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The letter of Prof. Theodore B. Comstock, from Eureka, Colo., in this issue, will repay a careful perusal.

The present winter in the San Juan country is the most severe experienced since its settlement.

OUR acknowledgments are due to our Hamilton (Ont.) correspondent, Mr. H. BARNARD, for his courtesy in furnishing us with the statement of Imports of Coal at Toronto, published by us January 10th.

WE find, on a more careful inspection of Vol. VII. of the Transactions of the Institute of Mining Engineers, that the adjourned discussion of Dr. Dudley's famous paper, held at Pittsburg, is included in the volume, although the other proceedings of the Pittsburg meeting are to form part of Vol. VIII. The Secretary has put all the discussions of the paper together—a very sensible proceeding.

J. E. S., in renewing his subscription to the Engineering and Mining JOURNAL, adds the following words of appreciation and encouragement, which are very gratifying, coming as they do from an expert in an important mining center: "I find the square, honest tone and high standard of your paper very refreshing, especially at this time, when many bogus and swindling mining schemes are floated and aided by some of your contemporaries. Such schemes, I regret to say, are not few, and are perhaps more apparent to one in the field here than in New York. 'Do your best to crush them, wherever they appear."

#### ANTHRACITE COAL TONNAGE.

Statement of anthracite coal tonnage for month of December, 1879, compared with same period last year:

	Dec., 1879.	Dec., 1878.	Differ- ence.	For year 1879.	For year 1878.	Differ- ence.
Philadelphia & Read. RR Lehigh Valley RR Central RR. of N. J. Del., Łack. & W. RR. Del. & Hud. Canal Co. Pennsylvania RR. Pennsylvania Coal Co. N. Y., L. E. & W. RR.	550,549 366,155 307,337 339,713 270,220 119,624 89,562 31,244	263,052 242,870 207,449 203,046 109,923	132,264 67,173 9,700	7,442,617 4,405,958 3,825,553 3,867,405 3,014,118 1,682,106 1,427,150 477,782	3,403,319 2,264,979 2,180,672 2,046,235 1,362,673	1,686,732 967,882 319,433 470,118
Total	2,074,404	1,443,276	631,127	26,142,689	17,605,261	8,537,427

The stock of coal on hand at tide-water shipping points, December 31st, 1879, was 613,512 tons; on November 30th, 508,990 tons; increase, 104,522

tons. The amount on hand December 31st, 1878, was 504,377 tons; and

on December 31st, 1877, 685,186 tons.

Of the total production in 1879, 12,586,293 tons, or 48°14 per cent, was from Wyoming Region; 4,595,567 tons, or 17°58 per cent, from Lehigh Region; and 8,960,329 tons, or 34°28 per cent, from Schuylkill Region. JOHN H. JONES, Accountant.

In making up our tables at the beginning of the year, we were compelled to estimate a portion of the production for the month of December. Our tables include the production of the Sullivan Region, which, added on to the total furnished by Mr. Jones, makes us differ only about 75,000

#### THE STORMONT MINES, SILVER REEF, UTAH.-III.

#### WITH SUPPLEMENT.

In our last issue, we gave a brief description of the Buckeye and Last Chance mines, which, though large and valuable mines in themselves, form but a portion of the Stormont Company's property. We will now refer to the Stormont and the Thompson & McNally mines.

The Stormont mine, of which we publish herewith a map, has been worked to but a very small extent, though it has always yielded ore of excellent quality; indeed, the richest ore we found in our recent examination of the mines of this camp was at the foot of the Stormont inclineone of the few points in this district that is below the water-level. The bed at this point over its average thickness of 4 ft. 6 in. assayed 97 ounces and 109 ounces per ton, which is much above the yield of ore from the upper workings in the mines. This increasing richness below water-level probably is merely accidental; but it has also been observed in the lowest workings of the California mine and in the new workings of the Kinner, and it may be more general than we have supposed. It would be natural to suppose that the silver would be found in depth more largely as a sulphide than as a chloride.

But little work has been done on the Stormont mine since the date of our examination in June, the mine being somewhat more expensive to work, on account of the water, than some of the other properties owned by the company. The sketch, therefore, shows, practically, the present extent of the workings. The single bed worked has averaged from 3 to 5 feet in thickness, and the ore milled has yielded very handsomely.

The Thompson & McNally mines, known as the Kerr property, a map of which we publish herewith, form one of the most valuable properties in the district. In June last, at the date of our examination, the developments were not great, but the ore produced and milled was remarkably rich, and the ore-bearing bed was very large, and, apparently, carried ore over a considerable extent. At the time, we were able to estimate but 5000 tons of 24-ounce ore "in sight." The work since done on the mine has developed a richness even exceeding the favorable opinion we then expressed, and in the report of his recent examination, Mr. Colbath says of this property:

of this property:

"The Thompson & McNally mines are now worked by means of a tunnel running through the White Reef from the east side, and cutting into the vein about ten feet below what was known as the Meeks cut. In cutting through, it was found that there was another stratum of ore more than three feet thick under the vein then worked, and separated from it by less than two feet of waste or barren rock. On the foot-wall, there is a rich stratum of the so-called soapstone, nearly all of which is being sacked as first-class ore, but of which none has yet been sent to the mill. A cut has been extended 123 feet south, taking up the entire vein, and an average of over eight feet in thickness is being sent to the mill. A shaft has been sunk on the McNally ground, 200 feet north of the Meeks cut, and a level started south to meet one from the tunnel level, which is about 35 feet below the Meeks cut, on the slope of the vein.

"In the McNally shaft, the vein was reached in 12 feet depth. The vein in the shaft is five feet wide, and samples over \$30 per ton. It is evident that the footwall has not been reached, and I shall confidently expect the lower stratum of ore to be found here, as in the Meeks cut, when the soapstone or shale, which seems to follow the foot-wall of this vein, will almost certainly be encountered. At a point, 170 feet west, and a little south of the Meeks cut, a shaft has been sunk by chloriders, which cut the vein 35 feet from the surface. A drift, north, 16 feet from the shaft, and a stope, in feet wide, is the size of this opening. The vein in the shaft and stope is over five feet wide, and, as in the McNally shaft, it is plain that these operators are only working the top layer of ore, no foot-wall having been reached. These are being assorted to a high grade, all below \$30 being rejected.

"The Thompson incline is seventy-two (72) feet deep, and shows decided im-

plain that these operators are only working that the set of good milling ing been reached. These are being assorted to a high grade, all below \$30 being rejected.

"The Thompson incline is seventy-two (72) feet deep, and shows decided improvement for the last twenty feet. Over two feet in the face of good milling ore appear here, and some samples of this are very rich. In the south incline, no work is being done at present.

"Taking the developments at the Meeks cut, in the McNally shaft, and in the west shaft, I have no hesitation in saying there are fully 20,000 tons of ore practically in sight, while I believe the amount will be much more in the block of ground included in this estimate. An incline should be sunk upon the vein from the Meeks cut to intersect the west shaft, and levels should be run north and south. A winze should be sunk from the McNally shaft to connect with the level north, and a winze at some point south—say 200 feet south of the Meeks cut—to intersect the level run south. This level should be extended and connected with the Thompson incline.

"By means of these operations, the required ventilation would be secured, and the ores would all be brought to one shipping-point. An immense area would, at the same time, be opened for stoping, and, from indications along the surface, I should expect the greater part of it to be paying ground. To accomplish the objects here proposed, it will be necessary to erect a small hoisting-engine to be stationed in the Meeks cut.

"This plan, if carried out, will, in six months' time, put these mines in good working shape, so that they will yield, if demanded, sufficient or a to run a twenty-stamp mill. The levels from the Meeks cut should also be continued north and south.

"The ores from these mines, for the last month, have sampled at the mill an

average of \$25.52. This is exclusive of ores of the first class, which are

"After the mine is properly opened, the ores can be assorted to a higher grade, should that be thought desirable."

These developments, made since June last, and referred to by Mr. COLBATH, fully establish the value of this property, and confirm, in the fullest manner, the favorable opinion of it we had expressed. The exploration work has developed the fact that the entire space between the "Meeks cut" and the Ashbrook shaft, as shown on the accompanying map, contains a body of rich ore, of very great thickness; in fact, the Kerr property may be considered to-day as probably the finest mine in the district, though not so fully developed as the Buckeye-Last Chance mine; and, together with these, it is unquestionably the finest property yet opened in the Silver Sandstone country.

The quantity of ore "in sight" in the several properties of the Stormont Company, in June, when these properties were examined by Mr. ROTHWELL and Mr. COUCH, and the value of these reserves, are compared in the following table with the quantities and values found in November by Mr. COLBATH:

_	-Jun	RESERVES "e, 1879.—	-Nov.	, 1879
Ton	ns.	Value, ounces fine.	Tons.	Value, unces fine.
Stormont Mine 2,4		63,408		
Last Chance 9,1 Buckeye 10,5		189,189 241,500	30,000	592,000
Kerr Property		120,000	20,000	394,000
Total 27.0	000	614.097	50.000	986.000

Besides this great increase in the value of the reserves, the mines have produced in bullion, since the first examination was made, nearly \$30,000. And the very fact that the developments recommended have actually proved the ores to be continuous and rich over great distances, adds immensely to the value of the property in the item termed "prospective value," which is not ore technically "in sight."

No developments have been made in the other claims owned by the company; but the success of all the work done thus far gives a fair probability of success for developments upon other claims which have already produced some good ore.

We shall now refer to the important questions of the cost of mining and milling these silver sandstone ores

The following extracts from Mr. ROTHWELL'S Report to the Stormont Mining Company give the cost of mining Silver Reef ores previous to

COST OF MINING AT THE STORMONT AND LAST CHANCE MINES, FROM THEIR OPENING IN AUGUST, 1878, TO MAY 1, 1879.

1878.	Tons Mined.	Labor and Salaries. Per Ton.	Supplies. Per Ton.	Incidentals. Per Ton.	Total per Ton.
August and September	577	\$16.53	\$3.15	\$0.94	\$20.52
October	709	9.04	1.45	26	10.75
November	753	7.07	1.49	23	8.79
December		5.60	.99	57	7.16
January	1.726	4.05	.73	35	5.13
February		4.84	1.38	24	6.46
March	4 4 (343	7.75	1.04	31	9.10
April	978	6.77	.60	13	7.50
Totals and averages	8,515	\$6.72	\$1.20	\$0.35	\$8.27

"These expenses include practically all the work of developing the mines, though not the work of sinking shafts or putting up machinery.

"In the Last Chance, the shaft had just reached the ore-bearing bed when the Stormont Company purchased in August, 1878. It is not easy to see where the expenditures in the Stormont mine were applied; for only 1151 tons were extracted in all from it, and very little dead-work has been done there. Indeed, these mines have been about as badly managed as is possible. No competent supervision of the work is maintained; and as all the work is done by the day, with miners and laborers paid \$4 per day, and with excessive salaries, it is not surprising that the cost per ton is very much greater than it should be. This cost, however decreased regularly as the output increased; and when that reached only 1726 tons per month, it attained the reasonable figure of \$5.13 per ton.

"With even a moderate degree of technical skill, economy, and energy, the average figures given above could be greatly reduced, even though wages remained at their present very high standard, and there would be no difficulty in reducing these to \$3 per day, with steady work and prompt payment.

#### COST OF MINING BY THE LEEDS COMPANY.

"Through the courtesy of Mr. E. C. CRANE, General Superintendent of the Leeds Company, I have been furnished, from the books of the company, the following particulars concerning the cost of mining from January 1st, 1878, to May 1st, 1879.

"The average cost per ton of mining 11,974 tons in 1878 was:

	 7 01

"The expense of mining has been considerably reduced during the year, and for the six months ending December 31st, 1878, it averaged New Almaden, Cal., Jan., 1880.

\$6.10 per ton, as against \$7.04 for the entire year. A still further reduction has been made since the first of the present year, as is shown by the following items for each month:

	COST OF MIN	ING AT THE L	EEDS MINE.		
January	. 1.150	Prospecting. \$2.02.7	\$2.75.8	Sundries. \$0.61.2	Total. \$5.39.7
February March April	. 1,045	2.09·6 1.77·5 1.81·3	1.82·9 78·1 77·5	49·2 51·9 57·1	4.41.7 3.07.5 3.15.9
Totals and averages.		\$1.92.8	\$1.53.6	\$0.55	\$4.01.2

"These figures do not in some particulars give a fair average for the cost of mining. For example, the work of prospecting has amounted to more in these than in all the other mines of the camp, and has been twice what would be a fair proportion were that work carried on systematically and continuously. In this case, it was neglected while the mines were in bonanza, and now the majority of the expenditure is in searching for new

"The item of 'extracting' covers the cost of ore-mining proper and general mine expenses. It is not pretended that ore can be mined for 77 and 78 cents per ton, that figure having been attained during the months of March and April by extracting from the mines large amounts of low-grade ore that had formerly been stowed away in the levels and on the stolls as waste. Nevertheless, these results of actual work, as well as the average cost during the last six months of 1878, when the proportion of prospecting was also excessive, fully justify the statement that ore not only can be, but is being, mined in this camp at a cost not exceeding \$4.50 per ton, every expense and a fair proportion of prospecting being included.

#### COST OF MINING BY THE CHRISTY M. & M. COMPANY.

"I am indebted to the courtesy of Capt. H. S. LUBBOCK for the following statements taken from the books of this company:

"Work commenced on the 8th of January, 1878, and the following figures, therefore, include all the expense of sinking shafts, opening mines, and the many extra expenses inseparable from the first period of a mining enterprise. The company extracted, between January 1st, 1878, and May 1st, 1879, 14,248.53 tons of ore. The average cost was:

For labor and salaries, per net ton	\$7.46
Per ton	<b>QR</b> 37

"I have not the figures of cost at the present time, but am assured they are so much below this average that they will justify the standard (\$4.50 per ton) given above."

We shall next week give the cost of milling.

#### QUICKSILVER RECEIPTS IN SAN FRANCISCO.

We are indebted to J. B. RANDAL, Esq., Manager of the New Almaden mine, for the following table of quicksilver receipts in San Francisco during the years 1878 and 1879:

RECEIPTS OF QUICESILVER IN SAN FRANCISCO FOR THE YEARS 1878, 1879.

Consignee.	Mines.	1878.	1879.
CONSIGNEE.	Mines.	Flasks.	Flasks
Thomas Bell & Co	New Almaden	15,249	20,700
M. Dore	luadalupe	9,072	15,540
Parrott & CoS	sulphur Banks	9,240	9,242
H. M. Newhall & Co	reat Western	4,866	7,031
Thomas Bell & Co N	New Idria	5,138	4,425
Redington & Co R	Redington	6,687	4.170
Daniel Meyer O	Dat Hill	3,049	3,605
Altoona Q. S. Mg. Co A	Iltoona	1,435	1,900
W. W. Traylor	Oakland	1,615	1,505
Parrott & Co G	Freat Eastern	1,286	1,470
Merchants' Exchange Bank C		1,434	1,026
Eggers & CoP	Pope Valley	600	989
Merchants' Exchange Bank C	Deanie	1,679	779
C. Langley & Co S	st. John	387	546
W. W. Dodge	loverdale	116	18
Parrott & Co		158	13
H. C. Egerton	underland	472	*****
SundriesS	Sundry mines	1,001	717
Total	***************************************	63,484	73,684

MONTHLY.		
	1878.	1879.
	Flasks.	Flasks.
January	4.142	5.734
February		5.539
March		5.145
April		5.377
May		6.164
June	5,279	7,099
July		6.883
August		6.282
September		6.848
October		6.310
November		6.509
December		5,794
Total	09 494	72 684

#### REVIEW OF THE MINING STOCK MARKET FOR 1879.

The dealings in this market were about doubled in 1879, as compared with 1878, while the proportion of transactions in the better class of stocks, as against the "fancies" or low-priced stocks, has greatly increased. The dealings in 1879, according to the published lists, aggregated 16,340,331 shares, against 8,320,433 shares in 1878. The number of shares sold in 1878, at an average of less than 50 cents per share, was nearly 7,300,000; while the number sold at an average of less than \$1 per share in 1879 was only about 11,200,000 shares. These figures do not nearly represent the actual business of either year, and particularly that of 1879, when there were large transactions through banking-houses directly with San Francisco. There was also a large business in mines under Eastern management that were not listed on any Exchange; and, besides, millions of dollars were invested in subscription stocks.

The growth of interest in the East in mining has been steady for several years; but it was not until the last four months of 1879 that any marked activity was shown. This was brought about by a greater dissemination of knowledge on the subject of mining for the precious metals, and bringing clearly before the public the claims of legitimate mining, as compared with railroads and other popular investment securities. The great cause, however, of the activity in mining securities was the general prosperity of the country, the desire of capital to find a profitable field for investment, and a speculative boldness that did not exist during previous years, when the majority of people predicted that every thing was "going to the dogs." Furthermore, what, to the Eastern mind, would be considered perfectly safe securities, were in such great demand that they advanced in price to such an extent as to afford but a very small rate of interest per annum on the capital invested. This left but a questionable class of railroad and other securities for the investment of accumulated earnings; and mining, owing to the large profits, with no greater risks than in many other securities, began to command attention.

The ordinary investor has not the tenacity to make a successful venture in a railroad scheme that has to await the growth of a country, or is dependent upon some similar contingency requiring considerable time for its realization, and he usually becomes tired and sells out at a loss. Mining has not been entirely free from the same objection; but the time necessary to put a genuine mine upon a paying basis is limited, and there are not the same chances of investors being wearied by waiting.

There has, of course, been considerable money invested in comparatively worthless mines; but, upon the whole, the investments in mining stocks have been in a very fair class of mines which promise good returns to the investors. We fear, however, that the worst is to come. There is already a recklessness and lack of caution among investors that is likely to aid in floating unlimited quantities of "wild-cats." desire on the part of capitalists to buy prospects indiscriminately at high prices, with the hopes of some day becoming "bonanza kings," is likely to absorb a large amount of capital without bringing corresponding returns. There are thousands of prospects (if many of them may even be called so), which, although offered at a small price as compared with a developed mine, are decidedly high in price as compared with many of the mines of assured value. A vein and an assay do not make a mine, and but very few of the mining locations called prospects ever become mines of any actual value.

If investments are to be made, in either mines or prospects, they should be in only such as are indorsed by disinterested experts of unquestioned ability and integrity, and even in such cases the evidence should be so full and complete as to be within the comprehension of any one of ordinary intelligence. Experts of this class, however, are not found in great numbers; yet the mines really worthy of attention are not so numerous that they could not be reported upon by such experts. There is a rapid growth of the number of so-called experts; but in many cases they have no claim to the title, having had neither the experience nor the education fitting them for the position. There is another class claiming the title who are a little premature, having had perhaps, the theoretical education obtained in a course of mining engineering, but not having the practical knowledge necessary to enable them to judge of the commercial value of a mine, nor to qualify them to include in their calculations the accidents, freaks of nature, etc., which arise to make a failure of what at the start appears to be a very promising enterprise. This class of men are of the greatest injury to the industry, as they are generally inclined to take too sanguine a view of the prospects of a mine. They are, in most cases, honest in their expressions of opinion; and the public, believing in their honesty, and knowing that they are clothed with the title of mining engineer, or something similar, is misled as to the value of their reports.

Another evil that has existed is the use that has been made of the San Francisco Exchanges and the press dispatches to give a fictitious value to stocks seeking a market in this city. The plan of operation is to list a mine in San Francisco, leave a little stock there with a broker, and make washed sales, to give the impression that it has an importance on the Pacific coast; then to have it called at our Mining Exchange, and make

in the press dispatches. In this way, the Eastern public has been led to purchase, as a gamble, stocks of but little value, in the belief that they could be sold again in San Francisco at about the price paid for them, in case they did not advance. Quotations of such stocks have been, and are still, telegraphed here every day, to the exclusion of valuable

The desire to grow rich rapidly is again developing very fast, especially among the class with but small capital, and already there is observable in this class a desire to invest in low-priced stocks without using any judgment. The only argument that they bring forth to sustain their action is, that prices are low and can not go much lower, while there is no limit to the price to which these stocks may possibly advance. There is just as much chance for a high-priced stock selling at its real value to advance, on the discovery of an extraordinarily rich bonanza, as there is in the price of a cheaper stock; while in one case money is paid for no value and the chances, and in the other for actual value, with equal or really greater chances.

It is to be regretted that the public stands so far off from the seller of the mine. In many of the mines that have been placed before the public, extraordinary profits have been demanded, in many cases varying from 100 to 200 per cent on the actual price paid by the promoters; while there are instances where 1000 per cent profit, and even more, has been paid by the public. Frequently promoters have placed less than half of the stock of the company, and received enough for the same to pay for the whole property, and still control the management and be able to make large profits in the manipulation of the stock in the market. In vein mining, the return to investors should not be less than 331/3 per cent per annum on the investment, while hydraulic mines should pay from 20 to 25 per cent per annum. Mines that do not do this, or, at least, are not able to do so at an early day, are not, as a whole, fair risks. Promoters may argue differently; but the experienced ones, in bargaining with the owners of mines for purchase, require much more than this.

Sometimes there are circumstances which enable shrewd promoters to secure great bargains in the purchase of mining properties, and in such cases we do not object to seeing the mines sold at a fair valuation; but the public should not be  $\,$  made to pay to promoters 100 per cent or  $\,$  mcre on the actual value of a mine. A mine may be purchased for a very small sum, and with development be made very valuable; if so, those developing the mine should not be asked to sell upon the basis of what they paid for it, but upon its actual value.

Two years ago, gentlemen holding high positions of trust in financial circles would have been distrusted and severely censured were it known that they were identified with mining enterprises. Now, public sentiment has changed, and all classes and conditions of men are interested in them, and the result is that thousands are following what was once known as the shrewd and conservative class. The public says, "If those gentlemen give their names to an enterprise, it must be good;" and they invest in entire ignorance and with blind confidence. It would be well for some of these gentlemen to consider seriously the vast responsibility they assume in permitting the use of their names, and to take every precaution in informing themselves as to the real merit of the enterprises offered to the public with which they are identified, and, if satisfied as to the management and merit of the mines. whether the public is being fairly treated in the matter of the price they are asked to pay for the stock. The public must also learn that a respectable board of directors does not by any means indicate a good mining investment; for bank and insurance presidents know no more about mining properties than the average man, and are likely to be greatly deceived while believing that they are identified with a very worthy enter

Although we have called attention to the snares and errors incident to mining investments, we are still prepared to say that, when they are made with prudence and knowledge, they offer as good or better returns than most classes of securities. A really prudent investment allows but little chance for a loss. There is an advantage in mining precious metals that is not possessed by any other branch of industry, and that is the comparative regularity of the market price of the products. Gold varies but a fraction of one per cent from \$20.67 per ounce, while the fluctuations of the price of silver have been comparatively but a small percentage of the average price. In coal, we have seen the price at \$6 and \$2 within a few years, and iron at \$16 and \$40 within a few months, and so with all classes of productions. The practical determination of so important a factor as the market price of an article for a number of years to come fully counterbalances the risks that are attributed to mining as against other industries. It was but a few years ago that the coal stocks were absorbed by trustees and others, as standards of safety, and still we have seen the companies on the brink of bankruptcy, and almost a panic among the investors in these securities, largely owing to the overproduction of coal. A bank may be robbed or discount worthless paper, and, in such case, it is worse'than a "petered-out" mine. Insurance companies may meet with a Chicago fire, and the value of their stock decline more arrangements to have the San Francisco price sent over here every day | rapidly than that of a mine ceasing to pay dividends. And so we could go through the list, and show that the same knowledge of human nature, and the same business sagacity that would enable a man to make a safe investment in any other security would enable him to invest in a mining stock with equal safety.

The interest in mining promises to increase very rapidly in the future, and from the present indications, it is likely to become the great speculation of this period of prosperity.

#### NEW YORK STOCKS.

ADLAIDE.—This Leadville company was largely dealt in by private sales at high figures early in the year; but as promised dividends did not come and the company was found to be considerably in debt without any working capital, the stock went practically out of sight.

