C. L. BRINK.

POWER WRENCH.

APPLICATION FILED MAY 21, 1910. RENEWED AUG. 22, 1912.

1,039,642. Patented Sept. 24, 1912.

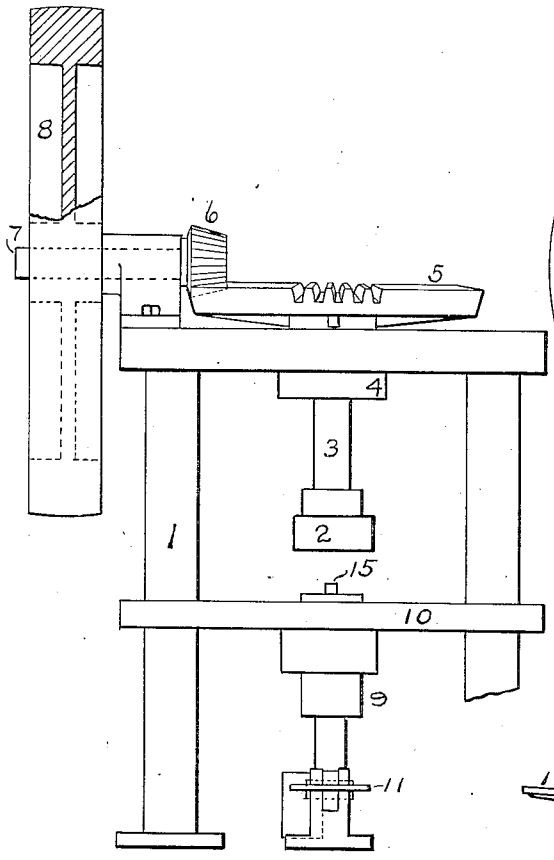

FIG. 1.

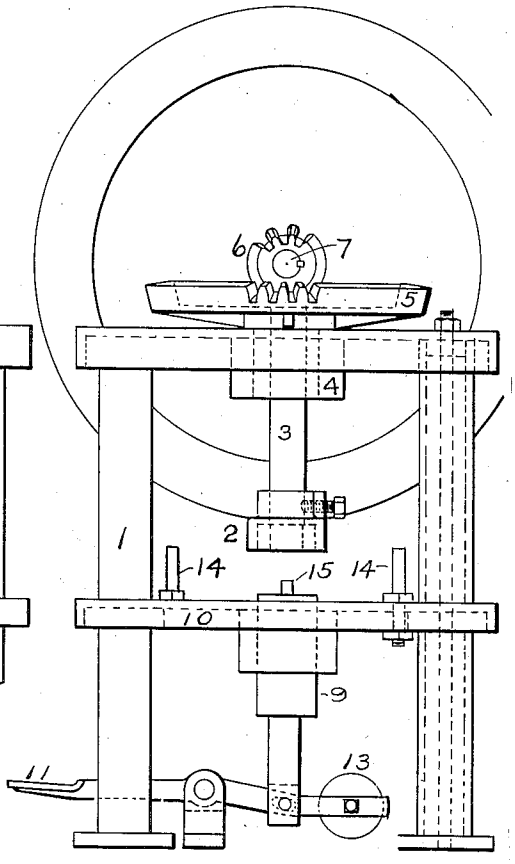

FIG. 2.

WITNESSES:

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POWER-WRENCH.

1,039,642. Specification of Letters Patent. Patented Sept. 24, 1912.

Application filed May 21, 1910, Serial No. 562,755. Renewed August 22, 1912. Serial No. 716,564.

To all whom it may concern:

Be it known that I, CHARLES L. BRINK, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Power-Wrenches, of which the following is a specification.

My invention relates to power wrenches and its purpose is to facilitate the removal of the dummy hubs, which are employed to hold the spokes in position in the manufacture of wheels for automobiles and other vehicles, although it might be used for many other purposes without departing from my invention.

In the drawings, Figure 1, is an elevation of my device from the front, and Fig. 2, is an elevation from the end opposite the driving pulley.

Referring more particularly to the drawings, my device consists of a main frame 1, which may be of any suitable construction adapted to sustain the working parts, and may be designed to stand on the floor, as shown in the drawings or to be suspended from the ceiling. A wrench 2 is fastened to a shaft 3, which revolves in a bearing 4 mounted in the upper part of the frame 1. The shaft 3 carries on its upper extremity a main driving gear 5 driven by a pinion 6 mounted on a shaft 7 and carrying at its opposite extremity a heavy fly wheel 8, which may also operate as a pulley. A wheel support 9 is mounted slidably in the lower part 10, of the main frame 1, and is adapted to be given vertical movement by a foot lever 11. The wheel support 9 is normally maintained in its lowered position, as shown by the solid lines in Fig. 2, by a counterpoise 13, or any other suitable means. One or more stops 14 are adapted to pass between the spokes of the wheel to prevent it from revolving while the nut is being removed.

The operation of my device is as follows: When it is desired to remove the dummy hub from a wheel, the wheel is placed on the wheel support 9, with the projection 15 on the extremity of the wheel support, entering the opening in the center of the dummy hub. The wrench 2 is kept constantly revolving by means of the pulley 8, pinion 6 and gear 5. The wheel being in position, the support 9 is raised by a foot lever 11, until the nut on the upper half of the dummy hub engages with the wrench 2, which unscrews it from the other part of the hub.

I claim,

1. A machine for the purpose set forth, comprising a main frame, a wheel press mounted to slide vertically on said frame at the lower part thereof to support a wheel in a flat horizontal position, a centering pin extending vertically from the upper surface of the wheel press to enter the opening in the center of a wheel hub, a shaft mounted for rotation on the main frame above the wheel press in vertical alinement with said centering pin and provided with a wrench at its lower extremity, means for giving motion to said shaft, stop pins projecting from the upper surface of the wheel press to enter between the spokes of a wheel and retain the wheel in fixed position, and means for raising and lowering said wheel press.

2. A machine for the purpose set forth comprising a main frame, a wheel press mounted to slide vertically on said frame at the lower part thereof to support a wheel in a flat horizontal position, a centering pin extending vertically from the upper surface of the wheel press to enter the opening in the center of a wheel hub, a shaft mounted for rotation on the main frame above the wheel press in vertical alinement with said centering pin, said shaft being provided with a wrench at its lower extremity and a driving gear at the upper end thereof, and said shaft being fixed with respect to vertical movement, means for transmitting motion to said shaft comprising a rotary horizontal shaft mounted at the top of the main frame at one side thereof, a pinion on said horizontal shaft to mesh with the gear on the vertical shaft, and a heavy fly wheel on the other end of the shaft, and means for raising and lowering the wheel press.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES L. BRINK.

Witnesses:
E. G. SCHULTZ,
RUTH I. BARTRAM.