

of several well-known text-books, the most notable being his "Elementary Treatise on the Calculus", a standard work extensively used throughout the British Empire. After his resignation in 1927 he prepared a large and important volume on advanced calculus, which is at present passing through the press. Many books, written by members of his staff, have also benefited by his profound learning and long experience, always freely and generously placed at the service of younger workers. In the Edinburgh Mathematical Society, which he joined soon after its foundation, Prof. Gibson was a leading figure, and a frequent contributor to its publications. From 1917 until 1920 he held the office of vice-president of the Royal Society of Edinburgh. The Universities of Edinburgh and Glasgow both conferred on him honorary LL.D. degrees, the former in 1905 and the latter in 1927.

An enthusiastic administrator, Prof. Gibson rendered important services to the cause of education in Glasgow. He was one of the original members of the Glasgow Provincial Committee for the Training of Teachers; after returning to the University he became a governor of the Technical College; for a long period he acted as chairman of the governors of the Park School Company; and in the Senate and University Court his sound and forceful counsels carried great weight with his colleagues. On the occasion of his retirement his friends and students combined to testify to their respect and admiration by raising a fund for the endowment of lectures on the history of mathematics, to be given at intervals in the University of Glasgow, and to be known as the George A. Gibson Lectures.

T. M. M.

DR. DAVID DRAPER.

In September of last year David Draper, one of the oldest of South African geologists, passed away at the ripe age of eighty years. He was well known throughout the land as the founder of the Geological Society of South Africa in 1895. He was born in the Cape Colony in 1849, and was the son of one of the English settlers who came out to South Africa in or about the year 1820. Most of Dr. Draper's schooling was done at Colesberg in the Cape Colony, which place he left whilst still in his teens to join the small army of diggers occupied in opening up the diamond mines of Kimberley in 1868. After taking an active part in this work with a fair amount of success, he departed for the Lydenburg and Barberton Gold Fields, which he closely studied, and later settled for some years in Natal, where he made himself acquainted with the extensive coal fields of that colony. The richness of the gold mines of the Witwatersrand afterwards drew Dr. Draper thither, and one of his first commissions of importance was to unravel the geological section from Vereeniging to the norite 'Pyramids' north of Pretoria on behalf of the local Chamber of Mines. This work, which covered an entire section of the Witwatersrand beds, was successfully accomplished and has stood substantially correct to the present day.

It was about this time that Dr. Draper realised

the necessity of furthering the work of geologists, mining men, and prospectors in South Africa, and the result of his efforts was seen in the formation of the Geological Society of South Africa. In addition to being the founder and first secretary and treasurer of this Society, it is interesting to note that he was also the first South African-born fellow elected to the Geological Society of London.

One of Dr. Draper's first efforts for the South African Society dealt with the primary systems of South Africa, and the conglomerate beds of the Witwatersrand, which at that time were creating world-wide interest on account of their unique geological features and richness as gold bearers. From this time on Dr. Draper was an ardent worker in the field of geology, and visited such distant parts of the world as Borneo, Asia Minor, and Brazil on special geological excursions. Some of his most useful contributions relate to the diamond occurrences of South Africa and Brazil.

For the valuable services rendered to the science of geology in South Africa, Dr. Draper was made an honorary life member of the Geological Society of South Africa—a distinction conferred only twice on South African members during the existence of that Society. In 1927 the honorary degree of doctor of science was conferred on him by the University of the Witwatersrand.

The contributions to geological science by Dr. Draper were numerous, and a bibliography of his works, compiled by the present writer, contains no less than fifty-seven papers to scientific societies and the technical press in various parts of the world.

HAROLD S. HARGER.

DR. ALBERT VON LE COQ.

A DISPATCH from the Berlin correspondent of the *Times* which appeared in the issue of April 25 announced the death of Dr. Albert von Le Coq, the famous German explorer and archæologist, at the age of sixty-nine years. Dr. Le Coq was a native of Berlin, and for some time was director of the Museum für Völkerkunde in that city. He was, however, best known for his investigations in Central Asia.

In 1904 and 1905, Dr. Le Coq made two expeditions of archæological exploration in the area at the foot of the eastern Tian-Shan Mountains in the neighbourhood of Kurfan and Koria. On one of these he was accompanied by Dr. Albert Grünwedel, the well-known authority on Buddhist art and archæology. As a result of the excavations in the sand-buried city ruins in the area, a large number of Buddhist wall-paintings and other relics were discovered and brought back to Berlin. The most important discoveries, however, were a large number of documents written in a variety of alphabets on Chinese paper, vellum, and wood. Not only did these reveal links between Hellenism, Persia, India, and China, but more important still it was found that a new and hitherto unknown Aryan language with two distinct dialects had been discovered. Study of Tocharian, this new language, has since revealed that it differs in phonetics, vocabulary, and