AMERICAN FLAG.—This stock was very quiet at 18@36c. for the first nine menths of the year; but on promises of something better, and the announcement that a compromise had been made with the man who had "jumped" the claim, and that the mine was producing, more attention was given to the stock, and in November the price of 90c. was reached. The public has heard so much of the prospects of this mine that it had better await some practical demonstration of its value before buying the stock. The shares sold during the year aggregate 254,140.

BERTHA & EDITH.—This stock shows larger dealings than any other on the list, although it was stricken from the list in the ninth month of the year. The sales aggregated 3,126,952 shares, selling as low as 8c. in January, and as high as 39c. in July, afterward declining to 5c. in September, previous to a suspension of public transactions. Since then, this stock has hardly been heard of. We had from time to time advised our readers as to the probable value of this stock, and, in the end. our predictions were shown to be correct. At 39c. per share, this stock sold at the rate of \$195,000, while, with the indebtedness duly deducted, the stock had no value at all. The Mining Exchange deserves credit for removing this stock from its list; and it is to be regretted that, owing to technicalities, others of similar character can not be treated in the same manner.

BOBTAIL.—This stock only records 500 shares at \$1.75@\$2.

BRUCE.—This company took possession of its property at Leadville, Colo., in September, and up to December 31st had sold over \$38,000 of iron ore to the furnace companies for fluxing purposes. The company declared a dividend of \$10,000 in December. Explorations are in progress with the hopes of finding a silver-bearing ore on the company's property.

BUCKEYE.—The transactions in this stock took the second position on the list, amounting to 2,528,500 shares, selling as low as 11c. in January and as high as 75c. in May, while, during the balance of the year, the range was 43@70c. The dealings in this stock began in April, 1878, at which time great results were promised, and they have been repeated at numerous intervals since, with constant announcements of the acquisition of additional property, the most important of which, and from which the greatest results have been expected, being the King of the Valley mine, at Silver Cliff, Colo. The announcement was made early in the year that rich ore was struck in this mine, but no important results have since been demonstrated. As this mine is in a district which promises to yield largely, it accounts for the higher range of prices for the stock during the past eight months. Past experience has taught us, however, to make great allowances on any statements put forward by this company.

CARIBOU.—This mine was placed on the market by Messrs. BRAYTON, IVES & Co., and has ranged, from the time the stock was first called at the New York Stock Exchange, in July, to September, at \$6@\$63%. In this month, the hoisting-works were destroyed by fire, and the price of the stock declined to \$434, and in December to \$414; but about the end of the year, upon the announcement that dividends would be resumed, and that there had been a change in the directory and presidency of the company, the price recovered to \$53/8. Although the company was unable to hoist ore and produce bullion for about three months, while the hoistingworks were being reconstructed, yet operations in the mines were not interrupted; and for some time to come the results will probably be more satisfactory than previously. The sales for the year amount to 28,671 shares. The company produced in 1879 about \$230,000, and paid \$50,000 dividends. The prospects are, that regular dividends of \$10,000 per month will be declared in 1880, and that a handsome surplus will be accumulated.

CASHIER.—This mine came on the Mining Exchange in 1878 as a surprise to most of the members of the board; and during the year, through a system of manipulation and "washes," it reached \$1.75 per share. It disappeared from the dealings almost as suddenly as it appeared, and but little has been heard of the mine or the stock since. But 100 shares, at \$1, sold during the year.

CENTRAL ARIZONA.—This mine did not make its appearance in the dealings in this market until October, when it was called at the New York | mine was reported to be looking much better than previously. Stock Exchange, and sold at \$10@\$1012. It was very quiet until November, when, under the manipulations of a pool, it was advanced to \$17, and in December reached \$2312. The sales to the end of the year only amounted to 4700 shares.

CHRYSOLITE.—This stock was placed on this market at less than \$13 pe

share, and has sold at about \$40 since then. It pays regular dividends of \$200,000 per month, or \$1 per share. The certificates of stock have not yet been issued to the majority of those interested, and only about \$4 cash has been paid on the stock. The promoters of this company, in taking the subscriptions for this stock, reserved the right for eight months of purchase at cost from the subscribers, of one half of the stock taken by

CLEVELAND.—There were no transactions in this stock until May, when it sold at \$2@\$3.05. Although the recorded sales aggregate, for the year, 101,450 shares, yet the transactions bore the appearance of being mostly in matched orders. The public appeared to take but little interest in them. The range after May was from \$3@\$3.70@\$3. The company claims to have made large developments during the year, and proposes to erect a 50-stamp mill this year,

CLIMAX.—This mine was not called until late in December. It is located at Leadville, Colo. The sales of stock aggregated 2400 shares at \$31, @33%.

DAHLONEGA. - This is another one of the "fancies" that has been promising something for a long time, but has never done any thing, nor do we believe that it is likely to. The sales aggregate 1,076,950 shares at 13@ 28c. The latter price represents \$70,000 for a property which, with its greatest expectations, should not sell for more than \$10,000. But this is one of the cheap stocks in which the public has wasted considerable money in hopes of an advance in price.

DEADWOOD.-This mine, located in the Black Hills, was floated by Messrs. Lounsbery & Haggin, and is under the same management as Homestake. The stock was not listed during 1879. The mill started in March, and produced, up to the end of the year, \$394,650.

EAST BOBTAIL.-This Colorado mine was placed on the market by subscription during the latter portion of the year, but was not called at either of the Exchanges. The company paid from \$5000 to \$8500 per month during 1879, and expects to average \$7500 in 1880, as large reserves of ore are reported to be in the mine.

EXCELSIOR.—The stock of this company was placed on the market by Messrs. Lounsbery & Haggin, at \$22.50 per share. It was first called at the New York Stock Exchange in November, when it sold up to \$29, but, under the influence of a semi-panic in railroad stocks, it declined to \$231/2. During December, it ruled at \$241/2@\$26, with a total of sales for the year of 24,417 shares. It has been paying 25c. per share per month, and this rate will be increased this year.

FINDLEY.—At the beginning of the year, this company was paying 1 per cent per month on its capital stock; but after that, it suspended paying them and began a series of important improvements which are now so far completed as to make it possible to again resume dividends. The price of the stock during the year was 50@85c., and the sales amounted to 539,175 shares. The company expects to resume dividends soon.

GOLD PLACER.—This stock, in which the public was fleeced to the extent of over \$3 per share in 1878, has continued to be a favorite for gambling purposes, without any prospects of its ever assuming intrinsic value. The sales aggregate 1,481,165 shares at 12@47c. This is an instance where the application of assessments might in time give value to the property; but, under the present organization, it does not seem probable that the necessary funds can be raised to make the property productive.

GRANVILLE.—This mine is located in the Land of Promise (the South), and has done its full share of promising. Under its latest effort in this direction, the price of the stock was advanced to 49c., while the lowest point of the year was 14c. The sales amount to 551,300 shares for the

GREAT EASTERN.—This mine entered into the dealings at the Mining Exchange in July, at which time it sold up to 68c., and paid its last divi. dend, which was one per cent on the capital stock, having paid two dividends in all. After that, it declined to 24c., although it recovered again to 41c. in December. The sales for the year aggregate 384,104 shares. The company announces that it has driven a new tunnel into pay ore, and has purchased one half of the Industrial claim, and is now out of debt, and will resume the monthly dividends of \$3000 at an early day. It also reports having struck a vein that compares favorably with the prominent mines of that district. It talks of increasing the number of stamps to sixtv.

GREEN MOUNTAIN.—This mine came into this market during the spring, and subscriptions were taken in a small way during several months following; and it was not until about November that it began to move very actively. In December, this stock was listed at the Mining Exchange, and advanced to \$2.50; but under sales by those who had procured the stock at about \$2, and desired to realize a profit, the price again declined to \$2. The total of sales was 8375 shares. At the end of the year, the

HOMESTAKE.—This mine was placed on the market by Messrs. Louns. BERY & HAGGIN, and was called at the New York Stock Exchange in January, when it opened at \$211/4, but before the end of the month reached \$2614. In March, \$41 was reached, and the range during the balance of the year \$38½@\$40¼. The management of the mines represented by this firm commands a confidence that gives greater value to ments, the latter figure is quite high enough. The sales aggregated their stocks than those under any other management. This company paid \$360,000 dividends upon a production of \$793,140 of bullion. The number of stamps was increased from 80 to 200, and it is expected that by spring the dividends will be increased.

HORN-SILVER.—The stock of this mine was started on this market in the spring at \$15 per share, and gradually advanced during the year, until it was announced that some large blocks were sold in Europe, when the price reached \$19.50@\$20. The promoters of this enterprise have been greatly disappointed by not getting a railroad to their mine. It was promised in the fall, but will not be completed until spring. When this is done, the company will have a large market for ores among the Utah furnaces; and, as it has hundreds of thousands of tons of ores in sight which it can remove in large quantities, the outlook will then be much brighter. The increased price of lead has probably added several millions of dollars to the value of this mine, as compared with what it was when the stock was first offered here for sale. The management is an excellent one, and the mine has the largest-developed ore-body in this country.

HUKULL.—At the end of 1878, this mine discontinued its dividends, and by April it had sold down from \$3.45 to \$2.40; but about this time it was appounced that Mr. GEORGE ROBERTS had taken an interest in the mine, and that Col. Osbiston would assume the management. Under this influence. and the discovery of some rich ore on the company's Whale property, the price of the stock advanced to \$4.75 in June. After this, there was a decline to \$3.50, and the number of shares was doubled and the par reduced to \$5. During July and August, the price ruled, on this basis, \$1.50@\$2. During the remainder of the year, the developments were carried on with very satisfactory results, and the price of the stock gradually strengthened until \$4.90 was reached in December, and more genuine speculation entered into this stock than in any on the list. At the end of the year, the developments in the mine had reached important proportions, and the indications were that they would prove to be all that it promised to be from the start. The sales aggregated, during the year, 340,989 shares.

KING'S MOUNTAIN.-The sales of this stock only amounted to 1100 shares at \$1.40@\$1.75. They made a good strike in a cross-cut driven from the new shaft, but the old workings were soon driven into, and the mine flooded; since when there has been nothing of importance done

LACROSSE.—This stock sold as low as 13c. in September; but upon the announcement of a "new deal," the price rose to 73c., only to drop to 36c. in December.

LA PLATA.-This stock was called at the New York Stock Exchange in November; since when, there have been transactions amounting to 12,405 shares at \$4@\$51/4. This stock has not caused much of a stir in

LEADVILLE.—This stock has had a vast amount of speculation in it. The company's property comprises the Carbonate mine and one half of the Shamrock claim, at Leadville. The stock was sold by subscription, at \$2 per share and less. Under a management from which nothing else could be expected, and of which we advised the public at the start, the mine has had a somewhat checkered career. The mine, when a sale became assured, and before the company took possession, was badly "gutted," and, although dividends were started promptly, yet, during the summer, they were discontinued, and, under this influence and quarrels among the management, the price of the stock was subjected to wide fluctuations. The stock was called at the Mining Exchange in March, and, later in the year, at the New York Stock Exchange, although the dealings at the latter were quite small. In March, the price was \$2.35@\$3. In June, \$4.10 was reached, while in August it had declined to \$2.40, and recovered again in December to \$4.65. The sales for the year amounted to 400,252 shares. The dividends declared by this company during the year, from the time of its formation, amounted to 75c. per share.

LITTLE PITTSBURG.—This prominent Leadville group of mines was brought into the market in the spring, and 50,000 shares sold at \$20 per share. After this, the price was advanced to \$25, and in October it was announced that 81,000 shares had been placed on the London market; after which, the price strengthened, and it was called at the New York Stock Exchange, selling at \$29@\$30½. In December, \$34½ was reached, although, in the same month, the price declined to \$281/2, or the lowest point in the transactions on the Exchange. The sales reported aggregated 18,141 shares. At the end of the year, the company made the following statement of its operations:

Ore produced, tons.

23,178 Present rate of increase of recommendation of the Spirit o 

LUCERNE.—Under a "washed" business, the price of this stock was kept for a long time in the vicinity of 30c. The highest price was 3.c., in April, and the lowest 9c., in December. From the company's own state- | SEATON.—This mine assumed the place of a mere "fancy," and sold

299,800 shares.

MARIPOSA.—The record of this mine has been, for years, steady assessments and rumors of rich strikes. The past year showed no practical change. The sales of the Preferred stock amounted to 6810 shares at  $1\frac{1}{4}$   $8\frac{1}{4}$   $8\frac{1}{4}$ only on lower quotations. The sales aggregated 13,865 shares at 75c.@ \$8@\$21/2@\$51/2@\$21/4.

MOOSE.—This stock reached \$9.50 in the spring of 1878, under forced dividends, since when there has not been one paid, although promises and flattering reports have been made. For a stock that gives no returns to the holders, and really gives no indication of ever giving any, a remarkably high price was maintained during the year. The average price of the stock during 1879 was about \$3 per share, which represents a value of \$600,000 for the whole mine; the sales amounting to 248,495 shares at \$4.55@\$2.70@\$4.20@\$2.80. Better results are promised in 1880. It would be strange if nearly two years' work did not permit the company to put the mine in such shape as to permit a resumption of dividends after which to look out for an unloading on the part of the insiders. With the resumption of dividends, learn first, before purchasing the stock, whether they are likely to be continued for any great length of

NATIVE SILVER.-This mine, which adjoins the Caribou, has been placed in this market by subscription, but has not been listed. The developments going on are in very satisfactory ore. It is expected that dividends of \$10,000 per month will begin in the spring, and that this mine will rival Caribou, if not surpass it.

NEW YORK & COLORADO.—This stock managed to keep up quotations throughout the year without commanding particular attention from the public. The sales amounted to 46,190 shares for the year, at \$1.25@\$2.75.

O. K. & WINNEBAGO.—This stock was floated upon the same plan and by the same parties as the Chrysolite, but does not promise to give satisfaction to the subscribers. In fact, there was but a small market for the stock at the end of the year, and a considerable concession from the subscription price was necessary to find a purchaser. This mine will probably be a profitable one in time; but there has been little advancement in this direction yet.

ONTARIO.—This has been the first of investment stocks on the list, and has shown no speculation worthy of notice. The sales have amounted to but 12,380 shares, while the lowest price of the year was \$381/2 in July, and the highest \$42 in September. The assay value of the bullion produced during the year was \$1,347,631, and the dividends paid, \$600,000. During the latter part of 1878, the hoisting-works of this company were destroyed by fire, and they were not in operation for a considerable time in 1879, owing to this cause. It is proposed to add the Last Chance mine to the Ontario. If this be done, the life of the company will be considerably extended, although the Ontario claim shows no indications of exhaustion, the developments on the lowest level having been of the most favorable character. It is also proposed to increase the milling facilities.

PENORSCOT.—This mine, at the opening of the year, promised almost immediate dividends, and had a surplus of about \$50,000 cash. At the annual meeting, a statement to November 1st was made to the stockholders, in which the proceeds of bullion were announced to have been \$207,040.88, and the expenses at mine \$194,494.01, and at New York office \$4494.01. The cash on hand was \$22,456.93. The balance of the cash was absorbed in machinery, etc. The trouble was, that the rich ore found in the shaft did not extend any distance, and that mined was of such low grade as to yield no profit. At the end of the year, there was an improvement in the quality of the ore at the bottom of the mine, and the management was confident of being able, at some day, to make returns to the stockholders.

PLUMAS.—This stock recorded its highest price in January, when it sold at \$3.70, and, with a fluctuating but steadily weakening market, sold down to \$2.80 in July, after which it was announced that dividends would be suspended, and they have not since been resumed. The consequence was, that in December the price of the stock declined to \$2.20. The sales for the year amounted to 67 495 shares.

QUICKSILVER.-These stocks were influenced by the decision in the courts in an important question that had been pending for a long time, a speculative advance in the price of quicksilver, and sympathy with the very active movement in the railroad stocks on the list of the New York Stock Exchange. The sales of Preferred amounted to 116,823 shares, at \$26@\$69; and of Common, 98,953, at \$11@\$25.

RAPPAHANNOCK .- A large quantity of this stock was placed by subscription previous to its listing at the Mining Exchange in October, during which month it sold at 25@30c. In November, 44c. was reached, while the quotations in December were 42@35c. The sales for the year aggregated 448,710 shares. The company is now erecting a ten-stamp mill and making many other necessary improvements preparatory to further opening the mine and milling its ore.

during the year at 85@19c., the transactions aggregating 5400 shares. been struck; and in April, sales were made at \$50; also in June; while in There was a complication on the indebtedness of the company which called for the services of the sheriff.

been struck; and in April, sales were made at \$50; also in June; while in July. \$48 was reached. During this time, the actual condition of the mine was greatly exaggerated; and, in July, a systematic effort was made to un-

SHAMROCK.—The first dealings in this stock were in September, when it sold at 95c. In October, it sold down to 75c., in November up to \$1.25, and in December up to \$1.55, although falling back in the same month to 90c.

SOUTH HITE.—The first sales in this stock were made at the Mining Exchange in August at \$1.50@\$1.65; in October, the price had declined to 60c. In November, however, it was announced that there were indications of a strike, and the price began to advance; and along with considerable "washing" and manipulation, there was also a liberal amount of speculation, and in December \$3.70 was touched. The sales reported amounted to 116,488 shares.

STANDARD.—This has been considered one of the great mines on this market; and although paying as high, and even higher, dividends than some of the mines under the HAGGIN & TEVIS management, yet, owing to the public's lack of confidence in the management, the price of this stock has not reached the point which it was thought it would, or another management would have insured. The first 10,000 shares of this stock were sold to the public at \$20 per share by LOUNSBERY & HAGGIN, and the second lot at \$22.50, after which this firm's connection with the mine ceased. In April, this stock was called at the New York Stock Exchange, opening at \$34% and reaching 35%, but shortly declined to \$26, very much to the disgust of the members of the Exchange. In May, \$34% was reached, and in June \$35, but by August sales were made at \$24, after which the price ranged at \$251/6@\$311/8, with a stronger tendency at the close of the year, owing to the near approach of the completion of additional milling facilities. The company declared regular dividends of 50c. per share from the time the stock was put on the market. The reports from the mine are of a very satisfactory nature, and indicate that the earnings will be increased upon the new mill getting into regular working order, and that they will be continued for a long time to come from ore now "in sight," with the prospects of large additional developments. The sales of this stock amounted to 147,759 shares during the year.

STORMONT.—This property was taken up by a strong syndicate, and has a highly respectable management. The company's mines are opening up very satisfactorily, and are producing about \$50,000 per month, which rate can be continued with the present appliances. The stock was sold, at private sale, at \$5.50, afterward advancing to \$6.50, at which it closed.

SUTRO TUNNEL.—This stock, which sold at \$5 in December, 1878, declined to \$2½ in January, which was the lowest price of the year. There was a fair amount of transactions in the stock at moderate fluctuations, as a rule, until November, when, in one week, the sales amounted to over 150,000 shares, and \$6½ was reached. After this, the price ranged at \$3½@\$45%. The sales for the year aggregated 593,679 shares.

TRIO.—This mine announced strikes once or twice during the year, and by this time should be giving some results. The lowest price was 45c., in January, and the highest 95c., in September. The sales for the year amounted to 170.310 shares.

#### SAN FRANCISCO STOCKS.

ALPHA.-In March, 25 shares sold at \$24.

ALTA.—The sales amounted to 230 shares at \$81/4@\$111/2.

BECHTEL.—The dealings in this stock did not begin until March, but after that time they were very liberal, amounting to 42,301 shares, selling at \$1.50@\$5@\$1.10@\$2.15.

BELCHER.—This mine has been kept in operation by assessments, and the price of the stock has been in sympathy with the rumors of bonanzas and Comstock manipulation. The sales in this market have amounted to but 1100 shares, opening at \$4 in January, selling up to \$9¼ in March, down to \$2¼ in December, but reacted from this latter price very materially, on rumors of the finding of paying ore in the lower workings. This is the deepest mine on the Comstock, and is thoroughly equipped with a splendid outfit of machinery.

BELLE ISLE.—This stock, after being fully prepared and advertised, was sprung on the market by the "Tuscarora Ring" in October, with a 75c. dividend, and it sold up to \$5½. This was looked upon as the cheapest stock in the market; and so it would have been, had the mine been able to keep up this rate of dividends; but instead, it was only prepared for a spurt; the public was robbed, the dividends ceased, and in December, the price declined to \$1¼. The sales aggregated 85,832 shares.

Belvidere.—This stock declined from \$2.60 in June to 80c. in December, with sales of 1725 shares.

BEST & BELCHER.—The sales of this stock amounted to but 40 shares at \$19½@\$9%.

BODIE.—The Eastern public suffered more loss on this stock than any other on the list. During the early portion of the year, the mine was levying assessments, and the price of the stock ranged at \$10@\\$5\%, on a basis of 50,000 shares. In the spring, it was announced that a new bonanza had

been struck; and in April, sales were made at \$50; also in June; while in July. \$48 was reached. During this time, the actual condition of the mine was greatly exaggerated; and, in July, a systematic effort was made to unload upon the public. The "points" tob uy were given broadcast, regardless of whether to friend or foe, and the public was more successfully duped in this operation than in that of any other during the year. Dividends were started at \$1, then reduced to 50c., and finally to 25c. The number of shares was doubled, and the price declined to \$8 in December, equal to \$16 upon the capitalization early in the year, and showing a decline in the price of the stock, to those who purchased at \$50, of \$34 per share.

BULLION.—This stock has shown a small business, the total amounting to but 1005 shares. In January, it sold at \$43/4, and in June at \$101/2, declining to \$7 in October, when the last sale took place. This mine is generally supposed to contain a quantity of ore which will pay to mill.

BULWER shows a very good business among the Bodie stocks. The mine has generally been looked upon as a very good one, and considerable stock has been purchased in anticipation of the starting of the new mill. Under manipulation, the stock sold up to \$15 in May, but declined to \$75% in September. The sales amount to 30,713 shares.

CALEDONIA.—In March, 50 shares sold at \$314.

Caledonia (B. H.)—During the first half of the year, an effort was made to consolidate this mine with the Clara, and float the stock on this market. The price was put too high, and the scheme failed. When the public saw at what price the stock was being offered for sale, it went in to buy the original Caledonia, and the result was, that the price advanced in this market to \$5½. In November, it had declined to \$1.70, although it again recovered to \$3.95. The sales amounted to 24,630 shares.

CALIFORNIA.—This stock was higher, early in the year, than Consolidated Virginia, but declined to a lower point, having sold at \$1134 in January, and \$234 in December. The sales during the year amounted to 108.851 shares.

CHOLLAR.—This stock only records sales of 1530 shares, at \$678@\$758, and the transactions all took place in August, September, and October.

Consolidated Imperial.—This stock shows the very large business of 339,100 shares, while the price advanced, under the distribution of "points" and manipulation, from 75c. in January to \$2.68 in June. It afterward declined to 30c. in December, and many who have had to stand a loss should learn a lesson from this experience.

Consolidated Pacific.—This stock sold at \$1.90 in March; but under the Bodie fever, a pool was formed—or so it was stated—and the price was suddenly advanced to \$10½, and a liberal amount of stock was shouldered on the public at that price down to \$3¼, which was reached in December. A series of telegraphic reports, and a systematic line of advertising, were employed at various times during the year, for the purpose of getting the public to take some interest in the stock. It is about time that some results should be given.

Consolidated Virginia.—This stock has attracted more attention than any other of the San Francisco stocks. The sales aggregate 234,160 shares at \$10 in January and \$3.25 in December. The Eastern public argued that a mine that could produce the quantity of ore that this mine had produced was not likely to be worked out soon; but nevertheless, the dividends declared during the year do not cover the depreciation in the market price of the stock.

Crown Point.—This stock records transactions amounting to 5,340 shares, at \$6½@\$3½, although during seven months of the year there were no sales here.

