Jan. 20, 1959 K. W. WINTERS ET AL 2,869,741

LOG HANDLING ARM ATTACHMENT FOR TRUCKS

Filed Dec. 17, 1957

Fig. 1

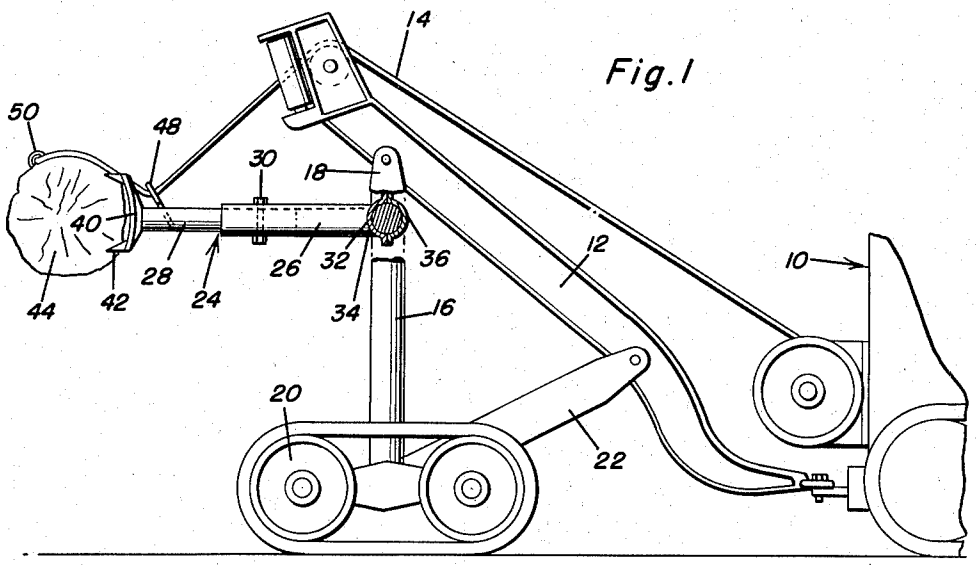


Fig. 2

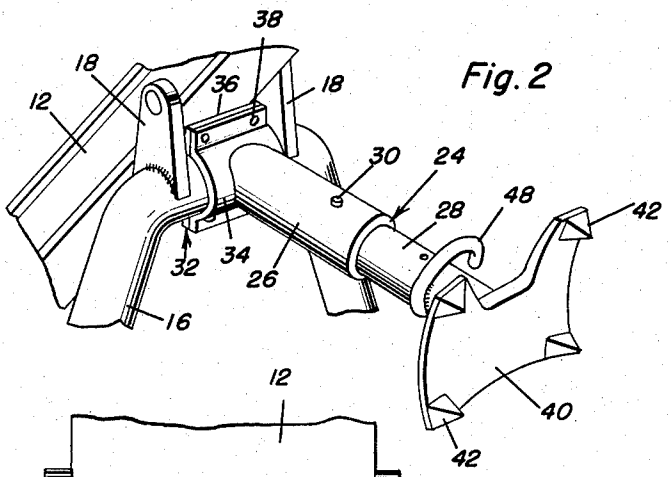
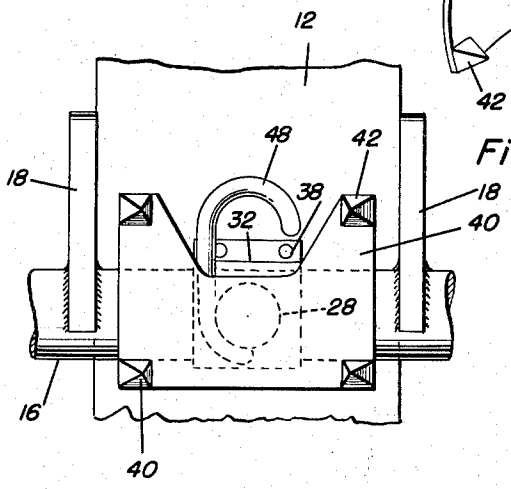


Fig. 3



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LOG HANDLING ARM ATTACHMENT FOR TRUCKS

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1 Claim. (Cl. 214—92)

This invention relates to new and useful improvements and structural refinements in log handling machines, and the principal object of the invention is to provide a log handling arm which may be conveniently and effectively attached to a conventional log handling machine, so as to substantially increase the ability of such a machine to pick up and transfer logs from one location to another.

