(No Model.)

J. A. CARROLL.

LOG CARRIER.

No. 539,380. Patented May 14, 1895.

Fig 1

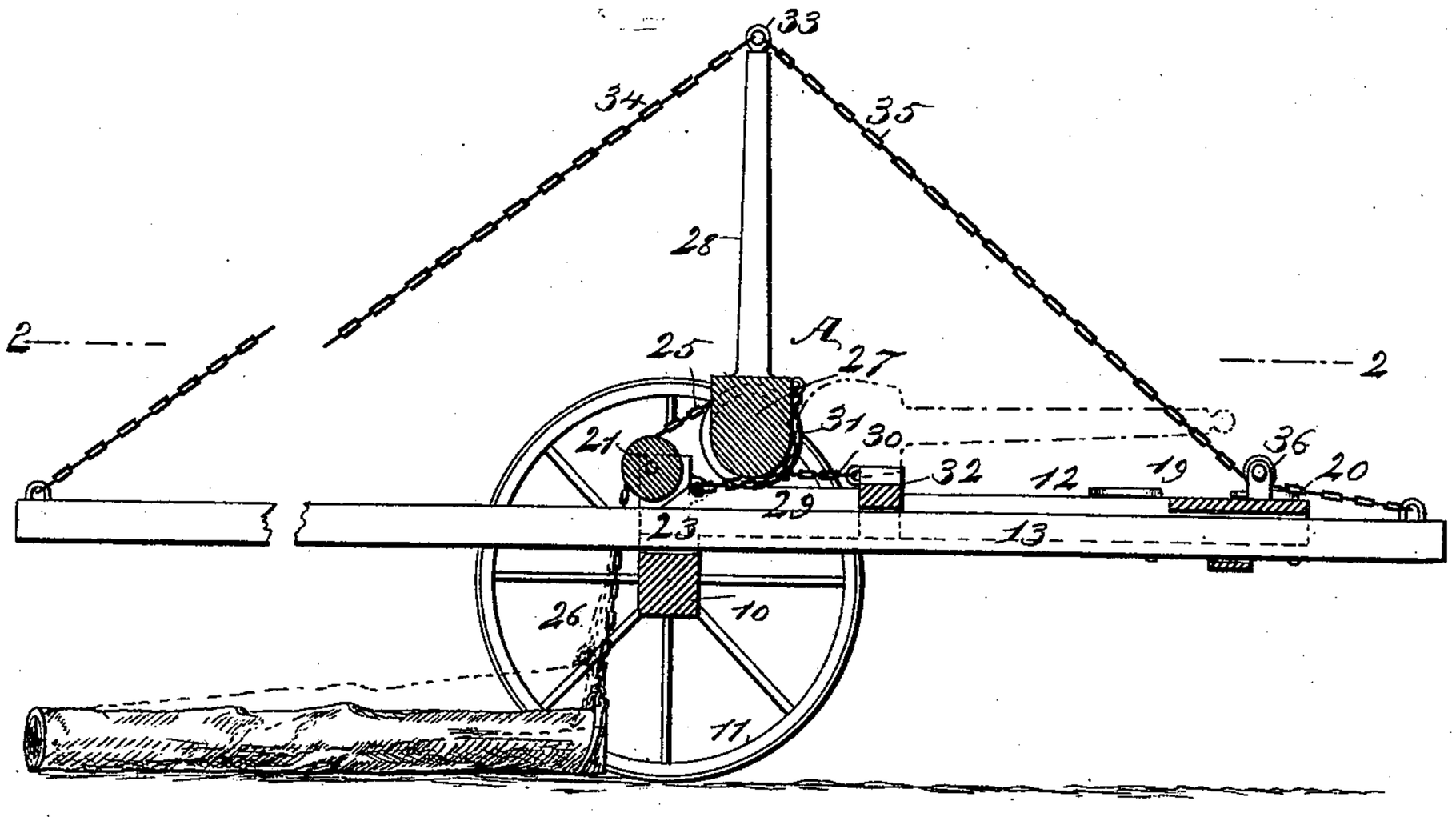


