

3. Call out for each day only such a number of men and teams as can be properly directed.

4. In laying out the work, estimate on a full day's work from every man, and see that it is performed.

5. See that all the gravel hauled is clean.

6. Every wagon box should hold a quarter of a cord of gravel.

7. Specify the number of loads to constitute a day's work.

8. Properly grade and crown the road before putting on gravel.

9. A fair crown for gravel is one inch of rise to each foot of width from the side to the centre.

10. Give the roadway on hills a higher crown than on level ground, otherwise water will follow the wheel tracks. One and one half inches to the foot from side to centre will be sufficient.

11. Spread the gravel evenly over the road, and keep it raked or scraped into the wheel and horse tracks until consolidated. A road roller should be used for compacting the gravel.

12. On all gravel roads, crown the roadway by cutting off the sides, putting new material in the centre. Do not cover the old gravel foundation with earth from the side.

13. Make the width of the road as uniform and the grade as easy as possible.

14. Remember that good drainage is absolutely necessary.

15. Whenever water stands on the roadway, or by the side of the road, or whenever the ground is seen to remain moist, better drainage is needed.

16. See that drains are free from obstruction, that they have a good fall and proper outlets.

17. Surface water should be disposed of in small quantities. Great accumulations are hard to handle and are destructive. Obtain outlets into natural watercourses as often as possible.

18. Instead of having deep ditches to underdrain the road, use tile.

19. Give culverts a good fall and free outlet, so that water will not freeze in them.

20. Make early arrangements for having on the ground when required, and in good repair, all machinery and implements to be used in the performance of statute labor



Road West of Brockville—"Never Good."

be placed inside or outside of the barn will depend upon each individual case.

The size of the silo will depend upon the quantity of stock kept. It is customary to estimate that a 1,000 lb. cow will consume about 40 lbs. or one cubic foot of silage per day. If one cow be fed a full ration of silage, say, from November 1st to May 1st, she would require 7,240 lbs., which would need a storage capacity in the silo of 181 cubic feet. At this rate 20 cows would require a storage capacity of 3,620 cubic feet. The following table, compiled by the Cornell Experiment Station, shows the approximate capacity, in tons, of silos of various depths and diameters for well-matured corn silage:

Depth feet.	Inside Diameter in feet.											
	12	15	16	17	18	19	20	21	22	23	24	
20	Tons 45	Tons 70	Tons 80	Tons 90	Tons 101	Tons 113	Tons 125	Tons 138	Tons 151	Tons 167	Tons 180	
21	47	74	84	95	106	118	132	145	159	173	190	
22	49	77	88	99	111	124	138	152	166	182	198	
23	52	81	92	104	117	130	144	159	174	190	207	
24	54	84	96	108	122	135	150	166	179	199	216	
25	56	88	100	113	127	141	157	173	189	207	225	
26	59	92	104	118	132	147	163	180	197	215	235	
27	61	95	108	122	137	153	169	187	205	224	244	
28	63	98	112	126	142	158	175	193	212	232	252	
29	65	101	116	131	147	164	182	200	220	240	262	
30	67	105	120	136	152	170	188	207	227	249	271	

In making out this table the mean weight of a cubic foot of well-settled silage has been taken at 40 lbs. If the silo is filled but once, and is not refilled after the silage has settled not more than two-thirds, the capacity of the silo can be obtained in settled silage. The table, however, will be a guide to those building silos.

When a stave silo is to be built the soil should be dug out to the depth of three or four inches, and with a diameter at least two feet greater than the proposed diameter of the silo, and drainage should be provided if the conditions seem to warrant. The excavation should be filled with stones, with gravel as a filling, and the whole pounded down. The finishing should be done with cement. A thin mortar made of one part cement and four parts of fine, sharp sand should then be poured over the whole lot. After this first coat has set, a finishing coat made of one part cement and three parts of sand should be put on and worked down with the trowel. Then finish off by dusting

Building a Stave Silo

The usefulness and practicability of the silo is now established beyond doubt. The question now discussed is which is the best kind of silo to build. Of late years the round or stave silo has come into prominence and in several ways is considered to be superior to the square silo. Cornell, N. Y., Experimental Station after three years' careful study and observation of the stave silo pronounces it the most practical and successful silo which can be constructed. It presents no corners which may pull apart, admit air and cause the silage to settle unequally. The original cost is very slight as no expert labor is required. The material used in construction is the minimum amount for obtaining the maximum capacity.

A silo should be located with reference to facility in feeding. If stock are kept in a basement, the floor of the silo should be on a level with that of the basement. It is cheaper to elevate the silage at the time of filling the silo, when it can be done on a carrier by steam power, than to elevate it in baskets at time of feeding, when it must usually be done by hand power. Whether the silo should