definite. In the November Number of the GEOLOGICAL MAGAZINE one cannot help being struck by the slip-shod system of reference used by two of the writers; *e.g.* "Tsch. Min. Mitt." is absolutely meaningless except to those who know the book; "Bull. Imp. Mosc." may refer to any Moscow society as no definite one is quoted.

Another source of inconvenience is seen in the reference to authors:—Prof. Judd, Prof. Bonney, Mr. Teall, etc., for example, how much more definite would it be to refer to these and any writer by initials as J. W. Judd, T. G. Bonney, J. J. H. Teall? We find much fault with our French and German colleagues for the vexatious system of printing surnames only, thus causing endless misquotation and confusion in library cataloguing, and yet ourselves permit it in our own scientific publications. The perfection of quotation, on the other hand, is seen on pp. 496–501 of the same number of the GEOLOGICAL MAGAZINE, and proves unmistakeably that the writer is familiar with the books he refers to. C. DAVIES SHERBORN.

## CONE-IN-CONE STRUCTURE IN A COAL-SEAM.

SIR,—What is commonly known as "cone-in-cone coal" or "crystallized coal" has, I presume, nothing to do with true cone-in-cone structure here referred to. Through a friend of the writer's, a small concretionary mass of iron pyrites taken from the "Roaster" coal-seam near Ashby-de-la-Zouch, Leicestershire, has come into his hands for examination. Externally the specimen has very much the aspect of a roughly rounded pebble, and is nearly black in colour, measuring $1\frac{1}{2}$ inch in diameter, and about $\frac{3}{4}$ inch thick vertically. Having had the stone cut horizontally through the middle, cone-in-cone structure showed itself in places around the outside; in fact, the specimen appears to be nearly wholly made up of the same structure, though only at all well developed near the surface.

Whether the theory put forward by Mr. John Young, F.G.S., of Glasgow, and published in this MAGAZINE, can or cannot account for the cone structure here seen, I leave others to judge; merely remarking that in my opinion some other explanation of the phenomenon must be found.[1] W. S. GRESLEY, F.G.S.

# OBITUARY

## PROFESSOR THEODOR KJERULF.

BORN MARCH 30TH, 1825; DIED OCTOBER 25TH, 1888.

WE regret to record the death, in Christiania, his native city, of Prof. Theodor Kjerulf, after a lingering illness. He was brought up and educated in Christiania, and after the completion of his University studies, spent some time in Iceland; he then went to Germany, where he studied in the laboratory of Bunsen, and at the same time pursued some geological investigations in the Harz and Tyrol. Returning to his native city, he commenced the study of the

[1] See W. S. Gresley, Note on "Cone-in-Cone" Structure, GEOL. MAG. 1887, p. 17. John Young on "Cone-in-Cone" Structure, GEOL. MAG. 1885, p. 283. Prof. J. S. Newberry on "Cone-in-Cone" Structure, GEOL. MAG. 1885, p. 559. John Young's reply to Prof. Newberry, GEOL. MAG. 1886, p. 139.

marvellous geological structure of the Christiania basin, of which the results appeared in the work entitled, "Das Christiania-Silurbecken, chemisch-geognostisch Untersucht" (1855). In 1858, Kjerulf became Professor of Geology in the University of Christiania, and shortly afterwards he initiated and organized the Geological Survey of Norway, to which he was appointed Director, and he continued to hold this post as well as the University Professorship till his death.

Dr. Kjerulf's most important work in connection with the Geological Survey, entitled "Udsigt over det sydlige Norges Geologi," appeared in 1879. In this the results of 20 years' observations of the Survey in the Southern part of Norway were summarized. The work was accompanied by an atlas of 39 plates and a geological map, and it is a mine of facts relating to the rock-formations of this country—from the Archæan gneiss to the Post-Glacial clays—their history, the fossils contained in them, the age and character of the eruptive rocks, etc. Dr. Kjerulf was also the author of numerous other important papers, mainly on the geology of Norway, which appeared at intervals between 1855–1885. Amongst these may be mentioned, "Ueber die Geologie des Südlichen Norwegens, mit Beiträgen von Tellef Dahll, 1857;" "Veiviser ved geologiske excursioner i Christiania omegn, 1865;" and "Ueber die Terrassen in Norwegen und deren Bedeutung für eine Zeitberechnung bis zur Eiszeit zurück," of which an English translation was made by Marshall Hall (GEOL. MAG. 1871, pp. 74–76). Dr. Kjerulf, in his "Meraker profilet," and in several other Memoirs, has fully described the very interesting series of older Palæozoic and Archæan rocks in the district around Trondhjem, Roraas, etc. He was deeply interested in the glacial phenomena, so strikingly shown in Southern Norway, and in addition to several papers of his own on this subject, was associated with Dr. M. Sars in writing the "Iagttagelser over den Postpliocene eller Glaciale formation i en del af de sydlige Norge, 1860."

Dr. Kjerulf's services to Geological Science were known and appreciated far beyond his native land. He was chosen a Foreign Correspondent of the Geological Society of London in 1864, and Foreign Member in 1875.

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## THE LATE W. H. BAILY, F.L.S., F.G.S.

SIR,—In the Obituary of Mr. Baily, which appeared in the GEOLOGICAL MAGAZINE for September last, p. 431, the List of his Works was omitted. I now send it for favour of insertion.—H.B.W.

1855.—1. Description of some Cretaceous Fossils from South Africa, collected by Captain Garden, Quart. Journ. Geol. Soc. vol. xi. pp. 454-465.
2. Description of Fossil Invertebrata from the Crimea, *op. cit.* vol. xiv. pp. 133-163.
3. On a Crustacean from the Coal-measures, with some remarks on the genus *Limulus*, Journ. Dublin Geol. Soc. vol. viii. pp. 89-91; Nat. Hist. Rev. vol. v. pp. 168-171.
4. Notice of Upper Silurian Fossils from Ballycar South, county of Clare, Journ. Dublin Geol. Soc. vol. viii. pp. 109, 110; Nat. Hist. Rev. vol. vi. pp. 72, 73.
5. On Carboniferous Limestone Fossils from county Limerick, Rep. Brit. Assoc. for 1857, Sections, pp. 62, 63.
6. On Fossil Localities near Drogheda, Journ. Dublin Geol. Soc. vol. viii. pp. 120-125.

1859.—7. On the occurrence of detached plates of the shell of a new species of *Chiton* in the Carboniferous Limestone at Lisbane, county of Limerick, Journ. Dublin Geol. Soc. vol. viii. pp. 167-171; Nat. Hist. Rev. vol. vi. pp. 330-334.