J. G. STONER
LOG HANDLING DEVICE
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WITNESSES

INVENTOR

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BY

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To all whom it may concern:

Be it known that I, Jacob G. Stoner, a citizen of the United States, and a resident of Smithsburg, in the county of Washington and State of Maryland, have invented a new and Improved Log-Handling Device, of which the following is a full, clear, and exact description.

This invention relates to log handling devices for use in saw-mills and the like, and relates more particularly to a device of this class comprising a support adapted to be arranged adjacent to a saw-mill carriage, and having a swinging arm, a carrier pivoted upon the arm and provided with rollers for movably engaging a log while the same is being turned upon the saw-mill carriage, and a pivoted brace for holding the arm in an operative position, the arm and its carrier, together with the brace, being moveable into an inoperative depressed position.

The object of the invention is to provide a simple, strong and durable log handling device, for use in connection with saw-mill carriages and the like, which can be arranged adjacent to the carriage to assist in turning the log by means of a cant hook, or similar device, which is simple and efficient in operation and which prevents the possibility of the log being displaced from the saw-mill carriage while it is being turned.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, in which—

Figure 1 is a perspective view showing an embodiment of my invention being used to assist in turning a log upon a saw-mill carriage; Fig. 2 is an end elevation of the saw-mill carriage showing the log thereon, and showing the arm and the carrier in an inoperative position; Fig. 3 is a plan view of the device; Fig. 4 is an end elevation showing a part broken away; and Fig. 5 is a longitudinal section on the line 5—5 of Fig. 4.

Before proceeding to a more detailed explanation of my invention, it should be clearly understood that the same is particularly used in connection with saw-mills, where it is frequently necessary to turn the logs upon the saw-mill carriages so that the saw can be applied at different sides of the logs. However, the device can also be employed under other conditions for similar purposes. The logs can easily be turned by means of a cant hook or other tool, and my invention provides means for assisting in this operation, the device movably supporting the log while it is being turned and holding it against displacement from the saw-mill carriage upon which the log is positioned while it is being sawed.

I prefer to provide the device in the form of a carriage having the supporting arms and carriers pivotally mounted thereon and adapted to be arranged adjacent to the saw-mill carriage.

Referring more particularly to the drawings, 10 represents a saw-mill carriage which may be of any suitable form, and has supporting axles 11 and wheels 12 arranged to travel upon rails 13 in the customary manner.

The rails are laid upon suitable supporting stringers or ties 14. The carriage has uprights 15 against which the logs A 80 are positioned. Adjacent to the rails 13 are provided rails 16 upon which is movably located an auxiliary carriage 17 comprising longitudinal frame members 18 and pairs of transverse frame members 19. The longitudinal members 18 are mounted upon axles 20 which have supporting wheels 21 arranged to travel along the track rails 16. Between the transverse members 19 of each pair is pivotally mounted a pair of spaced arms 22, arranged to swing about a transverse spindle 23 and having therebetween a roller 24. The arms between their free ends have carriers 25 pivotally mounted in position by means of a pin 26. The carriers comprise spaced members, between which are located rollers 27 at the ends of the carriers and intermediate the ends thereof. The end rollers 27 are pivotally held between the members of the carriers by means of pins 28 or the like. The intermediate rollers 27 are mounted upon the pins 26. The carriers are preferably curved so that the centers of the rollers do not lie in a straight line.

A shaft 29 is arranged longitudinally of the auxiliary carriage, being journaled in suitable bearing openings of the transverse frame members. The shaft carries braces 30 arranged to swing therewith and comprising members 31 rigid with the shaft and pairs 32.
of spacing members 32, pivotally secured to the members 31 by means of pins 33 or the like. The members 32 are pivotally secured upon the pins 26 between the arms 22 and 25 the carriers 23. It will be understood that when the braces are extended so that the members 31 and 32 are in alinement, the braces serve to hold the arms in operative positions, as is shown most clearly in Figs. 1, 4 and 5. The members 32 carry stops 33 adapted to engage the arms 22 to hold the braces extended. The shaft 29 at one end projects beyond the carriage and has a crank 34, by means of which it can be manipulated to swing the arms and braces into inoperative positions between the transverse members 19, as is shown most clearly in Fig. 2. The auxiliary carriage can be moved along the track rails 16 to position it at any desirable point adjacent the track 13, that is, at a point at which the saw-mill carriage is located.

