

applied science which, largely through his initiative and vision, has developed beyond all expectations. The idea of having a scientific laboratory in an archaeological museum was entirely novel, when, in 1919, the trustees of the British Museum sent a request to the Advisory Council for Scientific and Industrial Research for assistance in connexion with problems of cleaning, restoring and preserving antiquities. That Dr. Scott was called in to advise was singularly fortunate. His wide knowledge of chemistry coupled with his interest in antiquities fitted him peculiarly for the work. Within seven years the original inquiry had been satisfied and the results published in three reports which aroused widespread interest. Early experiences were of incalculable value when he visited Luxor and cooperated with Dr. Howard Carter in preserving many valuable objects from the tomb of Tut-ankh-Amun. As experience accumulated, the fact emerged that scientific assistance could be of much greater value to archaeology and the British Museum in general than had been at first supposed. There were questions of authenticity, of the composition of materials, of ancient technique, of classification, and of general diagnosis that could be answered only with the help of qualified scientific staff having the necessary facilities. Dr. Scott has had the satisfaction of founding and controlling the development of a research laboratory which from small beginnings became at length (in 1931) incorporated as a department of the British Museum, and is recognized to-day as being of the first importance by archaeologists and museums the world over.

Rejoinder of an Egg Collector

To Mr. Edgar P. Chance all credit is due for his film of cuckoo life, which thrilled every ornithologist who saw it and made a distinct contribution to scientific knowledge. This achievement, however, does not necessarily justify all his other activities, and for his egg-collecting he has been severely criticized. His rejoinder appears as an eight-page pamphlet entitled "An Egg-Collector Replies to his Critics" (Sept. 1938). In our view, an appropriate reply would be to show that the amount of disturbance caused to wild birds was justified by the amount and value of the scientific knowledge gained from the collections and published for the information of other scientific workers. Unfortunately, this reply makes no attempt at such justification, and is marred by expressions which cannot further the case of the egg-collector. The author's ethics are hinted at in a paragraph which states that "Bird Protection laws are proverbially stupid [we have not heard any proverb on the subject] . . . When a law is not worthy of respect it ceases to be law to those who know better". That is a position which cannot be defended, any more than can be the allegation that the bird protection laws are framed "by those who do not understand their subject". Clearly, however, the collector is himself convinced that his collection, which "is complete and only the abnormal can now find a place there", has been brought together without any unwonted disturbance of the numbers or distribution of wild birds.

Accessions to the British Museum (Bloomsbury)

AMONG the accessions to the British Museum (Bloomsbury) reported at the meeting of the trustees on October 8 (the first meeting to be held after the recess) were a number of antiquities from Central America, part of the collection made by the late Mr. T. W. Gann, and bequeathed by him to the Museum. They were accepted by the trustees in May last, but this selection has been received at the Museum only recently. The more important specimens are a number of carved jades, including figures of men and animals, coming mostly from Copan in Honduras. The best example is a magnificent green jade plaque with figures carved in relief. It is said to be the finest known example of carved jade from Central America. It was found at Teotihuacan in Mexico, but is thought to have come originally from Quiriqua in Honduras. By its style it is assigned to the Old Empire of the Maya, and dates probably from the fifth century A.D. In addition the bequest includes a number of fantastically shaped flints of unusual size. Some of these range up to seventeen inches long. There are also a number of painted stucco heads, with elaborate headdresses and some beautiful examples of the Mayan painted pottery. Another accession to the American collections obtained by purchase is an archaeological collection from Esmeraldas Province, Ecuador, while an anonymous loan consists of a notable series of antiquities from Mexico, which includes a remarkable series of funerary urns in human shape from Oaxaca. The Museum has now received its share of the antiquities found by Sir Leonard Woolley and Mr. M. E. L. Mallowan on their respective expeditions in Northern Syria, which were conducted under the auspices of the Museum jointly with the School of Archaeology in Iraq. Grants have been allocated for the renewal of both these expeditions in 1938-39.

Excavations in Northern Syria

MR. M. E. L. MALLOWAN'S expedition to the Habur region of Northern Syria in the spring of 1938, from which came the finds to which reference is made above, excavated four areas, which in conjunction yielded evidence covering a period extending from 3100 B.C. down to 1500 B.C. The remains latest in date were Hurrian houses of mud-brick in three successive levels, ranging in date from 1800 B.C. to 1500 B.C. These yielded a quantity of pottery of white design on black. Some private houses, Mesopotamian in plan, were contemporary with the third dynasty of Ur; but the most important evidence was obtained from the Sargonid level with its Akkadian palace, and the ziggurat, or tower, of Jemdet Nasr date, of which the remains were found beneath the Palace. The Palace, of which a complete ground plan was recovered, is a huge building, 90 metres by 90 metres, ranged about a great courtyard. It was built, as is shown by an inscription, by Naram Sin, son of Sargon, about 2500 B.C. It was destroyed by fire approximately at the end of the Sargonid period and rebuilt under the third dynasty of Ur. Below the south-west corner of the Palace were the ruins of a great tower, which was built

about 3100 B.C. Its dimensions were about 60 metres by 60 metres, and its walls still stand about 10 metres high. It rests on a clay platform, and was found to be packed with votive offerings, among which were about 40,000 beads in a variety of material, though mostly of faience. There were also a large number of amulets, which are beautiful specimens of animal carving and not all paralleled at Ur and Uruk. A collection of alabaster idols consisted of about 200 complete figures, with some thousands of fragments.

