Special Libraries and Information Bureaux

THE Association of Special Libraries and Information Bureaux held a luncheon on April 27 at which a company of more than eighty was present. After saying that he hoped the luncheon would become an annual event, the president, Sir Harry Lindsay, director of the Imperial Institute, spoke of the three stages of science: first scholasticism, dominated by the great men of science, then the period of the authoritative text-books, now the era of the individual specialist. The results of modern scholarship are scattered in innumerable technical journals and, in order to keep abreast, search must be made over a very wide field. The same is no less true of other spheres of knowledge. ASLIB was therefore formed to act as a guide to specialist sources of information. The next speaker, Sir Clement Hindley, chairman of the Racecourse Betting Control Board, mentioned his connexion, as vice-president, with the Institution of Civil Engineers. The Institution's abstracting service, started so long ago as 1877, he said, has recently been considerably expanded in collaboration with other institutions representing different branches of engineering. This expansion should interest all who, as members of ASLIB, are eager to facilitate the dissemination of knowledge. Sir Ian MacAlister, secretary of the Royal Institute of British Architects, stated that in the nineteenth century people created every sort of institution and machine, political, social and mechanical. In the post-War years of disillusionment, we realized that machines are of no use unless they work, museums are a costly extravagance unless their treasures can be made intelligible, and libraries are mere hoards of books if inaccessible to those who need them. A new desire to make the instruments of civilization work is now awake, and ASLIB is a valuable and essential part of this great movement.

Prehistoric and Primitive Iron Smelting

IN a paper bearing the above title read to the Newcomen Society on April 20, Mr. E. W. Hulme reviewed the history of the use and manufacture of iron through a period of about 3,000 years, from the date of the earliest known examples of beads made of meteoric iron down to about the first millenium. The first example of terrestrial man-made iron, he said, was the iron dagger found by Woolley at Tell Asmar in Mesopotamia. Unlike objects made from meteoric iron, this is free from nickel. Besides the objects found in tombs and the fragmentary records such as the diplomatic correspondence recorded in the clay tablets of Egypt and Asia Minor, Mr. Hulme dealt with the sites and processes associated with early iron making. These included the Egyptian by-product iron process by which very small amounts of iron were obtained from sands containing magnetite and gold; the Wootz steel-industry of southern Central India, the Chalybian steel process described by the Pseudo-Aristotle (fourth century B.C.), the iron industry of Persia and the Gerar forges of Southern Palestine. The claims of Persia to rank amongst the earliest makers of iron have been overlooked, but if they can be substantiated the migration of the industry to China, India, Syria and Palestine becomes explicable. When referring to the Gerar forges of Palestine described by Sir Flinders Petrie, Mr. Hulme said that though his interpretation of the purposes of the furnaces differed from that of Sir Flinders, "for the recovery of these dateable sites and for the meticulous accuracy in the description of the large output of these forges, all metallurgists owe a warm debt of gratitude to the veteran explorer who has done so much to recreate for them the history of Egypt and the Near East".

Paris Television Transmitter

ACCORDING to a note in the *Wireless World* of April 21, a new television transmitter at the Eiffel Tower, Paris, was inaugurated on April 8 by the Minister of the French postal and telecommunications service. The transmitter, which has been in regular operation since September 1937 with reduced power, will shortly be broadcasting with its peak output of 30 kw., thus making it one of the most powerful television stations in the world. The aerial is supported by the Eiffel Tower and connected to the transmitter by a cable 380 metres long. Two new studios with the most up-to-date equipment are situated at distances of 2·5 and 5 kilometres from the transmitter, to which they are connected by co-axial cables. The vision modulation frequencies are impressed on a carrier frequency of 5·5 Mc./sec., the total band transmitted down the cable being from 3 to 8 Mc./sec. The transmitter is designed to operate on a frequency between 40 and 50 Mc./sec., at its continuous peak power output of 30 kw. The frequency is maintained constant within narrow limits by a quartz crystal oscillator, followed by two doubler stages, which raise the frequency to the final carrier value. Some further technical details of the transmitter are given in the article to which reference is made above.

X-Ray and Radium Protection

THE fifth revised report (January 1938) of the British X-Ray and Radium Protection Committee shows that the Committee is alive to the necessity of continually adjusting its recommendations to the expanse of its subject. The chief additional items in this report are to be found in Section v, dealing with the necessary electrical precautions in X-ray rooms, in Section viii (*C*), which deals with radium teletherapy, and in Section ix, where the incidental dangers in the use of electro-medical apparatus, especially apparatus activated from the mains circuit, are considered. This report contains a valuable appendix giving the equivalent thickness of lead and materials in use for general radiation protection; the data are supplied by the National Physical Laboratory. The services of the Laboratory are largely made use of by those in charge of radiological departments, both in a consultative capacity in planning, and for purposes of test when the assembly of apparatus is completed. Copies of the report are sent free on application to the Hon. Secretaries of the Committee, 32 Welbeck Street, W.1.