other Foraminifera; Coccospheres and Rhabdoliths; fragments of Pteropods, and other pelagic Molluscs; Ostracode valves, fragments of Echinoderms, Polyzoa, and other calcareous organisms. The mineral particles in these green muds were about 0·2 mm. in diameter, and consisted of rounded fragments of quartz, felspars, hornblende, magnetite, mica, volcanic glass, in addition to glauconite. There were a few Radiolarians and Sponge spicules. A quantity of the glauconitic grains and casts were carefully collected, after the removal of the calcareous organisms by dilute acid, and a careful analysis of these was made by Dr. Sipöcz. A microscopic examination of the substance analysed showed it to be, by estimation, made up of about 10 per cent. of white, pale grey, and yellow casts, about 25 per cent. of pale green casts, about 60 per cent. of dark green ones, and about 5 per cent. of mineral particles and siliceous organisms. In practice it was found impossible to separate the siliceous organisms and small mineral particles from the casts.

Analyses of Glauconitic Grains and Casts.

	I.	II.	III.	
Silica (SiO_2),	51·80	...	...	51·80
Ferric Oxide (Fe_2O_3),	24·21	...	...	24·21
Alumina (Al_2O_3),	8·67	...	...	8·67
Ferrous Oxide (FeO),	...	...	1·54	1·54
Lime (CaO),	1·27	...	...	1·27
Magnesia (MgO),	3·04	...	...	3·04
Potash (K_2O),	...	3·86	...	3·86
Soda (Na_2O),	...	0·25	...	0·25
Water (H_2O),	5·68	...	...	5·68
Manganese Peroxide (MnO_2),	traces	...	...	traces
				100·32

I. 0·7312 gramme of the substance fused with double carbonate of soda and potash gave 0·0416 grm. water (H_2O), 0·3788 grm. silica (SiO_2), 0·1896 grm. ferric oxide (Fe_2O_3), 0·0634 grm. alumina (Al_2O_3), traces of manganese, 0·0093 grm. lime (CaO), and 0·0618 grm. magnesium pyrophosphate ($Mg_2P_2O_7$), equivalent to 0·02227 grm. magnesia (MgO).