

Furthermore, and I deem this conclusive as to the views which I have given above ; soils may contain a sufficiency of plaster to meet all the wants of the crop, and yet the particular class of plants which I have above enumerated will be much benefited in particular seasons by having plaster sown broad-cast over them.

When sown broad-cast it adheres to the surface of the leaves, and being dissolved by dew it fixes the volatile carbonate of ammonia of the atmosphere, which is taken up by the leaves, and this explains fully all the phenomena of its beneficial action. This, though a novel, yet I think is a correct explanation, at least it more thoroughly explains the well known facts attending the action of this substance than any other view which I have seen taken of it.

Common Salt.—The *mode* of action of this substance is uncertain as yet, but experience has shown that it is a very useful application on all soils that have a tendency to produce crops of wheat liable to be *straw-fallen*. It gives a clean, strong straw, increases the weight of the grain, and imparts such vigor to the crops on which it should be used as to render them much more free from loss by attacks from insects or by unfavorable weather, than otherwise they would be. It also acts as a manure by dissolving the phosphate of lime which may exist in the soil, and thus rendering it available to plants.

ARTIFICIAL MANURES.

The high price of crops, and an energetic spirit of improvement, have caused a demand for many other manures than those formerly used, and to meet this demand, manufacturers have introduced into our markets various compounds.

These have been recommended to the use of the farming community by recommendations from practical men who have used them, and have been endorsed, *without qualification*, by some "scientific men." I cannot too strongly caution farmers to beware of these manures, unless with a written guarantee as to the quantity of their several constituents. There are at present manures extensively sold in our markets at a price very far above their real value, which could not be obtained if farmers were correctly informed in relation to them. Compounds under names and with certificates calculated to deceive the public, are now so prominently advertised by means of pamphlets and the commercial and agricultural press, that great caution is necessary in order to avoid deception. It will be well for farmers before being led away by certificates of the superiority of any manure over "best Peruvian guano," or equal mixtures of "best Peruvian and best Mexican," to ascertain if these guanos came from the same parties as sold the manure, and whether they were *really* what they assumed to be. The business of making artificial manures is profit-