opement, location of mill site, general course of a proposed drainage and working tunnel to strike the deposit at a depth of 1,000 feet, treatment of ore, &c. The report makes a volume of 141 pages illustrated with 20 maps, plans and sections, and 89 photographs. In concluding his report Mr. Grandin says:—

"It is impossible from the facts before us to believe otherwise than that the deposit is one of immense size and value and one which, under proper management, is capable of being developed into one of the largest and most profitable copper mines in the world. I believe this estimate of the tonnage of pay ore in sight (100,000 tons) will prove to be a very conservative one."

R. H ANDERSON, late Supt. of Le Roi No. 1 Mines, Rossland, B. C. and Oro Denoro Mines, Eholt, B.C.—"The very great thickness of the ore body and the excellent situation of the deposit on the mountain side are favorable for cheap mining. In British Columbia I have taken ore from an open-cut and put it on board box cars at a near siding for shipment to smelter, using hand barrows, for a total cost of 49 cents per ton. You ought to be able for some time to come to win a large body of ore at as favorable figures in Cape Breton. The low labor charges which prevail in Nova Scotia always arrest the attention of Western mine managers. An average of $1.50 per day is in marked contrast with $3 00 in British Columbia, Arizona, Montana, California and other localities. With conditions so favorable, and with proper management and a large body of ore, a recovery as low as two p. c. copper, that is about $5 00, should coverall expenses of mining and treatment. Transportation by water to smelter at New York should be low, and it should often be possible to ship as ballast."

BENJ. T. SMITH, South Dartmouth, Mass.—"The largest single deposit of copper I have ever seen. The face of the mountain has been cleaned off to show about 50 feet of 5 p. c. copper ore carrying $1.00 per ton in gold and silver each across the face of the vein. This can be mined cheaply, in fact quarried out, by open cutting." Mr. Smith made a tour of the copper mines of the Maritime Provinces and Newfoundland on behalf of American capitalists.

JOSEPH R. MONK, Mine Foreman.—"There appears to be ore enough in this deposit to last for many years production. The district is favorable for cheap mining, as the local labor is good and the rate of wages is from $1.25 to $1.50 per day for 10 hours. The rock blows and drills well and there is plenty of growing timber on the ground and good water power in the neighbourhood. The rate of wages is in strong contrast to the average rate in the West, namely, $3.00 per day. I believe you have the making of a very large and steady paying mine and speak from 20 years' experience as a practical miner in Nova Scotia, Oregon and Idaho, having acted as underground foreman in several large mines in Nova Scotia and in the West."

H. L. BORDEN, Mine Superintendent, Cheticamp, C. B.—"Towards the hanging wall the deposit shows up well in sulphides and carbonates of copper. West of that the deposit shows a large amount of quartz formation carrying high values in gold. For a width of 45 feet of the deposit you have as good, if not better, copper proposition than there is on this continent, and in figuring on a large scale proposition the Company should not lose sight of the fact that in a full 160 feet width they have ore that, besides carrying good copper values, runs well up in gold and silver. I estimate the ore now in sight at 400,000 tons, and at least 100,000 tons of this can be quarried without going underground. In my judgment this is one of the biggest mineral properties in the world, with splendid facilities for mining and milling. My connection with practical mining both in this province and in the West extends over a period of 35 years."

Economic Location—Cape Breton is most favorably situated for profitable copper production. It is the only copper mining district where coal and ocean transportation are both adjacent to an extensive copper deposit. The Cheticamp section has the additional advantages of good local labor, low labor costs, large natural water powers and an abundance of timber and fluxes. In reporting upon a galena property located near the Copper Company's property Mr. W. H. Kinnon of Denver, gave the following figures:—

"With the cost of transportation, fuel, fluxes, labor and supplies at a minimum the following figures could be in practice duplicated:

Cost of mining per ton	$1.00
Cost of concentrating	65
Cost of smelting per ton of run of mine ore .	70
	$2.35

"Under the above general heads have been distributed various smaller items, including general expenses, etc. These figures are based on a daily tonnage of 500 tons."

Mr. Kinnon allowed 75 cents per ton loss in treatment, and he has offered his services to design and install a plant for the successful operation of the Company's mine. The above figures may be closely applied to the Cheticamp company's proposition.

Dr. E. D. Peters, Jr. of Boston, author of "Modern Copper Smelting"