

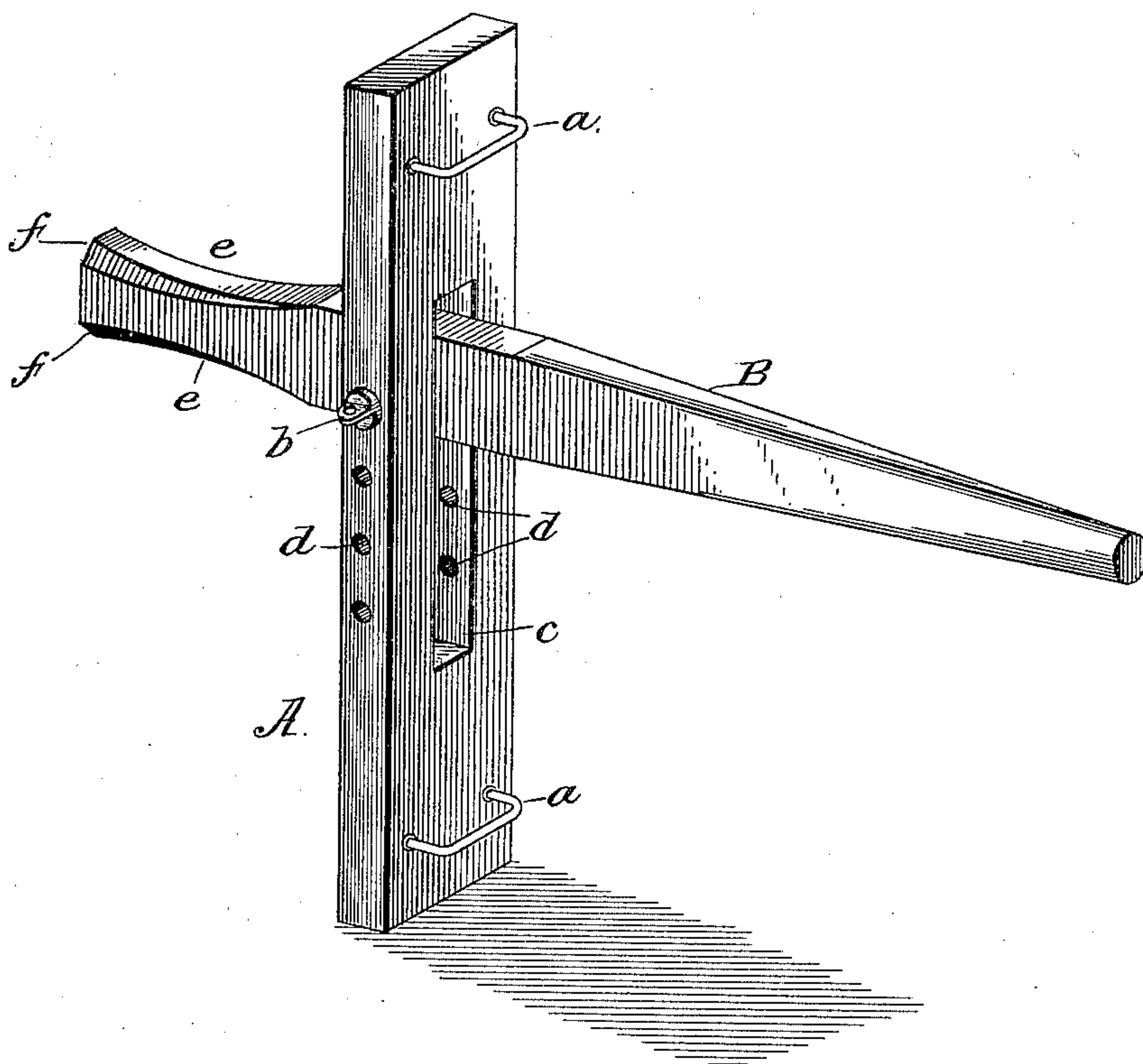
No. 688,589.

Patented Dec. 10, 1901.

A. BUTCHER & W. BROWDER.
WAGON JACK.

(Application filed Apr. 19, 1901.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

ANTHONY BUTCHER AND WILLIAM BROWDER, OF CHILLICOTHE, MISSOURI.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 688,589, dated December 10, 1901.

Application filed April 19, 1901. Serial No. 56,565. (No model.)

