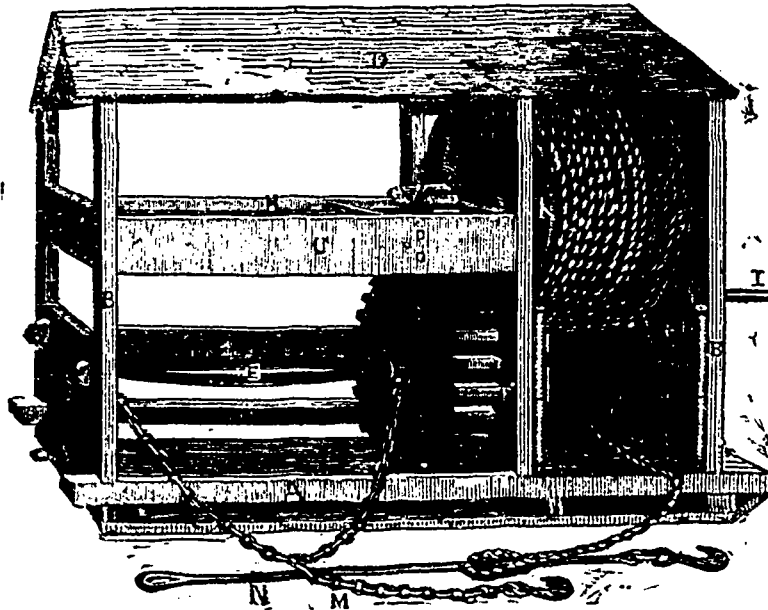


STUMP PULLING MACHINE.

A friend and inquirer, requested us to give some information in the columns of the CULTIVATOR, respecting the best mode of pulling up stumps from land. We have at considerable expence, had the following engraving executed by a young gentleman, living in the vicinity of this city, which gives an accurate idea of the machine.

As this machine is adapted to extract pine and hemlock stumps of the largest size,—a more simple and cheap plan may be practised to get rid of the ordinary hard-wood stumps, with which this country abounds. The process is simply this—procure a lever about 30 feet long, and 6 inches in diameter, fasten a sufficient length of cable chain around top part of the stump, to which attach one end of the lever. The lever is then to be raised in a horizontal position,—a yoke of oxen fastened to the other end, but little exertion will be required to raise stumps of 2½ feet in diameter.

Fig. 11.



A, the sills on which the frame work is erected; the side ones 7½, and the cross ones 4 feet long, made of 5 inch square timber. Under these sills are three more crosssills under which planks are fixed with the front end turned up like the front of a sled or scow, to facilitate the removal of the machine by dragging over the ground.—BBB, the upright posts, three on each side, 4 feet high, 3 by 4 inch stuff, the middle one standing 2 feet from the front and 4 feet from the rear of the machine. C, girths 12 inches wide, 2½ thick, framed into posts. Several short girths of this description are framed across the machine and contain iron boxes for the shafts to turn in. D, the roof or cover, with 1 foot slope to protect the machine from wet. E, a large cast iron shaft, 4 feet long, 5½ inches in diameter at the ends and swelled to 6½ in the middle, on one of which is a strong cast iron spur wheel (F) 3½ feet in diameter, with 54 cogs. G, a pinion wheel 7½ inches in diameter, with 9 cogs to mesh into the spur wheel, and placed on a wrought iron shaft (H) passing through the whole length of the machine, 2½ inches square near the pinion wheel, but tapering towards each end. I, the crank, outside, in front of the machine, on the end of the wrought iron shaft, by which to wind up the slack of the rope, and the same time unwind the chain. K, a wooden drum, 3½ feet in diameter, and 1½ wide, attached to the shaft by iron arms, around which winds a strong rope 1½ inch in diameter, 150 feet long, to the end of which the power is applied. LL, two rollers to prevent the friction of the rope against the sides of the machine.

The chain, M, is attached to each end of the iron shaft, by a strong bolt and screw, and extends about 4 feet double, where it converges together and is united by a triangular link and then extends single 4 feet further and terminates with a hook and swivel, as shown in the engraving. The chain must be very strong, made of the best of iron, the single part of 1½ and the double 1½ inch wire, the links small and short like ship cable. Another strong chain 10 or 12 feet long, with a hook one end and a ring the other, is placed around the top of the stump intended to be extracted, and this is connected with the chain

attached to the machine by a number of connecting rods (N) made of 1½ inch iron, 10 feet long, with a strong hook one end and an eye the other, as represented above. There should be a sufficient number of these rods to extend 100 feet or more. These rods cost less, and are much easier handled than heavy chains.

Now go on the other side of the machine, and on the upright posts, level with the large shaft, you see two strong rings attached to heavy plates of iron reaching to and forming boxes around the ends of the shaft. To these rings two strong chains are attached, by which the machine is anchored to a stump or some other immovable object. It will readily be seen that the power acts as much on one side of the machine as the other, and consequently it must be firmly secured to prevent its being displaced or turned over.—By placing the chain around the top of the stump to be extracted, and anchoring the machine to the bottom of the one on the otherside, the former will give way first, although it may be larger than the latter. The usual plan is, to commence operating near the outside of the lot, and after fastening the machine to a firm stump, extract all within the reach of the chains, leaving only one good one within reach to which it may next be fastened in order to extract the former one. If it be desired to extract a stump where there is no other one to which to fasten the machine, a hole must be dug in the ground and a strong post set in it, well braced to the top on the side towards the machine, place the chain around it close to the ground, and if the stump is not very strongly rooted, it will come out without much trouble.

The manner in which the machine operates must now appear obvious to all. A yoke of oxen draw on the rope: this turns the drum and the small wheel which turns the large wheel and shaft so as to wind up the chain very slowly, but with immense power. A single yoke of oxen drawing on the rope gives a power equal to thirty-five or forty yoke on the chain; so that some thing must inevitably give way. It will readily be seen that the machine must be well made, and the chain very strong, especially if large and firmly rooted stumps are to be pulled.—Gen. Far.

TORONTO MARKETS:

For the week ending 1st March, 1842.

Wheat, per bushel.....	5	0	a	5	6
Barley, do	1	3	a	1	8
Oats, do	1	3	a	1	6
Flour, Farmers', per bbl.....	25	0	a	27	6
Flour, Millers', warranted, do	30	0	a	0	0
Oat-meal, warranted, per bbl..	21	3	a	22	6
Beef, per cwt.	17	6	a	20	0
Mutton, per lb.....	0	3	a	0	4
Pork, per 100 lbs.....	12	6	a	18	9
Geese, each.....	1	3	a	2	0
Turkies, do.....	3	0	a	4	0
Fowls, per pair.....	1	3	a	1	6
Ducks, do	1	4	a	2	0
Eggs, per dozen.....	0	6	a	0	7½
Butter, in tubs, per lb.....	0	5½	a	0	7
Butter, in rolls, do	0	7½	a	0	9
Potatoes, per bushel.....	1	0	a	1	3
Hay, per ton.....	60	0	a	75	0

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ST. CATHARINES' NURSERY.

THE Subscriber begs to call the attention of the public to his well selected Stock of FRUIT TREES, which will be warranted to their soris.

CHAUNCEY BEADLE.

St. Catharines, March 1. 1842.

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WM. EVANS—EDITOR.

W. G. EDMUNDSON—PROPRIETOR.

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Orders will be received at J. EASTWOOD'S, LESSLIE, BROTHERS, and GEORGE LESLIE'S Seed Store, King Street, 37. No Orders will be attended to unless the terms are complied with. All Postmasters considered authorized Agents.

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