Sponges.—One specimen of Trichostemma hemisphæricum M. Sars; one of Cladorhiza abyssicola M. Sars; and about a dozen of the Hyalonema longissimum, of the same author, were taken in 220 fathoms. With these occurred another species, which is either a true Tethea, or belongs to a closely allied genus. In shape it is more or less pyriform, somewhat triangular in section, and with a flattened base. There are three orifices, corresponding to the three angles, of which two are basal. These are connected on two sides by a perforated canal or tube. The front basal orifice is partly closed by an outer fine open network and an inner and coarser one of siliceous spicules, the latter not very unlike those at the apex of Euplectella; and this opening seems to be the point of attachment to small stones, etc. The whole sponge is densely hispid with projecting spicules, which are sometimes of considerable length. These are mostly very attenuate; some of them are simple, and these are either straight or flexuous; others are simply ternate or bitcrnate at one end; some again are anchorate at the extremity, with three or four slender flukes. In its canal connecting the three external and larger openings, and in its beautiful open network of spicules, it seems to differ generically from Tethea. In the shape of its spicules, but not in some other respects, it resembles the Dorvillia agariciformis of Mr. W. S. Kent, and the Tethea muricata of Bowerbank. As the Canadian sponge may possibly be the same as Dr. Bowerbank's imperfectly characterized species, I refrain for the present from giving it a name. It is only fair to add that before I had dredged this species in a living state, my friend Mr. G. T. Kennedy, M.A., had found specimens in the Post-Pliocene clays of Montreal, which are undoubtedly conspecific with it.

Echinodermata. — Schizaster fragilis Dub. & Koren, and Cter liscus crispatus, are common in the deep-sea mud, as are also Ophiacantha spinulosa M. & T., and an Amphiura whose specific relations are still obscure. The Ophiuridæ collected during this cruise have yet to be studied. One living example of *Ophioscolex glacialis M. and T. was dredged in 210 fathoms, to the southwest by south of the Southwest Point of Anticosti.

Note.—I am indebted to Prof. Verrill for the identification of several critical species, to whose names an asterisk (*) is prefixed; and the difficult Crustacea, whose appellations are preceded by a dagger (†), were kindly determined for me by Mr. S. I. Smith.

Actinozoa.—A few individuals of *Pennatula aculeata* Dan., var., and of *Virgularia Ljungmanii* Köll., were taken in the deep-sea mud, together with large tubes apparently belonging to *Cerianthus borealis* Verrill, though the animal of this latter species has not yet been taken in the Gulf. *Cornulariella modesta* Verrill was collected (in 1871) at depths of 220 fathoms, between the east end of Anticosti and the Bird Rocks.

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