

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,