Wood ashes, among the best of saline manures and also among the most economical, are coming to be more and more appreciated every year. Farmers now, as a rule, husband every pound made on the farm and buy them whenever they can be procured at a reasonable rate. The time has gone by with good farmers for exchanging ashes from good hard wood for a few pounds of soap.

Leached ashes, while less valuable, contain all the elements of the unleached, having been deprived only of a part of their potash and soda. Ashes benefit all soils not already rich in the principles they contain, and may be drilled in with roots and grain, sown broadcast on meadows or pastures, or mixed with the muckheap.

The quantity of ashes to be applied to the acre depends, as does that of all fertilizers, on the character of the soil and crop cultivated. which exhaust the salts, as potatoes, turnips and all roots, clover, lucerne, peas, beans and the grasses, are benefited by ashes. The crops named thrive well under an application of ashes with bone-dust, and their effects are also strengthened when mixed with gypsum. Light soils call for light dressings, say from ten to fourteen bushels of unleached and twice that quantity of leached ashes per acre. Rich lands or clays bear heavier dressings. Repeated dressings of ashes like repeated dressings of lime or gypsum, without a corresponding addition of vegetable or barnyard manures, are not admissable, for they will eventually exhaust lands when applied alone. Where the entire surface of the soil is covered with vege-table growth, either of the three materials named acts with great effect. For this reason ashes may be applied unmixed with other fertilizers to meadow lands for a longer time than to any other

In reply to questions asked at the Elmira (N. Y.) Farmers' Club in regard to the value of leached ashes and the best manner of applying them to general crops, as corn, wheat and oats, the following information was gained: Leached ashes vary so much in their charactar that no precise estimate of their value can be made. Heavy clay is liable to be injuriously compacted by liberal dressings of ashes, leached or unleached, unless the soil is sod, in which case ashes spread on the surface tend to increase the crop of grass. The safest and best use of leached ashed on most kinds of soil is spreading them on old meadow or old pasture. Working them into land on which potatoes are to be planted in the same season is also a good way to use them. Good ashes make a valuable dressing for wheat land and for corn, but the leached ashes are too uncertain in their character to recommen I for such use.

coal ashes are inferior in quality to those from wood and vegetables, but are nevertheless of value and are to be applied to the soil in a similar manner, as they tend with their abundance of cinders to the mechanical division of soils. Coal ashes are beneficial to heavy rather that light soils.

Farmers, in consideration of the above facts, cannot be too strongly encouraged to follow the practice of collecting and reducing to askes all the rubbish of the farm not otherwise available, such as brush, old wood, sods, rags-in fact everything which cumbers the place as useless matter. Burnt earth is not only a manure it itself, but is most useful to mix with artificial fertilizers which connot be easily distributed alone or too strong to sow among seed unmixed with other material.—
New York Herald.

In all systems of manuring one fact should be borne in mind: that manure should be placed in as close proximity as possible to the plants it is to nourish, since in all cases of decomposition the disengaged substance enters into new combinations at the very instant it is thrown off, much more rapidly than it does at any subsequent period.

My experience is that in no way is farmyard manure more profitably employed than to meadow or pasture land, if it is spread the same day it is put out. Of manure applied to land, on which there was no crop, the nitrogen passed night down to the drains; but on grass the roots are there all the year round, ready to lay hold of the runaway food, storing it up for future use. -[J. A., in Agr. Gazette.

### Common-Sense Ploughing.

The depth of soil can alone determine the depth of ploughing. When the soil is shallow the gradual deepening of it should be sought by the use of appropriate materials for improvement until the object is fully attained. The sub-soil ought not, as a rule, to be brought out of its bed except in small quantities to be exposed to the atmosphere during the fall, winter and spring, or in summer fallow; nor even then except when such fertilizers are applied as are necessary to put it at once into a productive condition. Two indifferent soils of opposite character, as a stiff clay and sliding sand, sometimes occupy the relation of surface and subsoil to each other, and when thoroughly mixed and subjected to cultivation they will produce a soil of greatly increased value.

Soils appropriated to gardens and horticultural purposes are often deepened to fifteen and even eighteen inches with benefit, and those for generaltillage crop to about twelve inches with decided advantage. But whatever is the depth of the soil the plough ought to turn up the entire mass if within its reach, and what is beyond it should be thoroughly broken up by the sub-soil plough. When all circumstances are favorable to the use of the sub-soil plough an increase in the crop follows, as the hard earth below the reach of the ordinary plough has been loosened. This permits the escape of the water which falls on the surface, the circulation of air and a more extended range for the roots of the plants, by which they procure additional nourishment and secure the crop against drought. The benefits of sub-soil ploughing are most apparent in an impervious clay sub-soil and least evident in loose and leachy soils.

