

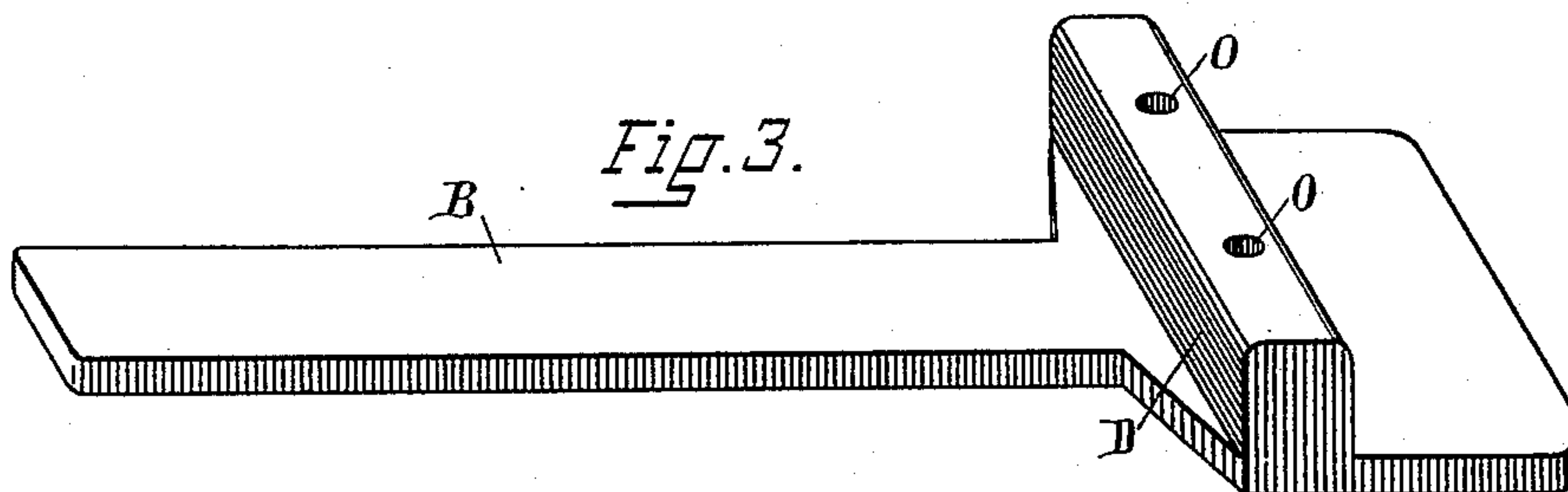
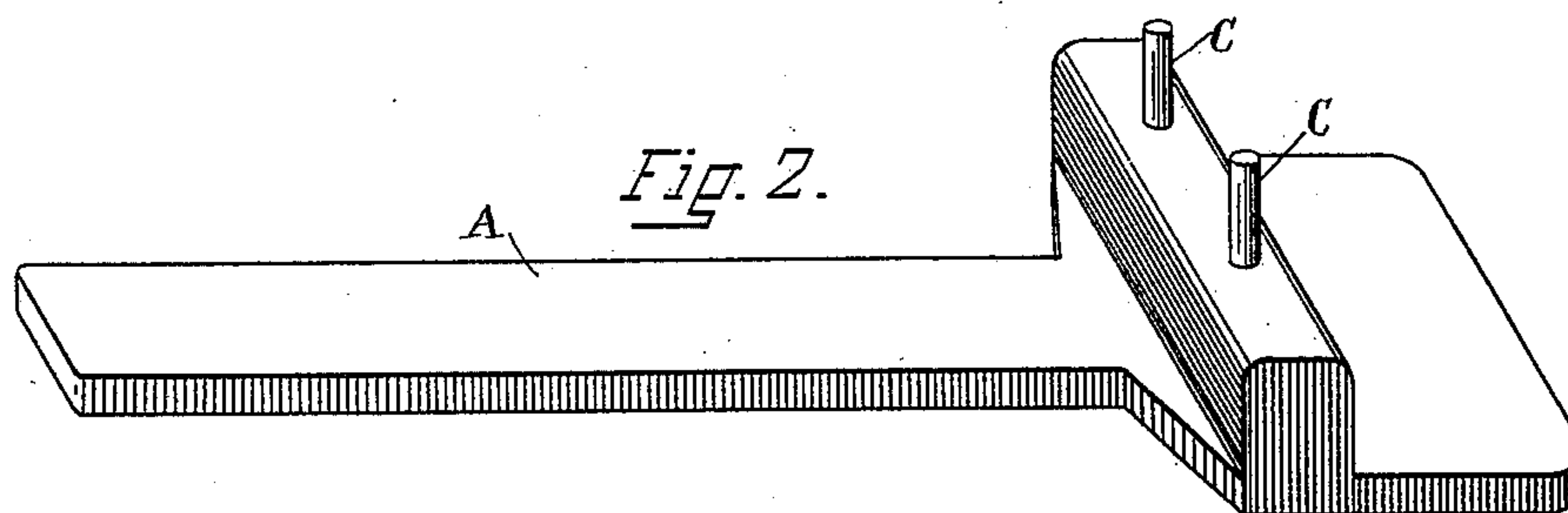
