

PAGES

MISSING



. THE CENTRAL . .
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Engineering
Club
 OF CANADA

OFFICIAL PROCEEDINGS

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TORONTO, CAN., December 17th, 1912

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THE CENTRAL RAILWAY AND ENGINEERING CLUB
OF CANADA MEETING.

COURT ROOM No. 2, TEMPLE BUILDING,

TORONTO, December 17th, 1912.

The President, Mr. J. Bannon, occupied the chair.

Chairman,—

The first order of business is the reading of the minutes of the previous meeting. As the meeting to-night is being held a week earlier than usual owing to the regular meeting night coming on Xmas eve, we will therefore have to dispense with this order of business, as the minutes of the last meeting are not yet out of the hands of the printers.

The next order of business is the remarks of the President. I was unable to be with you last meeting night owing to being indisposed. As you all know I have been sick off and on during the whole of the past year, and I am very sorry that I have not been able to be present oftener.

The next order of business is the announcement of new members.

NEW MEMBERS.

- W. Wibby, Builder, Toronto.
 W. E. Daniel, Machinist, Russell Motor Works, Toronto.
 A. Hollow, Machinist, Gurney Foundry Co., Toronto.
 J. H. Stanought, Chief Engineer, Canada Foundry Co., Toronto.
 S. Pearson, Apprentice, G.T.R., Toronto.
 H. Paton, Storekeeper, Press House, Soho St., Toronto.
 A. Harris, Storekeeper, Canada Foundry Co., Toronto.
 J. Callanan, Stationary Engineer, Canadian Tower Co., Toronto.
 E. Bert Fleury, Manager, E. J. Woodison Co., Toronto.

MEMBERS PRESENT.

G. P. Beswick	Jas. Wright	H. O. R. Horwood
F. E. Walker	C. G. Herring	W. Dennett
J. H. Williams	E. Schofield	J. C. Kyle
T. J. Walsh	J. H. Morrison	H. G. Gletcher
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E. A. Wilkinson	W. Schadel	J. W. Madigan
H. Goodes	J. Herriott	J. Bannon
W. C. Sealy	J. Ried	W. J. Jones
R. Fish	J. Anderson	Jas. Anderson
L. S. Hyde	C. L. Worth.	

Chairman,—

I will now pass on to the order of business,—“Reading of papers and discussion thereof.”

We have with us to-night, Mr. J. Herriot, General Storekeeper of the Canada Foundry Co., who is going to read you a paper on “General Store Practice,” and I have much pleasure in calling on Mr. Herriot.

GENERAL STORE PRACTICE.

BY JAMES HERRIOT, GENERAL STOREKEEPER, CANADA FOUNDRY COMPANY LIMITED, TORONTO.

The subject of this paper, is as you are all aware, a very important one. I can only in the short time allotted give a very sketchy idea of the work entailed in the handling of stores and supplies, in connection with any of the many manufacturing interests which are located around us, but trust that discussion will bring out other points which may be both instructive and interesting to us all.

The stores department, is one of the most important branches of any up-to-date plant, and unless it is well equipped, and stock kept up to requirements, the other departments must necessarily suffer.

In the first place the department should be well housed with good buildings containing sufficient storage capacity for proper storage of stock of raw and finished material necessary in the plant concerned, otherwise the department is handicapped by goods scattered around, where they are overlooked and not properly accounted for. Bins should be arranged so that each class of article is together, so that the storeman may be able to locate same quickly, and not delay workmen at the wicket.

There is now on the market a line of bins for stores purposes, made of steel and on the same principle as the sectional bookcases with which we are all so well acquainted. These are built up of separate units, and are so arranged that the compartments can be altered in size as your requirements may demand. I had the pleasure of visiting the store-room of one of the large plants located in our city which was equipped with this outfit, and can assure you that it left nothing to be desired as regards efficiency and neatness.

Bar iron, steel, pipe and tubing, and other heavy material, which in many cases are stored outside, should have proper racks, and a covering of some kind as protection from the weather.

All stores buildings should be located as centrally as circumstances will permit, so as to be easy of access from all parts of the plant. Iron and steel bar should be stored near the smith shop, other heavy material is generally unloaded as near the point of manufacture as possible, in order to facilitate handling when required to be put into production.

The amount of stock kept on hand is of course governed by the volume of business passing through the plant and orders placed accordingly. All specifications emanating from the shop production department pass first into the stores department. These specifications detail every item which will be required in connection with the contract, or sales order involved. These are checked with the stock on hand. Any material not in stock, is ordered at once, for this special job and must be reserved for same.

Material used in maintenance of plant, or what is known as "shop expense," is also handled in the same manner, but special tools required are only ordered or carried by authority of the general superintendent. In all plants there is a certain class of both raw and finished material which enters into the manufacture of standard lines and which can be safely carried into stock, but of this a maximum and minimum figure should be fixed. Any extra demand for these lines should be immediately covered by requisition. This would include iron and steel, both round and flat, rivet steel, boiler and tank plate, pipe and pipe fittings, etc. Tool steel should not, in my opinion, be carried in

- any quantity, as the demand for this is governed by your shop practice and can be ordered as required. Some may object to this on the ground of delay to work, but as same can always be procured on short notice (that is, in standard sizes) this objection cannot be sustained.

From my experience both on the railroad, and in the factory, I would say that the handling of a railway stores is much easier than the latter. In a railway stores, practically one line of business is to be looked after, either the repairs of locomotives, repairs of cars, maintenance of way or traffic department. The material carried is always standard to these lines, and there is not much variation. Your consumption from month to month generally averages the same amount, so that your stock can be always arranged to suit. Any overstock for a certain class of engine can always be transferred to some other point where this class is also stationed, and vice versa.

In an engineering plant which embraces the manufacture of varied lines, say locomotives, steam shovels, pumps, bridges, etc., you will readily understand, that you cannot do this so easily, and the storekeeper's life is not always a pleasant one when he fails to keep "production" supplied.

One point should not be overlooked, and that is the careful handling of material. It seems impossible to get workmen to recognize the fact that the same care and economy should be exercised in handling and using the supplies of their employers, as they would use were they handling their own property.

In regard to the "system" necessary to the proper accounting of the "stores" department. No two persons or no two "plants" have the same system, or same opinion as to how this should be done, but I will endeavour to give you an idea of the work required in order that supplies may be properly accounted for.

All requisitions for material originate in the stores department, and after being approved by the head of the plant, pass to the purchasing department (although in some cases these two departments are combined), who are responsible for the placing of the orders on the market, and who notify the "stores" on whom these orders are placed. A copy of the requisition goes to the "chaser" and another copy to the "receiving clerk" who are on the "stores" staff.

