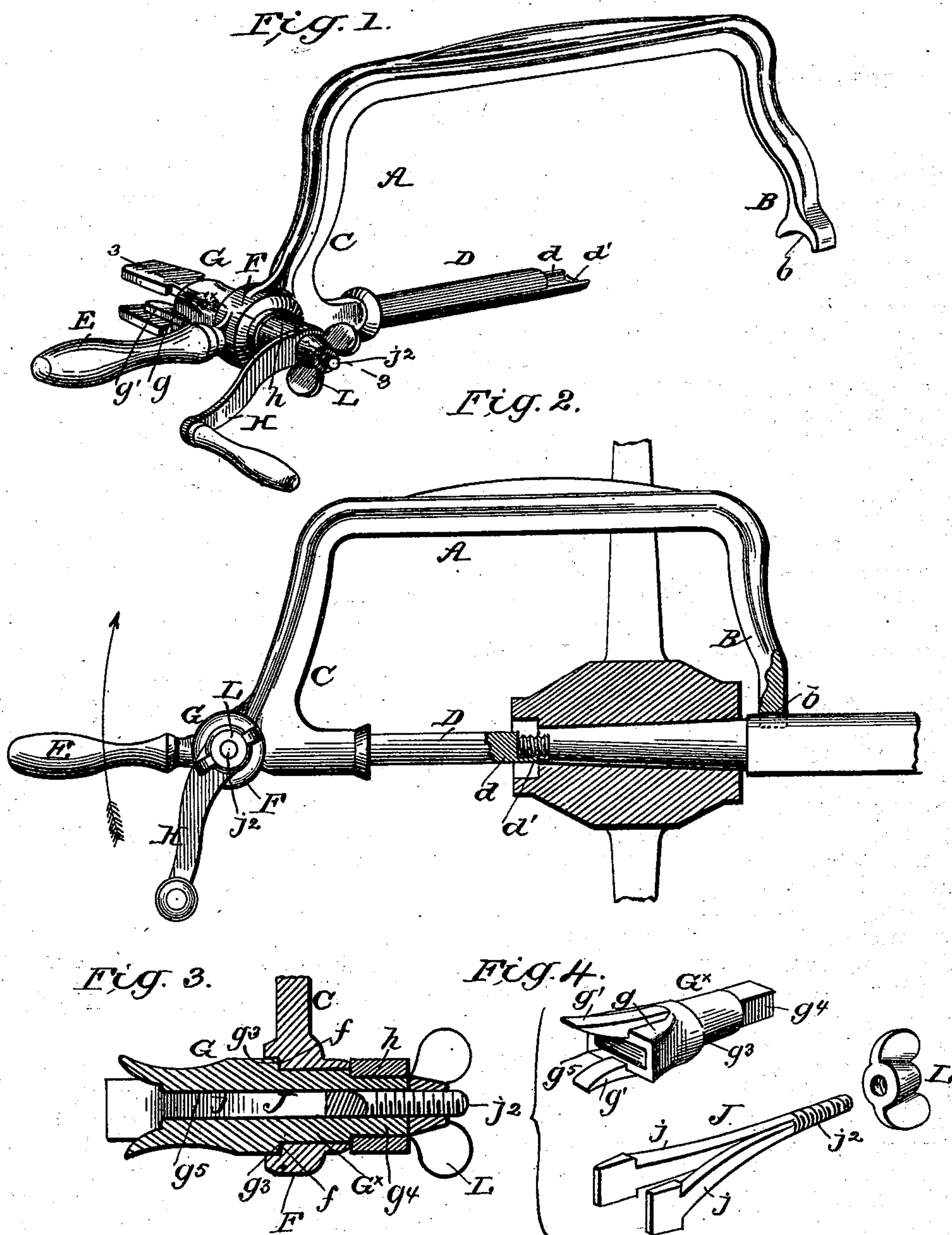


(No Model)

J. ROBERTSON.
COMBINED WRENCH AND WHEEL LIFTER.

No. 500,950.

Patented July 4, 1893.



UNITED STATES PATENT OFFICE.

JAMES ROBERTSON, OF PERTH, CANADA, ASSIGNOR OF ONE-HALF TO ANSLOW BARRINGTON RUDD AND HENRY H. NEILSON, OF SAME PLACE.

COMBINED WRENCH AND WHEEL-LIFTER.

