

NOTE ON THE OHIO PLACODERM

DINICHTHYS TERRELLI

IN a recent paper¹ Professor Branson describes and figures a specimen of the Devonian "fish" *Dinichthys terrelli*, in the Oberlin collection—a specimen evidently of great value, for it presents for examination many parts, largely in their natural relations, of one and the same individual. Similar specimens, as one recalls (not without chagrin) have earlier been found, and possibly even better ones, but their parts have never been kept together: for the zeal of pioneer collectors led them to separate all possible plates from the matrix, and caused the destruction of smaller undetachable elements, leading, naturally, to a less complete understanding of the anatomy of the "fish." In the present case Dr. Branson has been able to add interesting notes to our knowledge of this classic fossil; he has shown especially that the "clavicular" element of this species is smaller in its proportions than has hitherto been described, and he notes, very justly in this regard, that the restoration of the huge head of *D. terrelli* exhibited in the American Museum of Natural History, "makes the animal much thicker dorsal-ventrally than it should be." His comments, however, are less convincing which concern the actual relations of this plate. We have known that its upper part fitted between the antero-dorso-lateral and the side of the cranium, we have not known, though, just how the plate was placed at the side of and below the suborbital, and the present specimen, in spite of its many virtues, does not appear to clear up this point. Dr. Branson's conclusion that "the inner arm of the clavicular must have come inside the clavicular and prevented the mandible from resting against it" is not quite evident, since it is based upon a "left clavicular (which) lies on the right side, on top of the right clavicular which has lost its lower end." For, unhappily, it is the lower end of this plate which concerns us, and we can not, therefore, feel sure that a plate which has become detached

and shifted, will make clear its real relations to the plates near which it happens to lie. We may note in passing that several elements are present in the Oberlin specimen which, as far as we can judge from the picture, appear to have been earlier described, but never relatively in their natural positions; one of these is here shown close to the outer end of the interlateral plate, near a point where another plate should occur, by analogy with *Coccosteus*, but where no element is definitely known.

BASHFORD DEAN

THE NUMBER OF STUDENTS TO A TEACHER IN
STATE COLLEGES AND UNIVERSITIES

TO THE EDITOR OF SCIENCE: In the table published in your issue of October 27 the University of Minnesota was listed as having one teacher to every twenty-six students. The situation in this institution is by no means what it should be in this regard, but the ratio indicated above is so wide of the mark that I immediately looked up the figures upon which the estimate was based. A copy of the report to the Commissioner of Education is on file here. An examination of the report shows that in the total number of students all the students in the schools of agriculture, which are schools of secondary grade, were included. On the other hand the instructors in these schools were not included in the total of teachers. When this correction is made the ratio is changed from 1 to 26 to 1 to 16. As an average for all departments of the university this is probably approximately correct.

It seems desirable that some system of uniform and comparable statistics should be worked out. For example, there seems to be no definite understanding as to what constitutes a "teacher." Is a man giving himself wholly to research in a laboratory or in an observatory to be reckoned as a teacher? Is a clinical professor who gives part of his time to instruction in a school of medicine to be counted as a whole teacher, or such fraction of a teacher as is determined by the proportion of normal instruction which he offers?

The "students" need to be more carefully defined. Is the unit the individual without

¹ University of Missouri, Bulletin, Vol. 2, No. 2, October, 1911.