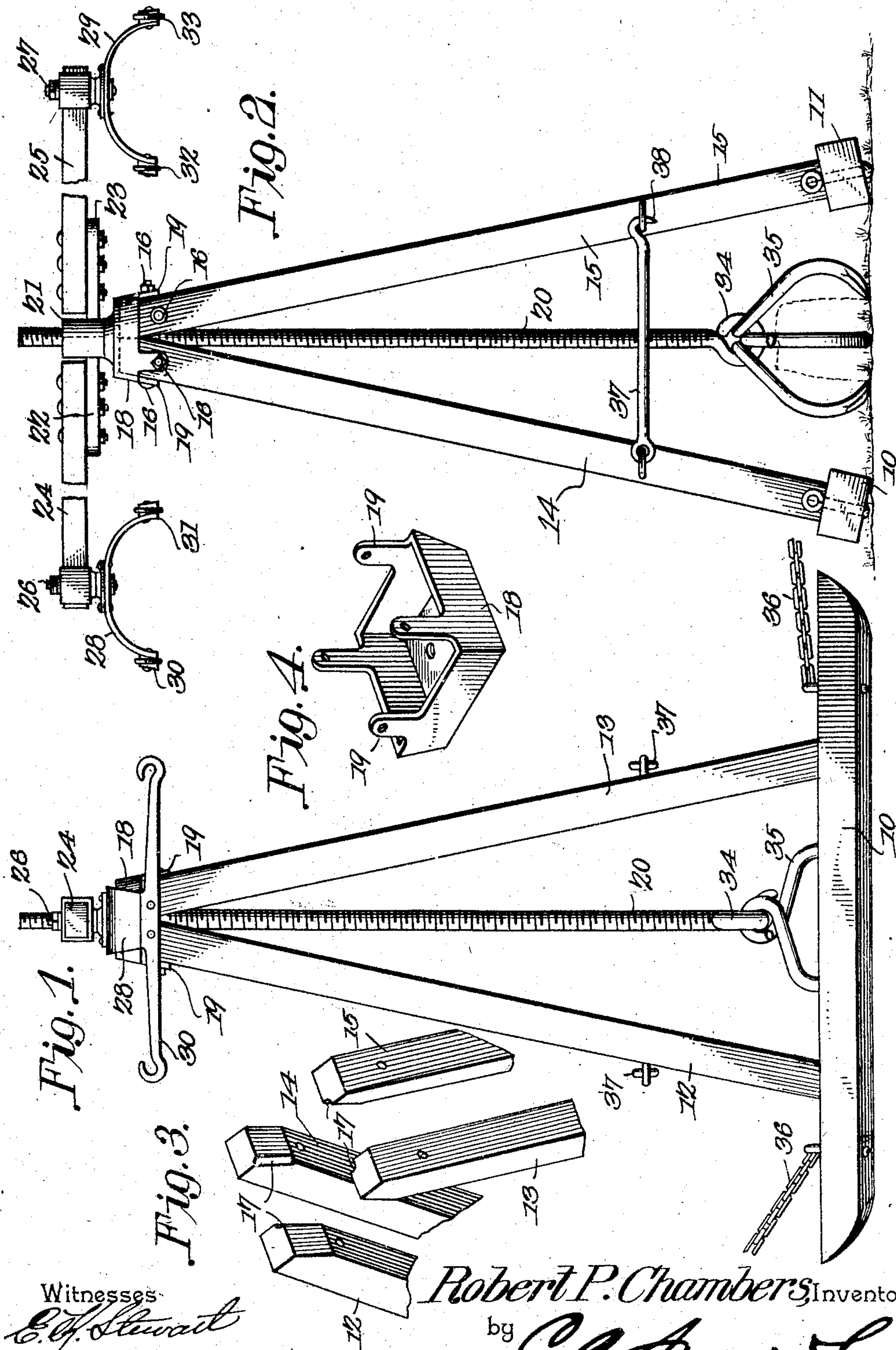


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R. P. CHAMBERS.
STUMP PULLER.

APPLICATION FILED MAR. 31, 1904.



Witnesses

E. J. Stewart
E. H. Woodward

Robert P. Chambers, Inventor.

by

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

ROBERT P. CHAMBERS, OF RICHMOND, KANSAS.

STUMP-PULLER.

SPECIFICATION forming part of Letters Patent No. 780,494, dated January 24, 1905.

Application filed March 31, 1904. Serial No. 200,970.

To all whom it may concern:

Be it known that I, ROBERT P. CHAMBERS, a citizen of the United States, residing at Richmond, in the county of Franklin and State of Kansas, have invented a new and useful Stump-Puller, of which the following is a specification.

This invention relates to devices for pulling stumps and for similar purposes, and has for its object to improve the construction and produce a device of this character of great strength and durability, which may be cheaply constructed, easily operated, and moved from place to place as required, and in which the strains are equalized.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages, and the right is therefore reserved of making all the changes and modifications which fairly fall within the scope of the invention and the claims made therefor.

In the drawings thus employed, Figure 1 is a side elevation. Fig. 2 is a front elevation of the improved device. Fig. 3 is a perspective view of the upper converging ends of the members of the supporting-frame disconnected. Fig. 4 is an inverted perspective view of the cap member detached.

