINE.

Inventory of Plant and Equipment May 1st, 1901.

SUMMARY OF ACCOUNTS.

	Page	Amount
Buildings	1	16630.61
Stationary Machinery	2	13498.80
Portable Tracks	3	4645.33
Shaft Houses, Trestles, & Docks	3	7459.27
Undergrd. Pipes & Fittings	4-6	4986.71
Surface Pipes & Fittings	7-9	4016.51
Office Furn. & Fixtures	10	296.90
Elec. Light Equipment	10	338.33
Surveying & Chem. Equipment	11	489.40
Machine Shop	12	1201.15
Carpenter Shop	13	202.67
Blacksmith Shop	14	193.89
Fire Apparatus	14	344.36
Tools in Gen. Use - In Mine	15	388.28
Tools in Gen. Use - Surface	16	67.57
Sheaves, Pulleys, & Wire Rope	16	<u>2699.39</u>
Total		57459.17

BUILDINGS.

1	E. House, Tank House, and Pdtns.	3096.19	
1	Boiler House and addintions	1190.16	
1	Laboratory and basement	263.30	
1	Captain's Office	43.20	
1	Doctor's Office	54.00	
1	Carpenter, Blacksmith & machine shop	611.28	
1	Change House	399.68	
1	Rope House	25.20	
	Water Closets	13.44	
1	Shipping Clerk's Office	6.48	
1	Barn with Additions	114.48	
1	Stone water tank	732.24	
1	Iron Rack and iron shed	25.60	
1	Tool House	60.00	
1	Mine Office	250.00	
1	Mine Office Shed	25.00	
1	Powder House	25.00	
1	Supply House	400.00	
1	Wagon Shed	43.20	
1	Dwelling ( Mr. Hayes )	5000.00	
1	" ( Mr. Smith )	2500.00	
1	" ( Capt. King )	1500.00	
1	" ( Mr. Taylor )	1500.00	
1	" ( Mrs. Pellin )	200.00	
1	" ( Mr. Alguire )	400.00	
		<u>\$18478.45</u>	
	Less 10%	<u>1847.84</u>	16630.61

STATIONARY MACHINERY.

Webster Camp & Lane Hoist			
2	Engines 26-1/2 x 48 four drums '89		4843.63
	Fifth drum added '92		1859.93
	Foundations '92		
1	Ingersoll-Sargent Dup. Air Compressor		
	Cooper Corliss 18 x 30 - 25 drills		
1	Ingersoll Straight Line Air Compressor		
	24 x 20 - 12 Drills Myers cut off		
	'92 and foundations for both		2114.56
2	Westinghouse Engine 35 H.P. Each		
	with pulleys, belts, etc. '94		1838.09
2	V. S. Dynamos each 150 Amp. and switch		
	board complete cut out and blocks		
1	Half Coupling and pins F.W.C. & L. Hoists		
1	10 foot Spider drum		
	Boilers Numbered - viz-		
70	1 16' x 60" 1889		162.00
	2 16 x 60 1889		162.00
	3 16 x 54 1886	Taken out	
	4 16 x 54 1886	" "	
	5 16 x 60 1887	In use	
	6 16 x 60 1889		125.00
	7 16 x 66 1890		403.20
	8 16 x 66 1890		302.40
9	Stirling 150 H.P. Stack & Setting '93		675.54
10	Do. '93		675.54
2	Locomotive Boilers-11 x 40-(I loaned to Pence&Synder)		90.00
1	Baragawanuth Heater '99		486.00
1	Smoke Box & Brushing		
1	Smoke Stack	Total	13737.89
1	No. 7 Korting Injector '98	29.25	
1	Pressure Recorder	34.20	
1	Thompson Indicator	54.54	
1	Pantagraph	4.50	
1	40 Spring		
1	60 Spring	7.20	
1	Water Cooler		
1	Upright Boiler 40' x 72" X Stack	72.00	
	(Loaned to Harmony Iron Co.)	201.69	
	Less 10%	20.16	
		181.53	
		13919.42	
	Less .0315%		420.62
			13498.80

PORTABLE TRACKS.