Fig 2

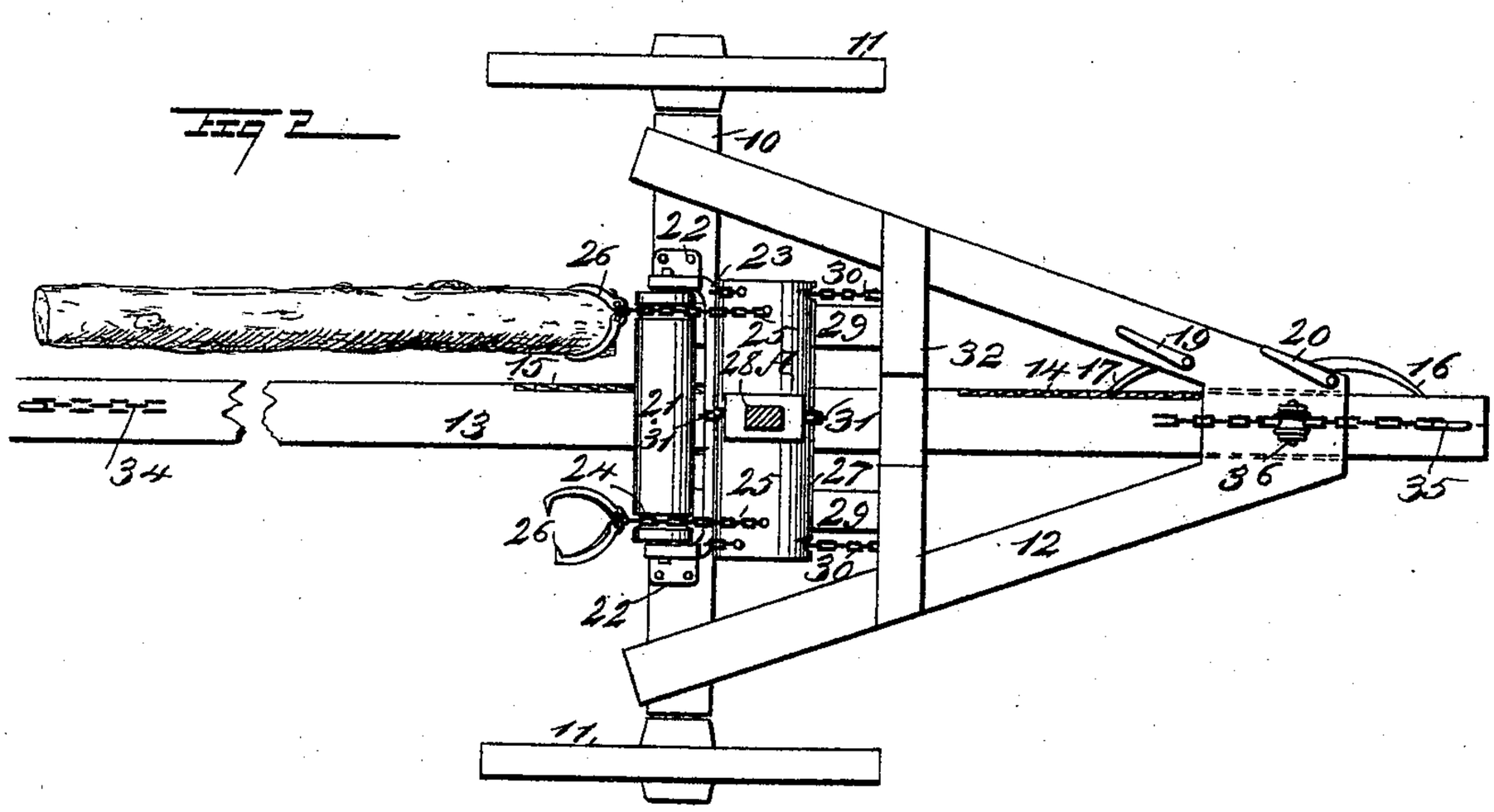
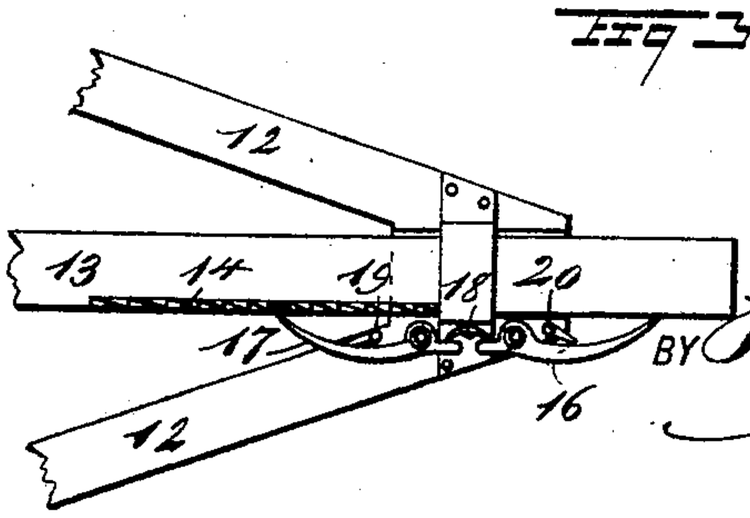