The improved device comprises spaced base members or "shoe-timbers" 10 11, from which a plurality of supporting members, preferably four, 12, 13, 14, and 15, extend, said members converging at their upper ends and having their adjacent portions "scarfed" where they

unite, as shown, and connected by clamp-bolts 16.

The inner corners of the scarfed portions are formed with segmental channels 17, which form a continuous vertical aperture when the parts are united.

A metal cap-plate 18 of sufficient strength to withstand the strains to which it will be subjected is placed over the united ends of the converging posts, with the depending sides thereof embracing the upper portions of the post, said cap being provided with perforated ears 19 to receive the binding-bolts 16, by which means the cap is secured in position.

The screw-rod 20 is of the usual form employed in devices of this character and passes through the aperture formed by the channels 17 and also through the aperture in the cap 18 and is provided with a nut 21, bearing upon the cap member.

Extending laterally from the nut 21 are arms 22 23, to which sweeps 24 25 are connected and extended to any desired distance.

Swiveled by stud-bolts 26 27 to the extremities of the sweeps are curved plates 28 29, having at their ends spaced plates 30 31 32 33 extending transversely of the same and terminating in hooks.

The curved plates 28 29 and their transverse end plates form saddle-like structures for extending over the backs of the draft-animals and attachable to the harness of the same by suitable coupling means connected to the hooked ends of the plates.

Any suitable arrangement of straps, links, chains, or the like may be employed between the hooked plates and the harness of the horses or other draft-animals; but as their construction is so well known and they form no part of the present invention they are not illustrated.

The lower end of the screw-rod 20 is formed with an eye 34, and linked into this eye are a plurality of swinging hooks 35, preferably with sharpened free ends and bent and curved to engage the stump at equidistant points, so that when the force is applied the upward "pull" will be direct and all lateral strains eliminated.

Drawing-chains 36 will be connected to the ends of the shoe-timbers 10 11 to enable the device to be drawn bodily from place to place to locate it over the stump or other object to be lifted.

It will be noted that by this simple construction a very strong, durable, and portable structure is produced which may be quickly moved from place to place and "set up" where required and a very powerful lifting force applied to the stump or other object to be elevated. The force being applied equally from each side, the strains are equalized, thus adding materially to the efficiency of the apparatus and increasing its durability.

If required, tie-rods 37 may be employed to connect the supporting members 12, 13, 14, and 15 transversely of the shoe-timbers, said rods being provided with hooked ends 38.

Having thus described the invention, what is claimed is—

1. In a stump-puller, a supporting-frame, a threaded rod mounted for vertical movement in said frame, a nut engaging said rod and bearing upon the frame, said nut being provided with oppositely-extending sweeps, and saddle members carried by the free ends of said sweeps for attachment to the harness of draft-animals.

2. In a stump-puller, a supporting-frame, a threaded rod mounted for vertical movement in said frame, a nut engaging said rod and bearing upon the frame, said nut being provided with oppositely-extending sweeps, and saddle members mounted for horizontal rotation upon said sweeps and provided with means for attachment to the harness of draft-animals.

3. In a stump-puller, a supporting-frame, a threaded rod mounted for vertical movement in said frame, a nut engaging said rod and bearing upon the frame, said nut being provided with oppositely-extending sweeps, and saddle members each comprising a curved plate rotatively connected to the free ends of said sweeps and having transversely-disposed bars secured thereto and provided with terminal hooks for engagement with the harness of draft-animals.

4. In a stump-puller, supporting-posts having their upper converging ends scarfed and provided with segmental channels forming a continuous vertical channel when said posts are united, bolts connecting the converging

ends of said posts, a cap member inclosing the scarfed ends of the posts and provided with a central aperture in alinement with the vertical aperture in the latter, depending lugs formed on the cap and engaged by the bolts, a threaded rod slidably engaging said aligned openings and having its lower end provided with stump-engaging means, and a nut engaging said threaded rod and bearing upon the cap member, said nut being provided with oppositely-extending sweeps.

5. In a stump-puller, supporting-posts having their upper converging ends scarfed and provided with segmental channels forming a continuous vertical channel when said posts are united, bolts connecting the converging ends of said posts, a cap member inclosing the scarfed ends of the posts and provided with a central aperture in alinement with the vertical aperture in the latter, depending lugs formed on the cap and engaged by the bolts, a threaded rod slidably engaging said aligned openings and having its lower end provided with stump-engaging means, a nut engaging said threaded rod and bearing upon the cap member, oppositely-extending sweeps carried by the nut, and saddle members mounted upon the free ends of said sweeps for engagement with the harness of draft-animals.

6. In a stump-puller, supporting-posts having their upper converging ends provided with segmental channels forming a continuous vertical channel when said posts are united, bolts connecting the converging ends of said posts, a cap member inclosing the united ends of the posts and provided with an aperture in alinement with the vertical aperture in said posts, depending lugs formed on the cap and engaged by the bolts, a threaded rod slidably engaging said aligned openings and having its lower end provided with stump-engaging means, a nut engaging said threaded rod and bearing upon the cap member, oppositely-extending sweeps carried by the nut, and saddle members mounted for horizontal rotation on the free ends of said sweeps and adapted for connection to the harness of draft-animals.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBERT P. CHAMBERS.

Witnesses:

R. S. McCREA,
J. H. GILKEY.