The "chaser's" duty is to keep in touch with the vendor, and follow the order up so that delivery of goods are made when required so that "production" is not delayed. He has to keep all records as to promises given, and reason of delays, etc., in fact should have notes on all material outstanding.

The "receiving clerk" receives all material which comes into the plant, checks same with his copy of requisition, notes differences in weights and quantities, and makes out "receiv-

ing" slips, which then pass to the "inventory or stock" clerks, and then to the "accountant" where they are compared with vendor's invoice before being passed for payment. The "receiving" clerk also makes out all "over, short, and bad order" claims against the railroad or other carrier, also checks the freight bills, etc., amount of same being entered on his report, so that goods can be priced at invoice value, plus amount of freight charges, and customs duty if any.

The customs end is handled by another department, copy of entry being furnished the "receiver" for his record.

No goods of any description should be unloaded without the "receivers" being present, and this rule is a hard and fast one, as unless it is adhered to errors and mistakes will creep in. This rule applies not only to goods delivered by city merchants, but also to car load lots. In this connection, car loads must be carefully watched so that no delay in unloading cars occur and "demurrage" bills pile up. All cars placed on sidings by the railroads are reported to the "receiver" who checks up his "freight advice," customs papers, etc., and if same are all clear, then gives the order for unloading, also advising where material is to be placed.

The "stores inventory" or "stock ledgers." Some prefer the "card system" and others the "loose leaf" ledger, but this is a matter of choice as practically the same results are obtained from either. These cards have headings showing name of article, location, etc., columns showing receipts with numbers of receiving slip, quantities, price, issues and balance. Cards should be fyled alphabetically. Goods are entered from the receiving slips, prices are taken from invoices, after same have been checked in accountant's department. Issues are made from "material order slips" (which will be explained later). In addition to this, a card is placed in each bin with goods showing receipts and issues, so that by looking at these cards it can be seen at a glance what quantity is on hand of that particular item. This card is posted by the "stores" helper when delivering goods on "orders" from shops.

It is also the practice to have an "inventory" clerk, whose duty it is to check up stock, he being employed on this continually, same being then compared with cards, and adjustments made if necessary.

"Material order slips." This is the order placed on stores by foreman, or authorized employee, for material required, and no article should be issued without this order. These orders show the "shop order number" or "expense number" to which the goods should be debited, the description and quantity of material required, also drawing or pattern numbers. These orders pass to the "inventory" clerks, who enter same on their records, price the order and transmit the same to

accountant's office, where it is handled by the "costs" department, but this part does not enter into my story.

Any material left over on any work should be at once returned to "stores" with a "credit" slip, showing the order number to which the same is credited. This is taken back into stores at value issued (if in good condition) or if same has been improved, the extra labour is added to value.

The handling of scrap material is also in most cases done by the stores department. Scrap iron, steel, steel and iron turnings and borings, copper, brass, rubber, rope, etc., being classified and stored at convenient points for loading, and when a sufficient quantity accumulates same is sold.

Brass turnings from brass finishing department are also disposed of in the same manner, or else remelted in your own foundry.

There are certain materials used in all plants which cannot be kept directly under the eye of the storekeeper, and he has to depend on the other departments to give the necessary orders when using same. This embraces lumber, coal, coke, etc. Now workmen seem to have the idea that because it is all company's material they are at liberty to use same at their pleasure without putting through the proper account, which in their minds is really "red tape." The workmen should have their minds disabused of this idea, and should be carefully instructed on this point.

Some of those present may remember a paper which was given to this club by Mr. Alfred Tory, General Storekeeper, G.T.R. System, London, Ontario, in October, 1908.

Among other interesting things he gave us a list of the numerous qualifications required of a railway storekeeper and as these are also applicable to the storekeeper of any of our large plants, I think the repetition will not be amiss. They read as follows:

"A railroad storekeeper should be an integrate part, a cog in the wheel of the system by which he is employed.

"He must possess 'tenacity' and a faculty for concentration, etc.

"It is his duty to familiarize himself with all classes of material, and have a general knowledge of all classes of railroad material and be familiar with its composition and construction.

"It is his duty to supervise those under him to produce the best results.

"He must make himself thoroughly familiar with his base of supplies, etc.

"He must study the requirements of the territory depending upon his storekeeping for supplies.

"He must study the best interests of the company, using

his best endeavors to prevent excessive and wasteful use of materials.

"He should keep in touch with the commercial world, to enable him to determine when and how to replace requisitions, so that the material may be furnished with as little delay as possible.

"He must inform himself by personal observation, with work under way or contemplated, and ascertain what material is likely to be wanted.

"It is his duty to keep in touch with his stock by personal observation, instilling into his subordinates the necessity of having ample supplies on hand at all times, to prevent delays. He must dispose of all obsolete material. Keep his stock standard to power and equipment and avoid carrying dead stock.

"He must systemize his store house in such a manner that material may be handled promptly and economically.

"It is his duty to instill into his subordinates the necessity of cleanliness—store houses, lumber yards, scrap bins—all should be models of neatness, etc.

"It is his duty to prevent the store house being made a loitering place by employees.

"He must see that store department material is unloaded promptly from cars to prevent loss of revenue by such cars being out of service.

"It is his duty to help all departments, at any and all times, in all possible ways, and do his best to promote the general welfare of the service."

"It is his duty to maintain the strictest discipline, with store employees, especially in regard to pilfering, etc."

"He must be ready at all times to listen to suggestions, which would improve the efficiency of the store house.

"It is his duty to economically order material. He must keep accurate record of all such, ordered and received, check and inspect same and protect his employers from cheap and inferior goods, etc.

"He must understand the nature of material, and store it so that it does not deteriorate.

"He must assume full control of all scrap and surplus material that may accumulate, etc.

"He must keep a book record of all material issued, etc.

"He should meet all officers and employees with that due respect that designates the true gentleman, and treat all employees with the same courtesy as if he was conducting a commercial business.

"He should inspect all sub-store houses at outlying points under his jurisdiction, etc.

"He should be subject to order of the general storekeeper

only, and report direct to him in matters pertaining to stock, etc., etc."

"At the conclusion of the paper, the chairman having announced it open for discussion—one member suggested that there were one or two more qualifications that general storekeepers should have, viz.: 'A pair of wings and a 'Halo.'

"Now gentlemen, you will see that a railroad storekeeper has not a bed of roses by any means. If to be a successful storekeeper, it is necessary to have all the qualifications mentioned, I am afraid there are very few of us who will be able to come up to them. When I read it, it put me in mind of that portion of the Litany of the Anglican Church, where after each paragraph the response is 'Good Lord deliver us,' and I heartily say 'Amen.'"

