

the American species of the genus *Hyolithes* are distributed as follows, those from above the Potsdam sandstone according to their respective authors and those of the Cambrian in part by the writer:

<i>Hyolithes</i> (Theca) <i>aculeatus</i> Hall.	{ Lower Carboniferous.
<i>carbonaria</i> Walcott.	
<i>aclis</i> Hall.	{ Hamilton Formation.
<i>triliratus</i> Hall.	
<i>singulus</i> Hall.	
<i>striatus</i> Hall.	
<i>ligea</i> Hall.	{ Upper Helderberg Formation.
<i>principalis</i> Hall.	
<i>centennialis</i> Barrett.	{ Lower Helderberg Formation.
<i>parviusculus</i> Hall.	
<i>Vanuxemi</i> Walcott.	{ Hudson River Formation.
<i>gibbosus</i> H. & W.	
<i>primordialis</i> Hall, (= <i>gregarius</i> .)	{ Lower Silurian (Ordovician).
<i>Americanus</i> Billings	
<i>Billingsi</i> Walcott.	{ Upper Cambrian.
<i>communis</i> Billings.	
<i>var. Emmonsii</i> Ford.	{ Potsdam Sandstone.
<i>impar</i> Ford.	
<i>princeps</i> Billings.	{ Middle Cambrian.
<i>Shaleri</i> Walcott.	
<i>excellens</i> Billings.	{ Georgia Formation.
(<i>Camarothea</i>) <i>Daniana</i> Matthew.	
<i>gracilis</i> Matthew.	{ Lower Cambrian.
<i>Micmac</i> Matthew.	
(<i>Diplothea</i>) <i>Acadica</i> Hartt.	{ Braintree Argillites.
<i>var. obtusa</i> Matthew.	
<i>var. crassa</i> Matthew.	{ Lower Cambrian.
<i>var. sericea</i> Matthew.	
<i>Hyattiana</i> Matthew.	{ Newfoundland.
<i>var. caudata</i> Matthew.	

In the description of the species the flattened side, with the projecting margin, is considered the dorsal side and the rounded side the ventral. This is the reverse of that used by Mr. Billings, Professor Hall, and heretofore by the writer; but a comparison with the shells of the recent genus *Cleodora* shows the projecting side to be the dorsal. This view was held by Morris and Sowerby in the description of the genus *Theca*, and by Salter in the description of species (Mem. Geol. Surv. Great Brit., vol. iii).

HYOLITHES AMERICANUS Billings.

Plate xiii, figs. 6, 6a-f.

Theca ? *triangularis* Hall, 1847. Pal. N. Y., vol. i, p. 313, pl. lxxxvii, figs. 1a-d.

Theca triangularis Ford, 1871. Amer. Jour. Sci., 3d ser., vol. ii, p. 33.

Hyolithes Americanus Billings, 1872. Can. Nat., 2d ser., vol. vi, p. 215, figs. 2a, b, p. 213; Amer. Jour. Sci., 3d ser., vol. iii, p. 353, figs. 2a, b.

Original description (Hall).—"Bodies of a slender pyramidal form, flat behind and rounded at the larger extremity, angular in front; small