and sometimes a second pair stand immediately below these, in the place of the first actinal or superficial spines. The marginal spines and actinal spines are subequal to one another in size, and diminish as they recede from the mouth; the actinal spines forming a series parallel to the median suture of the mouth-plates.

The actinal interradial areas are very small, and do not contain more than two or four small intermediate plates, which bear either a forficiform pedicellaria or a group of small ciliary spinelets.

The madreporiform body is hidden by paxillæ.

Colour in alcohol, varying between light yellowish drab and dirty greenish grey; with a very dark broad band, almost black in some specimens, dark sage green in others, along the median radial line, extending to the centre of the disk, in some specimens fading out gradually at the sides, in others terminating more abruptly. At the extreme tip of the ray the whole area is of this dark colour, whilst the ocular or terminal plate is white, and hence very conspicuous.

Locality.—Yokohama. May 6, 1875. Depth 5 to 25 fathoms.

Remarks.—This species is perhaps most nearly related to a Luidia from Singapore, preserved in the University Museum at Copenhagen, which bears the manuscript name of Luidia chefuensis, Grube; but the two forms are distinguished by a number of well-defined characters. In Luidia limbata the paxillæ are larger and more definitely square, and the lateral spine is of a different shape. The armature of the adambulacral plates is different, wanting altogether the comb of four or more spinelets running parallel to the furrow, which in Luidia chefuensis succeeds the two single curved spinelets. In like manner there is no trace of the second comb, parallel to the furrow, of four to six ciliary spines, probably situated on the intermediate plate between the infero-marginal and adambulacral plates.

I should here state that I have not been able to find any published description of the species now mentioned under the name of Luidia chefuensis.

In the University collection at Breslau there is another Luidia, which bears the manuscript name of Luidia singaporensis, Grube, but which seems to me to be the same as von Martens' Luidia maculata, var. quinaria, and different from Luidia chefuensis.

I am inclined to think that the so-called variety quinaria of Dr. von Martens is really a species distinct from Luidia maculata.

## 4. Luidia clathrata (Say), Lütken.

Asterias clathrata, Say, 1825, Journ. Acad. Nat. Sci. Philadelphia, vol. v. p. 142.

Luidia clathrata, Lutken, 1860, Videnskab. Medd. naturh. Foren. i Kjøbenhavn for 1859, p. 37.

Locality.—Challenger Expedition: Bahia. Depth 7 to 20 fathoms.

Other Docalities.—North Carolina, South Carolina, Florida, Martinique, Hayti, St Thomas, Rio Janeiro.