The suture dividing the outer lamella of the opercula is accurately at right angles to the long axis of the body in the female; it is more oblique, slanting downwards in all the male specimens that I have seen; I am inclined, however, to think that this is rather an individual variation than a mark of sex, inasmuch as nothing of the kind exists in any other species.

Serolis convexa has been figured by Cunningham 1 and by Studer,2 and as both these figures, especially the latter, show plainly the characters of the species, I hardly think it worth while to introduce another into the present Report.

Serolis convexa can be easily distinguished from Serolis gaudichaudii by a number of small characters; the shape of the body is more oval in Serolis gaudichaudii; in Serolis convexa it is more pear-shaped, owing to the greater length of the caudal shield, which terminates in a more pointed extremity; in both species there is a central and two lateral carinæ; the latter are curved, and follow closely the lateral margin of the caudal shield but at some distance from it; in Serolis gaudichaudii these carinæ, especially the two lateral ones, are very faint; in Serolis convexa the lateral carinæ are strongly marked, and terminate more or less abruptly in a short spiniform projection at the end of the middle third of the caudal shield; the median carina is only found in the anterior part of the caudal shield, posteriorly it becomes obsolete; another difference between the two species is in the colour, and since this difference is quite constant in all the specimens examined by me (five of Serolis convexa, four of Serolis gaudichaudii) it is worth noting; Serolis gaudichaudii is distinguished by its dark brown colour, darker in the central part of the body, and dotted all over with black spots of various sizes; in Serolis convexa the colour is of a uniform pale brown, hardly darker in the middle of the body than upon the epimera. This description of course relates only to specimens preserved in alcohol. Another species closely allied to Serolis convexa is Dana's Serolis plana, and from a careful comparison of the figures and descriptions given of these two species I find it almost impossible satisfactorily to separate them. The general shape of the body, the form of the epimera, &c., is almost identical in the two. The eyes, however, of Serolis plana are stated by Dana to be conical in shape, whereas those of Serolis convexa, as in all other species, are distinctly reniform. In Serolis plana "the articulation of opercular plates is more nearly transverse than in Scrolis gaudichaudii;" there is also a lateral tooth on the caudal shield just below termination of carina; the median carina is obsolete posteriorly, and the fourth segment has a low prominence just inside of the epimeral suture. first character is, as I have already shown, of no use in distinguishing the species; the last character, namely, the presence of a low prominence to the inside of the epimeral suture of the fourth segment, is well marked in the Challenger specimen of Serolis convexa; in this specimen all the thoracic segments have a slight prominence, almost indistinguishable in the anterior and posterior ones, but conspicuous in the fourth segment, where it slightly

¹ Loc. cit., pl. lix. fig. 3.