

by a very deep ravine. To bring their land into the market, and to make it accessible from the city they built a high level bridge across the ravine and filed a plan dividing their property into building lots and showing a highway where the bridge crossed the ravine. In 1894 the population having increased defendant Electric Light Company placed wires across the ravine and about ten feet west of the bridge. In 1904 the bridge was reconstructed and made wider, being brought to within twenty inches of the wires which in the meantime had become worn and ceased to be insulated. The bridge was reopened for traffic and had been in use some months when the plaintiff, Francis Gloster, a boy about nine years of age put his arm through the railing, touched the wire, and was seriously burned.

The Supreme Court of Canada take the view that the defendant company transmitting such a dangerous element as electricity through wires strung along a public highway are bound to exercise the greatest possible care and use every possible precaution for the protection of the public. Now it ought to have been present to the minds of the company that if not grown-up people at any rate children crossing the bridge or playing upon it would be exceedingly likely to touch the wires. There was evidence to show that the defendant's inspector crossed the bridge almost daily and should certainly have known in what state the wires were at that point. Held that the wires in the condition in which they were at the time and place complained of constituted a danger to those using the highway and were in fact a nuisance: they had become worn and defective and ceased to afford any protection to any person who touched them: the Electric Light Company are liable for the injury to the boy Francis Gloster. 38 Can. S.C.R., 27

ORDER OF THE RAILWAY COMMISSIONERS OF CANADA.

Copies of these orders may be secured from the Canadian Engineer for a small fee.

4810—June 1—Authorizing the Wheatley Telephone Company to cross with its wires the track of the Pere Marquette Railway at Lot 12, 3rd Concession, Township of Romney, Province of Ontario.

4811—May 29—Approving location of the C.P.R. Virden-McAuley branch, mile 0 to mile 5, being from a point on main line, in N.W. $\frac{1}{4}$ of Section 22, Township 10, Range 26 W. Principal Meridian.

4812—May 27—Approving by-law of the Orford Mountain Railway, authorizing A. C. Lytle, to prepare and issue tariffs of tolls to be charged on traffic carried on its railway.

4813—June 3—Approving location of the G.T.P.R. from Prince Rupert, mile 0 to mile 50, Coast District, Province of British Columbia.

4814—June 1—Authorizing the Walkerton & Lucknow Railway to take additional lands adjoining its railway in the village of Priceville, Township of Artemesia, Ont.

SOCIETY NOTES.

American Foundrymen.

At the closing of the American Foundrymen's Convention, held in Toronto, June 9th to 12th, the following officers were elected: President, Mr. Lawrence L. Anthes, superintendent of the Toronto Foundry Company; vice-president, F. B. Farnsworth, McLogan Foundry Company, New Haven; W. H. Parry, National Meter Company, Brooklyn; J. W. Jeffery, Ohio Malleable Company; Samuel T. Johnston, Cleveland; T. W. Sheriff, Sheriff Manufacturing Company, Milwaukee; J. A. Kisserle, Columbus Iron Company, Columbus, Ohio; and R. J. Cluff, King Radiator Company, Toronto. Dr. Richard Moldenke, of Watchung, N.J., was re-elected secretary. The next session of the association will be held at Cincinnati.

The Toronto Convention was a most successful gathering. The attendance was good, the exhibits large in number and extensive in the departments and trades they represented,

and the interest taken both in the papers read and machinery and supplies exhibited was all that could be desired.

Each exhibit appealed to some particular class. To some because it was new and strange, to others because they were themselves connected with that particular line of work.

The Arthur Koppel Company, of New York, had a model industrial and portable railway equipped with cars, switches and turntables.

The flexibility and adaptability of the Koppel system bring it in use in almost every large manufacturing establishment and in all lines of work where transportation of either materials or products is an essential feature. The system is simply a complete narrow gauge railway that can be installed in any plant, to reach any individual department, thus doing away with the necessity for wheelbarrows, hand-trucks and other out-of-date equipment of that character. The equipment consists of curves, switches, turntables, crossings—in any weight of rail—any gauge and with specially designed cars to fit any particular requirement.

One of the most interesting exhibits was that of the Goldschmidt Thermit Company, of New York, who have a Toronto office at 103 Richmond West. The process of welding was exemplified and the method of welding and the reactions explained.

The Thermit engineering staff will be at the disposal of interested parties, to advise on, or execute, all work suitable for the process, such as welding locomotive frames and drivers and electric motor cases. It will undertake by contract: (1) The welding of tram rails in paved streets. (2) The welding of heavy sections, such as stern posts of steamships, crank shafts and other steel sections for the repair and reinforcement of which the Thermit process is the only possible method. At the shops, repairs on small castings, not exceeding 1,000 pounds in weight, will be undertaken.

Carborundum does not grind, it cuts. The effect of this in practice is that as compared with an emery wheel, a carborundum wheel, being harder, does more work; being sharper, does much faster work; cutting instead of grinding, does smoother and better finished work; producing less friction, does not affect the temper of, or discolor the work; and requiring much less pressure, calls for the expenditure of much less physical energy on the part of the workman operating it.

The Carborundum Company, of Niagara Falls, N.Y., has an interesting exhibit showing the carborundum in all its stages. The raw material which, by the application of the electric current, becomes carborundum, the product in the rough and the finished cutting wheels, and carborundum paper and cloth.

The Joseph Dixon Crucible Company, of Jersey City, N.J., had an exhibit, a study of which must have been of great value to workers in crucible steel. Not only did they attempt to give object lessons in what happens to crucibles, but their representatives were always ready with suggestions and directions how to handle the crucible so that they would stand the greatest use. They explained the effect of rapid heating and moisture, they described the best tongs and how to use them. Messrs. Smith, Coane, Hoasis and Condit were among the best entertainers at the exhibition.

Compressed air is now the great labor saver in the foundry. As a force to assist in removing moulds there were many devices shown which used compressed air as a motive force.

The J. W. Paxson Company, Philadelphia, Pa., had among their exhibits a sand-blast machine. The sand-blast process is the best and most economical method of cleaning castings and metals which are to be machined, electroplated, enameled, japanned, bronzed or painted. For removing paint and scale from all kinds of metals it is invaluable. On brazed work it is a great labor saver for cleaning off the spelter. It is specially adapted to frosting builders' hardware, gas fixtures, etc. Railroads make use of the sand-blast to clean paint and rust from steel bridges preparatory to repainting. For removing discolorations from stone and masonry work it is of great service.