

## NEWS AND VIEWS

## Prof. Frank Schlesinger

PROF. FRANK SCHLESINGER, who is shortly retiring from the directorship of the Yale University Observatory, is the doyen of American astronomers. His work has been concerned mainly with astrometry, and has been characterized by originality, economy of effort and high precision. As director of the Allegheny Observatory, he used the 30-inch Thaw refractor for the determination of stellar parallaxes. From a masterly discussion of the observations and of the various sources of error, he laid down the methods to be followed to ensure the greatest attainable accuracy. These methods have been adopted at other observatories and have led during the past quarter of a century to a great development in the knowledge of stellar distances. After Schlesinger's appointment as director of the Yale University Observatory, he decided to erect a 26-inch refractor in South Africa to determine the distances of southern stars. This telescope was erected in the grounds of the University of the Witwatersrand, Johannesburg, for this specific programme; and for economy in cost, it is mounted in a meridian building, which restricts its movement to a few degrees on either side of the meridian. Intensive observations with this telescope, in conjunction with those at the Cape Observatory, have made the knowledge of the distances of southern stars almost as complete as for northern stars.

Schlesinger has also been the pioneer in the determination of stellar positions with wide-angle lenses, covering fields up to 100 square degrees, in contrast to the 4 square degrees of the Carte-du-Ciel plates. This has enabled visual observations with meridian instruments to be restricted to the brighter stars and effects a great economy in time in photography at the telescope. Methods of measurement and reduction have been carefully planned to secure the greatest economy of effort. Photographs taken with a camera attached to the telescope at Johannesburg have been measured and reduced in New Haven and, with only a small staff, star catalogues have been produced at a surprising rate. Two compilations, the "Catalogue of Stellar Parallaxes", in which all determinations have been combined with appropriate weights and their systematic errors investigated, and the "Bright Star Catalogue", have proved invaluable for reference purposes. Prof. Schlesinger's sound judgment, sane outlook and wise counsel have given him an outstanding position not only among American men of science but also in international astronomy, and were fittingly recognized by his election as president for 1934-35 of the International Astronomical Union.

## Honorary Degrees at Bristol

In his capacity of Chancellor of the University of Bristol, Mr. Winston Churchill attended a Congregation on April 12 for the conferment of the honorary

degree of Doctor of Laws on Mr. John G. Winant, the American Ambassador, Mr. Menzies, Prime Minister of Australia, and (in absence) on Dr. J. B. Conant, president of Harvard University. Referring to the honorary graduates, Mr. Churchill said: "Through him [Mr. Winant] and other distinguished representatives who are with us to-day . . . we make another tie with the illustrious President of the United States, and with the representatives of that vast community at a time when great matters of consequence to all the world are being resolved. . . . In Dr. Conant we have a figure, widely and deeply respected throughout the United States, and particularly among the youth who attend Harvard University, holding up a clear beacon light for young men of honour and courage." Mr. Menzies, he said, has brought with him the strong assurance of the democracy of the Commonwealth that they with us will go through this long, fierce, dire struggle to the bitter end.

Speaking of the occasion as one of rare and exceptional character because the visitors to whom they were showing honours and courtesies are playing an important part in the universal drama which is unfolding, Mr. Churchill said, "Here we gather in academic robes and go through ceremonials and repeat formulas—here in battered Bristol, with the scars of new attacks upon it. Many of those here to-day have been all night at their posts and all have been under the fire of the enemy, under heavy and protracted bombardment. That you should gather in this way is a mark of fortitude and phlegm, of a courage and detachment from material affairs worthy of all that we have learned to believe of ancient Rome or of modern Greece."

## Yugoslav Fauna and Flora

THE extension of war into Yugoslav territory takes it into an area of the south-eastern Europe fauna and flora which had only begun to be properly explored by biologists within modern times. The British Museum expedition of 1937 collected four species of *Clitellus* (susliks or gophers) in Yugoslavia (*Annals and Mag. of Nat. Hist.*, May 1940), two of which were new to science, *Clitellus c. karamani* (named in honour of Dr. Stanka Karaman, explorer of Macedonian fauna), from Karadjica Mountains, Macedonia, and *Clitellus c. laskeri* (named after Prof. V. Laskarer, of the University of Belgrade). Slovenia contains abundant chamois, red and roe deer, bear, wild boar and even lynx, while its avi-fauna includes capercaillie and stone partridge, mostly protected by the 1931 game laws. Spoonbills nest abundantly on the Obekska Bara bird reservation near Belgrade. In the Knez Mihaileva region buzzards and eagles are still well established, while magpies and jays from the Belgrade suburbs have frequently been observed passing over the city.



