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ON THE HYPOSTOMA OF ASAPHUS CANADENSIS, AND ON A THIRD NEW SPECIES OF ASAPHUS FROM CANADIAN ROCKS.

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I. ASAPHUS CANADENSIS.

In our recent description of this new species (Canadian Journal, vol. 3, p. 230; and Annals of Natural History, July, 1858), we were unable to give any definite information respecting the form of the hypostoma. Since the publication of this description, however, Mr. J. F. Smith, of Toronto, has found a well preserved hypostoma (evidently belonging to the species in question), in the Utica slate of Whitby, in Canada West—one of the principal localities of the species. By the kindness of Mr. Smith, whose zeal in the service of Canadian palæontology we have already had occasion to acknowledge, we are enabled to lay before our readers a figuré of this hypostoma, somewhat enlarged. In its outline, the hypostoma of *Asaphus Canadensis*, as in all the recognised species of the genus *Asaphus*, exhibits the well-known fork or “horse-shoe” at its lower or buccal extremity. The upper margin or so-called “base” is partially obscured, and the wings, or ascending processes by which the hypos-