

PERSONALS

DONALD HUGH McDougall, president of the Nova Scotia Steel and Coal Co., Ltd., has been elected president of the Canadian Mining Institute for the ensuing year. Mr. McDougall was born in 1879 in Cape Breton. He was educated at the Government Mining School, Glace Bay, N.S., through the International Correspondence Schools, at Dal-



housie College (mining course) and at summer schools. In 1900 he joined the staff of the Dominion Iron and Steel Co. as an apprentice mechanic and became in turn assistant mine and railway surveyor, mine surveyor, civil engineer and engineer in charge of construction. In 1902 he joined the New York Central and Hudson River Railway as assistant resident engineer. In 1904 he was appointed manager of the Wabana Mines, Newfoundland, and three years later became

superintendent of mines and quarries for the Dominion Iron and Steel Co. In 1910 he was appointed assistant general manager of the Dominion Coal Co. and in 1912 general manager. In 1916 Mr. McDougall became general manager of the Dominion Steel Corporation, resigning last fall to become president and general manager of the Nova Scotia Steel and Coal Co. He is a member of the Mining Institute of Scotland, the Royal Astronomical Society of Canada, the American Iron and Steel Institute and the Engineering Institute of Canada.

CHARLES W. DILL, of Winnipeg, has been appointed Superintendent of Highways, Province of Manitoba. Mr. Dill will have charge of all work in the field.

D. T. BLACK, city engineer of Welland, Ont., has been appointed town engineer of Owen Sound, Ont., and has placed his resignation in the hands of the Welland Council.

MAJOR W. D. ADAMS, formerly assistant engineer of railways, city of Toronto, has returned from overseas. Major Adams enlisted with the 14th Battalion, first contingent, and won the Military Cross.

W. G. MAWHINNEY, of Tuelon, Man., has been appointed engineer of St. Clements municipality, with office at Selkirk, Man. Mr. Mawhinney, who recently returned from overseas, is a graduate in civil engineering of the University of Manitoba.

JAMES P. GORDON has been appointed town engineer of Trenton, Ont. For the past four months Mr. Gordon has been on the engineering staff of the International Nickel Co., but for twelve years previously had been on the staff of Chipman & Power, consulting engineers, Toronto. He graduated in 1904 at S. P. S., University of Toronto.

CHARLES H. WALLACE, sales manager of the Hamilton & Toronto Sewer Pipe Co., has resigned to become manager of the newly-incorporated Clay Products Agency, Ltd., Toronto. Mr. Wallace has been sales manager of the Hamilton & Toronto Sewer Pipe Co. for the past eleven years, and previously spent seven years with the Toronto Pottery Co. The agency will represent manufacturers in the sale of all kinds of vitrified clay products, including sewer pipe and blocks, fire brick and clay, paving and sewer brick, land tile, building blocks and conduits.

ROAD MAINTENANCE

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The tools generally employed to maintain the roads are graders and drags. With proper handling, these tools render excellent services, but sometimes they are useless in the hands of an incompetent man. I have heard the statement made that road drags are useless to maintain earth roads. Upon investigation, I found that they had been experimented with under most unfavorable conditions.

In my experience, the proper time to use a drag on the road depends on two factors: The nature of the soil, and the traffic over the road.

An earth road mixed with gravel should be dragged when very wet, as also when the traffic is light on any road. But, when the traffic is considerable, it is useless to drag it until the earth has sufficient body to prevent cutting by the wheels of vehicles. This matter, however, can be easily adjusted by a few trials with the drag under various conditions of the road.

There is also another matter in connection with road maintenance that seems to be overlooked because it does not affect all the counties of Ontario to the same extent. I refer to the maintenance of winter, or snow, roads. In the northern part, as also in eastern Ontario, snowplows and rollers are used in many localities. Both have their merits, but, considering the uncertainty of the snowfall in some parts of Ontario, I believe that the ordinary land roller answers the purpose quite well. It is better to begin when there are 8 or 10 ins. of snow over the road and to roll the road after each snowstorm.

If this is delayed until there is a foot or two of snow over the road, it is practically useless to roll the road. The action of the roller in packing down the snow provides a smooth road, free from "pitch holes," which are sometimes prevalent during winter.

In conclusion, I must say that success or failure in road maintenance depends largely on the spirit of hearty co-operation of all the men connected with the work. Nothing should be neglected that will tend towards this end. The superintendent should endeavor to create some emulation among his foremen with the view of obtaining the best results for the money expended under each of them.

ROADS RULE THE WORLD

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form a perfect transportation system for this province. Without waterways, we would lack sufficient transportation; without railways, we would lack to a greater degree sufficient transportation; and without highways, our whole transportation system would be useless,—we would be uncivilized. Byrne, in his "Highway Construction," says, "Countries inhabited by the least civilized people, whose wants can be supplied in the immediate vicinity of their dwellings, are almost destitute of roads; hence it has come to be said that roads are the physical symbol by which to measure the progress of any age or people. If the community is stagnant, the condition of the roads will indicate the fact; if they have no roads they are savages."

Smiles, in "Lives of the Engineers," says, "The road is so necessary an instrument of social well-being, that in every new colony it is one of the first things thought of. . . . The new country, as well as the old, can only be effectually opened up by roads, and until these roads are made it is virtually closed." And to quote further, "Roads rule the world—not kings nor courts, not ships nor soldiers. The road is the only royal line in the democracy, the only legislature that never changes, the only court that never sleeps, the only army that never quits, the first aid to the redemption of any nation, the exodus from stagnation in any society, the call from savagery in any tribe, the herald of prosperity. The road is umpire in every war, and when the new map is made, it simply pushes on its great campaign of help, hope, brotherhood, efficiency and peace."