

THE IRON AND STEEL INSTITUTE

NOTWITHSTANDING the pre-eminent scale on which the mineral and metallic industries of Great Britain are conducted in practice, it must nevertheless be admitted that, as a rule, we have hitherto been long and far behind our continental neighbours in respect to possessing institutions calculated to aid in developing or advancing the scientific or practical bearings of such subjects, or to afford the means of intercommunication between those occupied or interested in such pursuits. To this rule, however, we now have, at least, one honourable exception in the case of the Iron and Steel Institute, now holding its second annual meeting in London, and the establishment of which, in 1869, must be looked upon by all interested in the application of science to the arts, not only as a decided step forward in the right direction, but may even be regarded as inaugurating a new era in the history of the so important iron and steel manufactures of Great Britain.

It has been often the fashion, possibly also with some show of justice, to represent the British manufacturer as a narrow-minded individual surrounded by and, as it were, isolated from even the rest of his own class by a sort of atmosphere heavily loaded with trade jealousy and manufacturing secrets. The experiment of the last two years, however, has amply proved, at least in the iron trade, that it only required the establishment of such an association as the Iron and Steel Institute, to present him in a very different and more favourable light; for the mere fact of bringing together from different parts of the country men all deeply interested in similar pursuits, has at once dissipated the petty jealousy inseparable from a previous state of isolation, and has, besides indicating how much can be effected by combined action, convinced the majority at least, that the interests of the individual manufacturers are intimately bound up with the advancement of the country at large.

The Iron and Steel Institute now numbers some four hundred or more members, including the principal iron-masters and others practically engaged in the production or working of iron and steel, or connected more or less directly with those manufactures by reason of their scientific attainments in metallurgy or the allied sciences; so that, taking into consideration that the Institute has as yet been barely two years in existence, this rapid progress must be regarded as the most convincing proof that a real want for such an association had been very generally felt.

The consideration of what may be termed commercial in contradistinction to technical, questions, such as, for example, those connected with wages, trade regulations, &c., do not come within the sphere of the Institute; the objects of which, besides affording a means of communication between its members, are restricted to the acquisition and dissemination of information, and the discussion of all scientific and practical subjects bearing upon the production and manufacture of iron and steel.

The methods by which these objects are sought to be attained are threefold—viz., by the publications issued by the Institute; the formation of committees to examine into and report upon subjects of special interest; and by general meetings of the members, two at least in each

year, one of which is held in London in the spring, whilst the other or autumn meeting is located in the country, in some one of the manufacturing districts, as may be determined by the Council.

The excellent attendance at both the London and the country meetings at Middlesborough and Merthyr Tydvil, under the able presidency of the Duke of Devonshire, as well as in the sustained interest which has been kept up in the proceedings of the Institute, have already proved it to be a success, besides showing how much may be effected by bringing from all parts, into personal contact, those interested in the same occupations, whereby a mutual interchange of ideas and a spirit of generous rivalry is established, which cannot fail to do good to the individual, as well as tend to the progress of the industry of the country at large.

An examination of the publications issued by the Institute up to the present date, will amply justify the assertion that they fully maintain the high position which it aspires to, whether they be judged from a strictly scientific or technical point of view, and that they are entitled to rank alongside any which emanate from even the best institutions of like character on the Continent. For the years 1869 and 1870 they appeared in the form of Transactions; in all seven numbers, which contained the proceedings of the Institute, prefaced by an able inaugural address delivered by its first president, the Duke of Devonshire, who himself is largely interested in iron mines and smelting works, along with a series of well-illustrated papers on various subjects relating to iron and steel-making communicated by members of the Institute.

At the commencement of the present year, however, the Council decided that these Transactions should give way to the more convenient form of a Quarterly Journal, and the first number made its appearance on the 1st of February as a volume of 276 pages, copiously illustrated by well got-up plates, and containing numerous valuable communications to the Institute; as, for example, by Mr. J. L. Bell, on the chemical phenomena of iron smelting; Mr. Siemens on pyrometers; Mr. Kohn on alloys of iron and manganese, &c., whilst in addition to the usual proceedings of the Institute a new and important feature was introduced in the shape of quarterly reports from the two secretaries; the general secretary giving a summary of what has been done in Great Britain in connection with these subjects outside the Institute, whilst the foreign secretary communicates a report on the progress of the iron and steel industries abroad, being an attempt to supply a long-acknowledged desideratum by keeping the public here informed as to what is being done in connection with the production and manufacture of iron and steel in foreign countries.

The present meeting opened on Tuesday with an address from its new President, Mr. Henry Bessemer, so well known in connection with the process which now has effected a world-wide revolution in the manufacture of steel; whilst on the two following days various communications were to be brought forward by Messrs. Bell, Ferrie, Kohn, Tate, Walker, and others, besides a lecture by Prof. Roscoe, F.R.S., on Spectrum Analysis, with special reference to the manufacture of iron and steel.

DAVID FORBES