German chemist, who died on March 24, 1849. He was born in 1780, and in 1810 became a professor at Jena, where he discovered the property of spongy platinum which led to his patent in 1824 of the Döbereiner lamp. Another chemist who died in 1849 was George Fownes. He was then only thirtythree years old, but he had already held professorships at the Pharmaceutical Society and University College, London, had been awarded a Royal Medal by the Royal Society, and at the time of his death was secretary to the Chemical Society.

By 1849 the domains of science were rapidly being extended, and a man of science born in that year entered upon his life's work with many new fields open to him. Of the scientific events of that year, none surpassed in importance the reading to the Royal Society of Joule's paper on the "Mechanical Equivalent of Heat". Mayer, Rankine, Helmholtz, Clausius and Kelvin were all at that time deeply interested in thermodynamics, while other physicists all over the world were following the course of Faraday's long and fruitful investigations in electro-magnetism. Some of the results of all this were seen in the work of John Hopkinson (1849-98). Adolf Slaby (1849-1913), George Forbes (1849-1936), and Sir Ambrose Fleming (1849-1945), who were among the pioneers of electric power supply and of wireless telegraphy and telephony. The tragic death of John Hopkinson, who was killed in an Alpine accident with three of his children on August 27, 1898, robbed the world of a distinguished mathematician, physicist and practical engineer. Forbes, who was the son of the Edinburgh professor, J. D. Forbes, was consulting engineer in 1892 to the company formed for harnessing the water-power of Niagara Falls, and was also concerned with other hydro-electric schemes. Fleming was for forty-one years (1885-1926) professor of electrical engineering at University College, London. Adolf Slaby was a professor first at the Technical High School and then the University of Berlin, and was one of the pioneers of wireless telegraphy in Germany. The year Fleming was appointed to the chair at University College saw Raphael Meldola (1849-1915) made professor of chemistry at Finsbury Technical College, where he had as his colleagues John Perry and Silvanus Thompson. In 1921 the Maccabeans—a society mainly of Jewish professional men devoted to the promotion of the interests of the Jewish racefounded the Meldola Medal of the Royal Institute of Chemistry. Two eminent metallurgists, both Bessemer medallists of the Iron and Steel Institute, were born in 1849, namely, Johan August Brinell (died 1925), of Sweden, and Floris Osmond (died 1912), of France. The terms sorbite, martensite, troostite and austenite are due to him, and it is of interest to recall that Sorby, the virtual founder of metallurgy, began his study of thin sections of rocks by means of the microscope in the year of Osmond's birth.

Lastly, 1849 saw the birth of two well-known astronomers, William Edward Plummer (died 1928), of the Liverpool Observatory, and Matthieu-Prosper Henri (died 1903), of the Paris Observatory; and of two notable geologists, William Johnson Sollas (died 1936), who for thirty-nine years was professor of geology and palæontology in the University of Oxford, and George Mercer Dawson (died 1901), who became director of the Geological Survey of Canada and president of the Royal Society of Canada, an office first filled in 1857 by his father, Sir John William Dawson (1820-99).

OBITUARIES

Sir Wilfred Grigson, C.S.I.

SIR WILFRED GRIGSON'S death in an air accident in Pakistan will be felt as a serious loss by the administration of that country and by anthropologists in Great Britain. He was born in 1896, the son of Canon W S. Grigson, vicar of Polynt in Cornwall, and educated at St. John's, Leatherhead, and Christ Church, Oxford, where he held a classical scholarship. He served in Flanders, Mesopotamia and Palestine during the First World War, and entered the Indian Civil Service in 1919, starting his career in the Central Provinces, where his experiences as administrator of Bastar State turned his attention to anthropology and to the ethnology of the Gonds in particular. From Bastar he went to Berar, and in 1928 his services were lent to the Government of the Nizam of Hyderabad. He returned to the Central Provinces in 1940, but after holding several important posts there, returned to Hyderabad in 1946 as a member of the Nizam's Executive Council. Retiring from the Indian Civil Service in 1947, he entered the service of Pakistan as Commissioner for Refugees, a post in which he had to deal-and did deal with the sympathetic efficiency typical of him-with the difficult situations created by the streams of some millions of Muslims who swarmed into Pakistan from the East Punjab after the boundary commission had come to its findings.

Grigson's book on "The Maria Gonds of Bastar", published in 1938, is a model of what such a tribal monograph should be, and a review of it rightly remarked on the good fortune of the Maria "in having their affairs administered by one so wise in their ways"; while an Indian reviewer stressed his contribution "not only to the science of anthropology, but also to the art of civil administration, especially as it ought to be conducted among the less advanced castes and tribes". "He has approached", continued this reviewer, "the administrative aspects of study without bias of any kind. Whatever his political opinions he has kept them by for the moment and has dealt with the problem of the primitive tribes in a thoroughly practical and sympathetic manner."

The same might truly be said also of Grigson's report to his Government on "The Aboriginal Problem in the Central Provinces and Berar"; issued in 1944, for which he took as his motto the last words of Cecil Rhodes, "so little done : so much to do", a report which fills more than 500 crown octavo pages. His last published work consists of a survey of tribal conditions in Hyderabad, and consideration of policies to be followed to improve them, in a more slender volume published at Hyderabad in 1947 under the title of "The Challenge of Backwardness". No servant of the Crown in India ever more truly earned the traditional title of 'Protector of the Poor' than Wilfred Vernon Grigson.