On low or strong land the experienced farmer prefers to see the furrow left on edge exposed to the action of air and harrow. Sandy or dry soil requires flat ploughing, which tends to consolidate

As a rule those crops are the most productive which are ploughed the oftenest. Caution must be used, however, especially after the second ploughing of corn, when a surface plough is less liable to injure the roo s than an ordinary one. [N. Y. World.

# Cultivation of Sorghum.

As regards the cultivation, in the first place, it should be planted upon a rich soil which is both warm and dry, as sorghum will not grow and accumulate saccharine matter from a cold, moist or clayey soil, but it does grow to its greatest perfection where the soil is a sandy loam. The artificial preparation of the soil, so far as preparatory fertilization is concerned, is no different than for ordinary cultivated crops. It is better to have it follow some well-manured crop that has has been perfectly—or as as near as may be—clear of weeds. Then let the surface be well manured with decomposed manure previous to plowing, that it may be incorporated with the soil at plowing, which should be carefully done, so that the same may be thoroughly pulverized.

After plowing mark off for rows from three to three and a half feet apart, dropping decomposed manure, compost, or something of that sort, in the hills, which may be two and a half to three feet apart. A little superphosphate may be employed in the hill to give a quick start to the young plants. It should be kept clean, and its cultivation be thorough and frequent.

When matured, and before early frosts, it should be cut up and the leaves stripped off (which make very fair fodder), and the stalks tied in bundles, saving the seed, which affords an average feed for hogs. It is then ready to be taken to the mill, which consists of the grinding cylinders and evaporating pans.

The price for manufacturing was twenty cents per gallon, which is to be reduced to fifteen cents the coming season. The quantity produced from an acre varies according to the character of the soil, but averages six to eight barrels per acre.

As to value it has ever to be considered equal or superior to the average cane syrups of the market. The only trouble is that sometimes, if kept into the summer, there is a slight tendency to fermentation when kept in a warm place.

It would hardly be a profitable crop to grow further than is necessary for family use. The farmers here who engage in its cultivation plant ten to twenty square rods of ground, and from the latter surface frequently obtain a barrel of syrup.

—[W. H. Y., in Conn. Farmer.

# Loultry.

### Chicken Gossip,

As Mr. J. C. wishes to know why chickens do not pay, we answer his question by a correspondence by C. E. S., which may invigorate some others to look about their poultry yards:

"Well, John, how are your chickens etting along?

"Oh, not very well; they don't seem to lay like other people's I hear of. I don't know why, for I give them all they can eat, and they can always run around the barnyard and stack, and pick up something for a change."

"Yes, that seems rather strange, if they are having good care and feed, and no eggs. Come, let's look at them."

So we are led to a portion of the stable penned off for them, and so dark we could scarcely tell whether they were chickens that were bustling around or not; but soon our eyes got used to the comparative darkness, and we were prompted to ask a question or two.

"Well, John, how is it that you have such a small place for them? Why, this is not large enough for a dozen fowls, and you must have fifty here!

"Yes, I reckon there are."

"Why keep it so dark?"

"I don't know; never got time to put a window "How often do you clean this out? You should

have it well cleaned once a week at least. 'Oh, that would never do; couldn't find time. I generally shovel it out once a year, and surely

that is enough for chickers." "Yes-if you do wish them to lay. Is that the sand-box in the corner?"

"No, that's an old box the boy had a hen setting in last year, and that's the same nest yet.'

"Yes! Well, where do you keep the sand and gravel for them?' "That's over on the side-hill, where they put in a loud time in the spring, and in the winter—why, they want no sand?"

'No, if you do not want the trouble of taking the eggs to the house. Have you given your chickens any fresh meat this winter?"

"Yes, last fall, when the hogs were killed, we gave them the lights; that lasted them some time, and I guess the cats helped them away with them!"

"I suppose that they were beginning to think it was time for more eggs, and hit on this instead; and I see no water-cans—a little water is very necessary. Well, now, in a quiet way I will give you my opinion on profits in fowls, to make them a profitable portion of the farm. They require a large, well-ventilated house; it requires to be well lighted and the fowls must have a variety of good food. Their houses require to be kept clean, and good, neat, comfortable nests for them are also required. We should always be about them two or three times a day; they always require sand and water; and if we ever want to make any portion of our farm profitable we must pay attention to it. Nothing pays to keep unless it is worth attention. tion.

# Doctoring.

A little dosing or doctoring may be a decided benefit to the health of fowls, if done when the disease first makes its appearance, but it is seldom of much avail when the ailments have once gained a hold. In cases of roup, gapes, etc., there are medicines which are very beneficial when administered in time, but many of the diseases and disorders which so perplex and annoy the poultry breeder could be avoided by keeping the house clean and pure, and by adopting a careful and common-sense system of management throughout. Preventives of this kind are invariably more satisfactory than dosing chicks after they have been attacked, and we shall always advocate that kind of medicine as being decidedly cheaper and more effective.

To be simple, box hone

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