#### OF INTEREST

TO MILLMEN

## Cyanide of Potassium May be Reduced to Ten Cents Per Pound.

In a report from Berkeley, California, it is stated that Professor Edmund O'Neill of the University of California, rection.—Pacific Miner. after experimenting for six months with varying success, has finally discovered a new process for making cyanide of potassium from the nitrogen of the atmosphere.

A discovery that will allow of the production of the compound at a rate far cheaper than it has ever been possible to manufacture it. Such an advantage can be obtained by the new method that it is hoped to secure a great reduction in the cost of extracting gold by the cyanide process and in similar other metallurgical operations.

Professor O'Neill's process is described as analagous to the method of making nitric acid from the nitrogen of the air, a result which has been worked out and successfully demonstrated at Niagara Falls.

Following on the line of these experiments he has tried a number of snytheses in his laboratory at Berkeley, working on a small scale and persisting through a long succession of failures in the details of the research.

Finally he has been able by the use of petroleum, gasoline, coal gas, furnace gas, and almost any form of hydrocarbon vapor with the nitrogen of the air under the influence of the electric arc to produce hydrocyanic acid, which can be absorbed in potash with a formation of potassium cyanide.

The cheapness of the materials and the simplicity of the apparatus combined with the saving in energy permitted in this operation are, as stated in the report, factors that give the new process a tremendous advantage over all other processes now in use.

The manufacture of cyanide of potassium has always been exceedingly expensive. It has been made from animal refuse fused with potassium carbonate, or from ammonia and metallic sodium. The price within the last five or six years has been cut down from \$1 to twenty-five cents per pound by small reductions in the expense of the materials, and it was felt that little more could be shaved from this lowest figure.

Professor O'Neill, while maintaining a very conservative position regarding his discovery, feels that there is no reason why the cost per pound cannot be brought down to the still smaller figare of ten cents.

As this process has been demonstrated only on a small scale in the laboratory. Professor O'Neill is not prepared to predict what success it may have when tried on a large manufacturing scale.

As he refuses to patent his discovery it is expected that some of the eighteen factories in the United States at present turning out the chemical will give the invention a substantial trial before long. -Journal for Investors.

### Knapp Group of Claims Sold.

The Knapp group of claims, located on Rock creek, and adjoining the Maxwell mine, has been purchased by the Highland Gold Mines company, a corporation of Sumpter, Oregon. The purchase price given in the deed is Pole lead extends through the property. into that almost inaccessible region

This group was located by M. H. Knapp when it was an unbroken wilderness, some twelve years ago. Mr. Knapp has and was one of the factors which caused been very persistent in holding these its development. claims, and developing them, so that he would be able to make a life stake out of them. In mining circles it is talked of as being one of the most important deals recorded in the last year. It is said that this property has the longest pay chute ever exposed in any mine in the Sumpter district. The deal was carried through and financed by Neil J. Sorensen & Co., of Sumpter, Oregon, and it is said that the development work will be carried on under their di-

#### DRIFTING ON STRASBURG MINE.

#### Six Claims Near Alamo Owned by a Well Financed Company.

A small force of men keep drifting on the vein of the Strasburg, near Alamo, from the level of the lower tunnel. At this point the pay streak averages four feet in width and is pronounced by well posted men from that section as being the finest milling ore yet found in the district.

This property belongs to an incorporated company. W. S. McCornick, the Salt Lake banker, W. H. Remington, a well posted mining man, and Portland parties are the holders of the stock. Three tunnels have been driven to develop the property, which aggregate 230-feet in length.

The body of ore now being developed is on the level of number 3, or the lower tunnel. This drift is 200 feet vertically below any other workings. This group consists of six claims, all of which are patented. This company have plenty of means of their own, and are not offering any shares to the public. It is said that when the present ore shoot is fully explored, upraises made and the ore blocked out, that a large and first class reduction plant will be installed.

#### GROSSCUTTING ON SOUTH POLE

#### Main Tunnel is Now in Nine Hundred Feet From Portal.

W. H. Reeves, foreman of the work now being prosecuted on the South Pole mines, came over the high mountain between Cracker and Rock Creeks on Saturday, returning on Sunday. He traveled on snow shoes, but did not find locomotion very pleasant, as the recent fall of snow had not settled.

He reports the tunnel on South Pole territory now in a distance of 900 feet. A short distance back from the face, crosscuts have been started in each direction which is intended to determine the width of the vein. Each cut had been driven ten feet at the time of his departure with no walls in sight. This would make the vein over twenty-five feet in width at present.

