Doing a Good Work.

AN ASSOCIATION OF EDUCATION AND PROGRESS SHOULD HAVE THE SUPPORT OF EVERY MANUFACTURER INTERESTED IN METALS. AMERICAN FOUNDRYMEN'S ASSOCIATION CONVENTION MEETS IN TORONTO NEXT YEAR.

When an organization has for its object the education of its members, the free exchange of ideas, the standardization of materials, and in general the placing of the industry it represents on a higher and more efficient plane, it deserves success. Such is the object of the American Foundrymen's Association, and it has been successful. During the eleven years of its existence its history has been one of progress. Next year the Association intends holding its convention in Toronto, which will be attended by about 2,000 delegates and at the same time the Foundry Supply Association will hold its annual exhibition of the latest machinery and apparatus dealing with foundry practice. Part of the address of the retiring president, W. H. McFadden, given at the recent convention at Philadelphia, deals with the advancement in foundry science. He tells of their early experiments on the effects of silicon on iron. Its influences were studied and the results explained at these meetings.

Differences of opinion were frequently manifested, but the knowledge gained proved of great benefit to foundrymen. Experiments and discussions soon brought out the fact that silicon was but one of several elements which exerted a marked influence on cast iron. This led to a study of the effects of other impurities, and has resulted in the development of foundry metallurgy into an exact science.

There is no longer any excuse for the uncertain hit or miss methods formerly used for in mixing foundry iron. Our proceedings contain material, which, if intelligently applied, should allow the foundryman to shake off the shackles which bind him to the ruts followed by his forefathers.

It is a surprise to me that the opportunities offered by metallurgy are not more universally taken advantage of, as the foundry metallurgist has explained many of the problems formerly thought unsolvable. Where metallurgy is not a success in a foundry, it is due to the lack of knowledge of the one who seeks to apply it rather than to any defect in our present knowledge of the science itself.

STANDARDIZED DRILLINGS.

In order to aid the foundry chemist to obtain uniform results, this association developed a series of standardized drillings of cast iron which have become the arbitrator in nearly every laboratory in America. While these drillings are now under the Bureau of Tests of the United States government, their inception and preparation resounds greatly to the credit of our association.

STANDARD METHODS FOR ANALYSIS.

Hand in hand with the work of standardized drillings has gone the work of standard methods for analysis of iron. Started some years ago, the work has since been in the hands of our metallurgists. After four years of hard and painstaking labor, their committee has at last succeeded in placing before our association a series of standard methods. Their adoption, for use in cases of dispute, will greatly aid in preventing dissension between the buyers and sellers of pig iron. The secretary and committee have worked arduously for the association and deserve great credit for their results.

STANDARD METHODS FOR TESTING CAST IRON.

The work of this association formed the basis for the standard methods for testing cast iron adopted by the American Society for Testing Materials. The data published in connection with this work, in our proceedings, is of itself an encyclopedia on cast iron, giving, as it does, the analysis as well as the strength of a large number of characteristic irons. It is to be regretted that these specifications have not met with more universal usage; it is possible that they do not fulfill the requirements of founders and, if this is so, steps should be taken to remedy the defects. Cast iron will maintain its position in the future solely by the intelligent application of some method of testing, which will give the engineer an accurate knowledge of its strength in the casting as it makes up a component part of the machine.

STANDARD METHODS OF BUYING PIG IRON.

The work of the association in bringing about the adoption of standard specifications for buying pig iron deserves mention. The old method of buying by fracture is rapidly disappearing and the modern method of buying by analysis is rapidly taking its place, much to the advantage of both the buyer and the seller. This happy condition of affairs is largely due to the work of this association and the publicity given the matter by its proceedings.

STANDARD METHODS OF FOUNDRY COST KEEPING.

Another matter which deserves the careful attention of every foundryman, viz., methods for keeping foundry costs. All foundries have some method, however crude, for ascertaining costs of castings. A careful study of these methods reveal the fact that many of them are not only incomplete, but very misleading. The association should assist in the development of some simple system which will give accurate costs. This should be a foundation, as it were, on which those foundries desiring to go into detail could build and still preserve the principles of the standard method.

Some system is essential to remedy the uneconomical working conditions which exist in our jobbing foundries. Some method should be adopted for properly distributing the general expense or burden of a plant so as to enable the foundryman to ascertain just what class of work was profitable for him to make and what should be left for some other to handle. An intelligent system would lead to a rearrangement in bidding on work which would cause a much improved condition in our jobbing foundries.

This illustrates the nature of the work being carried on by the National Foundrymen's Association, and as such its influence is felt not only in the foundry, but indirectly in every branch of manufacture.

CONVENTION IN CANADA.

That the convention will be held in Toronto next year is due in a large measure to the efforts of Mr. L. L. Anthes, superintendent of the Toronto Foundry Co., Toronto and vice-president for Canada of the National Foundrymen's Association, who has worked diligently with this in view. Mr. Anthes has taken a close interest in the work of the association, being an aggressive and influential member, being rewarded in his work by arranging, not without some opposition, to have the next convention held in his native city. Objection was raised by some members of the Supply Association that trouble would be experienced with our customs regulations

L. L. ANTHES, SUPERINTENDENT TORONTO FOUNDRY CO., TORONTO.

in bringing their exhibits, but Mr. Anthes was able to assure them, having taken the precaution of ascertaining beforehand, that the Canadian Government would contribute the building used for the exhibits, a bonded warehouse. It is proposed should nothing intervene to prevent, to have the convention held in two separate buildings of the Toronto exhibition, enabling the meetings where papers are read and discussed and business transacted to be free from the noise of moving machinery exhibits.

It is opportune here to say a few words regarding Mr. Anthes toward whom Canadian foundrymen and many manufacturers feel a sense of gratitude at the present time. As a technical graduate and university man he has had a broad training for the position he now holds. As a practical foundry man, however, he excels, having been one of the first to develop the gravity method of moulding which is coming into more and more general use, on account of the economy, speed and precision made possible. His paper read before the New York convention three years ago caused considerable attention, and has led to a wider development along this line. The foundry of the Toronto Foundry Co., is a further tribute to the ability of Mr. Anthes, being considered a model and visited by many in search of the latest ideas in foundry practice and construction. Here moulding is done by gravity and there may be seen working the only duplex gravity core machine in the world, the design and invention of Mr. Anthes.