



Devoted to the Mining, Lumbering and Farming Interests of this Community.

VOL. VI

COTTAGE GROVE, LANE COUNTY, OREGON, WEDNESDAY DECEMBER 21, 1904.

NO. 48

## Mines and Mining

Devoted to Bohemia Notes and Items of general interest to Mining Men.

William England who has been working for the Venovius mining company for some months past, came to the city Saturday. He will go to Southern Oregon to work his placer claim during the wet season.

Saturday the change in the carrying of mails to Bohemia took place. Heretofore the contract has been from Cottage Grove to Bohemia by one contractor, all the mail going via Sharp's Creek, now the O. & S. E. carries to Wildwood at which point the Danewood Bros. take the mail by the old route to Bohemia post office.

George Kerr has the newly created route contract up Row river via the Wren house to the Orasco post office in Bohemia district.

Bert Willard made his last trip Saturday.

R. J. Harl, one of the members of the executive board of the Oregon Miner's Association who owing to his extensive mining operations in Bohemia was unable to be present at the second meeting of the board in Portland, expresses himself as very much pleased with the selection of W. D. R. Dodson as president of the Association; also with the plan of work as outlined for the coming year, as if carried out it would prove of great benefit to the mining industry of the state, also with Prof. Hyde of the state University as vice president and Davis of Portland as secretary the organization is in good hands, and that the Association was rapidly forming a nucleus for an organization of power and influence for the more rapid development and promotion of the mining interests of the state.

**Down From the Venovius.**  
David Ivy, who has been employed for the past several months at the Venovius mines in Bohemia arrived in the city Monday.

Mr. Ivy proved himself, while at the Venovius, to be a very competent man, particularly in the machinery department.

He recently injured a hand which prevents his working for the present. Mr. Ivy states the weather in camp is very fine and so far outdoor work has not been suspended. He says the Venovius mill and tram run like clockwork, that the buildings about the Venovius are substantial and comfortable and with telephone connection and electric lights it is a homelike place to live.

For Gasoline call at the Modern Pharmacy.

### EASTERN OREGON NOTES.

A new ore body of concentrating ore is being opened in the Valley Queen.

The main working tunnel of the Black Jack is now in 955 feet and will soon reach the vein for which it is being driven.

The standard ore shoot of rich Cobalt gold ore recently found is proving to be much better in size and value than at first reported.

A good clean up was recently made from the first mill run at the Black Butte.

The heavy receipts of ore still continues at the Sumpter Smelter.

### Selection of Proper Metallurgical Methods

The concentration of ores consists in separating a heavy, and usually a more valuable, portion from a lighter and less valuable portion. This is accomplished by various methods. Among these the most crude and least complete is sorting under ground in the mine. A second stage toward improvement is hand sorting after coarse crushing on the surface, the various ores being picked out by hand from a revolving table or from a moving belt conveyor. A further and closer concentration may be made by means of the various mechanical concentrating devices. These include jigs, belt-vanning machines, shaking tables, circular tables and bundles, and the dry concentrating machines depending for success in operating on an intermittent blast of air. Each of these various machines, together with the canvas tables and hydraulic sizers, in which latter class belong the spitzkasten, etc., have a field of usefulness, though often they are not properly applied when they do the best work. Excepting the dry concentrators above mentioned, all of these devices depend to a large extent upon the sorting power of water, and the success is generally proportional to the adaptability of the machine to the ore. A coarse first-product jig would be useless in the treatment of slimes, and the canvas table would accomplish no valuable result on coarse ore.

Smelting is as much a process of concentration as any of the operations carried on by means of vanners, jigs or other mechanical apparatus, and not infrequently the same ore may be successfully treated by either process. By successfully means success in a practical or me-

