Sept. 20, 1955 O. G. PURDY 2,718,375

LOG JACK

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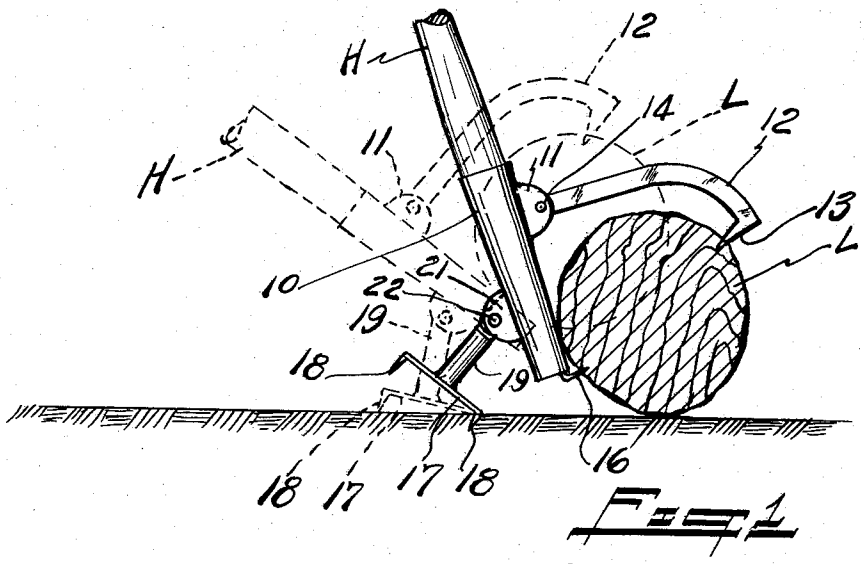


Fig. 1

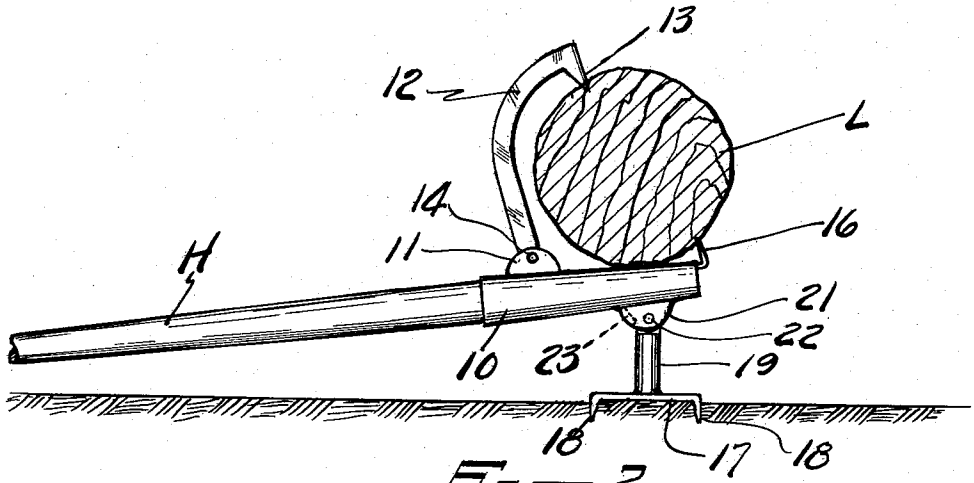


Fig. 2

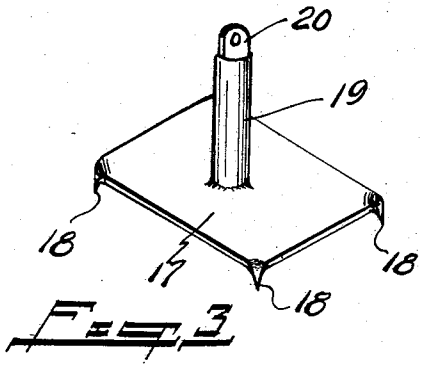


Fig. 3

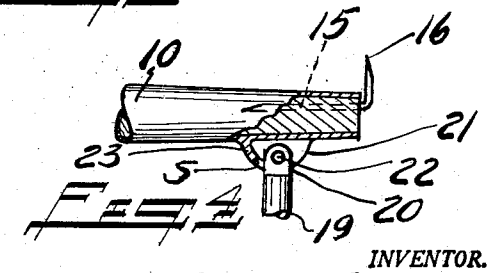


Fig. 4

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LOG JACK

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2 Claims. (Cl. 254—131)

This invention relates to logging tools and more particularly to a log jack or lifting implement for manually raising and holding logs during lumbering and sawing operations, which is particularly useful in handling logs being sawed into sections of predetermined length.

