in the month of April last. The conductors of the station seem to have gone to work in good, honest fashion, without bias one way or the other, and their failures are reported as frankly and freely as their successes. The silocs seem to have been built with great care, and one peculiar part of the construction seems worthy of remark: the sides do not extend to the bottom, but stop short an inch and a-half all round. Before filling, a strip of tarred paper is folded lengthwise and doubled, so that one-half of it will lie against the wall, and the other portion on the floor: it is held in its place by a strip of board. This makes an air-tight joint, when the pit is full. When the silo is empty, the board and the paper are removed, and there is a circulation of air all round the sides of the silo, between the stone-wall and the lining of matched boards, which keeps the wood-work dry, and adds greatly to its durability. The lining is 2 inches from the wall, and the air-chamber provided by this mode of construction seems to have preserved the silage from freezing during the two past winters, though the silo is built on the north side of the barn, and has been exposed to a temperature of—40° F.

The Ensilage crop.—Three and a-half acres of self-drained clay-loam were selected and, after receiving thorough cultivation and 20 tons of well-rotted farmyard dung, sown with corn in rows 45 inches apart, and 4 grains to the foot. The seed was deposited two inches deep, *well rolled*, and 9 days afterwards the rows of young corn were visible. Harrowing with the smoothing-harrow, and horse-hoeing followed, "and the crop was hand-hoed once, to remove the weeds from between the stalks." And while feeling quite delighted at seeing cultivation so thoroughly carried out, I cannot help remarking how desirable it is that some one should teach the farmers of this continent how to use their exquisitely constructed hoes. The hoe used in my part of England is a clumsy tool enough, but with it a Kentish labourer *edge-hoes*, with ease, an acre of pease, beans, potatoes, or roots, a day. By *edge-hoeing*, I mean that he cuts up all the land, with its weeds, that has not been touched by the horse-hoe; striking his tool along the rows and between the plants, so that when he has finished, the field has been moved in such fashion by the horse- and hand-hoe, that not one particle of the ground remains unstirred: he walks of course, with the row between his feet. Now, in the table giving "the cost of growing one acre of ensilage corn—see p. 7 of this report—the expense of hand-hoeing is set down at four dollars an acre!!! Have I not a right, to say if a Scotchwoman can single 2½ roods of turnips in one day, and a Kentish man can edge-hoe an acre of potatoes, &c., in the same time, the American farmer wants somebody to teach him to use the hoe? As the wages paid during this experiment were at the rate of $1.33 a day—see the same table—it follows that it took a man three days to "hand-hoe, to remove the weeds from between the stalks," or three times as long as it would take him did he understand his business.

I confess I should not like to conduct experiments in Minnesota, for, "in the latter part of July, the *chinch-bugs* swept over the farm, destroying many of our experiment plots of grain and grasses." Fortunately, the corn-plot was too forward to suffer.

In 1886, the distance between the rows of corn was 25 inches, 4 grains to the foot, and the yield, with the same treatment as in 1887, was 22 tons an acre. With drills at 45 inches, and 3 grains to the foot, the yield was 35 tons an acre, and a much larger proportion of the stalks bore well matured ears of corn, which were in "the milk" when cut.

Harvesting.—The corn when cut averaged 13 feet high. It was too heavy for any machine, so it was severed by hand, and laid in open bundles on the ground, to wilt, for about 36 hours, during which time it lost about 17 % of its moisture. The yield of *green corn*, determined by careful weighing of the whole crop, was 35 tons an acre, so that the ensiled corn off an acre would probably weigh about 29 tons. The time occupied in the operation from beginning to cut to the filling of the last load into the silo, was 13 days, of which, as far as I can judge from the rather queerly expressed passage about it, only the afternoons were devoted to filling. It was evidently acid silage, as there could not have been time to allow of heating before covering in.

Silo No. 1 was filled to the depth of 16 feet, with 142,600 lbs. of cut fodder, which gave 35 lbs. to the cubic foot. After levelling the top, it was covered with planks, placed side by side, so arranged as to leave one inch space on the top of the silage naked, to allow of easy settling. This was then covered with two thicknesses of tarred building paper, and over this a covering of inch boards and the whole weighted with 130 lbs. to the square foot. On December 1st, the mass had settled 4 feet, = one-fourth of the original depth. No more settling ensued, and on March 30th, a cubic foot of the silage, taken 6 feet from the surface, weighed 43 lbs., showing a loss of 10,504 lbs., or 7 %, in curing. (1)

Silo, No. 2, was filled in the same manner as No. 1, with 76,000 lbs. of the same kind of corn, and the balance with silage corn from other experiment-plots. This was packed and covered the same as No. 1, but *not weighted*. The extent of subsidence was 3 feet 6 inches.

Early in December, both silocs were opened, and their contents examined. No. 1—silage *perfect;* not a cubic inch injured; as bright under the covers, round the sides, and in the corners, as when put in. Light brown in colour, slightly acid to the taste, and the odour agreeably vinous.

In silo No. 2, the unweighted one, the contents were decayed for the first 12 inches from the top, and nearly as much round the sides. The silage had a strongly acid smell and taste. The sound interior was readily eaten by the stock, but not with the relish or productive results as the contents of No. 1.

Cost of growing one acre of ensilage.—The average distance from the field to the silocs was 1,000 feet:

Carting and spreading 20 tons of dung.....	$5.50
Once ploughing.....	1.00
Harrowing and rolling.....	1.00
Planting	1.00
Seed 2 pecks.....	1.25
Cultivating 4 times.....	2.00
Hand-hoeing and weeding.....	4.00
	$15.75
Equal per ton.....	.45

On this, I have to observed that there is no value put on the "20 tons of *well-rotted* farmyard manure!" This ought to be worth, when ready to go on to the land, at least $1.50 a ton, and allowing one-third of it to remain available for future crops, an addition of $20.00 should be made to the above total. Again, no rent, rates, or interest, or wear and tear, depreciation of value, are mentioned. Four dollars an acre would not be too much for these charges. I doubt very much if an acre of land can be *ploughed* for a dollar, the man's wages alone being $1.33 cents a day! I see one of the correspondents of the Rural Vermonter boasts of the acti-

(1) It strikes me that the increased weight of the cubic foot does not necessarily show a loss in curing Pressed hay weighs at least 100 % *more* per cubic foot than it did when in built, and yet is has lost little or nothing of its contituents not even water by being pressed. Ed. A. Barnard.