Excursion of the Geological Society of France

A. R. LILLIE writes: The *réunion extraordinaire* of the Société Géologique de France was held this year on September 10–17 in the southern French Alps. There was an attendance of ninety-four members, who came from the following countries: France, Belgium, Britain, Czechoslovakia, India, Poland, Spain and Switzerland. The excursion, under the guidance of Profs. Gignoux, Lory, Moret, Raguin and Schneegans, was well organized and was a useful introduction to a territory of fascinating tectonic problems. The party met at Grenoble, where M. Gignoux outlined the objects of the meeting, and then went by motor-car to the Dévoluy. M. Lory there demonstrated the considerable extent of the pre-Senonian folding which he has elucidated during many years work. From Gap as centre, during the following three days, the excursion was conducted in localities situated in the ultra-Dauphinois zone and the sub-Briançonnais zone at Ancelle and in the Ubaye valley. The recent work done in this region, particularly that of Schneegans in the massif of the Grand Morgon, is very impressive in view of the complicated tectonics and the mountainous nature of the ground. Moving on to Briançon for the last three days of the excursion, the party had the opportunity of seeing something of the tectonics in the Briançonnais zone. The final day was spent at the col du Galibier, where all the tectonic elements are to be seen continued northwards into Savoie. An excellent memoir with numerous plates had been prepared by MM. Gignoux and Moret in collaboration with Lory and Schneegans, and a copy was presented to each participant. This memoir, entitled "Description Géologique du Bassin Supérieur de la Durance", appears to include much hitherto unpublished work, and should prove a valuable summary for geologists interested in Alpine tectonics.

The Mellon Institute

THE annual report of the Director of the Mellon Institute for the year March 1, 1937, to March 1, 1938, refers to the interest aroused in hydroxyethylapocupreine, a contribution of the Institute's department of research in pure chemistry. Semi-plant scale operations have been undertaken to provide material for more extensive clinical trials, and other new drugs prepared in the Institute have received clinical trials in cases of pneumonia and pneumococcal empyema. Research on alkyl, hydroxyalkyl and other derivatives of apocupreine is being actively pursued with the object of finding more efficient antipneu-

mococcal drugs. Studies in the treatment of streptococcal and pneumococcal infections have been continued, and research on the variability of the tubercle bacillus has reached a point where it appears to be of some importance in diagnosing anomalous aspects of lung tuberculosis in the benign stages, an advance which may make it possible to use preventive and hygienic measures in time to stop development into the classical and more fatal forms. Seventy-two applied science programmes or fellowships were in operation in 1937–38, new fellowships on amines, anthracite industries, chemical hygiene, cotton, dielectrics, proteins and tar properties commencing operation in the year. Valuable contributions to the improvement of industrial health have been made by the attention given to the medical, engineering and legal aspects of the problems involved. A multiple fellowship on commodity standards has a programme directed to establishing standards for nearly 300 items of staple merchandise so as to provide known values for the consumer. The Cotton Research Foundation is investigating the chemical and physical properties and uses of the whole cotton plant. A new blue print paper has been developed, and a new resin, "Raolin," is also under development. A multiple fellowship on organic synthesis has been concerned with the preparation, properties and uses of a wide range of amines, solvents, intermediates and resins, including various alkylene alkylol and heterocyclic amines, propylene glycol derivatives, silicon and titanium esters of higher alcohols and vinyl resins for protective coatings.

Industrial Development in 1937

A SURVEY of Industrial Development for 1937 recently issued by the Board of Trade includes particulars of factories opened, extended and closed in 1937 with some figures for 1936, and indicates the extent to which industrial development in the form of new factories and factory extensions took place in Great Britain in 1937, together with the areas in which it occurred and the nature of the trades contributing to such development (H.M. Stationery Offices. 9d. net). The survey is limited to factories where 25 or more persons are to be or have been employed, and Government establishments set up in pursuance of the rearmament programme are excluded. The Survey shows that 541 new factories, employing 46,700 people, were established in 1937, as against 542 in 1936, employing 49,500 people. The number of factory extensions, however, increased from 185 to 237 and the number of factories closed decreased from 394 to 361. 94 of the new factories represent transfers from other areas and 66 of these are in Greater London. An attempt was made to ascertain the reasons for the location of the new factories. Convenience of premises was the reason given in 212 of the 416 cases for which particulars were obtained, suitability of labour coming next (67), proximity to other factories in the same industry (41), proximity to markets (34), cheap land, low rent or low rates (34), accessibility of raw materials (26), being the other reasons assigned in the relative order indicated.