SPECIFICATION forming part of Letters Patent No. 500,950, dated July 4, 1893.

Application filed April 18, 1893. Serial No. 470,881. (No model.)

To all whom it may concern:

Be it known that I, JAMES ROBERTSON, residing at Perth, in the Province of Ontario, Canada, have invented a new and Improved
5 Combined Wrench and Wheel-Lifter, of which the following is a specification.

My invention relates to a combined wrench and lifting device, more especially adapted for removing axle nuts and lifting the wheels
10 of vehicles, when it is desired to lubricate the axle, and it has for its object to provide a device of this character simple in its construction, and operation, and effective for its desired purpose.

15 The invention consists in the peculiar combination and novel arrangement of parts as will hereinafter first be described, and then particularly pointed out in the claims, reference being had to the accompanying drawings
20 in which—

Figure 1 is perspective view of my improvement. Fig. 2 is a side view illustrating the manner in which it is used. Fig. 3 is a transverse section on the line 3—3 Fig. 1 and Fig.
25 4 is a detail view illustrating the wrench members detached.

In the accompanying drawings A indicates a frame, which in the practical construction is of substantially the shape shown, it being
30 in the nature of a bow, its front end terminating in a bearing member B, having a concaved face *b*, while its opposite end C, has a spindle D, which extends inward toward the face *b* and in line therewith, and such spindle has its end formed with a concaved projecting portion *d* formed with a nib *d'*, the
35 purpose of which will hereinafter appear.

Projected outward in line with, and in an opposite direction from the spindle D, is a
40 handle member E, which terminates at a socket portion F in which is adapted to be held, a rotary wrench mechanism G. This mechanism consists of a clutch member or sleeve G the front end of which is spread or
45 flattened as at *g* and formed with fixed jaws or clamp fingers *g'*, such member *g* ending at a shoulder *g³* which bears against a shoulder *f* in the socket F as shown most clearly in Fig. 3. The outer end of the sleeve G has a

square extension *g⁴*, on which is fitted the
50 squared socket *h* of the crank handle H.

J indicates a clamp jaw provided with spring clamp members *j* which terminate in a threaded shank *j²*. This jaw J passes
55 through the sleeve G, its members *j* fitting in the flared end of the aperture *g⁵* in the sleeve G, while its shank extends through the squared end of such sleeve to receive a thumb nut L as shown.

In use the operator grasps the handle E and
60 adjusts the clamp members *j* over the axle nut, such members being drawn in against the nut by the adjusting thumb nut L. The operator then turns the crank handle and thereby quickly unscrews the axle nut. The de-
65 vice is then placed in the position shown in Fig. 2, with its end B resting on the axle, and its concaved end *d* fitted under the threaded outer end of the axle, its nib *d'* engaging one of the threads; the frame proper being passed
70 between the spokes of the wheel. When in this position, by pulling upward on the handle E, the wheel will be lifted from the ground, after which it can be slid out on to the end of the axle or the spindle D, to allow for a free
75 lubrication of the axle spindle.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A device of the character described consisting of an arched frame having a bearing member at its outer end, a spindle projected inward from its opposite end, such end terminating in an outwardly extending handle portion, said handle end having a transverse
85 socket-like bearing, and a rotary wrench mechanism journaled in such socket, including nut clamp members, all arranged substantially as shown and for the purposes set forth.

2. An improved implement for the purposes
90 described, comprising an arched like frame, having a bearing member *b* at one end, an arm C at its opposite end having an inwardly extending spindle D, an outwardly extending handle portion E and a socketed bearing ar-
95 ranged between the spindle and handle portions and transversely thereto, a spindle G held to rotate in such bearing, clamp members

adjustably held therein, a crank handle, and an adjusting nut adapted to secure such handle and adjust the clamp members, all arranged substantially as shown and described.

- 5 3. In combination with the frame A, having a handle E and a socket bearing F, a wrench mechanism, comprising a sleeve G having a circular portion fitting the socket, a squared projecting portion at one end, and a
10 laterally flared mouth at its opposite end, a nut clamp J fitting within such sleeve, and

formed with spring clamp members *j*, terminating in a threaded shank held to project through the squared end of the sleeve, the crank handle H and the nut L all arranged 15 substantially as shown and for the purposes described.

JAMES ROBERTSON.

Witnesses:

EDWD. ELLIOTT,
JAS. A. CAMERON.