

Radiolaria which they contain. The white specimens resembling Kieselguhr contained approximately 60 to 70 per cent. by volume of Radiolarian shells, the yellowish marl 40 to 50 per cent., and the brown and black (bituminous) marl 10 to 20 per cent. or less. Two analyses of the first, which my friend Dr. W. Weber was good enough to carry out, yielded different results from those which are given by Ehrenberg on the basis of Rammelsberg's analyses (L. N. 25, p. 116). The results of both are here given for comparison.

Ehrenberg-Rammelsberg (Fragment from Hillaby).	Weber I. (Chalk-like Fragment).	Weber II. (Tripoli-like Fragment).
Silicate of alumina, . . . 59.47	Silica, 52.2 71.3
Alumina and oxide of iron, . 1.95	Alumina (with traces of oxide of iron), . . . 12.3 11.2
Calcium carbonate, . . . 34.31	Lime and magnesia, . . 31.9 14.8
Water, 3.67	Carbon dioxide 3.2 2.7
Total, 99.40	Total, 99.6 100.0

For further comparison I here add the three different analyses of Miocene Tripoli-marls from Sicily, given by Stöhr on the authority of Fremy, Schwager, and Mottura (Tagebl. d. fünfzigsten Versamml. Deutsch. Naturf. u. Aertzte in München, 1877, p. 163).

Composition.	Tripoli from Licata (Fremy).	Tripoli from Grotte (Schwager).	Tripoli from Caltanissetta (Mottura).
Silica,	30.98	58.58	68.6
Alumina,	17.54	11.51	} 3.6
Oxide of iron,	0.33	1.84	
Lime,	} 38.09	{ 8.49	} 12.1
Magnesia,		{ 0.41	
Water and Organic matter,	} 13.06	{ 11.26	} 15.2
Carbonic acid,		{ 7.12	
	100.00	99.21	99.5

B. The Radiolarian marl of the Mediterranean appears, judging by the accounts already published, to stretch along a considerable part of the coast in the earlier and middle Tertiary formations; thus it occurs of similar composition in widely separated localities, in Sicily, Calabria, Zante, and Greece; in North Africa from Tripoli to Oran and probably much farther. So long ago as 1854 Ehrenberg, in his Mikrogeologie (L. N. 6) gave a series of important, even if incomplete, communications regarding the "chalky white calcareous marl of Caltanissetta" (Taf. xxii.), the "Platten marl of Zante" (Taf. xx.), the "plastic clay of Ægina" (Taf. xix.), and the "polishing slate of Oran" (Taf. xxi.). In 1880 Stöhr showed in his fundamental description of the Tripoli from