

No. 812,689.

PATENTED FEB. 13, 1906.

W. E. SINCLAIR.  
LOG CARRIER.

APPLICATION FILED MAY 11, 1905.

2 SHEETS—SHEET 1.

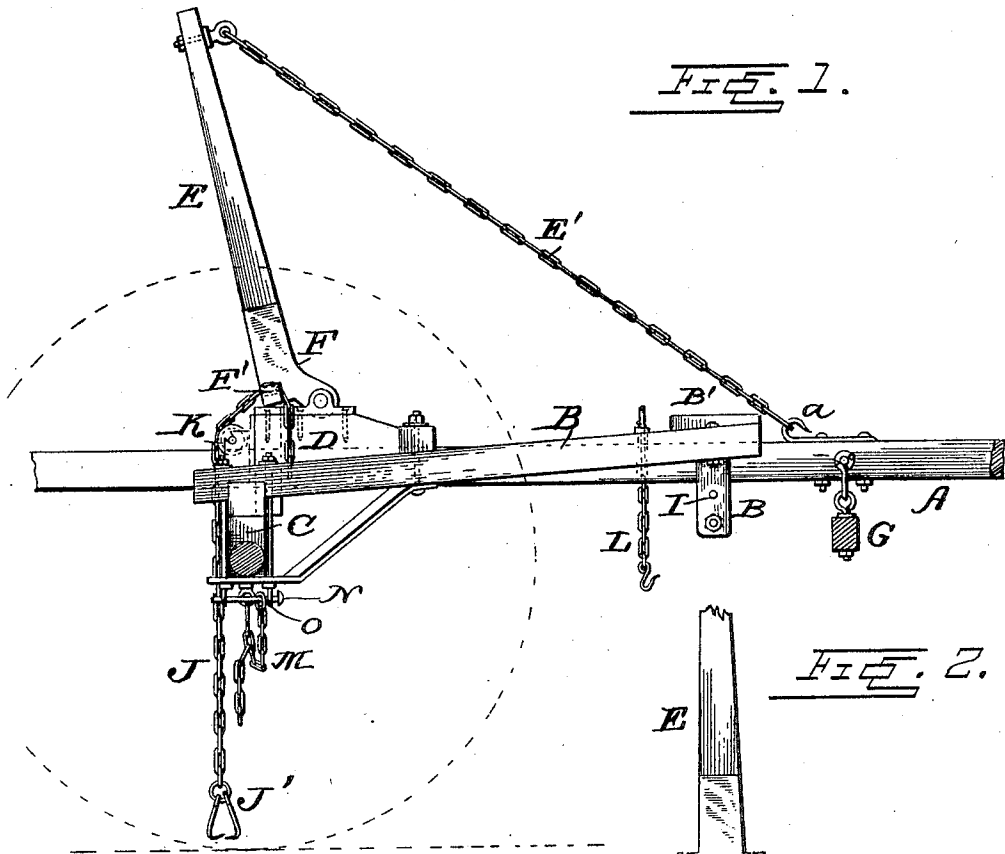
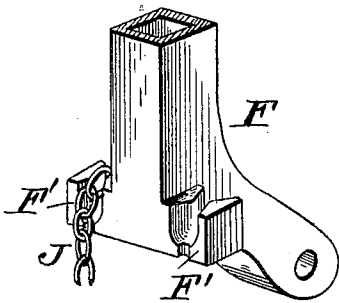


FIG. 6.



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2 SHEETS—SHEET 2.

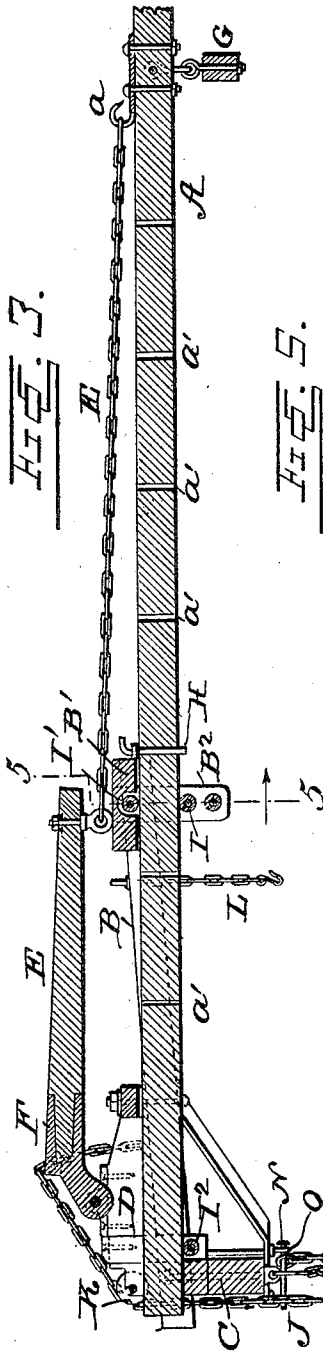


FIG. 3.

