

addition of unbleached ashes sufficient to cover the poudrette, and on the fourth a good dressing of ashes alone.

The grass throughout the whole lawn came up earlier, and grew more vigorously than it did last year. In the first part it was lightest, and most infested with weeds. The second and third gave a very good crop of hay, the difference between them being hardly perceptible. The fourth was a little better than the first. I ought to add that my soil is a clayey loam, inclining to become parched and cracked in summer.

So far as a judgment can be formed at this season of the year, and from a single experiment, I think there can be no doubt of the value of poudrette as a top-dressing for grass. On stiff, dry soils, a good compost from the barn-yard might be preferable, as that, by mechanical action, loosens the ground and protects the tender roots of the grass from the heats of the mid-summer sun. This region, (Oneida Co.) is now, (July 25th,) suffering from drouth, and yet my lawn looks much fresher than it did in the midst of a similar drouth last year.

I have tried poudrette also in my garden, on corn, beans, asparagus, grape-vines, &c. In the growth of corn, squashes and beans, there is, thus far, a perceptible improvement. But of these and some other things, I can give you a more complete report next fall.

#### HEAP WELLS.

It must be admitted that the present mode of digging and finishing wells for the supply of water for farms and dwellings, is rather behind the modern progress of labor-saving machinery. The shovelling and picking, and the slow and laborious turnings of the windlads, day after day, as the depth is gradually increased under these tedious and heavy labors, should give way to something nearer the horse-power and steam-engine principle. Wells are needed by every farmer, and are as necessary as food and clothing, and an improvement in making them would benefit millions. We are not about to propose anything, but merely to suggest the subject to ingenious men; and in the meantime, by way of assisting such suggestion, we furnish a few of the interesting facts in relation to wells, stated at a late meeting of the Royal Agricultural Society of England.

In soils free from stone, and consisting of sand, clay, marl, or gravel, successful experiments have been recently made, at a very moderate cost, by the following mode:—Instead of digging the common large well, to be walled with hard brick or stone, a hole was first made with an ordinary boring auger, or cylindrical scoop, which brings up the soil to the surface. A cast-iron cylinder, half an inch thick, five inches in external diameter, and four feet in length, its lower end being brought to a sharp edge so as to penetrate the earth, is then driven down into the hole by means of a heavy mallet, or beetle. To keep it steady, a collar of wood made by perforating a plank, is placed around it on the surface of the ground. The earth enclosed within it is again removed with the auger; and in order to obtain a further downward passage for the cylinder, a tool is used for the removal of the earth in the form

of a circle beneath its cutting rim. It consists of a rod with a cross-handle like that of an auger, and at its lower end a claw at right angles to the rod, so that in turning the rod, this claw turns round and cuts the earth below the lower edge of the cylinder, which is then again beaten down with the mallet. Successive cylinders are placed one upon another, as they descend. In this way, a well of ordinary depth, or twenty feet deep, is commonly completed in a single day, the sides being incased with iron cylinders from top to bottom. A bed of gravel is then thrown into the bottom, and a metallic pump inserted. It was stated at the meeting above mentioned, that the expense of such wells, where a business was made of it, did not exceed eight to fifteen dollars for a depth of twenty feet, including pump with lead tube; the cost of the iron cylinders is not mentioned, but if they are five inches inner diameter and half an inch thick, calculation would show that they would weigh about 37 lbs. to the foot in length, and could not therefore be afforded in many places in this country at less than a dollar per foot, unless made smaller and thinner. It may be that in soft earth, and especially soft sand, earthen tubing like drain tiles, with the addition of glazing, might be strong enough, and might be adopted to great advantage, especially as some of the speakers at the meeting stated that the use of iron had been found to impart a rusty appearance to clothes washed in the water. From the statements of other members, it appeared that some had found a serious inconvenience from corrosion in the use of iron pumps, while others had experienced no evil whatever, owing undoubtedly to the difference in the water in different localities, and in the substances held in solution. The same difference has been found in the corrosion of lead-pipes, some water not affecting them at all, and others eating them away in a few years. We have known a similar difference in the effect of water in this country. But it may be laid down as a rule that should in no instance be departed from; the water from lead-pipes should never be used for cooking or as drink, which remains any length of time stagnant in the pipe instead of merely passing through.

The preceding mode would be applicable to such localities as contain large subterranean strata of water in beds of gravel, from which it pours out freely. There are many such, well determined, in regions where stone would not impede the sinking of the tubes. In other places where it is important to excavate larger reservoirs for holding slowly collecting waters, this mode would not be applicable.

ARTESIAN WELLS.—Will you please to inform me as to the implements used, and manner of using, to make Artesian Wells? If proper, I would ask for a drawing of the implements, or so much that I may understand the process.

DOCTOR.—I will. Come, Mrs. Grundy.

(Mrs. Grundy reads:)

#### DESCRIPTION OF PLATE.

Silk dress, the skirt with five rows of black lace, set on quite plain: bows of ribbon the color of the dress; ornament the front of skirt *ca* *ts*