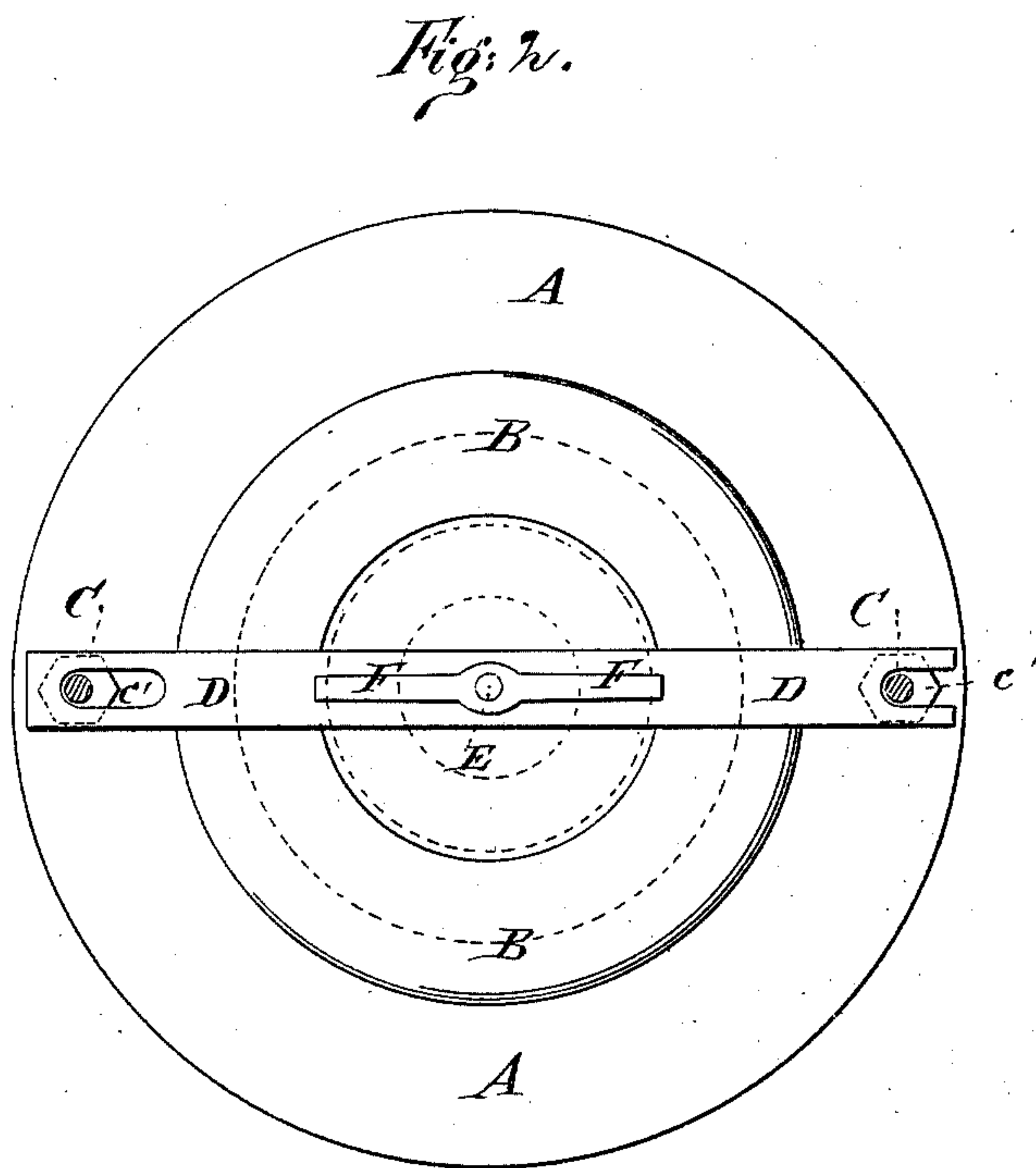
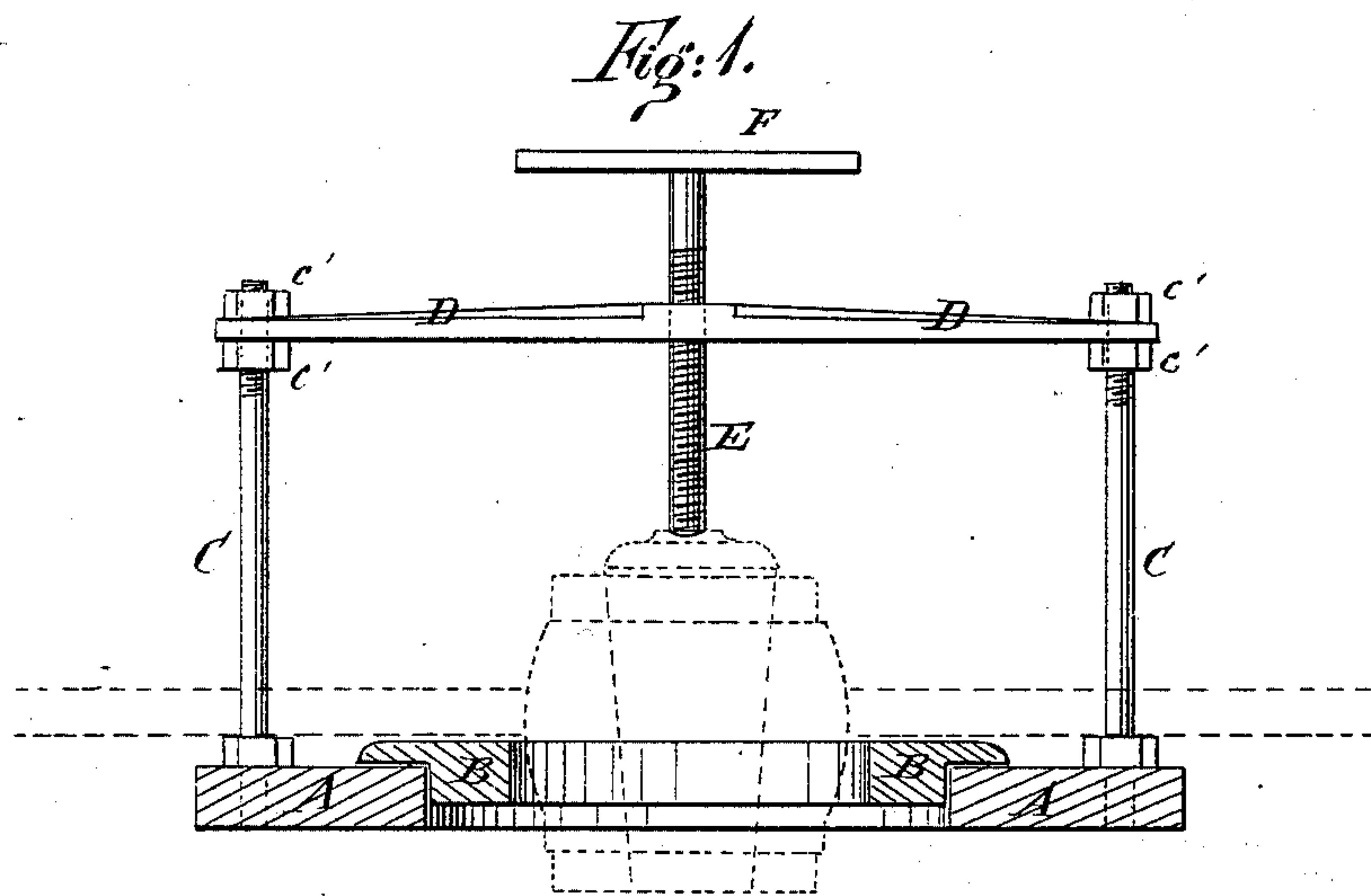


