

different sizes. Three wings short, broad, diverging, triangular, and striated, embracing at the base the lumbar stricture, the lower third of the thorax and the upper third of the abdomen.

*Dimensions*.—Length of the three joints,  $a$  0.04,  $b$  0.06,  $c$  0.12; breadth,  $a$  0.045,  $b$  0.1,  $c$  0.08.

*Habitat*.—Central Pacific, Stations 263 to 274, depth 2350 to 2925 fathoms.

#### 4. *Theopera luscinia*, Haeckel.

*Lithornithium luscinia*, Ehrenberg, 1875, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 78, Taf. iv. fig. 9.

Shell slenderly ovate, with distinct collar, but indistinct lumbar strictures. Length of the three joints = 1 : 3 : 6, breadth = 1 : 5 : 5. Cephalis hemispherical, with a slender cylindrical horn of three times the length, bearing a spindle-shaped spinulate top (like a fir-cone). Pores subregular, circular, twice as broad in the abdomen as in the thorax. Three wings arising with broad triangular base, embracing the lower third of the thorax and the upper third of the abdomen, prolonged into three slender diverging spines, as long as the shell.

*Dimensions*.—Length of the three joints  $a$  0.015,  $b$  0.05,  $c$  0.1; breadth,  $a$  0.02,  $b$  0.07,  $c$  0.07.

*Habitat*.—Fossil in Barbados.

#### 5. *Theopera chytropus*, n. sp. (Pl. 67, fig. 6).

Shell slender, ovate, with distinct collar, but indistinct lumbar stricture. Length of the three joints = 1 : 2 : 5, breadth = 1 : 3 : 3. Cephalis hemispherical, with a conical horn of the same length. Pores in the thorax and abdomen of similar shape, irregular, roundish. Three wings with broad triangular base attached at the upper half of the shell, in the lower half free, diverging, with a spinulate knob at the distal end.

*Dimensions*.—Length of the three joints,  $a$  0.025,  $b$  0.06,  $c$  0.15; breadth,  $a$  0.03,  $b$  0.09,  $c$  0.09.

*Habitat*.—Central Pacific, Stations 265 to 268, depth 2700 to 2900 fathoms.

#### 6. *Theopera cortina*, n. sp. (Pl. 67, fig. 8).

Shell slender, ovate, with distinct collar, but indistinct lumbar stricture. Length of the three joints = 1 : 2 : 6, breadth 1 : 4 : 4. Cephalis subspherical, with an elegant pyramidal horn of three times the length, bearing an ovate, spinulate knob. Pores subregular, circular, two or three times as large in the abdomen as in the thorax. The three wings are slightly elevated small ribs on the thorax, arise with broad, triangular, striated bases in the upper half of the abdomen, and are prolonged into three slender diverging feet, which are as long as the shell, and bear a spinulate, ovate knob at the distal end.

*Dimensions*.—Length of the three joints,  $a$  0.02,  $b$  0.05,  $c$  0.13; breadth,  $a$  0.03,  $b$  0.08,  $c$  0.08.

*Habitat*.—Tropical Atlantic, Station 338, depth 1990 fathoms.