chanical way, but the economic result may be a loss in one case and a profit in the other. A mine situated at a distance from a railroad in a semi-arid region was operated for several months successfully in a mechanical way—by smelting. The ore was a typical smelting mixture and the matte made ran high and contained a high percentage of the precious metals, but the enterprise was eventually abandoned, for the reason that costs were so high as to absorb all that should have been profit. The property was closed down and after a time a lease was given a number of men, who overhauled an old mill and prepared to concentrate the ore. This was done at comparatively nominal expense, and success, both mechanical and financial, was the result. The smelter had made a 40 per cent matte at a heavy cost, while the concentrating mill turned out a 40 per cent concentrate, which also contained the precious metal values as well, at a cost of \$3 per ton. This illustrates the need for careful consideration of the installation of a process or of any expensive machinery, for without due consideration having first been given such a matter a failure may result where success is possible. There are situations where the difference of cost between smelting and milling complex ores may not be far apart, or may in some cases even be in favor of the smelter. Mistakes of the sort above mentioned are not of infrequent occurrence. It is not only necessary to know that the ores of a certain mine contains a given percentage of copper, or a stated amount of gold or silver. It must be known what process is best adapted to the reduction of this ore, at the lowest cost. Amalgamation and chlorination or cyanidation may do it, but better economic results may be obtained by concentration and shipment.

There are many men who are first class miners, who know every detail of mining from the breaking of the ground in a prospect pit to a developed property several thousand feet deep, and yet some of these men have a limited knowledge of metallurgy. The more cautious of these do not hesitate to employ men of experience to determine what is the best treatment for ores with which they are not wholly familiar themselves, and this frequently insures success—Lead and Zinc News.

In Baker county, and also in Grant, in a less degree, there was friction for a time between the owners of the large mines and the assessor, over the valuations affixed in establishing the tax. Josephine county has also experienced the same trouble. In neither county has there been a disposition to oppress operators, but the clamor of agricultural and commercial interests for what they termed an equitably proportionate rate has brought on a little friction.

Montana has a net bullion tax, and an equipment tax, and other large mining states have different laws to those prevailing in Oregon. A large number of the smaller operators would like to see Oregon laws conform to those of some of the more advanced mineral commonwealths, and have indicated their purpose of bringing the subject up at the next session of the legislature.

**Bought Eagle Book Store.**  
Thos. Gill, who last winter lost a leg by an accident while working on a bridge, and who for sometime past has had a stand next to Garman and Heutenway's has purchased the Eagle Book store.

Mr. Gill will keep a good stock of books, stationery, magazines and notions and will be pleased to receive the patronage of the people.

## OREGON MINE TAX

### Many Small Operators Want to See a Net-Production Basis Adopted.

Legislation revising the methods of taxing mining property is likely to be discussed at the next session of Oregon's law-making body, says the Daily Journal. Idaho's precedent has been in operation for a year, and apparently with satisfaction to the mining interests. The last legislature of that state enacted that producing mines should be taxed on the basis of net production, and all properties not patented should bear an equipment tax. This tax is not oppressive, and places the burden of maintaining mining interests largely upon such properties as have been developed, and are paying dividends.

In Oregon there is an equipment tax, a tax for patented land, and the corporation license. If a non-productive mine is patented and equipped, it is liable for about as much as the producing property near. The assessor is unable to know if a property is yielding a net revenue when producing, and therefore has no guide except bare rumor to govern him in his work of distinguishing between the big mines.

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### Future Depends on Uses For Metal.

While not long ago a mining man in the vicinity of Union, this state, received inquiries from Pittsburg, Pa., relative to whether tungsten was to be found in Oregon, the Mining World says the present available supply of tungsten ore is greatly in excess of commercial demands, and the prices paid for small shipments in the past were not based on the scarcity in nature. The Mining World predicts that with the increasing demand is likely to come increased production and much lower prices although future demand and prices will depend on the finding of new uses for the metal and the enlarging of those already existing.

The uses of tungsten ore are comparatively recent. The most important is an alloy of steel. The tungsten, used as ferro-tungsten, makes steel self-hardening and gives a product much used for tools. An alloy of 5 per cent gives a hard, tenacious steel, which is workable, however, but 10 to 12 per cent gives an alloy so hard that it cannot be worked in a lathe. A new alloy called sideraphite, containing a large percentage of iron, with some nickel, aluminum and copper, together with 4 per cent of tungsten, has recently been introduced, which is said to resemble silver and to be very ductile and malleable, and not easily attacked by acids. Another alloy called manganite, consisting of copper and nickel, is improved by the addition of a small percentage of tungsten. An alloy of aluminum and tungsten, known as partinum, is used in France in automobile construction.

