

No. 664,793.

Patented Dec. 25, 1900.

G. H. WALL.
CAR OR WAGON STAKE.

(Application filed Sept. 6, 1900.)

(No Model.)

2 Sheets—Sheet 1.

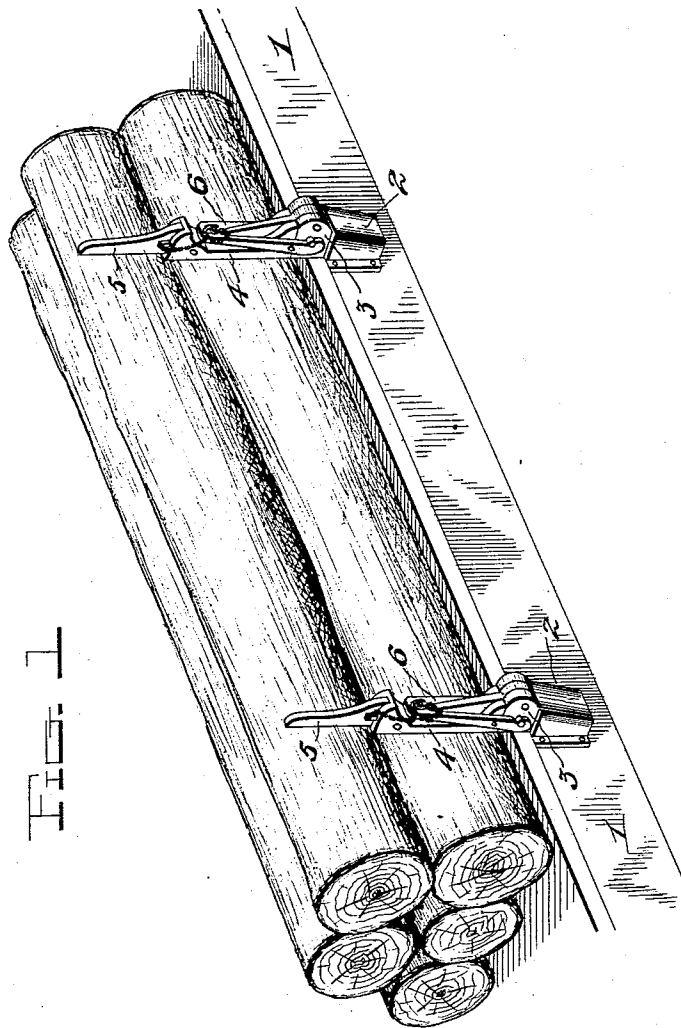


FIG. 1

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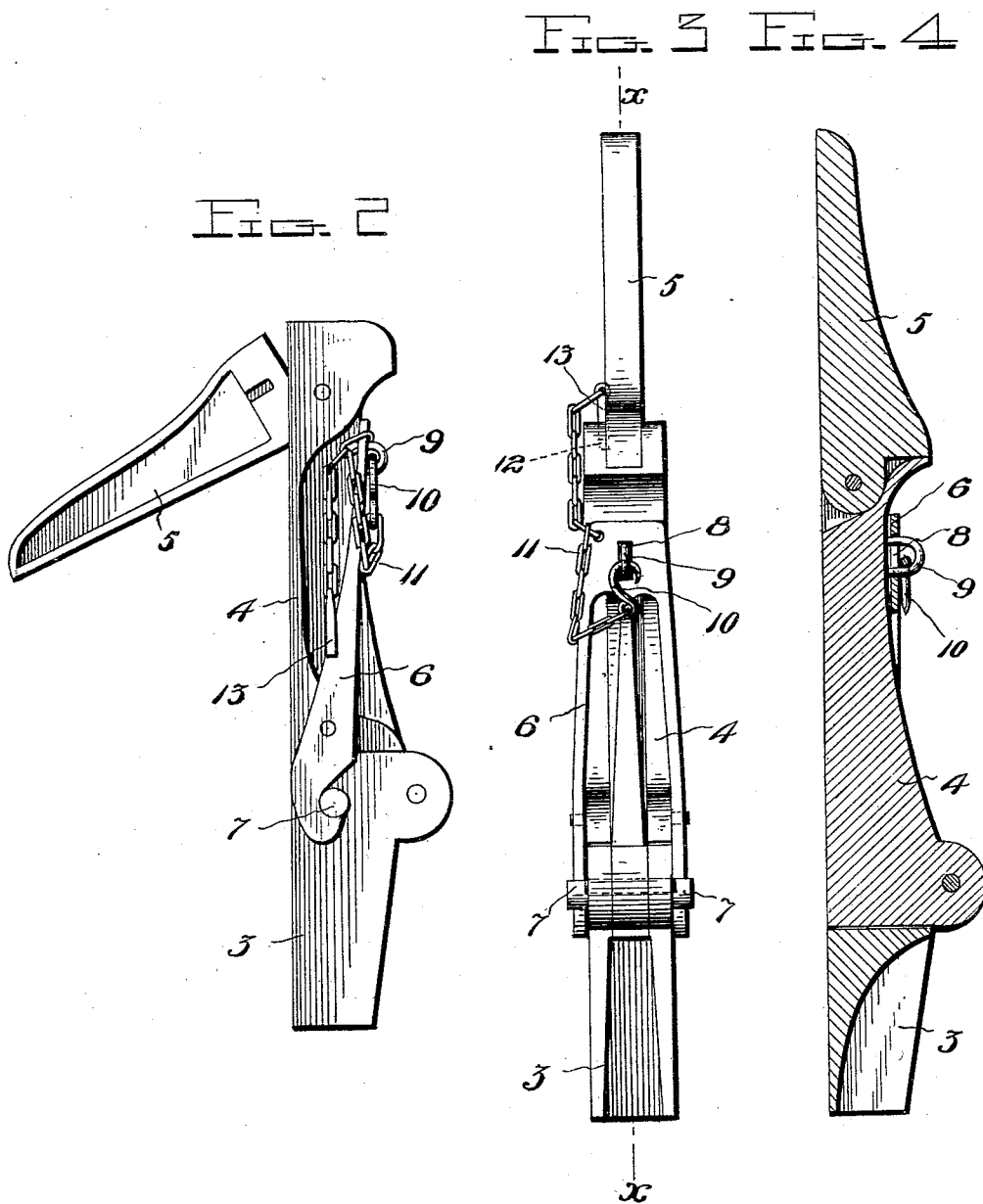
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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

