

- B. Body not very oblique.
 B. Surface marked by concentric striae which curve backward between the radii.
 $\beta 1$. Strong radii, usually without interstitial additions. *A. boydi*.
 $\beta 2$. Slender radii with interstitial additions.
 $b 1$. Body broadly ovate; oblique, at an angle of about 55° . *A. theta*.
 $b 2$. Body broad and short ovate; oblique, at an angle of about 45° . *A. eta*.
 B'. Surface not marked by concentric striae which curve backward between the radii.
 $\beta' 1$. Strong elevated rays and wider interspaces. *A. epsilon*.
 $\beta' 2$. Radii, fine.
 $b' 1$. Body at an angle of about 60° with the hinge. *A. delta*.
 $b' 2$. Body at an angle of about 45° with the hinge.
 $b' 1$. Shell small, body subrhomboidal, subovate. *A. perstrialis*.
 $b' 2$. Shell of medium size, rhomboidal, body broadly ovate. *A. iota*.
 C. Body very oblique.
 Radii filiform, interrupted and undulating. *A. kappa*.

Crustacea.

Phacops rana Hall.

This species is abundant at a single locality in the Ithaca group, station 8-4.

Mesothyra oceani Hall.

This is a rare species in the Portage group.

Vertebrata.

Pisces.

Dipterus ithacensis H. S. W.

Lower Ithaca group and Ithaca shale.—H. S. Williams.