2300	Ft.	60 Lb.	Rail	From switch near E. House to End No. 8	
1816	"	"	"	From Blacksmith shop to end of yard	
3464	"	"	"	No. 4 shaft through No. 6 to end yard	
1742	"	"	"	Switch at B. Shop to Warehouse	
272	"	"	"	Transfer main line to No. 7 shaft	
290	"	"	"	No. 7 to No. 8 shaft	
460	"	"	"	No. 4 Main Line	
500	"	"	"	Scattered	
<u>10844</u>	"	"	"	21688 Lbs. at \$20.00	2168.80
736	"	30 lb.	T. Rail	No. 6 Trestle	
718	"	"	"	No. 7 "	
240	"	"	"	No. 3 "	
932	"	"	"	No. 4 "	
<u>2626</u>	"	"	"	26260 lbs. at \$20.00	262.60
392	"	56 lb.	T. Rail	No. 6 Trestle	
160	"	"	"	No. 7 "	
<u>552</u>	"	"	"	10304 Lbs. at \$20.00	103.04
299	"	30 lb.	Loose on Trestles		
968	"	"	Rail	No. 3 Skip road	
970	"	"	"	No. 4 Skip Road	
900	"	"	"	No. 6 Skip Road	
900	"	"	"	No. 7 Skip Road	
<u>3738</u>	x 2	7476 ft.	or 74760 Lbs.	at \$20.00	747.60
				Underground	
				No. 3-3210'	
				No. 4-4246'	
				No. 6-6816'	
				No. 7-3974'	
				No. 7-6388' - 1st Level <sup>13181'</sup>	
				24634' or 13181 lbs. at \$20.00	1313.81
				Switches	
				6 - No. 3	
				21- No. 4	
				37- No. 6	
				18- No. 7-1st Level	
				19- No. 7	
		101 at 9 feet each	909 ft. 16# Rail	-4848 lbs. at 20.00	<u>48.48</u>
					\$4645.33

SHAFT HOUSES-TRESTLES & DOCKS.

1	Shaft House	No. 3			2000.00
1	"	4			1000.00
1	"	6			800.00
1	"	7			1000.00
1	Trestle	Ore and rock	No. 3		1129.27
1	"	"	4		500.00
1	"	"	6		500.00
1	"	"	7		100.00
1	Coal Dock				430.00
					<u>\$7459.27</u>

UNDERGROUND PIPES & FITTINGS.

12	Pt.	3/8" Pipe	.05-1/2	.66		
66	"	3/4" "	.11-1/2	7.59		
1906	"	1 "	.16-1/2	314.49		
329	"	1-1/4 "	.22-1/2	75.03		
000	"	1-1/2 "	.27			
2656	"	2 "	.36	956.18		
453	"	2-1/2 "	.57-1/2	260.43		
2187	"	3 "	.75-1/2	1650.69		
2333	"	4 "	1.08	2519.64		
883	"	5 "	1.45	1280.35		
1854	"	6 "	1.83	3485.52		
58	"	8 "	2.82	163.56		
66	"	10 "	4.25	280.50		
418	"	12 "	5.20	2173.60		(65%)
674	"	10 "	4.50	3033.00	16201.27	5670.44
198	"	12 "	.83	172.04		
1011	"	1/2 "	.08-1/2	85.93		
23	Flange Unions	2"	1.00	23.00		
6	"	2-1/2	1.25	7.50		
27	"	3	1.50	40.50		
25	"	4	2.10	52.50		
11	"	5	3.15	34.65		
23	"	6	3.95	90.85		
6	"	8	7.00	42.00		
17	"	10	11.50	195.50		
10	"	12	16.00	160.00		
62	Elbows	2	.28	17.36		
14	"	2-1/2	.50	7.00		
45	"	3	.75	33.75		
40	"	4	1.20	48.00		
19	"	5	2.00	36.00		
19	"	6	2.75	52.25		(70%)
9	"	8	6.75	60.75	1161.58	348.47
4	Elbows	10	13.50	54.00		
8	"	1/4	.04	.32		
24	"	1	.22	5.28		
21	"	1-1/4	.25	5.25		
4	"	1/2	.10	.40		
1	Tees	12		29.00		
8	"	6	4.00	32.00		
4	"	5	3.00	12.00		
9	"	4	2.55	22.95		
9	"	3	1.10	9.90		
2	"	2-1/2	.73	1.46		
20	"	2	.60	12.00		
9	"	1	.25	2.25		
1	Flanged Tees	10		19.50		
2	"	5	3.00	6.00		
3	"	4	1.75	5.25		
1	"	2		.41		
2	Bushings	12 x 8	5.00	10.00		
4	"	6 x 5	1.25	5.00		
5	"	5 x 4	.93	4.65		
2	"	5 x 3	.93	1.86		
5	"	4 x 3	.50	2.50		
1	"	3 x 2	.30	.30		
5	"	3 x 2-1/2	.30	1.50		
4	"	2-1/2 x 2	.21	.84		
8	"	2 x 1-1/2	.14	1.12		
1	"	2 x 1	.14	.14		
4	"	1-1/2 x 1-1/4	.09	.36		
5	"	1-1/4 x 1	.07	.35		
1	"	1 x 1/2	.06	.06		
2	"	2	.14	.28		
1	Globe & Valves			37.50		
1	"			27.00		(70%)
4	"		19.00	76.00	387.43	116.22

