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NOTE ON AN ECHINODERM COLLECTED BY DR. AMI  
AT BESSERERS, OTTAWA RIVER, IN THE PLEIS-  
TOCENE (LEDA CLAY).

By SIR J. WILLIAM DAWSON, C.M.G., LL.D., F.R.S.

The specimen is a flattened disc, about three centimetres in diameter, in a circular nodule split open. The central part shows inclined bars or tubercles and remains of slender spines which also fringe the margins pointing mainly in one direction (backward). There are indications of a shallow sinus in front. The spines are flattened and pointed, and show traces of an echinoid cellular structure.

The specimen is probably the flattened test and spines of a spatangoid sea-urchin, which has burrowed in the clay when soft and has been buried up and compressed owing to its not having been penetrated with earthy matter. This mode of preservation renders it impossible to see distinctly the markings on the shell, which are obliterated by flattening or covered with the remains of the spines, making the determination of the genus and species very unsatisfactory.

It may belong to either of the genera *Spatangus*, *Brissus*, or *Amphidotus*, as defined by Forbes for the European species. Looking for it among existing species, I do not know any of this type on our coast, except that *Brissus lyrifer* is said to have been dredged by Goodsir in Davis Straits; but the present specimen does not seem to agree in form with that species. On the east side of the Atlantic, *Spatangus purpureus* extends to Norway, and so does the common *Amphidotus cordatus*. Sars, in his memoir on the Quaternary fossils of Norway, mentions *Brissus fragilis*, a species which I have not seen, as occurring in the glacial clays of that country (which contain fossils resembling those of the Ottawa

clays) and also an undetermined species of *Amphidotus*. The present species may be identical with one of these; but I have no description or figures of Sars' specimens. Perhaps there may be better means of reference to them in the Geological Survey library.

In the meantime I can only say that the specimen probably represents a species of *Spatangus* or *Brissus* which lived in the seas of the Canadian Pleistocene, but which, so far as I know, has not yet been found here in a living state. The fact is another instance of the circumstance which I have noted in papers on the Pleistocene fossils that there is in our Pleistocene marine fauna a North-European aspect, as if at that time the indentations of the two sides of the North Atlantic were more nearly alike than at present.

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