J. A. GALLAGHER.

STUMP PULLER.

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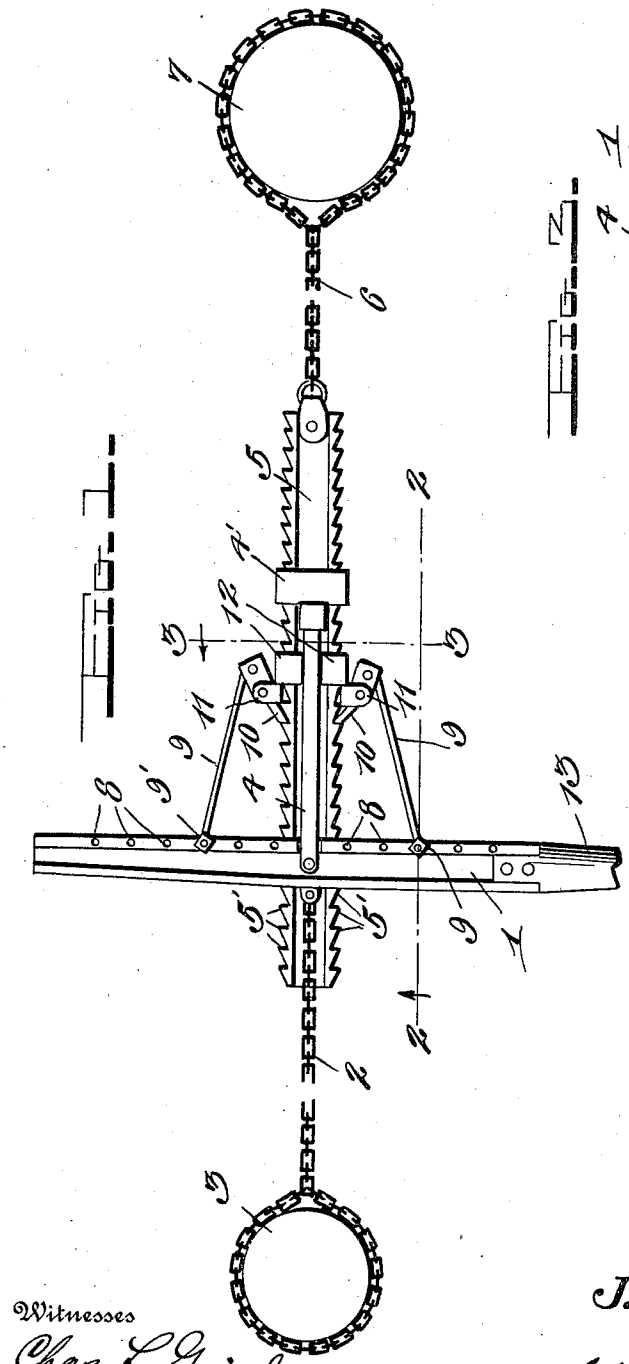
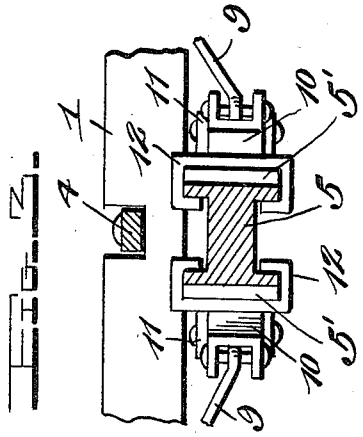
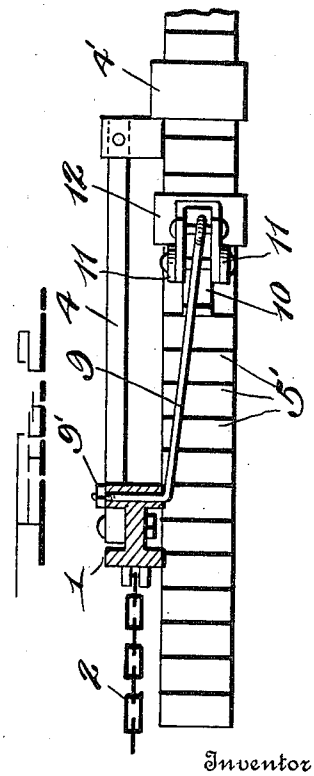
1,043,919. Patented Nov. 12, 1912.







Witnesses

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STUMP-PULLER.

1,043,919. Specification of Letters Patent. Patented Nov. 12, 1912.

Application filed March 30, 1912. Serial No. 687,371.

To all whom it may concern:

Be it known that I, JOSEPH A. GALLAGHER, a citizen of the United States, residing at Roscommon, in the county of Roscommon and State of Michigan, have invented certain new and useful Improvements in Stump-Pullers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in devices known as stump pullers and my object is to provide a device of this character which may be readily applied and manipulated for removing stumps and the like from the ground.

