

sential characteristics of the mountain ranges of this part of Albania were much more easily observable than from the ground, while something could also be determined about the form of the seaward extension of the land under the shallow marginal waters of the Adriatic, especially as to the submarine extension of delta and beach deposits.

In an aeroplane flight from Paris to London this past summer I was again impressed with the potential value of the aeroplane in physiographic reconnaissance. The surface of northern France is of very moderate relief, yet when flying low it was much easier to observe many critical features and to note their broader relationships than would have been the case from selected points on the ground. The excellent topographic maps of this region render aerial observation less necessary than in countries where maps are poor in quality, or wholly lacking; but there can be no doubt of the value of such observation in supplementing map studies and ordinary field work on the ground. On both the French and English shores of the English Channel shoreline phenomena such as cliffs, beaches, dunes, deltas, and submarine bars not only were remarkably distinct, but their relations to surrounding features appeared with a clearness observable in no other manner. Certainly the large scale British maps of the Dungeness foreland, excellent as they are, give no such vivid impression of the evolution of that wonderful series of beach ridges as comes to one who looks down on the foreland from an aeroplane flying at an altitude of a few thousand feet. In the late afternoon the unroofed dome of the Weald had all the distinctness of a relief model, with the oval pattern of its infacing cuestas or hogbacks readily distinguishable.

In the detailed work of tracing specific peneplane levels across mountainous country one not infrequently encounters the difficulty that in critical areas where observations are much needed the only effective viewpoints are rendered useless by a dense forest cover; or one may climb a selected peak only to find that it is not at the proper elevation to give

the best results. Good field observations may be of vital importance, not merely as a check on profile studies based on topographic maps, but also because the limitations of the profile method are such that not infrequently proper field observation alone can settle doubtful points. It has occurred to me that in studies of this nature either the captive balloon or aeroplane could be used to good effect. Map studies, where possible, will define the limits of the problems to be settled in the field, and indicate the places where evidence of decisive value can most probably be secured by satisfactory observations. A few hours in captive balloon or aeroplane under these conditions might prove of more value than weeks of inconclusive work on the ground.

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SCIENTIFIC LITERATURE IN EUROPEAN COUNTRIES

THE lead taken by the Biological Club of the University of Minnesota should certainly be followed by many other scientific groups or individuals, according to their ability. Such arrangements as Dr. Barker describes not only promote the interests of science, but also aid materially in bringing about that international good-will and cooperation which this world so sorely needs. After a visit to Europe one returns with the conviction that if the psychological difficulties could be overcome, it would not take very long to restore material prosperity. Could Europe somehow be endowed with a genuinely scientific spirit, combined with general good will, the fearful situation which now exists might well give way to a new epoch compared with which the past would seem like a bad dream.

During the winter I was in Portugal and the Madeira Islands, I found that the escudo, formerly having the value of a dollar, was rapidly diminishing in exchange value. On arriving in Madeira in December, I got 28 for an English pound. When I left, in March, the exchange was fluctuating between 45 and 50 to the pound. I met a very able and enthusiastic

naturalist in Funchal, who was handicapped at every turn by the lack of literature. He had purchased what he could, but at present prices were prohibitive. The Madeira Islands are extraordinarily interesting to the biologist, and every encouragement should be given to those who would study the fauna, flora or geology. Why should not we place a good series of American publications in the public library (Biblioteca Municipal) of Funchal, where they would be available to students? Anything sent there, care of the librarian, Sign. A. O. de Noronha, will be appreciated. There is, however, another very important way in which we can render assistance. That is by subscribing to European scientific journals, or joining scientific societies. In doing this, we enrich ourselves. The gallant way to which the scientific home fires have been kept burning in certain quarters would command our admiration if we knew the facts. Take for instance the *Annals and Magazine of Natural History*, the leading zoological journal of England. It appeared regularly all through the war, though the staff of the printing office (Taylor and Francis) was reduced to a minimum. It publishes zoological papers more promptly and accurately than any journal in America. Not long ago I presented a paper on fossil insects, with over 50 figures, and it appeared within a few months. I was not asked to pay for the cuts, as one often is in America, sometimes at fancy prices. The obvious comment would be, that the *Annals* must be a prosperous concern, quite unlike our poor American journals. On the contrary, I happen to know that it is losing heavily, but it carries on. There are many such cases, I do not doubt.

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SCIENTIFIC BOOKS

Sturtevant's Notes on Edible Plants. Edited by U. P. HEDRICK. Report of the New York Agricultural Experiment Station for the year 1919, II. Albany, J. B. Lyon Co., State Printers, 1919. 4to. Pp. i-vii, 1-686, with portrait.

A work of more than usual note has been

made available to students of agricultural botany by the publication of a selected portion of the data on edible plants brought together by Dr. E. L. Sturtevant, first director of the New York Agricultural Experiment Station. Over six hundred quarto pages comprise the body of the volume, to which are added bibliography, index, biographical sketch of Dr. Sturtevant by Dr. Hedrick, editor's preface, Director W. H. Jordan's letter of transmittal, and a full-page portrait. The entries are arranged alphabetically under the Latin name of the plant to which reference is made. The first entry is here reproduced to give an idea of the manner in which the material is presented.

Aberia caffra Harv. & Sond. *Biwineae*. KAI APPLE. KAU APPLE. KEI APPLE.

South Africa. The fruits are of a golden-yellow color, about the size of a small apple. They are used by the natives for making a preserve and are so exceedingly acid when fresh that the Dutch settlers prepare them for their tables, as a pickle, without vinegar. Jackson, J. R., *Treas. Bot.* 2: 1255. 1876.

The closing citation is not attached to the paragraph as shown here, but is dropped to the bottom of the page, taking the form of a footnote. When mention of a synonym is required it follows the citation at the bottom of the page. Many of the entries are only of a few lines each, some of them range up to a page or two, while about two dozen entries occupy more space. About three pages each are given to Lima bean, English bean, pea, egg plant, cucumber, watermelon, kale, parsley, and wheat; four pages each to artichoke, carrot, onion, and radish; five pages each to banana, currant, cabbage, turnip, tomato and muskmelon; six pages each to beet, common or field bean, potato and pepper; eight pages to strawberry; and twelve pages to squash and pumpkin, and to corn. To secure the data, Dr. Sturtevant, who had a good reading acquaintance with Latin, Greek, French and German, and some knowledge of other languages, accumulated an extensive library, especially rich in pre-Linnaean works, and abounding in rare issues.