

on the surface, and find its way readily to the ground in small particles ready to be dissolved and carried down to the hungry moths below that are reaching out in every direction for food. Manure or compost applied in lumps is of very little value in enriching the soil. The surface manuring should be done early, in order to have the best effect on the crop of next season. If the manure is reduced to the proper condition of fineness, and is not already exhaling its valuable properties in the process of fermentation, there is no occasion to fear loss by evaporation. Its nutritive properties will be drawn downward to meet the requirements of the growing grass.—*V. Reed and Farmer.*

FARM GLEANINGS.

England uses 83,000 tons of bone-dust and 210,000 tons of guano a year.

New York, which used to be the great wheat-growing State of the Union, now produces fourteen million bushels less than her people consume.

The Andrew (Iowa) *Journal* says that the largest hay field in that county is near the mouth of the Maquoketa river. It comprises 3,000 acres.

A farmer who runs his farm without a record of expenses and the cost of different crops, is like a ship without a compass or a log book.

Mr. Greeley, on being asked by a Pennsylvania farmer why he didn't write a new work entitled "What I Don't Know of Farming," is said to have replied that life was too short.

No wonder that we have a close money market in the country, and that the rural population complain of hard times—hard times that this system of bad management will always insure.

The *Delta* says that George W. Tift, of Buffalo, N. Y., has about 3,000 acres of land located about nine miles north of Avoca, Iowa, out of which he proposes to make a model farm, and designs ascertaining if Chinamen will make good farmers, and to that end will import fifty Johnnies early next Spring. He has a ready contractor for the building of an extensive row of houses for their accommodation.

The French, by a simple process, reduce coarse fish and fish offal to a fine powdered soil fertilizer. The operation consists of boiling, pressing out of oil and water, drying and pulverizing. Such a powder contains twelve per cent, of nitrogen and fourteen per cent, of bone earth. It is said to be as valuable as Peruvian guano.

The *County Gentleman* says that in making compost he puts salt may be sprinkled over each successive layer of manure, at the rate of a peck to a load, more or less, and this is a good way to apply it. If sown on the land it soon dissolves and is absorbed by the soil, and hence the importance of spreading it evenly, so that certain spots will not be oversalted, while others have none.

Hent's and Home points to a lesson from the drouth in the fact that potatoes which were planted on or near the top of the ground in sections where the drouth has been excessive, were hardly worth digging, while those in adjoining fields which were put at the bottom of a deep furrow and never killed at all, yielded well.

The *County Gentleman* says the only reason why better crops of potatoes are obtained from large

potatoes used for seed then from small ones, is that the former gave a greater supply of nutriment to the young sprouts. It says that so far as any other reason is concerned one might as well expect that using graft from a large tree would produce larger trees than grafts from a small one of the same kind.

M. L. Dunlap thinks that a great trouble with many farmers is that they "are too ambitious to get rich at once; buy a large farm, get in debt for material and labor, are compelled to sell at a bad stage of the market, or when other work needs their attention, and, if they do not fail, they have one continual struggle for existence. Had they been content to operate with their own capital and labor, they would have gradually risen to a higher position.

For the improvement of pastures the *Oio Farmer* recommends that they be divided; one half stocked with sheep, and the other half with cows, and alternate changes every Spring; or by an entire change from cows to sheep and from sheep to cows ever, few years, always retaining a cow or two for family use. The two, however, never to run together.

The *New England Home* says that the present season has witnessed the inauguration of a new trade in garden vegetables between Chicago and Boston. Hubbard and Marrow squashes are shipped from the latter to the former city, and the price is \$18 per ton. Early squashes sold in Boston for \$3 per dozen; but later the price paid realized to the grower about \$50 per acre.

The practice of sowing Spring wheat on plowed up fields of Winter-killed wheat, is condemned by some farmers. It is held that the balance of fertility has been disturbed, and a crop has been grown a young one it is true, but still such a one as required for its support what the land was capable of finding, but which it could not find for both Fall and Spring wheat, even where Fall wheat has been ploughed under.

David Mosley in the *New England Home* thus speaks of the use of lime in curing hay: "Last year we purchased one barrel of good lime, knocked out the head and let it air slake in the barrel. When we carted our hay we did not spoil it by drying. Unless it was very dry we put on from two to three quarts per ton of hay, say one-third of a ton, and then spread about one quart of lime on the same through both crops. We cut about the same quantity of second crop in good season. Our neighbor, Lewis, practiced the same on his hay crop. We never had our hay so uniformly cured. Our horses and all our stock were benefited. I have done the same this season. We like it better than salt."

The *Boston Journal of Chemistry* says:

The order in which the different kinds of straw stand relatively, as regards nutritive value, may be presented thus: Oat straw, barley straw, wheat straw, rye straw. Unquestionably it will be for the best interests of farmers in most sections to diminish the amount of straw used for litter, and increase its use for fodder. In many of the Northern States, rye straw is of equal value with the best quality of timothy, as it is used largely for bedding horses in towns and cities. Of course where straw commands such high prices, and is of such really sale it would be absurd to feed it to animals. We must not be understood in these remarks as holding to the