

Isles. The report, based on a two years survey by Mr. S. F. Markham, is accompanied by a short non-technical pamphlet, "Museums and the Public" for the use of museum committees.

#### Mycenean Athens

THE discovery at Athens of a chamber-tomb of Mycenean age, which presumably had served for a royal burial, corroborates tradition, but at the same time necessitates a new orientation in assessing the importance of the settlement of Attica in early pre-classical times. The chamber was brought to light in the course of the present—the ninth—season of excavation on the Acropolis by the American School of Classical Studies. In a preliminary account of the discovery (*Illustrated London News*, July 22), Prof. T. L. Shear of Princeton University, field-director of the excavation, states that the tomb is situated in shallow accumulations of deposit on the northern slope of the Acropolis. It consists of a rectangular chamber, filled with splintered rock and approached by a dromos, or passage, some 45 ft. in length, but which originally may have been longer, as the outer end is cut by the Roman wall. The earth-filling of this passage contained a number of Mycenean potsherds. Both passage and burial chamber had been cut from the rock; and the entrance to the chamber from the passage is through a rock-cut doorway. This doorway was closed by carefully packed stones, which clearly had not been disturbed since they were placed in position.

INSIDE the chamber on one of the rock-cut benches, which run along each side, were six vases and a cylindrical ivory box in their original position. The vases had been crushed by the collapse of the roof, but the ivory box, which is described as "a masterpiece of artistic design and of technical execution", was intact. East of the doorway were two large vases standing on the floor by a copper ladle. The grave was cut in the rock to a depth of four feet. It had been covered by a stone slab; but this had been removed, and lay diagonally by the grave. Neither bones nor offerings were found in the grave, although there was one small disk of gold in the earth and stones which filled the grave. On the floor beside the slab lay a group of small toilet articles—a bronze mirror, a small ivory box, and ivory pins; and north of the grave, also on the floor, were three piles of gold ornaments. The pottery is of a single period and is characteristically Mycenean in form and decoration. Exact parallels can be found in Mycenean pottery from the Argive Heraeum and elsewhere belonging to the third Late Helladic period of the first half of the fourteenth century B.C. The state in which the tomb was found and the character of the offerings lead Prof. Shear to the conclusion that this is the burial place of a lady, probably belonging to the royal house of Erechtheus, the legendary king of Athens, whose body was removed when the roof of the chamber collapsed; while the wealth of the offerings—overlooked when the body was removed—gives rise to a completely different conception of the kingdom of Erechtheus in the fourteenth century B.C.

from that conveyed by the fragmentary remains of the walls of his palace, which have been discovered on the Acropolis, and the unimportant part played by Athens in the Trojan War five generations later as recorded in the Homeric poems.

#### Industry and Agriculture in Belgium

IN a pamphlet on the National Foundation for Scientific Research and Industry, the contribution of this body to industry and agriculture in Belgium during the last ten years is reviewed by P. Beghin, the secretary of the Foundation (Pp. ix + 408. Bruxelles: Fonds National de la Recherche scientifique). Since the Foundation gave its first grant in July 1928, 252 persons have received grants, 75 of whom are still receiving them, while 35 fresh grants are made each year. In subsidies of all kinds, 25,000,000 francs has been distributed amongst 1,350 research workers. The annual budget of the Department of Industrial Science of the Foundation is limited to 1,000,000 francs. Taken by industries, the distribution of research effort is concentrated mainly in agriculture and horticulture (1,532,460 francs), metallurgy (1,299,000 francs), electrical engineering (1,209,400 francs), out of a total of 7,166,810 francs, chemistry coming next with 730,750 francs and civil engineering with 630,100 francs. The report includes more or less detailed accounts of work in progress in metallurgy, welding, the thermodynamics of heavy-oil motors, electrical apparatus, including incandescent electric lamps, radio reception, civil engineering, including the action of wind on buildings, chemistry, including synthetic lubricating oils, copal gum, synthetic resins for the electrical industry, vulcanization of rubber, the charcoal industry, glass industry, cement industry, optical industry, as well as in agriculture, including the disinfection of plants and the cultivation of the beetroot, the brewing industry and the tanning of leather.

#### British Museum (Natural History): Recent Acquisitions

AN interesting acquisition in the Department of Zoology is a series of the golden mole, *Eremitalpa granti*, presented by Captain G. C. Shortridge of the Kaffrarian Museum, King William's Town, South Africa. The gift comprises seventeen skins and skulls of this insectivore, and forms a valuable addition to the study collections. Mr. F. N. Ashcroft has presented to the Department of Mineralogy a further selection of well-crystallized minerals from forty-seven carefully recorded localities in Switzerland. The Ashcroft collection of Swiss minerals is unrivalled in the excellence of the specimens and the care with which the localities have been recorded. This latest gift brings the number of specimens added to the Museum's collection from this source in the last ten years to a total of 3,654. Another interesting gift comes from the McGregor Museum, Kimberley, through Miss M. Wilman, the curator, and consists of three specimens of the doubly refracting Iceland spar found in Cape Province, South Africa. A collection comprising about 4,900 gatherings of plants has been brought back from South America by Mr. A. H. G. Alston, assistant keeper in the

Department of Botany. Of these about 1,900 are vascular cryptogams. The collection is rich in duplicates and there are about 20,000 specimens in all. Mr. Alston represented the Museum at the first South American Botanical Assembly at Rio de Janeiro last October, and later made an expedition across the north western corner of the South American continent from La Guayra in Venezuela to Bartacoas in southern Colombia, near the frontier of Ecuador. He studied the phytogeography of the area and collected specimens of the plants found.