FIG. 5.

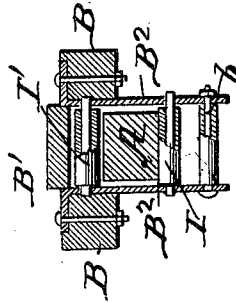
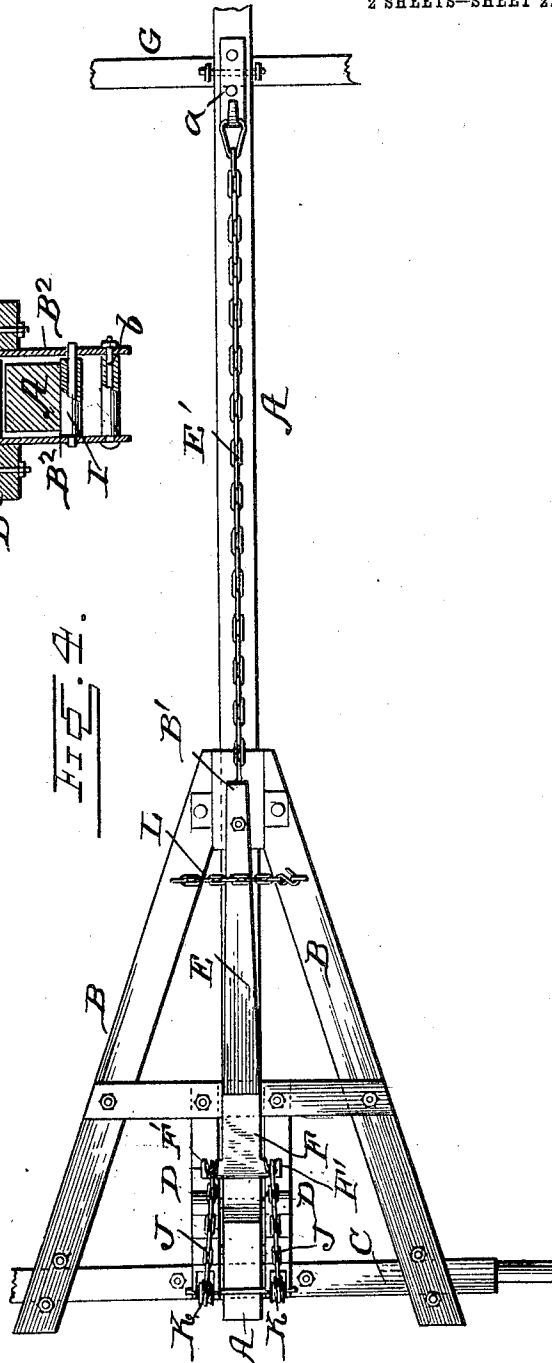


FIG. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM EDGAR SINCLAIR, OF MOBILE, ALABAMA.

## LOG-CARRIER.

No. 812,689.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed May 11, 1905. Serial No. 260,026.

*To all whom it may concern:*

Be it known that I, WILLIAM EDGAR SINCLAIR, a citizen of the United States, residing at Mobile, in the county of Mobile and State of Alabama, have made certain new and useful Improvements in Log-Carriers, of which the following is a specification.

My invention is an improvement in that class of log-carriers in which the draft-animals attached to a tongue and wheeled axle are utilized for lifting and handling logs, the tongue being adapted to slide in suitable guides and connected with a pivoted lifting-lever, which in turn operates chains and grapples attached to the log or logs.

The chief objects of my invention are to reduce the draft heretofore required for raising the logs by the lift-lever and chains and also to enable the operation of loading and unloading to be more quickly effected.

The details of construction, arrangement, and operation of parts are as hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of a wheeled log-carrier constructed according to my invention. Fig. 2 is an end view of the same. Fig. 3 is a longitudinal section of the log-carrier minus the wheels. Fig. 4 is a plan view minus the wheels. Fig. 5 is an enlarged transverse section on the line 5 5 of Fig. 3. Fig. 6, Sheet 1, is a perspective view of the pivoted socket for the log-lifting lever.

In Figs. 1, 3, and 4 A indicates a tongue, B hounds in which the tongue is adapted to slide, and C an axle to which the hounds are attached. Bars D are applied to the hounds and axle, and upon these bars is pivoted a lever E, fixed in a metal socket F. The lever is pivoted so as to swing in line with the tongue, and its limit of movement is from the horizontal to the vertical, or approximately so. The outer end of said lever is connected by a chain E' with a hook *a*, secured to the tongue A. A doubletree G is attached to the tongue at a point contiguous to the hook *a*, and in practice this will be provided with whiffletrees, to which the tree will be connected in the usual way. The tongue A is provided with a series of vertical perforations *a'* (see Fig. 3) for reception of a locking-bolt H, which serves to prevent the tongue sliding backward when drawn out to any desired extent.