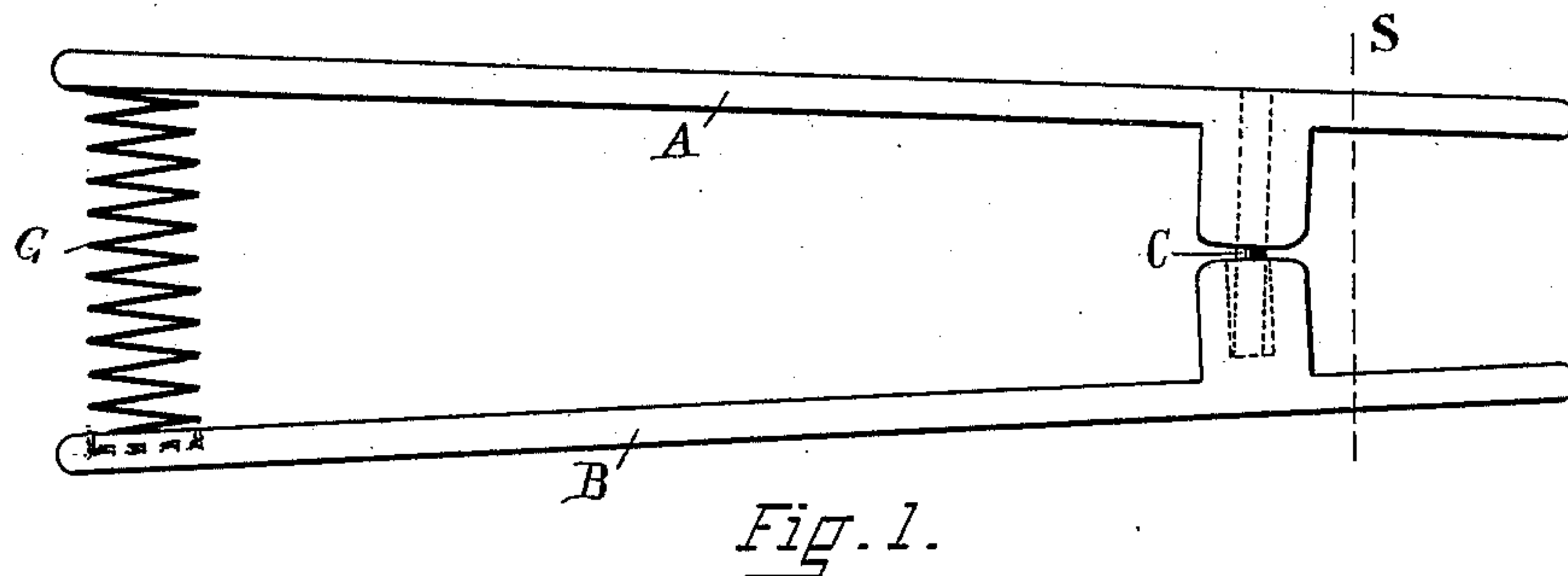
(No Model.)

