this however is the effect produced when no reference to the Society is made when the pagination is altered, and the type partially reset. All parties would be benefited if the Society would prohibit such unnecessary and confusing changes. But there is no inducement to a Society to consult the wishes of those who break up odd volumes of their Proceedings, while a careful worker or a good bookseller will take care to copy the information before the original covers are destroyed. Should public-spirit ever lead a Society to move in this matter in the direction of convenience to specialists, then the suggestions of Mr. Buckman would be admirable. One might further suggest that a fresh paper should always begin on a fresh leaf; the extra expense would be small, the convenience to bookbreakers great. In some German and American magazines each paper begins a fresh "Section": so excellent an arrangement might well be adopted by our leading Societies.

As to authors, they would further benefit their readers by attention to two points. First, by giving definite and descriptive instead of vague and unsatisfying titles to their papers. Secondly, by publishing some address at which letters or papers would find them: one often wishes to communicate with a fellow-worker in one's special field, but is deterred by the absence of any information as to his whereabouts, and one often hesitates to make the hardworked Editor a general postman. The chief gainers by this would, how-

ever, be the authors themselves.

In referring to a paper it is very advisable to give its title, as well as that of the publication in which it appeared: for the possessors of a separate copy are often unable to recognize it when merely referred to by a string of letters and figures, especially when the proper information has not been given with the authors' copies.

BRIT. MUS. (NAT. HIST.), S.W.

F. A. BATHER.

## THE OLENELLUS ZONE IN N. W. EUROPE.

SIR,—It has been pointed out to me that the original discovery of the Olenellus zone on the European side of the Atlantic was not made by the late Dr. Linnarsson, as indicated in my recent "Note on the Discovery of the Olenellus Fauna in Britain," but was the work of my friend Dr. A. G. Nathorst, of Stockholm. In the year 1868 Dr. Nathorst detected and described a new and distinct horizon below the "Paradoxides Beds" at Andrarum (Scania), containing annelide trails and examples of Lingula. In the following year he discovered in the same horizon a Paradoxides-like form, together with examples of Ellipsocephalus, and a species of Arionellus. Dr. Torell, to whom he communicated this discovery, gave the Paradoxides-form the provisional title of "Paradoxides Wahlenbergi," and named the containing beds the "Paradoxides Wahlenbergi strata;" but he did not describe or figure the new form.

Linnarsson made his own discovery of Olenellus (Paradoxides)

<sup>&</sup>lt;sup>1</sup> GEOL. MAG., Nov. 1888, p. 484.

<sup>&</sup>lt;sup>2</sup> Öfvers. Kongl. Vetens. Akad. Förhandlinger, Stockholm, 1869, p. 64.

<sup>&</sup>lt;sup>3</sup> Torell, Petrefacta suecana Formationis Cambrica, 1869-70.

Kjerulfi in Norway in 1870. He published an account of this discovery in 1871, naming the characteristic Trilobite Paradoxides Kjerulfi, and figuring it. The identity of this species with the previously named Paradoxides Wahlenbergi of Dr. Torell was distinctly acknowledged by Linnarsson in the year 1876.2 Thus, while it must be admitted that Linnarsson's specific title of Paradoxides (Olenellus) Kjerulfi must be retained as that of the first Trilobite figured and described from the Olenellus Zone in Europe; yet the actual credit of the original detection of this Olenellus zone belongs unquestionably to Dr. Nathorst, who made known its stratigraphical position in Sweden at least two years before Linnarsson detected and described the species of the Olenellus zone from Norway.

CHAS. LAPWORTH.

## A WOODEN DINOSAUR.3

Sir,—Frequent protests have been entered against the hastiness with which new species or even genera are founded upon frag-But all previous blunders in this line are mentary materials. thrown into the shade by the recent restoration of a new genus of Dinosaurs, Aachenosaurus, from two fragments which, on microscopical examination, prove to be nothing but masses of silicified wood. The contributions to this subject, quoted below, not being easily procurable, we think the readers of this Journal may be interested by the following analysis.

In two notes published in Belgium, Abbé G. Smets describes a fossil obtained by him from the sands of Aix-la-Chapelle, in a quarry at Moresnet, Belgium, between Verviers and Aix-la-Chapelle, sands in which, according to the most competent local authorities, no vertebrate remains have as yet come to light. This fossil has been described as a portion of the right dentary bone, "to which joins another fragment, very probably of the coronoid," of a new Dinosaur of the family Hadrosauridæ. The author declared he had tested the bony nature of this fossil by means of the lens and the microscope, without, however, making any sections; while some incrustations were identified by him as teeth. A plate, so rudely executed as to be utterly worthless, accompanies his second paper, which concludes with an attempt at a restoration of this marvellous Dinosaur, which is supposed to have been biped, to have attained a length of 4 to 5 metres, to have been provided with a spatulate mandible, to have fed on succulent plants, while its hide was probably furnished with an armour of dermal spines.

- M. Dollo having obtained leave to examine and make micro-
- <sup>1</sup> Linnarsson, Öfvers. af Kongl. Vetens. Akad. Förhand. 1871, p. 784.
- <sup>2</sup> Ibid, Brachiopoda of Swedish Paradoxides beds. Bihang. Kong. Swensk. Vet. Akad. Handlingar. 1876, p. 5.
  - SMETS. Un Reptile nouveau des Sables d'Aix-la-Chapelle. (Louvain), vi. 1887, pp. 133, et seq.
  - G. SMETS. Aachenosaurus multidens, Reptile fossile des Sables d'Aix-la-Chapelle (Mémoire présenté au congrès des savants catholiques à Paris et lu dans la séance du 9 avril, 1888). Hasselt, 1888, 8vo. 23 pp., 1 pl.

    I. Dollo. Aachenosaurus multidens, Bull. Soc. Belge Géol. ii. 1888, p. 300.

    G. Smets. Un mot de réponse à M. L. Dollo. Hasselt, 1889, 8vo. 13 pp.