EUREKA.—This has been a favorite stock in the East, although a greater portion of the transactions in the stock have been directly with San Francisco. Nevertheless, the sales amount to 14,030 shares. In January, it sold at \$34, while in August, it sold at \$15; and, upon the announcement of an increased dividend, it sold up to \$30 in September and October, although declining to \$15\%1 in December, under the resumption of the old rate of dividend, and the general depression in the San Francisco market.

EXCHEQUER only records 225 shares at \$81/2@63/4.

Goodshaw.—The first sales of this stock were in June, when \$1.20 was recorded, steadily declining, until the quotation of 7c. was reached in December. The sales amounted to 41,460 shares.

GOULD & CURRY only records 610 shares, at \$12½ in June, and \$4.95 in December.

Grand Prize is largely held in the East, and small transactions have taken place regularly throughout the year, showing, at the end, a total of 7470 shares, at \$8% in January, and 50c. in December. This is another case where the public was duped in Tuscarora stocks by a spurt in production.

HALE & Norcross only records 580 shares for the year, the highest price being \$18 in June, and the lowest, \$141/2 in November.

HUSSEY had dealings amounting to 44,650 shares during the first eight months of the year, after which there were no transactions. The highest price was 40c. in February, and the lowest 7c. in June.

INDEPENDENCE.—There has been considerable speculation in this stock,

and the fluctuations have been wide. Like the other Tuscarora stocks, it shows a loss to Eastern investors. The sales amount to 95,355, and the prices have been \$2.10@\$1.10@\$4@75c.

JULIA.—This stock shows a liberal business, the transactions amounting to 3485 shares. The highest price was \$5% in February, and the lowest, \$2 in December.

JUSTICE.—The first sale took place in September at \$4, while, in November, the price had declined to \$2.25. The sales for the year amounted to but 530 shares.

Kentuck.—In March, 100 shares sold at \$4.90.

Kossuth.—The sales aggregated 19,800 shares at 15@29@16c.

LEEDS.—This stock has been a disappointment to Eastern holders. especially as it was currently rumored, about the middle of the year, that a fair body of ore had been struck. In January, the price of the stock was up to \$11/2, and in December down to 50c. The sales aggregated 5270 shares.

LEOPARD.—During the early portion of the year, this stock sold to the extent of 600 shares at 50c.@\$1.25.

LEVIATHAN.-This cat has had too many bricks thrown at it to meet with much popularity. Although a "fancy," yet the sales only amount to 27,930 shares for the year, selling at 20c. in March, \$1.10 in May, and 25c. in December. This mine has no value at all, and it is questionable if the company even owns it.

McClinton only records sales of 528 shares at \$1@60c.

MARTIN WHITE is another example of mines under the "Tuscarora Ring." The sales amounted to 5790 shares at \$2 in October and 40c. in

MAY BELLE.—The sales of this stock began at 75c. in June, and in December the price had declined to 18c. The sales for the year amounted to 11.675 shares.

MEXICAN, in small lots, furnishes an aggregate of but 170 shares at \$37% in September, and \$251/2 in December.

Modoc recorded, in July, 1100 shares, at \$1.45@\$1.35, without any further transactions during the year.

Mono did not participate largely in the movement in the Bodie stocks. The sales amounted to but 520 shares at \$121/2@\$65/8

NAVAJO sold from 50c. in January down to 20c. in February; up to 70c. in June and down to 25c. in December, with total transactions of 53,850

NORTHERN BELLE.—The sales of this stock only amount to 35 shares, all

NORTH STANDARD .- Of this stock, beware. It is high at one tenth of the quoted prices upon present prospects. The first sale was at \$2.25, but the quotations were afterward permitted to range between \$2.10 and \$1.70, but entirely on manipulation. The sales amount to 26,900 shares.

OPHIR records but one transaction of 30 shares, at \$351/2. This took place in August.

OVERMAN.—This stock records 260 shares sold, the price in March being \$30, and September, \$91/3. These were the only months in which sales were made in this market.

Potosi.—The sales of this stock amounted to but 100 shares, at \$4.75 in August, and \$2.45 in December.

RAYMOND & ELY.-This stock sold at \$81/4 in January, and at \$1.20 in October. The sales for the year amount to 3665 shares.

SAVAGE.—The first transaction in this stock took place in June at \$16, while in December there were sales at \$7. The total transactions for the year were but 400 shares.

SIERRA NEVADA.—Although this has been a leading speculative Comstock stock in San Francisco, yet the dealings in this market were quite insignificant, amounting to but 395 shares. The price in February was \$50, in October, \$60, and in December, \$201/4.

Silver Hill.—Scattered transactions aggregate 2550 shares, at \$2\% in January, to \$1.50 in October.

TIOGA.—The dealings in this stock did not begin until May, when \$4@ \$41/2 was the range, and in July the price advanced to \$8, but steadily declined until \$1.85 was reached in December. The sales aggregated

TIP TOP.—This stock shows a very liberal business, the sales amounting to 51,905 shares, at 75c. in several of the early months of the year, and at \$2 in December.

TUSCARORA.—This has been a very active stock, and, on manipulation and large speculation, advanced to 99c. in October, although declining to 17c. in December. The lowest price of the year was 3c. in February. The sales aggregate 492,850 shares.

Union Consolidated.—The sales amount to but 330 shares at \$551/2 in August and \$82 in October.

YELLOW JACKET has shown a larger business than most of the Comstock shares, the sales aggregating 1735 shares. In May, this stock sold at \$22, and in December, at \$9.

THE WASTE OF ENERGY IN THE OPPOSITION TO WATER-GAS.

An Open Letter to Eugene Vanderpool, Engineer of the Newark Gas-Light Company.

DEAR SIR: I have quite recently received a pamphlet bearing your autograph, and entitled, "The Waste of Energy in the Production of Water-Gas," it being the printed copy of a paper read by you before the Society of Gas-Lighting, October 9th last. I will not say that the perusal of it has made me homesick, in this northern latitude; but it has certainly reminded me so forcibly of manners and customs prevailing among gas men in my native land that I am constrained to write you a letter on the subject. And as it is rumored that gentlemen in your profession are just now "changing positions" quite actively, I have concluded to make it an open letter, that it may not fail of reaching its destination. No one can fully appreciate your skillful handling of the subject without being acquainted with some of its collateral difficulties, and it is but simple justice that I attempt an explanation of these, that the subtler abilities of your paper may appear.

acquainted with some of its collateral difficulties, and it is but simple justice that I attempt an explanation of these, that the subtler abilities of your paper may appear.

To begin with, the society before which it was delivered is a peculiar organization in itself. Composed of but eleven resident members (and six non-resident), selected from the great companies in and about New York, it constitutes a limited jury, upon which is laid the delicate duty of molding the opinions of the humbler engineers of the general organization known as the American Gas-Light Association. This manipulation must be accomplished with an iron hand concealed under a velvet touch. It necessitates the maintenance of a great show of wisdom and an earnest desire for progress; but this latter must not be permitted to threaten the sacred fires they are expressly set to guard. Any improvement, however promising, which endangers the bituminous flames of the retort altar must, without appearance of prejudice or passion, be slain and offered up thereon. The date of your paper was one of those sacrificial occasions, and I am sure no ancient Druid could have put the knife into a fellow-mortal with more dexterous solemnity than that with which you attempted the coup de grâce to the water-gas principle. The difficulties in your case were indeed much greater than at Stonehenge, by reason of the fact that, in your limited audience, one listener and fellow-priest had just concluded a purchase for his parish (New York Gas-Light Company) of the process you were immolating, at an expense of (\$300,000) three hundred thousand dollars, and three of the other members were contemplating a similar transaction in the Brooklyn parish, involving an outlay of (\$1,000,000) one million dollars.

Under these deeply afflicting circumstances, it was devotion bordering on the sublime to plunge a second knife into these deluded associates, by

outlay of (\$1,000,000) one million dollars.

Under these deeply afflicting circumstances, it was devotion bordering on the sublime to plunge a second knife into these deluded associates, by mentioning that the antiquated process of "Kirkham, patented in 1852, is, so far, the best for the economical production of water-gas, and can be used by any one desirous of making it, without expense for the use of patent royalty," etc. May I ask you how the victims bore the stroke—if they uttered any defense of their heretical conduct, and whether their places in the society are to become permanently vacant?

For producing the intended effect upon the Gas-Light Association, your paper is most judiciously constructed. Its voluminous tables add up

For producing the intended effect upon the Gas-Light Association, your paper is most judiciously constructed. Its voluminous tables add up correctly, and look so like an exhaustive examination of the subject that few of its docile members will read more than half through before deciding that the new system is a fraud.\* As the creation of this impression is the one purpose of the document, the element of truth is necessarily treated somewhat as a subordinate. As a masterly illustration, allow me to specially commend the statement (page 13), worded as follows: "We have data that show, under the most careful working, 1000 cubic feet of water-gas have been produced from (75) seventy-five pounds of anthractic coal, and we will assume this as the best work obtainable in practice, and take it as a basis of comparison, so as to give the water-gas process every favor in working results." The special flavor of this sentence no one can enjoy as I, who, as your companion three years ago, made a certain journey and saw carbureted water-gas made on a practical working scale with about 30 per as your companion three years ago, made a certain journey and saw carbureted water-gas made on a practical working scale with about 30 per cent less weight of coal than you now mention. I have not forgotten how, after you had concluded your investigations, you uttered apparently sincere exclamations of surprise at the results, and added some hearty prophecies of success for the water-gas system; and these recollections, of course, add peculiar zest to the reading of your paper. It is rather curious that, while I have ever since been earnestly laboring (and with an encouraging measure of success) to fulfill your pleasant predictions, you have seemed to work for their defeat. I remember promising, at that time, to make (50) fifty pounds of coal, including the steam, deliver (1000) one thousand cubic feet of gas in the holder; and I may say to you that I have recently obtained that volume, by the Strong system, from (40) forty pounds of English coke, and expect from furnaces now building to obtain even better results. This fact should interest us both; me, because it proves that I am keeping my promise; and you, because it is giving to the most important residual of your works a value never before possessed.

But it is a fact which comes into somewhat violent collision with your table (page 13) entitled "Waste of Energy, based upon the consumption of 75 lbs. anthracite coal per 1000 cubic feet of water-gas generated," in which you say:

The waste of energy is...... 675,000 300,000 675,000 wasted is.... 100.0

The corrected table, based upon actual results obtained here, as to vol-

\*In justification of this strong language, I may state that a prominent resident of this city has just received a letter from a third party in the United States accompanied by a copy of your pamphlet, and an expression from one of the "honorary members" of the society to which it was read, that "No one can be connected intimately with it (the water-gas system) without knowing that it is a fraud." The malicious purpose of the man is foiled, because the facts observed during long experiments here have gained a confidence not to be shaken by the unscrupulous words of an evident partisan, however titled.

100

ume of gas, and the calorific computations by Dr. Gideon E. Moore, which have never been challenged, I believe, would read thus:

The ener The ener weight	rgy of 40 ergy of ng	lbs. English of the Strong g	oke is as produced	therefrom	is 1000 41·16	bs. × 1 cubic lbs. ×	3,500 feet	=	540,000 362,026
The Per cent	e waste of	of energy is ry utilized is				862,026	=	67	177,974
46	66	wasted is				540,000 177,974 540,000	==	33	

The difference between the tables is, of course, too slight to attract the attention of the American Gas-Light Association. Preliminary to showing attention of the American Gas-Light Association. Preliminary to showing the "waste of energy in the carbonization of bituminous coal for the production of illuminating-gas" (page 16), you say, "As, in the case of the water-gas, we have taken the best results obtained from the best practice (!) for a comparison, so in the manufacture of gas from bituminous coal we will take for our basis a specimen of excellent work," and then proceed with a calculation founded on the production of (11,200) eleven thousand two hundred cubic feet of gas of 16-candle power from a ton of coal, and with an expenditure of (312) three hundred and twelve pounds of coke as fuel. This is, indeed, "excellent work," and I should be pleased to know in what part of the United States it is done.

Without desiring to overpraise your paper, I must allude to your ingenuity in instituting a comparison between ideal figures. You are consistent in doing this upon both sides of the calculation, however, though I observe you do it in such a manner that your favorite system is always advantaged.

For example, as anthracite and petroleum are at present too low to suit the purpose of your argument, you advance the former from \$2.50 to \$4.50 per ton, at which price, you say, "There is a fair profit to those producing it" (I thought your coal interests were exclusively bituminous?), and you make (5) five gallons of naphtha necessary to produce a (16) sixteen-candle gas, although there is abundant evidence to show that (16) sixteen-candle gas, although there is abundant evidence to show that (4) four gallons produce (20) twenty candles, in several places in the United States, by the Lowe process; and on this side the ocean, where distance from the oil-wells begets economical management, the same illuminating value is obtained from even less. The experts of the upright Gas Trust of Philadelphia did, indeed, after long manipulation of the Lowe gas, and an intermixture therewith of the carbonic acid of politics, manage to reduce its brilliancy to (13.48) thirteen and forty-eight hundredths candles, although Barker of Pennsylvania University and Wurtz of New York both separately ascertained it to be about (20) twenty candles. twenty candles.

The ability of a man to rise superior to adverse circumstances is a final test, and the graceful agility you show in this whole matter, even to the extent of overleaping facts, in the effort to prove the old method superior to the new, is beyond my powers of praise. And now, having exhausted commendation, permit me to call your attention confidentially to a point which has proved a source of error to so many philosophers that it is not which has proved a source of error to so many philosophers that it is not strange it should appear in your paper, and (except so far as the readers for whom it was intended are concerned) rob it of the force it would possess, even were its statements not open to criticism. The fact is, the laboratory calculations of calorific values, based upon the raising of the temperature of a given weight of water by the combustion of a given weight of fuel, however precise and useful for strictly technical comparison, are, for practical conclusions, sure to mislead, unless the actual conditions of practical operations are duly considered and admitted to the computation. And the question you and I are discussing is strictly a practical one. How can the present fearful waste of fuels, both in the generation of light and heat, be checked?

Newark is a great manufacturing city, and yet the bulk of your business, as a distributor of gas, is with the householder; and we both understand that, large and profitable as it is, the furnishing of illuminatinggas is a small industry as compared with that of fuel used in domestic heating and cooking. Where there is a pound of coal burned in laboratory experiments, there are hundreds of thousands of tons used in this manner; and there is small consolation to the householder in an assurance

manner; and there is small consolation to the householder in an assurance that the chemist gets ten times the heating power from the fuel that he does. That there is an appalling loss in the present methods of employing fuels, we agree, as also upon the general fact that it results largely from the conversion of solid forms into gaseous ones in atmospheric air; and that this conversion naturally costs more where effected in ordinary grates and stoves, recklessly managed, than if it is accomplished upon perfected scientific principles. This sacrifice of heat-units in the gasification of the mineral substance, though too little unplished upon perfected scientific principles. This sacrifice of heat-units in the gasification of the mineral substance, though too little understood heretofore, must be admitted as an inevitable accompaniment in all combustion. All that human skill can hope to do is to reduce it to a minimum. We doubtless further agree that this conversion can be most economically accomplished at utholesale, in suitably located and equipped works, whence the gas, thus made ready for fuel as well as light, may be distributed by mains to the consumers. I know you believe that, as compared with the general distribution of a cheap and efficient fuel-gas, the present illuminating business would be insignificant, both in proportion and profit, to say nothing of the advance it would represent in civilization. This we have talked over before now. The world is rapidly preparing for such an improvement, and the question which every progressive gas-engineer should candidly investigate is, By what method may so desirable a change be best accomplished? To arrive at a decision, it is not necessary to delve among the earlier text-books and laboratories of the century, or compile voluminous tables of theoretic figures. We have practical facts, fresh and authentic, on which to base a decision, which, while they do not collide with the exact calculations of figures. We have practical facts, fresh and authentic, on which to base a decision, which, while they do not collide with the exact calculations of sall grades of fuels, which enables it to convert, with the highest economy, of all grades of fuels, which enables it to convert, with the highest economy, of all grades of fuels, which enables it to convert, with the highest economy of all grades of fuels, which enables it to convert, with the highest economy of all grades of fuels, which enables it to convert, with the highest economy of all grades of fuels, which enables it to convert, with the highest economy of all grades of fuels, which enables it to convert, with the highest economy of all

are, and not argue upon what they should be; admitting that in burning coal in ordinary stoves and grates, not more than (10) ten per cent of its maximum heating power is obtained by the housekeeper, and assuming that, in the combustion of a gas for similar purposes, a rational system will utilize (90) ninety per cent of the calorific value of the gas. We will leave out of the calculation all argument regarding the items of labor and wear and tear (although in these important elements of cost the coal gas system). out of the calculation all argument regarding the items of labor and wear and tear (although in these important elements of cost the coal-gas system is at a very heavy disadvantage), and base the comparison exclusively on the useful heat derived by the consumer from each. The coal-gas method may be defined in the briefest terms as a process in which bituminous coals are introduced into retorts and heat applied externally, by which the volatile hydro-carbons are distilled. The coke remaining is used in part for sale to consumers, and in part for fuel under the retorts. used in part for sale to consumers, and in part for fuel under the retorts. Your pamphlet assumes that only (20) twenty per cent of the coke is burned for the latter purpose, a proportion far below the fact in general practice, and you set the gas product too high; but we will give the system the benefit of your own figures and calculate the *practical* calorific loss, that is, the difference between the theoretic potential energy of a ton of coal and that derived by the consumer in actual use.

0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	1560 - 312 = 1248 lbs. coke
	101 lbs. tar. [This residual we can not send to the consumer, and though, by general custom, it is a credit item against cost rather than against calorific waste, we will accept your doubtful statement (practically considered) that 101 lbs. tar are the equivalent of 202 lbs. coke, and credit you with the latter more available material.] 202 lbs. coke × 10,970. 2,215,940 Less 90 per cent in combustion 1,994,350
	Proportion of theoretic heating power of one ton of coal actually utilized in domestic practice $\frac{8,043,462}{31.360.000} = 25.7$ per cent.
	Proportion wasted. $23,316,538 = 74.3$ "

The tables of your pamphlet (page 16) are almost exactly reversed by this method of calculation, which is unquestionably the correct one. I have given the retort system every advantage of your idealized figures, and by exchanging the tar have allowed you to sell (93) ninety-three per cent of all your coke, only insisting that, if your fuels are burned in the kitchen and not the laboratory, the heat actually available to the cook, and not that possible to the chemist, is what the housekeeper needs to have determined. One defect of the retort system, though not its only one, lies in the fact that its operation is a partial distillation and not a total conversion in the sense most required. One sixth of the weight of the coal only is volatilized; the remainder still retains the objectionable mineral form, which, we have already seen, is a source of immense loss

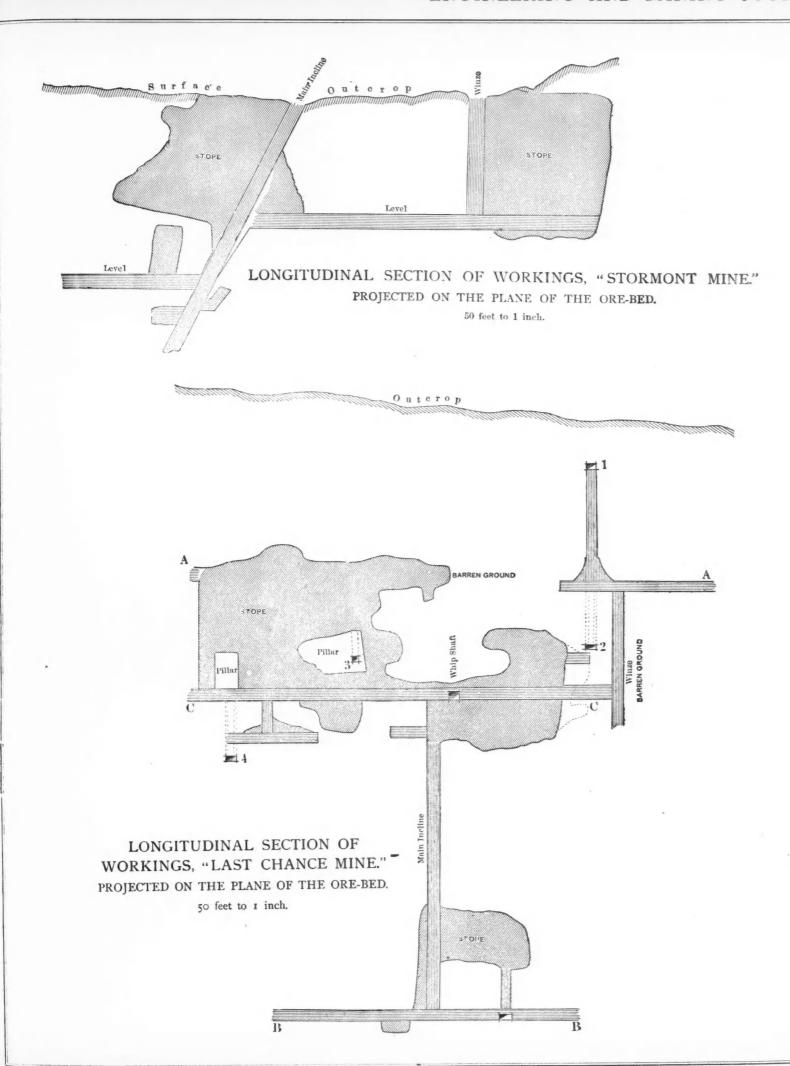
the coal only is volatilized; the remainder still retains the objectionable mineral form, which, we have already seen, is a source of immense loss in ordinary combustion. Thus the large residuals, of which gas men have boasted, are, even as articles of profitable sale, evidences of the inefficiency of the system, if the practical calorific results are fairly considered. Now let us look at the water-gas principle. This may be briefly described as the process of converting carbon from a solid or crude form to a gaseous condition in an atmosphere of steam. This is accomplished in a variety of ways, some of which are not new; but I must decline to base calculations on a process which you recommend as the best, but which was tried and abandoned twenty-eight years ago. I prefer to judge of the art by its latest and most perfect development, and select the Strong system, for the substantial reason that, to the present date, it produces more practical heat-units from a given weight of carbon than can be made available by any other working method.

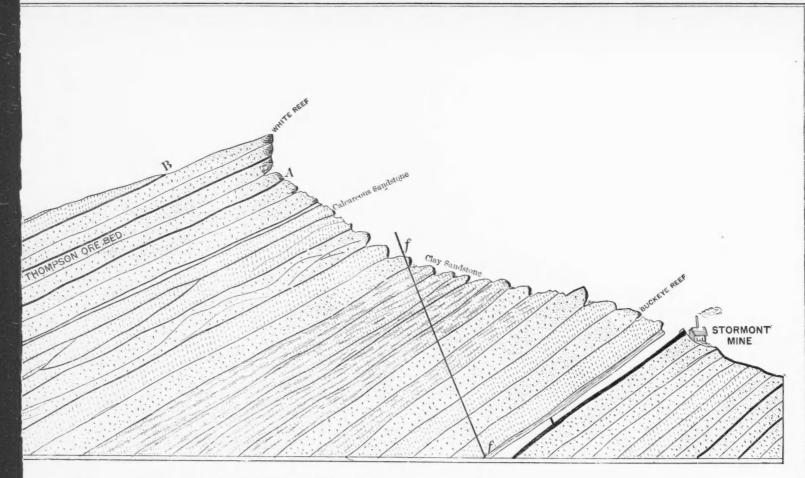
I must insist again in taking facts as they exist in actual operations, and

made available by any other working method.

I must insist again in taking facts as they exist in actual operations, and not as they should be, according to theoretical tables. Experiments in this country, covering a considerable period of time and a large variety of fuels, show that an essentially constant gas, of composition identical with that produced at the Mount Vernon works, as reported upon by Dr. Gideon E. Moore, is produced by them all, the volume, of course, varying in proportion to the carbon present. Taking English coke as a standard, because of its purity, it is ascertained that (1) one pound yields (25) twenty-five cubic feet of gas equal to (56,000) fifty-six thousand feet per 2240 lbs, coke. per 2240 lbs. coke.

