

SELLING SALEM DISTRICT

Devoted to Showing Salem District People the Advantages and Opportunities of Their Own Country and Its Cities and Towns.

The Way to Build Up Your Home Town Is to Patronize Your Home People

The Surest Way to Get More and Larger Industries Is to Support Those You Have

Selling Salem District is a continuation of the Salem Slogan and Pep and Progress Campaign

This campaign of publicity for community upbuilding has been made possible by the advertisements placed on these pages by our public-spirited business men—men whose untiring efforts have builded our present recognized prosperity and who are ever striving for greater and yet greater progress as the years go by.

We Will Give Our Best Efforts

At all times to assist in any possible way the development of the fruit and berry industries in this valley.

Oregon Packing Co.

Hunt Bros. Packing Company
Salem, Oregon

Quality Fruits,
Proper growing,
Proper packing,
Intelligent selling,
Courteous treatment,
Community service,

Are the steps to business success.

DEHYDRATED and CANNED FRUITS AND VEGETABLES
Oregon Products

King's Food Products Company
Salem—Portland—The Dalles
Oregon

Why suffer with Stomach Trouble when Chiropractic will Remove the Cause

Your Health Begins When You Phone 87 for an appointment

Drs. SCOTT & SCOFIELD
F. S. O. Chiropractors
Ray Laboratory 414 to 419 U. S. Nat'l Bldg.
Hours 10 to 12 a.m. and 2 to 6 p.m.

Gileon Stolz Co.
Manufacturers of Dependable Brand Lime-Sulphur Solution
The brand you can depend on for purity and test
Prices upon application
Factory near corner of Summer and Mill St.
Salem, Oregon

Willamette Valley Prune Association
The oldest Association in the Northwest.
W. T. JENKS
Secretary and Manager
Trade & High Sts.
Salem, Oregon

NELSON BROS.
Warm Air Furnaces, plumbing heating and sheet metal work, tin and gravel roofing, general jobbing in tin and galvanized iron work.
239 Commercial St. Phone 1306

DIXIE BREAD
Dixie Health Bread
Ask Your Grocer

Always Ride the Trolley
It's Convenient Comfortable Safe and Economical too—
Tickets Save Time
Sold in strips of 5 for 20c
Southern Pacific Lines

FOR YEARS AND YEARS

The statesman has been supplying the world of the critical job printing trade—
Proof positive we are printers of worth and merit.
Modern equipment and ideas are the ones that get by.

STATESMAN PUBLISHING COMPANY
Phone 72 & 622 2nd St. Salem, Or.

ACTUALLY MINING AND TREATING AND SHIPPING ORE AT LOTZ-LARSEN CAMP

Two Men Who Have Persevered and Planned and Plugged and Dreamed and Worked With Their Tired Brains and Their Bare Hands for the Goal That Is Now Not Only in Sight, But in Process of Realization—Starting the Golden Stream That Will Swell With the Years Indefinitely

H. H. Lotz, president of the Lotz-Larsen Mining company, was in Salem on Tuesday, on his way from Portland to the mines, after a business visit in the metropolis where Mrs. Lotz and their children are spending the school year. They will go to the mines in June.

Mr. Lotz reports that work is progressing favorably in their camp. They will be shipping ore as soon as the roads dry up. The reader will get a better idea of their progress, their machinery and equipment, and their methods of treating their ore, from a reading of the well written communication of Mr. Lotz in this issue.

They Have Persevered

Mr. Lotz and A. C. Larsen, the man who is associated with him in the operations on the Little North Fork of the Santiam, at the mouth of Gold creek, have certainly shown their faith by their works. They are both high class men and gentlemen. Mr. Larsen is a man of education and refinement, and Mr. Lotz is an eminent mining engineer, a graduate of the best schools both scholastic and "hard knocks" and he keeps abreast of the latest things in all the mining world, which is con-

stantly in search of and finding new ways to get the precious and useful metals from their hidden places in the rocks.

