succession to D. E. Jones. Here he worked quietly, and gradually built up an efficient department of physics until his retirement in 1919. He was married in 1894 to Miss Annie Powell of Carreg Cennen, Carms., who predeceased him in 1932.

Prof. Lewis was of a modest and retiring disposition, and greatly disliked publicity. Yet he could be very enthusiastic in those causes which, in his opinion, mattered. While at Hirwain he inaugurated and lectured to classes under the Science and Art Department, and later wrote considerably to the Welsh local Press to stress the importance of scientific and technical education in the new secondary schools which were then being established. He served the University Colleges of Bangor and Aberystwyth and the University of Wales well during their formative years, and the cause of adult education in the Principality found in him a willing helper. During many years, he served as a governor of Aberystwyth County School and was for a period chairman.

After his retirement, Lewis's main interests were in the affairs of his religious denomination, in Welsh hymnology and in archæology. Until quite recently, his quiet, dignified figure could always be seen at the meetings of the British Association, among whose members he had a host of friends.

T. C. J.

Dr. Percy Phillips, director of the Hydrological Service of the Physical Department, Egyptian Ministry of Public Works, died in Cairo on August 4, at the age of fifty-seven years. Previous to the Great War, he was a lecturer in physics in the University of London and during the War had a commission in the Sound-Ranging Section of the Royal Engineers, with which he saw service in France and Palestine. He joined the Egyptian Government Service in 1919, and was responsible for the collection and discussion of statistics relating to the water supply of the Nile. He did valuable work in the study of the hydrology of the Nile Basin and in the preparation of the large irrigation projects on the Nile

WE regret to announce the following deaths:

Dr. G. P. Clinton, formerly botanist of the Connecticut Agricultural Experiment Station, known for his work in mycology, on August 13, aged seventy-one years.

Prof. F. B. Loomis, professor of geology in Amherst College, Mass., an authority on vertebrate palæontology, on July 24, aged sixty-three years.

Mr. Andrew Mellon, founder of the Mellon Institute of Industrial Research at Pittsburgh, Pa., sometime American Ambassador in Great Britain, on August 26, aged eighty-two years.

Prof. Luigi Pernier, professor of archæology and the history of ancient art in the University of Florence.

Lord Rothschild, F.R.S., a trustee of the British Museum and founder of the Tring Zoological Museum, on August 27, aged sixty-nine years.

News and Views

Sir Thomas Grainger Stewart (1837-1900)

SIR THOMAS GRAINGER STEWART, the eminent Scotch physician, who died on February 3, 1900, was born at Edinburgh on September 3, 1837. He qualified in 1858, and then visited the medical centres on the Continent, where he came in contact with Virchow, Schönlein and Traube in Berlin, and Oppolzer, Skoda and Hebra in Vienna. On his return to Edinburgh, he was made physician to the university wards in the Royal Infirmary. In 1876 he was appointed professor of physic and proved an exceptionally gifted teacher. He was one of the first in Great Britain to direct attention to the deep reflexes, and under the title of "Paralysis of the Hands and Feet from Diseases of the Nerves", he first described the condition known as multiple neuritis. For many years he held a foremost position as a consultant throughout Scotland and the north of England. His chief publications were "A Practical Treatise on Bright's Diseases of the Kidneys" (1868), "The Teaching of Medicine in Edinburgh" (1877) and "An Introduction to Diseases of the Nervous System" (1884). He was the recipient of many honours. In 1882 he was appointed physician to the Queen in Scotland, in 1887 he was made M.D. honoris

causa of the Royal University of Ireland, in 1890 he was elected president of the Royal College of Physicians of Edinburgh and honorary fellow of the College of Physicians of Philadelphia, in 1894 he was knighted, and in 1898 he was elected president of the British Medical Association when the annual meeting was held in Edinburgh.

Samuel Siegfried Karl von Basch (1837-1905)

This eminent Austrian physiologist and physician was born on September 9, 1837, at Prague. After studying medicine in his native town and Vienna, he qualified in 1862 in Vienna, where he acted as assistant for several years to Dittel, Jaeger, Turk and Kalisko. In 1865 he went to Mexico, where he was appointed Court physician to the Emperor Maximilian, who was shot on June 19, 1867, and himself narrowly escaped execution. After his return to Vienna he carried out some important experiments on the action of nicotine on the movements of the intestine, and in 1878 was appointed extraordinary professor in experimental pathology. He was the author of numerous publications, but his chief work was "The Physiology and Pathology of the Circulation" (1892), which he dedicated to his former teacher, the celebrated physiologist Karl Ludwig. Basch is best known for his invention of a sphygmomanometer, by which he inaugurated the clinical measurement of the blood pressure. He also did valuable work on pulmonary cedema, cardiac dyspness and the innervation of the uterus. His death took place on April 25, 1905.

