in accordance with the latest and best American and European machine shop practice. The volume contains over four hundred pages and five hundred illustrations.

Across the San Juan Mountains, by T. A. Rickard: New York and London: The Engineering and Mining Journal 1903, qto. cloth; price \$1.

Had Mr. Rickard, the talented editor of the Engineering and Mining Journal, chosen he might have attained literary eminence as easily by any other path than that which he has gained it. He has a very wonderful knack of descriptive writing, and the gift, too, of expressing ideas with perfect lucidity and directness—a characteristic, we should imagine, of scientific men who have studied nature from the practical side. "Across the San Juan Mountains" is a delightful account of a journey through what is evidently a most picturesque country, that of Southwestern Colorado; and although, of course, the book deals largely with mining in that territory, it is by no means a technical treatise, being, in fact, devoid of technical terms and phrases and it should therefore appeal equally to both the technical and non-technical mubble

Papers and Report relating to Minerals and Mining in New Zealand in 1903. Government Printer, Wellington.

This report, which is handsomely bound in cloth, comprises the annual statement by the "finister of Mines; Report on the Goldfields; Report on the Coal Mines and Report on State Coal Mines

COAL MINING NOTES.

The development of the new anthracite discovery at Comox is proceeding with great energy, three shifts being now employed at the work. A branch line of railway has also been built to the mine, and while as yet the output is necessarily small, it is expected that by the end of February a daily production of between three and four hundred tons will be maintained.

The Crow's Nest Coal Co. produced in 1903, 661,118 tons of coal and 167, 739 tons of coke, an increase of 50 and 39 per cent. respectively over the 1902 returns. The Company has now 913 coke ovens in use, and 215 under construction. In 1903, 1,450 men were employed as against 984 in 1902.

COAL EXPORTATIONS AND TRADE.

THE following report has been issued by Mr. J. W. Harrison, of San Francisco: "The quantity of coal imported during the year is 230,044 tons less than 1902, as can be ascertained by referring to the figures below. This cannot be accepted as the amount of fuel to fill our requirements, as the quantity of fuel oil which has been produced this year has been 60 per cent. in excess of the product of 1902, hence the showing made for the coal consumption cannot be accepted as being a discouraging one for manufacturing interests locally. The early portion of this year labour disturbances developed themselves in the British Columbia collieries; these were not amicably compromised for some considerable time, as the manager of the Wellington Collieries displayed a disposition to maintain his rights rather than make concessions, although at a serious loss to himself; the laborers finally acceded to his demands.

The abrogation of the duty of 67 cents per ton on Australian and British Columbia coals, has proved for the year a marked advantage for their products, and has aided in giving large consumers here a pronounced benefit.

The present position is a complicated one, the outlook for low-priced Australian coal is discouraging, partially because the inducements for carriers to come here are anything but profitable, and partially because outward freights on grain from here are exceedingly low, and grain freights from Australia are fully 50 per cent, higher than from here. The quantity of coal of all grades on hand here at present is small. There are uncertain factors now existing which may create a very generous demand for fuel in the near future; principally the requirements of our government for Panama, and adjacent ports, hence the market is in a very uncertain condition. If the present outward rates of freight on grain from here should show no improvement in the near future, which will minimize colonial imports, thus leaving the control of the local coal market in very few hands, which will assure high figures for 1904. The marked differenece between the prices of domestic grades, and ordinary steam coals is likely to be sustained, as the output of the former is concentrated in very few hands,

The various sources from which we have derived our coal supplies are as follows:—

British Columbia	1900.	1901.	1902.	1903.
Australia	Tons.	Tons.	Tons.	Tons.
English and Welsh	766,917	710,330	591,732	289,890
Scotch	178,563	175,959	197,328	276,186
Eastern (Cumberland and Anthracite)	54,099	52,270	95,621	61,580
Seattle (Washington)	none	none	3,600	3,495
Tacoma (Washington)	17,319	27,370	24,133	13,262
Mount Diablo, Coos Bay and Tesla	250,590	240,574	165,237	127,819
Japan, and Rocky Mountains by rail	418,052	433,817	209,358	256,826
	160,915	143,318	111,209	84,277
	42,673	51,147	47.380	108,219
Total	1,889,128	1,834,785	1,445,598	1,215,554

Important coal mining developments are taking place in the vicinity of Blairmore. During the past year a number of properties have been developed from mere prospects into producing mines, and where last year there were in the Pass but two mines, there are today eight. In this section French capital in very large amounts has been invested in colliery development, with the most promising results, and already a commencement in production activity is being made. Ere long the International Coal Company expect to begin supplying the Granby smelter with an adequate supply of coke, while the Solvey ovens at Little have just been fired. This company has now two engines employed in hauling and delivering coal to the C. P. R., the railway company taking the entire output for locomotive fuel purposes. The Grassy Mountain mines, owned by the same colliery company, are also now becoming productive.

To secure a complete statement of the entire coal consumption of California, I have been obliged to include deliveries at Port Los Angeles and San Diego by water, which have been added to the above sources of supply. The total amount received by water at those ports foot up to 69,248 tons.

Fuel Oil.—It can be safely computed that the Californian products of oil for 1903 will foot up to between 20 and 21 millions of barrels, as against 13,000,000 for 1902. Deducting the quantity which will be refined, and the amount which will be exported, there will yet remain enough for steam uses to be a disturbing factor in the consumption of coal. During the year there has been a marked advance for a further improvement in the price of oil. The railroad companies have absorbed most of the promising properties, the output of which will not seek buyers, hence the market price will not be affected.