

C. A. S. E. BANQUET.

The Sixth Annual Dinner of the Canadian Association of Stationary Engineers was held on the evening of the 9th of November, at the Richardson House, Toronto. About 70 ladies and gentlemen sat down to dinner, amongst whom were noticed the following:

Guests Messrs. Geo. Grant, Jas. Watson, Wm. Towers, J. Wright, W. S. Brown, Prof. Galbraith, J. Main, R. Hutt.

Lady Guests Mrs. R. Hutt, Mrs. Wm. Towers, Misses A. M. Wickens, E. M. Wickens, Miss Mortimer, Misses M. Croake, M. Coutts, L. Coutts, J. Winters, L. Kennedy, Miss Winters, L. Smith.

Members and wives Mr. and Mrs. J. G. Bain, Wm. Butler, W. G. Blackgrove (President), Mr. and Mrs. H. Caldwell, A. E. Edkins, Geo. Emory, J. Fox, Geo. Gilchrist, Mr. and Mrs. Chas. Heal, D. Jeffrey, Mr. and Mrs. Chas. Kinsey, W. Lewis, P. Myers, Mr. and Mrs. Chas. Mosley, J. C. Mooring, W. Phillip (V. President) and Mrs. Phillip, E. J. Phillip (Sec'y), William Reveley, T. Rolph, C. Scott, W. Sutton, Mr. and Mrs. George Saunders, E. Tipton, H. Terry, Mr. and Mrs. A. M. Wickens, Jas. Wadge, H. Winters.

An excellent bill of fare was presented, and after full justice had been done thereto, the "Queen" was proposed and drank in royal style. The "C. A. S. E." was coupled with the names of Bros. A. M. Wickens and A. E. Edkins, President of the Executive Committee.

"Our Manufacturing Interests" was coupled with the names of Mr. Brown, of the Glodie & McCulloch Co., Galt, and Mr. J. W. Main, of John Inglis & Sons, Toronto.

Mr. Brown, in responding referred to the growing influence of the C. A. S. E., and the many benefits that had been derived by its members. The Association was not only beneficial to members, but also to employers, as it enabled them to secure thoroughly capable men. The engines were better taken care of and better satisfaction given in every way.

Mr. Main also spoke, expressing the pleasure it afforded him to be present. He had attended several dinners of the Association and always enjoyed himself. He was pleased to see the Association prospering, and hoped that it would continue to advance in the future as in the past.

"Our Educational Interests" brought forth a response from Prof. Galbraith, who said:—"It is with peculiar feelings that I arise to respond to this toast to-night. I think I have been at every annual dinner that you have held since the beginning, and I must say that I never felt so embarrassed as to-night. I think the last time that I had to make a speech in the presence of ladies, that is aside from a written speech or something of that kind, was the morning that I was married, and I observed the five minute rule then I can assure you. I didn't attempt to fill up the time. But, ladies and gentlemen, I think that we must all acknowledge the advance of the times; ten years ago we never thought of seeing a lady at our classes in the University; to-day we think nothing of it. (Laughter). The professors are quite accustomed to speaking to ladies; it is only within the last year that we had the pleasure of addressing any ladies. There is one now attending the School of Science—the first one. I am beginning to get accustomed to it, but it takes a great deal of courage I am sure. But this has quite driven the subject of the toast out of my head. As a change has taken place in the respect that I have just mentioned, so changes have taken place in educational interests with which we are concerned, namely, in technical education. It is only, I think, four years ago since we had nothing but bare drawing tables, seats and blackboards, and a few books. Now we are pretty well fitted out with a large quantity of apparatus and machinery. Within the same period the technical evening school has become a fact. Four years ago your former President, Mr. Wickens, and your present President were working hard with us to get that school established, and we never expected to meet with the success that we have. For the first year we worked in the same way as we have worked for a long time in the School of Science, with very little except mechanical apparatus. This year I am glad to say that the council have given a fairly large grant toward electrical apparatus, and I am glad to say that as time goes on we shall find both of these classes—the School of Science and the Technical School—growing and increasing. I don't fear now

that they will fail; a few years ago we scarcely hoped that they would succeed. I scarcely know what I can say more than I have said on former occasions. One thing perhaps I may say: I promised you for the last three or four years an evening at the School of Science. I promised it so often that I felt sure that you had lost all faith in my promises. However, I determined to be at the dinner to-night and speak a few words to you, and now I think I can take courage and make a further promise, sometime during the coming winter to give you a more extended address something that will interest you. I am glad to see your society progressing as it is, and from the signs that we see at the end of the table, I am glad to believe that it will never die out.

The Hosi and Hostess were then proposed, to which Mr. Richardson responded.

After the room had been cleared, the following programme, interspersed with dancing, was gone through:—

Piano solo, Miss Croake; song (comic), Mr. F. Wright; duett, G. W. Grant and Miss Mortimer; song, Mrs. Bain; song, Mr. Major; duett, G. W. Grant and Mr. Blackgrove; song, Mr. F. Wright; song, Miss Mortimer; duett, G. W. Grant and Mrs. Bain; song, Mr. Major; song, Mr. F. Wright; Miss Croake, pianist.

AN AUTOMATIC TELEPHONE.

The Automatic Telephone and Electric Co. of Canada has been organized at Montreal, to introduce an instrument designed to enable each subscriber to a telephone exchange to make his connections without the assistance of a third person at the exchange. Mr. James P. Dawes is the President of the new Company, and Mr. H. M. Linnell, formerly manager for the Edison Co., is to be the managing director. Among the directors are Messrs. John Torrance, R. Wilson Smith, L. M. Dupnis, J. B. Clarkson, J. E. Macdougall, and Alf. Lomas.

The invention, which is said to have been proved by tests to work with entire satisfaction, is thus described by a local paper: It is a device to automatically make the connections in a central exchange and dispense entirely with the services of an employe at that place. The method by which this is accomplished is simple. On the telephone shelf is a row of keys, five in all, marked thousands, hundreds, tens and units, the fifth being a release key. The subscriber who wishes to place himself in communication with some one of the other hundred or thousand subscribers taps out the desired number on the key-board, which automatically connects his wire with that of the person with whom he wishes to speak. Suppose for instance, that a subscriber wishes to communicate with No. 1123. He simply presses the key marked thousands once, the key marked hundreds once, the key marked tens twice, and finally the key marked units three times. His wire is then in electrical connection with that of the subscriber 1123, and he can ring his bell and converse with him in the same way and with as much ease if he had been wrangling with central for five or ten minutes. The whole mechanism of this, the Strowger, patent takes up a space of only 6x4x4 inches. The apparatus is placed in the central exchange and takes the place of the ordinary telephone girl. As for the subscriber's end of the line, there is nothing more than the ordinary telephone with a row of keys upon its shelf; the mechanism at the exchange consists chiefly of a circular disc constructed of hard rubber or any other suitable non-conducting material, and this is the central feature of the machine. This disc is provided with perforations in circular rows of 100 each, these rows being about one-twentieth of an inch apart. Through these perforations extend the wire connections to the main line wires, so that the wire of every subscriber in the exchange comes to this instrument, and passes up through one of the perforations, ending in a good metallic contact slightly raised above the face of the disc. If, now, a moving arm or needle can automatically be made to make contact with any one of these points at will, it is evident that a telephone circuit can be completed and the object of the invention attained.

This is accomplished in the following manner:—A circuit-closing arm is made in parts, of which one is a rod. Within the circuit-closing sleeve is closely fitted a circuit-closing needle held in such a manner as to be in perfect electrical contact with the wire terminal by a spring. A rod is located along the axis of the cylinder and is free to rotate and move longitudinally;