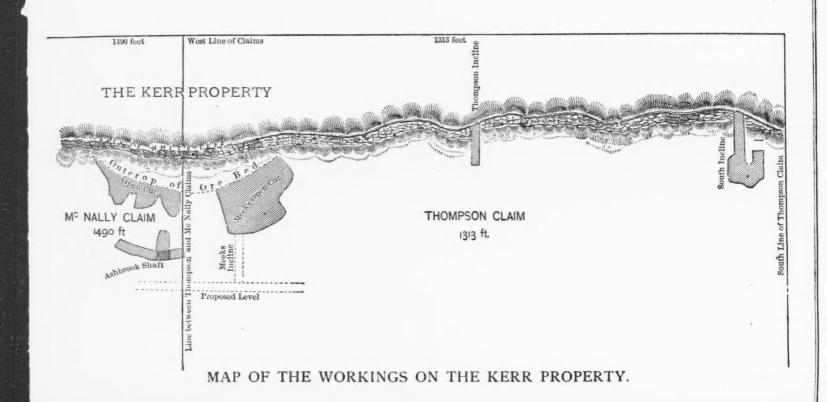
The calorific energy of this coke is 2240 lbs.  $\times$  13,500......30,240,000 heat-units. The heating power of the gas produced is 56,000 cubic feet, weighing 0 04116 lb, per cubic foot = 2305 lbs  $\times$ 20,279,390 2,027,939 s 10 per cent loss in combustion.... -18,251,451 " " Proportion of heating power utilized  $\frac{18,251,451}{30,240,000}$ = 60.4





PROFILE SECTION ACROSS STORMONT MINE.

80 feet to 1 inch.



are deprived of their highest value. By its delicate determinations, a weight of fuel is ascertained by the chemist to possess a certain thermal force. By the close study of practical operations, it is discovered, with equal certainty, that the same weight of material, burned in domestic stoves and grates, yields only (\frac{1}{10}\) one tenth that power. There is no antagonism between these facts. The one fixes a standard of possible value; the other shows the value realized; the difference measures the waste resulting from imperfect use. It is, indeed, an appalling waste; one for which civilization should blush. Any life spent in its correction will be useful. What you or I may say on the subject is of small consequence, except as it may help or hinder so needed an improvement. The water-gas system has taken its place permanently among the useful arts; it is most satisfactorily and profitably lighting many towns and cities in the United States, not, perhaps, to the satisfaction of the old companies, with whom it successfully competes, but very much to that of the consumers, who, everywhere, prefer its beautiful light.

It gives a well-sustained promise of supplying the much more important need of a cheap gaseous fuel, which the age demands and will have, despite the obstructions of conservatism and the opposition of vested interests. If you are, indeed, sincerely interested in the conservation of forces, you should cease further "waste of energy" in opposition to "water-gas."

A contest with facts is as hopeless as a perversion of them is immoral.

water-gas."
A contest with facts is as hopeless as a perversion of them is immoral. Respectfully, STOCKHOLM, Dec. 20, 1879. GEORGE S. DWIGHT.

#### NEVADA MINING NOTES.

Special Correspondence of the Engineering and Mining Journal.

This place is the center of considerable activity at the present time. The Belmont mine, in which, for some months past, a great deal of dead-work has been done, has now began to turn out not only low-grade ore in large quantities, but some very fine mineral from the upper levels. The mill is very busy, and will crush continuously for some weeks before cleaning up. This has been a source of considerable encouragement to mine owners in the immediate vicinity, and has led to a closer examination

owners in the immediate vicinity, and has led to a closer examination also into surrounding districts.

At San Antonio, the old Liberty mine is being opened in the lower levels, and a vein 24 feet wide has been located below the fault. As soon as spring opens, this district will be the scene of as great activity as reigned there fifteen years ago. At Belleville, the Northern Belle Mining Company is treating some very fine ore from the Candelaria mines, and feels confident that 1880 will show better results than any previous year. In addition to what has been said in regard to the general developments of our mining districts, it is worthy of note that railroad companies have been organized, and are organizing, to push lines from the Central Pacific Railroad southerly through the open valleys to all the principal mining

of our mining districts, it is worthy of note that railroad companies have been organized, and are organizing, to push lines from the Central Pacific Railroad southerly through the open valleys to all the principal mining centers in this part of the State. To the east, the Eureka and Palisade road contemplates extending southerly through the Little Smoky Valley to Hot Creek, Philadelphia District, Tybo, and Reveille. There is also a project on foot to connect White Pine, Ward, and Pioche with Eureka, in the not very distant future. To the north, the Battle Mountain & Austin Railroad is building with great vigor, notwithstanding the fact that we are in the midst of winter; and it hopes to have trains running before the middle of summer. There is talk of extending this line down along the Reese River, where, in the early days, there was so much excitement, through to San Antonio, and possibly Silver Peak and Montezuma. Still another project is attracting a good deal of attention—that of building a road from Wadsworth by Walker Lake to Belleville. This would open a district of country which has long been in need of transportation fscilities, and would give to commerce a large amount of bullion. The old project to connect Bodie with Carson by rail has at last taken shape, and the construction will be pushed with all expedition by the way of Walker River and Aurora toward Bodie.

As will be seen from a careful perusal of these facts, Nevada does not intend to be left out in the march of progress toward the thorough development of the mineral deposits of the West. It is true that Eastern capital has been attracted of late into Colorado, Utah, Arizona, and New Mexico, and also that Nevada's bullion product has fallen much below the average of former years; but 1880 will undoubtedly show a much larger output than 1879, and possibly will surpass any other year in its history. It is supposed that the Comstock will show up with some handsome ore-

average of former years; but 1880 will undoubtedly show a much larger output than 1879, and possibly will surpass any other year in its history. It is supposed that the Comstock will show up with some handsome orebodies during the year, that Eureka will do as it never has done in the past, and that the newer camps will have a largely-increased product.

Mining investors should not suppose, for one minute, that Nevada intends to give up her place as a leading State in bullion production without a strong fight, and, with railroad facilities such as she will have before the close of the year, she bids fair, not only to hold her own, but to surpass her best efforts in this direction.

In later letters, we shall have occasion to describe the progress of developments in detail at a number of mining camps.

IONE.

velopments in detail at a number of mining camps.

Belmont, Nev., Jan. 5.

#### PETROLEUM NOTES.

COMPARATIVE SYNOPSIS OF REPORTS FOR NOVEMBER AND DECEMBER, 1879 AND 1878.

10 G	18'	79.	1878.		
42 Gallons = 1 Barrel.	Nov. 30 days.	Dec. 31 days.	Nov. 30 days.	Dec. 31 days.	
Production for the month Daily average Stock at the wells Fron tank stock Otal stock Number of producing wells " "drilling wells " "dry holes Lygregate daily production of new wells Lyerage Number of rigs building	291,922 7,759,547 8,051,469 11,960 372 21 4,459 20	1,769,356 57,076 291,922 8,178,568 8,470,490 11,960 440 15 4,200 16 1-10	1,348,954 44,965 83,909 4,205,400 4,289,309 10,276 297 18 2,963 12 305	1,318,678 42,538 308,417 4,306,889 4,615,299 10,337 218 13 2,176	
Total shipments out of the region	1,453,645	1,532,585	1,281,410	992,7	

-Stowell's Petroleum Reporter.

#### PROGRESS IN SCIENCE AND THE ARTS.

Technology.

The Latest Novelty in Lightning-Rods.—The stoicism with which the The Latest Novelty in Lightning-Rods.—The stoicism with which the State of Ohio has borne the prodigious draught upon her resources in sacrificing so many of her citizens to the public weal, at the call of duty, has long since placed beyond question her claim to be considered as one of the most remarkable States of the Union. It will not, therefore, excite surprise to learn that the resources of this proud commonwealth are by no means "played out," and that she has lately given birth to an idea in the line of lightning-rods, so original and revolutionizing that, for the reputation and peace of mind of poor Ben Franklin, we are really glad the old man is dead and buried.

tion and peace of mind of poor Ben Frankin, in the state and buried.

This novelty is fathered by the "Chambers National Lightning Protection Company," of Cincinnati, in the State aforesaid, and marks an immense improvement over every thing of the kind ever before presented to a gullible public that expends hundreds of thousands of dollars upon public schools.

The Americans, says the Popular Science Monthly, apropos of the subject, are a progressive people, great on improvements, and the Westerners are especially wide awake in this respect. So the new lightning-rod is a great step forward in inventive science. It is laid flat on the ridge of the building, and turned up at the two ends, and has no connection with the ground. Its rationale seems to be that the lightning discharge is caught upon one of the points, and, there being no rod to convey it to the earth, it is obliged to "diffuse back into the air, where it belongs,

the earth, it is obliged to "diffuse back into the air, where it belongs, and whence it came."

The richest part of this story is yet to come. Prof. Macomber, of the Iowa Agricultural College, had the audacity to pronounce the new-fangled rod a humbug and a fraud, whereupon he is promptly prosecuted by the C. N. L. P. C., which lays its damages at \$50,000. Macomber is so badly frightened that he goes and gets the opinions of a lot of ignoramuses, like Tyndall, Loomis, Pickering, Silliman, Rood, Meyer, Clarke, Morton, and others, who, being naturally blinded by prejudice, can see no good in the invention, and, of course, agree with Macomber, that the thing is a humbug. But what will an Ohio jury say to this interference with the profitable business of the Lightning Protection Co.? We are decidedly curious to know. curious to know.

Technical Notes.—Prof. Egleston, in a recent lecture on Gold, made the point that the idea that this metal was confined to the most ancient formations must be abandoned, since it has been found in deposits of all formations must be abandoned, since it has been found in deposits of all ages. He made the curious calculation that all the gold in the world would only suffice to make a pile 25 feet wide, 45 feet long, and 25 feet high.—A paragraph is going the rounds of the technical press that sheet-iron covered with gum of the euphorbeaeeæ, common and luxuriant in the tropics, affords an excellent protection against fouling when exposed to the action of sea-water. A test-piece of iron, covered as above stated, and immersed at the Chatham dockyard, England, where as above stated, and immersed at the Chatham dockyard, England, where every thing rapidly becomes foul, was taken out after lengthened immersion quite clean. This gum is described as being intensely bitter and poisonous to the lower forms of life. Further details will be found elsewhere in this department.—The experiments in electric lighting, in London, inaugurated some time ago by the Metropolitan Board of Works, are said to have given such satisfaction that a further extension of the system (the Jablochkoff plan is employed) has recently been made from the Central Station at Charing Cross on the Thames embankment.—The sensation created by the last announcement from Menlo that Edison had succeeded in solving the problem of electric lighting for domestic purposes has died out sooner than we had anticipated. At present writing, the globes are affected with a disposition to crack, the carbon horseshoes disintegrate, and, saddest of all—for those upon whom it was unloaded—the stock of the company has fallen almost as rapidly as carroon norsesnoes disintegrate, and, saddest of all—for those upon whom it was unloaded—the stock of the company has fallen almost as rapidly as it "boomed." Moral: "Never 'holler' till you're out of the woods." —A contract for laying a submarine cable across the Gulf of Mexico, connecting the United States with the Mexican republic, has been approved by the Mexican Congress.

proved by the Mexican Congress.

The Audiphone, which, from recent accounts of its performances, bids fair to become a valuable instrument in assisting the deaf, is said to have been discovered by accident. The invertor, Mr. Richard S. Rhodes, of Chicago, who is very deaf, having noticed that he could hear the ticking of his watch by placing it against his teeth, though quite unable to do so by applying it to the ear, conceived the idea of the instrument now known by the name of the audiphone, which he succeeded, after a year or more spent in experimenting, in perfecting to its present condition. As now constructed, we learn from the Manufacturer and Builder, the audiphone closely resembles a fan. It consists, essentially, of a diaphragm of hard rubber, very thin and elastic, about a foot square, with rounded corners and a neat handle. When in use, a silken cord draws down on the inside the top of the diaphragm, presenting a convex surface to the speaker. In this position the upper edge is pressed firmly against the interior edge of the upper teeth, and the sound falling on this surface is conveyed to the auditory nerve. Many accounts of the remarkable effects of this simple instrument are given from time to time in the daily press, and there appears to be no reason to doubt its usefulness. and there appears to be no reason to doubt its usefulness.

and there appears to be no reason to doubt its usefulness.

Electric Brevities,—The London Telegraphic Journal is evidently impressed with the merits of the Brooks Underground System. It admits that, as regards cost, the latter will be only half as expensive, where 20 or more conductors are on one route, as when the same number of wires are strung upon poles. It admits that there is nothing perishable in the system, except the outside of the iron pipe; that the insulation of the system is equal to that of gutta-percha covered underground conductors; and that the conductors, being sealed in a pipe, are not liable to interruption by breaks, contacts, and other causes which affect overhead wires, and hence are capable of being worked to much greater capacity.—The British Lightcontacts, and other causes which affect overhead wires, and hence are capable of being worked to much greater capacity.—The British Light-House Board lately experimented with a novel system of signaling, the plan of which consists in reflecting the light of colored fire mixtures, burned in a closed chamber, on escaping steam, in flashes of long or short duration. It is stated that the flashes of illuminated steam could be seen at a considerable distance.—Referring to the principle of electric illumination by incandescence, which, until quite recently, was advocated by Mr. Edison, M. Schwendler, in an elaborate paper, affirms that, until we shall be fortunate enough to discover a conductor of electricity with a much higher melting - point than platinum, and the specific heat and weight of which conductor are also much lower than of platinum, and which, at the same time, does not combine with oxygen, we can scarcely expect that the principle of incandescence will be made use of for practical illumination.—

\*\*Manunt required February 1st, 1879.\*\*

\*\*Sanult required February 1st, 1879.\*\*

\*

network of triangles has just been effected.

A New Varnish for Protecting Metallic Surfaces, especially those of iron, is believed, as briefly noticed elsewhere, to have been found in the application of euphorbium gum. The history of this suggestion is stated to be as follows: The workmen of, Natal are said to have noticed that when they cut certain plants of the euphorbeacea, a thin adherent layer of gum remained upon them which effectually protected the blade from rusting. To determine the extent to which this protective influence could be relied upon, the experiment was tried of coating sheet-iron with the gum and immersing it in the sea-water of South Africa, which is highly detrimental in its action upon iron. The trial is affirmed to have proved so successful that a varnish was made of the gum dissolved in spirits, and this was applied to ships' bottoms and to other metallic surfaces. The adherence of the gum after the evaporation of the spirit is said to be perfect. A ten-years' trial of this preparation at the Chatham dockyard, already alluded to, is reported to have given equally satisfactory results, the iron so varnished having remained uninjured after exposure, during that period, to the corrosive action of the water of the docks. In Africa, where the gum is abundant, it is said to have long been in use as a preventive of the ravages of the white ants. Its virtues are ascribed to its perfect insolubility in water, and to its poisonous qualities and extreme bitterness, which make it an excellent protective agent against the lower forms of marine and terrestrial life.

A Medical Discovery of Great Interest, if verified, is announced by

against the lower forms of marine and terrestrial life.

A Medical Discovery of Great Interest, if verified, is announced by Dr. W. Cheatham in the Louisville (Ky.) Medical News. This gentleman announces that he has made the discovery that the use of the sulphate of cresine makes it unnecessary to use spectacles in case their use is caused by a flattening of the cornea from old age—a very common complaint. He states that this drug possesses the property of acting especially on the ciliary muscle, and contracting it, which has the effect of increasing the convexity of the cornea. He recommends dissolving one gram [grain?] of the sulphate of cresine in one ounce of water and putting one drop in each cye at bed-time. At first, it is said to produce the opposite effect—too great convexity of the cornea—or near-sightedness, but this is said to soon pass away. He affirms that, in his opinion, the remedy is perfectly safe, and recommends its use in cases of inflammation of the eye from various causes, for weakness of this organ, etc. Until it has been definitely ascertained that this remedy is not attended with unfavorable secondary effects, which can only be determined after its prolonged use, we feel disposed to recommend caution in its application. The observation, however, is of the utmost interest. ever, is of the utmost interest.

The Condition of the Blast-Furnaces of the country on the 1st of January, 1880, is given by the *Iron Age* in its last issue. The record, as our readers may suppose, is most encouraging for the continued prosperity of the iron trade. The figures given by our contemporary are as follows:

CONDITION OF FURNACES, JANUARY 1ST, 1880	),
In Blast.	Out of Blast.
Charcoal 93	146
Anthracite	67
Bituminous	80
	-

The rapid revival of the iron trade during the past year, after the prolonged period of depression from which it, in common with the other leading brands of manufactures, suffered for a series of years, is well shown by the following comparative table from the same source:

NUMBER OF	FURNACES I	IN BLAST, JA	NUARY 1ST.		
1875. Charcoal. 152 Anthracite 130 Bituminous. 81	1876. 95 100 98	1877. 73 87 84	1878. 79 98 86	1879. 79 96 82	1880. 93 165 126
Totals 363	293	244	263	257	384
NUMBER OF I	FURNACES OU	T OF BLAST,	JANUARY 187	Г.	
Charcoal	1876. 186	1877. 209	1878. 198	1879. 180	1880. 146
Anthracite 87 Bituminous 96	125 109	136 123	128 132	130 123	67 80
Totals 328	420	468	449	433	293

### Engineering.

The Egyptian Obelisk.—The Herald's correspondent at Alexandria, Egypt, reports that on the 6th of December the needle was safely lowered from the pedestal upon which it had rested for nearly 1900 years. The Dessouk, a steamer of 1600 tons register, will transport the obelisk to

The East River Bridge.—The following statements of the amounts expended and still required to complete the great suspension bridge be-

t	Estimated cost of the bridge, February 1st, 1879	\$13,708,026.60 10,103,553.54
9	Amount required February 1st, 1879. \$1,006,262.04 Expended since that date up to December 1st, 1879. \$1,006,262.04 Cash on hand and receivable from two cities at this date. 596,676,04	*
	cash on hand and receivable from two cities at this date 590,070.04	\$1,602,938.08
l	Amount to be provided for Add for advance in land, materials, and labor since February 1st, 1879 Add for contingencies	\$2,001,534.98 200,153.49 48,311.53
- 1		

Lot	1	2	tons			 									1	11,830	ounces	to	the	ton.	
6.6	2	4	6.6				 						 			4,993	4.6	64	5.6	6.0	
+6	3	8	44		 											1,234	0.6	64	44	66	
4.4	4	51	666			 										1.088	66	66	4.6	6.6	
6.6	5	8	- 66							 						568	64	66	44	6.6	

"The whole amount averaging above a thousand ounces of silver to ton, or, as said above, on careful tests made from the ore still not sampled, of a total value of \$118,500.

Ine whole amount averaging above a thousand ounces of silver to ton, or, as of \$118,500.

"Each week of working has shown up greater and richer ore-bodies, that have astonished the owners themselves. At the time of the compromise even, but little idea of the vast richness of the mine existed, as up to that time the highest mill-run that was made was but 1100-ounce ore, and that in a small lot. In the latter part of September, a body of gray sand, containing considerable quantities of horn-silver and chlorides, was cut, that assayed from five to twenty-five thousand ounces of silver to the ton. This has since been traced almost continuously a distance of 150 feet, with an average width of fifteen inches. It pitches rapidly down and its depth is unknown. Besides this immensely rich streak, great bodies of hard carbonates, rich in chlorides, have been blocked out, running from five hundred to 1300 ounces of silver to the ton. One lot of twelve tons sold to August R. Meyer & Co., contained 1306 ounces to the ton, and numbers of large lots of both sand and hard ore have run upward of a thousand ounces, while many lots have run from two to three thousand. One ton of ore, sold to Eddy & James, contained 10,306 ounces, and another half-ton 5535 ounces. Until this last great run, made in the past few days, only such of the very richest of the ore as it was necessary to take out has been mined, the streak being merely prospected.

"Since the completion of the new shaft and drift, a small amount of mining was done during the last few days of December, but the actual mining did not commence till Monday, January 4th. In considering the vast wealth of this great mine, it should be remembered the claim contains five acres of ground, and the workings so far do not cover one fourth of an acre. Blocked out in the mine already, by drifts extended along and around ore-bodies, at low estimates, place the value of the ore in sight at three millions of dollars, while that which exists, and is at present unknown, bewilders one to cont

Licht ville inities is the Lorio we .					
Mines.	Ton			Tor	is.
Chrysolite	1	25	Agassiz		5
Little Pittsburg	1	50	Iron Mine	!	25
Little Chief		50	Smuggler		5
Dunkin		15	Tucson		5
R. E. Lee		36	Silver Wave		10
Climax	!	20	Little Ella		5
Carbonate		36	Highland Chief		30
Yankee Doodle		5	Argentine		10
Morning Star		40	Little Giant		15
Colorado Prince			Oro La Plata		
Nevada		5	Scooper		10
Crescent & Ætna			Miner Boy		5
Long & Derry		5	Double Decker		3
Pendery & Glass			Others		35
Forsaken				-	-
Total tons				6	393

Second Contact reached in the California Tunnel.—The Times says:

"Telegrams recently received in this city announced in welcome but modest terms the reaching of contact in the California tunnel, near Leadville, an enterprise that has been pushed with skill and energy since the first of May. It is seven feet in the clear, and equipped with a double track of good iron, constituting, in all respects, the best piece of work of its class in the carbonate region.

"The tunnel starts from the main highway in California Gulch, near Meyer's smelting works, on the south side of Carbonate Hill, some 300 feet lower than the first contact in the Little Pittsburg and other well-known mines on the northern slope of Carbonate Hill.

"The tunnel penetrated porphyry for 440 feet before the contact was reached, but the ore now coming out gives highly-satisfactory returns, and has caused such a tide of visitors to the tunnel site that the superintendent in charge has been compelled to put on guards to keep out the rush.

"Not the least important phase of this discovery is the bearing it has upon the

second-contact theory—a hope that doubles the estimated wealth of the partially-developed Leadville mines and gives promise of deposit below deposit, to a depth

As the ore in the California tunnel is at least 300 feet below the first contact

"As the ore in the California tunnel is at least 300 feet below the first contact ore in the Little Pittsburg, on eof two things must be true—that the incline from the Little Pittsburg, on the north side of Carbonate hill, to the California contact, on the south, is greater than experience has led experts to calculate, or that the contact reached in the California tunnel is in line with the second contact in the Little Pittsburg and neighboring mines. Of the two theories the latter is most apt to prove true."

The Denver Tribune states: "Negotiations which have been pending for the sale of a number of mines on Fryer Hill, Leadville, have at last borne fruit, and, as a consequence, one of the largest sales for many weeks is to be reported. The mines disposed of are the Pittsburg, the Joe Bates, the Gambetta, the Bullion, and the Ida Nice, all located near tegether on the hill mentioned. The mines are to be stocked by the purchasing company, which is known as the Pittsburg Consolidated Company. The price paid was \$865,000.
"During the past month, the Little Ella Hill District, near Leadville, has come to the front as one of the most promising localities in the district; a large number of big strikes having been made upon it. Rich mineral underlies the whole of this hill at a depth ranging from sixty to one hundred and twenty feet. It seems that the sedimentary deposit, which is now found in the shape of carbonates, was very evenly distributed over this neighborhood when the porphyritic outflow from the adjoining range that now forms the little Ella Hill overspread it and formed the present ridge. The whole neighborhood is, of course, taken up with claims, not a single foot remaining vacant.

"It cost \$60, not \$1000, to take the \$115,000 out of the Robert E. Lee mine, in twelve hours.

twelve hours.

'It is stated upon pretty good authority that the owners of the Robert E. Lee mine declined an offer of a million dollars for a lease of it for seven days."

