Stump Pulling.

To the Editor of THE CANADA FARMER:

SIR, Some fourteen months ago I inquired, through the columns of your valuable journal, for a screw stump machine, and received the desired information. I purchased one of the above-named machines for about $175. This machine requires three men to clean the stump while being raised; one horse to wind it up; also, one yoke of oxen to move it from one stump to another. On an average, we can pull eight pine stumps per day. In looking over the last number of the CANADA FARMER I see an account of a machine, called the "Pioneer Stump Puller," exhibited at the N. Y. State Fair by C. H. Church, of New Berlin, Chenango County, N. Y," which is said with "two men will raise a weight of 25,000 pounds, and pull 100 stumps a day." If that is so, it puts my machine in the shade altogether. I would like to see a draft of this "Pioneer Stump Puller," and have a full explanation of the same. I think it would pay any person or persons wanting a job of pulling stumps to purchase one of these machines, as I have from two to three thousand stumps to take out, which I will let in lots of from fifteen to twenty-five acres.

I have been paying from sixty-five to seventy-five cents per stump, that is, for pulling and burning off, leaving the land ready for cultivation. Any person or persons wanting a job on the above-mentioned terms can have it by applying to

THOS. BURNHAM.

Sandford, Nov. 6, 1868.

NOTE BY ED. C. F.—Our correspondent had better write for further information to the manufacturer of the "Pioneer Stump Puller," who most likely has an illustrated descriptive advertisement or circular of the machine in question.

Cost and Profit of a Root Crop.

To the Editor of THE CANADA FARMER:

SIR,—At this season of the year one often hears the question asked whether root crops really do pay; and as they are certainly becoming daily of more importance in Canadian agriculture, it is probable that many would give them a trial, were they not deterred from doing so by the seemingly enormous cost attendant thereon. If, therefore, some of your readers who have been in the habit of cultivating this crop, would give their experience of the cost per acre, I think it would be conferring a benefit on the farming community.

I append hereto my own estimated cost per acre of a crop of turnips.

Rent	$4 00
Seed, 3 lbs., at 30 cents (say)	1 00
Ploughing twice	4 00
Cultivating, harrowing, &c.	2 00
Hoeing twice	10 00
Pulling	2 50
Carting	2 50
Manure—20 loads at 50 cents	10 00
Carting, spreading, &c.	10 00
	$46 00

There is, besides, the expense of making the drills and putting in the seed If I am correct in the above estimate, nothing short of an extra crop will balance the cost.

DEWDROP

Hamilton, Nov 20th 1868

CHOPPING.—A correspondent criticises "Mark Tapley's" directions for using an axe. He takes exception to the weight of the axe recommended, 8 lbs., as the best choppers in his locality usually prefer one weighing about 4 lbs. The length of the chip directed to be taken out, three feet for a tree four feet in diameter, is objected to as out of all proportion, and an impossibility if it is only commenced at the height specified. "Mark Tapley's" description is no doubt somewhat ambiguous and inconsistent, and there is a manifest error in regard to the weight of the axe-head.

A Table of Dimensions of Dry and Liquid Measures.

THE following useful table is supplied by a correspondent of *Colman's Rural World*. It will be found convenient in making calculations of quantities, or in extemporizing measures when required, by constructing a box of the right dimensions.

DRY MEASURE

Measures.	Square Vessel.				Round Vessel.	
	No of Cubic Inches.	Length.	Breadth.	Depth.	Diameter.	Depth.
Barrel	10752.0	22	22	22 7-32	23	25 7-8
Bushel	2150.4	13	13	12 3-4	18 1-2	8
Peck	537 6	8	8	8 6-16	10	6 13-16
Gallon	268 8	7	7	5 1-2	7	6 31-32
Quart	67.2	4	4	4 3-16	4	5 11-32
Pint	33 6	3	3	3 3-4	3 1-2	3 1-2
Gill	8.4	2	2	2 3-32	2	2 21-32

LIQUID MEASURE

Measures.	Square Vessel.				Rd Vessel.	
	No Cubic Inches.	Length.	Breadth	Depth	Diameter.	Depth.
Barrel	7276.5	20	20	18 3-16	21	21
Gallon	231 0	6	6	6 6-16	7	6
Quart	57 75	3 3-4	3 3-4	4 3 32	4	4 19-32
Pint	28.87	3	3	3 3-16	3	4 1-16
Gill	7.22	1 7-8	1 7-8	2 1-16	2	2 9-32

☞ On Mr. Mechi's farm in England, which contains 170 acres, there are 72 acres in wheat and 18 in pasture. This is a leased farm, yet Mr. Mechi used £16, or nearly $80 in gold per acre, and would have preferred to have increased this to £25. He made 18 percent. profit.

NORWAY OATS.—A variety of Oats under this name has been extensively advertised and extravagantly lauded. Considerable dissatisfaction has, however, been expressed among our neighbours in the States, in regard to the true merit of the variety, and the advertisers are charged with endeavouring to put a fictitious value on a very ordinary grain.

