the H_2O 's supplementing what would otherwise be a meta- into an ortho-silicate, which explains its decomposibility by hydrochloric acid. I am, however, very far from asserting that the substance really is such a zeolite. Before doing so I should wish to repeat my analysis with a larger supply of *purified* material.

93. BASIC VOLCANIC GLASS .- Station 276.

Lat. 13° 28' S., long. 149° 30' W., 2350 fathoms (Sipöcz).

A. Unaltered Nucleus (spec. grav., 2.90).

- I. 0.9040 grm. of substance, fused with the carbonates of soda and potash, gave 0.4227 grm. of silica, 0.1254 grm. of peroxide of iron, 0.1601 grm. of alumina, 0.0043 grm. of manganoso-manganic oxide, 0.1045 grm. of lime, and 0.2604 grm. of pyrophosphate of magnesia.
- II. 0.3390 grm. of substance, treated with hydrofluoric and sulphuric acids, required for oxidation 6.35 c.c. permanganate of potash (1 c.c. permanganate of potash = 0.0058296 grm. of protoxide of iron), corresponding to 0.037018 grm. of protoxide of iron.
- III. 0.8385 grm. of substance, treated with hydrofluoric and sulphuric acids, gave 0.0314 grm. of the chlorides of potash and soda, 0.0075 grm. of chloroplatinate of potash, corresponding to 0.0023 grm. of chloride of potash = 0.00144 grm. of potash, and 0.0291 grm. of chloride of soda = 0.01543 grm. of soda.

Silica,		×					46.76
Peroxide of iron,							1.78
Protoxide o	of iron,						10.92
Alumina,						•	17.71
Manganous oxide,							0.44
Lime,		•					11.56
Magnesia,							10.37
Potash,	•				•		0.17
Soda,						•	1.83
							101.40

94. PALAGONITE.-Station 276.

Lat. 13° 28' S., long. 149° 30' W., 2350 fathoms (Sipöcz).

B. Decomposed Coating.

- I. 0.5681 grm. of substance, dried at 105° C., gave 0.0543 grm. of loss on ignition, then fused with the carbonates of soda and potash gave 0.2541 grm. of silica, 0.0828 grm. of peroxide of iron, 0.0924 grm. of alumina, 0.0159 grm. of manganoso-manganic oxide, 0.0107 grm. of lime, and 0.0554 grm. of pyrophosphate of magnesia = 0.01239 grm. of magnesia.
- II. 0.3801 grm. of substance, dried at 105° C., treated with hydrofluoric and sulphuric acids, gave 0.0565 grm. of the chlorides of potash and soda, 0.0794 grm. of chloroplatinate of potash, corresponding to 0.0242 grm. of chloride of potash = 0.0153 grm. of potash, and 0.0323 grm. of chloride of soda = 0.017126 grm. of soda.

Silica,	•		,	•				44.78
Peroxide of iron,			•					14.57
Alumina,								16.26
Manganic oxide,			•			•		2.89
Lime,						1788		1.88
Magnesia,	•			•				2.23
Potash,	•							4.02
Soda,		•						4.20
Water,								9.26
2								