Leadville Heruld: "Probably the largest stock of ore on hand in the camp is at the Colorado Prince. Hundreds of sacks of the selected ore are stored at the orehouse on the mine and in the stamp-mill in the gulch below, while in the ore-bins at the mine and on the ore-platforms on the outside are piled about 4000 tons. No ore has been treated, as it is awaiting the completion of the stamp-mill. The mill will be ready to run inside of two weeks; the building is completed, the batteries in place, the cam, with the cams upon it, is also lined up, and in a few days will be connected with the engine. It is to start with fifteen stamps only, at first, although there are twenty-five here, ready to be put up, and the extra ten will be added in the spring. The mill will be the first stamp-mill in Leadville. Some years ago, one was running at Oro, upon ore from the Printer Boy, and the mill is still standing; but when carbonates were discovered, little attention was paid to the finding of gold ores. The amount of ore on hand at the Colorado Prince, Miner Boy, and other locations on Breece Hill will keep the mill busy for a long time, and, no doubt, future developments will require another mill before a great while.

time, and, no doubt, future developments will require another mill before a great while.

"On Breece Hill, above South Evans Gulch, mining is being prosecuted as vigorously as ever on the developed properties, although many of the prospects have been abandoned for the winter. The snow is very deep, and travel is only possible over the beaten roads or trails. There is no doubt but that this entire portion of Breece Hill will be a busy camp next summer, and not only the present locations will be worked, but many new ones made. Enough development has already been made to make it almost certain that the great mineral belt underlies the entire hill. But little attention was paid to the section until the developments on the Highland Chief mine early last summer—and the more work that has been done on that property the greater the encouragement, while a score of mines are now in pay on the hill."

The Silver Cliff Prospector remarks as follows, concerning an important property in that locality: "The Prospector has had occasion more than once to speak of the astonishing riches that are dug from the Bassick mine, and its reputation is well known to our readers. A report of tests of mineral from this mine, given in our columns not long ago, showed the presence of unusually large quantities of both of the precious metals, and gave as the high value of one ton of the ore, the large sum of about \$2400. This famous mine is 'so well known that it has become proverbial; and to illustrate the promise of a young mine, it is spoken of as a second Bassick. As the work of excavating goes on, richer and more inexhaustible beds of ore are revealed; and the Bassick will send out many millions more of money to tempt the miser's greed. Two thousand dollars' worth of ore is daily brought over to the sampling works of Silver Cliff, and after being crushed and made ready for shipment, it is transported to Omaha, where if is reduced and refued."

The Register-Call is informed that an effort is being made among capitalists of this country, l

is reduced and refined."

The Register-Call is informed that an effort is being made among capitalists of this country, looking forward to an early resumption of work in the Leavitt mine, property of Bela S. Buell, Esq. It has always been very much of a mystery why this mine has been allowed to remain idle for so great a length of time. The mine and mill building are supplied with every possible convenience for mining and milling the ore. Should a pool of practical men succeed in getting control of the property, which the Register-Call trusts they may, this mine will be made to produce more largely than ever before.

The same paper states that the Caribou Consolidated Mining Company has resumed the shipment of silver bullion East. Last week, through the Boulder Bank this company shipped three bars of silver to the company's head-quarters in New York. Now that the buildings and machinery destroyed by fire last fall have been replaced, the usual dividends of that company may be confidently expected.

peered.

A correspondent of the Fort Collins Courier says:

"We learn from practical miners, that North Park promises to rival any thing yet heard of in Colorado, this coming spring. Already, nearly a hundred mines have been located, some assaying over 1000 ounces in silver to the ton, and a large number assaying as high as \$27 and \$30 per ton, on the surface. Mill sites, coal lands, and ranches have been taken up in the neighborhood of the mines, and a town laid off and named Crescent City, which promises big inducements to capitalists this spring, as well as to mechanics and laborers of all kind. There are, at present, three roads building into North Park from the flourishing and enterprising town of Fort Collins, and will probably be ready as soon as the snow has disappeared in time for spring immigration. All those desiring to visit North Park next summer will do well to stop off at Fort Collins, it being the nearest railroad point."

A letter from the Summit Mining District, in Rio Grande County, states that on January 15th there were ten feet of snow on the level. The altitude is 11,300 feet. Advices from various portions of Colorado concur in representing the snowfall on all the main ranges to have been, so far, greater than during the entire winter of 1878-9.

This will be a temporary disadvantage in the apparation of presenting at a discontinuation.

winter of 1878-9. This will be a temporary disadvantage in the operation of properties at a distance from reduction works, and may necessitate a postponement of general prospecting for some weeks later than usual next spring; but it will be an important aid to placer-mining. Some gulches were not worked last summer, for the first time in years, on account of the scarcity of water—the snow-fall during the previous winter having been much below the average. Deep snow is of course no impediment to mining "under cover," or to milling. It does not in any way affect works where the mine and mill adjoin, or are connected by tramway, provided supplies have been laid in during the summer or fall. The Little Annie mill, in the Summit District, the highest gold reduction works in the world, did not lose an hour's time during the winters of 1876-7 and 1877-8. Many placer mines will be worked next season, and some mills, that were compelled to lie more or less idle last summer for want of water.

#### UTAH.

THE SILVER REEF DISTRICT.—We are indebted to the Silver Reef Miner of

The Silver Reef District.—We are indebted to the Silver Reef Miner of January 10th for the following:

"One 'C. B. B.,' in a letter from Silver Reef to the New York Mining Record, makes the astonishing statement that the Stormont Company mills 'all of the custom ore from chloriders in this camp, and then ships the bullion as Stormont bullion,' all of which, he thinks, 'is calculated to deceive Eastern men who may not know better.' The impression sought to be conveyed by this statement is that, without working the ores of tributers, and shipping the product as Stormont bullion, the Stormont Company can not ship its usual \$40,000 to \$50,000 per month. Let us see whether they can or not.

"The November yield of bullion from all ores run through the Stormont mill amounted to \$46,810, while the December turn-out showed \$48,073—a total of \$94,883. The total value of the custom ores milled during the same period was \$12,982, which sum, deducted from \$94,883, leaves \$81,901 as the bullion product from the company's ores. Now, add to this \$81,901, the sum realized from working the custom ores—which may properly enough be counted Stormont bullion, though not taken out of the company's mines—and it will be seen what the statement of 'C. B. B.' amounts to.

"It is also stated that the company is 'not raising a pound of ore' out of the Last Chance mine every day in the week.

"Another statement, that the 'ore of the Thompson & McNally is low grade, not paying to mine as they go down,' shows that the Record correspondent either seeks to willfully misrepresent the property, or is himself in ignorance as to the grade of ore there mined. The ores of the Thompson & McNally are sorted, and, after the high-grade has been picked out and sacked, the remainder, the 'low-grade,' still gives an average of from \$25 to \$30 per ton. The first-class ore runs all the way from \$80 to \$160 per ton, and, to our knowledge, there are 20 tons of this ore now sacked at the mine, awaiting shipment to the mill. Now, if large quantities of such valua

#### NEW PATENTS.

The following is a list of the new inventions relating to Iron, Coal, Mining Machinery, Chemical Apparatus, and the treating of Precious Metals, etc., from The Official Gazette of the United States Patent Office, for the two weeks ending January 30th, 1880:

No. of Patent. Title of Invention.	Name of Inventor.	Residen	re.
223, 238—Steam-Boiler and other Furnac 223, 237—Rotary Engine	William E. Ludlow Joseph Wharton. Seth H. Bevins. Pierre C. Du Bois. Philip H. Sharp. John H. Irwin. Elisha S. Mack John W. Miner (a). ters. Charles N. Petesch (b. James A. Stout (c). Joseph W. Thompson(. etc. Calvin Detrick (e). Goldsbury H. Pond (f. Walter M. Bailey. s. George H. Bliss John Brown. Lucius D. Chapin. George Dalton. David Flanery. Abram J. Martin. Harris Morse (g). James Morton. Josiah M. Simpson (f. Cyprien M. Tessié I	Jersey Cit. Philadelpi. New York. Copper Ci. Harrisbun Philadelpi. Painted P. MountPle. O. Chicago. Belleville J. Salem, O. Pittston, J. New York. New York. Jackson, Catskill. Columbia Chicago, Leeds, C. York, F. Jackson, Catskill. Olumbia Obshkosh, Mu	y, N. J. hia, Pa. City, ty, Cal. g, Pa. hia, Pa. hia, Pa. hia, Pa. hiia, Pa.
223,557—Dynamo-Electric Machine 223,561—Apparatus for Forming Molten	Elihu Thomson	Philadelp	hia, Pa.
into Ingots, etc	George Webb	Johnstow	n, Pa.
into Ingots, etc	46 46	4.6	44
223,565—Lining for Molds for Metals	66 66	6.6	4.6
223,566—Ingot-Mold	46 46		6.6
223,568—Hydraulic Press	14 16	46	4.6
223,571—Manufacture of Anhydrous Su	Inhuric		
Acid	Johann A W W	1.	
	ters	Leipsic,	177
223,581—Rock-Crusher. 223,590—Mining-Drill. 223,606—Steam-Boiler Furnace. 223,610—Fuddling and Boiling Furnace. 223,623—Magneto-Electric Machine. 223,626—Mining-Machine.	Bernard Rogan Eric A. Witherell (i)	Pittsburg	g, Pa.

- (a) Assignor to himself and William B. Miner, Connellsville, Pa.
  (b) Assignor to Murry Nelson, same place.
  (c) Assignor to himself and Harrison Machine Works, same place.
  (d) Assignor of one half his right to Buckeye Engine Company, same place.
  (e) Assignor of five twelfths of his right to Franklin C. Mosier, same place.
  (f) Assignor to Pond & Bradford Boiler Company, same place.
  (g) Assignor to Asahel J. Severance, San Francisco, Cal.
  (h) Assignor of one half of his right to Alexander Ault, same place.
  (j) Assignor to Herman E. Dick, same place.
  (j) Assignor to Lechner Mining Machine Company, Columbus, O.

#### PROPOSALS

For the benefit of many of our readers, we compile weekly such proposals and solicita tions for contracts, etc., as may be of interest. The table indicates the character of proposals wanted, the full name and address of parties soliciting, and the latest date at

#### FINANCIAL.

#### Gold and Silver Stocks.

New York, Friday Evening, Jan. 23. There has been a very important business in mining stocks in this market, and although many of the stocks are characterized by weakness, yet it is an evidence of the interest that is taken in mining by the public, and the decline is greatly due to the fact that holders of long standing have found this interest so large that they have been unloading on the public to a large extent. The same efforts a few months ago would have caused the greatest demoralization, while now it does not disturb matters much, but rather tends to bring into the market fresh material. In some cases, a reaction will take place, while in others even the present prices are high.

The Comstock shares have been quiet and weak. California has sold at \$4,60@\$4, and records transactions of but 1765 shares. Consolidated Virginia has had larger dealings, yet not up to the average of late. The quotations have been \$4.90@\$4.15, with sales of 3110 shares. Sierra Nevada records but 100 shares at \$24@\$221/6 early in the week. On Saturday, 5 shares of Bullion sold at \$6. Consolidated Imperial shows a large business, selling up to \$1 on Monday, and back to 83c. to-day. The sales aggregate 10,700 shares. Leviathan sold from 35c, on Saturday, up to 45c. on Monday, and back again to 39c. to-day. sales for the week amounted to 1350 shares

The Bodie stocks have had a moderate busines Bodie sold at \$8% on Saturday, but declined to \$7 on Tuesday, under the influence of a reduced rate of dividend; it recovered, however, to \$8@\$8½, exdividend, later in the week. The transactions aggregate 1570 shares. Standard records sales of 2460 shares, selling from \$33 down to \$31%, and recovering to \$32½. Bechtel advanced from \$2 to \$2.25, and declined to-day to \$2.05, with sales for the week of 2764 shares. Consolidated Pacific only records 100 shares at \$4. Goodshaw has been weak, selling from 43c, to 37c, on 2100 shares. May Belle has been weak, selling from 33c. down to 27c... with transactions aggregating 2300 shares. Standard has held its stereotyped position, at \$1.85@ \$1.95, with sales of 700 shares. Did the public buy any? Tioga was active for four days, and during the past two days there was not a quotation. This looks suspicious and indicates some washing in the previously quoted sales. The transactions for the week amounted to 2530 shares at \$3.10@\$3.50.

The Tuscarora stocks have had a liberal business Belle Isle has sold at \$1.80@\$1.55@\$1.70, with trans actions amounting to 1620 shares. The sales of Grand Prize amount to but 75 shares at \$1.50. Independence records sales of 1355 shares at 80@88c. Martin White sold at \$1.35@\$1.25, with transactions of 550 shares Navajo records sales of 700 shares at 42@38c. Tuscarora has been quite active, but weak, the sales amounting to 19,600 shares at 31@17c.

The miscellaneous San Francisco stocks have b quiet. Eureka only records 565 shares sold at \$16% @\$16. Caledonia (B. H.) has been a little stronger. elling at \$3.25@\$3.50, with a business of 450 shares Tip Top has been quite strong, selling at  $3.20 \$ @\$3.25, with transactions of 2050 shares

The dealings in stocks of the regular lists of our exchanges have been as follows: Caribou has had but a moderate business at \$51/4@\$5, the sales amounting to 2200 shares. Central Arizona has been the leading speculative stock among the mining shares. The sales aggregate 59,330 shares, and, under considerable newspaper advertising, a large amount of business was actually done; yet, at the same time, there were unquestionably a great many matched orders Will some one please state why this stock should sell at even the lowest price of the week, which was  $\$11\frac{1}{2}$  to-day, while on Monday the price was up to  $\$17\,?$  The public should carefully examine into the merits of this property through disinterested channels before investing, and not give any attention to much that enters print relative to the mine. Climax has also been quite speculative, and has had considerable manipulation. The sales amount to 12,360 shares at \$3.50@\$3.05, both prices being touched to-day. Deadwood sold at \$251/8 on Saturday, and \$20 to-day, with several blank days. The transactions for the week amounted to but 720 shares. We can learn of no change in the company's prospects for the worse. Excelsior, which is under the same manage-

355 shares, while Homestake, another under this management, declined from \$371/2 to \$35, with sales of but 300 shares, and Ontario from \$39 to \$37 on sales of 40 shares. Findley has been weak but fairly active. The sales amount to 4900 shares at 65@57c. Great Eastern, under promises of early resumption of dividends, has been very active and stronger. The transactions aggregate 89,000 shares at 47@59@55c. Green Mountain has been quite active and strong, selling at \$2.30@ \$2.20 with transactions of 11,935 shares. Hukill still holds a prominent speculative position, and under the announcement of striking a continuation of the ore body, in the third level, has been stronger. amount to 33,790 shares at \$4.15@\$4.80@\$4.40. La Plata has been quiet but stronger, the sales amounting to but 765 shares at \$51/8@\$6. Leadville has been active but weaker, under a pressure to unload. The sales aggregate 16,640 shares at \$3.90@\$3.35. Little Pittsburg has been quiet and weak, the sales amounting to but 860 shares at \$29% @\$281/4. The indications favor quite a recovery in this stock in the next 60 days. It is said that the insiders are unloading Moose at a lively rate. Be this as it may, the price declined from \$2.80, on Tuesday, to \$2 to-day, without unfavorable news from the mine, and the sales amounted to 24,765 shares. New York & Colorado records 200 shares at \$2. The sales of Plumas have been but 100 shares at \$2.50. The Quicksilver stocks have been very quiet, the sales of Preferred amounting to but 500 shares at 68@651/2, and of Common, 700 shares at \$221/@\$21. Rappahannock has been quiet, the sales aggregating but 17,800 shares at 39@ Shamrock has shown a good business, with an inclination to strength. The sales amounted to 4050 shares at 95c.@\$1.25. South Hite shows quite a large business, but weak. The transactions amount to 22, 375 shares at \$3.40@\$3.10. Sutro has been dull but fairly steady, with sales of 5335 shares at \$3% @\$3%

In the "fancies," we note transactions as follows 500 shares of American Flag at 50@45c., 58,700 Buckeye at 60@54c., 11,100 Dahlonega at 21@18c. 4300 Gold Placer at 27@29c., 26,100 Granville at 48@43c., 34,210 Lacrosse at 54@51c., 2400 Lucerne at 19@18c.

Our dividend notices for this week show that the amounts declared aggregate \$395,000. The La Plata Mining and Smelting Company declares 7½c. per share, payable January 31st, and carries over a cash balance of \$136,679.58. The transfer-books closed January 21st. The Bodie Consolidated Mining Company declares a dividend of 25c. per share, payable at the banking-house of Messrs. Laidlaw & Co., February 2d. The transfer-books closed January 20th. The Breece Mining Company has declared a dividend of 5c. per share, payable February 9th. Transfer-books will be closed from February 2d to 10th. The Little Pittsburg Consolidated Mining Company has declared its ninth regular dividend of 50c. per share, payable February 2d. Transfer-books will be closed from January 24th to February 5th. The Chrysolite Silver Mining Company has declared its third regular dividend of \$1 per share, payable on the 26th inst. The transferbooks will be closed from January 22d to January 27th. The Stormont Silver Mining Company has de clared its first quarterly dividend of 30c, per share, payable February 15th. The transfer-books will close February 1st, and reopen February 17th.

The Boston Advertiser contains the following

The Boston Advertiser contains the following:

"Professor Raymond is now in New York, and personally verifies all the statements made in his published report on Colorado Central Consolidated. He states that the property is developing even better than indicated in the reports, and many of his personal friends are investing in the stock, as being one of the safest and most profitable ever offered on the Eastern market. The mines (seventeen in number) have been worked for many years and always at a profit. They are upon a true fissure-vein or series of veins, and the ore is rich in quality and inexhaustible in quantity. The present out-put yields, net, \$60,000 per month, or 4 per cent per month on the present price of the stock, with a certainty of a large increase."

The "published report" of Dr. Raymond here alluded to, is the Report of the United States Mining Commissioner, rendered in 1874, and describing the condition of the Colorado Central mine at the end of 1873. On page 286 of the volume, will be found the Commissioner's statement that Mr. H. Stoelting (now deceased) furnished for that year the report on Clear Creek County. Mr. Stoelting was a competent and careful reporter; but the collection of statistics for a general report to the government is not like the critical examination of a mine in the interest of purment, declined from \$24% to \$21% on a business of chasers. Nor could Dr. Raymond or any body else,

after the lapse of some years, "personally verify," in such a way as to endow with present, decisive value. this statement of the condition of a mine in 1873. Moreover, the Commissioner's Report of 1876 (page 303) shows that in 1875 the bonanza described in the Report of 1874 had been worked out. The Colorado Central mine has, as we are informed, been succe fully worked since 1875, and now promises to be both productive and profitable. But this fact is to be established by other and later evidence than the old government reports referred to. Dr. Raymond has published nothing on the subject; and the use of his name is unwarrantable. The gentlemen concerned in this enterprise would probably be the last to use it in that way; but their prospectus is somewhat to blame for the misunderstanding. Dr. Raymond is now absent, on his way to the Pacific; and we do not profess to know his present personal opinion in this case.

SAN FRANCISCO MINING STOCK QUOTATIONS.

Daily Range of Prices for the Week.

NAME		C	LOSING	QUOTA	TIONS.		Open-
OF COMPANY	Jan. 16,	Jan.   17.	Jan. 19.	Jan. 20.	Jan. 21.	Jan. 22.	ing. Jan. 23.
Alpha	11	12	10%	111/4	111/4	1034	10%
Alta	416	45/8	5% 1% 1%	514	51/8	47/8	43,6
Argenta Bechtel	114	13/8	178	114	178	1 2	2
Belcher	91.6	1334	1018	101/2	943/4	10%	105
Belle Isle	1%	1334	194		1.93	156	2078
Belvidere	15-16	27-32	11/4	11/4	3.50	11/8	
Best & Bel.	1314	141/2	13	1316	1398	1374	131/4
BlackHawk	29-32	73/4	94	834	27-32	29-32	
Bodie Boston Con.	114	114	11/4	114	114	0	11
Bullion	636	61/2	136/12	6	55%	57/8	174
Bulwer				111/4	10		
Caledonia	134	134	31/4	214	21/4	17/8	
Cal., B. H California	434	234 43/8	414	132/4	412	31/8	
Chollar	876	91/8	93/8	41/8	8 8	876	4
Con. Imp	15-16	1	1	27-32	29-32	13-16	13-10
Con. Imp Con. Pacific.	5	434	5	47/8	41/2		41,
Con. Va	43/4	434	41/8	41/4	414	41/8	41
Crown P'int	5 21-32	$6\frac{6}{8}$ 21-32	57/8	01/8	58%	5%	58
Dudley Eureka Con	161/2	1534	13-16 16½	1534	34	11-16 17	
Exchequer.	4	41/4	4	4	37/8	334	33
Goodshaw	13-32	13-32	13-32	$13\ 32$	13-32		0.9
Gould & Cur	63/4	7	65%	61/8	61/8	61/4	61
Grand Prize		13/8	116	116	11/2	15%	** * *
Hale & Nor.	87/8	87/8	834 194	88% 15%		8½ 13-32	81
Hillside Indep'd'nce	29-32		3/4	198	134 29-32		29-3
Jackson			74	74		21/2	20-0
Julia Con	234	27/8	31/4	3	234	216	21
Justice	21/2	23/4	31/4	3	314	212	2)
Kentuck Lady Wash	10.10	11/	11/8	15-16	29-32	****	
Leeds	13-16	11/6	178	10-10		1	****
Leopard	74	21-32 5-32	5-32	3-16	3-16	134	
Leviathan	7-16	1,6	1/6	7-16	7-16	13-32	
Mammoth .	21/8	21/4	2	21/8	23/	23/8	28
Manhattan.	1 66	17/8	11/2	134	114	*****	
May Belle . Mar. White. McClinton.	5-16	5-16	11/4	11/4	114	3-16	
McClinton.	13/8 21-32	34	3/4	3/4	34	21-32	****
Mexican	191/6	1958	1794	1914	1814	1816	191
Mono	65%	7	814	81/2	734	81/4	81
Navajo	13-32	13-32	5-16	11-32	11-32	11-32	
North. Belle N. Belle I'e	9	91/4	91/2	98/8	91/4	91/2	
N. Bonanza		11/2	1	11/4	11/4		
N. Standard		-/2					1.9
Ophir	191/2	20	18	191/4	191/2	19	191
Ophir Orig. K'ys'e				****		****	2.8
()verman	81/4	93/4	97/8	988	834	834	
Potosi Ray. & Ely.	518	51/2	514	51/4 29-32	29-32	29-32	51
R. de Monte	11/2		11/4		11/2	11/4	
Savage	734	8	77/8	77/8	738	73	7
Scorpion				*** **			
Seg. Belcher	231/4	23	1934	221/2	*****	*****	21
Sierra Nev. Silver Hill.	11/2		15%	13/8	211/6	213	22
Silver King	67/8	634	71/4	714	178	1	1
So. Bulwer.	11/4	184	11/2	138	11/8	1	
Summit			1			1	
Syndicate .		17/8	134	2	17/8		
Tioga	3	3	38%	31/4 38/6	334	31/2	
Tip Top Trojan	31/4	31/4	31/2	3-32	1379	09	3
Tuscarora	1/4			0-0%	1-10		
Union Con.	47	47	431/	433/4	44	438	43
Utah		31/8	1				16
	1 19	21/	3	3	31/8	38	1
Wales Yel. Jacket	1136	113%	121		128	123	

REVIEW OF THE SAN FRANCISCO MARKET.

