

If four horses are kept on the farm, one pair may be haling while the other is at the machine. If only a single team is kept, they can be unhitched from the waggon, put into the machine, and as soon as the load is thrashed, taken to the field for another load. While loading two extra hands may be profitably engaged putting away the straw or cleaning up and bagging grain, or storing it in the granary.

If it is impracticable to thrash the grain as it is drawn, we would stack it close to the barn, make the top secure for a few days, and as soon as possible, thrash it out. Even this mode would tend to save labor as well as grain, and on a small or new farm where machines are not yet introduced, any plan whereby labor can be saved is worthy of consideration and adoption.—*American Agriculturist*.

SEED WHEAT.

By the time this number of the *Agriculturist* is in the hands of the farmers all over the United States, they will be casting about where to get their seed wheat. We would suggest that it would be advisable to experiment a little with fresh seed. It has been found that seed procured from a distance—either greater or less—has been used with profit, and generally it has been found that seeds brought from a northern locality have been more profitable than those from a southern one. Doubtless the continued use of the same seed on the same ground leads surely, though gradually, to deterioration in the crops. Farmers have changed seed with neighbors only a few miles distant, with advantage.

As to varieties there is abundant room for choice. The white or amber varieties furnish a valuable grain for the first quality of flour, and millers are glad to see such wheats coming to them; but they require good soil and good preparation, as well as early sowing, or drilling in, all of which will prevent heaving by frost in ordinary winters. We have found the Treadwell a very profitable wheat, stooling thickly, and proof against the midge, but very subject to heaving on undrained ground. It has yielded with us over twenty-five bushels per acre on what was two years previously a badly used up field. This wheat has the peculiarity of producing smooth and bearded heads from the same stool, and a field of it would look to the uninitiated as if it were badly mixed. The grain is small and therefore heavy, weighing 60 lbs. to the struck bushel. The Diehl is also a favorite wheat with us; it, too, requires good farming to secure a good crop. In fact, we cannot mention a wheat that does not require good culture, though some varieties seem to stand neglect better than others. The old Lancaster Red is a favorite in some districts, and we have seen fair crops on what we should call poor farms. Aim to get a trial piece well prepared this fall, and sow it with some new, well recommended wheat. In every neighborhood there is usually some go-ahead farmer who has been experimenting, and has some seed to offer. Encourage him by trying his seed if of promising quality, he will then make other trials.—*Id.*

CHEMICAL CONSTITUENTS OF PLANTS AND SOILS.—The *Marleboro Gazette* says: The ashes of nearly

all agricultural plants have been frequently analyzed by different chemists; but, perhaps, more thoroughly in Germany than in any other country. And the following substances are found to be invariably present in plants, and in nearly all parts of them, viz:

BASES	Potash,	Acids	Chloride,
	Soda,		Sulph. acid,
	Lime,		Phos. acid,
	Magnesia,		Silicic acid,
	Oxide of iron.		Carb. acid.

It is true that the quantities of these different constituent parts of the ashes have varied much in the analyses made by different men, and under various circumstances, but the prominent fact remains that they have all been found present where the proper tests have been applied.

Potash, lime, magnesia, phosphoric acid, and sulphuric acid, are now deemed absolutely necessary to the life of agricultural plants, as has been demonstrated by various experiments.

In reply to a correspondent the *Maryland Farmer* says:

Cotton seed is peculiarly rich in bone earth—phosphate of lime, potash and soda. An analysis of 36½ grains of cotton seed ash gave the following result.

Silica.....	0.1000
Carbonic acid.....	0.3504
Chlorine.....	0.3940
Sulphuric acid.....	0.0980
Phosphoric acid.....	11.3618
Lime.....	1.0784
Magnesia.....	6.0839
Potash.....	13.3566
Soda.....	3.1070

36.6000

It will be seen by the above that 36½ grains of the ash of cotton, or 1,000 grains of the pure seed before being reduced to an ash, gave 33 grains of the phosphoric acid, potash, magnesia and soda. The seed is also rich in nitrogen.

FARM GLEANINGS.

Salt is said to be very distasteful to cut-worms. A tea-spoonful put at the foot of an infested plant is recommended.

H. H. McAfee, Superintendent of the Wisconsin University Experimental Farm, recently wrote to the *Western Farmer* that he counted twenty-six perfect Colorado potato beetles emerging from an area of one square foot of ground.

The *St. Louis Rural World* gives an account of the death of a son of Mr. Schofield, of Fall Creek, Indiana, by inhaling Paris green which he was preparing for application to potato vines. He died in a few hours after inhaling the poison.

The *Rural New Yorker* recommends applying ashes to grass lands by sowing broadcast the fall after the crop is off. The amount per acre may be twenty five to two hundred bushels.

The *Geneva (Ill.) Republican* says that the potato bugs have entirely disappeared from that neighbor-