Forward

4

6135.13

UNDERGROUND PIPES & FITTINGS(Cont.)

6135.13

Brot Ford						
17	Globe Valves	2"	5.30	90.10		
3	"	2-1/2	10.00	30.00		
6	"	1-1/4	2.52	15.12		
19	"	1	1.80	34.20		
2	"	3/4	1.26	2.52		
12	"	1/2	1.00	12.00		
2	"	1/4	.72	1.44		
1	Plugs	6"		1.20		
4	"	5	.88	3.52		
3	"	4	.42	1.26		
3	"	3	.25	.75		
2	"	2	.10	.20		
1	"	1-1/2	.07	.07		
1	Reducer	2 x 1-1/4	.45	.45		
1	"	6 x 5	2.70	2.70		
1	"	2-1/2	.70	.70		
1	"	2"	.45	.45		
2	Nipples	10"	5.35	10.70		
5	"	8	3.30	16.50		
6	"	6	1.85	11.10		
12	"	5	1.55	18.60		
8	"	4	.85	6.80		
11	"	3	.48	5.28		
8	"	2-1/2	.39	3.12		
17	"	2	.18	3.06		
4	"	1-1/4	.11	.44		
6	"	1	.08	.48		
11	"	1/4	.04	.44	273.20	(70%) 81.96
2	Check Valves	8"	57.00	114.00		70.00
1	Angle Valves	5"	30.00	30.00		27.00
3	Throttles	2"	10.00	30.00		28.31
1	Stop Cocks	2"	7.30-70%			2.18
1	Stop Cock	1-1/4"				2.78
2	Gate Valves	8"		net19.25		38.50
1	"	6"		37.50		
4	"	5"	27.00	108.00		
4	"	4"	19.00	76.00		
5	"	3"	12.50	62.50		
3	"	2-1/2"	9.00	27.00		
5	"	2"	7.00	35.00	70%	
1	"	1-1/4"	2.52	2.52	348.52	104.55
6	Mall Unions	1-1/4"	.46	2.76	70%	
14	"	1"	.33	4.62	7.38	2.21
1	45° Elbows			3.45		
1	"			2.50		
2	"		.90	1.80		
2	Steam Gauges		8.50	17.00	70%	
2	Water Gauges		1.00	2.00	26.75	8.03
4	Small Pulleys			.15	.60	
40	Ft. 3/4" Water Hose			.10	4.00	
3	1 gal. Oil Cans			.18	.54	
9	2 gal. " "			.30	2.70	
1	3 gal. " "				.45	
2	Teapots			.15	.30	
1	12" Coe Wrenches				.65	
1	15" " "				.75	
1	12" Trim. Wrenches				1.50	
10	Spanners			.15	1.50	
3	Hammers			1.00	3.00	4.25
4	Chisels	16.99-25%-.25 <sup>4</sup>			1.00	
1	Bench Vise	50%			15.00	7.50
1	Pipe Vise	50%			20.00	10.00
1	4" Wind Bore				4.00	
1	3" Wind Bore				3.00	7.00
1	Prescott Steam Trap				3.05	8.05
1	3" Suction Hose					15.40
	Forward					\$ 6552.85