

quire, first of all, a change in their mechanical texture; and here fresh stable manure affords the best means on hand to meet the deficiencies in this respect. The humus which it contains in considerable quantity, will render the clay soil more voluminous, loose and porous, and thereby fit to communicate freely with the atmosphere; also, by generating a slow and regular evolution of carbonic acid in the very body of the soil itself, it will, to some extent, compensate the inability of these soils of appropriating carbonic acid from without. Light sandy soils, on the other side, which suffer mostly by an excess of dryness and heat, the necessary consequence of the predominance of quartz-sand in their body, obtain, likewise, in humus, a most valuable fundamental constituent which will impart to them the power of retaining moisture and soluble nutriments; and as it envelops and joins the quartz-sand particles, materially aid in tempering their excessive power of absorbing heat. The immense benefit which is derived from the practice of manuring with green crops, is most apparent on these latter kinds of soils; they, very properly, are usually turned in with the stiff clay soils, whilst their application in the form of a top dressing is generally adopted for the improvement of the light sandy varieties. This is an indirect proof for the correctness of the views, as laid down in the foregoing; the application of a green clover ley being, indeed, in every respect, a substitute for a dressing with fresh stable manure.

Coarse stable manure should always be applied as a top dressing to young clover in its second spring, we then obtain its advantage with compound interest, it greatly increases the clover growth, which in turn greatly increases the growth of wheat, or any other crop which may succeed it. As to the propriety of this plan, there can be no two opinions.

The last, and in a practical point of view, the most important matter to be discussed, is the manner in which stable manure should be preserved so as to secure the most beneficial results from its use. The conclusions which we have drawn above, in relation to the composition of both putrefied and fresh stable manure, are only correct when the proper precautions have been taken to preserve it and to regulate the process of its putrefaction. When this is attended to, practice and scientific investigation have shown that there occurs little or no loss in its valuable fertilizing constituents. Every man of common sense must admit that the rules to be adopted for a rational system of saving manure, must be based on the knowledge of changes that occur in the course of its putrefaction, and it is in accordance with our present