I have endeavoured to give you in a condensed form some idea of the many duties required in the "running" of a "stores" department, but it would be impossible to give you all the minor details necessary for the handling of same in a paper of this kind. I have not attempted to evolve any new ideas, but simply tried to explain one of the "systems" with which I have been connected, and in conclusion, I would thank you for the patient hearing given to me.

I trust I have at least interested you in this particular line.

Chairman,—

You have all heard the very able manner in which Mr. Herriot has delivered this paper and same is now open for discussion.

Secretary,—

I would like Mr. Herriot to explain more fully his card system of keeping stock.

Mr. Herriot,—

At one time we had a loose leaf ledger, now we are using a card system. The cards are about 4 inches by 6 inches. On the top of each card is shown the name of the article, the location and the storehouse. Our storehouses are numbered A, B, C, etc., A, general stores; B, iron; C, Structural stock, bridges, etc., and so on down to the letter "L." The card also shows the maximum and minimum quantity of the article, which you should never run over or under. Of course in the case of special material or when a large contract comes along you order specially for it. The lower part of the card is ruled off in columns showing the requisition number the material is ordered on, the date received, receiving slip number. That is

every slip made out by the receiving clerk bears a serial number. Then the quantity received, weight or quantity and unit price. Then there is another column for appropriation. Under "appropriation" is entered all material appropriated for specifications or shop orders issued from the engineering department or production department. Every job bears a shop order number.

Suppose you require 10 bars of steel 1 inch by 5 inches. This is appropriated and entered on the card to the order appropriated to, and then another order comes along for the same class of material. Suppose you had 2000 lbs. of this material on hand and these two orders amount to 1500 lbs. and by looking at your card you will see that it is time you placed an order for more of this stock.

We also have a routing card and material order slip. The routing card is attached to the material when it is delivered to the shop, and when delivery is made it is marked on the inventory card and that item is scored out of the appropriation column and the price entered on the material order slip which goes to the costs department and is held there until the job is completed and the cost of that job is figured out.

We have two men checking over the stock all the time. They take a certain line of material and check it over and the whole stock is checked over twice a year, and any differences that are found with the inventory cards, either over or under, are adjusted.

In railroad stores they have a large book in which the stock is kept. I found this a good system, but you had to write in all the headings every two months, the page being divided into two parts, one half for one month and the lower half for the next month, the balances being carried forward. However, with the card system, supposing a certain line of material is discontinued, then the card is transferred to the dead box, and if at any time you should get any more of that material you can get the old card and continue it in use. The other card I was referring to is a small card, about 3 inches by 4 inches, which slides into a label case inside the bin where the material is kept. This card shows the date, the amount of material received, and the amount issued and the balance. For instance, on December 6th you have six oil cups on hand, on December 18th you issue one, this is recorded on the card; by this means the storeman can tell how many cups there are on hand, getting the same result as if he had taken the articles all out and counted them.

I find this system works out very well. Occasionally we have cases of material being given out and not entered on the cards, but this does not often happen and adjustments then have to be made.

Mr. Beswick,—

I would like to ask Mr. Herriot where the specifications are made out for the material required.

Mr. Herriot,—

As I explained before, each plant has its own system.

The customer's order originates in the sales department, who places this order with the shop production department. This department then sends the order to the engineering department. The engineering department is responsible for the specifications. It might be a pump. They get out the specifications, showing every detail of that pump, bolts, nuts, washers even if it is only one half inch screw, it goes on the specifications, they also get out blue-prints so that the shop knows exactly what to do. Pattern numbers are also quoted in the case of castings. The engineer department issue these specifications to the production department. Three copies are made, of which the engineering department keeps one, two go to the production department, and the production department issue them to the stores department for the material. The stores department check them up and return one copy, in most cases the carbon copy. In other cases they have standard blue-print specifications for standard work, which are always issued for a standard line of pumps. This is merely a matter of blue-prints. A sufficient number are printed for the different departments, one for the foundry, one for the boiler shop and the machine shop as the case may be, every shop has its own copy.

Then there is the routing of material through the plant I referred to before. All material requiring shop operation has a card issued for it. The card may call for ten castings of a certain pattern number, this card shows the different machines in the different departments this material has to go through. For instance, it has to go to the planer, the lathe and drill before going finally to the assembling room, where it is held until the assemblers are ready for it, so that when they are ready to erect the pump the material is ready to hand for the erectors to do their part, except for small articles which can be drawn from the general stores in a few minutes as required.

Mr. Herring,—

Can you give us any information in regard to the tools department, and how you handle such articles, as oil, waste, etc.

Mr. Herriot,—

Oil and waste, with which we include all kinds of inflammable material such as paint, etc., are kept in a separate building under the jurisdiction of the general storekeeper. Any foreman requiring any of this material has to issue a material order slip which goes to the paint stores, or wherever this material is stored and they issue just the same as any other material. Of course as in all shops there is a certain limit fixed for each department. They are allowed so much waste for cleaning. Of course waste for cleaning up any special articles must have an order put in charging the waste to this particular job.

There is a special classification for all accounts. Shop expenses account is kept separate from the regular sales or shop orders.

Mr. Herring,—

Does each part of the plant have an order number.

Mr. Herriot,—

Each part of the plant is distinguished by a special number. Each shop has a tool department, with a man in charge, who hands out the tools that are required and it is his business to see that they are returned; of course if they get broken in an ordinary way, why of course they have to be replaced, and the cost of course is an overhead charge that every plant carries.

Secretary,—

Take the case of your oil, your inventory shows five hundred gallons on hand, but you have actually only got 450 gallons on hand. How do you handle that?

Mr. Herriot,—

We are up against that problem occasionally. There is a certain amount of shrinkage, especially in oils and paint. There is always an overage or shortage at sometime or other in nearly all classes of material, but with the perpetual inventory such as we have it is an easy matter to adjust.

Mr. McRobert,—

I would like to propose a hearty vote of thanks to Mr. Herriot for the paper he has read to us, and I am sure everyone is pleased with the manner in which he has handled the discussion. Seconded by Mr. Wright. Carried.

Mr. Herriot,—

I have very much pleasure in accepting the hearty vote of thanks. I do not feel that I have done very much, but I felt it my duty as a member of this club to try and interest the members, and spread what little I know of this subject. I am always willing to learn and I hoped for a good discussion, so that I might get some new ideas. I hope at some future time to go further into this subject when I will be better prepared to handle it. I thank you for your kind attention.

Chairman,—

This being the last meeting of the year, we shall have to elect the officers for the ensuing year to-night.

You have all been provided with balloting papers on which the nominations of the Nominating Committee have been printed.