CRANBERRIES IN UPLAND.—A correspondent of *The Rural American* says:—"My own experience, and that of many others, is proof conclusive that they can be grown successfully and profitably on dry uplands. A clay or loamy soil, that is naturally moist, is the best. Upon such there is no doubt of successful culture. The land should be prepared by ploughing and harrowing thoroughly, rake level, and plant in rows 1½ feet apart, and one foot in the rows. Hoe the plants as long as convenient without disturbing them, after which weeding is all the cultivation necessary. The plants are set in spring until the 15th of May; in the fall, from the 1st of October until the ground freezes. On the pine-barren lands of Long Island they grow to perfection without the usual course of flooding, which so many consider necessary.

THIN SOWING.—The accompanying letter is from a practical farmer, who for many years has occupied a 700 acre farm in West Norfolk. My best field (one bushel seed) yielded 7 quarters 2 bushels per measured acre of fine white wheat (Club-headed Rough Chaff); sold for 60s. per quarter. My whole wheat crop (73 acres) will average 6 quarters per acre. The peck an acre yields 2 bushels per acre less than the adjoining 1 bushel, which was over 6 quarters of white wheat per acre. The peck an acre was put in as late as the 20th of November, which I do not recommend, but was determined to put it in same day as the rest.—*F. F. Mechi, Tiptree, October*, 1868.

The following is the letter of Mr. Mechi's correspondent:—"Oct. 13, 1868.—At the request of my brother, I write to inform you of the result of my experience in thin sowing for wheat last year. From what I saw on your farm, and what I read in your publication, I was induced to try 4 pecks per acre in four different fields. As you may suppose, my labourers laughed at the idea of it. I need not tell you that the ridges selected for the purpose were very visible all winter, even before you got near the field; looked very thin. As soon as the plant began to grow in the spring, it told us what it was going to do. I had a few friends to look at in the summer, and I think I may say that every one was in favour of the thin sowing, both as to straw and corn,—that is to say, 4 pecks against 7 pecks per acre, which is my usual quantity. I had that which grew in one field cut by itself; also the adjoining ridge, each containing 3 roods and 36 perches. The 4 pecks per acre gave me 13 coombs and 2 pecks. The 7 pecks per acre gave me 11 coombs 3 bushels and 3 pecks. I shall try it again this year."

THE MANUFACTURE OF MANURE.—Many of our farmers complain that they cannot make enough manure, and I never yet found a good one who has had too much. Now I think that if a farmer has hay enough there need be no difficulty in obtaining enough manure.

We see many of our barnyards constructed with escape holes in the wall along the lowest side of the yard, and from these holes a passer-by can scarcely fail to notice the very essence of manure escaping. The most valuable portion of the manure are those which are soluble, and of course these are taken up by the water in its passage through the manure and out of the yard.

Not long since I was arguing with one of my neighbours upon the propriety of stopping up these holes in his barnyard wall, when he met my objection with the assertion that he could not keep his yard clean enough to keep cattle in. A further investigation showed that his yard was not supplied with rain spouts, and consequently there was more water in the yard than fell there in direct descent. Yet this same farmer would complain that he "could not make manure enough," and this, too, when the most valuable portion of what he did make was escaping into the public road and into his neighbor's land.

If no more water finds its way into the yard than that which falls into it, there should be no difficulty in keeping it clean with the materials found on a common farm, such as coarse grass from the swamps and lowland, sods from the roadside, tussocks from the meadows, whose removal, while it benefits the manure pile, also improves the appearance of the meadow. If these are all used up, then it will be time enough to complain of the difficulty of not being able to make manure.—*Correspondence Germantown Telegraph.*

FEEDING OFF AFTERMATH.—It is a very common practice with farmers to reserve their meadow feed until very late in the fall, even so near to the winter that the frost has taken nearly all the succulent and nutritious properties out of it; but, by this mode of management, very little benefit is received, and in many cases great injury is done. Some advocate, however, that aftermath should not be fed off at all, but left as a shield and mulch for the roots; but from our own experience, we do not believe meadows are injured by being pastured in the fall if it is done at the right time and by certain animals.

Meadows are injured by horses and sheep late in the season; for after the blades of the grass are killed, these animals will nip close to get sweet feed. They never should be allowed upon mowing land after the grass has stopped growing, not even in winter when the ground is frozen, for they will then gnaw to the very roots.

Horned cattle are really the only fit animals for the meadow, and they should be turned in while the feed is good, and removed as soon as the earth becomes moist enough for their feet to break the sod. In this way a profit may be derived on one hand, without any loss attending on the other, and sufficient protection left for roots. Timothy, and many other grasses which are common, take strong hold upon the soil, and are difficult to eradicate, and for this reason farmers abuse their fields.

Close feeding kills out here and there a little, and mosses, with other foreign matters, work in so gradually that it is for a few years hardly noticeable, but eventually the meadow has to be ploughed and restocked, because a paying yield of grass is not received.

Now, all this results from injudicious management, for we know of many meadows which yield heavy crops every year of the best quality of grass, that have never been ploughed or re-seeded since the land was cleared, nearly half a century ago. They have always been pastured in early fall, never fed close, and have occasionally received a top-dressing of barnyard manure.—*Ohio Farmer.*