He is a graduate of the Butte school of Mines; has had 20 years of practical mining experience; is the man who first discovered copper on the Parrott Flats at Butte, which have since produced probably more copper than the original highlands, and he has had the experience of being "froze out" of a copper property which is reported to have since paid \$22,000,000 in dividends. Mr. Lotz is a registered mining engineer under the Oregon laws. Both Mr. Lotz and Mr. Larsen have for seven long years stuck together and worked together—worked with their hands at every manual task of which there are so many about a developing mine. They have planned together and kept on the job through all the seasons; meeting discouragements and sharing the responsibilities of mistakes together—but each time and always coming back and coming up smiling; with the ultimate goal constantly in sight, though seeming distant often—that goal the making of a paying mine in a prosperous camp; pouring untold wealth for generations into the lap of the valley and the channels of trade of the cities which their properties overlook, up there in the shadows of Mt. Jefferson, some seven miles as the crow flies from the backbone of the Cascades.

No Ignis Fatuus

But the light of day dawned, and when it is dry, is very good. There are a few sharp pitches, but coming to the mine the most of it is a water grade. The company today has installed water power, has constructed and nearly ready to run a 50-ton concentrating mill. Here the ore is to be brought from the mine to the mill, by one-way cable. The bucket will have a capacity of 500 pounds; will work on a one-inch cable, and will be handled by 2 1/2 inch cable come-back line. The power for running the same will be a 5 h. p. motor. At the mill, the ore will pass over a sorting table, then through a Downe crusher, where it will be crushed to 1 1/2 inch size. Here it will pass on to 14 rolls, where it will be crushed to 3/4 inch size; then it is carried by an elevator back to the top of mill, where it passes through a trommel or classifier; the oversize going back to the rolls for re-grinding, and the other passing through the figgs, and on over the tables. Later, we expect to put in flotation, as our ore is amenable to flotation. It is expected we will be able to put five tons of raw ore into one ton of concentrate. This has been the laboratory test. We further expect to be able to hand-pick and sort at least three to five tons a day, what can be shipped without milling.

SCREEN DOORS

Wire Screen, Screen Hardware, Screen Enamel and paints will brighten up and preserve your old screens.

Falls City-Salem Lumber Co.
249 So. 12th St.
Phone 513
A. B. Kelsay, Mgr.

Ed. CHASTAIN CLOTHING CO.
305 State St.
Men's and Young Men's Clothing and Furnishings
Use my stairs. It pays

SALEM IRON WORKS

Established 1899
Founders, Machinists and Blacksmiths
Corner Front & 1st Sts.
Manufacturers of the Shand pump for irrigation and other purposes. Correspondence solicited. Irrigation information supplied.
Makers of Salem Iron Works Drag Saws.

HOTEL BLIGH

100 rooms of Solid Comfort
A Home Away From Home

Buy the Oregon Made Furnaces

W. W. ROSEBRAUGH CO.
Foundry and Machine Shop
17th & Oak Sts., Salem, Or.
Phone 386

We Are Out After Two Millions
We are now paying over three quarters of a million dollars a year to the dairymen of this section for milk.

"Marion Butter" Is the Best Butter
More Cows and Better Cows is the crying need
MARION CREAMERY & PRODUCE CO.
Salem, Ore. Phone 2488

Salem Carpet Cleaning and Fluff Rug Works
Rug and fluff rugs woven any sizes without seams. New mattresses made to order. Old mattresses remade. Feathers renovated. I buy all kinds of old carpets for fluff rugs.
Otto F. Zwicker, Prop.
Phone 1154
13 1/2 and Wilbur Streets.