To all whom it may concern:

Be it known that we, ANTHONY BUTCHER and WILLIAM BROWDER, citizens of the United States, residing at Chillicothe, in the county of Livingston and State of Missouri, have invented a new and useful Wagon-Jack, of which the following is a description.

Our invention relates to wagon-jacks, and more particularly to that type embodying an upright stander and a lever pivoted to the same. Previous to our invention all wagon-jacks of this type of which we have knowledge have the stander fixed and rigid in its upright position. Consequently such devices are adapted for use only in connection with the axle of a vehicle.

One object of our invention is to provide a wagon-jack in which the stander oscillates and thereby admits of engagement directly with the wheel for the purpose of withdrawing it from or replacing it in operative position upon the axle without the necessity of the operator placing his hand upon the wheel.

A further object is to produce a device of this character by which the work can be accomplished expeditiously and which is of extremely simple, strong, durable, and cheap construction.

With these objects in view the invention consists in certain novel and peculiar features of construction and arrangement, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawing, which represents a perspective view of a wagon-jack embodying our invention.

Referring to the drawing in detail, A designates a stander, preferably in the form of a plank or board of substantially the proportion shown and provided centrally with a longitudinal slot *c* and with a series of transverse holes *d*, said holes extending through the stander from edge to edge, and therefore intersecting said slot. The stander is also provided with a pair of handles *a* at its outer side, one being located near each end.

B designates a lever extending through the slot and pivotally mounted therein on bolt *b*, engaging transversely-aligned holes *d* of the stander. The outer end of the lever is preferably attenuated to provide a convenient

handle, while its inner end at the inner side of the stander is dished in its upper and lower edges, as shown at *e*, in order to approximate the configuration of and fit snugly against the under side of the hub, the corners of the lever at the side margins of said dished portion being hipped, as shown at *f*, for the purpose of fitting snugly between contiguous spokes. With the lever dished as described the wheel-hub will fit snugly therein and will move longitudinally on its spindle as the lever is raised or depressed, the dished surface of the latter effecting this sliding action of the spindle, as will be readily understood. The hipped portions admit of a firmer and more extended bearing on the contiguous spokes than could be obtained if the corners were left intact, and therefore tends to prevent any slipping of the lever on the hub when manipulated to slide the wheel in or out.

In practice the stander is placed on the ground in upright position on a plane parallel with the wheel, so that the lever may pass between the spokes, and the short or inner end of the lever is fitted under the hub of the wheel to be oiled and between the contiguous spokes, the nut being removed before or after this disposition of the jack, as desired. The operator then presses down with one hand on the handle end of the lever and at the same time grasps the upper handle *a* and tilts or oscillates stander A outward. In this action the lever raises the wheel and the oscillating movement of the stander pulls it outward upon the axle the required distance for oiling or other purposes, after which the operator raises the lever and permits the wheel to descend to the ground while he is oiling the axle. To replace the wheel, depress the outer or handle end of the lever and rock or oscillate the upper end of the stander back to its original position. This action slides the wheel back to operative position upon the axle, and the nut is then replaced and the wheel lowered to the ground again.

To accommodate this wagon-jack to wheels of different diameter, it can be inverted, so as to permit the formerly upper end of the stander to become the lower end and the formerly operative dished upper side of the lever the inoperative side, or the bolt *b* can be

withdrawn and engaged with different holes
d to effect a variation in the height of the
lever.

From the above description it will be ap-
5 parent that we have produced a wagon-jack
embodying the features of advantage enumer-
ated as desirable in the statement of inven-
tion.

Having thus described the invention, what
10 we claim as new, and desire to secure by Let-
ters Patent, is—

A wagon-jack comprising an upright
stander flat in a plane parallel with the wheel
and having a longitudinal slot and a series of
15 transverse holes intersecting the slot, handles
in the outer face of the stander near its top
and bottom, a lever passing loosely through
said slot and having a handle at one end and

its other end dished at the upper and lower
edges to conform with the longitudinal curva- 20
ture of the hub and hipped at the corners of
both dished portions to permit them to enter
between two spokes, and a bolt adjustably
pivoting the lever within said slot, the device 25
being invertible to accommodate it to wheels
of various diameters without necessarily ad-
justing the bolt to different holes, all as and
for the purpose set forth.

In testimony whereof we have signed our
names to this specification in the presence of 30
two subscribing witnesses.

ANTHONY BUTCHER.
WILLIAM BROWDER.

Witnesses:

JAMES P. HENDERSON,
J. E. WATKINS.