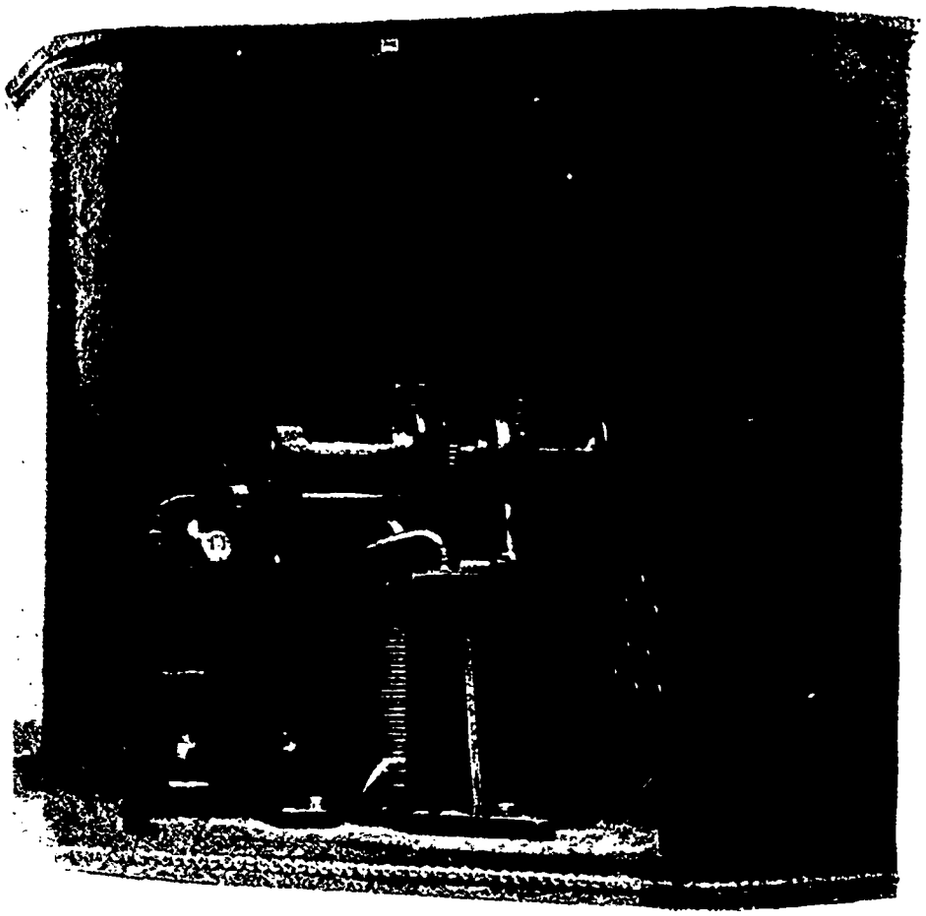

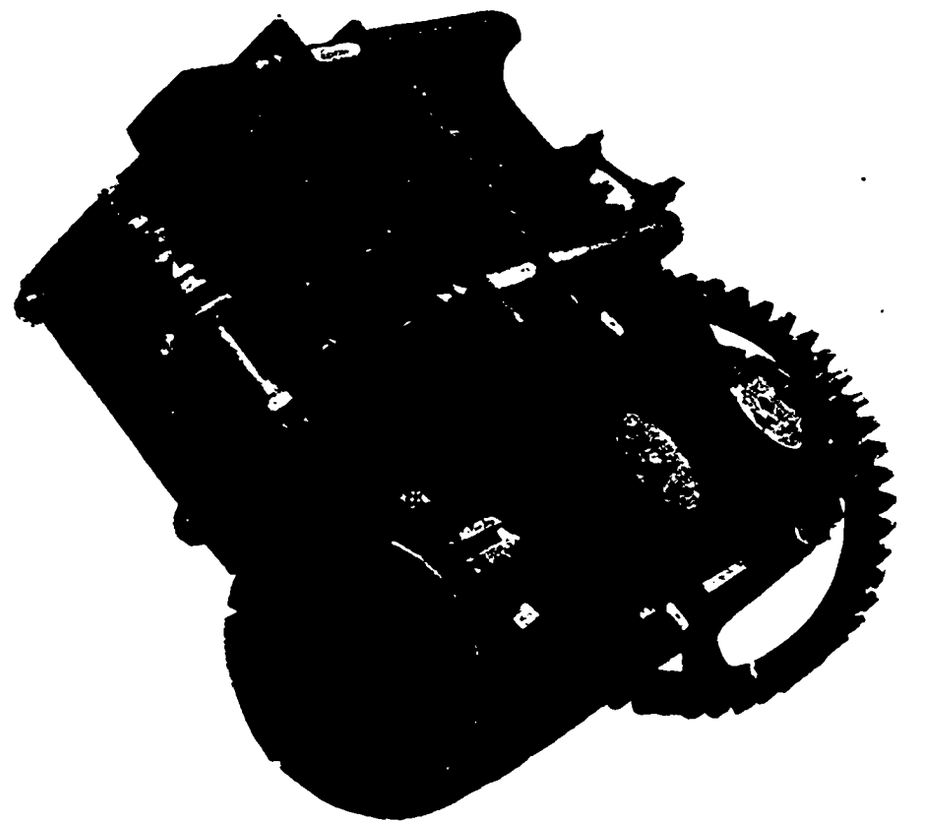

Qu'Appelle, Long Lake & Saskatchewan.—The net loss in operating for July was $4,676.59, as compared with a net loss of $2,704.74 for the corresponding period.

St. Catharines & Niagara Central.—This line, particulars of the troubles in connection with which will be found in our July issue (pg. 118), has been sold to Haines Bros., New York. Particulars of the purchasers' intentions to electrify the road will be found on pg. 193 of this issue. From the purchase money it is conceded that about $11,000 may be controlled by the City Council, & this the Council is asked to forego. It is said G. M. Neelon was paid $1,000 over his purchase price for the road, & that the purchasers have offered him a position.

White Pass & Yukon.—This Company recently asked the English public to subscribe for debentures amounting to $750,000, for construction purposes. The American representative of the Co. informs us that the issue was quite successful.

EQUIPMENT.

Electrical Lighting of Cars.

Three methods of lighting cars by electricity have so far been adopted. The most extensively developed method heretofore employed is where a dynamo in the baggage car, run by steam from the locomotive, generates an electric current which is carried through the train by wires extending from car to car. This plan requires the constant attendance of an electrical engineer, & has been found so expensive as to be impracticable. Another method now in use is that of a simple storage battery in each car. This, however, is both expensive & unsatisfactory, because the batteries must be removed at each terminal & recharged from a central electric plant. The weight of the batteries, the fact that the light is likely to diminish as the storage is drawn on, the labor of changing & cost of charging them, together with the necessity of confining the runs of the cars to terminal points where there are charging stations, add to the cost & difficulties of this system.

At one time & another a number of inventors have given more or less attention to the possibility of utilizing the motion of the wheels of railroad cars for the generation of electricity for lighting the train to which such cars belong, but until recently it could not be said that any very satisfactory results had been attained, & even now it is doubtful if any system has been so perfected as to warrant its general adoption. Some months ago the C.P.R. Co. equipped its sleeping car, Winchester, with a system, & it has since been put in the 10 magnificent sleeping cars, of which the Chantilly was the first turned out.

This system consists of a dynamo mounted upon the truck of the car, one end of which is supported by a stirrup from the truck, & the other by the axle. It is driven by a direct gear which revolves usually at the rate of 2½ to 1 revolution of the car wheel. The part resting on the axle rests on a split sleeve, supported by the axle. This split sleeve finds its bearings by means of adjustable jaws, so arranged as to take up any irregularity of the axle, & they engage close to the wheels, leaving the central parts of the axle free to spring rounding curves & going over irregularities in the road & centering the weight where it is least felt. A peculiar feature of this system is the regulating device. Although the speed of the train may reach great extremes of variations, & the dynamo being directly geared would generate great extremes of current, the regulator is so arranged by a system of resistance wires that the current is kept substantially uniform during all the variations of speed between 20 miles an hour & the maximum ability of the