[FROM THE AMERICAN JOURN. OF SCIENCE AND ARTS, Vol. XLI, MARCH, 1866.]

## CEPHALIZATION. 0 N

No. IV.

EXPLANATIONS DRAWN OUT BY THE STATEMENTS OF AN OBJECTOR.

## BY JAMES D. DANA.

In a paper published in the third volume of the Proceedings of the Entomological Society of Philadelphia, Mr. B. D. Walsh discusses the subject of the classification of Insects as based on the principle of cephalization, and criticises, not my views, but his own misconceptions of them.2 As others may have fallen into similar errors, not with standing the long explanations which have been presented, I briefly notice here some of the points in his paper.

1. Our objector says (p. 238) that "as originally propounded by him [Mr. Dana] in Crustacea, cephalization consists in 'the transfer of the anterior members of the thorax to the cephalic series' (Sill. Jour., vol. xxxv, p. 66), or in other words in legs being

converted into head-organs."

In the first place, our expositor, while claiming to cite what was "originally propounded" by me, had not seen my original memoir published in 1852' in the Report on Crustacea, and in 1856 in this Journal, and refers to no paper earlier than that of 1863.

In the second place, he finds in the paper which he does cite what neither that paper, nor any other that I have written, con-I have nowhere said that cephalization consists in such a

<sup>2</sup> For number I, of this series, see this Journal, xxxvi, 321, Nov. 1863; number

II, xxxvii, 10, Jan. 1864; number III, xxxvii, 157, March, 1864.

On certain Entomological speculations of the New England School of Naturalists, by B. D. Walsh, M.A., Proc. Entomolog. Soc., iii, 207. The writers of the "New England School" here particularly criticised are Prof. Agassiz and Prof. Dana; and, incidentally, A. S. Packard, Jr., some passages of a paper of his having been cited by the latter. Not 1855, as stated in this Journal, xxxvi, 821.