

On this confirmatory evidence I adhere to the view expressed in my paper as to the derived or *remanié* character of the *Conularia* layer, until something more conclusive is brought forward than has been yet produced.

The "Olive group" of the Salt-range which contains this *Conularia* layer, from its circumstances of position and from a few of its fossils, found in a determinable state, was classified by Dr. Waagen and myself as probably of Cretaceous age, before he left the Punjab.

It has been recorded for years that certain Boulder-beds, lying just beneath this *Conularia* layer, and included in the Olive group, contain glaciated blocks, and resemble the Talchir Boulder-beds of the Gondwana series in Peninsular India; also that there are in other parts of the Range, and at different vertical positions in its sections, Boulder-beds of very similar aspect.

I have never found reason to believe that the stratigraphic relations of these Salt-range Boulder-beds supports the idea now advanced, that all occur upon one and the same horizon; and I must say I am still unconvinced of the fact, while admitting that this would be both important and interesting if proved.

KINGSTOWN, 19th March, 1886.

A. B. WYNNE.

THE PALÆONTOGRAPHICAL SOCIETY.

STR,—The fortieth volume of the Memoirs of the Palæontographical Society is now in progress; with the current year the series will have completed the number generally assigned to a period of probation. That it has well endured the trial of time none can deny. The unremunerated labours of many of the leading palæontologists of Britain have enriched their fellow-workers with a series of monographs, sometimes dealing with various genera or classes, sometimes presenting a synoptic view of certain portions of the fauna or flora of an important Geological period. To these workers and to all who have taken an active part in the direction of the Palæontographical Society, geologists, not of Great Britain only, are deeply indebted. Never, we may confidently assert, has so magnificent a series of admirably illustrated monographs been placed in the hands of students or at so low a price. For an annual subscription of one guinea, a bulky volume is received, containing usually about thirty plates and three hundred pages of letterpress. At the present time monographs are in preparation or in progress on Pleistocene Mammals and Old Red Sandstone Fishes, on Jurassic Ammonites and Gasteropods, on Cretaceous Starfishes, on Palæozoic Sponges and on the Flora, both of the Carboniferous and of the Eocene periods. There is evidently no failure either in material or in writers. Moreover, up to the present time the Society has successfully paid its way and has occasionally had a small balance to the good. Death however of late years has unfortunately removed many of the original subscribers, and new members come in more slowly than might have been expected. Accordingly the Secretary announced at the last meeting of the Council that very shortly, unless there was a substantial increase in the number of subscribers, the quantity of matter

included in the annual volume must be reduced, and thus the issue of the monographs delayed. This announcement is not altogether creditable to the geologists of Great Britain. The number of persons interested in the study of this science has not diminished, nay, has become decidedly larger, since the foundation of the Palæontographical Society. Many more than those whose names are on the list of subscribers could well spare the annual guinea needed to secure the efficiency of the work, but it may be feared that there is among them some lack of public spirit. The rapid development of every branch of geology has perhaps contributed to this by rendering its students more of specialists than they formerly were; but even if the number of monographs in the series bearing on this or that man's hobby be small, he is bound, I think, on public grounds to see that this useful work does not languish for want of funds. In almost every career of life there are certain associations to which one feels bound to belong: may I then be forgiven for suggesting that every geologist not absolutely impecunious should consider the Palæontographical Society one of these. True, the number of back volumes is now formidable to those who desire a complete set, but these can be purchased on easier terms by subscribers, and the less wealthy student may console himself for a broken series by the thought that he is doing a good work in securing its continuance.

T. G. BONNEY.

NOTES ON PHENACODUS.

SIR,—I must remark on your late article on *Phenacodus*¹ (GEOLOGICAL MAGAZINE, No. 260), that having selected for publication my earliest conclusions regarding it, issued in 1881, my more mature views are not stated. In order to insure the dissemination of the latter rather than the former, through your journal, I give the following points.

A few months after the publication of the note from which you have principally copied, I published a systematic analysis of the Ungulata in the Proceedings of the American Philosophical Society (1882), in which it was shown that the carpal bones in *Phenacodus* are in linear and not alternating series, and that it therefore cannot be referred to the Perissodactyla. With the Hyracoidea and other forms having similar carpal and tarsal characters it was placed in an order Taxeopoda. This order I regarded and still regard as ancestral to all Ungulata, Amblypoda and Proboscidea included. It thus realized, so far, the prophecy which I made in 1874 (Journal Academy Philad.), that the ancestral type of higher Mammalia would prove to be pentadactyle and bunodont. The history of this question is set forth in my illustrated account of the Condylarthra published in the "American Naturalist" for 1884.

A further study of the extinct Taxeopoda has shown me that although furnished with hoof-like unequal phalanges, they are not very different from the Lemurs of the primitive type known as the Adapidæ. I now believe that the order Taxeopoda must include

¹ See February No. pp. 49–52, Pl. II.