After some discussion it was moved by Mr. Herriot, and seconded by Mr. Beswick, that the nominations as presented by the Nominating Committee be adopted as they stood, which motion was carried unanimously, and the following were elected officers for the year 1912.

HONORARY PRESIDENT.

R. Patterson, Master Mechanic, G.T.R., Stratford.

PRESIDENT.

A. M. Wickens, Executive Special, Canadian Casualty and Boiler Insurance Co., Toronto.

1ST VICE-PRESIDENT.

W. C. Sealy, Assistant Master Mechanic, G.T.R., Toronto.

2ND VICE-PRESIDENT.

Jas. Wright, Foreman, Gurney Foundry Co., Toronto.

EXECUTIVE COMMITTEE.

J. Herriot, General Storekeeper, Canada Foundry Co., Toronto; C. G. Herring, Chief Draughtsman, Consumers' Gas Co., Toronto; C. D. Scott, Representative Gutta Percha & Rubber Co., Toronto; E. Logan, Foreman, G.T.R. Shop, Toronto; W. M. McRobert, Chief Engineer, Gunns' Limited, Toronto; R. Pearson, Foreman, Consumers' Gas Co., Toronto; T. Walsh, Chief Engineer, High Level Pumping Station, Toronto.

AUDITORS.

D. Campbell, Storekeeper, Consumers' Gas Co.; F. G. Tushingham, Foreman, T. Ry. Co., Toronto.

RECEPTION COMMITTEE.

H. G. Fletcher, Garlock Packing Co., Toronto; A. W. Durnan, Rice Lewis & Son, Toronto; H. Ellis, Foreman, Consumers' Gas Co., Toronto; T. Ward, Steamfitter, Consumers' Gas Co., Toronto; J. McWaters, Machinist, Consumers' Gas Co., Toronto; J. M. Clements, Machinist, Canada Foundry Co., Toronto; G. M. Wilson, General Foreman, G.T.R. Shop, Toronto; W. Newman, General Superintendent, Polson Iron Works, Toronto; A. W. Carmichael, Canadian Supply Co., Toronto; J. H. Morrison, Representative, Federal Clay Products Co., Toronto; E. A. Wilkinson, Lunkenheimer Co., Toronto; C. L. Wilson, General Manager, T.Y. & R. Ry., Toronto; H. Cowan, Foreman, T. Ry. Co., Toronto; J. F. Campbell, Elaterite Paint Co., Toronto; N. A. Davis, Representative, Garlock Packing Co., Toronto; J. Disney, Representative, The E. J. Woodison Co., Toronto.

Mr. Herriot,—

It has been my privilege at this time of year for the last three years to move that the Executive Committee be allowed a certain amount of the funds of this Club to be distributed to the various charitable organizations, and I would move that the same procedure be adopted this year.

Mr. Rawstron,—

I have great pleasure in seconding that. Carried.

At the Executive Meeting held after the regular meeting it was decided to donate the sum of \$100.00, which was distributed as follows:—

Boys' Home, Toronto.....	\$5 00
Infants' Home and Infirmary, Toronto.....	10 00
Children's Aid Society, Toronto.....	5 00
Sacred Heart Orphanage, Toronto.....	5 00
House of Industry, Toronto.....	5 00
House of Providence.....	5 00
Hospital for Incurables, Toronto.....	10 00
Muskoka Free Hospital, Toronto.....	5 00
Girls' Home, Toronto.....	5 00
Hospital for Consumptives, Weston.....	5 00
Toronto Hospital for Sick Children, Toronto.....	5 00
East End Day Nursery, Toronto.....	10 00

Home for Incurable Children, Toronto.....	\$10 00
Aged Women's Home, Toronto.....	5 00
Aged Men's Home, Toronto.....	5 00
Children's Home, Toronto.....	5 00

LIST OF MEMBERS.

- A. W. Adams, Sales Manager, The Allen & Morrison Brake Shoe Manufacturing Co., Chicago, Ill.
- J. R. Armer, Chief Draughtsman, G.T.P.Ry., Rivers, Man.
- W. H. Alderson, Gutta Percha Rubber Co., Toronto.
- E. C. Adams, Manager, Anchor Packing Co., Detroit, Mich.
- H. C. Austen, Representative, Dunlop Tire and Rubber Goods Co., Limited, Toronto.
- F. Atwater, Treasurer, Columbia Nut & Bolt Co., Bridgeport, Conn.
- H. V. Armitage, Foreman, Chapman Double Ball Bearing Co., Toronto.
- J. F. Alexander, Local Manager, Babcock & Wilcox, Limited, Toronto.
- John Adam, Clerk, Stores Dept., Polson Iron Works Limited, Toronto.
- W. G. Adams, W. G. Adams & Co., Toronto.
- F. Adams, Engineer, G.T.R., Stratford, Ont.
- W. E. Adams, Shipper, Structural Dept., Canada Foundry Co., Toronto.
- A. A. Allen, Manager, Holden Co., Montreal, Que.
- J. S. Adam, Fitter, Pipe Foundry, Canada Foundry Co., Toronto.
- W. Allen, Engineer, Consumers' Gas Co., Toronto.
- M. Le C. Atkinson, Toronto.
- J. Anderson, Clerk, G.T.R., Toronto.
- J. Anderson, Marine Engineer, East Toronto.
- J. W. Aston, Chief Engineer, Toronto Ferry Co., Toronto.
- Jas. Adam, Electrician, Toronto.
- R. N. Austen, Engineering Representative, Canada Foundry Co., Toronto.
- W. H. Bowie, Mechanical Expert, New York.
- G. Baldwin, General Yard Master, Canada Foundry Co., Toronto.
- Acton Burrows, Managing-Director, *Railway and Marine World*, Toronto.
- H. Bertram, Secretary, The John Bertram & Sons Co., Dundas, Ont.
- F. G. Butterfield, Butterfield & Co., Rock Island, Que.
- H. H. Beasley, Storekeeper, Toronto Railway Co., Toronto.
- G. D. Bly, Manager, Monarch Supply Co., Toronto.

