

## SHORTER ARTICLES.

THE GEOLOGIC DISTRIBUTION OF POLLICIPES  
AND SCALPELLUM.

In a valuable memoir on the 'Hudson River beds near Albany and their taxonomic equivalents,' published as Bulletin of the New York State Museum, No. 42, April, 1901, Dr. Rudolph Ruedemann describes a number of variously shaped valves found in the Upper and Lower Utica Shale of Green Island and Mechanicsville, N. Y. (p. 578, pl. ii.). These he believes to 'find their homologues in parts of the capitula of the pedunculate cirriped genera *Scalpellum* and *Pollicipes*, notably of the latter. On this account the various valves have been united under the caption *Pollicipes siluricus*, in full consciousness of the enormous gap existing between the appearance of this Lower Siluric type and the next Upper Triassic (Rhaetic) representatives of these genera.' Confirmation of Dr. Ruedemann's ascription may be derived from the fact that 'the enormous gap' does not exist. Early in 1892 Dr. C. W. S. Aurivillius\* published the descriptions of *Pollicipes signatus* from bed *e* (= Lower Ludlow), *P. validus* from bed *c* (= Wenlock Shale), *Scalpellum sulcatum*, *S. varium*, *S. granulatum*, *S. strobiloides*, *S. procerum*, *S. cylindricum*, and *S. fragile*, all from bed *c*, of the island of Gotland. The species of *Scalpellum* are founded on peduncles, *Pollicipes validus* is represented by a broken scutum only, but *P. signatus* is based on an almost perfect specimen. The occurrence of more than one species of both these genera in the Silurian lends significance to the diversity of form presented by Dr. Ruedemann's specimens. The ornament on his Fig. 18 most nearly resembles that of *P. signatus*, while the rostrum, Fig. 22, is also not unlike that species. Figures 16, 17, 19 may belong to more than one other species, while 24 (with which presumably 25 is to be associated) may belong to a *Scalpellum*, as Dr. Ruedemann seems to hint. In the circumstances it is specially regrettable that Dr. Ruedemann has selected no one of these specimens as the holotype of *Pollicipes siluricus*. If he does not do so soon, confusion is pretty certain to arise.

\* Bihang Sveska Vet.-Akad. Handl., XVIII., Afd. IV., No. 3.

Figures 13, 14, 15, are referred to *Turrilepas* (?) *filosus* n. sp. A recent examination of the plates of that genus suggests to me that the note of interrogation is fully justified.

Aurivillius considered that *Pollicipes signatus* showed a closer approach to the Balanidae than any other of the Lepadidae, but he too, in ignorance of the Devonian *Protobalanus* Whitf., discoursed needlessly about the gap in the distribution. Now that the range of the Lepadidae has been extended to the Ordovician, we may look confidently for further discoveries. We may also hope that the time has now come when even the text-books may awake to the fact that the genera *Pollicipes* and *Scalpellum* existed in Palaeozoic times. It was pointed out in your own columns a year ago (Vol. XI., p. 984), and in other reviews before that. But perhaps the reviewer and the author reviewed are the only readers of a review.

My apology for insisting on this is not merely that both Dr. Aurivillius and Professor Lindström, who supplied him with the material, have unhappily passed away, but that I had the good fortune to be the discoverer of the beautiful specimen of *Pollicipes signatus*, when developing a specimen of *Gissocrinus verrucosus* from the *Pterygotus* bed of Wisby Waterfall in May, 1891. The very fragile specimen was subsequently licked into shape (no metaphor is intended) by Mr. G. Liljevall, to whom the excellent drawing of it is due. F. A. BATHER.

LONDON, June 5, 1901.

## QUOTATIONS.

THE SALARIES OF SCIENTIFIC MEN IN THE  
EMPLOYMENT OF THE GOVERNMENT.

WITHIN the past few years our Government has come to fully recognize the wisdom of utilizing in every way possible the results of modern science, particularly in the conduct of its internal affairs. The amount appropriated by the late Congress for scientific purposes was somewhere in the neighborhood of \$9,000,000—a larger sum than is devoted by any other Government to like purposes. Yet the liberal and enlightened policy evinced by legislation of this sort has been accompanied by a short-sightedness—not to use a less complimentary term—hard to account for in a legislative body made up largely

of business men. The head of the Division of Forestry, for example, with \$187,520 at his disposal, receives a salary of \$2,500. If a thoroughly competent man has been secured for this important position at this ridiculously low figure the Government is, indeed, to be congratulated. As soon, however, as he shall have established a reputation he will very probably be 'lifted' by some more generous Government. This actually happened last year in the case of an officer of the Department of Agriculture who received \$1,800 a year. He now holds a like position in Japan at a salary of \$7,000.

If in spite of this Congressional niggardliness many very capable men be now engaged in governmental scientific work, this result has been brought about more by good luck than by good management, and the broad truth is not thereby affected that in every business, whether private or public, the higher salary appeals to the higher order of talent, with its consequence of greater efficiency in the work done. At the late session of Congress an unsuccessful effort was made to rectify this mistaken policy. It is to be hoped that another session of Congress will not pass without a further and a successful effort to readjust the salaries of all government scientists, and to fix them at figures which will at least bear a comparison with those paid for similar work by many private firms and corporations.—*Philadelphia Record*.

Two important government positions at Washington are going begging because there are no applicants for them. The reason is simple:—they can be filled only by men of technical skill and scientific training, and the salaries attached to them are \$1,200 and \$1,400 a year, respectively. The politicians who fixed these low salaries for high-class work knew that the incumbents would be worthless for political manœuvring, and hence did not care to 'waste' much money on them. It is a rule that holds good all through the scientific side of government work.—*Philadelphia Ledger*.

#### THE NATIONAL UNIVERSITY PROJECT.

THE action taken at Detroit by the National Educational Association on the subject of the

projected national university leaves that matter in a peculiar but not a necessarily disappointing status. A committee of the Association had investigated the general project of utilizing, for higher university education, the facilities afforded by the governmental establishment and appurtenances at this capital. It reported in favor of the plan recently proposed by the George Washington Memorial Association and the Washington Academy of Sciences for the creation of an establishment to be known as the Washington Memorial Institution, to direct the energies of students desiring to avail themselves of the educational facilities here, without endowing a specific educational organization. The association declined to adopt this view and passed resolutions declaring its unwillingness to abandon its favorite project of establishing a distinct national university in this city.

Thus it appears that the issue at Detroit is between two plans to accomplish the same purpose. There is no division on the score of the desirability of utilizing the exceptional educational advantages of the capital city. All the educators agree that here lie chances for higher education which are not to be found elsewhere and which could not be duplicated with any expenditure. The majority of the delegates to the convention believe, as have many leaders of pedagogic thought in the past, and as did George Washington in the beginning, that the best way to make use of this plant is by direct means to create a university which shall stand for the national progress and prestige. Others contend that this is impracticable, and that the most promising method is to respect the existing educational establishments as sufficient in themselves and to create a supplement for the special use of those who desire a post-graduate course afforded only by the governmental facilities here.

The capital desires nothing more than that the fullest possible use be made of its exceptional opportunities for education. It hopes to see George Washington's ideal realized in some form as early as possible. It will aid to the extent of its ability any promising project to this end. It will safeguard the interests of any educational creation here, whatever its form or name. It