

THE ELECTRICAL NEWS completes with this number its second year of existence. An index to the contents of this volume accompanies the present number. A perusal of it should satisfy every subscriber that he has had value for the price of subscription. Indeed, some of our most intelligent subscribers have expressed the opinion that in some cases a single article was in itself worth to them the price of a year's subscription. The co-operation of every reader is asked towards making the paper increasingly valuable, and thanks are extended to those who have in any way assisted its progress in the past. To all the wish is extended for a Merry Christmas and prosperous New Year.

It isn't often of late that the tallow dip and coal oil lamp get a chance to demonstrate their usefulness in competition with the incandescent electric light. Such an opportunity came to them, however, in Toronto a few nights ago, when by reason of the fusing of a safety catch in the junction box of an underground feeder, the incandescent lamps went out. In many of the business buildings gas has been entirely dispensed with, and when darkness settled down upon them, the lighting methods of our ancestors suddenly regained a brief popularity, while at the same time serving to impress the public mind with a greater appreciation of the value of the modern illuminant.

IN supplying power from a central station for the operation of a number of small motors, it is of the utmost importance to both those supplied as well as to those supplying it, that a constant pressure or E. M. F. be maintained on the mains during all the time that it is in operation. A greater fluctuation than 5 per cent. should under no circumstances be allowed by the attendant in charge of the generating plant. The principal reason is that a motor running at or about full load at a certain speed will feel a greater drop than this very sensibly, and will lose a number of its revolutions, particularly if the drop is as great as 10 per cent. So great would be the difference in the number of revolutions, particularly on very fast running small motors, that it would cause an appreciable difference in the amount of work being turned out by the various machines under operation, meaning of course a loss to the power customer, which if kept up for any length of time, would in all probability cause him to condemn electric power or perhaps throw it out entirely. True, the fluctuations in load on a generator, that, among other things is operating a few passenger elevators, is sometimes so great that it precludes anything like fine governing either by hand or automatically, but the fact remains nevertheless that it will pay best to keep up as near a constant pressure as possible. These remarks do not apply to generators operating street railways, for in their case there is so great a fluctuation in the load at times as to make it almost an impossibility to maintain a constant and steady E. M. F., nor is it essentially necessary to do so, owing to the fact that a regular speed is not required, it being seldom necessary for the motor man to turn out all of the resistance of the rheostat to get his car to travel its set speed, and a drop in the E. M. F. can easily be compensated for by turning in a little more current, it being a combination of the E. M. F. and amperes (or watts) that does the work.

WE have quite recently seen tested a one inch by half inch oval carbon for all night single rod lamps, and to judge from this test, they are unquestionably the right thing in the right place. The test on a 10 ampere current showed a life of 10 to 20 hours for each pair (one twelve and one seven inch), plain black ones being used, without any coating of copper at that. In fact a test was also made at the same time of a coppered one of the same size, but owing to the carbon being consumed without breaking down or fusing the copper, it was necessary to occasionally knock off the long metal horns which formed at the extreme outside width of the carbon. In using this style of carbon it is necessary in order to obtain the best results, to set them in the lamp at right angles to one another, and also that means be provided in the lamp to keep them in this position as they feed down. This is not an easy matter to do in the ordinary clutch lamp, perhaps, but in a clockwork lamp, with rack rods, no other device is necessary than to fit them with holders suitable to the shape of the carbons. Such carbons are actually money savers to the company using them, their first cost being

considerably less than would be that of enough 7/16 carbons to last the same length of time. Again, there is this consideration, that a plant requiring the lamps trimmed every day, say for six months in the year, would only need them trimmed or carboned every other day for the other six months. Thus, one trimmer would take the place of two for that length of time, a decided saving as all will admit who have weekly wages to pay to half a dozen or more trimmers, and who find it uphill work to make the plant even show a semblance of paying any profit to those who have their money invested in it. The argument may be used that it is necessary that every lamp should be looked after in some way or other every day, to see that the rods are clean, etc., but this is not absolutely necessary where a black carbon is used; they cannot pass by or become locked if used as shown above, nor can there be any reason whatever advanced to show that this method of all night lighting is not a change in the right direction and a money saver for the company. Another point, is that the dynamo may flash around the commutator without the least fear that there will be any of the carbons pass by or lock, which is decidedly not the case where a double rod lamp and 7/16 carbons are used.

C. A. S. E. No. 6, GUELPH.

GUELPH, NOV. 21, 1892.

Editor ELECTRICAL NEWS.

A regular meeting of No. 6, C. A. S. E., recently organized here, was held on Saturday evening last. Two applications for membership were received. Every member was present, making the total attendance 16.

The President, Mr. John A. Angell, gave a lengthy and practical lecture relating to boilers, the common slide valve engine, steam pumps, etc., and questioned the brethren on these and other subjects pertaining to steam engineering.

So pleased was everyone present with the lecture, that a resolution was passed requesting the President to repeat it at next meeting.

As we are but new beginners, we would feel greatly obliged for any information or assistance of any kind which our more experienced brethren in the Association may feel disposed to give us.

Yours truly,

C. J. JORDAN, Rec. Sec.

PERSONALS.

We have been favored with a copy of a Newport paper containing full particulars of the wedding of Mr. John Carroll of the Eugene Phillips Electrical Works, Montreal, and Miss Emily Selina Ryan, of Newport. Miss Sadie Carry was the maid of honor, and Mr. Andrew J. Carroll the best man. The ushers were Messrs. Sanford Gladding, Dr. Wm. Carry, Wm. Christie, of Montreal, A. J. Carroll and H. T. Rooney. The residence of the bride's mother, where the ceremony and wedding festivities took place, was tastefully decorated for the occasion. A large number of the friends of the contracting parties were present. Mr. and Mrs. Carroll left Newport the same evening for New York, and returned a few days ago, by way of Toronto, to their future home in Montreal.

In a recently published list of men of wealth in Montreal appears the name of Mr. Charles R. Hosmer, director of the C. P. R. telegraph system. The following particulars of Mr. Hosmer's career, from the Kingston *Wing*, will be of interest to our readers:—"He was an operator in the service of the Montreal Telegraph company when the Dominion Telegraph company was projected, and he had the ambition to advance and become manager. The new business prospered under him, and it was not long ere he was translated to a higher sphere, to the position of superintendent of a division, in which he showed much ability and qualified for the responsibilities of a still higher position that which he holds now as director of the Canadian Pacific railway's telegraph system. He is one of the best known telegraph men in America and in connection with the Commercial cable he is known across the Atlantic also. It may be said that for him there were grand openings presented to but few, but how many are there who do not take advantage of the opportunities they have had and so give point to the old law that 'nothing venture nothing have?' Granted, that Mr. Hosmer was fortunate in his associations, fortunate in his choice of situation and lucky in his chances, he had the tact and the wisdom to carry himself right, and he shaped his purposes and plans to suit the emergencies of life. Above all he has not lost his head; success and prosperity have not interfered with his usefulness, and he is as active and enterprising to-day as when he set out, only a few years ago, to build up a name and a reputation of which he has reason to be proud. His record should be an inspiration to all young men. It points to what can be done by work and courage and laudable ambition."

Some of the officials of the city of Toronto profess to have discovered that the Toronto Electric Light Co.'s building stands partially on the line of a public street. The company deny that such is the case.