public road. Above Elkhorn the miners have hewed their own road out of the side of the mountain—a solid rock road that will bear heavy loads every day in the year. These men have now proved that they have been following no ignis fatuus. They have developed and equipped a real mine. It is no will-o'-the-wisp of the feverish imagination of the writers of mining literature, indited mainly to influence the sales of stock. They are now ready to mine, treat and ship ore. They will be engaged in this business from now on; or from a few days hence onward, indefinitely, and increasingly, when the county road is dry—but they need a rock road over that stretch; and they should have it. Marion county ought to provide it. Again, this is no jack-o'-lantern, imagining of the brain tricked by the eye. That is a real mining district, and capable of vast development. The metals are there in millions piled on millions of value; and it would be good business for Marion county to rock that stretch of road; it is due to the men who have shown the world the way to a vast store of wealth; that is now ready to pour out its constant and ever swelling golden stream—with a few thousand tons of rock on a properly drained stretch of county road the chief remaining obstacle to certain well considered and planned and manifest progress.

An Interview

In talking with a Statesman reporter in Salem on Tuesday, Mr. Lotz gave substantially the following information concerning the operations at the Lotz-Larsen mines:

The expression "good mines are not found in places fit for habitation, and in places easily accessible," is not always true. Among the many that could be placed in this group, that are easily reached, close to civilization, is that of the Lotz-Larsen Mining Co. This property consists of 24 claims, lying in range 4 and 5 East, Town 3 South, Willamette Meridian, in the Lester Mining district, on the Little North Fork of the Santiam river, Marion county, state of Oregon, 52 miles south and east of Salem, 22 miles from Lyons, where it is reached by the C. & E. and is accessible by a good mountain road with a practical water grade the entire distance.

The mines takes its present name from the men who are now at its head, and who have devoted their entire time and money to bring it to its present stage of productiveness. However, they are not the original discoverers. This property, in the early days, produced \$16,000 in gold dust, and these present veins, or faults, were discovered by these early miners who discovered that it was a base ore, and, for that reason, it was passed up. It has been held and relocated at different times by different prospectors, until it has fallen into the hands of the present owners. The men who first discovered this copper ore did not feel elated; they were disgusted and left the camp. However, I have digressed somewhat from what I started out to say.

Agreeable Place to Live

We have an agreeable place in which to live. The L-L-M Co's property is situated on an elevation of 1900 feet at the mouth of Gold creek, where it confuses with the Little North Fork of the Santiam river. It is situated on the western slope of the Cascade mountains, a spur running at right angles from the main mountain range. The air is balmy, and is tempered by the sweet smelling pine, which is invigorating and very healthful. A good deal of snow falls on the ground in winter, but seldom lies there, and the cold is never excessive. The drinking water is the finest in the world; comes bubbling out of the ground from springs, a sparkling, refreshing drink. The mountains are rugged and precipitous. The side hills are covered with a virgin growth of pine, cedar, hem-

THE FAITH OF AN EXPERT IN THE FUTURE GREAT SANTIAM DISTRICT

Words of the Consulting Mining Engineer of the Bureau of Mines and Geology, State of Oregon, in a Letter Written to The Statesman—He Says He Has Great Faith

(About two years ago, on Feb. 28, 1921, A. M. Swartley, consulting mining engineer of the Bureau of Mines and Geology, State of Oregon, in response to an inquiry, wrote the following to The Statesman, and this letter is incorporated in this number to make more full the record of facts proving that Salem has at her front door a great undeveloped mining region—and with the hope that copies of this paper may come to the notice of some of the men in the mining world able and anxious to do the things which Mr. Swartley says ought to be done. Following is the language of the letter):

The metal mining resources of Marion county include the North Santiam or Elkhorn district and the properties on the headwaters of the Molalla river. The ore bodies are of the same type and origin as the other districts on the west side of the Cascade range, which extend from the Ogle mountain mine on the north through the North Santiam district, Quartzville, Blue River, Bohemia lock and larch. The district being part of the original Santiam forest reserve, has been a great fishing district, but being so easily reached by auto, has been fished out. Some wild game abounds; there being grouse, deer, elk, bob cats, wild cats, martin, mink and a few timber wolves.

