NEWS AND VIEWS

Prof. F. C. Minett

FRANCIS COLIN MINETT, who has just been appointed director of the Imperial Veterinary Research Institute of the Government of India, was educated at King Edward's School, Bath, from 1899 until 1907, and in the latter year entered the Royal Veterinary College. Two years after obtaining the diploma of membership of the College, he was awarded a Ministry of Agriculture research scholarship and studied at the Pasteur Institute in Paris and at the Veterinary School in Alfort. On the outbreak of the Great War, he joined the R.A.V.C. and proceeded to France with the Expeditionary Force. In the following year he returned to Aldershot, where he was engaged in research and in the preparation of mallein for the diagnosis of glanders—at that time a problem of urgent military importance. From 1921 until 1924 he served in Egypt, and in the latter year resigned his commission upon receiving an appointment under the Foot-and-Mouth Disease Committee. He was awarded the D.Sc. in veterinary science of the University of London in 1927, and in the same year, upon the retirement of Sir John McFadyean, was appointed director of the Research Institute in Animal Pathology at the Royal Veterinary College, and, in 1933, when the posts became amalgamated, he was appointed professor of pathology and director of the Research Institute.

DURING the past twelve years, Prof. Minett has contributed generously to the study of many problems associated more particularly with diseases of economic importance among farm animals. In this connexion, special reference should be made to his work upon bovine mastitis, Johne's disease and contagious abortion of cattle, as a result of which, measures for the more effective control of these diseases have been established. Important as his researches have been, it is safe to say that one of his chief claims to recognition lies in his ability as a teacher. Indirectly, as well as by direct contact with his students and junior members of his research staff, he has advanced the study of veterinary pathology to a marked degree.

Bicentenary of Du Fay (1698–1739)

ON July 16, 1739, the death occurred of the French man of science, Charles-Francois de Cisternay du Fay, who though he wrote memoirs on many subjects and was superintendent of the Jardin des Plantes, is remembered to-day for his electrical experiments and observations. Born in Paris on September 14, 1698, he was an officer in the French Guards, and for a time followed a military career. Ill-health, however, led to his resignation and he then turned to literary and scientific pursuits. He was admitted to the Academy of Sciences in 1733 and contributed papers on geometry, astronomy, mechanics, chemistry and botany. He was especially interested in the electrical experiments of Stephen Gray, and suspending himself by silk cords, as described by Gray, he observed that when he was electrified, and another person came near, there issued from his body pricking shoots, making a crackling noise. The Abbé Nollet (1700–70) was associated with these experiments, which he afterwards extended. Du Fay also discovered two kinds of electricity which he named the *vitreous* and *resinous*, and he made attempts to formulate a theory of electric phenomena. A man of great industry, as superintendent of the Jardin des Plantes he did much to rescue that institution from neglect, and it was through him that Buffon became his successor.

Julius Cohnheim (1839–1884)

PROF. JULIUS COHNHEIM, the eminent experimental pathologist, was born on July 20, 1839, at Demmin in Pomerania. He studied medicine at the universities of Würzburg, Marburg, Greifswald and Berlin, where he qualified in 1861 with a thesis on suppuration in serous membranes. After acting as an assistant to Virchow in Berlin and serving as an army surgeon in the war with Austria, he was appointed professor of morbid anatomy at Kiel, where he remained until 1872. He was then transferred in a similar capacity to Breslau and finally occupied the corresponding chair at Leipzig in 1878, where he stayed until his death six years later. Cohnheim was a highly skilled technician, and made several valuable contributions to microscopical science, among which may be mentioned his methods for demonstrating the nerve endings in the cornea, the structure of striated muscle and the phenomena of inflammation. His successful inoculation in 1868 of tuberculosis in the anterior chamber of a rabbit's eye, thus proving the disease to be infectious, is an important landmark in the history of tuberculosis. His principal literary work is represented by his lectures on general pathology published in 1877–80 and translated in 1888–90 in the New Sydenham Society's publications, in which he dealt with the pathology of the circulation, nutrition, digestion, respiration, genito-urinary organs and animal heat. He also published several valuable articles on malignant growths, trichinosis and the bone marrow in anæmia. His stimulating lectures attracted a large number of students from all parts of Germany, and he had many men who later became eminent among his audience, including Heidenhain, Litten, Welch and Neisser at Breslau and Roy and Councilman at Leipzig. He died at the early age of forty-five years on August 15, 1884, from the effects of gout.

New Long-Distance Air Liner

PRELIMINARY details of a new civil transport aeroplane, the Fairey C.I., have just been made public. It is a low-wing monoplane fitted with four Bristol 'Perseus' sleeve-valve engines of 1000 h.p. each. The body is of a circular section monocoque construction, arranged to carry thirty passengers.

