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 46 is secured to the arm section 28 adjacent the plate 40, so as to slidable 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 bending 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.

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