

AGE OF THE ROCKS OF ALASKA TERRITORY.

SIR,—Mr. Dall appears to me, in the extract of a letter of his, published in your last number, to base his determination of the Alaska beds upon a species of *Platanus* found near Toponica, which he considers to be undoubtedly Miocene. I fear this cannot be accepted as settling the question, seeing that Professor Heer has described a species of this genus (*P. Newberryana*), from Nebraska, found in strata which he originally considered to be Miocene, but which Prof. Newberry has lately shown from the molluscan remains to be Cretaceous. Some additional evidence must be found before the age of these beds can be definitively fixed. The remarkable persistence of some of the generic forms of America from the Secondary down to the existing flora, as lately expounded by Professor Newberry, is a fact of great importance, especially when contrasted with the changes which have taken place in the Secondary and subsequent floras of Europe.

W. CARRUTHERS.

THE OLDEST BRITISH BELEMNITE.

SIR,—The interesting notice by Mr. Tate, of his "little old" Belemnite from the Lower Lias beds, which yield *Ammonites angulatus*, may be a fit occasion for entreating the renewed attention of Palæontologists to the importance of this kind of research, unpromising though it be, for the origin of the "geno." My friend, Mr. C. Moore, besides placing at my disposal his whole collection of Belemnites, has sent me, among other rarities, a very small conical specimen from beds immediately above those which yield *Ostrea liasica*. This may be the young of the short conical form to which I have given the name of *Belemnites calcar* (Monograph of *Belemnitidæ*, pl. 11, fig. 4). The fossil described by Mr. Tate must certainly be distinguished from every variety of *Belemnites clavatus*; regarded as a young individual, it may with some confidence be thought likely to prove to be closely allied to *B. pencillatus*, which is by no means always deprived of lateral furrows, and is, in fact, a variable species (Monograph of *Belemnitidæ*, pl. 1., fig. 2, p. 35). I possess specimens of *B. acutus* and *B. pencillatus*, from the Lower Lias of Antrim. *Belemnites dorsalis*, of the Yorkshire Upper Lias, is certainly quite distinct.

JOHN PHILLIPS.

OXFORD, April 4, 1869.

THE OLDEST BRITISH BELEMNITE.

SIR,—Mr. Tate's "oldest British Belemnite," described in the April number of the GEOLOGICAL MAGAZINE, will have to yield the palm to an older one, which I found some years ago in the Insect beds (*Ammonites planorbis* zone of some geologists) at Binton, in Warwickshire. My friend Professor Phillips supposed that no Belemnites were known so low down, and I at once forwarded the specimen to him, and it is still in his possession. Unfortunately it is a mere fragment, consisting only of the phragmocone or chambered part of the shell, without the attached guard or sheath. The chambers, though crushed, from their size, indicate a tolerably large

Belemnite, but the species, I presume, cannot be determined. This is the only specimen I have ever discovered or heard of in this division of the Lower Lias, and the genus appears to be very rare.

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April 15, 1869.

OBITUARY.

CHARLES ÆMILIUS OLDHAM, B.A.

Indian geology has sustained a great loss by the death of one of its most ardent labourers, Mr. Charles Æmilius Oldham, youngest son of the late Thomas Oldham, Esq., of Dublin, and brother of Dr. T. Oldham, Superintendent of the Geological Survey of India, which lately took place at Wellington Road, Dublin. The deceased entered Dublin University in 1846, where, having passed a very distinguished undergraduate course, and obtaining a classical sizarship and scholarship, he took the degree of B.A. as senior moderator and gold medallist in Ethics and Logic in 1852. He afterwards entered the School of Mines, Jermyn Street, London; and on the completion of his studies there, was appointed in 1856 on the staff of the Geological Survey of India. For several years past he acted as Deputy Superintendent of the Survey of the Madras Presidency; and during the last two years held the lectureship of Geology to the Engineering College of Madras. He married in 1863, Evelyn, second daughter of Professor W. King, of the Queen's Universities in Ireland. In the middle of last December, he returned home on leave of absence, in the enjoyment, to all appearance, of perfect health. Two months subsequent to his arrival, symptoms of approaching illness manifested themselves; and shortly after he became affected with blood-poison, consequent on the breaking off and decomposition of a Guinea-worm that had penetrated one of his legs while on duty. Passing through various phases, his illness, of a most painful character, terminated fatally on the 30th of March, in severe congestion and inflammation of the lungs. He died in the 38th year of his age. His name will ever be associated with the early progress of the Geological Survey of Southern India, as it is honourably connected, like those of his colleagues, with the discovery in the Madras Presidency of the quartzite implements that have attracted so much attention of late. Gifted with a most amiable disposition and talents of a high order, being in the prime of life, and having just entered on the necessary leisure by which, for the first time, he became enabled to communicate his knowledge of Indian geology to the scientific public, and leaving a widow, with one son, to mourn her irreparable loss, under such circumstances, the sudden and unexpected death of Mr. Oldham has spread intense grief among a wide circle of friends.