By virtue of the provision of the log handling arm, the "reach" of the log handling machine is substantially increased, its holding capacity is enhanced, and the manner of its operation is greatly expedited.

An important feature of the invention resides in the provision of means for varying the length of the arm in accordance with different requirements of the work, while another feature of the invention resides in its ability to remain inactive in an unobtrusive position, or to be completely removed, when the use thereof is not desired.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention resides in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view of the invention attached to a log handling machine of the conventional type;

Figure 2 is a fragmentary perspective view thereof, on an enlarged scale; and

Figure 3 is a fragmentary front elevational view of the same.

Referring now to the accompanying drawings in detail, the general reference character **10** designates a conventional log handling machine including a boom **12**, a hoisting cable **14** passing over the boom, and the customary arch **16** having a top portion which is connected to the boom **12** by a pair of upstanding laterally spaced brackets **18** on said top portion pivoted to opposite sides of the boom, said arch being carried by a truck **20**, connected to the boom **12** by a brace **22**.

The invention resides in the provision of a log handling arm designated generally by the reference character **24**, the same consisting of inner and outer sections **26**, **28** which are slidably telescoped together. A locking pin **30** extends transversely through the telescoped sections **26**, **28**, so as to lock the same in a predetermined position against

relative sliding movement, whereby the over-all length of the arm **24** may be increased or decreased, as desired.

The arm section **26** is provided at the end thereof with a clamp **32**, consisting of a pair of complemental half sections **34**, **36**, the same being secured together by suitable fastening elements **38**, whereby the entire arm **24** is swingably mounted on the aforementioned arch **16**. It will be understood, of course, that the clamp sections or members **34**, **36**, embrace the arch **16** and that the fit of the clamp **32** on the arch is such as to permit the arm **24** to be swung in a vertical plane.

The arm section **28** is provided at the end thereof with a concave plate **40** having a plurality of pointed, log engaging prongs **42** provided thereon, whereby the arm can effectively grip a log, indicated at **44** in Figure 1.

Finally, it will be observed that an arcuate guide or hook **48** is secured to the arm section **28** adjacent the plate **40**, so as to slidably receive the aforementioned cable **12**.

When the invention is placed in use, the arm **24** in its lowered position is engaged with a log and the cable **14** is anchored to the log as exemplified at **50**. Thereupon, by hauling the cable **14** inwardly, the arm **24** together with the log **44** will be caused to swing upwardly about the axis of the clamp **32**. This swinging movement will take place in an arc disposed in a straight vertical plane and, of course, by pre-adjusting the length of the arm **24**, the effective "reach" of the arm may be correspondingly varied, so as to accommodate various conditions of operation.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

In a log handling machine, a boom, a hoisting cable trained over said boom for attachment to a log to hoist the same, a boom supporting arch beneath said boom having a top portion provided with a pair of laterally spaced upstanding brackets attached to opposite sides of the boom, a log lifting arm extending forwardly of said top portion, means on one end of said arm rotatable on said top portion between said brackets and attaching said arm to said portion for vertical swinging movement, a rigid log lifting plate on the other end of said arm having log engaging and lifting prongs thereon, and a cable guide on said arm behind said plate through which said cable is extended to lift said arm when the cable is attached to a log engaged by said prongs.

References Cited in the file of this patent

UNITED STATES PATENTS

1,755,738	Klepadlo	Apr. 22, 1930
1,793,545	De Rocher	Feb. 24, 1931
2,643,012	Wahl	June 23, 1953