The front ends of the hounds B are provided with a cross-block B', from which depend par-

allel side bars B<sup>2</sup>, these being connected at their lower ends by a cross-bolt *b*. (See Fig. 5.) In the bars B<sup>2</sup>, I arrange two antifriction-rollers I I', one above and the other below the tongue A. As shown in Fig. 3, the upper roller I' is arranged in the block B', which connects the front ends of the hounds B. I arrange a third antifriction-roller I<sup>2</sup> directly in front of the axle C, (see Fig. 3,) and the tongue A rests on and runs in contact therewith. By means of these antifriction-rollers I greatly relieve the friction, and therefore the draft heretofore attendant upon and necessary for operating the tongue A. In other words, the tongue may be drawn out or pushed back with less draft and greater ease than heretofore, so that the strain on the team is greatly reduced and the loading or unloading may be more quickly effected.

I have improved the socket or "boot" F, in which the lever proper, E, is held—that is to say, I construct the socket with lateral extensions F', (see Fig. 6, Sheet 1,) which are forked and otherwise constructed in such manner as to adapt them to receive and lock the log-lifting chains J. In other words, these lateral projections F' form vertical opposite jaws between which the log-lifting chains may be placed and with whose links they engage, as will be readily understood. The jaws F' being open on the upper side, it is apparent that the chains J may be very quickly inserted or removed from them in the operation of raising or lowering logs. It will be seen that since the jaws F' are formed integrally with the socket proper, F, they are strong and durable and not liable to be broken in the exigencies of use. As shown in Figs. 1 and 3, the said chains J are provided with grapples or hooks J' in the usual way. The chains pass over antifriction-rollers K, arranged in suitable bearings at the rear of the bars D. (See Figs. 3 and 4.) The axle upon which these rollers K are mounted is journaled in open bearings, as shown in Figs. 1 and 3.

As in other log-carriers of this class, when the chains and grapples J J' have been connected with a log upon starting the team the tongue A is drawn forward, and the lever E is thus carried down from the vertical position shown in Fig. 1 to the horizontal position shown in Fig. 3 and the tongue is locked by the pin H and the lever secured by a chain L, as shown in Fig. 4. There being two chains J, two logs may be raised and trans-

ported in this manner. Upon reaching the point of delivery the chain L is first unhooked and then the chain E', so as to release the lever E. This allows the logs to drop to the ground, and upon removal of the locking-pin H the tongue A may be slid backward with ease in view of the antifriction-bearings provided for it. The weight of the tongue A is always imposed on the rear antifriction-roller I<sup>2</sup>, and it engages or bears forcibly upon one or the other of the front rollers I I', according to conditions.

I provide for raising and transporting smaller logs than those to which the chains and grapples J J' are ordinarily applied by means of supplemental chains M. (See Figs. 1, 2, and 3.) These are attached to cross-bolts N, held in eyebolts O, that pass through the axle C and its bolster and the hounds. The opposite or free ends of the chains M may be supported by hooks P, secured to and pendent from the axle; but in raising the logs which these chains are adapted to carry the chains will be engaged with the jaws F' of the lever-socket F in the same manner as the chains J.

The hooks P, before referred to, are also adapted to be utilized when a log has been grappled and raised by one of the chains J through the operation of the lever, as before described—that is to say, when a large log has been raised by one chain J the hook P, which is adjacent to said chain, may be locked

therewith for holding the log suspended, and then the upper end of the chain J may be released from the lever E, and the latter may then be operated for raising another log by means of the opposite chain J.

By means of the construction and arrangement of parts before described I have improved log-carriers of the class to which mine belongs in several particulars which are very important in practice.

What I claim is—

1. In a log-carrier, the combination, with an axle and hounds provided with guides, of a slidable tongue, log-lifting chains, a pivoted lever, and a chain connecting it with the aforesaid tongue, and bearings for the tongue consisting of two antifriction-rollers arranged respectively below and above the tongue in a front attachment of the hounds, and a rear antifriction-roller arranged adjacent to the axle and beneath the tongue, substantially as described.

2. In a log-carrier, the combination of the axle, the hounds, a block connecting the front ends of the hounds, and parallel bars pendent therefrom and provided with two antifriction-rollers arranged transversely and spaced apart, one above the other, and a rear guide for the tongue, substantially as described.

WILLIAM EDGAR SINCLAIR.

Witnesses:

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