

follows:

After drying at 100° C., the composition was found to be as follows:

Phosphoric acid <sup>1</sup> .....	40.812
Fluorine <sup>2</sup> .....	3.554
Chlorine <sup>3</sup> .....	0.040
Carbonic acid <sup>4</sup> .....	0.518
Lime .....	49.102
Calcium .....	3.763
Magnesia .....	0.620
Alumina .....	0.565
Sesquioxide of iron .....	0.125
Alkalies .....	?
Insoluble residue .....	0.630
	<hr/>
	99.729

1 Equal to 88.098 tribasic phosphate of lime.

2 Equal to 7.295 fluoride of calcium.

3 Equal to 0.062 chloride of calcium.

4 Equal to 1.177 carbonate of lime.

The results of the foregoing analyses have been embodied in Table I. with the object of affording easy reference, and facilitating comparison, not only the one with the other, but alike with those contained in Table II., which embraces analyses of fluor-apatites from some of the principal European localities. In selecting these latter analyses I have only availed myself of those wherein the fluorine has been determined by direct estimation; further, in transcribing them, I have taken the liberty of presenting them in a somewhat different form to that in which they appeared,—that is to say, in analyses A. B. C. where the amount of tribasic phosphate of lime, fluoride and chloride of calcium was given, the amount of phosphoric acid, fluorine, chlorine, lime and calcium thus represented has been calculated and stated separately. In like manner in analysis E. where the amount of fluoride of calcium was given, the amount of fluorine and calcium thus represented has been calculated and stated separately. In the other analyses viz., D. F. G. and H. the total lime found was given and stated as such; in these instances the amount of lime corresponding to the calcium (now stated as such) required for the fluorine or fluorine and chlorine, as the case might be, has been deducted from the total quantity given: as a result of this altered representation, the analyses do not now foot up so high as in the originals.

Explanatory  
remarks on  
Table ii.