There is not much of importance to observe respecting the course of mining shares in San Francisco during the period covered by our review. On the first of the week, prices were generally higher; since when, however, they have reacted, and the general market opens to-day at nearly the same as a week ago. The Bankers' Magazine says that "the new Constitution of California makes the directors corporations personally responsible to both stockholders and creditors for all losses resulting from the embezzlements and defalcations of subordinate officers. It is upon stockholders that such losses ordinarily fall. To avoid liability to stockholders, the directors of some corporations are asking them to sign a paper releasing them. It is set out in such papers that the consideration of this release is the

# GENERAL MINING STOCKS. Dividend Paying Mines.

NAME AND LOCATION OF	Feet on	Capital	SHARE			ESSMENT				IVIDEND								MAI	E.						1
COMPANY.	Vein.	Stock.	No.	Par le	Total evied to	amou	and nt per		Total paid to	Last I	oivide	end.	Jan		Jan.		Jan			. 21.	-	. 22.		1. 23.	SALES
gentaNev	1.500	10,000,000	100,000		75.000	Jan., 18		_	date.	July. 1	870:	20	H.		Н.	L.	H.	L.	н.	L.	H.	L.	н.	L.	-
le Isle Nev	1,500	10,000,000	100,000	100 i					300,000 5,397,200	Dec. 1	879	25 1 00	1.80	1.60	1.75	1.70			1.60	*****	1.65	1.55	1.70		1
tail, G Col. tail Tunnel, G Col.	2,500	1,136,630	227,326 20,000	5	52,000	July 18	373 0	30	125,030 56,000	Sept.	879	15							**** *						
gs Con., G Col.		10,000,000 2,000,000	100,000 200,000	10	75,000	May. 18	379 1	00	1,175,000 8,000	Dec.	879	0 04	****	834	8		71/4		\$81/6		8		81/4	8	
ornia, G. S Nev oou Con Col. ral Arizona Ari	1,400		540,000 100,000	100 .	*****			3	1,320,000	Dec Jan	1879	50 10	4.50	4.40	4.60 51/8	4.40	4.35 514	4.15	4.20	4.10	4.25	4.20	4.10	4	
lar, G. S Nev	700	10,000,000	100,000	100		Dec. is			3,080,000	Feb.	872	1 00	161/8	1498	17	15%	1634	14	15%	141/4	14%	127/8	131/8	111/2	-51
vsolite, s Col. nax Col. S. Virginia, G. s Nev	0	2,000,000	200,000	10	********				40.000	Jan	1830		3.50		3.30		3.35		31/4	31/2			3.50		1
idence, G. B Nev	101		24,980	100	474,600 256,320	Apr. 1	873   3 878   6	00 4	78,000	Dec	1879 1865	814		4.60	4.90	4.65	4.40		4.35		4.35		4.30	4.15	
vn Point, g. s Nev		10,000,000	100,000		2,210,010	Dec., 1	879	) 5) 1	25, 00	Jan	1880	2 00	2516	25	2410		25					****	23	20	
ka Cons., G. S. L. Nev	525 acre	5,000,000 s 10,000,000	100,000	100	100,000	May. 1	876		4,075,000			25	10%	10%	2178	161/8	161/4	161/8			16		22	2176	
d & Curry, G. S Nev	61	200,000	108,000	) 1	3,044,000	July. 1	879	1 00	8,000 3,826,800	Oct.	1870	10 00			61		65		65	63	63	60	61	57	
t Eastern	1,50	0 10,000,000	300,000	0 1	220,000	Dec 1	879	75	10,000	Feb.	1879	1 00	50	47	1.59 54	50	53	51	55	50	59	56	1.50 57	55	
& Norcross, G. S Nev	40	0 11,200,000	112,000	0 100	3,094,000	Sept. 1	879	1 00	1,598,000	Jan Apr.	1871	5 00		8.25	2.30	2.25	2.30		#2.25			2.20		2.20	
estake, II Dak 1, S Uth		. 10,000,000	400,000	0 25					200,000	Jan	1880	30 25			******		371/2		*****		. 35		35		
ll, g. s	7. 1,50	0 10,000,000	100,000	0 100	80,000	Dec. i	879	25	225,000	Dec., Sept.	1879	25	89	4.15 87		4.25 85	4 85 84	81	80	4.55		4.35 85	87	85	
consNev	7. 1,20	0	30,00		200,000	Aug. 1 Oct 1	879	2 00	1,252,000 62,500	Sept	1873	5 00 0 25			*****									***	
ville Col		. 2,000,000	200,00	0 10					150,000	Feb.	1880	756	3.70	3.45	3.90	3.65	3.70	51/8	8.75	3.60	3.70	3.3	35	3.45	
ard, L. G. S Ne	3,00 1,50	0 5,000,000	50,00	0 100	342,500	Sept. i	879	50	162,50	Oct Dec.	1876	0.50	leere!		*****										1
hattan Nev	129,81	20,000,000	100,00	0	200,000	July. 1	1879	1 00		Feb.	1877	1 00			291/4	29	29	281/2					281		
in White Net imac, s Ma	8. 1,50	0 500,000	100,00	0 5	850,000	Jan. 1	1880	50	120,00	0 July. 0 Mar.		0 50					1.35		*****		1.30		1.2	1	
e	39,00	0 2,000,000	200,00	0 10		Feb 1			550,00	0 Dec. 0 Mar.	1878	0 50	2.80	2.75	2.80	2.75			2.70	2.4	2.50		2.33	-	
hern Belle, S Ne	v. 1.60	1,000,000 0 5,000,000	50,00	0 100					1,500,00	0 July. 0 Nov.	1877	1 00	3	*****	******								2	****	
rio	1. 3,00 v. 67	0 10,000,000 5 10,080,000	100,80	0 100	2,594,20	Nov.	1878	1 00	2,550,00 1,603,20	0 Jan.	1880	1 0	)		381/4								. 38	37	1
Sl. G. S NO	7 70	0 11,000,000	112,00	0 100	112,00	Dec.	1879	0 50		0 Dec.		0 4	)	*** *	*	*****	,								
nond & Ely, G. S. Ne	v. 5,00	1,000,000	120,00	0 100	*********	Sept.	1879	1 00	3,075,00	0 July 0 Sept.		3 0													
mond, s Nev Patch Nev oseph, L Mo	v. 1,60 2,000 ac	1,350,000 8. 1,000,000	. 30,00	0	157,50	Dec.	1878	1 00		o Dec.	1877	0 2	5			****									
ge. G. S Ne	v. 80	0 11,200,00	112,00	0 100	4,684,00	Dec.	1879	1 00	250,00 4,460,00	0 June	1869	3 0	0	****											
on, G. S Col a Nevada, G. S Ne	v. 3,65	0 10,000,000	100,00	0 100	3,450,00	Oct.	1879	2 00	102,00	May Jan.	1871	1 0	0 24		231/4	231/2									
r King Ari dard Cal ow Jacket, G. S Ne	1.00	10,900,00	100.00	NO TONE	50,000	JULIA	1878	1 00	1.509.00	0 Nov. 0 Jan.	1880	0 5	0 33	32	33	3136			32		. 32		325	2	
		22,000,00			3,275,00		1019	1 00	2,184,00		1911	2 5													
					********				********		****														
														******		*****									
ra, G. s	v. 60 5,30	0 1,250,000	108,000	0 10	*	o Jan.	1879 1880	1 00 0 50	Divide						* - **		50e						45c		
imore Cons Ne	V. 1.08		84,00	0	1,015,0	00 Jan 00 Apr.	1878	0 90							*****						****				
idere	1.50	0	4504 (30)	0	96,0	00 Sept 00 Oct 00 Jan	1879	0 13	······································				. 2.05		2.15	2	2.15			2	2.25	2.15	2.15	2.05	
ha & Edith. G Vir & Belcher, G. S Ne	645 ac	s. 5 10,080,000	000,00	0 1		00 Dec.											****					****			
lion, g. s Ne	v. 943	2,000,000	100,00	0 5	*	00 Dec .		0.50					. 53c	50e	54e	51c	59e	58e	60c	57e	60c	56c	60e	56e	
B. H Da	k	10,000,000	100,00	0 100		Dec 00 Jan	1877	0.50					. 1134	ii	11¼ 3.30	1056	11 3.50		11		- 5.46		1036	101/8	
nier Co.	2,18	500,000	250,000	0 2	1,835,9	00 Dec	1879	0 50									0.00								
llenge	3,7	5 250,000		0 10	*	00 Nov.	1	0 20																	
. Pacific Cal	1,4	600,000	60,00	0 50		09 Jan	1880	0 20					. 95c	92c	1	97c	95e	90e	90c	85c	90e	88c	84c	83e	
lonega	v. 1.50	250,000	100,00	100	70,0	00 Feb	1879	0 1							21c	19c .					19c			18e	
rees Ne	Z 1,50	0010,000,000	100,00	0 100	750,0 140,0	00 Apr.	1878 1879	0 20									*** *								
hequer, g. s Ne i Placer, g Co		5,000,000	200,00	0 25	480,0	July.	1879	7 90					980	27c		27e	28e		29e	27c	*****		29c	17c	
dshaw	C. 1,231 ac	s. 300,000	300,00	0 1		Dec.			5				470		43e	41c 44c	40c 45c	39c 44c	39e	38c			39c 48c	37e 48e	
a, G. S Ne	v. 3,00	00 10,000,000	110,00	0 100	1,130,5	00 Aug. 00 Dec	1879	11 00										****							
g's Mountain, G	C	1,200,000	120,00	0 10	3,079,0	00 Dec	1870	0 00																	
suth Ne rosse Co. lathan Ne	3.9	00 10,700,000	100,00	0 10	-	00 Aug.							520	49c	53e	52e	54e	52c	52e	50c	530		52e	51e	*****
erneCo lposa preferredCa	1. 4.20	00 5,000,000	500,00	0 10	*	00 Aug.		25			****	*****	. 37c		19c		43e 19e		40e		99e 18e				
Belle Ca	l. acres.	10,000,000	100,00	0 100	1,425,0	00 June 00 June	1878	1.00																	** 9*
racken Ar	1. 1.00	00 10,000,000	. 00,00	0	75,0	00 Jan . 00 Oct	1879	0 25	5				320												
ican, G. S Ve	v. 60	10,000,000 10,080,000 50 5,000,00	100.80	100	919,8	00 Sept. 00 Dec., 00 Sept.	1879	2 00																	
nio No	v 1 5	00 10,000,00 10,000,00	100,00	100	145,0	or Sept. Or Sept.	1879	0 50				***					40c		40c				40	38e	
York Ne Standard Ca Keystone Ne	V. 1.5	10,000,00			*****	00 July	1879				1				1.95		1.90				1.85		1.85		
rman, G. S Ne eksilver preferred. Ca	v. 1,2 1. 8,500	00 3,840,00	0 38,40	U 100	3,481,0	So Dec.	1879	2 00			****			6734											••••
pahannock, G Va	narag	5,708,70	0 57,08	100	*	*****			********		****		. 2214		2176	21 .	980		900		6516				
mrock Ne	v. 1	640,00	6,40	100		00 Oct.	1876	3 00			****					87c	38e	37e		36e				****	
er Hill, G. S Ne	v. 5,4	10,800,00 10,000,00	0 108,00	100	1,458,0	00 Oct 00 Mar	1879 1879	0 50			****		. 1 10	95e	1.20	1.10	1.15			1.10					
mont, s	h	. 2,500,00	0 100,00	25	*******			*****					3.45	8.25	3.40	3.15	3,35		3.30	3.10			3.30	3.10	
or Tinnel Ne	v	30,000,00	0 2,000,00	0 50	120.0		1876	0 50						35%	37/6	334	3%		334	356	314	2.40			* * * * *
Ca Ca	1. 1,5 1. 1.2	00,000,00	0] 100,00	100	155,0	00 Apr. 00 Dec .	1879	0 20			***		. 3.40	3.25	3.25 3.40	3.10	3.25		3.25 3.50						
an Ne	v. 1,5	10,000,00	0 100,00	100	265,0	00 Mar. 00 Sept.	1879	0 25																	
on Cons. G. S Ne	U	[10.300,00	100,00	0 100	860,0	00 July.	1879	2 00					27e		31e		26e	25c							
d Ne	v. 1.2	00 2,000,00 00 11,000,00 00 10,000,00	0 110,00	0 100	143,0	00 Jan 00 Jan	1880	0 4							****										****
is rargo Ne					*******		1879	0 10																	
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********					*******																				
					******																				
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								***																	

consent of persons to serve as directors, who would decline to serve if the agreement was not made. On the face of it, and technically, this is a sufficient legal consideration, but the courts may hold that such agreements are void as being against public policy as determined by the California Constitution."

A bill has been introduced in the California Assem bly, making it obligatory upon brokers to give a de tailed statement of their transactions to their custom ers and taxing each sale. The measure is chiefly intended to put a stop to "wash" sales as well as to afford protection to the mining share-dealing public generally. It is stated that should this bill become a law, many of the brokers will emigate to New York. A significant commentary upon the condition of the mining share market in San Francisco and the enormous shrinkage in the dealings is shown in the fact that the dealings have fallen 75 per cent during the year, and the price of seats in the Board from \$35,000 to \$10,000.

The east drift from the 3000 station of the Belcher has reached a distance of 100 feet, vein in porphyry. This stock opens to-day at \$10%, which is somewhat of an advance on the price quoted a week ago. The quotations during the week have been quite irregular.

Bullion has ranged from  $6\frac{1}{2}$  to  $5\frac{5}{8}$  as the extreme prices of the week, closing yesterday at \$5% as against \$5% a week ago. Fifteen feet per week is now being added to the depth in the double-incline winz below the 2150 level; total depth now attained is 360 feet on the slope below that level. The south header of the Sutro Tunnel has reached the Bullion ground; it will require about two months to go through the ground. The cost is estimated at about \$70,000. Argenta closed vesterday at \$1, the lowest price for the week, against \$1.50 a week ago. This company is making very satisfactory shipments. Consolidated Virginia is steady, closing yesterday at \$41/4 against \$41/2 a week ago. The annual meeting of this company was held on the 16th, from which we learn that the bullion product of the mine during 1879 aggregated \$1,198,319.68 in gold and \$1,283,039.15in silver, a total of \$2,481,358.83. Of this sum \$1,-350,000 was paid out in dividends, aggregating \$2.50 per share. The superintendent reports that during the past year 59,441 tons of ore were extracted, yielding on an average \$41.20 per ton, and 741 per cent of the assay value. This company is now raising about 1100 tons of ore per week.

The California Mining Company is extracting about 1000 tons of ore per week, principally from the 1750 level. This stock has declined to \$4 from \$41/4, as quoted a week ago. The principal operations in the Crown Point mine are in running the drift on the 2700 level toward the Yellow Jacket shaft. This stock opens at \$5%, which is a slight improvement on the quotations of a week ago.

Eureka Consolidated closed at \$17 yesterday. This company entered a protest on the 14th inst. against granting a patent to the Richmond Company for the main shaft of the mine, on the ground that it passes the compromise line.

We are in receipt of the following letter, dated Philadelphia, January 21st: "Chas. Reed, superintendent of the Eureka Consolidated, on examining the Kite mine yesterday, reports by telegraph: 'Ore on the lowest level, 350 feet, at connection with winze is 20 by 25 feet. The strike of this ore-body, and the rich strike of ore in the Eureka tunnel at the depth of 800 feet, gives great value to the mines on Prospect Moun-

Gould & Curry is somewhat lower, opening at \$61/4. This mine, as of old, is troubled with "water." The G. & C. and B. & C. shaft has attained a depth of 870 feet. We note recent sales of the stock of the Hillside on the San Francisco market at \$1.90. It is said that the expenses attendant upon the new hoisting-works and other expenditures upon this mine have been more than enough to absorb its large bullion product. This statement is announced in justification of the recent assessment levied by the company.

The Leeds Mining Company comes forward with an ment of 10 cents per share, levied on the 19th instant. This will give the company a sum equal to \$6000, as there are 60,000 shares in the mine, which should be ample to enable it to open up the ore-body discovered last year. Recent quotations of this stock show a decline. Recent telegrams

#### COAL STOCKS.

		SHARE	s.					Que	tation \$100.	ns of Phila	New 1	York s nia pri	tocks ices ar	are b	ased ted, s	on the	e equ	uivale shar	ent of e.	
NAME OF	Capital Stock.		al.	T	asi		per n.	Jan	. 17.	Jan	. 19.	Jan.	20.	Jan	. 21.	Jan	. 22.	Jan	. 23.	SALES,
COMPANY.		No.	Par V	Divi			Rate per Ann.	н.	L.	H.	L.	H.	L.	н.	L.	H.	L.	н.	L.	
	8		8	Mo.	Y.	R't.	Per c'nt		_			-			_	_	_		_	
Am. Coal Co.		60,000						****		****			*****	****		*****		*****	*****	
Atl. Coal Co		******	50	*****				***	*****	*****	*****	*****				*****		******	*****	******
Buck Mt.Coal	15 000 000	150,000					****	2234	22	2336	22	2214	2136	227/4	221/4	2234	2216	22		11.23
Ches. & O. RR Consot, Cost.	10,000,000			Jan.	77	216											10072		*****	22,00
Cumb. C. & I.	500,000	5,000	100							6316				68						
Del. & H. U.		200,000	100	Aug		4		7654	76	7534	7514	7514	7474	75%	7514	751/8	7434	75%		
D., L&W. RE	26 200 000	524,000		July			5	8616		861/8	851/8	8516	8114	8594	84%			85	8316	
Lehigh C.& N	10,148,550	208,971		Nov			516	38	3734	*****				371/2	*****			3756 5184		
Leh. V'y R, R		540,858		J'ne			4	5214	52	2616	52	5218	52	52	*****		*****	0174		440
		300,000		Jan. July				2634		104		104		104		10856		*****		200.10
Morris & Es'x New Cen. C'l	5,000,000							32	311/4			311		011		30%		30%		3,25
N. J. C. R. R.					76		216		8216		82	824			8056			81%		54,83
Penn. Coal	5,000,000	100,000		Oct.						*****		210								10
Penn. R. R		1,337,404		Nov.				51	50%			51	50%							
Ph. & R. R.R*	34,278,175	685,563		Jan	76	216	10	70	6934	697/8	6914	691/8				6914	68%	69	681/	43,92
S. Clara M'g	*********	******	100	D	mr.	101		****		*****		*****						*****	*****	
Spring Mt.C'l	1,500,000	30,000	90	Dec.	10	354						*****					*****	*****	*****	******
Spruce H. C'1	*********					****				******									Inneses	Invance.

\*Of the sales of this stock, 33,110 shares were sold at the Philadelphia Stock Exchange, and 10,818 at the New York Stock Exchange.

#### BOSTON MINING STOCKS.

	Jan.	16.	Jan.	17.	Jan	19.	Jan	. 20.	Jan	. 21.	Jan	. 22.	SALES.
NAME OF COMPANY.	Н.	L.	H.	L.	Н.	L.	H.	L.	Н.	L.	H.	L.	Shares.
Allouez, cMich. Atlantic, cMich. Blue Hill, cMe	18 7¾		23	20	291/4	2734	71/2		26 83/8	25 8	24 91/8		1,766 1,950
Brunswick	41		240 43	238 421⁄2	2493 <sub>4</sub> 503 <sub>4</sub>	247 48½	249 49	7 2471/2 481/2	81/4 245 52 20	7¾ 51	8 2421/2 20	242	3,637 213 643 230
Chrysolite Colo Copper Falls, c Mich.	*****		6%	61/2	8	7	73/4	71/2		71/4	8	734	3,60
Dana, c Mich.	******		1	871/2c	11/4	1	11/8	11-16	11/8		11-16	1	2,577
Douglas, c Me Duncan, s Ont	41/2		45%	******	51/4		47/8	434	45%		5		1,060
Eagle River, c Mich. Franklin, c Mich. Hanover, C Mich.	371/2		39	371/2	443 <sub>4</sub> 80c.	4234	431/4	42	4434	44	451/2	441/6	8,913
Humboldt, c Mich.					1	13/4	134 871/2c		13/4			15%	1,310
International, s Ont Manhattan, c Mich.					70e. 11/4		134	11-16					100 850
Mesnard, C Mich. Minnesota, C Mich. National, C Mich.	4	3	41/8		458 9 716	6 616	81/2	7	61/2 61/2	6 61/4	7 634	616	4,17 2,33 4,75
Orford	3916				*****				4214	42	914	9 4134	20
Pewabic, c Mich. Phœnix, c Mich.	56	52	60	57	671%	631/2	63	611/2	64	63	641/2	64	4,45 1,60
Pontiac, c Mich. Ridge, c Mich.	88%	71/8	9	834	13/8	9	916		91/8	9	15/8 91/4		9,43
Rockland, c	331/2		341/8	33	3834		40	371/2		405%			
Silver Islet, s Mich. Star, c Mich.	2		21 25-16 11		2116 234 11	23/8	24 25/8	22 21/4			216		2,77 50
Sullivan, s Me Superior, c Mich.									*****		1154	1178	
			95c.	871/20	1 871/60		1		1		7. 9		2 437
W. Minnesota				1	15%				11/4		178		1,45
c. Copper	-	-	s. Sil	ver.	-	*	7 11-10	3	-	+11:	3-16.		

from the superintendent of the Leadville Mining Company on the 20th say that on taking charge of the mine he found every thing in good order. The 3d, 4th, 5th, and 6th levels and the breast of the incline in good ore, and about 200 tons on hand.

Mexican opened to-day at  $$19\frac{1}{2}$ , somewhat of an advance on previous prices. Active work is going forward in this mine. The ore stopes in the Ophir are yielding a large amount of good milling ore. No particular change is noticed in the various workings of this mine. The machinery is working well. Stock is quoted at \$191/4.

At a meeting of the Sierra Nevada Mining Co., on the 21st inst., in San Francisco, John Skae retired from the directory, the Bonanza firm taking full control, with the following Board of Directors: Charles H. Fish, President; W. S. Lyle, Vice-President; L. P. Drexler, Con O'Connor, and R. N. Graves. The reports show large additions to the facilities for working the mine and the reduction of the ore. superintendent, in his report, says that it will be impossible to determine the extent of the ore-body until the Union shaft is completed and the water can be removed with economy.

The South Bulwer Mining Company levied an asses ment, on the 20th, of 25 cents per share. The stock closed yesterday at \$1, against \$11/8 for the week pre vious.

Union Consolidated shows a decline of \$5 per share for the week. It is said that this mine is now produc-

ing ore milling \$82 per ton.
Yellow Jacket opens at \$12½, as against \$10½ in our last. The depth of the main shaft in this mine is ing price was 37; the highest, 451/4; closing, 44@441/4.

over 2800 feet. It is said that this mine is improving

daily as depth is attained.

Copper and Silver Stocks.

Reported by C. H. Smith, Commission Stock Broker, No. 15 Congress street, Room 3. Boston, Jan. 22, 1880.

The long-expected "boom" in copper stocks has been realized during the past week, and we have to record an excited and rapidly advancing market which has gladdened the hearts of the brokers, as well as those who pur-chased stocks at the low prices current the past sixty days. There has, of course, been some realizing, which has caused slight reactions at times, only to be followed by still higher figures. The sharp advance in ingot copper will add largely to the profits of the producing mines and stimulate those who have good properties but have been unable to

work them profitably to resume active operations.

Calumet & Hecla opened the week at 235; advanced to 24914 on the 19th, closing with sales to-day at 2421/2, which was bid; 244 asked.

Central advanced from 40 to 52, on the 21st; closing

Copper Falls advanced from 61/4 to 8 on sales of about ares; closing, 71/2 bid; 73/4 asked. The management of the Copper Falls are pushing the erection of the stamp-mill as rapidly as circumstances will admit of. The boilerhouse is almost completed, and a force of carpenters is getting out the necessary timber and preparing the foun-dations for the mill. The outlook underground is very encouraging, and good results are confidently looked for. No doubt but what the expectations of the stockholders of this company will be realized after they get things fairly running, and can break between two and three hundred tons of ashbed rock a day.