No doubt this history of this camp will be similar to all other sections. The men who have done most of the hard work today are minor owners of this proposition. A. C. Larsen and H. H. Lotz, the original owners, have divided their interests to secure finance to develop the property, until today they only control the work at the mine, but do not control the stock. They have associated with them a number of stockholders, who are good sound business men. Among them, T. R. Ratcliffe, Bert and Rowell Frank, N. A. Heckman, J. A. Lathrop, W. M. La Force, and others.

Real Accomplishments

The road is a mountain road, and when it is dry, is very good. There are a few sharp pitches, but coming to the mine the most of it is a water grade. The company today has installed water power, has constructed and nearly ready to run a 50-ton concentrating mill. Here the ore is to be brought from the mine to the mill, by one-way cable. The bucket will have a capacity of 500 pounds; will work on a one-inch cable, and will be handled by 2 1/2 inch cable come-back line. The power for running the same will be a 5 h. p. motor. At the mill, the ore will pass over a sorting table, then through a Downe crusher, where it will be crushed to 1 1/2 inch size. Here it will pass on to 14 rolls, where it will be crushed to 3/4 inch size; then it is carried by an elevator back to the top of mill, where it passes through a trommel or classifier; the oversize going back to the rolls for re-grinding, and the other passing through the figgs, and on over the tables. Later, we expect to put in flotation, as our ore is amenable to flotation. It is expected we will be able to put five tons of raw ore into one ton of concentrate. This has been the laboratory test. We further expect to be able to hand-pick and sort at least three to five tons a day, what can be shipped without milling.

and other districts in Douglas county. The rocks in these districts are almost entirely Cascades andesites and tuffs which make up a large part of the Cascade range. The ore deposits are in silicified and mineralized fracture zones cutting through these andesite lavas and tuffs. The veins generally dip steeply and the fracture zones are frequently of great length. The ore bodies vary from one to many feet in width. The principal minerals are: pyrite (iron sulphide), chalcocite (copper and iron sulphide), sphalerite (zinc sulphide), and galena (lead sulphide). These sulphides usually contain considerable gold and silver. At varying depths from the surface weathering has broken down and dissolved the sulphide minerals, leaving most of the gold and a large part of the silver in the oxidized ore.

The mills erected in the past in these Cascade districts have been stamp mills with amalgamating plates upon which 50 to 60 per cent of the gold in the ore was collected. Some of these mills also had a few concentrating tables which recovered a portion of the sulphides in the ore after it had passed over the plates.

At comparative shallow depths in these mines the sulphide zone was reached. The gold in the sulphide ore did not amalgamate as well as in the oxidized ores above. The recovery per ton in practically all of these properties dropped below the cost of mining and milling and consequently these plants were forced to close. The above is essentially the history of all of the operating mines in these districts. The metallurgy, or milling methods of the time when this occurred had not advanced sufficiently to successfully treat these complex ores, which almost invariably occurred immediately below the oxidized zone. Great advancement in the art of handling complex ores has taken place since that time. The difficulty largely lies in the fact that smelting requirements are entirely different for zinc than for lead or copper, and lead smelting is also somewhat different than copper smelting. We must send our zinc ore or concentrates to a zinc treatment plant, and we also have lead smelting plants and copper smelting plants.

The Present Problem

The problem, then, at the mine where we have these mixtures of sulphides is to separate zinc sulphides, copper sulphides, and lead sulphides, each from the other. This cannot be successfully accomplished upon the old style of concentrating table. The method, which has come into use in the last few years and which is being improved from day to day is that of flotation, and the special application of flotation to the separation of sulphides from each other is called preferential flotation. The products from this process are then in a marketable form.

Another method which is being applied at or near mines, in some cases by the mining companies themselves, is that of roasting, leaching, and electrolytic recovery of the metals. This has been developed especially in the recovery of zinc.

It is evident from the above bare outline that a great problem for most of these mines is the ore of metallurgy, or treatment.

