The bulk of the part soluble in acids apparently consists of hydrated sesquioxides of manganese and iron and decomposible silicates.

Portion "3. (3)." *White Siliceous looking Core.*

	P.	$\frac{P.}{E.}$
Insoluble in acid,	0·06	
Moisture,	2·21	
Combined water (H_2O),	2·22	
Phosphates of iron and alumina,*	0·42	
Phosphoric acid (P_2O_5),*	34·13	1·4420
Carbonic acid (CO_2),	6·61	0·3042
Fluorine 1·4 = ($F_2 - O$),	0·81	0·0736
Sulphuric acid (SO_3),	0·81	
Chlorine,	trace	
Lime (CaO),	49·85	1·7801
Magnesia (MgO),	0·77	0·0385
Alkalies and loss,	2·11	
	100·00	

Ratio of equivalents of phosphoric acid, carbonic acid, and fluorine—

$(\frac{1}{3}P_2O_5)$		(CO_2)		(F_2)
1	:	0·211	:	0·051

The following specimens were only partially analysed.

No. 4. *Portion of Beak of a Ziphius.*

Station 286; 2335 fathoms, South Pacific.

The body of the specimen looked pretty much like recent bone, but had veins of manganese running through it. The outer coating of the specimen was black.

Found in 100 parts of the inner portion—

Moisture,	1·14
Combined water (H_2O),	2·78
Carbonic acid (CO_2),	6·81
Phosphoric acid (P_2O_5),†	33·30
Fluorine (F_2),	1·65

Ratio of equivalents of phosphoric acid, carbonic acid, and fluorine—

1 : 0·220 : 0·062

* Total phosphoric acid found = 34·33 per cent. 34·13 phosphoric acid found = 74·5 per cent. tricalcic phosphate.
† Equal to 72·69 per cent. tricalcic phosphate.