## THE MASSES IN THE CROMER DRIFT.

SIB,—Sir Charles Lyell was misinformed as to his pinnacle at Sherringham having disappeared in 1864, for my first visit to the Cromer coast was in August of that year, and I saw it and drew it in my note book. I also well recollect it.

The woodcut of it first appeared in a paper by Sir Charles in the Phil. Mag for May, 1840 (p. 367), where he says that chalk flints are scattered somewhat irregularly through it. This is not the character of the chalk itself, but is exactly that of the reconstructed chalk (moraine), which forms hills flanking the Lincolnshire Wold. Although this part of his description was omitted by Sir Charles in subsequent publications, his cut in all of them shows the pinnacle as having from base to summit on the left side, and part of the way up from the base on the right side, numerous angular stones—presumably these scattered flints—distributed through it.

I must leave Mr. T. M. Reade's other objections to be answered by the general case shown in the Memoir on the Newer Pliocene Period, which from my having pointed out therein the great error into which he had fallen as to the elevations in Norfolk, and the consequent failure of such inferences as he drew from it, gave rise to this correspondence. SEARLES V. WOOD.

14th August, 1883.

## OBITUARY.

## WILLIAM MOLYNEUX, F.G.S.,

BORN MAY 22nd, 1824; DIED OCTOBER 24th, 1882.

WILLIAM MOLYNEUX, the subject of our present Memoir, was born at Nuneham Courtenay. Oxfordshire, a village on the banks of the Isis, where he received his first instruction. At an early age he was taken into the establishment of His Grace the Archbishop of York, where his education was advanced by Miss Harcourt, a sister of the Archbishop. He developed a taste for poetry and in 1853 published a volume of poems and some other works of a similar nature. In 1855 Mr. Thomas Jackson (private secretary to the late Duchess) obtained him employment under the late Duke of Sutherland, at Trentham, Staffordshire, where he resided six years. He wrote a Guide to "Trentham and its Gardens" in 1857, and commenced with Mr. Garner, F.L.S., his geological studies, and with that gentleman and Dr. Barnard Davis, F.R.S., he assisted in the exploration of several Romano-British Barrows.

A paper was read before the North Staffordshire Field Club, in 1866, by Mr. Molyneux, "On the Gravel Beds of Trentham Park," with an account of the fossils collected by Mr. Molyneux, drawn up by the late Mr. J. W. Salter, A.L.S., F.G.S. In 1859, Messrs. Garner and Molyneux communicated a paper to the British Association for the Advancement of Science at Aberdeen, "On the Distribution of Organic Remains in the North Staffordshire Coal-field," which was highly commended by Sir Philip Grey-Egerton, Bart. In 1860 Mr. Molyneux, communicated a paper to the Meeting of the British Association at Oxford, "On Fossil Fish from the North Staffordshire Coal-field."

In 1861 he left Trentham, having been appointed Secretary and Librarian to the Mechanics' Institution, Stafford; and his collection of Fossil Fishes was purchased for the Museum of Practical Geology, Jermyn Street, London.

In 1864 Mr. Molyneux was elected a Fellow of the Geological Society of London, and was entrusted with a grant from the British Association to draw up a "Report on the Distribution of the organic remains of the North Staffordshire Coal-field;" this Report extended over two years and appears in the 34th and 35th volumes of the Association for 1864-65. In this latter year he also became a member of the British Association, and regularly attended its annual gatherings as long as he remained in England.

In 1867 Mr. Molyneux communicated a short paper to the GEOLOGICAL MAGAZINE, "On the Gravel Beds of Trentham Park," Vol. IV. p. 173. On leaving Stafford he next (through the kind assistance of Mr. Darling) was engaged as resident agent to the late Marquis of Anglesea, at Burton-on-Trent. In 1869 he published an important work on "Burton-upon-Trent; its History, its Waters, and its Breweries"<sup>1</sup> (the preparation of which had occupied his spare time for three years). The work gives the rise of Burton and the development of the brewing trade, together with the geology of the district and the origin of its water-supply, on which the staple article of its wealth depends. Mr. Molyneux also published a pamphlet on "The Old River Courses and the Recent Floods of the Trent Valley at Burton-on-Trent"; suggesting means for the prevention of these disastrous inundations. It was about this time that his attention was more particularly directed to the promotion of Coal-mining in connection with the opening up of the Cannock Chase Collieries, being successful in the promotion of two companies, to one of which he acted, ad interim, as Secretary. The unprecedented success of the coal and iron industries about this time and the enhanced value of mining stock gave him then a cheering prospect of worldly success and prosperity; but unfortunately he did not realize his shares, and later on their value became depreciated by heavy calls, which he was unable to meet, and his chance of good fortune seems never to have returned.