GEORGE HENRY WALL, OF CADILLAC, MICHIGAN.

CAR OR WAGON STAKE.

SPECIFICATION forming part of Letters Patent No. 664,793, dated December 25, 1900.

Application filed September 6, 1900. Serial No. 29,228. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY WALL, a citizen of the United States, residing at Cadillac, in the county of Wexford and State of Michigan, have invented certain new and useful Improvements in Car or Wagon Stakes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to a car or wagon stake.

One object of the invention is to provide a simple, strong, powerful, and inexpensive stake of this character particularly designed for use on drays, express-wagons, and flat cars employed in the transportation of logs, timbers, and other material which requires the employment of stakes to prevent the logs and timber from falling off, thus preventing the ditching of trains and the loss of the logs.

A further object of the invention is to provide stakes of this character which shall be of such construction as to expedite loading and unloading of the vehicle equipped with them and increase the carrying capacity of the vehicle.

With these and other objects in view the invention consists in certain novel features of construction and combination of parts, which will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of a portion of the floor of a flat car, illustrating the application of my invention. Fig. 2 is a side elevation showing the position of the upper arm of the stake when serving as a skid. Fig. 3 is a front view; and Fig. 4 is a vertical sectional view on line *x x*, Fig. 3.

Referring to said drawings, 1 denotes the floor of a vehicle, which in the present instance is shown as that of a flat car, and 2 denotes sockets secured to the side edges of the floor.

3 denotes the stock or standard of the stake, and 4 denotes an arm connected thereto by a hinged joint and adapted to swing outwardly.

5 denotes an arm connected to the upper end of the arm 4 by a hinged joint adapted to swing inwardly. The arm 4 is locked to the stock or standard by a lever 6, the lower hooked ends of which engage studs 7, pro-

jecting laterally from the sides of the stock or standard. These studs may be cast directly on the sides of the standard or be the ends of a bolt passed entirely through the standard. The upper end of the lever is secured in locked position in any suitable manner, preferably by providing said upper end with a slot 8, through which projects a staple 9, fixed to the side of the arm 4 and engaged by a hook 10, secured to a chain 11, carried by the upper end of the lever. The arm 5 may be locked in vertical position to the arm 4 in any suitable manner. This is preferably effected by forming the upper end of the arm 4 on its inner face with a groove 12 and forming the lower end of the arm 5 with a similar groove, which is caused to align with the groove 12, and inserting into said grooves a locking-pin 13.

When the device is in the position shown in Fig. 4 and it is desired to remove the logs from the vehicle, the hook is disengaged from the staple and the upper end of the lever is swung outward, thus breaking joint and allowing the arms 4 and 5 to swing down against the side of the car, thus allowing the logs or timbers to roll off or be removed.

In loading the car the arm 4 may be locked in vertical position, as before described, and the arm 5 may be unlocked and swung inward, so that in raising the logs or timbers over the ends of the arm 4 they may be slid down over the arm 5 to the bottom of the car, the arm 5 in this position serving as a skid.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood without requiring an extended explanation. The device is exceedingly useful for the purpose for which it is designed and may be placed upon the market at a comparatively small cost.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described my invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A stake of the character described, com-

prising hinged sections adapted to swing in opposite directions and provided with means for locking them against movement, substantially as set forth.

5 2. An outwardly-folding stake having an inwardly-folding skid-arm, substantially as set forth.

3. An outwardly-folding stake having an inwardly-folding skid-arm, and means for
10 locking said stake and arm in vertical position.

4. The combination with a stock, of an arm hinged thereto to swing outwardly and provided with studs, and a lever pivoted to said
15 arm and adapted to engage said studs and lock said arm to said stock, substantially as set forth.

5. The combination with a stake provided with studs, of an arm having a rule-joint connection therewith and capable of swinging
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outwardly and prevented from swinging inwardly, a lever pivoted to said arm and engaged with said studs, and means for fastening the free end of the lever to said arm, substantially as set forth.

6. The combination with a stake, of an arm having a rule-joint connection therewith to swing outwardly, a second arm connected to the first arm by a rule-joint connection to swing inwardly, and means for locking said
25 30 arms against movement, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE HENRY WALL.

Witnesses:

N. W. MORTORFF,
WM. A. CLAY.