

No. 687,860.

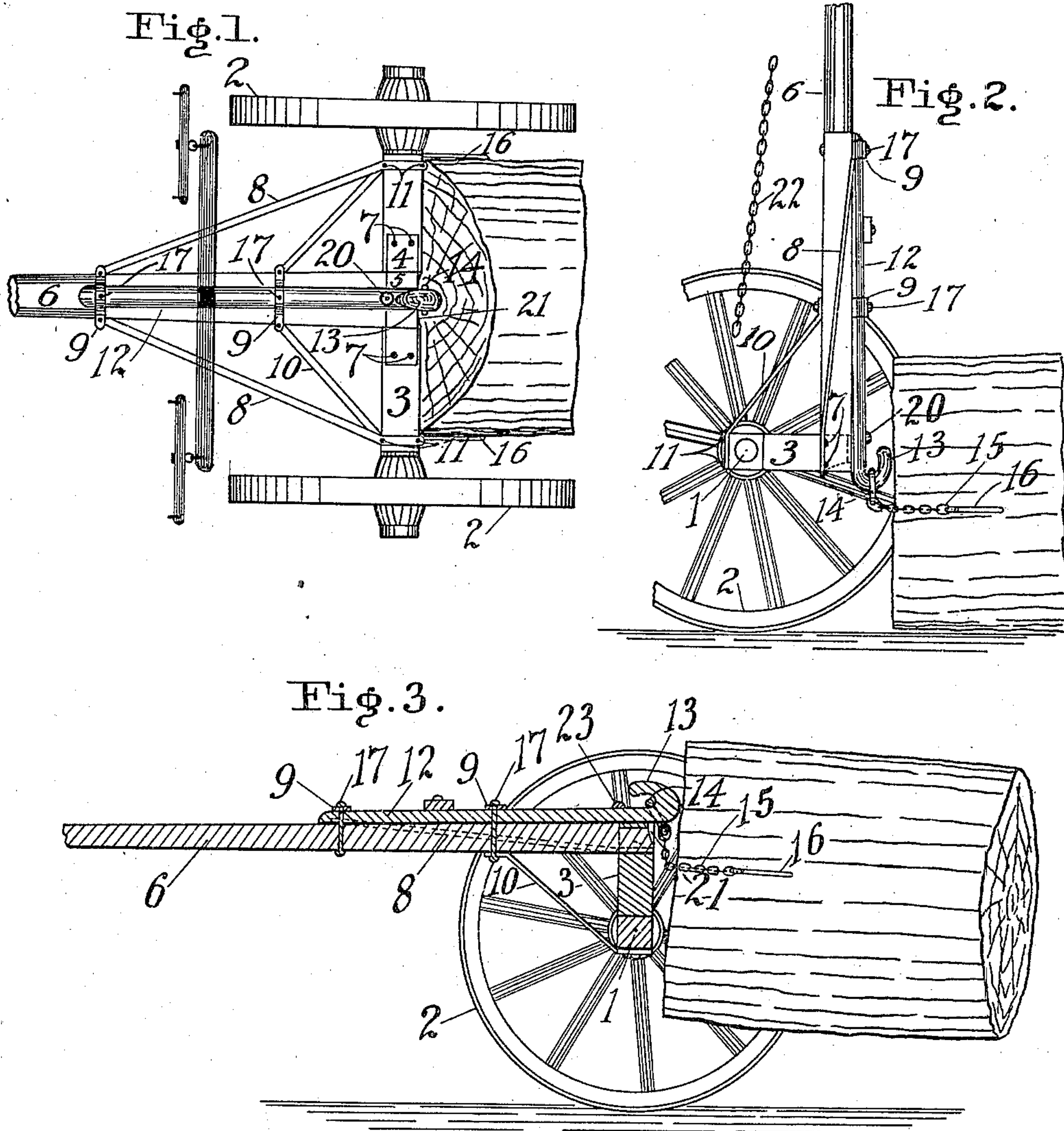
Patented Dec. 3, 1901.

J. H. SMART.

LOG CARRIER.

(Application filed Apr. 11, 1901.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH H. SMART, OF LOS ANGELES, CALIFORNIA.

LOG-CARRIER.

SPECIFICATION forming part of Letters Patent No. 687,860, dated December 3, 1901.

Application filed April 11, 1901. Serial No. 55,438. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. SMART, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented new and useful Improvements in Log-Carriers, of which the following is a specification.

This invention relates to log-carriers, and particularly to that class thereof known and distinguished as "end carriers" or "end trucks;" and one of the objects of the invention is to provide a vehicle of this character which is simple and durable in construction and efficient in operation.

Another object of this invention is to provide a log-carrier which will prevent the log or logs from injuring or interfering with the team drawing the vehicle when descending an incline or when going downgrade and also to provide a log-carrier constructed to dispose the line of draft in the plane of the axle of the vehicle.

A further object of the invention is to provide a vehicle constructed and operating in such a manner as to allow free movement of the log or logs carried thereby upon the point of suspension, so that the latter may be drawn around sharp curves or turns in the road or trail and in order that the vehicle will not upset upon an incline or sloping surface or when passing over stumps or obstructions, owing to the decreased height of the carrier.

It is also an object of this invention to construct a log-carrier in such a manner that the tongue or pole thereof will remain in an approximately horizontal position after the log or logs shall have been connected thereto and the tongue or pole been drawn downwardly into the aforesaid position and also to produce a log-carrier which can be rough-locked or one or both of the wheels can be changed or held against rotation when descending a steep grade without causing excessive weight or pressure upon the draft-animals.