It is very light and strong. A tungsten-nickel alloy is also in the market, containing about 75 per cent tungsten and 25 per cent of nickel. The nickel alloy is frequently introduced into steel, giving very satisfactory results. A sodium tungstate is used in solution as a fireproofing for curtains, etc. The potassium tungstates, fused with ton, give a variety of "bronze" powders much used in decorating, etc. Sodium tungstate is also used as a mordant in dyeing cloth, and the lead tungstate is substituted for white lead for some purposes. Several of the tungsten compounds make pigments used in oil painting. The best steel for magnets is ore containing 7 per cent of tungsten.

The specific gravity of tungsten is 19.129 (Roscoe), being as much as gold. From this fact the metal derived its name, tungsten being the Swedish word for "heavy stone," the mineral having been named in that country.

The production of tungsten ore in the United States is not large, according to Mineral Resources, the output for 1901 being 179 short tons of concentrated ore, valued at \$27,720. During 1902 the production was 183.5 tons at prices from \$2 to \$3.50 per unit of tungstic acid.

### Holiday Windows.

Welch & Woods are making a display of new holidays.

Garman & Heutenway's windows are showing signs of the approaching holidays.

Lurch's store has a full supply of all kinds of General Merchandise.

Hemenway & Burkholder, although quite busy can find time to wait upon a few more customers.

Griffin & Veatch are prepared to supply you with all kinds of hardware.

Piper & Van Denburg can show you some of the best stoves on the market.

M. E. Smith has opened in the building next to Metcalf & Morse, a photograph gallery. Also in the front a jewelry store. Watch repairing. Some handsome Christmas goods in stock.

When selecting your Christmas presents, don't forget that the Wynne Hardware Company has a large stock of pocket and table cutlery and many other articles which are suitable for Christmas gifts, both desirable and durable.

### Dissolution Notice.

The firm of Tom, Dick and Harry, consisting of Tom Jenkins, Dick Berry and Harry Peck, has dissolved partnership, Dick Berry and Harry Peck retiring. All claims against the firm and all bills due the same will be paid and collected by the undersigned.

Dated Dec. 14, 1904.  
THOMAS W. JENKINS.

You can buy Diamonds cheaper at Madsen's than in larger cities and will guarantee them perfect.

## DECISION IN SCHOOL CASE

### State Board of Education Reverses Opinion of County Supt. Dillard.

On October 15th the School Board of Cottage Grove refused to longer allow Miss Shiveley to continue teaching in the public schools.

The reason as given by the board at that time was, that the teacher had failed to produce her diploma which they claimed was necessary before she became legally employed. Miss Lea was engaged to fill the vacancy.

Shortly afterward Miss Shiveley's diploma was found and forwarded to her. She presented it to the board but they stated it was too late as there was no vacancy.

An appeal was taken by Miss Shiveley to County Superintendent Dillard, who decided in her favor. The case was then carried to the State Board of Education which on Thursday reversed the county superintendent and sustained the school board's action.

It is not yet known whether Miss Shiveley will take any further action in the matter.

The following decision was rendered by the state board of education:

The Board of Directors of School District Number 45, Lane County, Oregon, Complainants and Appellants,

vs.  
Nan Shiveley, and Walter B. Dillard as County School Superintendent of Lane County, Oregon, Defendants and Respondents,

On appeal from the decision of the County School Superintendent of Lane County, Oregon, to the Superintendent of Public Instruction and by him submitted to the State Board of Education. Decision reversed.

When selecting your Christmas presents, don't forget that the Wynne Hardware Company has a large stock of pocket and table cutlery and many other articles which are suitable for Christmas gifts, both desirable and durable.

