

## CHRISTIAN FREDERIK LÜTKEN.

BORN AT SORØ, OCTOBER 4, 1827. DIED AT COPENHAGEN, FEBRUARY 6, 1901.

PROFESSOR LÜTKEN, whose death, some two years after his resignation of the Directorship of the Zoological Museum at Copenhagen, removes another veteran from the ranks of the admirably trained and hard-working Scandinavian naturalists, was best known as a describer and classifier of living animals. But while, in common with the leaders of palæontology, he insisted that "only from the organization of the *living* form can we learn to understand that of the *extinct*," so also he was at one with the more eminent zoologists in recognizing that only by a study of extinct forms can we perceive the true relationships of the living. And it is because he put his creed into practice for over half a century that the close of his labours calls for the affectionate regret of geologists. That a notice should appear in this Magazine is moreover specially appropriate, since it was to it that he turned on the few occasions when he desired to address English readers in their own language. We allude to his notice of Lovén's memoir on *Leskia mirabilis* (GEOL. MAG., 1868, p. 179), his notes on the Ophiuridæ (1870, p. 79), and his criticism of Professor Kner's writings on the Ganoids and on *Xenacanthus* (1868, pp. 376 and 429). His own great memoir on the classification of the Ganoids appeared in *Palæontographica* (1873-75). From his many allusions to fossil Echinoderms we may select as early evidence of his penetration the constant opposition that he raised to the idea that the anus of the stalked echinoderms was a proboscis or mouth, and his severe criticism (oddly overlooked by later writers) of the division of the Crinoids into a Palæozoic and a Neozoic group. As a systematist the characteristics of his work were thoroughness, accuracy, and caution: qualities less showy than lasting. He was not a brilliant speculator on the phylogeny of unknown forms, but an advocate of, and an adept in, the synthetic method: "I mean that method which, giving up all preconceived ideas, patiently puts genus to genus, until families are formed, and family to family after their natural affinities, until the whole systematic building stands before us." It is work of this nature that will stand, that will vindicate the claims of palæontology to be heard, that will justify systematic zoology as a serious attempt to solve the problems of life, and that will keep science itself from the ridicule of the unlearned. We can ill spare such workers; but Lütken was a leader and a teacher as well as a student, and his monument is to be found not only in the books that he has left, nor even in the rich and well-arranged museum of Copenhagen, but also in the school of active and earnest zoologists that will long do honour to Denmark.

F. A. B.

## ROBERT CRAIG.

WE regret to record the death at Glengarnock, on the 14th January, of Robert Craig, in the 80th year of his age. Mr. Craig took an active interest in geology, and from his occupation as

a quarrymaster and burner of lime he had exceptional opportunities for the pursuit of the science. During the past forty years he contributed many papers to the Transactions of the Glasgow Geological Society, more especially on the Drift deposits and Carboniferous rocks. In his own neighbourhood, from his literary and scientific tastes, he was known as "The Sage of Beith."

#### MISCELLANEOUS.

**GEOLOGICAL SURVEY OF THE UNITED KINGDOM.**—We have already notified the appointment of Mr. J. J. H. Teall as *Director* in place of Sir Archibald Geikie, *Director-General*. The further appointments are two *Assistant-Directors*: Mr. H. B. Woodward (for England and Wales) and Mr. John Horne (for Scotland). *District Geologists*: Mr. C. Fox Strangways, Mr. Clement Reid, and Mr. Aubrey Strahan (for England and Wales); Mr. B. N. Peach and Mr. W. Gunn (for Scotland); and Mr. G. W. Lamplugh (for Ireland).

**'BLOOD RAIN' IN SICILY.**—A telegram despatched from Palermo yesterday stated that since the previous night a dense lurid cloud had hung over the town. The sky was of a sinister blood-red hue and a strong south wind was blowing, and the drops of rain which fell were like blood. The phenomenon, which is known locally by the name of 'blood rain,' is attributed to dust from the Sahara Desert having been carried there by the wind. Similar atmospheric conditions are reported from Rome. The sky had a yellow tint yesterday, and a violent sirocco swept over the city. At Naples showers of sand fell, and the phenomenon of the 'fata Morgana' was observed.—*Morning Post*, March 11, 1901.

**VIENNA, MARCH 12.**—Red and yellow snow has fallen in many parts of Austria, including districts so far north as Prague. The coloured snow lies several inches deep, and makes a weird and unearthly effect. Scientists state that southern winds of extraordinary force have carried the red and yellow sand of the Sahara across the Mediterranean to Southern Europe in such an enormous quantity that even here in Austria the colour of the snow has thereby been changed.—*Morning Leader*, March 13, 1901.

**REPTILIAN REMAINS FROM PATAGONIA.**—At the meeting of the Zoological Society on March 5th, Dr. A. Smith Woodward, F.L.S., F.Z.S., F.G.S., read a detailed description of the remains of *Miolania* from Patagonia, which were briefly noticed by Dr. Moreno in the *GEOLOGICAL MAGAZINE* for September, 1899. He regarded them as indicating a Chelonian only specifically distinct from the typical *Miolania* of the Australian region. In the same formation in Patagonia were found the skeleton of a new extinct snake and the jaws of a large carnivorous Dinosaur, which were also described. The discovery of *Miolania* in South America seemed to favour the theory of a former Antarctic continent; but it should be remembered that in late Secondary and early Tertiary times the Pleurodiran Chelonia were almost cosmopolitan.