

REVERBERATORY FURNACE FOR REFINING AMALGAM SPONGE TO BULLION IN HIGH GRADE MILL OF NIPISSING MINING CO., COBALT, ONT.

At present there are about half a dozen streams of silver, such as the above, in Canada, each pouring their wealth into the lap of the country, continuously, day and night.

This is manufactured at Buckingham, Quebec, partly into phosphorous by the Electric Reduction Company, and partly into fertilizers by the Capelton Fertilizer Company, also at Buckingham.

The falling off in production of phosphate, or apatite, in Canada was not owing to the exhaustion of the deposits, but to the development of enormous deposits of phosphate rock in the southern United States, particularly the State of Tennessee; and in Northern Africa, which is much more easily worked up into fertilizers.

In fertilizer manufacturing, phosphate rock is ground and then treated with sulphuric acid, giving acid phosphate. Some phosphate rock is utilized without the acid treatment, being simply finely ground before spreading on the fields.

Phosphorous is manufactured from phosphate rock by a process of reduction in an electric furnace.

## Slate

R OOFING slates have been quarried in Danville, Coris, Brompton, Melbourne and New Rockland, in Southern Quebec. The quarries at New Rockland have been almost continuously worked since 1868. In the Province of Ontario, some development work has been undertaken on a slate property near New Liskeard, in Hudson Township. Roofing slate has also been obtained on the West Coast of British Columbia.

Slate is nothing more than a very hard and compact variety of shale or clay. It is easily split into thin sheets and trimmed to convenient dimensions. There is only a small market in Canada for slate shingles as they are not nearly so durable as the shingles made from asbestos or metal. Slate is also used to make electric switch-boards, and black-boards for schoolrooms.

## Peat

→ HE peat deposits of Canada are quite extensive and constitute an important reserve of fuel that has as yet been but little utilized. The most important areas so far as known are those found in the provinces of Quebec and Ontario. A number of these have been systematically examined and surveyed by the Mines Branch with a view to determining their character and extent. The Branch has also carried out a comprehensive investigation of fuel values of peat, having built a plant in Ottawa for demonstrating the feasibility of the manufacture and use of peat gas in gas engines. During the past two years aid dried peat fuel from the Government bog at Farnham, Que., and Alfred, Ont., was disposed of in Montreal and Ottawa. In both cases the fuel was in considerable demand for use in open grates and in kitchen ranges. The Alfred bog is now being operated as a private enterprise.