Dr. G. B. Grundy

GEORGE BEARDOE GRUNDY, son of the Rev. G. B. Grundy, formerly head of Lichfield Grammar School, was born at Aspull in Lancashire in 1861. He was sent to school at Blackheath, but had to earn his living at the age of sixteen, as a teacher, first in a preparatory school, then at Wolffram's army coaching establishment; and later as head of the Cowley Military Academy, near Oxford. In 1888 he entered Brasenose College as an undergraduate, and obtained second classes in Classical Moderations and Literæ Humaniores (1891). In the same year he married. He was already interested in Greek military history, and a geographical studentship enabled him to remain in Oxford, and also to visit the battlefields of Thermopylæ, Marathon and Platæa, where his military knowledge and skill as a field surveyor enabled him to put the study of Greek tactics on a firm basis. His account of Platæa was published by the Royal Geographical Society as a supplement to the Geographical Journal; other papers appeared in the Journal of Hellenic Studies, including a study and survey of Pylos and Sphacteria.

Grundy owed much at this period to the encouragement of Henry Pelham, who as Camden professor of ancient history was a fellow of Brasenose, and was interested in all modern developments of classical studies, and especially in archaeology and geography. Grundy lectured for Pelham in 1897, and later for Brasenose College, where he was given full charge of the teaching of ancient history. For his geographical studies he received the Conington Prize in 1900, after standing *proxime* for the Arnold Prize in 1899. When the School of Geography was founded, he was appointed lecturer in ancient geography, and drew considerable classes in military and economic subjects.

In 1902 Grundy published "The Great Persian War", incorporating all his special interests in a general narrative; this was written in a lively style. Further travels in Greece led to an adventure near the north-west frontier, and to even keener interest in modern Greek politics. His historical studies were continued in "Thucydides and his Age", published in 1911, and reissued, with a second volume, in the year of his death. He travelled also in Italy, visiting especially ancient battlefields; and he had a wide interest in Roman and Saxon Britain, especially in boundaries and field names, which he hunted widely over the countryside.

In 1902 Grundy was appointed to a fellowship and tutorship of Corpus Christi College, then ruled by Thomas Case, who appreciated his vigour and originality. Here he taught continuously until 1931, taking keen interest in all aspects of college life, and also in university business. He was a champion of unpopular causes, and a vigorous speaker in Congregation, but took no part in administration. An all-round athlete until middle life, he became later an expert croquet player. He was a frequent contributor of light verse to the Oxford Magazine, translated selections from the "Greek Anthology", and in 1945 published an 'unconventional biography', the record of his "Fifty-Five Years at Oxford".

JOHN L. MYRES

WE regret to announce the following deaths :

Mr. Frank Nasmith, a founder member and president during 1938-39 of the Textile Institute, on November 16.

Dr. M. C. Rayner (Mrs. W. Neilson Jones), formerly head of the Department of Botany, University College, Reading, known for her work in forestry research, on December 17.

Dr. G. Scott Robertson, permanent secretary of the Ministry of Agriculture, Northern Ireland, and formerly professor of agricultural chemistry in Queen's University, Belfast, aged fifty-three.

NEWS and VIEWS

East Malling Research Station :

Dr. R. G. Hatton, C.B.E., F.R.S.

THE many friends and scientific colleagues of Dr. R. G. Hatton will learn with regret of his resignation from the directorship of the East Malling Research Station for reasons of ill-health. For some years he has been far froth well and, though advised medically to take things more easily, Hatton is not the man to let up on his work if he is physically capable of getting to his office. Born in 1886, he is a Balliol man who after graduating, decided his interests lay in agriculture and horticulture; and he went to Wye College, later becoming acting-director during the First World War of what was then the College's Fruit Experimental Station at East Malling. When it became an independent research station in 1918, Hatton was its first director, and it is to his personal energy, vision and administrative ability that the Station owes its present position as one of the foremost horticultural research centres of the world. His own work on the sorting-out and classification of fruittree rootstocks would alone justify his high position in science and his fame among fruit-growers in all countries. Apart from his many scientific writings, Hatton, in his early years, made one excursion into general literature. His delightful "Folk of the Furrow" was published in 1913 under the pen name of "Christopher Holdenby", and it was many years before even his closest friends knew that he was the author.

The National Physical Laboratory, Physics Division: Dr. B. W. Robinson

DR. BERNARD WHEELER ROBINSON was appointed in October 1948 as superintendent of the Physics Division, National, Physical Laboratory, in succession to Mr. W. F. Higgins. Dr. Robinson was born in 1904. He studied mathematics and physics at Trinity College, Cambridge, and then spent two years at the Cavendish Laboratory under Lord Rutherford. Afterwards as research assistant to Sir William Bragg at the Davy Faraday Laboratory, Royal Institution, he specialized in instrument design and the technique of X-ray crystallography. He later held the post of senior lecturer in physics at the Military College of Science. During the Second World War, Dr. Robinson was associated with the development of gunsight and fire-control instruments for aircraft, including the 'gyro-gunsight'. He was later concerned with work on the remote control of aircraft guns, a project closely related to the extensive wartime advances in the Finally, under the field of servomechanisms. Directorate of Armament Development, Ministry of Aircraft Production, he was in general charge of fire-control research. After the War, Dr. Robinson was engaged on specialized instrument work for the National Institute of Medical Research, translating the requirements of the physiologist and biochemist into the design of new physical instruments.