shaped, nearly horizontally divergent wings, as long as the thorax. The cephalis and the three feet are similar to those of *Peromelissa phalacra*, (Pl. 57, fig. 11); but the cylindrical thorax with irregularly scattered pores is completely different, and exhibits a truncate, wide open mouth.

Dimensions.—Cephalis 0.05 long, 0.04 broad; thorax 0.06 long, 0.04 broad.

Habitat.—North Pacific, Station 244, depth 2900 fathoms.

3. Psilomelissa hertwigii, Haeckel.

Lithomelissa hertwigii, Bütschli, 1882, Zeitschr. f. wiss. Zool., p. 517, Taf. xxxiii. fig. 22, a, b.

Shell rough, with obliterated collar stricture. Length of the two joints = 4:4, breadth = 5:5. Cephalis hemispherical. Thorax little larger, cylindrical. From its upper half there arise three very strong pyramidal divergent wings, about as long as the shell. Pores of both joints very small and numerous, circular. Mouth truncate, wide open.

Dimensions.—Cephalis 0.04 long, 0.05 broad; thorax 0.04 long, 0.05 broad.

Habitat.—Fossil in Barbados.

4. Psilomelissa calvata, n. sp. (Pl. 56, fig. 3).

Shell smooth, with sharp collar stricture. Length of the two joints = 7:5, breadth = 5:6. Cephalis ovate, large, with subregular, circular, double-contoured pores. Thorax smaller, ovate, with very irregular, roundish pores of different sizes. From its upper third there arise three conical, slender, widely divergent spines or wings of the same length. (In fig. 3 the cephalis with the three wings is alone represented.)

Dimensions.—Cephalis 0.07 long, 0.05 broad; thorax 0.05 long, 0.06 broad. Habitat.—Central Pacific, Stations 263 to 274, depth 2350 to 2925 fathoms.

5. Psilomelissa sphærocephala, n. sp.

Shell rough, with deep collar stricture. Length of the two joints = 1:2, breadth = 1:3. Cephalis spherical. Thorax cap-shaped, flat and broad. From its upper half there arise three pyramidal wings, half as long, fenestrated at the base and nearly horizontally divergent. Mouth constricted, half as broad as the thorax.

Dimensions.—Cephalis 0.03 diameter; thorax 0.06 long, 0.09 broad. Habitat.—Central Pacific, Station 272, depth 2600 fathoms.

Genus 539. Spongomelissa, n. gen.

Definition.—Sethopilida (vel Dicyrtida triradiata aperta) with three free lateral wings, or solid spines arising from the sides of the thorax. No terminal feet. Cephalis with one or more horns.

1 Spongomelissa = Spongy bee; σπόγγος, μίλισσα.