2 Sheets—Sheet 1.

J. A. COREY.
WAGON WRENCH.

No. 392,146.

Patented Oct. 30, 1888.



Witnesses,
Charles M. Arnold.
Howard B. Perry.

Inventor,
John A. Corey.
By his Attorney John G. Perry.

(No Model.)

2 Sheets—Sheet 2.

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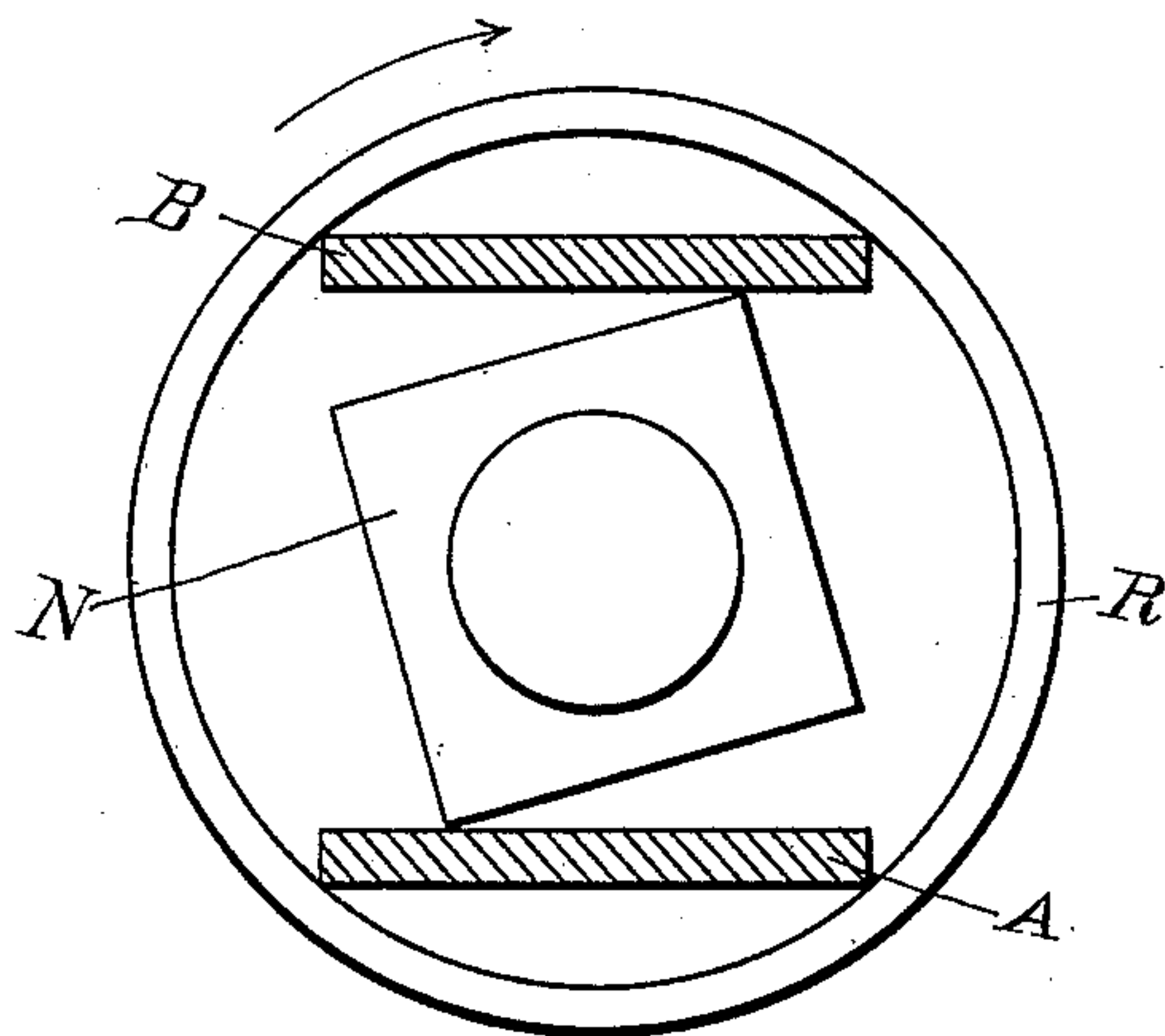


Fig. 4.