- J. Bannon, Chief Engineer, City Hall, Toronto.
 J. Barker, Ex-Machinist, G.T.R., Toronto.
 A. B. Brown, Canadian Representative, Canadian Westinghouse Co., Montreal, Que.
 W. J. Bird, National Iron Works, Toronto.
 T. T. Black, Civil Engineer, Canada Foundry Co., Toronto.
 J. Battley, Examiner of Firemen, G.T.R., Stratford, Ont.
 E. Blackstone, Machinist, G.T.R., Toronto.
 J. C. Brady, Mechanical Engineer, Goldeneast, Kootenay,
 B.C.
 C. L. Bailey, Canadian Manager, William Jessop & Sons, Limited, Toronto.
 E. R. Battley, Locomotive Foreman, G.T.R., Fort Erie, Ont.
 R. H. Brown, Brass Finisher, C.P.R., Toronto.
 O. A. Burt, Fitter, C.P.R., West Toronto.
 P. Brundrett, Assistant Foreman, Pipe Foundry, Canada Foundry Co., Toronto.
 H. Bull, Machinist, Canadian Pacific Railway, West Toronto.
 G. H. Boyd, Foundry Cost Clerk, Canada Foundry Co., Toronto.
 F. W. Barron, Chief Engineer, Copeland Brewing Co., Toronto.
 G. S. Browne, Fitter, C.P.R., West Toronto.
 A. E. Baines, Machinist, G.T.R., Stratford, Ont.
 S. Best, Machinist, G.T.R., Toronto.
 A. T. Bliss, Machinist, G.T.R., Battle Creek, Mich.
 P. Brazier, Boilermaker, G.T.R., Stratford.
 J. L. Bigley, R. Bigley Manufacturing Co., Toronto.
 R. Burns, Superintendent, Philip Carey Manufacturing Co., Toronto.
 F. Bastow, Gentleman, Toronto.
 G. P. Beswick, Clerk, Polson Iron Works Limited, Toronto.
 J. W. Blair, Manufacturers' Agent, Toronto.
 J. Burns, Burns Coal Co., Toronto.
 F. Burnett, Gas Engineer, Economical Gas Apparatus Co., Toronto.
 H. Biffin, Iron Worker, Consumers' Gas Co., Toronto.
 J. H. Branston, Machinist Improver, G.T.R., Stratford, Ont.
 F. Branston, Machinist Apprentice, G.T.R., Stratford, Ont.
 T. H. Barnes, Salesman, H. W. Johns-Manville, Co. Toronto.
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 R. W. Bennett, Conductor, G.T.R., Hamilton, Ont.
 J. M. Beswick, Bookkeeper, Standard Foundry Co., Toronto.

- G. Beck, Machinist, Gurney Foundry Co., Toronto.
C. Blackwell, Pattern-Maker, Gurney Foundry Co., Toronto.
- T. Brown, Jr., Machinist, Gurney Foundry Co., Toronto.
J. Bell, Travelling Engineer, Loco Superheater Co., New York.
- W. Brazier, Machinist Improver, G.T.R., Stratford, Ont.
D. Campbell, Storekeeper, Consumers' Gas Co., Toronto.
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- J. M. Clement, Foreman Fitter, Boiler Dept., Canada Foundry Co., Toronto.
- O. A. Cole, Manager, Crown Gypsum Co., Toronto.
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- W. H. Chidley, Locomotive Inspector, G.T.R., Stratford, Ont.
- J. F. Campbell, Representative, Elaterite Paint Co., Toronto.
- W. S. Cowan, Foreman Driller, Canada Foundry Co., Toronto.
- H. Cross, Blacksmith, Consumers' Gas Co., Toronto.
W. E. Cane, Harding Motor Car Co., London.
B. W. Coghlin, Manufacturer of Railway Spring & Truck Tools, Montreal, Que.
- A. W. Carmichael, Representative, Canadian Supply Co., Toronto.
- G. Cook, Engineer, Consumers' Gas Co., Toronto.
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W. A. Chapman, Manager, Rail Joint Co. of Canada, Montreal, Que.
- J. Cave, Chief Electrician, Canada Foundry Co., Toronto.
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F. A. Corns, Principal, Dominion Engineering Academy, Toronto.
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- C. Chappelle, Machinist, G.T.R., Toronto.
G. F. Clark, Machinist, Consumers' Gas Co., Toronto.
A. Chenoweth, Machinist, G.T.R., Stratford, Ont.
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D. Cairns, Draughtsman, Consumers' Gas Co., Toronto.
S. Cohen, Toronto.

- J. J. Conlin, Engineer, S.S. "Kingston," R. & O Navigation Co., Toronto.
- T. B. Cole, Engineer, Christie Brown Co., Toronto.
- W. H. Church, Foreman, Pipe Shop, Canada Foundry Co., Limited, Toronto.
- E. E. Cummings, Factory Manager, S. R. Bowser & Co., Toronto.
- J. G. Corlett, Assistant Foreman Erector, Canada Foundry Co., Toronto.
- G. Carter, Steam Fitter, Consumers' Gas Co., Toronto.
- G. H. Carman, Foreman Carpenter, Consumers' Gas Co., Toronto.
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- J. Chipchase, Manager, Supply Department, Canadian Fairbanks Co., Toronto.
- H. Clay, Engineer, G.T.R., Stratford, Ont.
- R. Coxon, Machinist, Gurney Foundry Co., Toronto.
- H. H. Cheesman, Ship Draftsman, Polson Iron Works Limited, Toronto.
- W. Crossley, Superintendent, City Motor Garage, Toronto.
- W. Carr, Superintendent, Dominion Bridge Co., Toronto.
- J. Cottrell, Foreman Main Layer, Consumers' Gas Co., Toronto.
- J. R. Donnelly, Master Mechanic, G.T.R., Allandale, Ont.
- A. W. Durnan, Rice Lewis & Son, Toronto.
- J. Duguid, Kingston Locomotive Works, Kingston, Ont.
- D. A. Dickson, Chief Engineer, Temple Building, Toronto.
- J. Dodds, Government Steamboat Inspector, Toronto.
- W. Dyer, Engineer, G.T.R., Stratford, Ont.
- J. M. Downer, Downer Pattern Works, Toronto.
- W. E. David, Machinist, Consumers' Gas Co., Toronto.
- J. Dewsbury, Machinist, G.T.R., Toronto.
- C. L. Drury, Representative, Drury Iron & Steel Co., Toronto.
- C. Daniel, Foreman, Moulding Shop, Canada Foundry Co., Toronto.
- J. C. Donald, Foreman Carpenter, Canada Foundry Co., Toronto.
- W. Dony, Machinist, G.T.R., Toronto.
- S. G. Dabner, Machinist, Canada Foundry Co., Toronto.
- J. S. N. Dougall, President, The Dougall Varnish Co., Limited, Montreal.
- G. Despond, Manager, Standard Foundry, Toronto.
- G. Dingwall, Representative, Philip Carey Manufacturing Co., Toronto.
- J. B. Dunlop, Machinist Improver, G.T.R., Stratford, Ont.
- W. S. Davis, Foreman, G.T.R. Shops, Stratford, Ont.