His account of the appearance of the ore body exposed at this point, is that it is better than at any other place in this long tunnel, which has been driven in on one of the numerous leads con-

## Recommended to Manage Mines.

William M. Hennessy, for some time superintendant of the Last Chance mine in Cable Cove, has been recomended by former manager Oscar Townsend as his successor. Nothing is known definitely as to the action some of the owners and directors will take when they arrive here, but some of them are expected soon. Mr. Hennessy has had a long and varied experience in every \$45,000, and the property is said to be department of mining from a prospector well worth that amount. Considerable to manager. He was among the very high grade ore is already exposed, and first who braved the dangers of the it is a well known fact that the North Slocan, in British Columbia. Going

#### NOTICE FOR PUBLICATION.

Department of the Interior, †
Land Office at La Grande, Oregon, Feb. 7, 1903.

Notice is hereby given that the following-named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before George F. Ward, U. S. commissioner at Canyon City, Oregon, on April 6, 1903, viz. H. E. No. 7203.

PATRICK FINLAN.

PATRICK FINLAN,
of Austin, Oregon, for the w is ne if, se if ne if
Sec 10, sw if nw if Sec. 20, Tp. 11 S., R. 15 EWM.
He names the following witnesses to prove his continuous residence upon and cultivation of said land,
viz. John S. Guridge, L. wis Hess, John Kelly, of
Prairie City, Oregon; and G. W. Dart, of John Day,
Oregon.

E. W. Banyerr, Bander, Decidence

E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 1, 1878.-NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon,
February ofth. 1001.
Notice is hereby given that in compliance with the
provisions of the act of Congress of June 1, 1878,
entitled "An act for the sale of timber lands in the
states of California, Oregon, Nevada, and Washington Territory," as extended to all the Public Land
States by act of August 4, 180a,
POSE A. CALL.

ROSE A CALL,

OSE A CALL,
of Sumpter, county of Baker, state of Oregon, has
this day filed in this office her sworn statement No.
1075, for the purchase of the w ½ s e ½, section
No 6, and n½ ne ½ of section No 7, in township
No. 10 south, range 17 E W M, and will offer
proof to show that the land sought is more valuable for its timber or stone than for agricultural
purposes, and to establish her claim to said land before Charles H. Chance, U. S. commissioner, at
Sumpter, Oregon, on Saturday, the 9th day of
May, 1003.

Sumpter, Oregon,
May, 1903.
She names as witnesses: Eugene Brown,
Thomas Moore, Melvin Clark and Cornelius S. Van
Duyn all of Sumpter, Oregon.
Any and all persons claiming adversely the above
described lands are requested to file their claims in
this office on on before said 9th day of May.

E. W. BARTLETT, Register.

# TIMBER LAND, ACT JUNE 3, 1878-NOTICE FOR PUBLICATION.

United States Land Office, United States Land Office,
La Grande, oregon, Jan. 27, 1903.

Notice is hereby given that in compliance with the
provisions of the act of Congress of June 1, 1878, entitled "An act for the sale of timber lands in the
states of California, Oregon, Nevada, and Washington Territory" as extended to all the Public Land
States by act of August 4, 1808. JAMES W. LONG

JAMES W. LONG
of Dayton, county of Columbia, state of Washington,
hasthis day filed in this office his sworn statement No.
1910, for the purchase of the nek of section No. 20,
in township No. 11 south, range No. 18 EWM, and
will offer proof to show that the land sought is more
valuable for its timber or stone than for agricultural
purposes, and to establish his claim to said land before
Chas. H. Chance, U. S. Commissioner, at Sumpter,
Oregon, on Friday, the 17th day of April, 1903,
He names as witnesses: Van Rennselaer MeadWilliam A. Green, Ralph Mead, and Joel G. Shannon, all of Sumpter, Oregon.
Any and all persons claiming adversely the abovedescribed lands are requested to file their claims in
this office on or before said 17th day of April, 1904.

F. W. BANTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.-NOTICE FOR PUBLICATION

United States Land Office,

La Grande, Oregon, Jan. 37, 100,

Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land states by act of August 4, 1892,

ALBIN SELIN. ALBIN SELIN,
of Sumpter, county of Baket, state of Oregon,
has this day filed in this office his sworn statement
No. 1907, for the purchase of the swk nwk, wh swk
and sek swk of sec No. 30 in township No. 21 south,
range No. 38 E w M, and will offer proof to show
that the land sought is more valuable for its
timber or stone than for agricultural purposes, and
to establish his claim to said land before Chas. H.
Chance, U. S. Commissioner, at Sumpter, Oregon,
on Friday, the 19th day of April, 1905.
He names as witnesses: William A. Green, Van
Rennselaer Mead, Edward Reed, Ralph Mead, all of
Sumpter, Oregon.
Any and all persons claiming adversely the abovedescribed lands are requested to file their claims in
this office on or before said 17th day of April, 1904.
E. W. BARLETT, Register.

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