Still another object of this invention is to provide a log-carrier particularly adapted for use in a rough country, where steep inclines and slopes are encountered, as well as stumps and other obstructions tending to upset or overturn trucks of high construction, and

also to provide means for holding the log or logs in the center of the carrier and preventing them from rolling in the chain.

With these and other objects in view this invention consists, essentially, in the construction, combination, and arrangement of parts substantially as hereinafter more fully described in the following specification and illustrated in the accompanying drawings, forming part thereof, in which—

Figure 1 is a top plan view of a log-carrier embodying my improvement, showing a portion of a log in position for transportation. Fig. 2 is a partial sectional view, partly broken away, of the carrier, illustrating its position during the process of attaching the log thereto; and Fig. 3 is a partial sectional view showing a log after attachment to the vehicle.

Similar characters of reference designate corresponding parts throughout the several views.

Referring to the drawings, the reference character 1 designates an axle, preferably square in cross-section, on each end whereof are mounted wheels 2, of any preferred construction, but preferably of as slight diameter as is compatible with the size or diameter of the material handled. Upon the axle 1 is mounted a block or timber 3, of suitable width to properly elevate the log when attached, as hereinafter described, and upon the block 3 is preferably secured a metallic plate or casting 4, desirably constructed with parallel lips or perpendicular extensions, or said plate may be provided with an angular intermediate offset, as shown at 5, to receive one end of the pole or tongue 6, and the plate 4 is held in position upon the block 3 by bolts or similar devices 7, which may or may not extend through or beyond the block and axle and be secured by a yoke or bridge-piece beneath the axle. The tongue or pole 6 is held in position by metallic braces 8, passing from the upper edge of the block 3 to bands 9 upon the pole, and braces 10 extend from the under edge of said axle to the under side of the pole, as shown in Figs. 2 and 3 of the drawings. These braces 8 and 10 are preferably secured in position by means of long bolts 11,

which pass through or are countersunk in the block and axle to give support and rigidity to the parts, as will be readily understood.

Secured upon the pole or tongue 6 is a draw-bar 12, one end whereof is preferably bent to form a hook 13, constructed to receive a ring 14, carrying chains 15, to which are attached dogs 16, to be driven into each side of the log about on a line of the longitudinal axis thereof, as hereinafter explained. The draw-bar 12 may pass under the clamps 9, as shown in the drawings, and bolts 17 may pass there-through and through the tongue or pole in the manner illustrated, and an additional bolt 20 can be employed, if found necessary in practice. The hook 13 preferably extends slightly beyond the face of the block 3, and the latter is desirably cut away thereunder, as shown at 21 in Fig. 3 of the drawings, in order that the end of the log attached to the vehicle may abut against the hook, which forms a fulcrum or pivot upon which the log may move, and this construction throws the point of suspension of the log directly over the longitudinal center of the axle 1, so that when the tongue or pole 6 is in the position shown in Fig. 3 it will not tend to fly upwardly after the log shall have been attached to the carrier and the tongue drawn down to that position from the vertical position shown in Fig. 2 by the chain or rope 22, connected with the end of the pole or tongue.

The operation of the invention will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following explanation thereof. To attach a log to the carrier, the latter is backed up against the end of the log and the tongue or pole is elevated, as illustrated in Fig. 2 of the drawings, whereupon each of the chains 15 is drawn taut and the dogs 16 are driven into each side of the log about on the level with the longitudinal axis thereof, (substantially shown in Fig. 2 of the drawings,) notches having previously been cut in the edges of the log to receive the chains 15 and prevent the same from slipping out of position. Then by pulling upon the chain 22 the tongue or pole 6 is drawn downwardly to the position shown in Fig. 3, the wheels rotating toward the end of the log during the operation, thus bringing the axle into the position substantially as shown in Fig. 3, with the end of the draw-bar resting against the log, essentially as illustrated in the latter figure, whereupon the draft-animals may then be attached or hitched to the vehicle in the same manner as to an ordinary wagon, the position of the animals being adjacent to the wheels, thereby rendering the load easier to

pull than when the animals are attached at the extreme end of a sliding pole or tongue, as in the case of a straddle truck or carrier, which latter subjects the animals to inconvenience and injury from the log being conveyed in going downhill and also renders it harder, if not impossible, for the animals to hold back the weight of the vehicle and the material carried thereby.

I do not desire to confine myself to the specific construction, combination, and arrangement of parts herein shown and described, and I therefore reserve the right to make all such changes in and modifications of the same as come within the spirit and scope of my invention.

What I claim is—

1. A log-carrier provided with a draw-bar constructed to be connected with and to support one end of a log and receive the end thrust thereof.

2. A log-carrier provided with a draw-bar constructed to receive the end thrust of a log and means connected therewith to support the log thereagainst.

3. A log-carrier provided with a draw-bar constructed to receive the entire end thrust of a log, and devices carried thereby to engage a log or logs whereby the downward pressure of the pole or tongue of the carrier is equalized when the wheels are held against rotation.

4. A log-carrier provided with a draw-bar having a hooked end and attaching devices carried thereby to engage a log or logs, said end being constructed to abut against the end of the log and allow a lateral movement thereof and prevent the log from moving forward of the axle of the carrier.

5. A log-carrier provided with a running-gear, draft devices connected therewith adjacent to the wheels thereof, a draw-bar, and attaching devices carried thereby adapted to be connected with a log or logs, whereby the end thrust of the latter is supported by and against said bar when the carrier is loaded.

6. A log-carrier provided with a running-gear, a draw-bar thereon having a hooked end and chains carrying attaching-dogs connected with said bar and constructed to be secured to a log along the longitudinal axis thereof so that said bar receives the end thrust of the log.

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

JOSEPH H. SMART.

Witnesses:

L. B. ALDERETE,
C. H. AUSTIN.