Fig 3



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JOSEPH ALEXANDER CARROLL, OF BUNA, TEXAS.

LOG-CARRIER.

SPECIFICATION forming part of Letters Patent No. 539,380, dated May 14, 1895.

Application filed December 28, 1893. Serial No. 494,966. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ALEXANDER CARROLL, of Buna, in the county of Jasper and State of Texas, have invented a new and useful Improvement in Log-Carriers, of which the following is a full, clear, and exact description.

My invention relates to an improvement in log carriers, and it has especially for its object to improve upon the construction of the log carrier patented to Robert E. Terry August 23, 1892, No. 481,314, the improvements consisting in so constructing and locating the adjusting lever upon the wagon that the lever will afford greater purchase and greater raising power, and whereby the log chains will be so guided that they may be moved with less friction, and wherein also the log chains will not be liable to slip from their guides. Another difference in the construction consists in providing ratchets and pawls, whereby the tongue may be prevented from moving either in direction of the rear or in direction of the front as may be required, and whereby also when the tongue is moved rearward the log chains will be placed in position to be attached to a log, and at the same time the adjusting lever will be elevated and maintained in that position.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

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

Figure 1 is a section taken longitudinally through the carrier at one side of the tongue. Fig. 2 is a plan view and a partial horizontal section, the section being taken essentially on the line 2—2 of Fig. 1; and Fig. 3 is a bottom plan view of the forward portion of the hounds, viewed from the under side and illustrating the application of the pawls to the tongue.

In carrying out the invention the wagon or vehicle consists of an axle 10 carrying supporting wheels 11, hounds 12 secured to the axle, and a tongue 13, having sliding movement upon the hounds and upon the axle, the draft power being attached in any suitable or approved manner to the forward end of the tongue.

Upon one side of the tongue two racks 14 and 15, are produced, the racks being located at a few inches apart, and their teeth pointing in opposite directions, *i. e.*, toward each other. Upon the under side of the hounds opposite the rack surface of the tongue two spring-controlled pawls 16 and 17 are pivoted, said pawls facing one in direction of the rear and the other in direction of the front of the tongue; and ordinarily the two pawls are held in engagement with the tongue through the medium of a single spring 18, as shown in Fig. 3. Either pawl is adapted to be independently manipulated, and this is ordinarily accomplished through the medium of levers 19 and 20, fulcrumed upon the upper surface of the hounds and provided each with a foot, as shown in Fig. 3, capable of pressing the pawls from engagement with the tongue.

Over the central portion of the axle 10, a friction or guide roller 21, is journaled, the said roller being preferably held to turn in brackets 22, secured to the upper face of the axle, while in front of the roller a horizontal bar 23, is located, which may be attached to the brackets 22. The rollier 21, is preferably made of metal, and it is usually provided near each end with a peripheral groove 24 of sufficient depth to receive a log chain 25, and the said chains are provided at their lower ends with log grapples 26 of any desired construction.

The adjusting lever A, consists of a body 27, the under and side surfaces thereof being preferably made cylindrical, and a handle 28, which is secured preferably at the central portion of the body, upon that surface which would be the top when the handle is in a vertical position.

The upper ends of the log chains, 25, are secured upon the upper side of the body, 27, which is supported and adapted to rock on parallel horizontal bars, 29, forming part of the frame, and between which the tongue, 13, is arranged parallel and equidistantly.

