has always been that all officers must enter the "General Duties Branch", and devote their time to a complete training in flying for, at least, many years of their time as junior officers. Later they can express a wish to take up specialization in technical work, but they are still required to maintain proficiency in flying. Thus the process of becoming a technical specialist is a slow one, and in a service in which the retiring age is, possibly necessarily, set fairly early, as flying is primarily a young man's job, the officer choosing these branches always finds himself at a disadvantage, either for promotion within the service, or in respect of his ability to obtain employment in the technical side of aviation upon retirement. Also the break in continuity of training and accumulation of experience is usually considered to be unwise, and many young engineers, both from the universities and works apprenticeships, have undoubtedly been deterred from entering the Royal Air Force by this reason.

IN spite of the enthusiastic membership of the university air squadrons the number of technical graduates offering themselves for University Commissions in the Royal Air Force has always been relatively small. The new branch should remove these disadvantages. Entrants for commissions are now offered direct entry into technical work, without having to spend several years in acquiring proficiency in flying. They are to be recruited from university graduates in engineering or natural science, and student apprentices from works who have acquired theoretical knowledge up to a university degree standard. The retiring age limit may well now be extended, as the work is not that in which the younger man necessarily excels, in fact the older man would be superior by reason of his accumulated experience. Prospects of promotion should also now be greater as there must be senior administrative posts within the new department.

Further Archæological Excavation in Syria

SIR LEONARD WOOLLEY'S third season of excavation on the ancient site of Allalakh at Atchana near Antioch, as anticipated, has enlarged and added further detail to the picture of a great meeting place of the civilizations of East and West at an entrance gate to western Asia; but at its close it held out promise of an even greater field of discovery still to be explored. Of this a glimpse may be afforded when the numerous cuneiform inscriptions retrieved in the season just past have been submitted to inspection. Sir Leonard in his preliminary report (*The Times*, August 2 and 3) opened with an account of the further excavation of the earlier palace, which preceded that of the fifteenth-century Hittite king, Nig-me-pa. This earlier building, cannot, Sir Leonard thinks, be much later than the time of Hammurabi, and he assigns it tentatively to the eighteenth century B.C. The structural features, which point to its use in part for administrative and business purposes, in part as a royal residence, convey the impression of a sense of dignity and propriety, combined with an unusual appreciation of space and air, particularly noticeable in the arrangement of the upper residential chambers, with a loggia giving an extensive view over the city, and an approach by newel stairs, of which the first two flights are nearly perfectly preserved. It was, however, from a private house of the fifteenth century that the much desired further evidence was obtained of the contact with Crete, for which mainly the excavation of Atchana was undertaken. This now took the form of a fresco, which is exactly similar to a scheme of decoration found at Knossos, and a 12-wick lamp in red porphyry in the form of the capital of a column, which at Knossos would be hailed, Sir Leonard says, as a typical, but unusually fine, example of Minoan art.

IT was, however, towards the close of the season's work that the most striking discovery was made, which, as Sir Leonard says, "goes far to complete the picture of the ancient city of Allalakh". This was a temple, which throws light upon the religion of the people, and gives examples of their major arts. Though the clearance of this part of the site has only just begun, it is already evident that here are the superimposed remains of at least four temples, of which the latest may date to about 1200 B.C. and the earliest to the fifteenth century. They had been richly adorned with sculpture. Although as yet it has not been possible for Sir Leonard to give more than the most summary of accounts, the record of finds is amazing in both number and interest. Among the more arresting finds are the remarkable sculptured lions, the bronze spearhead, deemed to be a cult object, and most remarkable of all, the hidden statue of a king or god in white limestone with its fifty lines of cuneiform inscription, of which the decipherment will be awaited with keenest anticipation. Such a mass of evidence of the character of Hittite art, and of so early a date—at least of 1200 B.C. and possibly even of the fifteenth century—is indeed an unexpected, but more than welcome find.

Excavations at Ezion-Geber

RECENT excavation at Tell el-Kheleifi on the Gulf of Aqabah, Sinai, by the American School of Oriental Research at Jerusalem, not only has confirmed the indications of the importance of this site in early times as a meeting place of a number of trade routes, afforded by investigations in 1938, but also has revealed that it was the centre of an extensive industry for the smelting and refining of copper and iron from the mines of the adjacent Arabah. The site has been identified with the great port of King Solomon, Ezion-Geber "which is by Elath on the shore of the Red Sea, in the land of Edom". No longer, however, does it stand by the sea. The prevailing northerly winds have brought sand to silt up the head of the gulf, so that the shore is now half a mile away. The importance of the city as a commercial centre was indicated in the first season's excavation by a number of finds, of which the most important is held to be a large broken jar, on which

