- Fig. 10. Smooth radiole of actinal side.
 - " 11. Small radiole surrounding the actinostome.
 - " 12. Specimen of *Goniocidaris florigera*, in which the primary radioles present the usual variation of the tip, especially on the abactinal surface, characteristic of the genus; natural size.
 - " 12 a. Abactinal area of the same species, partly denuded; magnified.
 - " 13. Portion of denuded test of the same species, facing the median line of an ambulacral area; magnified.
 - " 14. Portion of an interambulacral area of same, from the equatorial zone of test.
 - , 15 a, b. The cupuliform radioles of the abactinal region are seen from above, represented in profile in c, d. $(\frac{2}{1})$.
 - " 16 a, b. End view and profile of a different cupuliform radiole, 15 and 16 are taken from the abactinal region of the test, the principal primary radioles of fig. 12 are cylindrical (fig. 18), with prominent irregularly-arranged spines scattered over the shaft.
 - ,, 17. Small radiole of actinal side of test, near the actinostome (3).
 - " 18. Basal part of shaft of primary cylindrical radioles.
 - " 19. Primary radiole near actinal edge of test.
 - " 20. Tapering spiniferous radiole, similar to those of fig. 7, taken from specimen of fig. 12.

PLATE II.

Goniocidaris canaliculata, A. Ag. (figs. 1-18), p. 43.

- Fig. 1. Specimen with long spines, seen from the abactinal side; natural size.
 - " 2. Specimen with short spines, seen from the abactinal side, showing the mode of carrying the young; natural size.
 - " 3. Another specimen, with proportionately shorter spines, seen from the actinal side; natural size.
 - 4, 5, 6. Portions of the median interambulacral primary plates, to show the variation in the depth of the median interambulacral groove, from a deep broad groove (fig. 4), to a mere indistinct bare space in fig. 5.
 - " 7. Edge of abactinal membrane to show the deep indentation of the median interambulacral and ambulacral spaces of the test.
 - " 8. Young specimen, 3 mm. in diameter, seen from the actinal side, denuded of spines about in the stage of fig. 12.
 - " 9. Young specimen, seen from the actinal side, 2 mm. in diameter.
 - " 10. The same as fig. 9, seen from the abactinal side.