

Sea, the sediment has a strong greenish hue and displays an interesting stratification, with layers alternately rich and poor in calcareous shells. Dr. Fred Phleger, of the Woods Hole Oceanographic Institution, who was the guest of the Expedition between Martinique and Panama, sampled this core for Foraminifera and also collected plankton from the uppermost 1,000 metres of water by means of tow-nets of special construction.

Hydrographic soundings with temperature observations, also by means of the bathythermograph, and with water samples for chlorine and oxygen determinations were made across the Caribbean. Large-volume samples were taken from various depths, both in the open Atlantic and in the Caribbean, for measurements of uranium and radium. Such measurements have become of especial importance owing to the light they may shed on the ionium precipitation in the sea, which is supposed to be responsible for most of the radium present in deep-sea deposits.

The cores hitherto taken by the Expedition are being sent back to Sweden for analyses by various specialists. The *Albatross* now leaves for the Pacific part of the cruise, with the Galapagos Islands as the nearest goal.

OBITUARIES

Dr. S. H. Daukes, O.B.E.

By the death of Sidney Herbert Daukes, the medical profession has lost its leading authority on the modern medical museum. Daukes died on September 3 after a short illness. The son of the Rev. S. Whitfield Daukes, vicar of Holy Trinity, Beckenham, he was born on April 20, 1879. He was educated at Lancing College where he distinguished himself in various sports, and at Caius College, Cambridge. He took a second class in the Natural Science Tripos in 1900 and then studied medicine at the London Hospital. He qualified M.R.C.S., L.R.C.P. in 1905 and in the same year graduated M.B., B.Ch., Cambridge. After several years spent in hospital appointments and in general practice, he took his D.P.H. in 1912 and in 1913 the D.T.M. & H. By the outbreak of the First World War he had held a post as assistant school medical officer at Leeds and was chief assistant school medical officer for Norfolk.

In the War, Daukes served first as a special divisional sanitary officer in France. In the winter of 1917-18 the War Office established the School of Army Hygiene at Leeds, and Daukes was made responsible for its organisation and administration. He was mentioned in dispatches and received the O.B.E. in 1920. He wrote "A Manual of Sanitation Applied to Military Life", and he contributed the chapters on hygiene to the official medical history of the War.

After the War, Col. Andrew Balfour—later Sir Andrew Balfour—who was director of the Wellcome Bureau of Scientific Research, invited Daukes to become curator of the Museum of Tropical Medicine which had been established by Sir Henry Wellcome. Under Daukes' guidance its scope expanded, and in 1926 it became the Wellcome Museum of Medical Science, with Daukes as its first director.

Daukes held very strong views on the importance of visual education, and he organised his museum with this end in view. Each disease was dealt with as an entity, and in the bays devoted to it, the student

could follow out the latest views on etiology, pathology, clinical features, treatment and prevention, each branch being illustrated by photographs, charts, pathological specimens, paintings and other visual representation which was calculated to impress the point in question on his mind. The Museum became an important teaching unit, and it was visited by many medical men from overseas, by practitioners proposing to specialize in tropical medicine, by medical students and by nurses and health visitors. In the years immediately preceding the Second World War, approximately 10,000 persons visited the Museum annually. The Ministry of Health included a demonstration of tropical diseases in the Wembley Exhibition in 1924, and this was largely planned by Daukes acting as organising secretary of the appropriate committee. Similar exhibits were sent to the Wembley Exhibition in 1925, to Antwerp in 1929 and to Paris in 1931. In 1928 Daukes graduated M.D. at Cambridge with a thesis on the medical museum. This thesis was later expanded and published as an important monograph. In 1940 Daukes was asked to take over, as a temporary measure, the administration of the Wellcome Historical Museum, the directorship of which had been held by Sir Henry Wellcome himself until his death.

Daukes was well known, under his pen name "Sidney Fairway", as a novelist with a wide popular appeal. His novels generally dealt with some aspect of medical life, his best known being "The Doctor's Defence" and "The Cuckoo in Harley Street". His last novel, "He Loved Freedom", was published a week or so before his death. His reminiscences will be published shortly with the title "A Pillar of Salt".

He married Emma, daughter of William Kempson of Reigate, who died in 1944. In 1945, he married Ethel Maud, widow of E. J. T. Hoyle of Doncaster. He is survived by his widow and a son by the first marriage, Lieut.-Colonel Whitfield Daukes, R.A.M.C.

E. ASHWORTH UNDERWOOD

Prof. V. Ulehla

THE many-sided Czechoslovak man of science, Vladimir Ulehla, died on July 3 at the age of fifty-eight. His father had taken a prominent part, years ago, in securing educational reforms in Moravia, and Vladimir's interest in science was further developed under Prof. B. Němec at Prague and at the University of Strasbourg. After 1919, Dr. Ulehla became professor of plant physiology and biology at the newly founded Masaryk University of Brno. His original contributions to science relate mainly to a study of protoplasmic movement in lower organisms, and the influence of various ions on cells and their protoplasm. The borderline of plant and animal life, and the infusoria especially, interested him and he made some physico-chemical investigations on plant colloids and on turgor. Ulehla also wrote two books in Czech of a philosophical nature, "Reflexions on Life" and "Beyond the Veil".

But Ulehla's special merit was his skill in interesting the general public of his country in science and culture. His first great opportunity came when he was the organiser of the remarkable Brno Contemporary Culture Exhibition of 1928. Moravia was then a centre of archaeological interest on account of the recent discoveries concerning the prehistoric mammoth hunters. Thanks to Ulehla's organising ability the exhibition, which attracted international atten-

tion, gave a clear impression of Czechoslovakia's cultural and scientific progress during the first decade of its independence.

