

wealth, the U.S.S.R. and China. The thirty-four specific conclusions of this study are set forth in its final chapter, following chapters in which the Pacific area is considered as a region, the main features of a design of security are outlined, and the position of each of the four major Powers is examined under the sub-title "A Speculative Appreciation of Certain Power Factors in the Pacific". British interests in the Pacific are discussed in a separate chapter, leading to the conclusion that Great Britain is a Power with so substantial a concern in the region that, in partnership with the Pacific Dominions of the British Commonwealth, she is bound to play a large part in the future history of that Ocean.

Sky Fantasia

ROBERT F. COLES, Hayden Planetarium, has an article with this title in *Sky and Telescope* of June, and among a number of celestial phenomena that present interesting and sometimes puzzling features is included the apparently greater diameter of the rising moon compared with the diameter when it has attained a higher altitude. Some text-books still repeat the old explanation, discarded many years ago, that the horizon moon is so situated that its size can be easily compared with terrestrial objects, but at higher altitudes we are deprived of these for comparison. Anyone can disprove this theory if he observes the moon near the horizon at sea, where no terrestrial objects are available for comparison. Yet the moon looks as large when rising or setting over the sea as it does when viewed on the land. Some years ago, Drs. E. G. Boring and A. H. Holway, two Harvard psychologists, after a series of experiments, concluded that the illusion is due to a physiological cause. It has been found that objects viewed straight ahead appear larger than do those of the same size in positions where the eye must be raised to see them. Although this theory is almost certainly the correct one, the basic causes are still somewhat of a mystery. The illusion can be observed in the constellations also, such as the Plough, which appears very much larger when low on the horizon than when high in the sky. Other groups of stars, like the Great Square of Pegasus, the Northern Cross, etc., exhibit the same phenomenon. An experiment which can be performed by anyone on some of these groups of stars, or preferably on the moon, will show that the old theory is incorrect. When the moon is near the horizon, gauge it between the thumb and forefinger and notice it shrinking; as the finger and thumb are separated it appears to swell again. This experiment is referred to elsewhere in the same issue of *Sky and Telescope*, and shows that the illusion is due to a physiological or psychological cause.

Surface-Active Agents

THE eight papers, together with the introductory address by M. L. Anson, presented at the two-day conference on 'Surface-Active Agents' held by the Physics and Chemistry Section of the New York Academy of Sciences in January 1945, have now been published (*Ann. New York Acad. Sci.*, 46, 347; 1946). Almost all the surface-active agents referred to were water-soluble substances which, even in small concentrations, lower the surface tension of water considerably. The properties of surface-active agents, how they are measured and how they are related to structure, were the topics discussed on the first day of the conference. Papers on these subjects were

contributed by A. W. Ralston, E. K. Fischer and D. M. Gans, D. Price, and L. Shedlovsky. On the second day, the applications of surface-active agents to biology, medicine and industry were dealt with, E. I. Valko and R. D. Hotchkiss lecturing on the biological and medical applications; M. H. Hassialis and R. R. Ackley on the industrial applications. In the introduction, it is pointed out that although surface-active agents have been known for some time as chemical substances, it is only relatively recently that they have become available as cheap commercial compounds. Many such agents have been prepared and many industrial applications discovered, mostly in industrial laboratories, but basic scientific work on pure substances has been very greatly neglected. Indeed, it was lack of sufficient knowledge of the properties of pure surface-active agents that prevented any useful theoretical discussion of the relation between structure and properties. The object of the conference was to stimulate interest and to put the understanding of surface-active agents and their applications on a better scientific basis; the publication of the proceedings of this conference on surface-active agents should be of considerable value in guiding workers in this field as to the choice of suitable research problems.

War-time Activity of the Leicester Museum and Art Gallery

THAT it is possible for a regional museum under active administration to fulfil and even increase its interests under the difficulties of war-time conditions has been amply proved by the Leicester City Museum and Art Gallery. The fortieth annual report (April 1, 1943–March 31, 1944; recently received) to the City Council shows, for example, that in that year the Geological Department, besides giving technical assistance in connexion with war-time industrial developments, provided special courses of instruction for members of the Forces; that the Department of Botany arranged topical exhibits in relation to war-time gardening, food values, medicinal herbs, etc., and that the Schools Service was extended to units of H.M. Forces stationed in the Leicester area, and to the development of children's clubs in art, science and drama. In addition, several special exhibitions of wide public interest were a prominent feature of the period. The R.A.F. "Wings for Victory" Exhibition drew 36,306 visitors, and the "City Planning" Exhibition, which was arranged in collaboration with various other Corporation Departments of Leicester City, drew 17,574 visitors. It is of interest to note that the general policy of the year was one directed at the "maintenance of public good spirits and morale". Towards this end, several other exhibitions of topical, art and domestic interest were arranged, while lectures and the weekly lunch-time concerts continued to be regular features. The bold and exploratory activity shown by the Leicester Museum throughout the war years has probably been watched with interest by other museum administrators. Many new methods of direct public appeal have been tried out and, judging from the attendance figures shown on p.15 of the present report, these have met with considerable success.

British Bryological Society

A MEETING of the British Bryological Society was held in London during September 27–28. After the meeting there was a dinner to celebrate the jubilee