Franklin has been very active, and shows an advance of over \$8 per share for the week. Sales aggregate over 9000 shares, or nearly one half the whole number. The open-

Osceola has also shown a great deal of strength, on sales of 2000 shares, with an advance from 381/4 to 441/2, closing, however, lower, at 42 asked. A dividend of \$1 per share is

Pewabic, as predicted in our last report, shows the greatest advance of the list; and notwithstanding the disposition to realize, the stock holds very firm. The opening sale of the week was 52, which was also the lowest, selling up to 67, and closing at 63@64. About 4500 shares changed

Quincy, in the early dealings, was steady at about 33@3314, but on the announcement of a dividend of \$3 per share, it advanced to 3814@3834. Subsequently, on the report that a stock dividend of the 4000 shares now owned by the company would be declared at an early date, giving one share to each holder of 10, the stock advanced to 411/2, closing to-day at 40@401/2. The sales of the week aggre gate over 9000 shares

Ridge has also partaken of the "boom," and shows a gain of about \$2½ per share for the week, opening at \$7%, selling up to \$10, and closing at \$8%@\$9. It is stated, that at the Ridge, the miners, in drifting east under the big show of copper they had this fall, have come upon a rich run of copper ground, which promises to be very productive. The force employed at the mine is quite small, so that not much can be expected from the mine in the shape of production. In its checkered career, it has probably produced more copper, for the amount of ground broken, than any mine in the district; yet we find her, after 30 years' working, only down to the depth of 50 fathoms.

Atlantic opened at \$18, advanced to \$28 (one sale of 10 shares only at \$29¼), but did not hold the advance; closing with sales at \$23, which was bid.

Phoenix, which is seldom quoted, sold in small lots at 6 early in the week; yesterday it advanced to 101/2, and today to 16; closing at 141/2@143/4.

Mesnard advanced from 3½ to 4½; closing, 4@4½. Blue Hill declined from 8½ to 7½, but is stronger to-day

at 8%@9, closing at 8¾ asked.

National advanced from 51/2 to 71/2; declined to 57/406; sales, about 4500 shares

Star advanced to 234, but closed at 2@21/2. A party of miners have been at work in the Star mine for the past three or four weeks; a much larger force will be employed in the spring. Other mines in the Copper Harbor District are expected to be revived during the next six months; among them will probably be the Empire, Resolute, Etna. and Hanover.

Minnesota opened at 4, and advanced to 9, subsequently selling at 6, closing 61/2 bid.

The low priced mines have also been favorably affected by the "boom," and record higher prices. We quote: Manhattan, 871/4c.@\$11/4.

Pontiac, 1@1%. Washington, 871/2c.@\$1.

Winthrop, 1@15%. West Minnesota, 60c.@\$1.

Dana, 1@11/4.

Hanover, 80c.@\$1. Humboldt, 136@2.

Hungarian, 871/c.@\$1. SILVER STOCKS.

Silver Islet, on good reports from the mine, advanced to 28. but reacted to 25, closing 25@2516.

Duncan Silver, sales at 41/2@51/4, closing 5 asked; no bid. International, sales 70c.

#### Sullivan steady at \$11@\$111/4. Coal Stocks.

New York, Friday Evening, Jan. 23.

The transactions in coal stocks during the past week show decreased sales at generally reduced prices. In New York, the week opened with a fair degree of activity, but prices have been fluctuating, and inclined to weakness. The Philadelphia market has been firm and steady throughout the week, although the closing prices show a slight decline as compared with the opening figures.

Delaware, Lackawanna & Western opened at 861/2, and steadily declined, selling at 83½, the lowest figure, to-day. The sales amount to 101,860 shares. Delaware & Hudson records sales of but 5491 shares, opening Saturday at 761/4, and touching 741/4, the lowest figure, to-day. There have been sales of 200 shares of Cumberland at 63½@68. This stock was selling in December at 19.

New Jersey Central has been active, the transac tions amounting to 54,835 shares, at prices ranging from 83 to 79.

The total transactions amount to 256,257 shares including 11237 shares of C. & O. RR. at 23%@21%, 2372 shares of Lehigh Nav., at 38@367/8, 949 shares of Lehigh Valley at 521/4@511/2, 465 shares of Maryand Coal at 27@25, 3250 shares of New Central Coal at 324@30, 30,871 shares of Pennsylvania Railroad, at 51%@50%, 43,928 shares of Reading at 70@681/2, and 10 shares of Pennsylvania Coal 210. We are reported an auction sale of 250 shares

of the last-named stock at 208, also one of 33 shares of American Coal Company at 56.

The annual meeting of the stockholders of the Lehigh Valley Railroad was held in Philadelphia on the 20th inst., and Mr. Chas. Hartshorne was elected as President.

The annual report shows the net income of the year to be \$3,543,382,46; the interest on bonds, the dividends, etc., \$3,520,019.15, leaving \$23,363.31 to the credit of profit and loss

The Fulton Coal Company has declared a dividend of 3 per cent.

Pennsylvania Steel Co.—Thirty shares of the stock of this company (par \$100) were sold at the Philadelphia Stock Exchange on the 19th inst. at \$1.50.

#### Miscellaneous Stocks and Quotations.

Sales and quotations of the stocks and bonds dealt in at New York, Philadelphia, and Baltimore, for the week ending the 22d inst., are given in the following tables. The Phila-delphia quotations will have a \* affixed. The Baltimore quotations are indicated thus †.

STOCKS.	Par Value.	High'st	Lowest	Closing	Sales: Shares.
St.L.,I.M.& S.R.Co.,	100	573%	521/6	561/6	171,925
*Cambria Iron Co	50				
*Penn Salt Mf'g Co.	50				
*Schuyl, Nav. Co.pf	50	811/2		811/2	
*N. Central RW	50	331/4	321/2	33	697
*H.& B.T.Mt.RR.pf	50	141/2	14	141/2	227
" " " com.		101/2	10	10	630
Northern Penn.RR.	50	52		52	226
+B.&O.RR.Co.1st pf			*******		
+B.&O.RR.Co.2d pf	100				
" " " com	90				

	Bonds.	Princ'l. When Due.	Int'est. When Due.	Hig'st.	Lowest	Amount.
	D., L. & W., 7s, conv 2d 7s M. & E.,1st con., 7s.	1882 1907 1915	J. & D. M. & S. J. & D. F. & A. A. & O. F. & A.	104¾ 109½	1041/6	3,000
١	" " " 2d 7s " " 7s, 1871	1901	A. & O.	113	11234	6,000
I	N.J.C.,1stmtge.new "" 1st mtge.,con "" convt. 7's " Adimt bds " Income	1890	F. & A.	119	106	10,000 ‡19,000
İ	"" " convt. 7's	1902	Q. M. & N. M. & N. M. & N.	1061/2	106	19,000 1
١	" " Adimt bds	1903	M. & N.	10612	10614	34,000
١	I. & W.B. con	1908	M. & N.	97	9434	15,000 \$144,000
ı	L. & W. B., con Income	1888	M. O. N.	65		10,000
ı	Am Dock & Imn 78	1886	J. & J.	108¼ 116	107	41,000
١	St.L.I.M.& S1st mt	1092		90	115¾ 86¾ 99½ 69	16,000 215,000
l	" " " " " 2d, 7s	1897	F. & A.	1011/4	991/2	80,000
ı	to state at an in my inc			74	69	395,000
1	St. L. & I., M. C. & F., 1st, 7s St. L. & I. M. Cairo,	1891	M. & N.	106	1041/4	43,000
1	St. L. & I. M. Cairo,	1000	T 0 T	1011	007/	05.000
1	A. O. I., 18t, 18.	1908	J. & J. J. & D. M. & N J. & J. J. & J.	68	6616	27,000 256,000 136,000 4,000 1,000
١	Ches. & O., 1st s'rs b	1918	M. & N	43	4134	136,000
1	D&HCCo.,1stm.rg	1884	J. & J.	10514	1041/2	4,000
1	ii ii ii ii ii m loan en	1891	A. & O.	109%		1,000
1	""""m.loan ep	1894	A. & O.	11034		3,000
1	""" new mge.			*****		
	div., 7s. coup.	1917	J. & D.	1111/2	1111/4	32,000
	(11V 78 PF	1917	M. & N.			
	L.V.R.,1stm.6s.ep.	1898	M. & N. M. & S. J. & D. J. & D. M. & S.			
١	" " 2d m. 7s,rg	1898	J. & D.	105		9 000
	" " con m 6s re	1823	M. & S.	11014		9.000
1	" " con.m.6s,rg	1923	J. & D.	11014		6,000
	*Pa RR 1st m fis.er	1880	J. & D.	101%	1013/4	9,000
1	g. m., os, cp	1910	J. & J.	1141/2		8,000 9,000 6,000 9,000 2,000
Ì	" con.m.6s,rg	190	A. & O.			
1	" con.m.6s,rg " 6s, cp " new loan, 5s	. 190	, Q.	11134		1,000
,	* " new loan, 5	8	J. & D.			********
•	*P.& R. R., 1st m.6s R. C. 43-44	188	T. & J.			
	*P. & R. R., 1st m.6s		1	1	1	
	R. C. 48-49	1880	J. & J. & J. J. & J. & J.	101		2 000
-	*P.&R.R.,gen6s,G ( " scrip deb.ex-cp	. 188:	J. & J.	90	89	4,695
3	" deb.ex-cp	. 1893	3	55		9,500
ı	e.m. 78,cp	101	J. & D. J. & D	114%		2,000 4,695 9,500 1,000 11,000 2,725
ı	" " cvt.7s.ex	G 1898	J. & J.	681/		11,000
	*L.Nav.Co., os,rg.m	. Too.	J. & J.	. 1061/2	105	2,725
	" " RR., rg. m	189	F. & Q M. & S			
,	" " m Gold R. C	. 189	7 J. & D	1041/	1037	6,000 12,000
,	" " con.m.7s,rg	. 191	J. & D	. 102	1013	12,000
-	*P.& N.Y.C.,7s,R.C	190	J. & D			
9	*Pa Canal, 6s	1911	1 .1. 00 .1.			8,000 700 11,000
9	*Schuyl. Nav., 6s	. 188	)	84		700
)		1918	J. & J	54		11,000
5	Sus. Can. 6s, ex-cp *Sus.Coal, 6s, c †Balt.&O. RR., 6s 6s	1880	J. & J			
	" " " " 6s.	188	J. & J. & O.			

t Assented.

#### Gas Stocks.

New York, Friday Evening, Jan. 23. The market for New York gas stocks is "booming," and prices have risen in some instances 15 per cent. The Brooklyn stocks continue to decline, on account of the imminence of a "gas war." The following

companies have declared dividends: New York Metropolitan, 5 per cent, payable February 4th.

4th. New York Municipal, 5 per cent, payable January 26th. Nassau, of Brooklyn, 2½ per cent, payable February 1st. Williamsburg, of Brooklyn, 1½ per cent, payable January 15th,

Prices of Gas to Small Consumers,

In	Washington, D. C., 1	oer M	[]																					\$2.00
66	Sing Sing, N. Y., Newark, N. J.,	6.6						Ĺ																3.50
6.6	Newark, N. J.,	4.6										ì				Ĺ		ĺ.						2.40
6.6	Wilkes-Barre, Pa.,	44			Ĉ							ì					-							2.50
4.6	Philadelphia, Pa.,	4.6			ì	•			ì			1				1				1	1			1.90
6.6	St. Louis, Mo.,	66	-		ſ	•			٠	•	1	1					Ī		1	Ĩ				2.50
6.6	Wheeling, W. Va.,	8.4	* *		•	• •		•	*	•	*	٠	•		ľ	•		•	•	•	•		1	1,20
66	Pittsburg, Pa.,	6.6		•	•	•	•	•	•				•			1	ľ	•	Ĩ	1	Û	•		1.00
66	Louisville, Ky.,	64		• •	•	•				•			•	 					•		ì			1,42

The following list of companies in New York and vicinity is corrected weekly by George H. Prentiss, Broker and Dealer in Gas Stocks. No. 24 Broad street. New York.

Claren Lerena est	Canttol		DIVIDENDS.			QUOT	ATI'NS	
COMPANIES IN NEW YORK AND VICINITY.	Capital Stock.	Par.	Rate per ann.	Am. of last.	Date of last.	Bld.	As¹d.	
Mutual, N. Y  "Bonds N. York "Metrop." Harlem "Manhat. Brooklyn, Bkln. Nassau "Certfs "Bonds "Metrop "Certfs "Bonds "Bonds "Honds "Honds	900,000 2,500,000 1,000,000 1,850,000 4,000,000 1,000,000 1,000,000 250,000 375,000 1,000,000 1,000,000 1,000,000 1,000,000 1,000,000 1,000,000 2,000,000 2,000,000 2,000,000 2,000,000 1,000,000	1,000 100 50 50 50 50 1,000 100 100 50 20 1,000 20 100 100 100 100 100 100 1	10 7 6 ‡ 7 7 7 7 5 8 7 ‡	31/2	July, '79 Aug., '79 Aug., '79 May, '79 Feb., '80 Aug., '79 Feb., '81 June, '74 June, '75 June, '81 June, '81 June, '82 June, '83 June, '83 June, '83 June, '83 June, '84 June, '85 June, '	100 90 115 95 40 152½ 115 50 85 25 75 90 50 10 10 145 138	57½ 104 90 120 100 45 160 120 55 95 80 85 60 75 100 55 108 155 110 90	

#### THE BULLION MARKET.

NEW YORK, Friday Evening, Jan. 23.

The market has advanced the past week, and is reported firm in London to-day at 52%d., but there are causes at work which, we think, may lower the market the coming week. Its future will turn on the amount wanted for the East the coming spring, and whether Germany will endeavor to meet this by sales of her reserved silver.

DAILY RANGE OF SILVER IN LONDON AND NEW YORK, PER OZ

DATE.	London	N. Y.	DATE.	London	N. Y.
DATE.	Pence.	Cents.	DATE.	Pence.	Cents.
	525-16 52% 52½	113¼ 113½ 113%	Jan. 22.	52%@52¾ 52¾ 52¾ (weak)	* 114¼ 114

\* 114@11414.

BULLION SHIPMENTS.

We give below a statement showing the latest published bullion shipments, in addition to those announced in our

sue	of January 17th:
an.	1McMillan Ariz\$10,151
66	3 Endowment
6.6	3Julian
6.6	7Ophir
6.6	7 Raymond & Ely Nev 4,745
6.6	9California
4.6	10Richmond, EurekaNev 17.434
6.6	4—11At Tybo
66	11-16. Eureka Consolidated, bullion, Nev. 160,990 lbs
64	10Silver King, concentrations Ariz. 12.000 lbs
6.6	10Bobtail
6.6	10Bobtail
	3-10. Stormont
66	10Robert E. Lee
66	4-11. Grant Smelting Co., Leadville, Colo 134.284
66	4-11La Plata Mining and Smelt-
	ing Co., Leadville
6.6	4-11 American Smelting Company,
	Leadville
6.4	A 11 Dillings & Filoss Londville Cole 50 004
66	4—11. J. B. Dickson & Co., "Colo. 12,919 4—11. Ohio & Missouri, "Colo. 11,850 4—11. Cummings & Finn, "Colo. 31,918 4—11. Gage, Hagaman & Co., "Colo. 13,912 4—11. Elgin Mining and Smelting
6.6	4-11 Ohio & Missouri " Colo 11.850
66	4-11. Cummings & Finn. " Colo 31.918
4.6	4-11. Gage, Hagaman & Co. " Colo 13 912
66	4-11 Elgin Mining and Smelting
4.6	3—11. Harrison Reduction Works, Leadville
	Leadville Colo 45 700
44	4_11 Eddy James & Co Leadville Colo 47 100
6.6	12Consolidated VirginiaNev 48,451
66	12Union ConsolidatedNev 100,713
6.0	12Eureka ConsolidatedNev 4,475
4.6	12Standard ConsolidatedCal 41,680
6.6	12Central City ConsolidatedColo 4,500
66	4—11. Como
6.6	13Bodie
4.4	9-13. Belmont
66	7—14. Paradise Valley
6.6	14Chicago and Marsac, 1 car each;
	Germania, 4 cars, and Marsac
	bullion, 1 bar, 80 oz. goldUtah 9,350
16	14Copperopolis, Mammoth, 1 bar, Utah 6,000
66	6—13. Calistoga, quicksilverCal. 18,642 lbs
66	8—15Leadville Smelter, leadColo 49,007
66	10-16. Christy mill, Silver Reef Utah 5,273
66	10—10. Christy min, Silver Reel Utali 5,273
66	16Central City, bank
66	12Nev
66	14-17. Ontario
	17Old Telegraph, 4 cars; Germa-
	nia, 2, and Morgan and Chicago, 1 each
66	Cincago, I each
	17Germania, 3 bars
Mo	ntana bullion shipments for the week ending January
1 8	36 506

The San Francisco Stock Report says: "The Eureka Consolidated mine produced in gold, silver, and lead, for the eleven months ending November 30th, 1879, \$2,606, 200. The yield of the Richmond for the same period is given at \$1,425,000."

A correspondent, writing from Wadsworth, to the Reno Gazette, says: "The Northern Belle last month turned out over \$92,000 in bullion, and the Alexander mine at Grants ville has sent to Wadsworth, since October 1st, over \$100. 000. The San Francisco mine, near Ellsworth, has already shipped several thousand dollars via Wadsworth to San

'The bullion shipments over the Utah Southern road during the month of December were 1,896,730 pounds; ore shipments, 1,837,073 pounds."

The entire product of the Idaho mine, Grass Valley since the year 1869 has been \$5,699,742, and the dividends,

124 in number, have aggregated \$2,703,200.

Of the Queen mine of Silverado the Eureka Sentinel says: "The Queen mine of Silverado is one of the best little mines in the State. Its ores are high-grade, and the owners have always worked the mine at a fair profit. Just now four men are engaged, who extract about \$100 per day. The ore ranges from \$150 to \$800 per ton."

The California quicksilver product in 1879 was 73,879 flasks, produced by mines as follows: New Almaden, flasks, 20,700: Guadalupe, 15,540; Sulphur Bank, 9242 Great Western, 6880; New Idria, 4425; Redington, 4516 Napa Consolidated, 3605; Altoona, 1906; Oakland, 1505 Great Eastern, 1470; California, 1026; Pope Valley, 989 Oceanic, 779; St. John, 546; Sundries, 750. Total,

The following statement shows the yearly product of the Boston & Colorado Smelting Works, now located at Argo,

Billice they bear tour			
1868	\$270,886 1	1875	\$1,947,000
1869	489,875 1	1876	2,097,990
1870	652,329 1	1877	2,154,000
1871		1878	
1872		1879	2,449,500
1873			
1874	1 638 877	Total	\$17 018 652

LEADVILLE, COLO., Jan. 18.—A party of Western capitalists, headed by Col. D. P. Dyer, of St. Louis, purchased yes terday the Glass, the Pendery, and the Ro No. 2 mines, three of the ricnest deposits yet developed in that region, for \$5,000,000. This is the largest sale of mining property that has yet been made in Leadville. Lieut. Gov. Tabor and others are mentioned as interested in the

Exports of Gold and Silver from New York.

week ending January 17th	5201,901
Corresponding week last year	415,916
Since January 1st	328,826
Corresponding period last year	1,102,610
Gold Interest paid out by the Treasury	

Week ending January 17th
Corresponding week last year.
Since January 1st this year.
Corresponding period last year. \$989,611 1,408,121 5,752,018 7,195,764

The New Orleans Mint can't coin silver dollars fast enough to supply the demand for them in the extreme South. They want to double its capacity.

The Assay Office shipped \$1,000,000 of gold bars on the 21st inst. to the Philadelphia Mint for coinage into small gold pieces-half-eagles and under-making \$5,000,000 shipped during the month.

On the 22d inst., the Treasury Department purchased 327,000 ounces of silver for the Philadelphia and San Francisco mints.

Accumulation of Silver Dollars -The amount of stand ard silver dollars still continues to increase in the Treasury vault, the Secretary of the Treasury not paying it out in quantities greater than 10 per cent. According to a statement prepared at the Treasury recently, the amount of standard silver dollars now reckoned in government assets is \$38,168,064; of fractional silver coin, \$18,881,629; and of silver certificates, \$4,888,658. The United States Treasurer and the disbursing officers of Congress have arranged so that 5 per cent of the salary of members is to be paid in silver certificates. The payment of members in silver certificates will result in placing a considerable number of silver certificates in circulation.

The House of Representatives, by a vote of 79 yeas to 158 nays, on the 20th inst., defeated Mr. Buckner's bill requiring national banks to keep one half of their reserve

#### METALS.

New York, Friday Evening, Jan. 23.

The activity in this branch of trade continues unabated, and prices in some articles continue to advance both here and abroad.

Copper.—There has been considerable speculative, as well as a large consumptive demand for this metal, and the sales have amounted to several million pounds. on spot and for future delivery, closing at 25c. strong on spot, and 251/2c. for futures, with an upward ten dency. Best Selected has advanced to £81 10s., and Chili Bars to £74 in London, again t £76 and £71 respectively on Saturday. At the same time, it is said that there has been a large business in that market.

Tin.—The business in this article has amounted to

several hundred tons on spot and to arrive, at prices up to our closing quotations. London quotes Straits at £99, with upward tendency; Singapore, \$31.50, and Penang, \$31, with exchange at 3s. 11d. This is an advance of £4 per ton since our last. The Banca sale will take place next week, and is looked forward to with much interest. We quote Straits at 241/2@ 24%c.; L. and F., 24c.; and Refined, 24%@24%c.

Tin Plates.-These have not been so excited, although there has been a large jobbing business. We quote  $\frac{1}{3}$  X, Melyn grade, at \$10; Allaway, \$9.75, and ternes, \$9.25@\$9.50; coke tius, B. V. grade, \$8.50@ \$8.75, and ternes \$8.25.

Messrs. Robert Crooks & Co., of Liverpool, under date of January 8th, say of tin and terne plates:

"Pending the Birmingham meeting, most makers refuse to quote and we are, therefore, unable to do more than fix figures as near selling values as possible. Buying, the last two or three days, has been vigorous, buyers apparently thinking, with makers, the advance after meeting almost certain. Prompt deliveries are most difficult to obtain."

Lead .- The business in this amounts to 400 tons of corroding at 61/4@6.35c., and in common to 100 tons in lots at 6c. There are but few holders, who are very firm.

Spelter and Zinc.-There is but little doing in spelter, which is quite strong at 61/2@65%c. Sheet zinc is quiet but firm at 8@81/4c.

Antimony.-The business in this has amounted to about 150 casks, and the market is bare, with none obtainable in Europe. Cookson's has advanced to 22 @23c., Hallett's to 20c., and Johnson & Mathys's to 19½c.

#### IRON MARKET REVIEW.

NEW YORK, Friday Evening, Jan. 23.

American Pig.-The sales reported to us amount to about 2000 tons, of which 1000 tons were Thomas No. 2 Foundry and Forge at \$38 and \$37 respectively. Although the transactions are small, yet prices are very firm, and the makers control the situation. There are large inquiries, which will probably resulting business at an early day. In a small way, as high as \$42.50 is asked for No. 1 Foundry iron; but we quote in ordinary quantities No. 1 Foundry \$40; No. 2 Foundry, \$38; and Forge, \$37.

Scotch Pig.-There has been a lull in the demand for this article, although we note sales of 1000 tons of Eglinton on private terms, and 1000 tons more for shipment to Philadelphia. The arrivals have been large, and a portion has gone into store. We quote Coltness at \$36; Glengarnock, \$35; Summerlee, \$35 and Eglinton, \$33.

Messrs, John E. Swan & Brothers., of Glasgow, under date of January 9th, 1880, report 101 furnaces, against 91 at the same time last year. The quantity of iron in Connal & Co.'s stores, was 425,072 tons, an increase of 5509 tons for the week. The shipments show an increase of 4006 tons since Christmas, as compared with the shipments to the same date last year. The imports of Middlesbrough pig-iron for the same period show a falling off of 605 tons. The following are the quotations of the leading brands of No. 1 Pig-Iron: Gartsherrie, 85s.; Coltness, 87s. 6d. Langloan, 85s.; Summerlee, 87s. 6d.; Carnbroe, 86s. Glengarnock, 86s.; Eglinton, 77s. 6d. Middlesbrough Pig-Iron was quoted as follows: F. o. b., Tees, No. 1 Foundry, 62s. 6d.; No. 2, 59s. 6d.; No. 3, 57s. 6d. No. 4, 57s. 6d.; No. 4 Forge, 58s. 6d.

