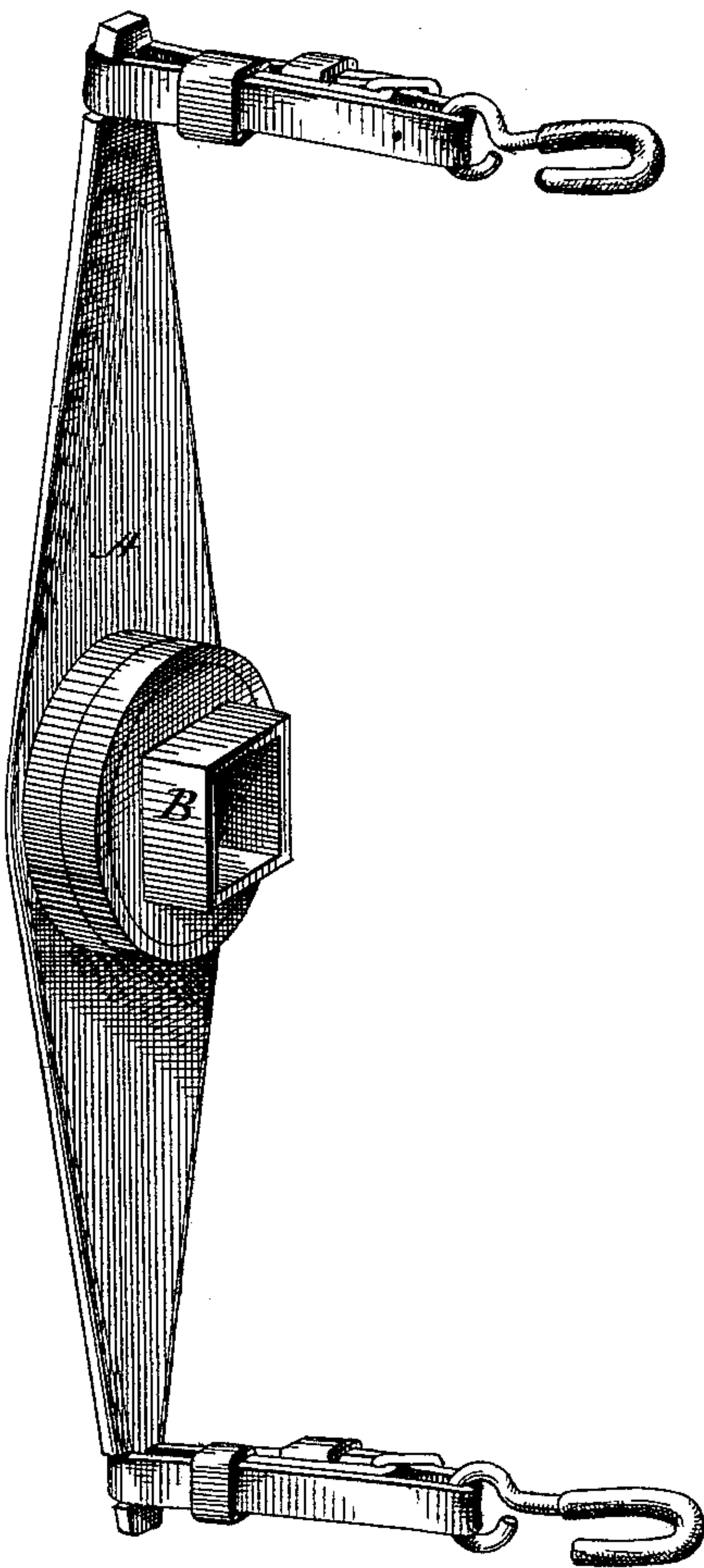


L. E. ROBINSON.
WRENCHES.

No. 195,403.

Patented Sept. 18, 1877.



WITNESSES:

Geo. H. Evans
A. H. Evans

INVENTOR:

Laurel E. Robinson
per atty.
A. H. Evans & Co.

UNITED STATES PATENT OFFICE.

LAUREL E. ROBINSON, OF MOUNT VERNON, OHIO.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **195,403**, dated September 18, 1877; application filed June 27, 1877.

To all whom it may concern:

Be it known that I, LAUREL E. ROBINSON, of Mount Vernon, Knox county, and State of Ohio, have invented certain new and useful Improvements in Wrenches, of which the following is a clear, full, and exact description, reference being made to the accompanying drawing, forming a part of this specification, in which the figure represents a perspective view.

My invention relates to improvements in wrenches for the easy and instantaneous removal of burs or nuts, and is more particularly adapted to be used in the removal of the wheels from the axles of vehicles, which is accomplished by means of my invention without soiling the hands.

In the drawing, A is an elastic piece of wood or other material made as a leaf of a spring, to which is securely attached cap B, by means of screws, rivets, or any other means which render the cap rigid and firm, so that it will not turn on the leaf A, which cap is adapted to fit over the head of the bur or nut. The cap B may be made entirely of metal, or part metal and part wood. If made of wood it should be strengthened by means of an iron band. On the ends of A I attach hooks or other devices, by means of an adjustable strap and buckle, or a chain. These hooks and straps are of such length that when one end is

laid over a spoke, and the cap B brought down to fit over the nut, it requires a slight bending of the piece A to bring the opposite hook in a position to be laid over an opposite spoke. Thus it will be seen that the cap B is held firmly on the nut and against the hub, and continues to hold the nut in that position after the removal of the wheel from the axle.

To remove the wheel after the wrench is attached as above described it is only necessary to turn the wheel backward, which detaches it from the axle in an instant, and, the nut being retained in its place, the wheel may be returned and fastened to its place by putting it on the axle and revolving it forward. The same means can be attained by having a rigid piece of metal or wood, A, and having some kind of a spring attached to the ends of the arms A.

What I claim as new, and desire to secure by Letters Patent, is—

The herein-described wrench, consisting of the elastic piece A, provided with cap B and fastening devices, whereby it is adapted to be fastened to the spokes of a wheel, and hold the cap in position over the nut, substantially as and for the purpose specified.

LAUREL E. ROBINSON.

Witnesses:

BENJ. A. F. GREER,
JOHN D. EWING.