

menced to prepare for a crop of beets, and to erect a factory. Knowing the importance of a thorough preparation of the ground, they at once procured the necessary plows and teams to turn up and pulverize the ground to the depth of *one foot*, not eleven inches—it was mostly done by the Michigan double plow; a part of it was plowed last fall, and a part in the spring. About one hundred acres were prepared at a very heavy expense.

The seed planted was imported by them from the most reliable sources, and planted, some of it being dibbled in, others sowed in drills, and notwithstanding the excessive drouth and the unfavorable weather of the spring, which delayed the planting of it until quite late, the excessive drought of the summer and the early frosts, they have now on the ground a crop which will yield in quantity as much as the average of the best fields in Europe. As to the quality in saccharine properties an analysis of them made last week by Mr. Bender, of this city, shows 12½ per cent. of dry allizable cane sugar, and 3½ per cent. of other soluble impurities—of which, at least eight or nine per cent. of sugar should be extracted, at which rate the yield of it would be from 2,500 to 3,000 lbs. per acre.

The crop is now being harvested and pitted preparatory to commencing the manufacture.

The building occupies a ground space of 150 by 100 feet, and the tower and main part a height of 50 feet, the whole being constructed in the most thorough and substantial manner; the supporters of each floor are entirely independent of the main frame of the building, and each floor independent of the others, so that in case of overloading any one, the building has no strain.

The machinery is driven by two engines, a large and powerful one for driving the graters, centrifugals, washers, &c., a smaller one for the pumps and vacuum pan. The whole establishment has been erected without regard to expense, in the very best and most substantial manner. The machinery for grating and swinging out the juice has been imported from Germany, and is the best improved in use there, and we cannot doubt that abundant success will crown the labors of Messrs. Gennert Brothers—who have been the first in the Union who were willing to risk so large a sum of money as was necessary (about \$50,000) to make the experiment. That such may be the result, and our own Prairie State have the honor of the inauguration of it, is the sincere wish of all who have watched the energy and perseverance of Mr. G., who has met with many obstacles and difficulties which would have discouraged almost any other man.

## FARM OPERATIONS.

### WORK TO BE DONE.

#### Implements.

If you have not a subsoil plow, a carrot-weeder, and a good horse-hoe, buy them at once; they will more than pay for their cost during the coming season. Repair and paint implements, and store up such as are not required for immediate use.

#### Firewood.

If your wood shed has not been filled during the summer or fall, do it now, with a two years' supply; this enables the wood to become seasoned before use, and well seasoned wood is more economical than any other.

#### Manures.

Look well to compost heaps. We should remember that there is no winter in a compost heap, and it may *fire-fang* even in the coldest weather. Return the drainage to the top of the heap frequently. If this is done with regularity, it will save the greater labor of turning it over.

### Ice Houses.

Before ice-houses are filled they should be put in perfect repair; the slightest opening suffered to remain in the walls will cause the ice to be wasted. In former times, hay, charcoal, or other filling, was placed between the double walls of the houses, to insure warmth and prevent the circulation of air; but it is now well established that, as confined air is the great non-conductor of heat, it is better to use no filling between the walls, but to have them thoroughly air-tight, and painted, if possible, on the inner sides with some cheap paint.—*Working Farmer.*

### AN EXPERIMENT IN MANURING FOR WHEAT.

IN preparing my ground for wheat in the fall of 1862, I tried an experiment in manuring which I will relate for the benefit of those whom it may concern. The ground was a fallow and a gravelly soil—a large part was