Rails.-We note a sale of 3000 tons of steel rails. t an Eastern mill, at a price equal to \$80 here. The mills are so full of orders, and the demand so great, that it is almost impossible to name a price. We shall quote, however, at \$80 at mill as a nominal About 5000 tons of iron rails are reported sold. We quote at \$62.50 at Eastern mills,

Messrs. John H. Austin & Co., of London, under date of January 9th, say: "Markets very strong, and it is now becoming very difficult to place orders except for small quantities at a time, and almost in each instance at increased rates. We quote iron rails, f. o. b., at the shipping ports, at £7 15s.@£8, and steel rails, at £8 15s.@£9 10s."

Old Rails.—The transactions in these on specula tive and consumption account amounts-to about 30,-000 tons. Ts on spot are worth \$43, and to arrive \$44@\$45, and D. H.s on spot \$44, and to arrive \$45@\$46.

gate several thousand tons, selling at \$42@\$42.50 to arrive, while spot lots are worth \$40.50, and from vard \$45.

We publish the following letters received from our regular correspondents:

"Baltimore, Jan. 19.

"We have to report a further advance in iron during the past week, and quote present prices as follows:

Balt. Char. .\$55,00@\$00.00 M. & White..\$36,00@\$37.00 Va. ".55,00@ 60.00 C'IC.B.Blooms 85.00@ 90.00 Anth. No. 1. . 40.00@ 41.00 ". "Billets. 90.00@ 92.00 ". "3. 39.00@ 40.00 Refi'd Blooms. 75.00@ 80.00

"R. C. HOFFMAN & Co."

"Columbus, O., Jan. 21.

"The demand for nearly all grades of pig-irons continues active. The best grades of mill iron are in short supply and prices firmer. From the present outlook, there is not likely to be an overproduction for some time to come. We quote as follows:

4	
FOUNDRY IRONS	
To. 1 Hanging Rock Charcoal     \$42.00@\$4*       To. 2     " 41.00@ 4*       To. 1 Hocking Valley     40.00@ 4*       To. 2 Hocking Valley     38.00@ 3*       To. 1 American Scotch     40.00@ 4*       To. 1 Shawnee     39.00@ 4*       To. 1 Jackson County     39.00@ 4*       To. 2     36.00@ 3*       To. 3     36.00@ 3*       To. 4     36.00@ 3*       To. 5     36.00@ 3*       To. 6     36.00@ 3*       To. 7     36.00@ 3*	2.00 1.00 9.00 1.00 0.00 0.00 7.00
No. 2 " " 35.00@ 3	6.00
MILL IRONS.	
Gray neutral     37.00@ 3       Mottled and white neutral     34.00@ 3       Fray coid short     34.00@ 3       Mottled and white cold short     33.00@ 3	$5.00 \\ 5.00 \\ 4.00$
"King, Gilbert & Warnes	2.72
"Toward War Ion 1	0

"LOUISVILLE, Kv., Jan. 19.
"The market continues very firm, and with the same advancing tendency.

FOUNDRY IRONS No. 1. No. 2. Hanging Rock Charcoal ... \$42.00@\$43.00 \$40.00@\$41.00 Southern Charcoal ... 40.00@ 41.00 36.00@ 37.00 H'n'g Rock, Stc'l & Coke ... 39.00@ 40.00 37.00@ 38.00 Southern Stonecoal & Coke 39.00@ 40.00 37.00@ 38.00 "Amer, Scotch ".\$36.00@\$38 | Silver Gray.\$34.00@\$35.00 Scotch Iron..... 37.00@ 38 |

MILL RONS
No. 1 Charcoal, Cold-short & Neutral. \$35.00@\$36.00
No. 1 Stc'l & Coke, Cold-short & Neutral. 34.00@ 35.00
No. 2 Stc'l & Coke, Cold-short & Neutral. 30.00@ 34.00
No. 1 Missourn and Indiana, Red-short. 36.00@ 38.00
White & Mottled, Cold-short & Neutral. 29.00@ 30.00 CAR-WHEEL AND MALLEABLE IRONS.

Hanging Rock, Cold Blast ... \$58.00@\$60.00
Alabama and Georgia, Cold Blast ... 50 00@ 52.00
Kentucky, Cold Blast ... 48.00@ 50.00
"George H. Hull & Co."

"St. Louis, Jan. 17.
"Business continues very active, with iron in short supy. The following quotations fairly represent the market.
otch Pig-Iron...... Pusiness continues very active, was to a salary active, ply. The following quotations fairly represent the market. Scotch Pig-Iron. \$35.00@\$40.00 Amer. Scotch Pig-Iron. 42.00@ 45.00 Amer. Scotch Pig-Iron. 42.00@ 45.00 Anthracite "No. 1 39.00@ 43.00 39.00 No. 2 38.00@ 41.00 "No. 2 38.00@ 41.00 "No. 3 7.00@ 39.00 No. 2 No. 2 No. 3 No. 2 
COKE AND COAL. 
 Missouri
 None offering

 Southern, No. 1
 40.00@42.00

 Ohio River, No. 1
 40.00@42.00

 Mill iron, \$40@\$45, and none offering.
 40.00@42.00
 CAR WHEEL IRONS.

#### THE COAL TRADE REVIEW.

New York, Friday Evening, Jan. 23.

#### Anthracite.

Mild weather has continued, and the consumption of domestic sizes of coal has been comparatively small. The result is, that these sizes are rapidly acculmulating, and such business as is being done is at a arge concession from circular prices. The companies are generally holding firmly to circular rates, and stocking coal, with the belief that the coal accumulated now will be absorbed later along with the regular production. The blocking of Wrought Scrap.-The sales of this article agge- shipping ports, and the utilization of cars for bolding additional stocks, is having the effect of curtailing production. The Reading Company has ordered all the collieries producing free-burning coal stopped. Those producing hard coal are kept going to supply the line trade and furnaces.

Although the mild weather in this section of country is greatly curtailing consumption, yet it has been sufficiently severe in some other sections to require about the usual consumption. To the mild winter may be attributed a large falling off in the consumption of coal for domestic purposes; but this will be fully counterbalanced by the immense consumption that will take place among manufacturing concerns, many of which did not start up until the latter part of 1879, and although carrying the anthracits ton-nage to a higher point than ever before in the history of the trade, will make a much higher record in 1880. The best authorities only estimate the decrease in consumption owing to the mild weather, should it continue to spring, at 2,000,000 tons.

The production of anthracite coal last week was 409,549 tons, as compared with 351,290 tons for the previous week, and 298,584 tons for the corresponding week of 1879. The total production from January 1st to January 17th was 838,679 tons, as against 650,873 tons for the like period of last year, showing an increase, this year, of 187,806 tons.

#### Bituminous.

The business in Cumberland coal has been small and prices not strong. Freights to Baltimore are slightly There have been strikes at the Big Vein mine firmer. of the New Central Coal Company, in consequence of the non-payment of wages, and at the mines of the Atlantic Coal Company. The indications are that there will be general labor disturbances in the bituminous fields that will require concerted action to control. The business in Clearfield coal is quiet and without feature.

#### New York.

Wholesale Prices of Anthracite Coal Delivery f. o. b. at Tide Water Shipping Ports, per ton of 2240

lbs.						
	Lump.	Steamer.	Grate.	Egg.	Stove.	Chestnut.
wyoming coal.  Pittston at Newburg Scranton at Hoboken Lackawanna at Weehawk'n Wilkes-Barre at Pt. Johnson	3 40 3 15	3 40 3 15		$\frac{3}{3} \frac{45}{20}$	4 00 3 75	$\frac{3}{3} \frac{75}{60}$
Plymouth R. A. at P. John. LEHIGH COAL.			3 40	3 55	4 15	3 85
Honey Brook at Port John. Cross Creek at Port John. Up.L.&Coun.Ri'geatEliz'pt schuylkill coal. †Alongside at N. Y. Harbor.	3 50 4 00	3 50	3 40	3 40	4 00	3 75
Hard White Ash. Free-Burning White Ash. Schuylkill Red Ash. Shamokin Lorberry Lykens Valley (Brookside). At Elizabethport.	4 00		3 70	3 75 4 25 4 75 4 85	4 30 4 65 4 75 4 85	4 00 4 15 4 15 4 25
Hard White Ash. Free-Burning White Ash. Schuylkill Red Ash. Shamokin Lorberry Lykens Valley (Brookside). At Port Richmond, Philadelphia, for shipment to points beyond capes of the Delware.			3 75	3 80 4 35 4 35 4 75	4 25 4 75 4 50 4 75	3 75 3 85 3 75 4 00
Hard White Ash Free-Burning White Ash Schuylkill Red Ash Shamokin Lorberry Lykens Valley (Brookside)			3 15	3 20 3 75 4 00 4 00	3 76 4 00 4 00 4 00	3 25

Fifty cents per ton additional for delivery at New York, † On coal delivered f. o. b. at shipping wharf at Wil-liamsburg, the current rate of harbor freight will be al-lowed from above prices.

#### Wholesale Prices of Rituminous Coal

m notesuite Trices of Mituminous C	out.
DOMESTIC GAS COALS,	
At the Shipping	
Per ton of 2240 lbs. Ports.	New York
Westinoreland and Penn\$4.25	
At Greenwich, Philadelphia	\$5.50
At S. Amboy 5.00	5 50
Kanawha at Richmond 4 10	5.40
Murphy Run, West Va., at Baltimore 3.75	5.85
Murphy Run, West Va., at Baltimore 3.75 Fairmount, West Va., "	5.70
Newburg Orrel, Md. " " 3.75	6.00
Cannelton & Peytona Cannel, West Va.	10.00
" Splint " at Richmond, 6.00	7.00
" Gas Coal at Richmond 4.00	5.65
MANUFACTURING AND STEAM COALS.	
Cumberland at G'n & Alexandria 3.00	5.50
Cumberland, at Baltimore 3.25	5.50
Cl'rfl'd "Eureka" and "Franklin."	
At mines 1.25	
At Baltimore 3.25	5.25
At Philadelphia 3.50	****
At South Amboy 4.85	****

4				
-	FOREIGN GA	Sterling.	Am. cu	ır'nev
-	Newcastle at Newcastle-on TyneLiv. House Orrel, at Liv Ince Hall Cannel ", "Gas Cannel "	7s.6d, 25s, 35s.6d, 25s.6d.	\$2 50@ 10 00@	13.00
	Scotch Gas Cannel, at Glas- gow, nominal	25s. Gold.		7.50
	Bl'k House, at Cow Bay, N.S. Caledonia, at Pt. Caledonia. Glace Bay at Glace Bay	\$1.60 1.50 1.50		\$4.25
	Lingan, at Lingan Bay Intern'l Mines, at Sydney	$1.50 \\ 1.60$		
	Pictou, Vale Mines, at Pictou  Retail			4.70
	Per ton of	2000 lbs,		

#### STATISTICS OF COAL PRODUCTION.

Anthracite. G. & Egg. Stove. Chesf. \$4.25 \$4.25 \$4.25 Lack, coal, delivered below 59th St. 4.50 4.75

This is the only Report published that gives full and accurate returns of the production of our Anthracite mines.

Comparative statement for the week ending Jan. 17th, and years from January 1st:

m	18	80.	183	79.
Tons of 2240 lbs.	Week.	Year.	Week.	Year.
Wyoming Region. D, & H. Canal Co. D, L. & W. RR. Co. Penn, Coal Co. L. V. RR. Co. P. & N. Y. RR. Co. C. RR. of N. J	72,041 63,814 10,537 16,621 248 40,647	158,258 151,578 26,619 38,741 932 70,757	47,184 49,629 13,008 13,526 324 13,051	96,727 126,977 32,247 28,467 497 17,601
	203,968	446,885	136,722	302,516
Lehigh Region. L. V. RR. Co C. RR. of N. J D. H. & W. B. RR.	44,703 43,444	99,484 67,673	31,410 27,743	66,831 46,820 686
	88,147	167,157	59,153	114,337
Echuylkill Region, P. & R. RR. Co Shamokin & Ly-	109,394	206,392	95,890	210,664
Shamokin & Ly- kens Val	7,829	16,984	5,694	21,279
	117,223	223,376	101,584	231,943
Sullivan Region. St Line&Sul.RR.Co.	271	1,261	1,125	2,665
Total	409,549	838,679	298,584	650,873
Increase	110,965	187,806		
				3,550 tons.
				9,283 " 4,255 "
				4,488 "
46 46 46 66				0,273 "

'The above table does not include the amount of coal consumed and sold at the mines, which is about six per cent of the whole production.

Receipts and Shipments of Coal at Chicago, Ill., for the reek ending Jan. 17th, and year from January 1st:

	Week.	Year.
Desertate.	Tons.	Tons.
Receipts		2,221,373 444,114

Belvidere Delaware Railroad Report for the week nd years ending Jan, 17th:

	Week.	Year. 1880.	Year. 1879.
Coal for shipment at Coal Port	******	0000	4 100
Coal for shipment at South Amboy Coal for distribution	3,629 4,977 1,660		5,072

The increase in shipments of Cumberland Coal over the Cumberland Branch and Cumberland and Pennsylvania railroads amounts to 47,335 tons, as compared with the corresponding period in 1879.

## The Production of Bituminous Coal for the reek ending Jan. 17th was as follows:

Tons of 2000 lbs., unless otherwise designated.
Week. Tons. 78,291 22,586 9,861 63,069 202,720 211,305 42,133 787,408 538,557

Tot the moon chains beet	W 7 1304	
The Production of Dec. 21st:	Coke for the week	ending
Tons of 2000 lbs.	Week	Year
Penn. R.R. (Alleghany Regio		49,199
West Penn. RR		93,279
Southwest Penn. RR		886,581
Penn. & Westmoreland Region	n, Pa. RR., 2,522	93,801
Pittsburg, Penn. RR	16,321	275,547
Total	36,566 1,	398,407

#### FREIGHTS.

Coastwise Freights.

Per ton of 2240 lbs. Representing the latest actual charters to Jan. 23d, 1880.

	Ports.  Alexandria. Annapolis. Apponang Baltimore Bangor. Baltimore Bangor. Bath. Me Beverly Boston, Mass. Bridtree. Bridgeport, Conn. Burlington Cambridge, Mass. Cambridge, Mass. Cambridgeport Camden Charlestown. Charlestown. Charlestown. Charlestown. Charlestown. Charlestown. Hackensack. Harlord Higham Keyport Lambertville Lynn Marblehead Millville Milton Mystic River New Bedford Millville Milton New York Norfelk, Va Norvich. Norwich. Sae Harbor Saelem, Mass. Sayanah Sayanah Washington. Troot. Weymouth Williamsbe, N. Y Wilmington, De Wilmington, D.  *And discharg per bridge evtr	From Philadelphia,	From Baltimore.	From Elizabethport, Port Johnson, South Amboy, Hoboken and Weehawken,
١	Alexandria			
1	Annapolis	***********		
	Apponang		**********	1.00
1	Bangor			
1	Bath, Me		******** **	
1	Beverly	1 75	9 90	1 45@1 50
٦	Braintree	1.70	2.00	1.40@1.00
:1	Bridgeport, Conn.		1.70	
1	Burlington			***********
.	Cambridgeport			
1	Camden			
1	Charleston	**********		
-	City Point			*******
-	Coosaw, S C			
٠	Damariscotta	******		
7	East Cambridge.			***********
7	E.Gr'nwich, R. I.			
2	Georgetown			80
7	Hackensack			
1	Hartford			******
6	Keyport			
	Lambertville			
0	Lynn			
6	Medford		************	***********
6	Millville			
6	Mystic River			
4	New Bedford			90
9	New Haven	*** *******	1.75	**********
-	New London		1.75	*** ********
3	Newport		1 05	80
5	Norfelk, Va		3.00	
_	Norwich			
3	Norwalk, Conn .	************	*********	
	Plymouth			
	Portland		2.25	
-	Portsmouth, Va.		2.25	
3.	Providence		1.75	
	Provincetown			
	Richmond, Va			
	Rockland			
1-	Rockport			*********
ıt	Saco			
	Sag Harbor		0.05	***********
e	Saugus		2.20	
	Savannah			
10	Staten Island			
34	Trenton			
k,	Troy		************	
c,	Washington			
-	Weymouth			
	Williamsbg, N.Y			
-	Wilmington, N.C			
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per bridge extra. § Alongside. | And towing up and down. ¶ And towing.

#### WANTED.

A party with \$25,000, to join four others in an industrial (silver) mining operation; mine in Lida District, Esmeralda County, Nevada; 400 tons free milling ore on dump, averaging \$70 to \$100 per ton; extensive and rich veins; every Latural advantage for working. Full particulars to right party. Will put up expenses, to be forfeited, to any one sending own expert to examine, in case representations are not faithful. Speculative gentlemen need not apply. Address, immediately,

M. D. CONVERSE,

M. D. CONVERSE, P. O. Box 1412, New York.

### MAP MINING CLAIMS

LEADVILLE

CALIFORNIA MINING DISTRICT,
LAKE COUNTY, COLORADO.
Carefully compiled and drawn from official surveys and records by

EDWARD ROLLANDET,

THE SCIENTIFIC PUBLISHING COMPANY, P.O. Box 4404, 27 Park Place, N. Y.

#### DIVIDENDS.

OFFICE STORMONT SILVER MINING COM-PANY, 11 Great Jones street, New York.

The Board of Trustees of this company have this day (January 22d, 1880) declared their first quarterly dividend of THREE PER CENT (30 cents a share) on the par value of their stock (\$10) payable at the National Broadway Bank, on February 15th, 1880,

nsfer-books close February 1st and reopen on Feb ary 17th, 1880.

San Francisco, Jan. 17, 1880 THE BODIE CONSOLIDATED MINING COM-

PANY has declared DIVIDEND NO. 7,

of twenty-five cents per share, payable at the office of Laid-law & Co., 12 Pine street, New York, February 2d, 1880, on all stock issued from the New York transfer agency.

Transfer-books close on the 20th inst, and re-open 3d prox. WM. H. LENT, Secretary.

LITTLE PITTSBURG CONSOLIDATED MINING COMPANY, 113 and 115 Broadway, New York, Jan. 22, 1880. DIVIDEND NO. 9

THE BOARD OF DIRECTORS OF THE LITTLE PITTSBURG CONSOLIDATED MINING COMPANY have this day declared their ninth regular dividend of \$100,000 (one hundred thousand dollars), being 50 cents per share (par value \$100) on the capital stock of the company out of the net earnings for the month of January, 1880, payable at the office of the company on and after February 2d. Transfer-books will close January 2d. Transf

THRYSOLITE SILVER MINING COMPANY,

ROOMS NOS. 51 TO 57 BOREL BUILDING.
No. 115 BROADWAY, NEW YORK, Jan. 15, 1880.

The Board of Trustees have this day declared a monthly dividend (No. 3) of TWO PER CENT on the ten million dollars (\$10,000,000) capital s.ock of this company, amounting to two hundred thousand dollars (\$200,000), or one dollar (\$1) per share, out of the third month's net earnings, payable at the Central Trust Company, on the 26th last.

Transfer-books will close January 22d and reopen January 27th.

DRAKE DE KAY, Secretary.

### EDWARD P. WHITE,

METAL BROKER No. 66 Fulton Street, NEW YORK.

INC. 60 Putton States,
P. O. Box 5672,
INGOT COPPER, TIN PLATES, PIG TIN. SPELTER, PIG
LEAD, ANTIMONY, PIG IRON, SOLDER, SHEET
ZINC, SHEATHING COPPER, COPPER BOTTOMS, SHEET IRON, WIRE &c.
Special attention given to Lake Superior Copper interests,

#### MINING COMPANIES.

#### Horn - Silver Mining OF FRISCO, UTAH.

Office, 44 Wall Street, New York.

Capital, \$10,000,000; 400 000 Shares; Par, \$25.

DIRECTORS.
CHARLES G. FRANCKLYN, Pres.;
FRANK G. BROWN, Vice-Pres.;
ALLEN G. CAMPBELL, Treas.;
WILLIAM S. HOYT, Sec.;

A. BYRAM, M. CULLEN, D. RYAN.

#### Consolidated Mayflower GOLD AND SILVER MINING CO.,

AT IDAHO SPRINGS,

CLEAR CREEK COUNTY, COLORADO ORGANIZED UNDER THE GENERAL LAWS OF THE STATE OF NEW YORK.

STOCK FULL PAID AND UNASSESSABLE. Capital Stock, - - - \$1,000,000.

100,000 SHARES; PAR VALUE, \$10.

The property is reported upon favorably by Profs. W. P. Blake, Hague, Vinton, and others. The Mayflower Mine, one of the properties of the above-named con\_pany, is in active operation, and has been opened by nearly 800 feet of tuncels, shafts, levels, and drifts; and through the entire workings a vein of pay ore is opened up. It is estimated that over 8000 tons of ore have been already practically developed. Large steam hoisting-works and the necessary buildings have been recently erected to more thoroughly open up new levels at greater depth. In the opinion of the experts who have examined this mine it is a fissure vein which can be profitably worked to an indefinite depth, and it is considered one of the largest and most reliable mines in that section of the country. The Colorado Central Railroad passes within a few hundred feet of the property, and affords every facility for transportation of the product of the mine. A limited number of shares of stock of this company are now offered for sale at \$4 per share. For prospectus and full particulars, apply to ASHTON & DOYLE, 161 Broadway, where subscription lists are opened.

## KO CONSOLIDATED MINING AS SMELTING COMPANY, OF ELKO, NEVADA.

Office, 152 Broadway, Room 2, second floor.
100,000 shares, \$10 each, organized under laws State of
New York; no incumbrances; vein 2200 feet in length;
tested by 10 shafts and 5 tunnels; furnace, etc., complete.
Ready for active operations. Stock can be purchased at
office of the company at \$3 per share.

WM. W. WAKEMAN, President.
C. DIMON, Vice-President.
GEO. H. EVERETT, Secretary and Treasurer.

#### MINING COMPANIES.

### THE BRIGGS'S CONSOLIDATED GOLD MINING COMPANY

BLACK HAWK, NEAR CENTRAL CITY,

GILPIN COUNTY, COLORADO.

The Mine is now being Operated on a Dividend-Paying Basis. Machinery and Appurtenances complete and in thorough condition.

CAPITAL, \$2,000,000. SHARES, 200,000, \$10 EACH.

S10 EACH.

OFFICERS: President, CHARLES PLACE; Vice-President, JAMES M. MOTLEY; Treasurer, JOSEPH POOL. TRUSTEES: JORDAN L. MOTT, Mott Iron Works; CHARLES PLACE, Mutual Gas Co.; JAMES M. MOTLEY; JOSEPH POOL. President Manufac'rs and Mer. Bank; THEO. W. MORRIS, Importer of Glass Plate; Hon. BENJ; THEO. W. MORRIS, Importer of Glass Plate; Hon. BENJ; OFFICE OF COMPANY: DREXEL BUILDING, Room OFFICE OF COMPANY: DREXEL BUILDING, Room 55, corner Wall and Broad streets, New York.

A limited number of shares for sale by JAMISON SMITH & COTTING, 14 Broad street.

#### THE CAPITAL STOCK

OF THE

## SPRING VALLEY HYDRAULIC GOLD COMPANY

(200,000 SHARES)

IS NOW OFFERED FOR SUBSCRIPTION

(FULL PAID AND UNASSESSABLE).

#### AT TEN DOLLARS (\$10.00) PER SHARE,

by the United States Mining Investment Company.

This property consists of over 1200 acres of deep blue gravel mining lands, situated in Butler County, California, and has long been known as one of the largest and most valuable gold deposits in the county. The property is now in profitable working condition. The last 70 days' run cleaned up \$80,791. Dividends will be paid regularly.

This company has been organized under the auspices of the UNITED STATES MINING INVESTMENT COMPANY. Owing to the extent and permanent character of this property, it offers great inducements to investors. For further partic-ulars apply to the United States Mining Investment Com-pany, 61 Broadway, New York. EDWARD BATES DORSEY, President.

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