J. E. Neill,

Wrench.

No 26,951. Patented Jan. 24, 1860.

Fig: 1.

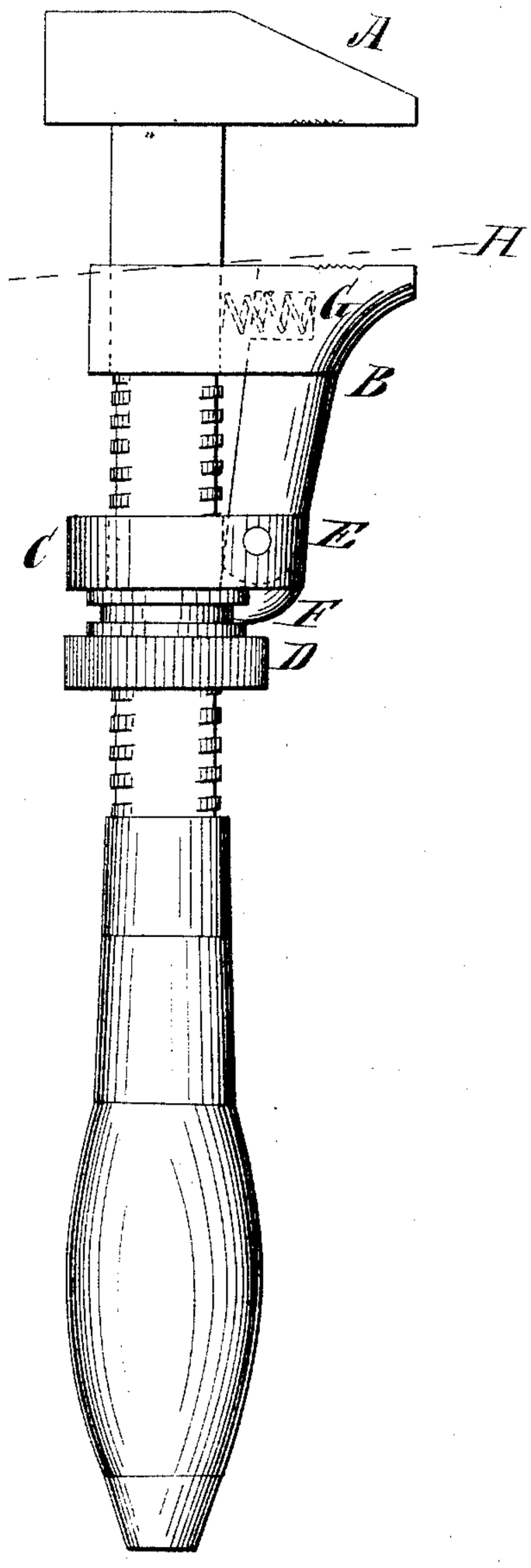
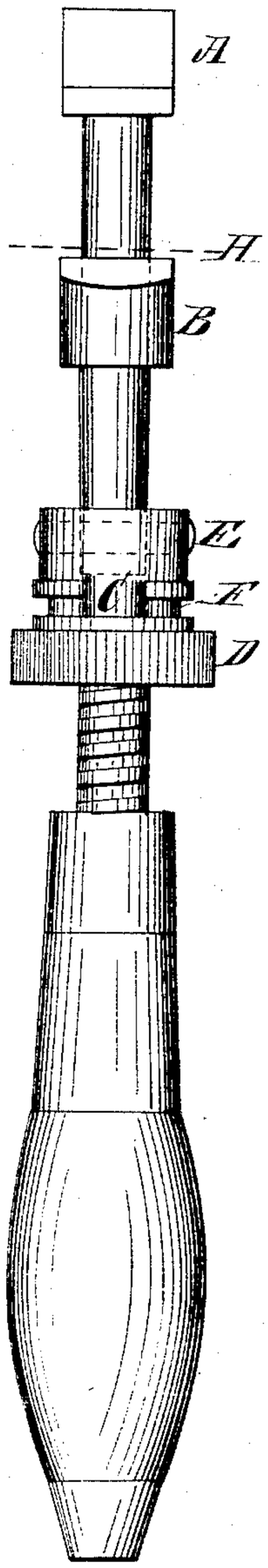


Fig: 2.



Witnesses:
Geo Dunison
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Inventor:
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UNITED STATES PATENT OFFICE.

JOHN E. NEILL, OF THE UNITED STATES NAVY, ASSIGNOR TO C. S. POMEROY, OF NEW YORK, N. Y.

WRENCH.

Specification of Letters Patent No. 26,951, dated January 24, 1860.

To all whom it may concern:

Be it known that I, JOHN E. NEILL, of the United States Navy, have invented a new and useful Improved Gripping-Wrench; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My improvement is based upon the ordinary construction of wrench most familiar and in the most extensive use, in which the actuating screw is cut upon the bar, and motion upward or downward is given to the movable jaw by a nut connected therewith as in the drawings annexed. This general arrangement is considered preferable as being easily managed and understood by all who employ the tool, and my gripping improvement being entirely automatic to its use, can be employed with perfect efficiency upon a round bar or an ordinary nut at the first trial. This wrench, although applicable equally with any other to the ordinary uses of a common screw wrench, has a gripping power upon a plan more simple, cheap, and effective than any hitherto constructed, and differing essentially from all others. This will be readily perceived by a reference to the accompanying drawings, where—

Figure 1, is a side, and Fig. 2 a front view.

A is the bar, upon which the screw is cut, and D a nut with a corresponding screw fitted upon the bar.

B is the movable jaw with its slot enlarged as shown in the drawing to admit of motion toward the stationary jaw and bar, but permitting no lateral movement.

C is a collar, sliding upon the bar, bearing upon the upper surface of the nut D, and confined in contact therewith by a tongue or lug F entering a groove cut in the circumference of the nut, or in some similar manner.

At E the movable jaw is connected with this collar by a pivot or hinge, allowing the jaw free movement; but it is kept away from the bar by the spring G, until its gripping power is called into action. When a nut with flat and square sides is placed between the jaws, no binding action is exerted, and none is required, but when required to turn a round bar, or a six or eight-sided nut, the corners of which are so much worn as to render the ordinary wrench inoperative, the friction of the surfaces will cause the jaw B to swing into the position indicated by the dotted lines at H, and consequently to grip the intervening object firmly, increasing its binding power with every increase of strain.

What I claim as my invention and desire to secure by Letters Patent is as follows:

The use of the jaw B, in connection with the collar C and nut D, when said jaw is constructed and operated in the manner specified.

JOHN E. NEILL.

Witnesses:

GEO. DENISON,

DANIEL POMEROY.