had been incised two letters belonging to the early South Arabic script. This is assigned by stratigraphic evidence to approximately the latter part of the eighth century B.C. The letters are the earliest known to be definitely datable from a scientifically controlled excavation. Dr. Nelson Glueck, director of the School, in a preliminary account of the excavations carried out in May-June, 1939 (*Illustrated London News* of August 5) records the discovery of an ingenious and complicated system of flues and channels in the thick and high walls of sun-dried brick of the first city, which is so constructed as to utilize the draught of the prevailing winds from the north for the furnaces of an elaborate complex of smelting and refining plant—the largest yet discovered in the ancient Near East. This system would appear to have been the governing factor in determining the site for the first city; and so well bonded were the bricks that many of the walls still stand almost at their original height after nearly three thousand years. Among smaller finds from the third city were Egyptian amulets, of which one was a small cat, a form characteristic of the cult of the goddess Bast of Bubastis, and another was the Uzat eye of Horus.

Jenner and Napoleon

AT a recent meeting of the Section of the History of Medicine of the Royal Society of Medicine (*Proc. Roy. Soc. Med.*, 32, 877; 1939), Dr. J. A. Nixon said that the world-wide eminence of Edward Jenner found no better illustration than his ability to secure the liberation of British prisoners from countries with which England was at war. One of the best known of these prisoners was the Earl of Yarmouth, the model of Thackeray's Marquess of Steyne and Disraeli's Marquess of Monmouth, on behalf of whom Jenner addressed in 1803 the following appeal to the National Institute of France: "The Sciences are never at war. . . . Permit me then as a public body with whom I am connected to solicit the exertion of your interest in the liberation of Lord Yarmouth". In 1805 Jenner addressed himself directly to Napoleon requesting that two of his friends, Mr. William Thomas Williams and Dr. John Wickham, both men of science and literature, might return to England. According to Baron, the well-known biographer of Jenner, it was either on this or a similar occasion that Napoleon exclaimed: "Jenner! Ah, we can refuse nothing to this man." Jenner was also successful in obtaining the release of Sir George Sinclair, who had been arrested as a spy at Göttingen. Besides helping to liberate Englishmen detained on the Continent, Jenner issued certificates stating that travellers abroad were known to him and were undertaking a voyage in pursuit of science or health or other affairs entirely unconnected with the war, and were in his opinion entitled to protection and freedom.

British School of Archæology at Athens, 1935-36

ALTHOUGH the Annual of the British School at Athens no longer provides a general view of the activities of the School and its students—information which now must be sought in a separate publication—its contents continue to record the more important operations of its members. The volume for 1935–36 (London: Macmillan and Co., Ltd., 1939. 42*s*. net), however, opens with an account, very fully illustrated, by Dr. Alex. Philadelphus, director of the National Museum of Athens, of the Anavysos Kouros, a remarkable example of archaic art, in fact "one of the most perfect and almost the last link in the long chain of Apollos or kouroi that have come down to us", probably dating at about 530 B.C. This statue, which was recovered in fragments from an antique dealer in Paris, had been smuggled out of Greece by sea a few years ago from Anavysos, near Laurium. Of the remainder of the contents of the volume the greater part is given up to the excavation of the cave of Trapeza on the plain of Lasithi in eastern Crete. This cave was first discovered by Sir Arthur Evans in 1896, who refers to it as containing objects mainly of the Hellenistic period, but also a faience figure of Bes and fragments of gold leaf, which afterwards found a parallel in the Early Minoan jewellery at Mokhlos. Apart from mention by Taramelli and Bosanquet, it received no attention from archæologists until 1935, when it was visited by members of the School. In 1936, between May 4 and 19, it was excavated by Miss Money-Coutts, Mr. and Mrs. J. D. S. Pendlebury and others. Judging from the finds, the contents of the cave originally must have been rich. Although metal was comparatively rare, gold, silver, bronze (or copper), and lead were all represented. The deposits in the cave, however, had been much disturbed by treasure hunters, and in one spot only were they intact. It has, therefore, been possible to study the pottery found for the most part on stylistic evidence only, and to reconstruct the history of the cave accordingly. It would appear to have been occupied as a habitation site in Late Neolithic, and to have been used for communal interment from Early Minoan II until the end of Early Minoan III.

The Cyclotron and Biological and Medical Research

DR. G. E. HARRISON, lecturer in physics, in the University of Birmingham, has been elected to a Rockefeller Foundation fellowship in natural science which will enable him to spend a year at Berkeley University, California, studying under Profs. J. H. and E. O. Lawrence. The object of the visit is to acquire first-hand knowledge of the application of neutrons to biological and therapeutic research, in which the Profs. Lawrence have opened up a new field the exploration of which seems likely to be of first-rate importance in the treatment of disease. Berkeley University, where Prof. Lawrence constructed his cyclotron and has developed his own technique, is unique in facilities for the production of neutrons and artificial radioactive substances. When the large cyclotron which Prof. Oliphant is building for research in nuclear physics in the Physics Department of the University of Birmingham is completed, this University, in which the Physics Department and new Medical School are in close proximity, will