Hexactinellids; that they are not so proves simply that the conditions for their preservation were not so favourable as Schulze seems to assume; both Lyssacina and Monaxonida are absent because they do not possess consistent skeletons.

It is quite possible also that Monaxonida and Lyssacina are less uncommon than supposed in Jurassic rocks, the difficulty may be to find them; like the skeletons of the Lithistida and Dictyonine Hexactinellids their spicules would probably be converted into carbonate of lime; and while whole skeletons like those of the Lithistida and Dictyonina may be extracted from the limestone in which they are preserved, single spicules can be so obtained only very exceptionally.

The relation between the nature of the sea-floor passed over by the Challenger and the number of species dredged is shown by the following list:—

From—

13	Stations on	hard ground	3	species were obtained, or	23	per cent.
9	,,	gravel	3	,,	,,	33·3	,,
8	,,	sand	5	,,	,,	62·5	,,
4	,,	mud	0	,,	,,		
20	,,	coral mud	7	,,	,,	35	,,
21	,,	green sand and mud	8	,,	,,	38·1	,,
30	,,	volcanic mud	6	,,	,,	20	,,
48	,,	blue mud and clay	20	,,	,,	41·6	,,
55	,,	Globigerina ooze	3	,,	,,	5·46	,,
10	,,	Pteropod ooze	3	,,	,,	30	,,
4	,,	Diatom ooze	1	,,	,,	25	,,
4	,,	Radiolarian ooze	0	,,	,,		
50	,,	red clay	4	,,	,,	8	,,

Thus mud and Radiolarian ooze yielded no Tetractinellida; the other deposits may be represented according to their richness (inversely, commencing with the poorest) in the following order:—

Globigerina ooze,	2	Gravel,	12
Red clay,	3	Coral mud,	13
Volcanic mud,	7	Green sand,	14
Hard ground,	8	Blue mud,	15
Diatom ooze,	9	Sand,	23
Pteropod ooze,	11		

The numbers attached to each deposit are the nearest whole numbers to multiples of 2, which is taken to represent the richness of Globigerina ooze.

If instead of species the same comparison is made for stations, we obtain the following results:—