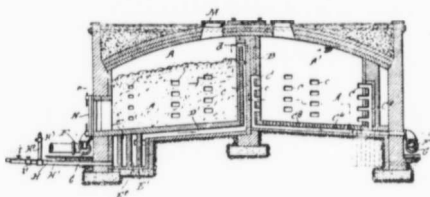


bore of the cylinder, and undue wear of piston and glands thereby avoided.

Apparatus for separating mercury from amalgam, granted to T. H. Hicks, of Fort Wayne, Ind. Claim: In a rotatable vessel, a cylindrical chamber and an annular chamber, each adapted to contain mercury and both arranged concentrically to the axis of said vessel's revolution and connected only by one or more joints so closely fitted as to prevent the passage of mercury therethrough, except under pressure.



Gold recovering process.—T. H. Hicks, Fort Wayne. Claim: The process of recovering gold as amalgam from pulverized sulphides (commonly called concentrates) which consists in subjecting such sulphides when dry to the action of heat and of hot mercury vapour as shown in the specification, and then collecting the freed gold whether in particles of amalgam or not by any effective liquid mercury amalgamating or mercury massing apparatus.

MINING PROGRESS AT ROSSLAND.

(From our own Correspondent.)

THE situation in Rossland remains unchanged from last month. The LeRoi is still shipping the usual quantity of ore, but arrangements are being made to bring up the output of 18,000 to 20,000 tons monthly, the increase being rendered possible by the larger amount of coke said to be available at the Northport smelter. The more furnaces that are running the cheaper the ore can be treated and, indeed, the manager, Mr. Mackenzie, is responsible for the statement that with all six furnaces going in the spring, upon the completion of the coke ovens at Morrissey, smelting can be accomplished at \$3 per ton, rendering \$8 ore profitable. This will mean a large augmentation of output. Mr. Mackenzie is leaving the mine at the end of the current month, and it will in future have no general manager, but one of the directors, Mr. Anthony J. McMillan, who is appointed managing director, will reside here and will conduct the affairs of the mine with a superintendent here and another at Northport. How this experiment will work yet remains to be seen. The present Superintendent, Mr. Roscoe R. Leslie, is said to be a capable mining man though young in years and necessarily so in experience. With smelting as cheap as is anticipated it is unlikely that the mine will immediately go in for concentration until the perfection of the experiments now being carried on in Rossland shows that not too large a percentage of the values is lost in the process. It is also likely that if concentration is carried out later on that the mill will be erected outside of Rossland if proper arrangements can be made with the rail-

ways. The most likely site to be selected is on Sheep Creek, over the boundary line, on the way to Northport, where below the falls there are some ideal sites where operations can be carried on by gravity. The question of concentration in Rossland itself is rendered difficult by the apparent lack of water, which, by the way, is more apparent than real if the city could be persuaded to undertake the bringing of it in on a large scale.

The War Eagle and Centre Star are shipping as usual and as yet no move has been made with regard to the erection of the concentrator. The experiments are perfected and the erection of a plant will probably come with the settlement of the water suits which are now pending at the Coast before the Supreme Court between the city and these mines. The disposition of the tailings is also another matter which needs some arrangement with the city if the mill be built close at hand.

In this connection it may be stated that the Elmore Process Company, which has been conducting a series of experiments on what is practically a laboratory basis, have made up their minds to erect a custom plant in the camp and treat ores given to them on a commercial scale. Most of the big mines on the hill have had samples of their ore treated locally by these people. The mill of the Centre Star and War Eagle is understood to be the usual water concentration type ending up with cyanidization. It is not improbable, however, that the tailings will be treated by the Elmore process.

The LeRoi No. 2 is now again on the shipping list after a close down which lasted for over a couple of months. The mine is reported to be in good shape. It is not likely, however, that the present management is anything else but temporary.

The Kootenay has commenced shipping in small quantities to Trail, which is inaugurating a series of experiments in treating this heavy iron ore on a pyritic basis and it is likely that the reduction works will be able to take some 300 tons daily and treat the same at about \$2.50 per ton, direct charges. If the indirect charges do not amount to much it is probable that the management will not proceed to erect a pyritic smelter of their own, at all events for the immediate present. The general manager of the mine is at present in London conferring with the shareholders as to the best method of putting the property on the active shipping list. He is expected back towards the end of February and it is more than probable that he will start shipping on a much larger scale on his return. The mine is being actively set in order in the preparation of stopes, etc., with a view to this policy.

Nothing much is being done upon the Giant. Events are waiting upon the action taken in London by the shareholders, which, if favourable to the further development of this promising property will probably result in the compressor of the California, an adjacent mine now lying idle, being utilized for more expeditious and economical work than is at present possible with the inadequate machinery at command.

The Homestake is working along well and some shipments of ore have been made to the Trail smelter which are reputed to have given favourable results. The management is particularly reticent in the dissemination of any information at the present stage of the mine's exploitation.