The undercarriage is of tricycle form so placed that the machine can land and stand with the cabin horizontal, which will increase the comfort of the passengers and facilitate loading up when on the ground. The wheels are retractable during flight. The cabin is air-tight, and conditioned air at ground-level density is maintained when flying at altitudes. The machine is fitted with an automatic pilot, relieving the pilot of most of his physical work, and making him more analogous to the captain of a ship. The whole of the mechanical detail is controlled from the flight engineer's cabin, who has actually sixty-four dials on his instrument board, dealing with matters varying from engine and flying performance down to the condition of the air in the cabin. A new feature of this machine is an auxiliary wing that can be retracted when not required. It is shaped like the more familiar trailing edge flap, and thus can be used as an air brake for reducing landing speeds as well as providing the extra surface for increasing the flying speed range. This additional surface allows for a wing loading of 25 lb. per square foot for taking off and landing, which is increased to 32 lb. per square foot while flying with it retracted. The estimated speeds of the machine are 275 m.p.h. maximum, and 220 m.p.h. cruising, and its air endurance with the full load of passengers will enable it to operate non-stop to any European capital. With a decreased pay load it will be capable of fast non-stop services on the Empire routes.

Neanderthal Man in Italy

IN more respects than one, the discovery of a skull of Neanderthal man in the Guttari cave at Monte Felice Circeo, about sixty miles south of Rome, is of unique significance for the study of the chronology and distribution of Mousterian man in Europe of the palæolithic period. Owing to conditions affecting the use of the cave by man, it is possible to fix the date of occupation within tolerably accurate limits, while the sealing of the cave in Mousterian times which brought that occupation to a close, has not only preserved the evidence of Neanderthal man and his domestic economy intact but also saved it from the superposition of the debris of subsequent intrusions—conditions unique in caves of Mousterian occupation. The skull, now the third of the type known from Italy, was found on February 25, 1939, by Dr. A. C. Blanc of the University of Pisa, who with the Abbé Breuil, discovered the second of the Italian Neanderthal skulls. Dr. Blanc had already examined thirty-one caves at Monte Circeo and found in them evidence of both the Mousterian and Aurignacian cultures, but the present find was made in a cave which had been discovered on the previous day only by its owner, S. A. Guttari.

THE skull lay on the floor of an inner chamber of the cave among stones which appear to have been laid in a circle around it, while underneath it were bones of Equus, Bos, Cervus and Sus, some of which had been intentionally flaked. The floor of the whole cave was covered with fossilized mammalian bones, antlers and skulls, including, in addition to those mentioned, hyæna and others, while elephant bones were found in a pool. All belonged to a warm climatic phase. This Neanderthal skull is the most perfect yet known, and in size approaches that of La Chapelle aux Saints. A fracture of the right temporal region points to a violent death; and the base of the skull has been opened extensively and the greater portion of the occipital foramen destroyed. The date of occupation is fixed by relation to the oscillation of sea-level at somewhere between 130,000 and 70,000 years ago; and Sir Arthur Keith, who contributed a prefatory note to an account, with illustrations, of Dr. Blanc's discovery in the *Illustrated London News* of July 5, regards these relics of Neanderthal man as contemporary with the lowest level of the Grotte des Enfants, Mentone.

Recent Additions to the British Museum (Bloomsbury)

SOME striking examples of West African art were among the more important of the recent additions to the ethnographical collections of the British Museum, which were reported at the meeting of the Trustees on July 8. Of these one was a gift of the National Art Collections Fund—a cast bronze head which was excavated at Ife, the religious centre of the Yoruba people, and is said to represent Olokun, the Yoruba deity of the sea. Discovered in 1938, it is in good condition, and shows traces of red paint on the head-dress. Probably it belongs to the fifteenth or sixteenth century, though the date is uncertain. Its modelling is of a quality unique among the artistic productions of negro Africa, and bears comparison with the finer sculptures of civilized art. The second example of African art is a carved ivory tusk from Benin, which bears figures of fish and animals, symbolizing the king in his supernatural aspects. There is a receptacle for magical 'medicine' at the larger end. No similar example is known. The gift to the Department of Manuscripts of the diaries of Robert Needham Cust, an Indian civil servant well known as an orientalist among scholars of the nineteenth century, will be welcomed by all who are interested in the history of Indian and oriental studies. The diaries were presented by his son, Mr. R. H. H. Cust.

Utilization of Coal

THE British Coal Utilization Research Association held its first annual meeting in London on June 28, when Sir Evan Williams, the president, gave an account of its first year's work, which has been largely concerned with the erection and organization of its research station in Fulham. It has been a subject of reproach that the coal industry has been largely indifferent to promoting efficiency in the utilization of coal. They now foresee, the president said, that the future will call for fuels of accurately controlled characteristics; the development of these is being investigated. The programme of research includes work on pulverized fuel firing which, it is believed, will play an increasingly important part in industry, and also on combustion in the fuel bed.