Witnesses,

H. J. Perry.
H. B. Perry.

Inventor,

John A. Corey.
By his Attorney John L. Perry.

UNITED STATES PATENT OFFICE.

JOHN A. COREY, OF ROCKVILLE, ASSIGNOR OF ONE-HALF TO CHARLES D. CHASE, OF SHANNOCK, RHODE ISLAND.

WAGON-WRENCH.

SPECIFICATION forming part of Letters Patent No. 392,146, dated October 30, 1888.

Application filed February 4, 1888. Serial No. 262,981. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. COREY, of Rockville, Washington county, Rhode Island, have invented certain new and useful Improvements in Wheel-Wrenches, of which the following is a specification, reference being had to the accompanying drawings, making a part of the same, and to the letters of reference marked thereon.

10 This invention relates to that class of wrenches known as "wheel" or "wagon" wrenches, used for turning the nuts on the ends of carriage-axles, and is fully shown in the accompanying drawings, in which—

15 Figure 1 is a side elevation of the wrench. Fig. 2 is a perspective view of the upper half of the same; Fig. 3, a perspective view of the lower half of the wrench; Fig. 4, an end view of a carriage-axle and rim or band of the wheel hub with the jaws of the wrench in position, the section of the jaws being taken on the line S, Fig. 1.

The wrench consists of two parts, A B, that may be made of cast or malleable iron or other suitable material. The two parts A B consist of oblong flat plates with raised bars made across them at about one-fourth their length from one end. In the edge of the raised bar on one part, A, pins C are inserted, (see Fig. 2,) and in the edges of the raised bar on the other part, B, Fig. 3, holes O are made to correspond with the pins C in the other half. These holes O are made large enough to allow a slight motion to the pins C, so that the two parts of the wrench can rock a short distance on the faces of the raised bars when put together, as in Fig. 1, so that when the long ends of the wrench are pressed together the short ends will open. An open spiral spring, G, is placed between the long ends of the wrench with its ends secured to the plates by projections or recesses to press them apart and close the short ends, or a flat sheet-metal spring may be properly attached and used in the place of the spiral spring if preferred.

In using the wrench the short jaws are opened by pressing the long ends together with the hand that holds the wrench until the jaws open wide enough to pass in over the nut N, Fig. 4. They are then pushed into the hub of the wheel until the outsides of the jaws press against the inside of the hub-rim or band R. Then by turning the vehicle-wheel the hub rim or band R will carry the wrench around with it by catching on the corners of the jaws where they come in contact with the rim or band R, and of course when the wrench is turned by the wheel the nut N inside of the jaws will press with its corners against the inner sides of the jaws of the wrench (see Fig. 4, accompanying this amendment and making part of the same) and push them still harder against the inside of the hub-band until the friction between the jaws and the hub-band shall be sufficient to turn the nut and unscrew or screw up, as the case may be.

The cheapness and simplicity of this invention, self-adherence when in position, and the great leverage obtained upon the wrench and over the nut by using the wheel to turn the wrench make the operation very effective, easy, and expeditious, and the wrench a very useful and desirable article.

Having thus described my improved wrench, what I claim as my invention is—

A wagon-wrench consisting of the members A B, having broad flat jaws S and raised bars D, one of said bars being provided with pivot-pins C, and the other with orifices which loosely receive the said pivot-pins, whereby when the said jaws are applied to an axle-nut and the wheel is turned the jaws will be pressed apart to be clamped between the periphery of the hub and the edges of the nut, substantially as described.

JOHN A. COREY.

Witnesses:

H. B. PERRY,
JOHN G. PERRY,
CHARLES M. ARNOLD.