CANADIAN ELECTRICAL NEWS AND STEAM ENGINEERING JOURNAL

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EDITOR'S ANNOUNCEMENTS.

Correspondence is invited upon all topics coming legitimately within the scope of this journal.

SALUTATORY.

THE general character of this journal, as well as the objects which it will seek to promote, will to a large extent be revealed by an examination of this first number. We are consequently under obligations to say but little by way of preface. The electrical industry is one of great importance in Canada, the installations at present numbering between four and five hundred, and electric lighting and power plants being daily installed in every part of the country. They may shortly be found in almost every manufactory, and in every large building. Side by side with them will be the steam engine and boiler, from which must come the power to generate the electricity, and furnish steam for heating. Upon the steam engineer will devolve the duty of operating the electric as well as the steam apparatus. It is because electricity and steam are destined thus in future to be so closely allied, that we are led to hope for the complete success of the paper in its new form. We are strengthened in this opinion by the hearty assurances of support which have already come to us from the various electrical companies, and from officers and members of the Canadian Association of Stationary Engineers.

Arrangements have been made whereby gentlemen recognized in Canada as authorities on the subjects of electrical and steam engineering will contribute liberally to the pages of each number.

Recognizing how many persons there are in charge of electric plants at the present time who have had little opportunity of gaining a proper knowledge of the principles of the science and their application, a special effort will be made to supply such information. It will be seen that in the present number has been commenced a series of articles giving the primary data with which the student needs to be thoroughly familiar before he attempts to acquire the higher standards of knowledge. To those who may happily have got beyond the rudimentary stages, it may seem like beginning too low down the scale to print information of this character, but we believe that to the majority of persons operating electric plants in Canada to-day it will prove welcome and helpful. It was thought well to begin thus at the very foundation, and after having placed the student in possession of a knowledge of the underlying principles, to lead him from thence onward to higher attainment. In view of this purpose, the persons into whose hands this paper may come, and who may be in need of this class of information would do well to become subscribers at once and thus secure possession of the entire series of articles.

In endeavoring to educate those charged with the operation of electric apparatus, we shall be conferring benefit also on the owners, inasmuch as upon the knowledge and consequent efficiency of the operator depends to a large extent the dividend which an electric plant may be made to render. It is safe to say that some of the plants in Canada to day are not yielding a fair profit to the owners because the persons in charge are unable through lack of knowledge to obtain from them the highest efficiency of which they are capable at the least cost

A Canadian Electrical Association, where owners and operators of electric apparatus might meet and consider the many questions affecting their interests, is a present necessity, and no effort will be spared on the part of this journal to bring about its early formation.

The Canadian Association of Stationary Engineers we believe to have been founded on right lines, and to be doing a grand work in the direction of raising the standard of efficiency not only of its members, but of engineers generally It must be acknowledged that there is great necessity for a higher average qualification than that which at present exists. With the increasing number of steam plants coming into use in connection with the heating and lighting of large buildings, the danger to life from improper management is vastly greater than ever before, hence the greater necessity for fully competent engineers

Many persons operating steam engines have as yet refrained from connecting themselves with the Association. We hope to see the number speedily grow less, as we believe such persons would best promote their own interests by joining the Association and assisting to bring about the objects sought to be attained.

In conclusion, the columns of this journal will be at all times open for the expression of opinions of its readers on any subject relating to electricity and steam engineering. Correspondents will be expected to observe brevity of expression, and avoid personalities. As far as we are able, we shall be pleased to answer questions on any subject which may legitimately come within the scope of this journal.

A NOTEWORTHY result of the rapid introduction of electricity in its various forms of light and power is the high standard of knowledge and intelligence required of the mechanical engineer. Formerly any man or boy who knew enough to throw on coal and sling a pot of hot tallow was considered abundantly competent to "run the engine," and as long as the engine "ran" with tolerable punctuality he was doing about all that could be reasonably expected of him. The evolution from this state of things has been almost as rapid as the introduction of electricity itself. Hand in hand with the progress of electrical development has gone the improvement of the steam engine, and machines are placed in the hands of the engineer of to-day comprising a complexity of mechanism and employing a pressure of steam such as his predecessor of the tallow pot could have had no conception of. This alone would call for a higher intelligence and greater skill on the part of the manipulator, but the fact that the forces of steam and electricity have become so allied and interwoven—one depending so much on the other—would indicate that something even more than this will be required of the modern engineer. Every factory in which steam power is employed to any extent now has, or will have, its electrical plant for lighting and for the transmission of power, so that it has become necessary that he should understand at least some of the principles of dynamo-electric construction and operation, and have some knowledge of the laws which govern the production and distribution of electric currents. The introduction of high-pressure steam with the principle of expansion carried to its utmost limit requires an amount of theoretical and practical knowledge heretofore not considered essential, so that for the thoroughly capable and aspiring engineer who is able to grasp all this, and besides has a sound practical knowledge of electricity, there is a constantly widening field. In isolated plants there is a demand for him. Central stations for the distribution of power and light are increasing in number and extending their operations, and the extension of electric railway systems will in the near future offer unexampled opportunities. In this, as in other walks of life, the best men will rise to the top, and the painstaking, intelligent and careful engineer will rank amongst society's most useful and respected members.