Early in 1880 he left England, to assist Mr. F. North, who had just been appointed by the Government of Natal to make a survey of the coal-fields of that Colony, but the engagement came prematurely to an end through some misunderstanding soon after they landed.

Fortunately at this juncture he was engaged by the Corporation of Durban to examine and report on the Durban Borough lands, and to ascertain their nature, extent and resources, and the geological deposits composing them. He also reported on the water supply of the Borough of Durban. He was subsequently engaged, through the influence of Sir Bartle Frere, Bart., G.C.B., F.R S., by the Government of the Cape of Good Hope, to Survey and Report on <sup>1</sup> London: Trübner & Co., 1869.

the geology of the Karoo and Stormberg. This Report was presented to the Cape Legislature in 1881, and forms a most important and valuable contribution to our knowledge of the geology of this interesting district.

When in Natal he made arrangements to purchase a farm, and in the autumn of 1881 he returned to England for his wife and family and sailed for Natal to take up his residence at Inchanga. But the farming proved too severe and laborious for his constitution, and not so profitable as he had been led to hope and expect. He therefore undertook an exploration in the Orange Free State and the Transvaal, to report on the mineral resources of those countries. On the return journey he made an examination of the Dundee Coal-field, which resulted in the formation of a company to work the coal and iron there. Returning to Durban, he took a severe cold, fever and dysentery ensued, and after three weeks' illness he died in his 59th year. His remains are placed near those of Thomas Baines, F.R.G.S., the African traveller, in Durban Church Cemetery.

He leaves a wife and eleven children, three of whom are still infants.

The following is a list of papers published by Mr. Wm. Molyneux, F.G.S., late of Inchanga, Durban, Natal, and formerly of Burtonupon-Trent.

On the Coal Strata of North Staffordshire, with reference particularly to their Organic Remains. British Assoc. Reports, 1859. (Joint paper with R. Garner.)

Remarks on Fossil Fish from the North Staffordshire Coal-Fields. Brit. Assoc. Reports, 1860.

Report on the Distribution of the Organic Remains of the North Staffordshire Coal-Field. Brit. Assoc. Reports, vol. xxxiv. 1864; and 1865, vol. xxxv.

- On the Gravel Beds of Trentham Park. GEOL. MAG. Vol. IV. 1867, pp. 173-174.
- On the Occurrence of Copper and Lead-Ores in the Bunter Conglomerates of Cannock Chase. Brit. Assoc. Reports, vol. xlii. 1872. (Proc. Sects. pp. 116-117.)
- On the Occurrence of Aviculopecten and other Marine Shells in deposits associated with Seams of Coal containing Salt-water in the Ashby Coal-Field. Brit. Assoc. Reports, 1877. The Cheadle Coal-Field (History of Cheadle), 1881.

- (A) Papers read before the North Staffordshire Naturalists' Field Club:—1. "On the Gravel Beds of Trentham Park" (1866). 2. "Notes on Connemara" (1868). 3. "The Geology of Lilleshall," etc. (1872). 4. "The Rhætie Beds of Needwood Forest" (1874). 5. "The Water Supply of Staffordshire" (1876). 6. Presidential Address (1879). 7. "The Pre-Norman History of Repton" (1877). 8. "The Geology of Dovedale" (1878). 9. "On the Bunter Conglomerate of Cannock Chase" (1878). 10. "Bosworth Field" (1880). Field" (1880).
- (B) Papers read before the Midland Scientific Association :-- " On the Fossils of the Lower Coal-Measures of North Staffordshire." "On the Calcareous Hæmatite of the Churnet Valley." "Notes on the Fossils and Antiquities in the History of Burton-on-Trent."

Separate works :-

- "Burton-on-Trent: its History, its Waters, and its Breweries." By William Molyneux, F.G.S. (London, 1869. 8vo. pp. 268. Trübner & Co.) "Report on the Geology of the Karoo and Stormberg." By Wm. Molyneux,
- F.G.S. Presented to the Cape Legislature, and ordered to be printed. Cape Town, 1881.
- A pamphlet on the "Conservancy of Rivers." (8vo. 1879, Bellamy: Burton-on-Trent.)