Profit and Loss Account.

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Balance from 1910	\$ 1,010,680.63
Surplus earnings, 1911	684,884.65
Adjustments	18,882.93
Transferred to replacements	12,821.85
Transferred to reserve account	550,000.00
Dividend declared	350,263.21
Balance	764,606.29
	\$1,704,574.28

The incorporation of the Dominion Power and Transmission Company, Limited, was the result of necessary increase in the financial capacity of the Hamilton Cataract Power, Light and Traction Company, Limited, which became inadequate to meet the expansion of that company's business and the probable extension of its field of operation, and this company's charter from the Dominion of Canada was framed with a view to the acquisition by this company of the control, and practically the taking over of the business of the Hamilton Cataract Power, Light and Traction Company, Limited. In view of the fact that four-fifths of the stock of the Hamilton Cataract Power, Light and Traction Company, Limited, has been acquired by this company it may be regarded as a successor to that company and its business, but on a larger scale. The mileage of the company consists of 22 miles of double track in Hamilton and 23 miles of interurban lines, including an extension to Brantford over a private right-of-way.

Large shareholders have been requested to sign the agreement for the sale, and it is understood that all the stockholders are to receive \$125 a share for their preference stock, \$110 for their second preference, and \$100 for their common stock. Stockholders seem to be satisfied with the terms.

The directors and officers of the company are as follows:—J. R. Moodie, president, Hamilton; James Dixon, vice-president, Hamilton; J. W. Sutherland, Hamilton; John Knox, Hamilton; Wm. C. Hawkins, Hamilton; Lloyd Harris, Brantford; Wm. Southam, Hamilton; Sir John M. Gibson, Toronto; secretary and general manager, Wm. C. Hawkins. The present directors will probably remain in charge until the annual meeting next February.

RAILWAY SIGNALLING EXPERIMENTS.

Interesting experiments have recently been made near Birmingham, England, with a remarkable invention designed by the inventor, Mr. H. von Kramer, with the object of preventing train collisions. The inventor's method is to have earth-buried wires laid alongside and parallel with each line of permanent way, which will communicate with the signal boxes all along the line. The guard's coach on the train is fitted with a coil framework whence electricity emanates, connecting with the buried wire. The signal is picked up from either the wire of the train by a "detector," and automatically magnified, so that it is capable of operating a bell, hooter, or even a brake.

In the guard's van are several electric "solenoids," erected on a marble slab, which are entirely automatic. When the detector operates, one of these rings a hooter, while another is used for pulling a lever in the van which puts on the brakes and stops the train. On the other hand, the train can signal from station to station, sending out a current which operates alarm bell and lamps.

If the signalman forgets to pull back a lever after a train has passed from one block section into another, this omission is automatically rectified by the current. If the train over-runs a signal at danger it will be automatically stopped, and will not be able to proceed until a seal has been broken in the signal box, where the incident is recorded. This automatic signal will not be blindly relied upon by the

engine-driver and signalman, but rather increase their alertness, as they are certain of having their mistakes recorded without the question of doubt. There is a recording instrument in each box which, when straight, indicates that all is right, but if any trouble occurs it goes up at the exact moment of the incident, and remains in a position of danger.

An outstanding feature of the invention is the extreme delicacy of the detector, which can be tuned to any pitch and only respond to a similarly tuned instrument. For instance, one tuned to 100 frequencies (vibrations) per second would not respond to others of even 95 or 105 frequencies. Moreover, the detector is tunable to such an extent that the signalman can distinguish between goods, slow passenger, and fast trains.

It is impossible for two trains to collide in the same section. If one gets in legitimately it is all right, but if a second runs over the block both trains are automatically stopped.

The experiments are being carried on over a ten-mile stretch of the Stratford and Midland Junction railway between Stratford and Kineton, and so far have proved a striking success.

PERSONALS.

MR. ADAM P. LINTON, of Regina, has been appointed assistant chief engineer for the Province of Saskatchewan.

MR. E. W. MURRAY, of Regina, has been appointed district surveyor and engineer for the Province of Saskatchewan.

MR. L. G. COLEMAN has been appointed superintendent of the Ottawa division of the Grand Trunk Railway, with office at Ottawa, Ont.

MR. H. G. PHILLIPS, of Regina, has resigned his position as district surveyor and engineer of Saskatchewan to engage in private practice.

MR. M. K. ALLAN has been appointed city engineer of Regina, to succeed L. A. Thornton, who was recently appointed city commissioner.

JAMES IRWIN, of Montreal, has been appointed to succeed G. G. Hare, civil engineer of the Kingston & Pembroke Railway Company, who has been transferred to the Dominion Atlantic Railway.

HON. FRANK COCHRANE has been appointed representative of the Federal Government to represent that body at the International Road Congress to be held in London, England next June.

MR. W. REES JEFFREYS, Honorary Secretary of the International Road Congress, is at present in Toronto arranging details of the meeting of that body to be held in London during June, 1913.

MR. R. O. WYNNE-ROBERTS has been asked by the Government of Saskatchewan to report on the lignite deposits of the province with reference to the possibilities for use as fuel, and for the development of cheap power.

MR. H. L. DRAYTON, K.C., has been appointed Chief Commissioner of the Dominion Railway Board to fill the vacancy caused by the death of Judge Mabee. Mr. Drayton's present position is Corporation Counsel for the city of Toronto.

OBITUARY.

We regret to announce the death of Mr. Cecil B. Smith, senior member of the firm of Smith, Kerry & Chase, consulting engineers.