J. M. WILLIAMS,  
Attorney for Appellants,  
J. S. MEDLEY,  
Attorney for Respondents.

On the 24th day of June, 1904, the Board of Directors of School District No. 45 held a meeting and decided that Miss Nan Shiveley be employed to teach in the public schools of the district during the ensuing school year at \$45.00 per month in the ninth grade, and thereafter and on the 24th day of September, 1904, an order was entered of record by the Board that all teachers be required to present papers for approval at the clerk's office and sign contracts before entering upon their duties. Thereafter and on the 17th day of October, 1904, the clerk of the district reported to the Board that Miss Shiveley had up to that time failed to produce any papers authorizing her to teach in the public schools of Oregon, and

that he had repeatedly insisted upon her doing so but that she had at last said her papers were lost. At that meeting it was also explained to the Board, though the record is silent as to who made this explanation, that Miss Shiveley had not promised to secure a duplicate of her diploma, claiming that it was unnecessary to do so.

Thereupon, the record recites that: "Owing to the fact that Miss Nan Shiveley not having produced a valid diploma or certificate as required by Section 8 of Article VI of the School Laws of Oregon, the position which she accepted in the public school is hereby declared vacant," and notice was thereupon forwarded to Miss Shiveley reciting the action of the Board in declaring her position vacant. No charges were ever preferred against her, and thereafter she filed a complaint and notice of appeal with the County School Superintendent of Lane County alleging substantially that on and for a long time prior to the 17th day of October, 1904, she was a teacher engaged in teaching school in said district No. 45, and that on said date the clerk of the district served upon her the notice hereinbefore referred to notifying her of the action taken by the Board of Directors on the 17th day of October declaring the position which she occupied vacant for the reasons contained in the minutes of the meeting hereinbefore recited; that she was subsequently informed by the Directors that their decision was final, and she was ordered from the school room formerly occupied by her; that she was never served with any notice or in any manner notified that any charge was being or would be investigated against her as provided by Section 23, of Article VI of the School Laws of the State of Oregon and Rule A of the Rules and Regulations governing trials as revised by the State Board of Education March 1, 1901, and that she at no time had any notice of any hearing or investigation and had no opportunity to be heard in person or to be represented by an attorney and that said proceedings were wholly invalid and void. She asked that she be reinstated as a teacher in the school or have such charges or objections as the Board of Directors were disposed to make against her investigated in the manner provided by law and the rules referred to governing trials.

At the time set for the hearing by the County School Superintendent, the Board of Directors filed a transcript of the record of their proceedings with him and at the same time a motion to dismiss the appeal, which motion was overruled by the County School Superintendent for the reason "that said Nan Shiveley was tendered a position as teacher in the public schools under the charge of said Board and the position was accepted and the duties entered upon by the said Nan Shiveley, and she was therefore entitled to continue as such teacher until removed for cause after a fair and impartial trial before said Board as provided for in Article VI, Section 48, Subdivision 23, and Rule A of the School Laws of Oregon."

A hearing was thereupon had upon the transcript, and after arguments of counsel the County School Superintendent decided that the said Nan Shiveley did not have due and legal notice of any action that the Board

(Continued on fourth page.)

## Long @ Bingham's Stock

The money you save in this closing-out sale is worth your while to lay in a supply.

### PRICE LIST

REGULAR	SPECIAL	REGULAR	SPECIAL
25c Gold Dust	20c	50c Star tobacco	45c
20c Dew Drop	18c	10c Smoking tobacco	8c
10c Felt's Naphtha	6 1/2c	5c "	5c
5c Savon 12 oz soap	3 1/2c	50c Shilling Baking Powder	35c
5c Tar Soap	4c	35c Golden West Bkg Pwd	25c
25c Sastile	20c	25c K. C. Baking Powder	20c
10c Giant Lye	8c	10c Spices	8c
10c Machine Oil	7c	5c Yeast	4c
10c tove Polish	6c	15c Milk	10c
12c Grape Nuts	12c	10c Oysters	8c
12c Force	12c	20c "	15c
12c Vim	12c	15c Corn Beef	12c
25c coffee	19c	25c "	20c
20c "	15c	20c Salmon	15c
2c Gilt Edge Stove Polish	20c	15c "	12c

Quite an assortment of furnishings, shoes, etc., that are sold and at below cost. Take advantage of this sale. Terms cash.

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## WELCH & WOODS

FOR SUBSTANTIAL

## Christmas Presents

FANCY HANDKERCHIEFS,  
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Big Cut in Sweaters