Flights of wild geese and wild duck, the former coming from the great Hungarian marshes, are frequent sights at the time of hunter's moon. Insect life includes a wealth of butterflies and the curious Yugoslav tiger moth, *Cymbaciophora pudica*, which produces a loud squeaking or clattering noise by its wings in flight. The caves of Dalmatia and Carinthia have long interested naturalists for their blind olm or cave newt, *Proteus anguineus*. The flora is rich in alpine flowers of great beauty. Pančić wrote a useful "Flora of Serbia", and recently Hayek compiled a new Balkan flora. It is an irony that one of its most recent students was Dr. Giuseppe, the Italian botanist and member of the Alpine Club. On his 1930 visit he found *Geranium subcaulescens* on Mount Koprevnia and *Saxifraga montegrina*, receiving the award of merit of the Royal Horticultural Society when introducing the former to British gardens. On Mount Cristen he found *Ranunculus creatus*, and in 1931 on Kerast he found *R. Wettsteisii* and *Ardisance Hedreantha*, on Ljuetia, *Viola Grisebachiana*. W. B. Turrill, of Kew, also studied the Balkan flora during the War of 1914-18 and three times since. Good herbaria existed at Belgrade, Sofia and Trieste. Tournefort, Sibthorp, Clark, D'Urville and Grisebach collected in the area, which has a flora of some 6,500 species.

#### International Relations and Federalism

THE February 1941 issue of *Union*, the monthly forum of the New Commonwealth Society, includes a number of articles on post-war reconstruction and the development of international relations. Mr. Duncan Hall, in an address on "What are the hopes of Lasting Peace?" asserts that only by a scientific understanding of the dynamic forces of human nature and human society, by a realistic education and a wise leadership, can we hope to speed up man's progress towards a lasting peace, based on the supremacy of reason and conscience. The problem is far more than one of finding the right institutions and making economic adjustments. It is essentially a problem of how to control the human forces, how to prevent uneven domestication, how to safeguard against mob situations that break down the conscience and reason of the individual and let loose his instinctive forces. Writing on "The Outline of a Long-Term Economic Plan", Mr. W. L. Fairweather urges that the task ahead of us is to raise the level of consumption all over the world, and that many of the controls necessary in war will be extended and developed and remain as a permanent feature of the economic system. Mr. Channing-Pearce's address to the Oxford Branch of Federal Union on January 4 on "The Federal Faith" is included, with its conception of federation as concerned not only with politics but also with sociology and economics.

#### The Wilkes Centenary

THE centenary of the Wilkes Exploring Expedition of the United States Navy, 1838-1842, was marked by a symposium on American polar exploration organized by the American Philosophical Society in

February of last year. The papers read on that occasion are now published (*Proc. American Phil. Soc.*, 82, No. 5) and include some valuable contributions to polar geography. The expedition is best remembered for its antarctic landfalls, which have since been the subject of much controversy but mainly have been confirmed. The expedition had, however, a practical bias, actuated by the considerable American whaling industry in the Pacific at that time, and the scientific side was not too strong though valuable results were obtained not only in the antarctic but also in many surveys in Pacific islands and numerous biological collections. The greater part of the results were published by the authority of Congress, but the edition was small and many of the volumes are rare. In the present publication the history of the expedition and the story of the struggle to get the reports published are fully traced and there are valuable bibliographical records.

A most useful paper deals fully with the fishes collected by the expedition, a report which has not previously appeared. This is by Mr. H. W. Fowler. Another paper, by Commander F. W. Reichelder, discusses the contributions of the expedition to magnetism, gravity and meteorology. Prof. W. M. Hobbs treats of the geographical discoveries. Another series of papers deals with other aspects of American polar work. Of these may be noted one by Mr. W. E. Ekblaw on the arctic discoveries of De Haven, Kane and Hall and another by Mr. H. J. Lee on Peary's journeys in North Greenland. Two valuable and original papers are those by Prof. L. M. Coull on the glaciers of Antarctica, which surveys all the glaciological problems, and one by Mr. V. Stefansson in which, with his customary bold conception, he advocates a ten-year programme of arctic studies to be centred in a number of stations, most of them on the pack-ice, to be established and maintained by air.

#### Early Man in Virginia

FOR some little time evidence has been accumulating which points to Bedford County, in south-western Virginia, as a place of early settlement of stone-using aboriginal tribes of nomadic hunters. During proto-historic and early historic times, Siouian and Iroquoian tribes appear to have lived within the present bounds of the county; while the Cherokee in the earlier half of the nineteenth century still retained the memory of an old tradition that a Cherokee village once stood near the twin Peaks of Otter in the north-west of the county where it is crossed by the Blue Ridge. These peaks were formerly thought to be possibly among the highest of the northern continent; and it is believed that the region around had been occupied for many centuries by a succession of tribes of different stocks, ever since the time when nomadic bands first entered the wilderness. This belief has now received the support of recent discovery in the form of stone implements of an early type on a site, now known as the Mons site, which was revealed early in 1940 in road-making operations in the vicinity of the Peaks of Otter. In a description of the site and finds by David I.