H. B. ANDREWS & O. W. BALL.  
Axle-Box Press.

No. 222,646.

Patented Dec. 16, 1879.



WITNESSES:

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INVENTOR:

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# UNITED STATES PATENT OFFICE.

HENRY B. ANDREWS AND OSCAR W. BALL, OF FARIBAULT, MINNESOTA.

## IMPROVEMENT IN AXLE-BOX PRESSES.

Specification forming part of Letters Patent No. **222,646**, dated December 16, 1879; application filed May 14, 1879.

*To all whom it may concern:*

Be it known that we, HENRY BACON ANDREWS and OSCAR WILLIAM BALL, of Faribault, in the county of Rice and State of Minnesota, have invented a new and useful Improvement in Axle-Box Presses, of which the following is a specification.

Figure 1 is a vertical section of our improved machine. Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a machine for pressing the axle-boxes into the hubs of wheels which shall be simple in construction, strong, durable, and convenient, and effective in use, forcing the axle-boxes to their places without any danger of breaking them.

The invention consists in the combination of the bed plate or frame, having a large hole or opening through its center, the detachable plate, having a hole through its center to receive the end of a hub, the stationary uprights, the detachable cross-bar, the screw, and the lever, with each other, as hereinafter fully described.

A represents the bed plate or frame of the machine, which has a hole formed through its center a little larger than the largest hub to be operated upon. B is a plate, which is rabbeted upon the lower side of its outer edge to fit into the hole in the plate or frame A, and which has a hole formed through its center to receive and fit upon the smaller end of the hub that is to receive the axle-box, the spokes of the wheel resting upon the upper side of the said plate B. Several plates B should be provided with different-sized holes through them to correspond with the size of the different hubs to be operated upon.

To the bed plate or frame A, upon the opposite sides of the hole through its middle part, are securely attached the lower ends of two uprights, C, which have screw-threads formed upon their upper ends to receive the nuts *c'*, two to each.

D is a strong cross-bar of such a length as to reach from one to the other of the uprights C, and the ends of which are placed upon the

upper ends of the said uprights C, between the nut *c'*. One end of the bar D is slotted longitudinally, and the other end is notched to receive the upper ends of the uprights C, as shown in Fig. 2, so that by loosening the upper nuts, *c'*, the bar D may be slipped back and swung around to allow the wheel to be conveniently placed upon and removed from the machine.

Through the center of the bar D is formed a screw-hole to receive the screw E, the lower end of which is rounded off, and to its upper end is attached a lever, F, by means of which it is operated.

In using the machine the wheel is arranged upon the machine as hereinbefore described, the axle-box is inserted in the bore of the tube, and started in by a few light blows with a hammer or mallet. An iron block is then laid upon the outer end of the axle-box, the bar D is swung into place and secured by tightening the upper nuts, *c'*, and the screw E is turned down, forcing the axle-box into place. If desired, one end of the cross-bar D may be hinged to the upper end of one of the uprights C, and its other end secured to the upper end of the other upright by means of a socket or hole and pin, so that it may be conveniently released and turned back; or the said cross-bar may be secured in any other desired way that will allow it to be conveniently released and turned back.

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

The combination of the bed plate or frame A, having a large hole or opening through its center, the detachable plate B, having a hole through its center to receive the end of a hub, the stationary uprights C, the detachable cross-bar D, the screw E, and the lever F, with each other, substantially as herein shown and described.

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OSCAR WILLIAM BALL.

Witnesses:

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