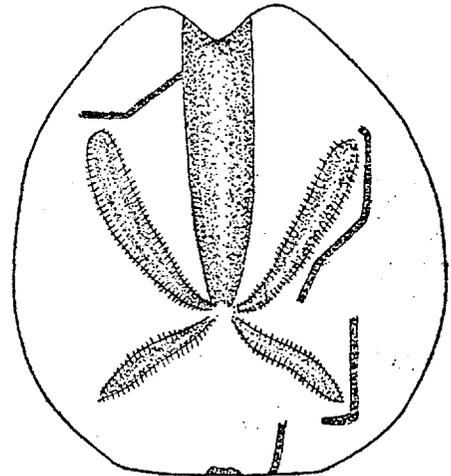
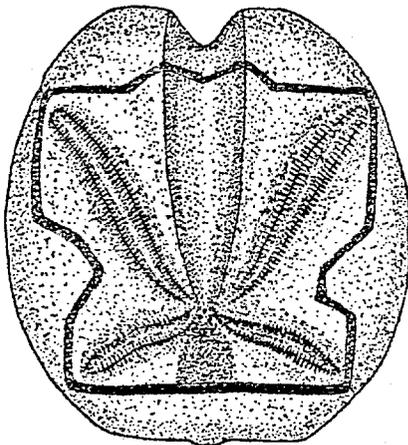


KEY TO THE IRREGULAR URCHINS

- I. Petaloids deeply sunken. Anterior petaloids long, reaching almost to margins of test; posterior petaloids shorter, approximately 1/2 the length of the posterior ones. Peripetalous fasciole with or without lateral fascioles on sides of periproct (often only part of the fasciole may be visible on test). Shape of test roughly pentagonal. Figure 1.

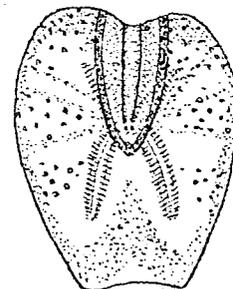
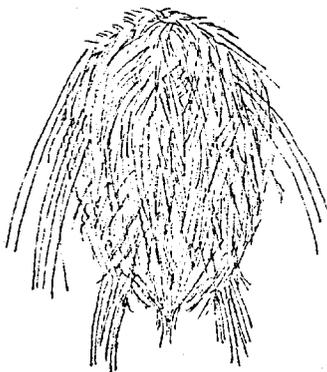
Brisaster latifrons



- II. Petaloids not deeply sunken.

- A. Test elongate, with elongate spines 3/4 to full length of test anteriorly, and 2-3 tufts of elongate spines at posterior end. An internal fasciole is present. Figure 2.

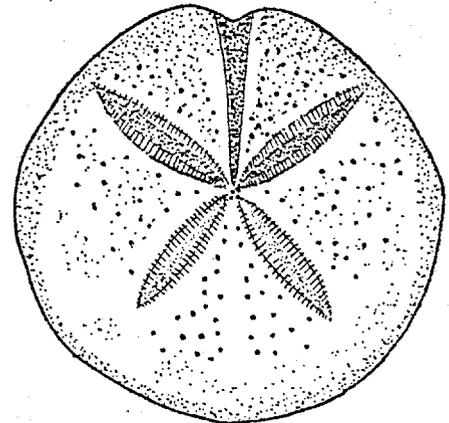
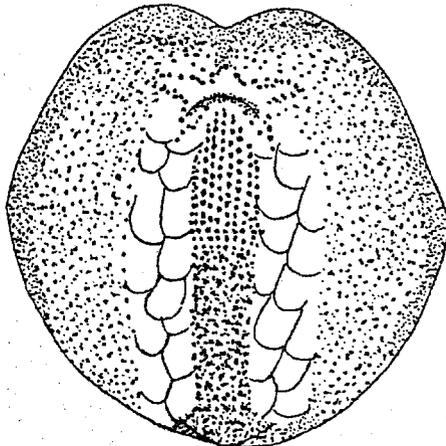
Lovenia cordiformis



II. B. Test not elongate, spines not elongate and not appearing in tufts. Plastron spiny, or granulated due to loss of spines.

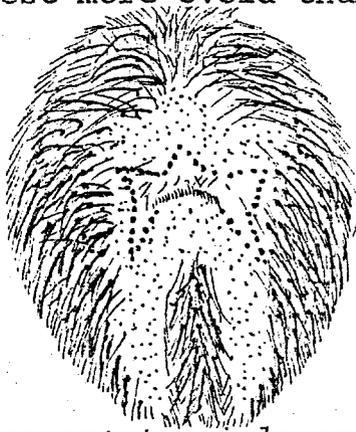
1. Spination of plastron extends almost to peristome. Test appears bifurcate at anterior end.

Spatangus californicus



2. Spination of plastron does not extend to peristome. Test more ovoid than above and bifurcate at posterior end.

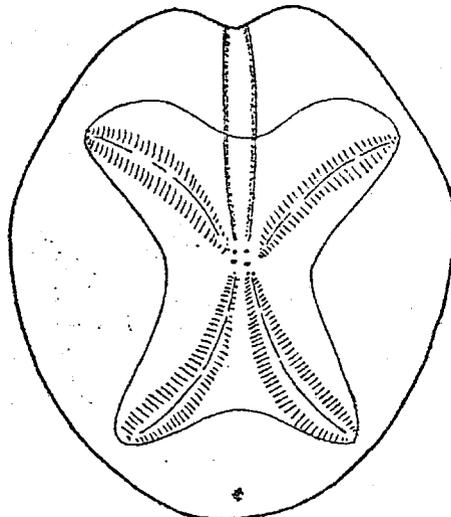
Gonimaretia laevis



After Clark 1943

c. subanal fasciole present. Peripetalous fasciole with lateral branches along periproct also present. Petaloids equal and not greatly concave.

Brissopsis pacifica



After Hyman 1955