- W. Dennett, Engineer, Toronto.
B. Dillon, Machinist's Improver, G.T.R., Stratford, Ont.
T. Dudgeon, Machinist, Chapman Double Ball Bearing Co., Toronto.
- J. Douglas, Foreman Molder, Gurney Foundry Co., Toronto.
- H. H. Dryden, Canadian Oil Co., Toronto.
J. Disney, Representative, E. J. Woodison Co., Toronto.
F. W. Donaldson, Boiler Inspector, Toronto.
N. A. Davis, Representative, Garlock Packing Co., Toronto.
- J. A. Dickinson, Clerk Polson Iron Works Limited, Toronto.
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F. B. Dickinson, Machinist, Gurney's Foundry, Toronto.
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- G. H. Davis, Resident Engineer, C.P.R., Toronto.
J. A. Day, Representative Can. Cleveland Air-Drill Co., Toronto.
- W. E. Daniel, Machinist, Russel Motor Works, Toronto.
H. O. Eddrup, Clerk, G.T.R., Toronto.
H. Ellis, Foreman, Machine Shop, Consumers' Gas Co., Toronto.
- G. E. Evans, Resident Engineer, Dominion Bridge Co., Toronto.
- W. Evans, Government Steamboat Inspector, Toronto.
H. Eatherley, Machinist, Bawden Machine Tool Co., Toronto.
- C. Endinger, Steel Structure Inspector, Canton, Ohio.
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J. J. Fletcher, Chattanooga, Tenn.
F. S. Ferguson, Local Superintendent, Canada Iron Corporation, Limited, St. Thomas.
- J. J. Fisher, Engineer, G.T.R., Sarnia, Ont.
H. G. Fletcher, Representative, Garlock Packing Co., Toronto.
- R. H. Frees, Manager, Malleable Iron Co., Walkerville, Ont.
- R. H. Fish, Road Foreman, G.T.R., London, Ont.
J. T. Fellows, Draughtsman, Consumers' Gas Co., Toronto.
E. J. Friend, Engineer, Canada Foundry Co., Toronto.
A. Fraser, Foreman Drillhand, Chapman Double Ball Bearing Co., Toronto.
- J. Fraser, Machinist, G.T.R., Stratford, Ont.
E. G. E. Ffolkes, Wilkinson Plough Co., Toronto.
I. O Frost, Carpenter, G.T.P.R., Elm Park P.O., Alberta.
J. H. Fryer, Managing Director, Galt Malleable Iron Co., Galt, Ont.

- W. Forbes, Builder, Toronto.
 P. H. Fox, Chief Despatcher, C.N.O., Ry. Toronto.
 J. A. Findlay, Marine Engineer, Toronto.
 W. Fish, Machinist, Gurney Foundry Co., Toronto.
 J. D. Frazee, Agent, Toronto.
 J. J. Francis, Toronto.
 C. Fox, Machinist, Gurney Foundry Co., Toronto.
 E. Bert Fleury, Manager, E. J. Woodison Co., Toronto.
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 R. W. Grace, General Superintendent, Flat Iron Works,
 Dayton, Ohio.
 W. H. Ginder, President, Canadian Tungsten Lamp Co.,
 Hamilton, Ont.
 U. E. Gillen, Superintendent, G.T.R., Montreal.
 J. W. Griffin, Motor Shops, Winnipeg Street Railway Co.,
 Winnipeg.
 M. R. Griffiths, Manager, H. W. Johns-Manville Co.,
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 J. C. Gartshore, Railway Equipment, Toronto.
 A. W. Givin, Toronto.
 C. H. De Gruchy, Representative, Finley-Smith Co.,
 Toronto.
 E. B. Gilmour, Molding Expert, Toronto.
 J. S. Grassick, Salesman, Consumers' Gas Co., Toronto.
 W. R. Gardner, Engineer, C. & W. Walker Co. (England),
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 J. Greville, Apprentice, G.T.R., Toronto.
 T. E. Greenshields, Machinist, G.T.R., Toronto.
 E. S. T. Gerow, Manager, Archer & Gerow, Toronto.
 A. A. Gardner, C. & W. Walker Co. (England), Toronto.
 R. A. Girouard, Civil Engineer, Toronto.
 W. A. Grocock, Engineer's Representative, Toronto.
 T. Graham, Assistant Engineer, City Hall, Toronto.
 W. W. Garton, Machinist, Christie Brown Co., Toronto.
 T. F. Garrigan, Assistant Superintendent, Bridge Depart-
 ment, Canada Foundry Co., Toronto.
 J. C. Grant, Foreman, Erection Department, Canada
 Foundry, Co. Toronto.
 J. N. Gregory, Manager, Dearborn Drug & Chemical Works,
 Buffalo, N.Y.
 H. Goods, Foreman, John Inglis Co., Toronto.
 W. K. Glasgow, Manager, Canadian Steel Foundries,
 Welland, Ont.
 W. J. Green, Mechanic, Consumers' Gas Co., Toronto.
 J. E. Houghton, Chief Operator, G.T.R., Toronto.

- J. W. Harkom, Consulting Engineer, Melbourne, Que.
G. W. Hardy, Engineer, G.T.R., Sarnia Tunnel.
Hannibal, Green's Sons & Co., Troy, New York.
J. Herriot, General Storekeeper, Canada Foundry Co.,
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J. G. Hyde, Machinist, G.T.R., Toronto.
A. D. Homard, Travelling Engineer, Detroit Lubricator
Co., Detroit, Mich.
J. Hay, Locomotive Foreman, G.T.R., Sarnia, Ont.
W. A. Hare, Standard Engineering Co., Toronto.
W. Hamilton, Cochrane, Ont.
A. E. Hawker, Mechanical Engineering, Toronto.
A. Hallimore, Foreman, G.T.R., Toronto.
W. D. Hall, Superintendent of Tunnell, G.T.R., Port Huron,
Mich.
C. G. Herring, Chief Draughtsman, Consumers' Gas Co.,
Toronto.
H. O. R. Horwood, Leveller, Dominion Bridge Co., Toronto.
P. J. Harley, Machinist, G.T.R., Stratford, Ont.
T. Henry, Chief Engineer, Erindale Power Co., Toronto.
L. S. Hyde, Clerk, G.T.R., Toronto.
M. A. Humber, Apprentice Instructor, G.T.R., Stratford,
Ont.
F. Hardisty, Engineer, G.T.R., Sarnia, Ont.
J. L. Hutcheson, Superintendent, Booth Copper Co., To-
ronto.
M. B. Horan, Superintendent, Pipe Foundry, Canada
Foundry Co., Toronto.
W. J. Hayes, Engineer, G.T.R., Stratford, Ont.
J. J. Harris, Chief Engineer, O'Keefe Brewery Co., Toronto.
F. G. Hebert, Chemist, Canada Foundry Co., Toronto.
J. Hunt, Stationary Engineer, Consumers' Gas Co., Toronto.
F. H. Hawkins, Mechanic, Consumers' Gas Co., Toronto.
J. G. Holfelder, South Framingham, Mass.
J. W. Hetherington, Machinist, Canada Foundry Co.,
Toronto.
J. H. Hollingworth, Machinist, G.T.R., Stratford, Ont.
W. Hebdon, Machinist, Gurney Foundry Co., Toronto.
F. C. Harding, Manager, M. Leith & Co., Toronto.
F. A. Harrison, Boiler Maker, Polson Iron Works, Toronto.
H. Hughes, Machinist, Polson Iron Works, Toronto.
W. Harvey, Machinist, G.T.R., Toronto.
Fred. Harding, Financial Manager, Harding Motor Car
Co., London.
P. Holbrow, Machinist, Gurney Foundry Co., Toronto.
J. W. Helps, Power Engineer, Hydro-Electric Co., Toronto.
H. Hett, Manager, Boiler Repair and Grate Bar Co.,
Toronto.

