A simple sample divider.

When a rock sample is required for chemical analysis, it is normal to analyse one fraction that is representative of the whole specimen. It is therefore necessary to divide the sample at chosen points during crushing and to select one portion at each point for further crushing. If the final product is to be a truly representative sample of the whole specimen, then the dividing process must be such as to ensure a completely random selection at each point.

A simple and inexpensive divider that will ensure completely random and equally fractioned samples may be constructed from a gramophone turn-table and a plastic hors-d'œuvre serving dish consisting of six equal sized and shaped segments set in a large round plastic dish. The segments are removable for cleaning.

The dish is placed on the gramophone turn-table and allowed to rotate at approximately 20 revolutions per minute, while the powder is gravity fed into the rotating segments via a large plastic funnel firmly clamped in position above the turn-table. The result is a rapid and accurate division, the contents of any one segment being selected as the random fraction.

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Calciferous amphiboles.

In his recent interesting paper on the 'vacant' area in the amphibole diagram (Jap. Journ. Geol. Geogr., 1962, vol. 33, p. 1) Dr. B. E. Leake says: 'No. 18 is included in Hallimond's table but because its cell-contents were erroneously calculated it appeared to plot outside the vacant area.'

I have checked the original slip for this amphibole (my number 47) and there is no miscalculation. In his original paper Zambonini (Zeits. Kryst. Min., 1905, vol. 40, p. 231) says: 'Cossa [see refs. in Zambonini] investigated the amphibole . . . in thin sections . . . the chemical composition is SiO_2 46·22 % [etc. as in Leake 18].' Zambonini then gives a very full account of the druse-amphibole crystals. He regards the magnetite, which is prevalent in the amphibole of the rock, as due to a late oxidation. He therefore records a new analysis of completely