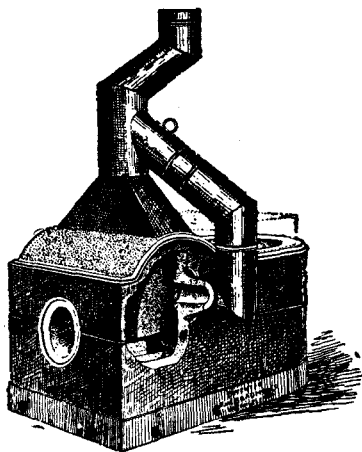


ously the double office of melting and cupellation. The ventilator promotes rapid oxidation throughout all parts of the muffle, carries off the fumes of cupellation and enables the operator to work with a degree of comfort not possible heretofore with this class of furnaces.

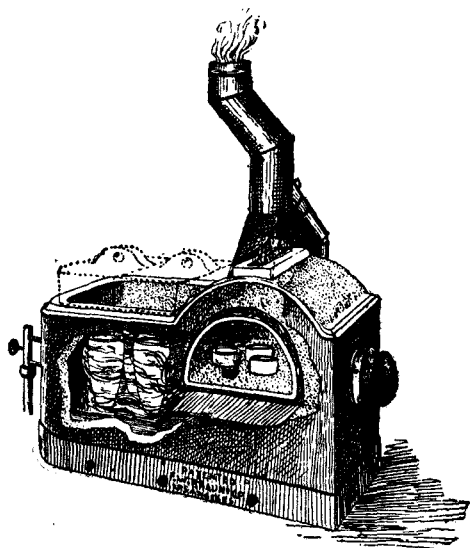
The ventilator referred to is a separate outside connecting pipe between the muffle and the stack, as



shown in the illustration. The heat arising in the main flue creates by induction a forced draft throughout the entire length of the muffle, the fresh air thus supplied furnishing abundance of oxygen, so that cupellation is both rapid and complete in all parts of the muffle.

The furnace is supplied with a centre pivot, by which it may be revolved, thereby enabling the operator to introduce the flame at either end at will from the one burner.

The melting compartment has a hinged bottom, which is covered with a mixture of coke and fireclay.



In case of a bullion spill the trap can be opened and the bottom removed without disturbing the brickwork of the furnace.

The standard size takes a muffle 6x10 inches and has a melting compartment 7x7x7 inches which will hold four crucibles, each with a capacity of two assay

tons of pulp, and weighs complete about eighty pounds.

With this size furnace it is possible to make 100 assays in a twelve-hour run.

Since coming into the hands of the present owners, the "L. & C." furnace has been greatly improved in effectiveness as well as general appearances, changes having been made that render its working perfect in all its parts, so that its convenience, compactness and economy of operation appeal to every practical assayer.

The patent draft feature is also applied to single muffle furnaces of various sizes. The Combination Melting and Muffle furnaces are made in a variety of sizes.

In the illustrations Fig. 1 is a view of the furnace showing the oxidizing bonnet and muffle draft; Fig. 2 shows melting and cupelling carried on at the same time. In both views the front is broken away to show the interior construction.

PRODUCING MINES.

ROSSLAND.

OUR Rossland correspondent telegraphs: "Ore production from this camp for the five months ending May 31st aggregate 50,000 tons gross, valued at approximately \$850,000."

NELSON.

The returns from the Nelson customs for April show the value of the mine products exported as follows:

	Value.
Coke, 2,258 tons	\$6,718 00
Ores, 1,517 tons	99,018 00
Gold bullion	37,626 00

LILLOOET.

The returns from the Ben d'Or mine give a result of 400 ounces of retorted bullion as the result of 25 days' and 21 hours' crushing.

COAL EXPORTATIONS.

THE following shipments were made in April:—

	Tons.
New Vancouver Coal Co.	36,379
Union	13,795
Ladysmith (Extension)	22,873

Total 73,047

For the three weeks ending May 20th the New Vancouver Coal Co.'s foreign shipments were as follows:—

Date.	Vessel.	Destination.	Tons.
1—	SS. New England.	Alaska	40
3—	SS. Mineola	Port Los Angeles . .	3,439
3—	SS. R. Adamson	San Francisco	4,501
8—	SS. New England	Alaska	40
9—	SS. Titania	Port Los Angeles . .	5,882
10—	SS. Ruth	Skagway	178
14—	SS. San Mateo	Port Los Angeles . .	4,472
15—	SS. New England	Alaska	10
16—	SS. R. Adamson	San Francisco	4,527
20—	SS. Aztec	Port Los Angeles . .	5,385

Total 28,474