

lution of all the substances in it, so that when they were applied to land every part of the soil was supplied with some portion of it.

The *mode* of the application of manures is not sufficiently attended to in this country, though sometimes it is as important almost as the article used. Whatever this may be, the full measure of benefit from it cannot be obtained unless it be equally distributed, and this cannot be effected unless it be in the finest possible state of division.

LABOR IS NOWHERE SO PROFITABLY EMPLOYED as when *in reducing manures, before using them, TO THE FINEST POWDER.*

First in importance of all the manures is that with which every farmer has more or less to do, viz :

#### STABLE AND BARN-YARD MANURE.

From its origin we can readily see that it must possess *all* of the necessary constituents of crops. When we consider that all of the food taken by our domestic animals which does not go to increase their weight, and which does not pass off in breathing, is voided in the shape of manure, we may understand how valuable that manure must be. The structure of all living animals is continually wasting away, and its materials being carried out of the system. This waste is renewed by the food taken. As long as the body grows more matter is taken as food than is passed as manure. When growth is stationary the waste and supply are equal, and when the weight of the body diminishes, then the waste exceeds the supply. Hence the manure of well fed animals which have obtained their growth is always better than that of young animals. Stable manure is a type of all other manures. It not only supplies all of the necessary constituents in a form fit for assimilation, but it also from its large proportion of vegetable matter furnishes carbonic acid, which serves to dissolve those materials which may be present in the soil, but not in a form capable of being used by the plant.

Since, then, in this substance we have all that we want, it becomes our duty to preserve it with the most careful attention. It is but poor economy to suffer the ammonia in stable manure to be carried off by the air, and the phosphates and alkalies to be wasted away by the rains and then buy guano at \$46 per ton to supply their place.

In stable manure, especially, the ammonia very rapidly escapes. This is manifest by going at any time into a stable. The smell at once admonishes us that something is passing away in the air. This something is the most valuable constituent of guano, and for which in that manure of average quality we pay at the rate of 12 cents per pound. A most effectual mode to prevent its loss,