After the log A has been sawed at one side, it is necessary to turn it to permit the saw to be brought into operation at the other side of the log. A cant hook B of the usual type, is generally employed for this purpose.

The operation of my invention is as follows: The auxiliary carriage is brought alongside the saw-mill carriage at a suitable point and the arms are operatively positioned with the carriers ready for engagement by the log. The latter is turned by means of the cant hook and is thereby brought against the carriers. The rollers of the carriers engage the log and permit it to be easily turned, while at the same time the carriers themselves swing to permit the turning of the log. When the latter has been sufficiently turned, it can be moved out of engagement with the rollers of the carriers, into position against the uprights 15. The foot of the operator can then be used to operate the crank 34 to swing the arms and carriers into inoperative positions. The rollers 24 are arranged to be engaged by the outer end rollers 27 of the carriers in certain positions of the same. The engagement between these rollers 27 and the rollers 24 is a movable one, of course, and thus reduces the friction, which might otherwise be excessive.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A device of the class described comprising a support adapted to be arranged adjacent to a saw-mill carriage and having a swinging arm, a carrier pivoted upon said arm and having rollers for movably engaging a log and holding the same while it is being turned upon the saw-mill carriage, a pivoted brace adapted when extended to hold said arm in an operative position, and means for inoperatively disposing said arm and said members.

2. A device of the class described comprising an auxiliary carriage adapted to be arranged adjacent to a saw-mill carriage, carriers movably mounted upon said auxiliary carriage and arranged to be projected toward the saw-mill carriage to engage a log upon the same, whereby the log can be movably held against displacement from the saw-mill carriage when being turned upon the same, and extensible braces having limited movements for holding said carriers in operative positions and consisting of pivotally connected parts adapted to be aligned to hold said carriers.

3. A device of the class described comprising an auxiliary carriage adapted to be arranged adjacent to a saw-mill carriage, swinging arms mounted upon said auxiliary carriage, movable carriers mounted upon said arms and adapted movably to engage a log upon the saw-mill carriage to hold the same while it is being turned, and extensible braces for holding said arms projected, said braces having stops for limiting their extension.

4. A device of the class described comprising a support adapted to be arranged adjacent to a saw-mill carriage, arms pivoted upon said support, carrier pivoted upon said arms and adapted movably to engage a log upon the saw-mill carriage, braces pivoted upon said support and pivotally connected with said arms, said braces comprising relatively movable parts adapted, when arranged in longitudinal alinement, to hold said arms projected toward the saw-mill carriage, said braces having stops adapted to engage said arms to limit the movement of said braces and said arms.

5. A device of the class described comprising a support adapted to be arranged adjacent to a saw-mill carriage, arms pivotally mounted upon said support, carriers pivotally mounted upon said arms and adapted movably to engage a log upon the saw-mill carriage, a rotatable shaft carried by said support, members rigid with said shaft, and other members pivoted upon said said arms, said members being adapted to be aligned to constitute extensible braces, each of the braces having a stop adapted to engage said arm.

6. A device of the class described comprising an auxiliary carriage adapted to be arranged adjacent to a saw-mill carriage, arms pivotally carried by said support, carriers pivotally mounted upon said arms and having rollers adapted movably to engage a log upon the saw-mill carriage, a rotatable shaft carried by said support and having a
crank whereby said shaft can be rotated, members rigid with said shaft, other members pivotally mounted upon said first members and pivotally connected with said arms, said other members having stops adapted to engage said arms to limit the movement thereof.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JACOB GARVER STONER.

Witnesses:
K. J. Newcomer,
J. P. Ligler.