- E. A. Heden, Electrical Engineer, Toronto.
 E. Holland, Fitter, Gurney Foundry Co., Toronto.
 A. Hollow, Machinist, Gurney Foundry Co., Toronto.
 A. Harris, Storekeeper, Canada Foundry Co., Toronto.
 W. H. Jackson, Manager, Glidden Varnish Co., Toronto.
 C. A. Jefferis, General Superintendent, Consumers' Gas Co., Toronto.
- Toronto.
 J. V. Jackson, Boiler Inspector, G.T.R., Montreal, Que.
 C. A. Jackson, Machinist, Buffalo, N.Y.
 I. Jefferis, Machinist, G.T.R., Toronto.
 W. J. Jones, Foreman, G.T.R., Toronto.
 A. Johnston, Travelling Engineer, McColl Brothers, Toronto.
- J. G. Jones, Chief Engineer, Manufacturers Life Building, Toronto.
- P. Jereat, Machinist, Adams Harness Co., Toronto.
 C. Johnston, Clerk, Consumers' Gas Co., Toronto.
 J. Jackson, Boiler Maker, Consumers' Gas Co., Toronto.
 A. Jones, Machinist, G.T.R., Stratford, Ont.
 T. H. Jeffers, Foreman, Gurney Foundry Co., Toronto.
 J. W. Jackson, Special Agent, Ontario Government State Department, Toronto.
- W. L. Janet, Electrician, Toronto.
 R. M. Jaffray, Mechanical Engineer, *Motor Times*, Windsor, Ont.
- C. T. Jackson, Salesman, Harbison-Walker Refractories, Buffalo, N.Y.
- J. A. Kilpatrick, Representative, Dominion Wheel & Foundries Limited, Toronto.
- G. C. Keith, Editor, *Railway Journal*, Toronto.
 G. Kyle, Steam Fitter, Consumers' Gas Co., Toronto.
 A. H. Kirby, Chief Engineer, Methodist Book Room, Toronto.
- W. J. Keating, Brass Manufacturer, Toronto.
 J. Kennedy, Boiler Maker, G.T.R., Stratford, Ont.
 J. C. Kyle, Representative, Philip Carey Manufacturing Co., Toronto.
- L. H. Keller, Assistant Foreman, Structural Department, Canada Foundry, Co. Toronto.
- J. Kelley, Chief Engineer, Mercer Reformatory, Toronto.
 J. Koiser, Foreman, Chapman Double Ball Bearing Co., Toronto.
- W. Kemp, Traveller, Dominion Radiator Co., Toronto.
 C. Kassteen, Steam Fitter, Consumers' Gas Co., Toronto.
 A. J. Lewkowicz, Consulting Engineer, Universal Gas Co., Toronto.
- C. A. Livingston, Durand, Mich.

- J. O. B. Latour, Chief Engineer, Canadian Casualty & Boiler Insurance Co., Toronto.
- P. J. Lynch, Superintendent, G.T.R., Allandale, Ont.
- J. E. Lenehan, Representative, Galena Signal Oil Co., Richmond, Que.
- W. Loveridge, Locomotive Foreman, G.T.R., Windsor, Ont.
- E. Logan, Foreman, G.T.R., Toronto.
- J. Lusk, Engineer, G.T.R., Sarnia, Ont.
- J. Lyons, Engineer, G.T.R., Sarnia, Ont.
- W. G. Larmour, Draughtsman, Norfolk Marine Railway Co., Norfolk, Va.
- F. D. Lyman, Manager, Supply Department, J. Millen & Sons, Limited, Montreal, Que.
- G. Little, Engineer, Consumers' Gas Co., Toronto.
- R. E. Layfield, Assistant Superintendent, Canada Foundry Co., Limited, Toronto.
- A. Laird, Machinist, Canada Foundry Co., Toronto.
- J. P. Law, Engineer, Consumers' Gas Co., Toronto.
- W. Large, Machinist, G.T.R., Turcot, Que.
- J. R. Leckie, Locomotive Foreman, G.T.R., London, Ont.
- D. Lamont, Assistant Storeman, G.T.R., Stratford, Ont.
- C. Lennon, Representative, John Millen & Sons, Limited, Toronto.
- C. R. Leake, Electrical Engineer, Factory Products Co., Toronto.
- F. Lewington, Inspector, Canada Foundry Co., Toronto.
- W. Loach, General Storeman, Canada Foundry Co., Toronto.
- D. L. Lochrie, Brick Manufacturer, Toronto.
- C. Laeon, Shipper, Canada Foundry Co., Toronto.
- J. Lindsay, Storekeeper, Gurney Foundry Co., Toronto.
- F. Lane, Machinist, Gurney Foundry Co., Toronto.
- J. Lindsay, Engineer, Toronto.
- J. H. Latrey, Toronto
- W. R. McRae, Master Mechanic, Toronto Railway Co., Toronto.
- J. McWater, Machinist, Consumers' Gas Co., Toronto.
- A. G. McLellan, Master Mechanic, C. & A. R. R., Bloomington, Ill.
- G. McIntosh, Air Brake Instructor, G.T.R., Stratford, Ont.
- L. J. McLaughlin, Foreman, G.T.R., Coteau Junct.
- P. H. McCabe, Engineer, Toronto Railway Co., Toronto.
- T. H. McBrien, Engineer, Consumers' Gas Co., Toronto.
- T. McLean, Machinist, G.T.R., Stratford, Ont.
- H. W. McMillen, Bridge Inspector, C.P.R., Walkerville, Ont.
- W. J. McCallum, Chief Draughtsman, Chapman Double Ball Bearing Co., Toronto.

