UNITED STATES PATENT OFFICE.

ABRAHAM H. PRESTBYE, OF KALISPELL, MONTANA.

HYDRAULIC STUMP-PULLER.

1,029,510.


To all whom it may concern:

Be it known that I, ABRAHAM H. PRESTBYE, a citizen of the United States, residing at Kalispell, in the county of Flathead and State of Montana, have invented certain new and useful Improvements in Hydraulic Stump-Pullers, of which the following is a specification.

This invention relates to improvements in stump pullers, and has particular reference to hydraulic stump pullers.

The principal object of the invention is to provide a simple device of this character and one which is easily moved from one point to another.

Other objects and advantages will be apparent from the following description and with particular reference to the accompanying drawings.

In the drawings: Figure 1 is a side elevation of the device in use. Fig. 2 is a top plan view. Fig. 3 is a rear elevation.

Referring particularly to the drawings, 10 represents the base of the device, which is supported on wheels 11, so that the device may be moved to the stump to be pulled.

Located on the base is a water tank 12, and connected to the tank by means of the pipe 14 is a force pump 13, the check valve 15 being arranged in the pipe 14. Suspended below the platform by means of the chains 16 is the hydraulic cylinder 17 in which is arranged a piston head 18 on the inner end of the rod 19. Both ends of the cylinder 17 are closed, except for a small opening 20 in one end through which is passed the rod 19.

The opposite end of the cylinder has screwed thereto any suitable device as a hook 21 to which a chain or rope 22 may be secured and anchored to a nearby tree as represented at 23.

The pump 13 is provided with an operating handle 24 by means of which the water is drawn from the tank and forced into the cylinder and behind the piston head 18 by means of the inlet pipe 25. Thus the force of the water drives the piston head toward the end of the cylinder which carries the hook 21. Attached to the opposite end of the rod 19 is a suitable device 26 for attaching to the stump to be pulled, and when the pressure is applied between the piston head and the adjacent cylinder head, the cylinder will be held to the point of anchorage 23, the piston head moving in that direction will draw the fastening device 26 and pull the stump.

By releasing the devices 22 and 26, the chain may be quickly and easily moved to another stump, and set up in similar manner, thus making it easy to pull the stumps, and requiring very little time to set the apparatus up, it only being necessary to attach the member 22 to a suitable point, attach the member 26 to the stump, and operate the pump.

In the pipe 25 is arranged a check valve to prevent back pressures into the pump. The pipe 27 leads from the cylinder to the pipe 14, and is provided with a hand valve 28 to release the pressure in the cylinder and return the water to the tank. In the pipe 14 between the pump and the junction of the pipes 27 and 14 is arranged a similar hand valve 15 which when pressure is to be released from the cylinder and returned to the tank, is inclosed thus cutting the pump completely out.

In the foregoing it will be readily seen that the device is simple, cheap and easily operated, and may be readily moved from one stump to another without any great amount of labor or time.

What is claimed is:

A hydraulic stump puller comprising a wheel supported base, a fluid tank on one end of the base, a force pump on the other end of the base, a pipe connecting the tank and pump, a cut off valve in the pipe, a check valve in the pipe between the cut off valve and tank, a hydraulic cylinder below the base, a pipe connecting the tank and cylinder, a check valve in the pipe, a piston in the cylinder, means on the piston for attachment to a stump, means on the cylinder for anchoring same, a pipe connected to the cylinder, at one end and at its opposite end to the first named pipe between the check valve and the tank, and a cut off valve in the last named pipe.

In testimony whereof I affix my signature, in the presence of two witnesses.

ABRAHAM H. PRESTBYE.

Witnesses:

WILLIAM F. SCHNELL,
I. D. ROQUELLE.