

The Bull Onthophagus: the Nymph

appear altogether when the adult bursts its wrapping. My near neighbourhood numbers a dozen species of Onthophagi; the world contains some hundreds. All, natives and foreigners, have the same general structure; all most probably possess the dorsal appendage at an early age; and none of them, in spite of the variety of climate, torrid in one place, temperate in another, has succeeded in hardening it into a permanent horn.

Could not the future complete a work whose design is so very clearly traced? We are the more inclined to ask this, because appearances are all in favour of the question. Examine under the magnifying-glass the frontal horns of the Bull Onthophagus in the nymphal state; then with the same scrupulous care look at the spear upon the corselet. At first, there is no difference between them, except for the general configuration. In both cases we find the same glassy aspect, the same sheath swollen with colourless fluid, the same incipient organ plainly marked. A leg in process of formation not more clearly announced than the horn on the corselet or those on the forehead.

Can time be lacking for the thoracic growth to become organized into a stiff and