- F. McDonald, Foreman Boilermaker, C.P.R., West Toronto.
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 W. M. McRobert, Chief Engineer, Gunns' Limited, Toronto,
 J. McGrath, Machinist, Massey-Harris Co., Toronto.
 T. McKenzie, Bursar, Mercer Reformatory, Toronto.
 G. McLaughlin, Erector, Canada Foundry Co., Toronto.
 J. W. McLintock, Clerk, G.T.R., Toronto.
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 P. E. McLelland, Fitter, Gurney Foundry Co., Toronto.
 W. C. McGhie, Chairman, Ontario Engineers' License
 Board, Toronto.
 C. McNair, Rule Instructor, G.T.R., Toronto.
 T. B. McCrosson, Machinist, Chapman Double Ball Bearing
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 P. A. McCrosson, Clerk, Chapman Double Ball Bearing
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 G. McKenzie, Steam Fitter, F. Armstrong & Co., Toronto.
 J. McGill, Electrician, Massey-Harris Co., Toronto.
 W. McDonald, Manufacturers' Agent, Toronto.
 J. McLardy, St. Thomas, Ont.
 F. A. McGivern, Civil Engineer, Toronto.
 J. A. Mitchell, Foreman, C.P.R., Toronto.
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 J. H. Morrison, Representative, Federal Clay Products,
 Toronto.
 G. T. Merwin, Representative, Pressed Steel Car Co.,
 St. Louis, Mo.
 J. Markey, Master Mechanic, G.T.R., Toronto.
 P. J. Myler, Representative, Canadian Westinghouse Co.,
 Hamilton, Ont.
 F. Moneyppenny, Vice-President Imperial Varnish & Color
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 F. G. Morris, Engineer, G.T.R., Sarnia Tunnel, Ont.
 G. A. Mitchell, Master of Bridges and Buildings, G.T.R.,
 Toronto.
 J. Matheson, Charge Hand, G.T.R., Ferries, Winsor, Ont.
 D. Murray, Manager, Murray Printing Co., Limited,
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 J. Mauldey, General Foreman, Dominion Bridge Co.,
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 W. R. Maynard, Storeman, G.T.R., Stratford, Ont.
 G. F. Milne, Inspector of Machinery, Canadian Inspection
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 W. H. Moore, Secretary, Canadian Northern Railway,
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- G. Morrison, Foreman, Pump Department, Canada Foundry Co., Toronto.
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J. J. Maine, Toronto.
W. Marchington, Toronto.
J. J. Moat, Engineer, T. Eaton Co., Limited, Toronto.
F. F. Minard, Engineer, G.T.R., Port Huron, Mich.
F. Matthews, Carpenter, G.T.R., Toronto.
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T. H. Martin, Martin Pump & Machine Co., Limited, Toronto.
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G. S. Morris, Mechanic, Consumers' Gas Co., Toronto.
J. E. Martin, Foreman Erector, Canada Foundry Co., Toronto.
A. Mitchell, Machinist, Gurney Foundry Co., Toronto.
J. Milne, Machinist, Consumers' Gas Co., Toronto.
W. Moss, Manufacturer, Moss Chemical Co., Toronto.
G. H. Mills, Florist, Toronto.
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R. Mullen, Steam Fitter, Evans Admirall Co., Toronto.
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T. C. Miller, Salesman, Woodstock Pneumatic Tool & Machine Co., Woodstock, Ont.
C. Mueller, Founder, Toronto.
W. B. Morgan, Toolmaker, Gurney Foundry, Co., Toronto.
C. Moffat, Pattern-Maker, Watson Pattern Works, Toronto.
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A. J. Nixon, Chief Operating Officer, Board of Railway Commissioners, Ottawa, Ont.

- C. F. Neild, Coal Merchant, Stratford, Ont.
 A. E. Nourse, Assistant Engineer, Expanded Metal & Fire-proofing Co., Toronto.
 W. Newman, General Superintendent, Polsons Iron Works Limited, Toronto.
 R. R. Neild, Charge Hand, G.T.R., Stratford, Ont.
 W. Nicholls, Canadian Supply Co., Toronto.
 A. Nickelson, Foreman Ship's Carpenter, Polson Iron Works Limited, Toronto.
 R. H. Noble, Traveller, Canadian-Fairbanks Co., Toronto.
 M. J. O'Leary, Special Representative, Canadian Oil Co., Toronto.
 J. E. O'Reilly, Foreman, Ramapo Iron Works, Niagara Falls, Ont.
 J. C. O'Brien, Secretary, Toronto Laundry Machine Co., Toronto.
 W. Price, Locomotive Foreman, G.T.R., Lindsay, Ont.
 R. Patterson, Master Mechanic, G.T.R., Stratford, Ont.
 H. M. Patton, Engineer, G.T.R., Stratford, Ont.
 R. Pearson, Machinist, Consumers' Gas Co., Toronto.
 J. Powell, Chief Draughtsman, G.T.R., Montreal, Que.
 F. A. Purdy, Manager, Canadian Gold Car Heating & Lighting Co., Montreal, Que.
 C. S. Parker, Representative, Parker Car Heating Co., London, Ont.
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 W. C. Philpotts, Analytical Chemist, Consumers' Gas Co., Toronto.
 A. G. Piper, Piper Railway Supply Co., Toronto.
 E. B. Price, Chief Clerk, Construction Department, Canada Foundry Co., Toronto.
 P. Philmore, Fitter, Canada Foundry Co., Toronto.
 C. H. Patterson, Engineer, Dominion Government, Toronto.
 J. Powell, Assistant Foreman, C.P.R., West Toronto.
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 A. C. Pratt, M.E. Toronto.
 C. J. Poore, Representative, B. M. Jones & Co., New York, N.Y.
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- J. G. Platt, Mechanical Representative, Hunt Spiller Manufacturing Corporation, Boston, Mass.
- G. Powell, Foreman, Heat & Pressure Control Co., Toronto.
- H. Paton, Storekeeper, Press House, Toronto.
- S. Pearson, Apprentice, G.T.R., Toronto.
- A. E. Quinn, Commercial Traveller, Toronto.
- J. A. Rowe, Machinery Supplies, Detroit, Mich.
- H. E. Rowell, Manager, Philip Carey Manufacturing Co., Toronto.
- W. D. Robb, Superintendent of Motive Power, G.T.R., Montreal, Que.
- W. H. Randell, Water & Machine Department, Toronto Water Works, Toronto.
- D. Ross, Engineer, G.T.R., Stratford, Ont.
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