#### Anthropology and Ethnology in Switzerland

THE *Bulletin der Schweizerischen Gesellschaft für Anthropologie und Ethnologie*, 1938-39, in addition to the annual report, obituary and other affairs of domestic concern, contains matter of wider interest for anthropologists in a contribution by the editor, Dr. O. Schluginhaufen, "Untersuchungen über die Gesichtsform der Schweizer" which was presented to the International Congress of Anthropological and Ethnological Sciences at Copenhagen in August last, and summaries of the anthropological communications to the annual meeting of the Société Helvétique des Sciences Naturelles at Coire, August 28, 1938, from the *Actes* of that Society. Among these, a group of papers by Prof. E. Pittard deals comparatively with various lesser known physical characters of the Bushman and other peoples of South Africa, upon which the author's promised further interpretations will be awaited with considerable interest.

STUDENTS of the skeletal remains of man may be directed particularly to the study by Dr. Albert L. Périer of a remarkable postmortem deformation of the mandible in six out of a collection of twelve Griqua skulls. In these six specimens, the bicondylar diameter of the mandible is by so far less than the corresponding basio-cranial diameter that it is impossible to articulate the jaw to the skull; and indeed, if it were not for the correspondence of other characters, it would be difficult to believe that their attribution to these crania is correct. In three of the skulls the discrepancy in diameter is ten millimetres or more. It is to be noted that the bone of the jaw is exceptionally thick, and the shrinkage absolutely symmetrical. No acceptable explanation of the change presents itself, especially as no other example is found in one hundred and fifty South African skulls in the collection to which the Griqua skulls belong. The author points the moral that caution must be exercised in drawing conclusions from isolated specimens in human palæontology.

#### Tests of Materials

NUMBERS 726 and 727 of Hermann's "Actualités scientifique et industrielle" (Paris) deal with tests of materials and are entitled "La Structure et la Déformation des Solides" and "Essais des Métaux", respectively, the former of fifty pages (18 francs), the latter of seventy pages (25 francs), both well illustrated. They are written by M. R. L'Hermite, assistant director of the Laboratory for Buildings

and Public Works, Paris, and represent his lectures delivered at the Laboratory in 1937 and 1938. He emphasizes the influence of the fine structure of materials on their elastic properties and devotes half the first volume to microscopic and X-ray methods and their results. In the section on the deformations produced by applied forces he makes use of the Mohr-Cauchot diagrams and theory, and ascribes deviations of experimental results from the theory to want of isotropy. In the second volume many of the newer forms of machines for testing metals under tension, compression, shear, bending and shock are described, as well as methods of testing hardness, wear and fatigue. The principal results obtained are given and are related to the Mohr theory.

#### Bibliography of Seismology

THIS bibliography, by E. A. Hodgson, published by the Dominion Observatory, Ottawa, for the period October-December 1938 has just been received. It contains 120 items from fourteen collaborators residing in eight countries, and it is noticeable that the United States and Holland are well represented and that Spain has a collaborator. Italy, the Balkan States, the U.S.S.R. and South America are this time not represented although it is known that seismological work is being done in all these places. One of the more recently studied branches of the subject is well illustrated by a paper by A. Belluigi ("Seismisch-electrische Wirkungen und neu mögliche seismische Anwendungen", *Bei. Angew. Geoph.*, 7, Heft 3, 260-264, bib., Leipzig, 1938). It concerns the new seismic-electric effect pointed out by American authors, and the author suggests that its probable cause consists in electrochemical alterations produced by elastic waves as Thyssen, Hummel and Rülke have demonstrated. It is further suggested that new electro-elastic seismometers be planned, as these should afford advantages over the present seismometers in exactness of reproduction of impulses, owing to the absence of inertia masses, and they should measure at the same time the electrical resistivity. Following the bibliography is a very valuable double index for the whole year, arranged first by subjects and then by names.

#### Journal of the Royal Agricultural Society

THE *Journal of the Royal Agricultural Society of England* has reached its hundredth volume, and with this issue certain changes of format are being made. In place of the single annual volume, a periodical appearing three times a year is to be published. The first part, issued in June, consists mainly of the usual reviews of agricultural research under the familiar title, "The Farmer's Guide", but also includes the annual financial statement. Part 2 will appear in November and will contain a number of contributed articles and the various reports on the Show. Part 3 will be published in March and will also contain a number of contributed articles, the report of the Council to the annual general meeting, the annual reviews of agricultural law and agricultural statistics,