"The nodules were very satisfactory from a blastfurnace point of view when charged into the furnace
cold. We did have considerable trouble with crusts on
the furnace, if we put in too much of the hot nodules,
due probably to the fact that they were near the smelting point when charged into the furnace and naturally
smelted much higher up in the furnace. I think we
would have had this difficulty with any hot material
that was charged. In fact, we found the same tendency
to crust when we tried the experiment of charging hot
converter slag into the furnace several years ago.

"The concentrate feed averaged about 30 per cent. sulphur, and several samples of nodules taken at various times showed an average of 14 per cent. sulphur. One sample of nodules chilled immediately in water showed a sulpur assay of 20 per cent. There is no difficulty in averaging 60 tons of the concentrates per day, and I believe that, with a proper feeding device, the tonnage could be increased to 75 tons a day. There is no question that the greater the tonnage the less the consumption of oil per ton.

## "Screen Test on Nodules from El Cobre Concentrates.

													Per cent.
"Between	n 1/2 8	and	1/4 n	nesh									25.95
6.6	1/4	"	8	6 6									44.75
6.6	8	"	16	66									24.52
4.6	16	"	20	66									1.64
" "	20	6 6	30	6 6									1.93
6.6	30	66	40	66					۸.				0.46
	40	66	60	6 6									0.33
4 6	60	66	80	"									0.14
4.6	80	66	100	66									0.04
6.6	100	66	120	6 6									0.06
	Thro	ug	h 12	0 me	esh					,			. 0.18

100.00

It will be noted that, although all the product is under ½ in., the proportion of real fines is very small.

## British Columbia's Coal Production in Half Year

The Vancouver Island Collieries produced 137.895 tons of 2,240 lbs. for the month of June, a little over 5,000 tons less than the quantity produced in the month of May.

Nanoose Collieries, Ltd., Nanoose Colliery . . . . 1,500

137,895

For the first six months of the year the Vancouver Island Collieries produced 857,131 tons, a decrease of 24,881 tons, as compared with the same period last year. The producing mines are three less than was the case in 1917, namely, the Jingle Pot Mine, South Wellington Mine, Pacific Coast Coal Mines, Ltd., and No. 4 Mine, Canadian Collieries (D), Ltd., Extension Colliery. The Jingle Pot Mine alone produced 48,885 tons during the first six months of last year, so that, in spite of the loss in tonnage from this mine and the others since closed down, the tonnage has been well maintained.

The tonnage produced by the various companies for the first six months follows:— Tons. Canadian Western Fuel Co., Nanaimo Colliery 389,984 Canadian Collieries (D), Ltd., Comox Colliery 280,151 Canadian Collieries (D), Ltd., Extension Col-

857,131

The Canadian Western Fuel Co. at its Nanaimo Colliery has made a gain of 63,515 tons for the first six months of the year.

The Canadian Collieries (D), Ltd., at its Comox Colliery, has made a gain of 21,233 tons thus far, but has lost 32,014 tons at its Extension Colliery. This is accounted for by the closing down of No. 4 Mine, as previously mentioned.

The Pacific Coast Coal Mines has a loss in output of 36,816 tons for the first half of the year. This is explained by the abandonment of the South Wellington Mine.

The Nanoose Collieries has made a gain of 9,086 tons, while the Jinglepot Mine of the Vancouver Nanaimo Coal Company, as stated, has produced no coal this year, while for the first half of 1917 its output was 48,885 tons.

The No. 5 Mine of the Canadian Collieries is now producing about 100 tons daily from development work and should considerably augment the Island tonnage before the end of the year.

The new mine at Cassidy's Siding, E. & N. Ry., which is being opened by the Granby Consolidated Mining & Smelting Co., is now producing coal from the development work. Some 1,000 tons has been dumped at the surface of the mine, but no shipments have been made as yet. The Island tonnage should be somewhat augmented by the production of this colliery before the end of the year.

A pair of shafts are now being sunk for the purpose of opening up a new mine on the Company's Farm near Nanaimo by the Canadian Western Fuel Co., and coal will probably be reached by October of this year, and shipments made before the end of the year.

The coal produced by the mines of the Nicola-Princeton district for the first six months of the present year was 19,972 tons in excess of that produced in the same time in 1917.

The tonnage to the credit of the several companies for the first six months of 1918 follows:—

															Tons.
Middlesboro	Collieries				 	*		٠			٠	٠		٠	54,698
The Fleming	Coal Co				 										12,637
Princeton Col	llieries, Lt	d.	,		 										22,148
1111001011	, , , , , , , , , , , , , , , , , , , ,														

89.483

The Middlesboro Collieries has made a gain of 19,152 tons over last year, and the Fleming Coal Co. (formerly the Inland Coal & Coke Co.) has exceeded last year's showing for the same period by 5,198 tons. The Princeton Collieries has made a gain of 355 tons.

The Merritt Collieries has not been operating this year, while last year, for the first six months, its output was 4.782. Despite this handicap, the district shows an increase of 19.152 tons.

While the returns of the Crow's Nest Pass Field are not available, it is known that the entire output of British Columbia, for the first six months of 1918, is considerably in excess of the showing made in 1917.