H.G.R. Bennett
New president of AISE

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Association of Iron and Steel Engineers

It is with some feeling of trepidation that I assume the honor and office of President of our Association succeeding G.R. Carroll who has so ably directed the activities of the organization throughout the past year. So much of importance has happened during this period—namely, the change of name of the Association has been consummated after a long period of consideration—plans have been completed for the largest convention and the most extensive and interesting exhibit ever arranged by the Association and a most notable improvement in the editorial and general makeup of the official publication, the Iron and Steel Engineer has been made.

To keep the proper momentum in our program of activities which such progress merits means a broad responsibility which I gladly accept feeling assured of the full cooperation and assistance of our Board of Directors and Managing staff.

We enter the year 1936-1937 with an impressive record of past accomplishments in the Iron and Steel Industry, and with many auguries for a still brighter future. Let us review some of the facts and figures illustrative of the great growth of the Iron and Steel business since its early days, and some of the improvements to which the engineer has contributed in making progress possible.

It was 80 years ago that Sir Henry Bessemer began his investigation into the possibility of producing an improved quality of iron, and during that same period the first 30-foot rails rolled in this country are said to have been produced. Sixty years ago, the first 60-foot rails rolled in the United States were manufactured, and this same period also saw the first steel wire nails.

Forty years ago, George B. Selden secured a United States Patent covering the idea of "Applying an Internal Combustion Engine to the Propulsion of a Vehicle." The original patent application had been made 23 years earlier. Selden's idea, and his broad basic patent, marked the beginning of the automobile industry.

Twenty years ago, the iron and steel business reached the most prosperous period of its history, but the sudden demand for increased output of iron and steel products was so great that a large portion of the activities of plant personnel was directed to increasing output, rather than toward important technical advances.
In 1935, a total of 21,100,000 tons of pig iron were produced in the United States, in comparison with 165,000 tons 100 years ago.

There is perhaps, no field in the steel industry in which more progress has been made than that of fuel conservation. Twenty years ago, the coke used to produce a ton of pig iron in a well-operated

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plant was in the neighborhood of 2200 pounds, while today it is about 1900 pounds. A similar improvement has been made in the percentage of the blast furnace gas used in stoves. This, due to improvements in stoves and burners, has dropped form more than 30% to 20% or less.

The surplus gas 20 years ago was either burned under boilers at 50 to 60 percent efficiency, or wasted to the atmosphere. Today, in a well-ordered plant, it is burned under boilers with an efficiency of 80%, or mixed with gases of higher calorific value and used for metallurgical purposes.

The experience with open hearth practice has been similar. Where 20 years ago the plant which was producing steel on 550 pounds of coal, or 7,500,000 B.T.U. was not considered to be doing a bad job—today a good plant will do so on 280 pounds, or slightly less than 4,000,000 B.T.U.

The advancements in steel making practices which I have enumerated are only a few of the many which have been made in the industry. The engineer has contributed much in bringing about these improvements. Likewise, the vision shown by the Association in anticipating such problems and needs of the industry, as come within its scope, will be manifested in an even closer spirit of cooperation among its members.

The future is brightened by generally improving business conditions and the most favorable increase has been enjoyed by the automotive industry. It used fully 25 percent of the rolled steel products produced last year, an enormous tonnage and more than was used by any other two consuming groups, and this year has witnessed an additional material improvement.
One of the broadest phases of the Association's purposes is the improvement in the relations between those of the iron and steel industry and others who have mutual interests. The selection of Detroit for our next Convention embodies this idea as it presents a splendid opportunity for the automotive trade and the steel manufacturers to discuss mutual problems.

I wish to take this opportunity to extend a cordial invitation to members and friends of the Association to participate in this program for their own benefit as well as that of the Association.

H.G.R. Bennet
President, AISE