Next, Ulehla turned his attention to the production of educational and cultural films, and those depicting the colourful peasant life and scenery of south-east Moravia, where the Slovak inhabitants cling to their traditional dress and old customs and folklore, were particularly successful.

In addition to his duties at Brno University, Ulehla was from 1928 until 1939 scientific correspondent of the daily *Lidové Noviny*, and he resumed this

work in 1945 when the journal reappeared as *Svobodné Noviny*. J. G. F. D.

WE regret to announce the following deaths:

Sir Albert Howard, C.I.E., Imperial economic botanist to the Government of India during 1905-24, director of the Institute of Plant Industry, Indore, during 1924-31, on October 20, aged seventy-four.

Dr. Ellsworth Huntington, formerly research associate in geography, Yale University, an authority on the effect of climate on human racial development, on October 16, aged seventy-one.

NEWS and VIEWS

Physiology at Charing Cross Hospital Medical School:

Prof. William Burns

PROF. W. BURNS, recently appointed to the chair of physiology at Charing Cross Hospital Medical School, London, is a graduate in science and medicine of the University of Aberdeen. He received his early education at the Mackie Academy, Stonehaven, whence he entered the University in 1930. Having graduated B.Sc. in 1932 and M.B., Ch.B. in 1935, he was appointed to an assistantship in the Department of Physiology, and in 1938 became senior lecturer. As a teacher and demonstrator, Burns brought to an orderliness of thought and expression the valuable gift of artistic skill in illustration. Prof. Burns' first interest in research work centred around the problems of carbohydrate and cardiac metabolism, but it soon became manifest that his chief interests lay in the realm of the biophysical. Until 1942 he was engaged in investigating activity in afferent nerves associated with the viscera. The results of this work were incorporated in a thesis for which he was awarded the D.Sc. degree.

Early in 1942, Prof. Burns' biophysical and technical interests suggested a potential usefulness in the war effort, and in that year he was called to the Admiralty. After a period of service at the Admiralty research laboratory, he was appointed physiologist on the staff of the headquarters of the Royal Naval Scientific Service and latterly was placed in charge of the Royal Naval Physiological Laboratory. During the period of his war service, he was engaged on various problems such as the application of acoustics, the habitability of submarines, operational considerations affecting special equipment in warships, etc. In the latter years of his Admiralty service, he was also responsible for liaison between the Royal Naval Scientific Service headquarters and the activities of the Royal Naval Personnel Research Committee of the Medical Research Council, in which the latter is associated with the Admiralty in dealing with problems involving the relationship of man to the various duties and types of environments imposed by the requirements of the Navy.

Walter Holbrook Gaskell (1847-1914)

ONE hundred years ago, on November 1, 1847, Walter Holbrook Gaskell was born at Naples. Gaskell was a physiologist to whom medicine continues to owe a deep and lasting debt. He was a mathematician by training, and on Michael Foster's advice he went in 1874 to Leipzig to Ludwig's laboratory, in those days the most important centre of physiological research in Europe. On his return he took up physiology as a career, being appointed lecturer at

Cambridge in 1883. Gaskell laid the secure foundation for our knowledge of the pathology of the heart and of the autonomic nervous system. In a series of ingenious and conclusive experiments he showed that the beat of the heart is due to automatic rhythmic contractions of the heart muscle and to the wave of excitation flowing from sinus venosus to bulbus arteriosus and from muscle fibre to muscle fibre. By his zigzag incisions of heart muscle he proved the continuity of the rhythmic wave. He introduced the terms and conceptions 'heart block', 'fibrillation', and 'gallop-rhythm' into the literature, and was one of the pioneers in the galvanometric investigation of the heart. In 1890, at the request of the Hyderabad Commission, he investigated the action of chloroform. His fascinating book "The Origin of Vertebrates" appeared in 1908. As a lecturer Gaskell was popular and inspiring, though he was not eloquent. A big man physically and intellectually, his strength and his weakness lay in his love of generalizations, which sometimes led him to victory and as often led him astray. He died on September 7, 1914, in his sixty-seventh year.

George Green, 1793-1841

As a mathematician, George Green is among the immortals; as a man he sank back almost at the moment of his death into the obscurity from which he had startlingly emerged. From a volume of studies published in 1946 as a tribute to George Sarton, Mr. Gwynedd Green, of University College, Nottingham, has separated a biography of the miller-scholar who graduated as fourth wrangler at the age of forty-four, nine years after the private publication of an incomparable masterpiece. Property is located, wills are transcribed, correspondence between Kelvin and Crellé is reproduced, and there are notes on every traceable name in Green's family tree and on all but eight of the fifty-two subscribers to the printing of the famous "Essay"; bibliographical information is thorough, but mention should surely have been made of the collected edition of Green's papers which was prepared by Ferrers for Caius in 1871 and reproduced photographically in Paris in 1903. The circumstances of Green's life both in Nottingham and at Cambridge have been investigated once for all from local sources with an industry beyond praise, and if a condescending patron and a resentful daughter are more vivid in the story than the central figure himself, this is because no contemporary portrait or character sketch has been found and the author does not attempt imaginary reconstructions. It is sad to learn from a note added in manuscript that the mill in which Green laboured and studied was reduced to a shell by fire in July last.