One of the prime objects of the invention is to provide a log jacking implement for engaging logs or poles and lifting them to raised position above the ground for sawing with a minimum of effort and manipulation to prevent the saw's binding during the sawing operation.

Another object of the invention is to provide a jack implement by means of which the log can be raised and supported above the ground, so that the saw does not run in the dirt or other debris when the cut is completed or nearing completion.

Another object of the invention is to provide a log jack which includes a fixed or stationary base or fulcrum which can be anchored on the ground adjacent a log so that it cannot slip, slide out from under the log, or otherwise become displaced.

A further object of the invention is to provide a log jack which is pivotally supported on a fixed base in a manner to enable it to be quickly manipulated into position to engage a log or pole and easily swung to the raised support position.

Another object of the invention is to provide a log jack including a base which can be quickly anchored on the ground, said base being provided with means to further prevent it from slipping on ice, hard surfaces, or on supporting blocks when the ground is overly soft and/or wet.

A still further object of the invention is to provide a log jack which is strong and durable in construction, which can be readily and economically manufactured, and from which the base can be easily and quickly removed to provide a standard cant hook.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts, hereinafter more fullly described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportion, and minor details of construction, without departing from the spirit, or sacrificing any of the advantages of the invention.

In the drawing:

Fig. 1 is a side elevational view showing the log jack in log-engaging position, the broken lines indicating an elevated position of the log and log jack after it has been swung up off the ground.

Fig. 2 is a view similar to Fig. 1 showing the log swung to raised position above the ground and supported in position for sawing or a similar operation.

Fig. 3 is a fragmentary, perspective plan view of the base of the device.

Fig. 4 is an enlarged, fragmentary, part sectional view of the socket member illustrating the stop.

Referring now more particularly to the accompanying drawing in which I have shown the preferred embodiment

of my invention, the numeral 10 indicates a tapered metal socket member for receiving the tapered end of a handle H. Spaced-apart ears 11 are formed on the upper side of the socket member 10, and a cant hook 12, including an inwardly projecting, sharpened tip section 13 is pivotally mounted therebetween by means of a bolt 14 in the usual manner. A claw-shaped toe 15 is driven into the end of the handle H, the claw section 16 projecting upwardly as shown for engaging the log L when the jack is placed in position for use.

A base or ground-engaging support plate 17 is provided for the device and includes downwardly projecting, sharpened corner prongs 18, these prongs piercing the ground and serving to anchor the jack so that it will not slip when used on ice, or when employed with a wooden support block or blocks (not shown).

A centrally disposed, vertical post 19 is welded or otherwise secured to the upper face of the plate 17, the free end of the post being flatted as at 20, and for a purpose to be presently described.

Ears 21 are formed integral with and depend from the underside of the socket member 10 at a point forward of the ears 11, and the flatted end 20 of the post 19 is pivotally connected thereto by means of a bolt 22. The space between the ears 21 is bridged at the rear end as at 23 to form a stop S which engages the post 19 when the handle is swung down to position as shown in Fig. 2 of the drawing, the center line of the log being past the vertical center line of the post 19 so that it is firmly supported in position and the workman need not hold the handle. I wish to direct particular attention to the fact that when the jack is placed in engagement with a log, the plate 17 will be tilted, with its forward edge in engagement with the ground, as clearly shown in Fig. 1 of the drawing, and will then be swung down flat on the ground during the raising operation, all as indicated in broken lines in Fig. 1 of the drawing. The forward edge of the plate 17 serves as the first fulcrum in the raising operation, and when the plate 17 has been swung down flat on the ground, the forward end of the handle which carries the log is then swung further upwardly about the bolt 22 as a pivot or fulcrum.

