

for supplying copies of the abstracts or of the original documents to any interested party, and this Information Service, with a nucleus technical staff and access both to the reports and to the original German documents, should be of great assistance to firms with limited research facilities. Publicity is being given to this service and facilities by an exhibition opened at the Board of Trade at Millbank, London, on December 10; the exhibition will eventually be shown in the most important provincial industrial centres of Britain.

### Centenary of the Sewing Machine

SEWING needles of bone date back to prehistoric times, and the steel needle made its first appearance in Britain in the sixteenth century. The speed of expert hand-sewing, thirty stitches per minute, is slow and laborious compared with that of machine work, and with the ushering in of the mechanical age in the eighteenth and nineteenth centuries, it is not surprising that the invention and development of the sewing machine should have come about early in this period. A chain-stitch machine with its single thread had already been made by B. Thimmonier, in 1830, and a machine produced by W. Hunt, in 1832-34, had an eye-pointed needle and an oscillating shuttle. It remained for Elias Howe to make and patent, in 1845, the first successful lock-stitch machine, in which an eye-pointed needle and an independent shuttle, each with its own thread, were used. He disposed of his English interests in the patent to William Frederick Thomas, of Cheapside, in whose name the British patent stands, dated December 1, 1846. The Royal Scottish Museum, Edinburgh, is commemorating the occasion of the centenary by holding a small exhibition of sewing machines. Thanks to the generosity of Mr. A. W. Pickard, of Glasgow, the Museum has in its collection one of the first six of the 1846-type machines, which were made by Howe. A number of other machines of dates ranging over the complete century of development are shown. These include early Howe and also Wheeler and Wilson machines, while modern development is illustrated by the latest domestic and workroom models of the Singer Sewing Machine Co.

### University of Birmingham

THE pro-chancellor of the University of Birmingham, Mr. Edmund P. Beale, is retiring after having held office since 1939. Mr. Beale, whose father was the first vice-chancellor of the University, became a member of the University Council in 1924 and was treasurer from 1930 until 1939. To commemorate his services, Mr. Beale has been presented with a portrait of himself, painted by Mr. A. Middleton Todd. The chancellor of the University, Mr. Anthony Eden, who made the presentation on behalf of the subscribers, paid a warm tribute to the work done by Mr. and Mrs. Beale for the University. The success of the recent appeal for funds, in response to which more than £1,000,000 has already been subscribed towards the £1,500,000 asked for, owes much to Mr. Beale's personal efforts. The vice-chancellor, Dr. Raymond Priestley, said that when he came to Birmingham he was somewhat prejudiced both against a lay element in a university council and lay honorary officers; but he now believes it to be the best possible system for a university like that of Birmingham. Mr. Beale, he said, typified integrity, loyalty and grit, and "one who can appreciate—as

not all laymen do—academic standards and ideals. He has stood for a university of national and international standards both of teaching and research."

The newly formed Department of Chemical Engineering in the University of Birmingham is giving special attention to the problems of fuel technology and the utilization of coal. On the occasion of a recent visit of more than a hundred executives of the gas and allied industries, the vice-chancellor emphasized the importance of making the best possible use of our remaining supplies of coal and high-grade iron ore. "We must capitalize," Dr. Priestley said, "our best brains, our national skill, and the faculty for the co-ordination of hand and brain in which, as a people, we are endowed, I believe, beyond most others, and it is in these fields that this university plans to help."

### Organisation for the Interchange of Technical Publications in Sheffield

A REPORT on the war-time work of the Organisation for the Interchange of Technical Publications in Sheffield was presented to the annual general meeting held in the Sheffield Central Library on November 5. This Organisation provides the framework for a system of co-operation between the Sheffield City Libraries, the University Library and other research libraries in the area, and the libraries maintained by local firms. Through its agency any member library, research workers employed by member firms, or accredited students at the constituent libraries, can draw on the pooled resources of the twenty-nine libraries included in the Organisation. Some of the member libraries are of such a highly specialized nature and cover so small a field (although in minute detail) that they rely largely on the extensive resources of the Science and Technology Department of the City Library in matters outside the range of their own material. Hence, as the largest contributor to the pool, the tasks of administering the scheme and of preparing research bibliographies on specific aspects of research (a service not, however, confined to members of the Organisation) fall on the City Libraries. The close collaboration between the highly specialized works libraries and research staffs and the City Library allows the latter to benefit from the advice of experts in the selection of books and in the preparation of its research publications. From the beginning of the War until November 1946, 8,163 books, periodicals, etc., were recorded as being interchanged by members, but the actual figures of loans were much higher.

At the annual general meeting, applications for membership from the Bragg Laboratory of the Admiralty, the Davy and United Engineering Company, Hall and Pickles, Ltd., Edward Pryor and Son, Ltd., and the Sheffield and District Gas Company were approved, bringing the total number to six society and twenty-three works members. It was also decided to investigate the possibility of obtaining research services in foreign patents through the Fédération Internationale de Documentation at The Hague. Resolutions were passed asking the Association of Special Libraries and Information Bureaux to urge the Patent Office to publish indexes and abridgments to British patent specifications of the war years, and to make representations to the appropriate Government department on the desirability of providing a national loan service of standards specifications from all countries.