

metals must, to a considerable extent, be carried on together. There are, however, exceptions, some mines having big deposits of ore almost pure zinc blende. The Lucky Jim, situated about on the dividing line between the Ainsworth and Slocan mining divisions, is one of these, having a large body of ore averaging about 54 per cent zinc. Late in December a sale of 2,000 tons from this mine was made, and it is understood that the Slocan Star has practically concluded negotiations for the sale of 2,000 tons. While marketable zinc was obtained here in only small quantities (having been hitherto run to waste with the tailings from the silver-lead concentrating mills) buyers of this metal, with a single exception, did not give this district any attention, but now there is a change for the better in this connection. Several of the concentrating mills have had their plants remodelled, so as to save the zinc as a by-product when treating ores for their silver lead contents, and two or three of these have added magnetic separating plants to raise the grade of the zinc concentrate still higher.

Iron.—Nothing of importance was accomplished last year in the direction of turning to account the iron ores known to occur in quantity in widely separated parts of the province. On Vancouver and Texada Islands some development work has been done and the attention of capitalists has been drawn to the former, particularly to the properties of the Bentley Iron Mining Company, at Bugaboo creek. The iron smelter at Irondale, Washington, having been closed down, shipments of iron ore from Texada Island have been discontinued. Little change took place at the Kamloops iron property. In the Nelson mineral division, the Crawford Bay Iron deposits are being prospected. In East Kootenay there are also iron properties, but they are awaiting capital for their development.

Coal and Coke.—On Vancouver Island the Wellington collieries made an excellent showing last year, both at Extension and Cumberland (Comox), their output of about 750,000 tons having been larger than that of 1903. Developments and permanent improvements recently made at these collieries and at their seaboard shipping wharves, indicate that the alleged "impending exhaustion" of the workable coal seams of Vancouver Island is not anticipated by the Wellington Colliery Company, which claims to have ample coal yet undeveloped to last at least until the close of the present century. The year's supply of coke at Comox was in excess of the local demand. The Western Fuel Company, of San Francisco, successor to the New Vancouver Coal Company, is operating the Nanaimo collieries, the output of which was curtailed last year by the destruction by fire of the head-works at No. 1 mine. The Crow's Nest Pass Coal Company produced more than a million tons of coal in 1904. Of this quantity, 744,000 tons were disposed of as coal, and the remainder made into 244,000 tons of coke. This company is successfully seeking an enlarged market in the north-western United States—Washington, Idaho and Montana—for coal and, in the last-mentioned state, for coke as well.

Other Minerals.—No developments of note took place in regard to other minerals commercially valuable excepting, in small measure, the shipment of some of the excellent building stone occurring in variety on Vancouver Island and neighbouring smaller islands, and on the coast of the mainland. This valuable natural resource is, to a large extent, neglected, little persistent effort being made to turn it to profitable account. The lime quarries at Marble Bay, Texada Island, exported a lot of lime. Cement works are being established near Saanich, on Vancouver Island, and will probably be in operation early in the new year.

CROW'S NEST PASS COAL COMPANY'S OUTPUT IN 1904.

Since the statistics of production at the Crow's Nest Pass Coal Company's collieries, appearing on page 31 of this issue, were printed, advice has been received that the figures for 1904, previously sent out by the company and which included an estimate for the latter part of December, were inaccurate.

The corrected figures are as follows: Production of coal in 1904 (exclusive of that made into coke) was 744,000 tons, of which 581,634 tons were disposed of in Canada and 162,366 tons were exported. The production of coke was 244,000 tons, of which 138,076 tons were sold in Canada and 105,924 tons exported to the United States. The gross production of coal was about 1,110,000 tons, of which 366,000 tons were made into coke and the balance disposed of as above stated.

AN IMPROVED ORE-CARRYING BARGE.

MR. ROWLAND BRITAIN, patent attorney of Vancouver, sends us the following report:

Mr. T. Kiddie, manager of the Tye Smelter at Ladysmith is the inventor of an improved barge or scow which should be of considerable importance to coast mines shipping ore to a smelter, as it is particularly designed to effect the rapid discharge of a load of ore, coal or similar material carried in bulk.

According to Mr. Kiddie's patent specification the deck of the barge or scow is divided into a series of pyramidal hoppers, the lower ends of which communicate through doors into sub-deck galleries running fore and aft of the boat. In these galleries or tubs or cars may be run on tracks provided and communicate with hatchways at the ends of the boat through which the cars may be hoisted.

The discharge apertures of the hoppers are closable with a particular form of door in which a segment of a hollow cylinder is pivotally mounted at the axis of its curve, and rotatable on that axis to open or close the door by levers beneath. This form of door and the position of the axis on which it is movable permits the door to move very freely even with the weight of a full load against it, so that they may be readily manipulated to regulate the discharge into the ore cars.

Mr. Kiddie has designed further improvements on this door to obviate the possibility of the choking of the aperture, particulars of which improvement will be announced at a later date when the patents on it are issued.

PERSONALS.

Mr. Paul S. Couldrey, who a few weeks ago retired from the managership of the Le Roi No. 2 Company's mines, at Rossland, left British Columbia early last month for Australia, where he will have charge of important mining interests.

Mr. Wm. Thompson, until recently manager of the Rossland-Kootenay and Velvet Portland mines, and previously for several years associated with the management of the Le Roi and other important mines at Rossland, left that camp last month for Ocampo, Chihuahua, Mexico, where he is now general manager for the Waterson Gold Mines, Ltd.

Mr. J. E. McAllister, manager of the B. C. Copper Company's smelter, at Greenwood, in the Boundary district, has returned from a trip to the Southern States and Mexico.

It is announced that Mr. Jas. McEvoy, for some time past chief geologist for the Crow's Nest Pass Coal Company, has been appointed the company's land commissioner, having supervision of the company's land department.

Mr. Ernest Levy is now manager of the mines of the Le Roi No. 2 Company, Rossland, in succession to Mr. Paul S. Couldrey.

Mr. A. G. Larsen has been appointed manager of the Velvet-Portland mines, near Rossland. Mr. Wm. Thompson, the late manager, continues his official connection with these mines, but now in the capacity of consulting engineer.

HELD OVER.

A review of Nelson and Lardeau districts, by our special representative, was received too late for publication in this issue of the *MINING RECORD*. This and other matter relating to the progress of mining in 1904, also unavoidably held over, will appear in our February number.