In operation, the device is placed adjacent the log to be elevated, with the handle in raised position, and the base plate 17 tilted to bring the claw 16 and tip 13 into gripping relation with the log. The handle H is then swung down as indicated in broken lines in Fig. 1 so that the tip 13 of the cant hook 12 bites into the log, and likewise, the sharpened claw 16 pierces the opposite side of the log. Once the log has been engaged, very little force need be applied to the free end of the handle H to swing it first about the forward edge of the plate 17 and thence about the bolt 22 to the raised log-supporting position illustrated in solid lines in Fig. 2 of the drawing. The prongs 18 on the forward edge of the plate 17 immediately engage the ground when the device is first placed adjacent the log and prevent the base from slipping.

It will be obvious that as the log L is supported slightly past the vertical center line of the post 19 so that the free end of the handle bears on the ground, the workman can then release the handle as the weight of the log will then be supported by the free end of the handle engaging the ground and the post 19 of the base 17. The base with the sharp prongs provides a non-slip supporting base or bearing which proves very valuable in the fall and winter seasons on wet and icy ground when logs and cant hooks slip and roll with possibility of injury to workmen as they are positioned for sawing or other processing.

The invention is not restricted to the exact design

herein shown and described, as variations may be made to adapt the implement to various uses.

What I claim is:

1. A log jack comprising an elongated handle adapted to be presented to a log at a vertically inclined angle, a cant hook mounted on the upper side of the handle a spaced distance from the front end thereof to engage the log when the handle is presented to the log, an upturned hook on the front end of the handle, ear means depending from the underside of the handle a spaced distance from the front end thereof, a support member comprising a flat base with a linear front edge, and an upwardly projecting post rigid on said base, the upper end of the post being pivotally connected to the said ear means and the length of the post from the plane of the base to the point of pivotal connection being substantially greater than the length of the base from the post to the front end of the base, ground-entering prongs depending from the front edge of the base to permit the latter to effectively serve as a fulcrum when the handle is presented to the ground at a vertically inclined angle and the base is tilted forwardly so that the front edge thereof only contacts the ground, means associated with said ear means in position to be engaged by the upper end of said post to limit tilting of the base forwardly in toward the front end of the handle beyond a predetermined degree when the handle is presented to the log, the front end of the handle terminating substantially short of the horizontal plane of the front edge of the plate when the latter is in a position of maximum tilt, the ear means on the underside of the handle being spaced forwardly of the point of connection of said cant hook so that the fulcrum point is forward thereof during elevation of the log, first by fulcruming on the front edge of the base and thence on the pivotal connection of the post to the ear means, and the center of gravity of the log is rearward of the point of pivotal connection to the post when it has been elevated to position.

2. A log jack comprising an elongated handle, a cant hook pivotally mounted on the one side of the handle a spaced distance from the front end thereof to engage the log when the handle is presented thereto at a vertically inclined angle, the cant hook being mounted on the upper side of the handle, an upturned hook on the front end of the handle, a support member comprising a rectangular shaped flat base with an upwardly projecting post rigid on said base, spaced apart ears depending from the underside of the handle, the post having a flatted head portion pivotally connected between the ears, the length of the post from the plane of the base to the point of pivotal connection to the ears being substantially greater than the length of the base from the post to the front edge of the base so that the handle may be readily pivoted about the pivotal connection to the post only prior to fulcruming on the front edge of the base when the handle is swung down to bite the said hooks into the log, a bridge spanning the rear edges of said ears and limiting the swing of said post by blocking the path of the head of said post to limit tilting of the plate forwardly in toward the front end of the handle beyond a predetermined degree when the handle is presented to the log, the front end of the handle terminating substantially short of the horizontal plane of the front edge of the plate when the latter is in its position of maximum tilt, the ear means on the underside of the handle being spaced forwardly of the point of connection of said cant hook so that the fulcrum point is forward thereof during elevation of the log, first by fulcruming on the front edge of the inclined base and thence on the pivoted connection of the post to the ears, and the center of gravity of the log is rearward of the point of pivotal connection of the post when it has been elevated to position.

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