

(5.) All the cuttings should be saved on the sheet, but pieces of stone known to be accidentally dislodged from points adjacent to the groove should be rejected.

(6.) The total weight of the sample may range from 5 lb. to 150 lb. In special cases it may be greater. Apparently Orton and Peppel, as a rule, took only one sample of a high quarry-face. It would be better in many cases to divide the face into measured sections and take several samples.

(7.) Every sample should be labelled plainly and legibly with a number and other particulars inside and outside of the sack in which it is placed. The inside number may be written or cut on a piece of soft wood and then wrapped in cloth. Whatever the method, care should be taken that the marking cannot be obliterated or the label lost.

(8.) If the sample is taken from a stock pile, bins, rock-breaker, or any unusual source, all the circumstances should be noted.

(9.) Every detail of the sampling and every observation of the material sampled should be noted at the time the sample is taken. The entries in the notebook used should be clearly worded and legibly written. Abbreviations should be sparingly used.

Orton and Peppel give further details, which need not be quoted, of how the main sample, by crushing and quartering, is reduced to the small sample of about  $\frac{1}{2}$  lb. weight used by the analyst for his work.

As previously stated, for agricultural purposes limestone need not be sampled in quite so elaborate a manner as that just described, but for some industries sampling of that kind is very necessary. In reconnaissance work and in general geological survey it is usually impracticable to take samples by the method of cutting a continuous groove. Provided the geologist or other explorer has experience, skill, and a knowledge of the general principles of sampling, he can without much difficulty select empirical samples that are representative of the locality sampled; but during the preliminary examinations it is generally not feasible to take all the samples that may be required for a thorough knowledge of the deposit, the expense and time involved in such work being usually prohibitive. It may be added that where a deposit is being worked on a large scale, and small variations in quality do not matter, numerous empirical samples may safely take the place of a smaller number of systematic samples.

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*Sunshine for Young Pigs.*—Sunlight is indispensable for the health and vigour of newly born pigs, except in extremely hot weather. The sooner they get the sunshine the better it is for them, and farrowing-houses fitted with windows and doors to let in the sunshine are decidedly advantageous. As soon as the little pigs are strong enough to run around and follow the sow they may be let outdoors into the sunshine, provided the weather is favourable. They should be able to do this within three days to a week. Sunlight and exercise make strong pigs in the early stages of their life.—*K. W. Gorringer, Instructor in Swine Husbandry.*