

insignificant depreciation and a low first cost.

Mr. Edison has produced no invention of broader utility in the electrical field since incandescent lighting was evolved from the busy brain of the same pioneer of industry. It is hard to foresee all the meaning of this improvement. But we may look a little way and see the noiseless city, the suppression of the horse, and the automobile a factor of economic importance in general transportation. The perfected battery means the solution of many difficult traction problems, the betterment of electric lighting and the foundation of the new art of electric navigation. Electric tugboats will give new life to our canals, and with electric ferryboats will revolutionize our harbors. Electric torpedo boats of swiftness and secrecy will make present naval armaments of doubtful protection.—Electrical Review.

MR. CLERGUE REACHING OUT.

Mr. F. H. Clergue, Sault Ste. Marie, has a large body of explorers covering the whole of the north shore of Lake Superior and east as far as Sudbury during the present season. Mr. H. C. Hamilton, Mr. Clergue's representative, says there are probably 150 men employed in the work. They were not searching for iron in particular, though that was no doubt one of the objects. Asked whether this exploration meant more railway

enterprises, Mr. Hamilton said possibly it might. They were searching for what-ever might be put to commercial use. Explorers are also locating a terminus for the Algoma Central Railway on the shores of James Bay.

INTERESTING EXPERIMENT.

At the Lucy Furnaces of the Carnegie Steel Co., at Pittsburg, Pa., a novel plant is to be installed for the purpose of freeing the air of moisture before the blast is sent into the furnace. A refrigerating plant is to be erected for this purpose. The moisture will be absorbed on coils of pipe through which brine will be forced, in the same way that refrigeration is carried on in large cold-storage houses. The moisture will freeze on the outside of the pipes and the air will then pass to the stoves and be ready for the blast with nearly all the moisture extracted. As is well known to blast furnace managers, it requires less coke to the ton of pig iron on a cold, crisp day when the air is dry than on a hot day when the humidity is very great. This experiment by the Carnegie interests will be watched by blast furnace operators all over the country.

RAILWAY SUBSIDIES.

The Dominion Government have granted \$88,884,557 and 39,725,130 acres of land to the railways of Canada.

Of these amounts, the Canadian Pacific has received 25,000,000 acres of land and \$62,742,816, the remainder being divided among other railroads. In addition, the various provinces have granted \$31,310,170 and the municipalities \$15,884,542, making a grand total of \$136,079,269 of public money paid in subsidies to Canadian railways, every mile of which is in private hands. Aid has also been granted by the Government of Ontario to the Manitoulin and North Shore Railway, which is said to be the boldest railroad scheme ever proposed in that province. The road will begin at Meaford (northwestern Ontario, run up the Bruce Peninsula, cross by ferry from Tober Moray to Manitoulin, and run through Manitoulin to Little Current, on the north shore. From the latter place, it will go north and west toward Lake Superior, with a branch line to Sudbury. It has also been proposed that the line be extended to form a connection with the transcontinental system at Port Arthur, car ferries being used along the northern shore of Lake Superior. The subsidy is in the form of a grant of 2,500,000 acres of land. The grant, however, does not include the pine timber. In return, the company is to build the railway and have it in operation by June, 1906; erect, within two years, a smelter of 300 tons capacity for nickel or other ores; export no spruce in an unmanufactured state; and, lastly, place at least one thousand settlers yearly on the lands granted.

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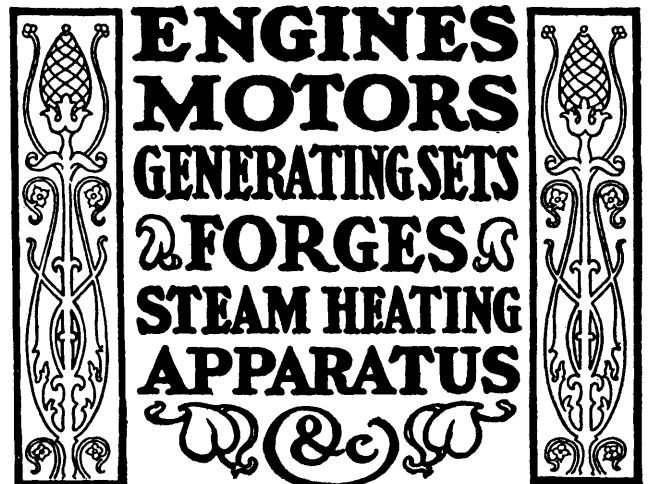
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