

SCIENTIFIC CANADIAN

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Presenting a New Volume of THE SCIENTIFIC CANADIAN to our subscribers and the public, we would wish briefly to call the attention of the latter to the main objects of the publication.

THE SCIENTIFIC CANADIAN, which is the only scientific paper published in this country, is intended at once to record the latest achievements in science throughout the world, and to offer a practical assistance to the skilled workmen of the country in their several trades. It will be our endeavour to obtain the best and most recent information upon all subjects of interest to

our readers, and with a view to the better carrying out of this object we invite correspondence from all who are interested in the work we propose to ourselves.

We have made changes in the Editorial department of the paper, which may be allowed to speak for themselves.

The present Editor will be happy to place himself in communication with all who may have matter of interest to contribute, or suggestions to offer as to any way in which the Magazine may be made of more service to the class it is intended specially to benefit.

A department of Notes and Queries will also be opened, and information on all subjects within the scope of the work will be answered editorially or otherwise.

The present number will be found to contain detailed descriptions of the rival method of electric lighting, the merits of which are now engaging so large a share of attention in scientific circles. This, with other descriptive and illustrated matter will form an attractive number.

It is much to be desired however that Canadians should take a greater interest in supporting what little scientific literature we have. Our trades, our education, our artistic tastes all reach a far higher standard than ever before, and now that some scientific training is a recognized part of the preparation for the mechanical trades, there should be many who are able to discuss the minor branches of science which come under their observation, and to them we gladly open our columns. We want a Canadian magazine to be the exponent of Canadian thought and Canadian research, and we make

an earnest appeal for support from all who are able to help us.

In conclusion, we would wish to thank those who have supported the magazine since its commencement, and while asking for a renewal of their good offices to commit our new volume to the public, with some confidence as to its reception.

A NEW SYSTEM OF APPRENTICESHIP.

A system of apprenticeship in some respects new, says the *Iron Age*, has been adopted by Messrs. Richards & Dole, machinists, of Springfield, Mass. It is intended to combine the thoroughly practical education of the shop with the theoretical education of the school; or, in other words, it is an industrial school in which the most time will be given to practice instead of theory. They propose to require of the apprentice fifty-eight hours a week in the shop and nine hours a week of study. The term of apprenticeship for those beginning to learn a trade who are under twenty years of age, is to be six years, in which time, under this system, it is believed that an apprentice will be qualified to rank with the best journeyman and to earn the same wages. Those who are over twenty years of age are allowed to finish their apprenticeship in five years, and those who have worked in a shop are advanced according to proficiency. The beginner is first put to drawing from sketches, then takes up projection and diagram, and advances regularly according to his ability. It is believed that in this way one year will qualify him as well to work from drawings, as four or five years ordinarily. All applicants are taken from four to twelve weeks on trial, and if not satisfactory are then dismissed. For the first year's labor 5 cents per hour is paid to those under 18, 6 cents to those who are 18, and 7 cents to those who are 20 and upwards; for the next years the rate is advanced to 6, 8, 10, 11 and 12 cents. The firm also pay 2 cents per hour additional into a reserve fund, which is paid to those apprentices who finish their full term of service; for the six years this amounts to \$400.

The scheme in this shop grew out of the difficulty experienced in getting thoroughly qualified machinists, and is an attempt to solve again the old problem of how to continue the system of apprenticeship, now largely fallen into disuse. It is stated that this firm have already more applicants than they can accept. The scheme certainly seems worthy of a trial. We have but little sympathy in many cases with the lament over the decrease of the apprentice system. The introduction of machinery and the consequent subdivision of labor have made it unnecessary in many trades. In some trades, however, there cannot be such a subdivision, nor such machinery as will do away with the necessity for a large proportion of skilled, thoroughly educated mechanics, and the machinist's trade is one of these. The scheme we have described above, certainly seems well calculated to produce workmen not only competent for the ordinary routine of shop work, but competent to design and oversee the execution of work.