Local Government in Roman Britain

A DOCUMENT of importance in its bearing on the organization of local government in Roman Britain has been brought to light in the course of the fifth season's excavation on the site of the Roman town of Brough, which has just closed. The investigation of this site, which is situated on the north bank of the Humber, commanding the crossing of the river by the Lincoln-York road, is being carried out by the Brough Excavation Committee under the direction of Mr. Philip Corder and the Rev. T. Romans. The present season's work has been directed to laying bare one of the four towers of rectangular form, twenty-five feet wide by ten feet deep, which were added to the front wall of fortification, possibly early in the fourth century. The most important find of the season was an inscribed slab, 2 ft. 3 in. high by, originally, about four feet long (The Times, August 27). Mr. Eric Birley reports on the inscription that it commemorates the provision of a stage at his own expense by Marcus Ulpius Ianuarius, Ædile of the village of Petuaria, in honour of the Imperial family of Antoninus Pius (A.D. 138-161) and of the spirits of the deified emperors. This inscription confirms the name Petuaria, and is one of the few known instances of the epigraphic confirmation of Romano-British names.

FURTHER, and more important, the inscription affords evidence of a step in the development of the unit of local governments in Britain from the tribal area, here that of the Parisii, to the self-governing canton with its seat of government at the old tribal capital, or a newly erected town. Although such tribal cantons were known from inscriptions at Caerwent and Wroxeter, this is the first mention of a tribal magistrate in Britain. Furthermore, being denominated as the Ædile not of the tribal area, as in the previously known inscriptions, but of Petuaria itself, this indicates, in the interpretation of Mr. Birley, a further stage of development in which the central town with its college of four regular magistrates, two duovirs and two Ædiles, was gaining in importance at the expense of the tribal organization. This inscription is also the first epigraphic evidence of the practice in Britain of a magistrate conferring benefactions in return for the honour of election to office.

Arctic Weather Reports

ONLY forty-one years have passed since Nansen made his perilous and unsuccessful attempt to drift with the arctic ice from northern Siberia across the North Pole to the neighbourhood of Greenland, yet since July at least one London morning newspaper has been publishing daily a weather report from the region of the North Pole along with similar reports

from New York and various Continental capitals. Such observations are not at present of great importance to weather forecasters, because the normal travel of weather systems generally tends to be circumpolar, and, moreover, the gap between the Pole and other arctic weather stations—even Spitsbergen—is a very wide one, so wide that it is impracticable to complete a system of isobars to cover the polar regions. But as a landmark in the gradual spreading of a network of observing stations over the whole world, this event is important. Owing to the drift of the ice, a permanent station at the North Pole is impracticable, but the Russian station from which the published observations have been received has apparently not drifted very far from the Pole yet. Its co-ordinates at the end of August were about lat. 87° N., long. 2° E. The reports include an observation of the direction of the wind, and owing to the fact that these are not made exactly at the Pole, the direction can be given in the ordinary manner. At the Pole itself, of course, all winds are from the south, and direction would presumably have to be given in terms of longitude instead of being referred to the points of the compass.

Problems of Conquering Everest

THE problem of reaching the summit of Mount Everest is discussed in a paper in the Himalayan Journal, 9, and takes the form of a memorandum prepared by the Eastern Section of the Himalayan Club, with some comments on the conclusions by Mr. E. Shipton. Two main suggestions are made in the light of past experience. The first is that expeditions have been foredoomed to failure because they have attempted to climb the north ridge too quickly. It is contended that men who have stood the strain of reaching the North Col cannot hope to do the remaining 6,300 feet in three days. The writers quote much evidence in favour of their statement, but Mr. Shipton is equally sure that above 23,000 feet a man deteriorates in muscle and energy quickly, and therefore delay at and above that height must be avoided. The second suggestion is that instead of trying in May and June when the effort is a race with the approaching monsoon, it would be better to make the attempt after the monsoon, in October or even in April. Days in October are certainly shorter than in May, but wind velocities so far as is known are slightly lower. Mr. Shipton admits that post-monsoon conditions should be studied, but prefers the pre-monsoon season. Major K. Mason points out that one obvious drawback to October is that it is a month of increasing wind, while May is a month of west winds decreasing owing to advancing monsoon currents.

The British Grid System

In a paper on the British Grid system by Johnstone Wright, the engineer of the Central Electricity Board, presented to the Engineering Institute of Canada, at Montreal in June last, an interesting account is given of the development of the Grid system in

(Continued on p. 419)