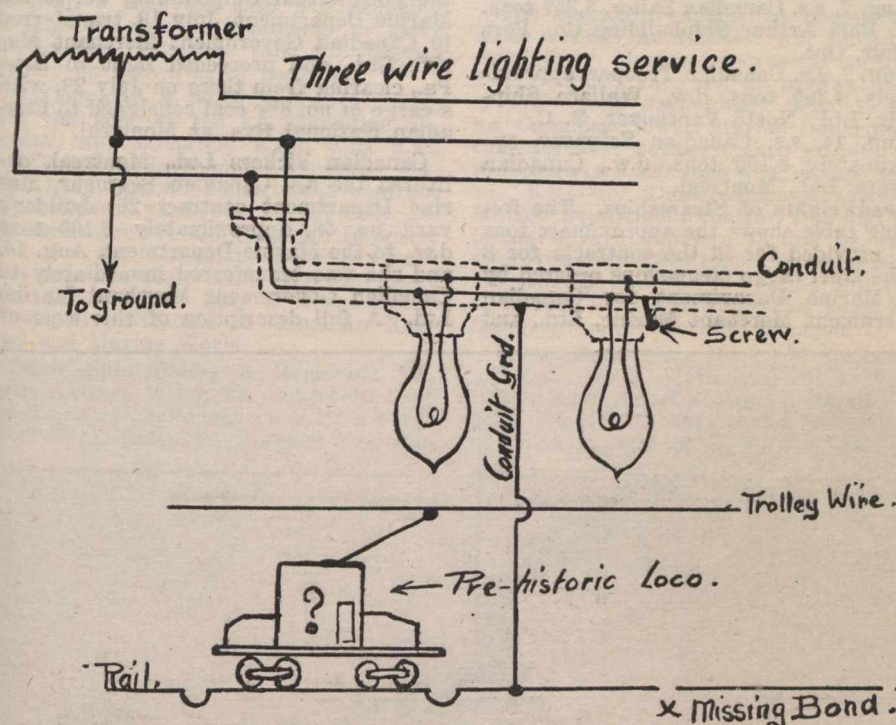


A Peculiar Trouble at Vancouver.

The accompanying diagram illustrates a rather remarkable case of trouble which occurred some years ago in a machine shop on the south side of False Creek, Vancouver. Whenever a train passed the building all the lights on one side of the shop would flare up and burst. After some Sherlock Holmes-ing, the following clues were picked up:

The central or neutral wire of the



lighting service was permanently connected to ground at the transformer.

The conduit system in the building was connected to the B.C.E.R. track to "ground" it.

One of the light wires had become "grounded" on to the conduit, as a result of a screw, securing a light receptacle, having punctured the insulation.

Some enterprising individual, in a hurry to become wealthy, had removed some of the copper bonds from the track by means of a hammer and cold chisel.

The result was that when an electric locomotive passed over the place where the bonds should have been, the 500-volt direct current flowed from the trolley wire through the motors to the rail, along the rail to conduit ground wire, thence through lamps to a real ground at the transformer. The lamps, being designed for 110 volts, went on strike when forced to carry 550 volts. J. H. Northrop, Horne-Payne substation, in British Columbia. *Electric Railway Employees Magazine.*

The London and Lake Erie Ry. and Transportation Co. has, we are officially advised, sold the whole of the copper wire from its dismantled line from London to Port Stanley, Ont., to Frankel Bros., Toronto.

St. Thomas Municipal Ry. Operation—The City of St. Thomas, Ont., is considering making changes in regard to the operation of its electric railway, which for some time past has been losing about \$1,000 monthly. The substitution of one-man cars, for the two-man cars now operating, is one of the things suggested.

Answers to Questions on Electric Railway Topics.

Answers to questions were sent by Canadian electric railway officials recently to the American Electric Railway Association's question box:—

Zone Systems.—What would be the determining factors in establishing zone limits on a city property, when it is intended to have on central city zone and one outside suburban zone?

W. G. Murrin, Assistant General Manager, British Columbia Electric Ry., Vancouver, B.C.—The factors determining zone limits are the geographical and topographical layout of the system, density of traffic and length of average haul. For example, in our cast outlet from the business district is controlled in one direction by the bridges available, so that to reach a district less than two miles away requires the same mileage as another over three miles out.

Continuous Use of Power.—Is it good practice on roads of less than 75 miles, to allow cars on the line continually, the city lines included being less than 10 miles?

W. G. Murrin, Assistant General Manager, British Columbia Electric Ry.—It depends upon headway of traffic and consequent liability to delays and collisions. All work except emergency jobs would have to be done at nights, or when traffic is at a minimum, and proper flagging rules should be enforced.

Draftsmen's Association Formed in Toronto.

Following a series of meetings in Toronto by a number of draftsmen of all branches, the Draftsmen's Association has been formed with the following objects: To promote more professional etiquette of the various branches of arts and science similar to that of the physician, lawyer, etc. To ensure that all work be carried out by men of specific qualifications. That the branches of arts and science shall know each other closer in relation to their work, and eliminate

professional jealousy. That by means of lectures and classes to be given by advanced members of the association, a broader knowledge be imparted to the younger element of all branches. To act habitually through the associations of architects, engineers and draftsmen and their chapters; in other words, to act as a compact, professional body, and not as individuals. To convince the employers of the different branches that the maintenance of ethical standards is the only right road to business success. To make the employers believe in us because we believe in ourselves. To promote such interest and participation in public and quasi-public affairs that will show the draftsmen to be men of general ability and civic pride, and not merely self-interested individuals. To create a more equitable relation between employers and employees. That the employers who purchase the brains of the different services financially realize the value thereof. Last, and not least, that by inspiration and thoroughness in the training of the junior draftsmen the association aspires to do what the societies of architects and engineers have failed to do, viz: a more sound training in every branch of the arts and science and ensure better recognition of the draftsman as a co-ordinate to the architect or engineer.

Disaster at Port Colborne Elevator.

The Dominion Government terminal grain elevator at Port Colborne, Ont., was wrecked Aug. 9, by an explosion, which is thought to have been caused by the ignition of dust. There was about 400,000 bush. of wheat in the elevator at the time, and it is expected that a considerable portion of this will be salvaged. The building itself was practically wrecked and the top was blown some distance, and fell on the Montreal Transportation Company's steel barge Quebec, which was loading at a nearby slip. The upper works and deck of this vessel were battered in and the vessel was eventually beached to save her from sinking. The number of deaths in the elevator and on the barge Quebec was 10, and several were severely injured. The Dominion Government has appointed a board of engineers to determine the cause of the disaster, to make recommendations with a view to preventing any similar occurrence in future, and also to decide as to the repairs and reconstruction of the elevator buildings and the salvaging of the grain lift in the bins. The board consists of C. N. Monsarrat, Consulting Engineer, Dominion Government; A. St. Laurent, Assistant Deputy Minister, Public Works Department; D. W. McLachlan, Engineer in Charge, Port Nelson Terminals, Hudson Bay Ry.; and John Murphy, Electrical Engineer, Railways and Canals Department.

The Board of Conciliation appointed to deal with the wages question of the Toronto Ry. and Toronto Electric Light Co.'s employees, consists of Judge Gunn of Ottawa, Chairman; W. H. Moore, General Manager, Toronto and York Radial Ry., representing the companies, and F. Bancroft, Toronto, on behalf of the men. It has since been announced that Judge Gunn has declined the appointment.

Railway Lands Patented.—Letters patent were issued during July for Dominion railway lands in Western Canada to the Canadian Northern Ry. covering 9,493.70 acres.