

Unfortunately, I have been unable so far to investigate the beds immediately below the mottled ones at Silverdale to see if they agree with those in Derbyshire. Necessarily I am unable to give the actual thickness of the mottled beds. With reference to the contained foraminifera of these beds, I am hoping to make further investigations on them before publishing any note on the same. Some of the genera represented are *Nodosaria* sp. (*radicula* ?), *Endothyra* spp. (abundant forms, *bowmani* ?, *ammonoides* ?), *Textularia* sp., *Trochammina* sp.

### NOTICES OF MEMOIRS.

THE PRESIDENT OF THE ROYAL SOCIETY ON THE ACQUISITION AND ADVANCEMENT OF KNOWLEDGE.

THE following excerpts are from the Address delivered by Lord Rayleigh at the Anniversary Meeting of the Royal Society on November 30th, 1907 (published in Proc. Roy. Soc., Series B, vol. lxxx, pp. 77, 78, 1908).

#### *How to keep pace with the Progress of Science.*

“Enough has probably been said to illustrate my contention that much loss has ensued from ignorance and neglect of work already done. But is there any remedy? I think there ought to be. In all principal countries of the world we have now a body of men professionally connected with science in its various departments. No doubt the attention of many of these is so engrossed by teaching that it would be hard to expect much more from them, though we must remember that teaching itself takes on a new life when touched with the spirit of original enquiry. But in the older universities, at any rate, the advancement of science is one of the first duties of Professors. Actual additions to knowledge occupy here the first place. But there must be many who, from advancing years or for other reasons, find themselves unable to do much more work of this kind. It is these I would exhort that they may fulfil their function in another way. If each man would mark out for himself a field—it need not be more than a small one—and make it his business to be thoroughly conversant with all things new and old that fall within it, the danger of which I have spoken would be largely obviated. A short paper, a letter to a scientific newspaper, or even conversation with friends and pupils, would rescue from oblivion writings that had been temporarily overlooked, thereby advancing knowledge generally and sometimes saving from discouragement an unknown worker capable of further achievements. Another service such experts might render would be to furnish advice to younger men desirous of pursuing their special subject.”

#### *The Preparation of Scientific Papers.*

“Another remedy for the confusion into which scientific literature is liable to fall may lie in the direction of restricting the amount of unessential detail that is sometimes prevalent in the publication of scientific results. In comparing the outputs of the present time, and of, say, thirty years ago, the most striking feature that appears is doubtless the increase of bulk in recent years, coming especially from

young workers stimulated by the healthy encouragement of direct research as a part of scientific education. But I think it may also be observed, and not alone in the case of such early dissertations, that there is, on the whole, less care taken for the concise presentation of results, and that the main principles are often submerged under a flood of experimental detail. When the author himself has not taken the trouble to digest his material or to prepare it properly for the press, the reader may be tempted to judge of the care taken in the work from the pains taken in its presentation. The tendency in some subjects to submit for immediate publication the undigested contents of note-books is one that we hear much of at the present time. It is a matter that is difficult for publishing bodies to deal with, except by simple refusal of imperfectly prepared material, with its danger of giving offence to authors of recognized standing, but it seems not unlikely that at present public scientific opinion would endorse such a course of action. A related difficulty and one that contributes to this trouble, is the tendency, noticeable in some public scientific organizations, to imagine that their activity is estimated by the number of pages of printed matter they can produce in the year. Probably no consideration is further removed than this from the minds of the educated public, whose judgment is alone worth considering."

#### REVIEWS.

- I. — GEOLOGICAL SURVEY OF ENGLAND AND WALES. SHEET 125 :  
DERBY. Price 1s. 6d.  
MEMOIRS OF THE GEOLOGICAL SURVEY OF ENGLAND AND WALES.  
EXPLANATION OF SHEET 125 : THE GEOLOGY OF THE SOUTHERN  
PART OF THE DERBYSHIRE AND NOTTINGHAMSHIRE COALFIELD.  
pp. 199. Price 3s.

ON the scale of 1 inch to the mile only one geologically coloured map of this area is published which shows details of both solid and drift geology. We are told in the preface, "the distribution of the drift is not sufficiently great to obscure the general structure of the district."

The map is one of the new colour-printed series, and is full of detail and a great advance on the last edition in every way. Very elaborate legends are given in the margins, and we note a most useful novelty on the lower margin, i.e., an admirable coloured transverse section from west to east across the most important part of the map from a view of structure. Everyone concerned in the production of the map is to be most highly congratulated on its wealth of detail and general accuracy.

The memoir is written by Messrs. Gibson, Pocock, Wedd, and Sherlock, with notes by Mr. Fox Strangways, and the striking note of the volume is the application of palæontological data throughout the parts dealing with the Carboniferous rocks.

The Carboniferous Limestone in the area consists of the portion of the North Staffordshire–Derbyshire anticlinal at Wirksworth and the Crich inlier, which are shown to belong to the *Lonsdaleia* subzone of the *Dibunophyllum* zone. The limestones are succeeded by the