Has Faith for Future
I have a great faith in these

districts in the Cascades, providing strong, individual companies can be induced to take over some of the best properties and develop the ore bodies and the processes in a thoroughgoing, competent sort of way. This Bureau has tried to induce some of the companies, which are handling successfully similar ores elsewhere, to enter Oregon and lead the way. It has been under consideration by some of them, but the shortage of labor, the high cost of materials, and the great uncertainty of commercial conditions in the metal mining industry, which has prevailed up to the present time, has prevented us from engaging their interest. WE HOPE THAT WITHIN THE NEXT YEAR OR TWO this may be done.

With this end in view, it is our purpose next spring to make a fairly COMPLETE INVESTIGATION OF THE NORTH SANTIAM and other ore deposits in the andesite, to publish a special report upon them in order that authoritative information may be presented to those who have the capital and the ability to do this work successfully, and also for the interest and information of those who have spent their money and efforts in developing these districts.

LOTZ-LARSEN MINING PROPERTIES IN GOOD SHAPE, AFTER 7 YEARS

(Continued from page 1)

years of hell, will not succeed but lie them down to die. This is our exact position on the Santiam.

The Breed That Succeeds

We are of this breed that you cannot stop, and if we are compelled to even educate and build a new psychology, here in Salem and vicinity, we will do so. We will build a psychology of future hope and enjoyment in our achievement.

No longer will you cry "don't mine," but the cry will be "mine." And produce greater mines and greater mining enterprises, and our property will help make your property; our business will help make your money; our money will flow through your channels of trade, and will be as a new oil to your present machinery. Dollars will come for taxes and dollars will come for new enterprises and new industries. New faces will come and will add to your happy community. Very truly yours,

H. H. LOTZ.

HARD ON LUNGS

A story is told of a well-known Edinburgh organist who was conducting his choir practice, the anthem under treatment being "As Pants the Hart."

The choristers seemed rather short of breath and consequently did not sustain the notes long enough.

At last, when he could stand it no longer, the organist called out: "Stop, stop, gentlemen. Your pants are far too short."—Chicago Tribune.

SILVER KING COPY LOST

The Slogan editor had in hand copy for a good description of the Silver King mining property, with cuts to illustrate it. At the last moment, last night, it was found that this copy had been misplaced. This is very much regretted, but cannot be helped. This copy and these cuts will appear in The Statesman Slogan pages of next Thursday.

SLOGAN EDITOR.

FARM REMINDERS FROM THE O. A. C.

Just a Couple of Poultry Pointers and One on Planting of Potatoes

Potatoes for the late planting are best if kept in a cool place, spread out as thin as possible to avoid excessive sprouting. A corn-avoid excessive sprouting. A corn-avoid excessive sprouting. A corn-avoid excessive sprouting.

Cockerels caponized this month and next should make profitable birds for the holiday market next winter, if grown properly. A caponized set will cost from \$2.50 to \$7.50, and may be bought from any poultry supply house or the larger feed and seed stores.—O. A. C. experiment station.

A large number of hens will be culled out and sold for table use in the next month or two. Many successful breeders dispose of these culled hens to neighbors and their towns, trade through the "want ad" columns of their local newspapers.—O. A. C. experiment station.

LEGAL BLANKS

One hundred and fifteen different forms, including: Contract of Sale, Road Notice, Will Forms, Assignment of Mortgage, Mortgage forms, Quit Claims Deeds, Abstract Forms, Bill of Sale, Building Contract, Preliminary Notes, Installment Notes, General Lease, Power of Attorney, Prune Books and Pads, Scale Receipts, etc.

These forms are carefully prepared for the Courts and Private use. Prices range from 3 cents to 12 cents apiece and the note books from 25 to 50 cents.

Printed and for sale by the Statesman Publishing Co., Salem, Oregon at business office, ground floor.

HOLLOW TILE
A PROTECTION AGAINST HAZARDS

ALL SIZES

ALSO DRAIN TILE, PARTITION TILE, AND BRICK

Salem Brick and Tile Co.
Salem, Oregon