an ancestor, Sir William Baker, to commemorate the building of the house, are still among the finest in Great Britain. The pinetum, which at one time contained the best collection of conifers in the country, was considerably enlarged by the late Squire, who from time to time made numerous additions to it. Just before the War he commenced the formation of a new pinetum at Bell's Wood on another part of the estate, which he had planted with conifers recently introduced from China and elsewhere.

Between 1909 and 1913, Mr. Baker's interest in conifers took a more definite shape, when he published

three handsome quarto volumes of "Illustrations of Conifers" which contained 'close-up' photographs of all the hardy species in cultivation. The letterpress for the work was prepared by the late Prof. A. Henry and Mr. A. B. Jackson, two well-known authorities on the group. These volumes are a valuable contribution to the literature of conifers, and have been of considerable assistance in the identification of the species. A supplementary volume to the series was commenced some time ago, and will be issued shortly. It is deeply to be regretted that Mr. Baker did not live to see its completion.

## News and Views

Iron and Steel

WHEN delivering the Christmas lectures at the Royal Institution in 1925 on "Old Trades and New Knowledge", Sir William Bragg took for the subject of one of his lectures the trade of the smith. One of the objects of this lecture was to show how science has been applied to one of the oldest arts, and what it has revealed. Somewhat the same subject, but under the more prosaic title of "Iron and Steel", and dealt with in a different manner, was taken by Sir William Larke for his Friday evening discourse at the Institution on March 22, and this address is reproduced as a supplement in our issue this week. Within an hour, Sir William reviewed the whole history of the manufacture of iron and steel, pointing out some of the outstanding landmarks, referring to some of the chief inventors and touching upon some of the great achievements rendered possible by the metallurgists.

SINCE iron and steel were first used some thousands of years ago, and since iron was as precious as the crown jewels, many unknown inventors all over the world have added their contributions to the art of iron making, but as Mr. Charles Schwab said, every invention of fundamental importance in the modern iron and steel industry is British in origin. names as Darby, Huntsman, Cort, Neilson and Bessemer are well known, and the rise of the iron industry in Great Britain may be regarded both as a cause and a result of the so-called Industrial Revolution. Since the Norman Conquest, said Sir William, there may be said to have been three main phases of industrial development. The first extended to the beginning of the eighteenth century, when power was obtained from animals and men, the second lasted nearly a century and a half and may be described as the age of Iron and Coal, while the third phase, that of the development of metallurgy and alloy steels, has only lasted a quarter of a century, and we may be said to be at the beginning of a new era. Iron manufacture has profoundly influenced the standard of life in the past, and its effect on our social organisation is likely to continue to increase.

Dr. Irving Langmuir, For.Mem.R.S.

THE many friends of Dr. Irving Langmuir will note with pleasure that he has just been elected a foreign member of the Royal Society. It will be remembered (see NATURE, p. 768, Nov. 19, 1932) that he was awarded the Nobel Prize for Chemistry in 1932. In referring to this award, it was pointed out that it is to Irving Langmuir that we owe the conception of the orientated monolayer as the state of material at phase boundaries. A clear and simple interpretation was found for many of the phenomena occurring at interfaces, and new light was thrown on such varied subjects as thermionics, heterogeneous catalysis and surface tension. More recently, Langmuir has been investigating the stability of oil lenses on water as determined by the nature of the monolayer of the interface, a problem with many biological implica-In addition, as the late Sir William Hardy first observed, the orientated monolayer on a metal surface plays an important function in lubrication. During the last two years, Langmuir has also made the important discovery that these layers are destroyed by the passage of a rubbing surface, but if the film be made thick enough, self-repair is effected. Finally, with his co-workers, Langmuir has been investigating the conditions of mobility of substances adsorbed in monolayers on metal substrates, one of the factors to be considered when the rates of catalytic actions are under review.

## Prof. Max Weber, For.Mem.R.S.

The election of Prof. Max Carl Wilhelm Weber as a foreign member of the Royal Society gives well-deserved recognition to one whose influence on biological science is of outstanding importance. After earlier work on Crustacea, Prof. Weber soon entered upon his studies of fish, which were eventually to bring him into the front rank of ichthyologists of the day. His contributions to our knowledge of fish fauna have been very great and resulted from his personal travels into the far north, South Africa and the East Indian Archipelago. The fruits of his researches culminated in his comprehensive joint