

advertently touching the foot press the stamp came down upon him and he lost three fingers. The defendants admitted that the machine was dangerous but said the boy should not have gone beyond his assigned labor of helping the man in charge. The court pointed out that it is the duty of the employer to use reasonable care to shield his employees, and this duty involves making known to them the special risks they incur in operating dangerous machines. Further, if it was not intended that the boy should attempt to operate any of them himself he should have been expressly forbidden. Held that as the foreman was negligent in not pointing out to the boy which of the machines were dangerous and cautioning and instructing him as to them, the defendants are liable. (16, O.L.R. 1.)

### RAILWAYS—LEVEL CROSSINGS.

**Lamond v. Grand Trunk Railway Company.**—Lamond was watchman for the defendant company at a level crossing in the City of Toronto, Ontario, and on the night of October 14th, 1907, he was killed by two cars being "kicked off" in the usual way from a train which was backing in an easterly direction for that purpose, and this action is brought by his widow. A brakeman with a lantern was on top of the more westerly of the two cars, but was not keeping a lookout and gave no warning. There was no light at the crossing, nor was anyone stationed on the cars shunted to give notice of their approach and warn people to get out of the way.

Section 276 of the Railway Act says that wherever in any city in Canada cars or tenders shall pass a level crossing without an engine in front there the company shall station a guard on the foremost of such to warn passers by of their approach.

Held, that the company is liable for negligence in not complying with the above section.

Held further, that though the deceased was an employee, and it was his own duty to warn others, nevertheless he had a right to rely on the company observing the statutes and doing nothing to cause him unnecessary danger or exposure. (16 O.L.R. 365.)

### ENGINEERING SOCIETIES.

**CANADIAN RAILWAY CLUB.**—President, L. R. Johnson; Secretary, James Powell, P.O. Box 7, St. Lambert, near Montreal, P.Q.

**CANADIAN STREET RAILWAY ASSOCIATION.**—President, E. A. Evans, Quebec; Secretary, Acton Burrows, 157 Bay Street, Toronto.

**CANADIAN INDEPENDENT TELEPHONE ASSOCIATION.**—President, J. F. Demers, M.D., Levis, Que.; Secretary, F. Page Wilson, Toronto.

**CANADIAN SOCIETY OF CIVIL ENGINEERS.**—413 Dorchester Street West, Montreal. President, J. Galbraith; Secretary, Prof. C. H. McLeod. Meetings will be held at Society Rooms each Thursday until May 1st, 1908.

**QUEBEC BRANCH OF THE CANADIAN SOCIETY OF CIVIL ENGINEERS.**—Chairman, E. A. Hoare; Secretary, P. E. Parent, P.O. Box 115, Quebec. Meetings held twice a month at Room 40, City Hall.

**TORONTO BRANCH OF THE CANADIAN SOCIETY OF CIVIL ENGINEERS.**—96 King Street West, Toronto. Chairman, C. H. Mitchell; Secretary, T. C. Irving, Jr., Traders Bank Building.

**MANITOBA BRANCH OF THE CANADIAN SOCIETY OF CIVIL ENGINEERS.**—Chairman, H. N. Ruttan; Secretary, E. Brydone Jack. Meets first and third Friday of each month, October to April, in University of Manitoba.

**ENGINEERS' CLUB OF TORONTO.**—96 King Street West. President, J. G. Sing; Secretary, R. B. Wolsey. Meeting every Thursday evening during the fall and winter months.

**CANADIAN ELECTRICAL ASSOCIATION.**—President, N. W. Ryerson, Niagara Falls; Secretary, T. S. Young, Canadian Electrical News, Toronto.

**CANADIAN MINING INSTITUTE.**—413 Dorchester Street West, Montreal. President, W. G. Miller, Toronto; Secretary, H. Mortimer-Lamb, Montreal.

**NOVA SCOTIA SOCIETY OF ENGINEERS, HALIFAX.**—President, J. H. Winfield; Secretary, S. Fenn, Bedford Row, Halifax, N.S.

**AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS (TORONTO BRANCH).**—W. G. Chace, Secretary, Confederation Life Building, Toronto.

**AMERICAN SOCIETY OF MECHANICAL ENGINEERS.**—29 West 39th Street, New York. President, H. L. Holman; Secretary, Calvin W. Rice.

### SOCIETY NOTES.

#### Stationary Engineers.

The Canadian Society of Stationary Engineers held their nineteenth annual convention at Windsor, Ont., August 12th and 13th. About fifty delegates were present.

The next session will be held at London, Ont., in July, 1909.

The new officers elected were as follows: President, C. Kelly, Chatham; Vice-President, William McGhie, Toronto; Secretary, William Cockett, Hamilton; Treasurer, A. M. Wickens, Toronto; Conductor, J. J. Heeg, Guelph; Doorkeeper, W. Norris, London.

#### Stationary Engineers, Quebec.

A convention of the Stationary Engineers of Quebec was held in Montreal, August 12th, 1908. The purpose of the gathering was to discuss the possibilities of amalgamating the various societies of engineers now incorporated in Quebec.

The opinion was fully expressed that it was too easy to become an engineer in Quebec, that the methods of granting certificates was too crude and allowed many incompetent men to take charge of engines.

It was decided that incorporation was necessary, and at the close a motion in favor of applying to the Legislature at its coming session for an Act of Incorporation was unanimously carried, and it was resolved to appoint a committee to carry out the project and proceed with the necessary arrangements for the Act of Incorporation, to be presented at the forthcoming session of the Quebec Legislature.

#### Institute of Mechanical Engineers, Great Britain.

The Institute of Mechanical Engineers of Great Britain held their summer session during the last week of July in the University College building, Bristol.

A most interesting paper, entitled "A Method of Detecting the Bending of Columns," was read by Mr. C. A. M. Smith. In the course of the paper Mr. Smith said that in the course of certain investigations upon materials being conducted at the East London College it became necessary to determine accurately the load at which a strut of any desired ratio of length to diameter commenced to buckle. The importance of determining this critical load was considerable, as in the case of a column the whole of Euler's theory was based upon the assumption that under some critical load the strut was in equilibrium.

The general equation to the Euler formula was:

$$P = \frac{\pi^2 EI}{L^2}$$

where P = the critical load as above, E = Young's modulus of elasticity, I = moment of inertia of cross section of column, L = length of column.

There were two main points in connection with the formula which he wished to emphasize—that the value of P was dependent upon Young's modulus of elasticity, while Euler's assumed that the strut was long in proportion to its diameter and the load perfectly axial. In order to check the theory by experimental results it was necessary to be able to find for each specimen a value for E, to ensure that the load was as nearly as possible truly axial, to note the exact load at which bending of the strut commenced, a value of E, and the exact load at which bending commenced for struts of vary-