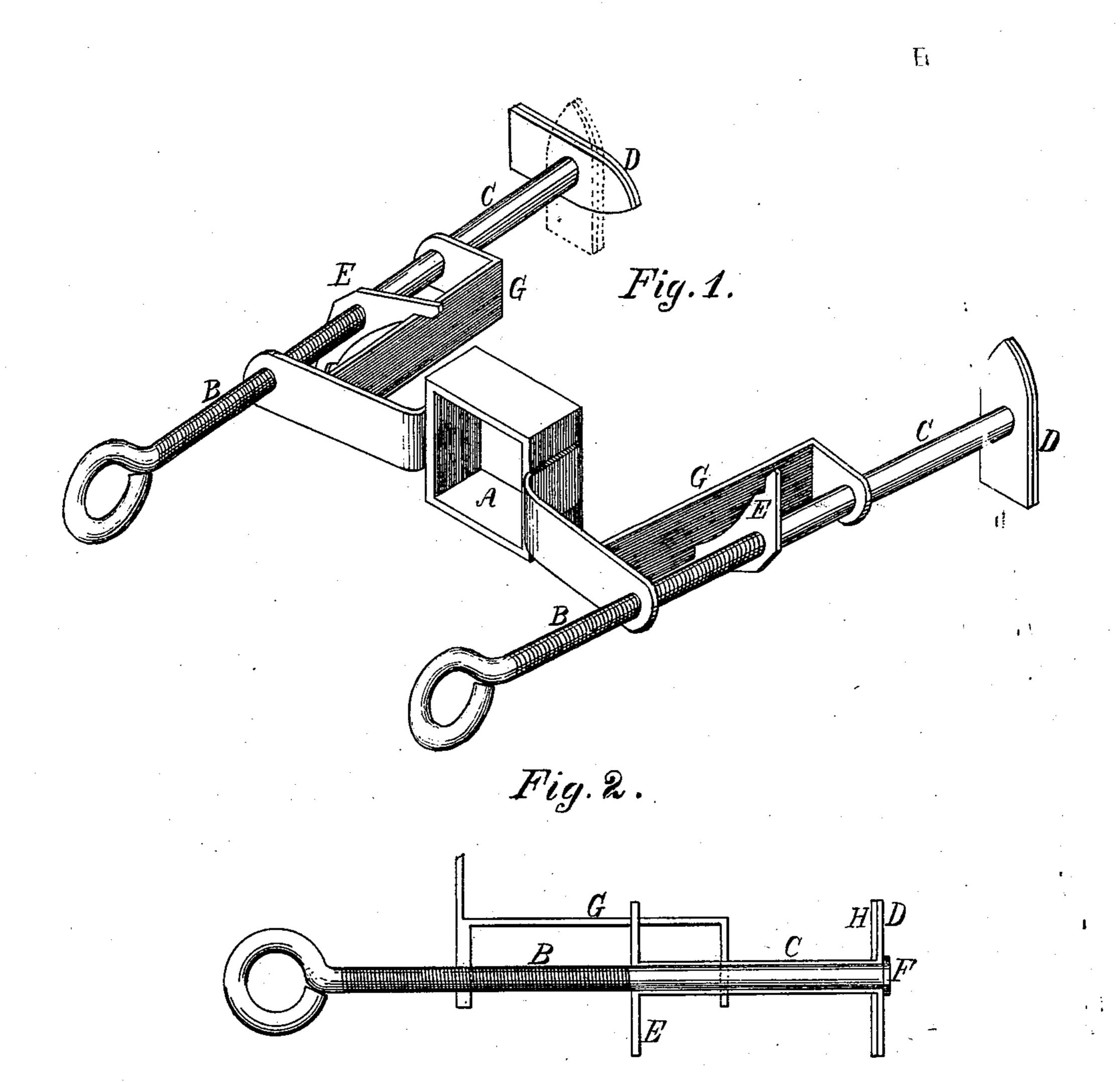
J. M. F. HALL & J. H. S. COLEMAN.

Wrench.

No. 230,270.

Patented July 20, 1880.



Witnesses.

H.M. Honley MONDENTER Inventors. James M. J. Hall John. H. S. Coleman

UNITED STATES PATENT OFFICE.

JAMES M. F. LALL AND JOHN H. S. COLEMAN, OF DAVENPORT, IOWA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 230,270, dated July 20, 1880.

Application filed March 15, 1880 (Model.)

To all whom it may concern:

Be it known that we, James M. F. Hall and John H. S. Coleman, citizens of the United States, residing at Davenport, in the 5 county of Scott and State of Iowa, have invented a news and useful attachment for a wrench, to be used for wagons, buggies, and all vehicles to which the same may be attached, of which the following is a specification.

The object of the invention is to attach the improved wrench to the wheel of the vehicle for the purpose of clamping the burr to the hub, thus beeping the burr and the washers in their places during the time the wheel is removed from the axle for oiling or for any other purpose.

The following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of the improved wrench with the improvement or attachment properly adjusted thereto. Fig. 2 is a view of the improvement or attachment as it appears when detached from the old wrench. Similar letters refer to similar parts in both

A is the old wrench. B is an iron screw-bolt, and C is an iron tube, through which B passes. D, on the end of the tube, is a small bar of iron faced with rubber, for the purpose of bearing against the back part of the spokes.

E, at the other end of the said iron tube, is a lever for the thumb to rest on when changing the position of the bars during the process of attaching or removing the wrench from the hub. F is a burr, which holds the iron screw-bolt B to the iron tube C. G is the wrench-frame, by which the parts are held firmly to

the old wrench A.

The following is a description of the mode of using the invention, to wit: Place the thumbs on the levers E, raise the levers at 45 right angles with the wrench, thus causing the bars D to stand horizontal with the spokes of the wheel of the buggy or other vehicle, pass the said bars D through to the back of the spokes, throw the levers E in onto the frame 50 of the wrench G, thus causing the said bars D to stand across the back of the spokes on each side of the hub of the wheel, tighten up on iron screw-bolts B by turning the screwbolts B to the right and left, respectively, un- 55 til the rubber facing on the iron bars D presses firmly against the back of the spokes and the wrench fits snugly against the burr or axlenut on the wheel, thereby fastening the wrench securely to the wheel and holding the burr or 60 axle-nut in its place against the hub while the wheel is removed from the axle, and then remove the wheel from the spindle by turning it back.

The wheel can be put back again by simply 65 replacing it on the spindle and whirling it forward.

What we claim as our invention, and desire to secure Letters Patent for, is—

An improvement in wrenches, consisting of 70 the following parts, viz: the combination of two screw-bolts, B B, two tubes, C C, two burrs, F F, two small bars, D D, faced with rubber, two levers, E E, and a frame, G, for attaching the aforesaid parts to the old 75 wrench, all arranged, constructed, and operated as above described, and for the purpose set forth.

JAMES M. F. HALL. JOHN H. S. COLEMAN.

Witnesses:
H. M. HENLEY,
C. F. HASS.