

midge. There are other causes to which may be attributed the failure of wheat culture, which causes I have frequently observed in travelling through our own country. For instance, improper tillage of the land, and a neglect in the opening of proper ditches and drains in order to take away the surface water, which, by being allowed to remain until it dries up by the heat of the sun or is absorbed by the soil, in either case materially injures the land and renders it unproductive. I really hope that all our farmers (for they are the bone and sinew of our country) will shake off that lethargy under which they seem to be laboring, and try such experiments as are recommended through the various agricultural periodical of the day, and my word for it, from my own experience, many of them who now appear to be in a state of despondency, will in a short time find out the advantages arising from the suggestions made from time to time through these papers, and that farming will soon assume a much more healthy aspect, and the apathy which at present prevails will disappear as the mists before the morning sun.

Mr. Editor, although only engaged in a very limited way in farming, I shall be most happy at all times to communicate my experience through the columns of a newspaper, or in any other way that will prove most advantageous to all concerned in these laudable pursuits.

I am sir, your ob't servant,

ROBERT HOBSON.

**APPLYING MANURE TO CORN.**—A correspondent of the *New England Farmer*, who uses manure from a barn cellar, without any admixture of straw, thus gives his method of applying it to sward land for corn. He spreads it in spring upon the ground plowed the previous fall, at the rate of fifteen to eighteen cords per acre, and then gives it a thorough harrowing, so as to mix it with the surface soil. Then, just before planting, he plows the ground to a depth of from three to five inches, harrows it and plants the corn. In this way he has raised on an average from sixty to seventy bushels of corn per acre.

**HEN MANURE.**—In answer to an inquiry, it may be said that a good use of hen manure is to compost it with muck two or three weeks before it is wanted. In the proportions of three parts of muck to one of manure it is excellent to give Indian corn a start by putting it in the hill at planting time. Do not put ashes or lime

with it, as they tend to liberate the ammonia. Plaster will not fix the ammonia unless it is in solution, and it requires about seven hundred times its weight in water to dissolve it. In a dry state, plaster will liberate ammonia, according to experiments of Mr. Pusey and others, which have been published.—*Boston Cultivator*.

**WOOD ASHES FROM AIR-TIGHT STOVES.**—From the peculiar construction of these stoves, the ashes are continually being reduced in bulk, the lighter portion being carried by the draft into the chimney, together with all the volatile matter, and thus the less volatile portions, composed chiefly of potash, are aggregated in the ashes left in the stove. Indeed, most of the air-tight stoves do not necessarily call for the removal of any ashes during the whole season, at the end of which, the ashes is nearly pure potash. We believe that ashes from such stoves are frequently worth a dollar a bushel for agricultural purposes. It should not be carried directly to the land, however, but should find its way there through the compost heap, and if this mass of manure is supplied with a drainage cistern, the lye continually being formed is so fully charged with potash, that when pumped back on the heap it has the power of decomposing the woody fibre, and developing most perfectly all the inorganic materials of value it contains; even the silice is rendered soluble by the presence of potash. Such ashes should never be sold, but should always be used by the farmer.

The amount of phosphates found in many ashes is very great. Thus hemlock spruce contains nearly 17 per cent. of phosphate of lime, and nearly 10 per cent. of phosphate of magnesia. American chestnut 17 per cent. of phosphate of lime, and white elm 14½ per cent. of phosphate of lime and magnesia; white hickory 11½. Black birch contains 16½ per cent. of phosphate of lime. Black cherry 13 per cent., and red beech over 17 per cent. Thus it will readily be perceived, that these ashes have a high value. Prof. Emmons claims, that of the phosphates, of per oxyd of iron, of lime, and of magnesia, the American white oak, in its ash, yields as follows: the sap-wood, 32½ per cent., the heart-wood 13½, the twigs 23 6-10, the bark 10 per cent., and the bark of the twigs 23 per cent.—*Working Farmer*.

**ASHES OF ANTHRACITE COAL.**—We are often asked if the ashes of Anthracite coal have any value as manure, and have as frequently answered that their greatest