A further object of the invention resides in providing an operating lever carrying gripping members which are adapted to automatically engage a traveler or beam as said lever is oscillated and a still further object is to provide means for the adjustment of these gripping members with respect to the lever.

Still another object of the invention is to provide a device which is extremely simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

With these and other objects in view the invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawing forming a part of this application, Figure 1 is a top plan view of the device set up for operation. Fig. 2 is a fragmentary side elevation of the device partly in section; and Fig. 3 is a transverse section as seen on line 3—3, Fig. 1.

In describing my invention, I shall refer to the drawing in which similar reference characters designate corresponding parts throughout the several views and in which—

1 indicates a lever of any desired size and shape, which is connected or anchored by means of a chain 2 to the anchoring block or other stationary object 3 and pivotally connected to the forward or front edge of said lever is an extension arm 4, the outer end of which is provided with a guide sleeve or the like 4′ to allow a beam or traveler 5 to slide therethrough. The side edges of this sliding beam or traveler 5 are provided with notches or ratchet teeth 5′, the purpose of which will be hereinafter and more particularly described, and connected to the forward end of said beam or traveler is a chain or other flexible engaging device 6 which is adapted to be engaged with a stump 7 so that the latter may be pulled from the ground upon the drawing of said beam or traveler.

The forward or front edge of the lever 1 is provided with a plurality of openings 8 with which are engaged on opposite sides of the arm 4, the inner ends of a pair of rods 9, said ends of the rods being held in engagement with the openings in the lever by means of nuts 9′, while the outer ends of said rods are provided with gripping members or the like for engagement with the ratchet teeth or notches 5′ in the side edges of said traveler. These gripping members each comprise a pawl or the like 10, which is fulcrumed intermediate of its ends between a pair of ears 11 formed on a guide member 12, said guide member being slidably engaged with the traveler or sliding beam 5, and said pawl is pivotally engaged forward of the fulcrum point with the outer end of one of the rods 9. From this construction, it will be understood that the one pawl may be engaged with a tooth on the one side edge of the beam 5, to draw upon the same, while the opposite pawl may be disengaged with the opposite ratchet teeth and slidably moved thereon, and in view of the particular mounting of the rods 9 on opposite sides of the arm 4, it will further be seen that the oscillation of the member 1 will cause alternate engagement of said pawls with said traveler or beam 5 to draw upon the same.

In order to readily operate the lever 1, a handle member or the like 13 is engaged with one end of the same and it will be seen that a continued oscillation of the said lever will obviously result in the total displacement of a stump after the chain or the like 6 has been engaged with the latter. It will also be appreciated that in view of the adjustability of the rods 9 with respect to the lever 1, the stroke may be adjusted.

From the foregoing description of the construction of my device, the operation thereof will be readily understood and it will be seen that I have provided a simple, inexpensive and efficient means for carrying out the objects of the invention. While I

have particularly described the elements most well adapted to perform the functions set forth; it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the principles of the invention.

Having thus described this invention, what is claimed is:—

1. A device of the class described comprising a lever, anchoring means therefor, an arm pivotally carried on said lever and provided with a guide sleeve on the outer end thereof, a traveler slidably disposed through said sleeve and having notches in the side edges thereof, means carried on the outer end of said traveler and adapted for engagement with a stationary object, pivoted pawls slidably arranged on said traveler, and rods adjustably engaged with said lever on opposite sides of the pivoted arm and also engaged with said pawls, whereby when said lever is oscillated, the pawls will alternately engage the notches in the traveler to draw upon the same.

2. A device of the class described comprising a lever having a plurality of openings on one side edge thereof, an extension arm pivotally carried on said lever about centrally thereof, the outer end of said arm being provided with a guide sleeve, a traveler slidably disposed through said guide sleeve and provided with notches on the side edges thereof, means carried on the outer end of said traveler adapted for engagement with an object, a pair of members slidably carried on said traveler, pawls fulcrumed on said sliding members and adapted for engagement with the notches in the traveler, and a pair of rods having the inner ends thereof engaged with openings in said lever on opposite sides of said pivoted arm, the outer ends of said arm being pivotally engaged with said pawls, whereby the latter will be alternately engaged with the traveler to draw upon the same as said lever is oscillated.

3. A device of the class described comprising a lever, anchoring means therefor, an arm pivotally connected at one end thereof to said lever and provided with a guide sleeve at the free end of the same, a traveler slidably disposed through said guide sleeve, the side edges of said traveler being provided with oppositely disposed ratchet teeth, means carried on the outer end of the traveler for engagement with an object, a pair of guide members slidably arranged on said traveler, pawls fulcrumed on said guide members and adapted for engagement with said ratchet teeth, and means pivotally connecting the ineffective ends of the respective pawls to said lever on opposite sides of the fulcrum point thereof.

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

JOSEPH A. GALLAGHER.

Witnesses:

ARTHUR W. LADD,

C. H. DE WAELE.