Article II.—NOTICE OF A SPECIES OF ACIDASPIS FROM A BOULDER OF MARCELLUS SHALE, FOUND IN DRIFT, AT WEST BLOOMFIELD, NEW JERSEY.

By C. H. HITCHCOCK.

PLATE VI.

At the Troy meeting of the American Association for the Advancement of Science I offered a paper entitled 'Description of a new Trilobite from New Jersey,' which was not printed in the 'Proceedings' (Vol. XIX) but the title was given on page 362 of that volume.

The further description and illustration of the species has been deferred until the present time, owing to unavoidable circumstances, but I now present as full a description as its condition will permit, together with photographic illustrations, twice natural size.

The specimen lies on the surface of a limestone boulder of quadrangular form found in West Bloomfield, New Jersey, by the late Rev. E. Seymour, which was identified by Mr. R. P. Whitfield, when shown him at the meeting in Troy, as belonging to the Marcellus shale, from the occurrence of a specimen of *Leiorhynchus limitaris* on the same surface with the trilobite, and fragments of a second specimen of the same species of trilobite. Professor James Hall also referred this specimen to the Marcellus shale, and said it was an undescribed species.

Acidaspis whitfieldi, sp. nov.

PLATE VI.

Entire carapace 2.3 centimeters in length; upper part of thoracic axis, 4 mm. wide, the axis marked by nine thoracic rings or segments; head shield 8 mm. long, by 13 mm. wide, exclusive of the cheek spines fringing the sides of the shield.

Glabella very tuberculose, but its crushed condition renders it impossible of description more than that the surface has been covered by small pustules, especially on the front margin and on the cheek borders.

Movable cheeks semilunate, armed on the outer middle margin with

slender spines which arch gently forward, decreasing in length anteriorly and finally represented by nodes on the front margin. No spine is visible at the posterior genal angle, but the border appears to round inward to the posterior border of the head shield.

Thorax composed of nine segments, each of which terminate on the margins of the body in a long backwardly curved spine, those of the fifth being much the longest; those of the other joints shortening gradually behind and in front of the fifth. Several of these spines are set on their lateral faces with many smaller subspines; and the anterior member of each segment of at least the four posterior joints or rings gives origin, at its extremity, to an additional organ which is closely set with lateral spines.

Pygidium very small, exceedingly short, axial lobe narrow but obtuse, the extremity bearing two minute sharp tubercles, marked by only a single axial ring. Lateral lobes flat, marked by a single rib which crosses them at right angles to the axial lobe and terminates on the margin in a single large, slightly curved spine, the largest on the pygidial plate. In front of this spine, on each side, there are three shorter spines, and ten or perhaps eleven still smaller spines on the posterior margin between the longer ones terminating the larger rib which crossed the plate from the axial lobe.

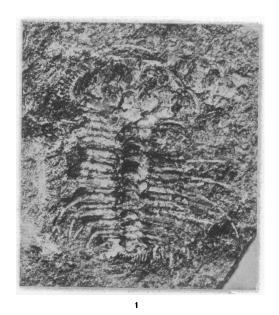
The surface of the specimen bears evidence of having been roughly pustulose with rows of nodes along all the principal parts.

Locality and Geological Position.—Near West Bloomfield, New Jersey, in drift.

The source of this boulder is probably the range of Hamilton rocks running N. E. by S. W. from Greenwood Lake, N. J.

There is no species of the genus Acidaspis in American rocks that approaches very nearly to this one. The nearest is A. tuberculata Conrad, from the Lower Helderberg Group in Albany Co., N. Y., illustrated in Vol. III, Pal. N. Y., Plate 79. A. mira Barrande, figured on Plate 39, figs. 1-11, of the Système Silurien de la Bohème, bears a rather close resemblance to this, being of the same type, but it is rather more complicated in the distribution of the spines.

BULLETIN A. M. N. II.





ACIDASPIS WHITFIELDI HITCHCOCK.