The lever is held in position preferably through the medium of three chains, two end chains 30 and a center chain 31. The end chains are secured to the body of the lever at

the back and are carried beneath the body to an attachment to a beam 32, located upon the hounds, as shown in Fig. 2, while the center chain 31, is attached to the front of the body, and is carried rearward and secured to the rear cross bar 23. Thus the body of the lever is held in a given position upon the truck, yet is free to rock forwardly or rearwardly; and one of the features of the invention, in addition to locating the ends of the log chains at a point in front of the lever, consists in constructing the surfaces of the lever over which the tie chains 30 and 31 pass, of the same diameter, so that the chains may be quickly adjusted and will always remain taut upon the lever. It will be understood that suitable grooves are produced in the body of the lever for the reception of the said tie chains.

The handle of the lever is usually provided with an eye 33 at its top, and two chains 34 and 35, are attached to the eye, one chain being carried downward and attached to the rear end of the tongue, while the other chain 35, is carried forward to an engagement with a guide pulley 36, located upon the hounds, and is attached to the forward end of the tongue, as illustrated in Fig. 1.

In practical operation, the forward pawl, 16, is held out of engagement with the forward rack, and the tongue is slid rearward to the position shown in full lines, Fig. 1, by which the chain 34, pulls the lever, 28, to the vertical position. The pawl, 16, being then released, it re-engages the rack, 15, and the tongue is thus held immovable by the two pawls while the log is being loaded, *i. e.*, raised from the ground. In the vertical position of the lever, 28, the log chains, 25, are slackened sufficiently to permit the attachment of the grapple, 26, to a log. Such attachment being effected, and the team connected with the forward end of the tongue, 13, the latter is drawn forward until the lever, 28, is pulled down and assumes a horizontal position, and the log also raised and held suspended, as shown in dotted lines, Fig. 1.

It will be understood, that the rear pawl, 17, must be held out of engagement with its rack, and that the forward pawl, 16, slides over its rack teeth, during this operation, and that, upon releasing said forward pawl, it locks the tongue, 13, so that it cannot slide backward.

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

1. In a log carrier, the combination of a truck, a sliding tongue mounted thereon and provided with two racks, the teeth of each rack facing in opposite directions, the oppositely disposed pawls mounted on the truck and simultaneously engaging the racks of the tongue, the adjusting lever having a rocking support on the truck and consisting of a body and a handle, connections between the handle and the tongue, and the stay chains secured to the truck in front and in rear of the body of the lever and attached to and wound on the body in reverse directions, substantially as described.

2. In a log carrier, the combination, with a truck, a sliding tongue provided with two racks, the teeth of each rack facing in opposite directions, spring-controlled pawls oppositely faced, carried by the truck and adapted for engagement with the rack surface of the tongue, and levers whereby the pawls may be independently disengaged from the tongue, of an adjusting lever having a rocking support upon the truck and consisting of a body and a handle, a guide roller provided with peripheral grooves and located at the rear of the adjusting lever, log chains passed over the grooved portion of the guide roller and attached to the forward face of the body of the adjusting lever, and a flexible connection between the ends of the tongue and the handle of the adjusting lever, substantially as shown and described.

3. In a log carrier, the combination, with a truck, a sliding tongue provided with two racks, the teeth of each rack facing in opposite directions, spring-controlled pawls oppositely faced, carried by the truck and adapted for engagement with the rack surface of the tongue, and levers whereby the pawls may be independently disengaged from the tongue, of an adjusting lever having a rocking support upon the truck and consisting of a body and a handle, a guide roller provided with peripheral grooves and located at the rear of the adjusting lever, log chains passed over the grooved portion of the guide roller and attached to the forward face of the body of the adjusting lever, a flexible connection between the ends of the tongue and the handle of the adjusting lever, a guide pulley located upon the truck and having bearing against the forward connection between the tongue and the lever, and stay chains attached to the end of the body of the lever, surrounding the same, and to the truck, a third stay chain being secured to the body of the lever at the opposite side and likewise attached to the truck, the surfaces of the lever body over which the chain is passed being of the same diameter, substantially as shown and described.

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Witnesses:
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