The very bright and conspicuous coloration of many individuals of this and allied species, making them so easily visible to hosts of hungry enemies, offers strong presumptive evidence that they have some means of protection analagous to those of land animals which are conspicuously colored. In the latter case, particularly among the insects and certain reptiles, conspicuous colors are associated with disagreeable or poisonous secretions or juices, and the colors in such cases are of the nature of warning or danger signals. It seems reasonable to suppose that similar disagreeable or poisonous secretions may be associated with the bright colors of our starfishes. *Solaster endeca*, a brightly colored form, is known to be poisonous (see under this species below.) Græffe (Arb. Z. Quest. Wein., iii., pp. 333-344) says that large starfishes have a disagreeable smell, which, he thinks, aids in their protection. Whatever may be the reason, it is certain that fishes very rarely or never eat them, for they are not found in fishes' stomachs. This is not because they contain little nourishment, for the much less nourishing Cake-urchins (*Echinarachnius*), and Ophiurans, (*Ophiopholis*), are often greedily taken. It is a strong confirmation of our view as to the colors of the starfishes, that the forms mentioned, which are eaten, are more or less protectively colored. It must also be taken into account that the color of the sexes are different, which makes the problem more difficult of solution.

Forbes (Hist. British Starfishes) suggests that it may be an acrid or poisonous secretion which enables the starfish to compel bivalves to open their shells. Certainly the valves are not broken, and we apparently know as little as Forbes did of the starfishes' method of procedure, and we must repeat his remark that the question should be investigated.

SIZE. This species in the Bay of Fundy grows to a diameter of, at least, fifteen or sixteen inches. *A. rubens*, which is probably identical with it, is said to attain twenty inches in Europe. The statement in Ingersoll's "Oyster Industry," (p. 227), that near Eastport they occur more than thirty-three inches in diameter, is, of course, an error.