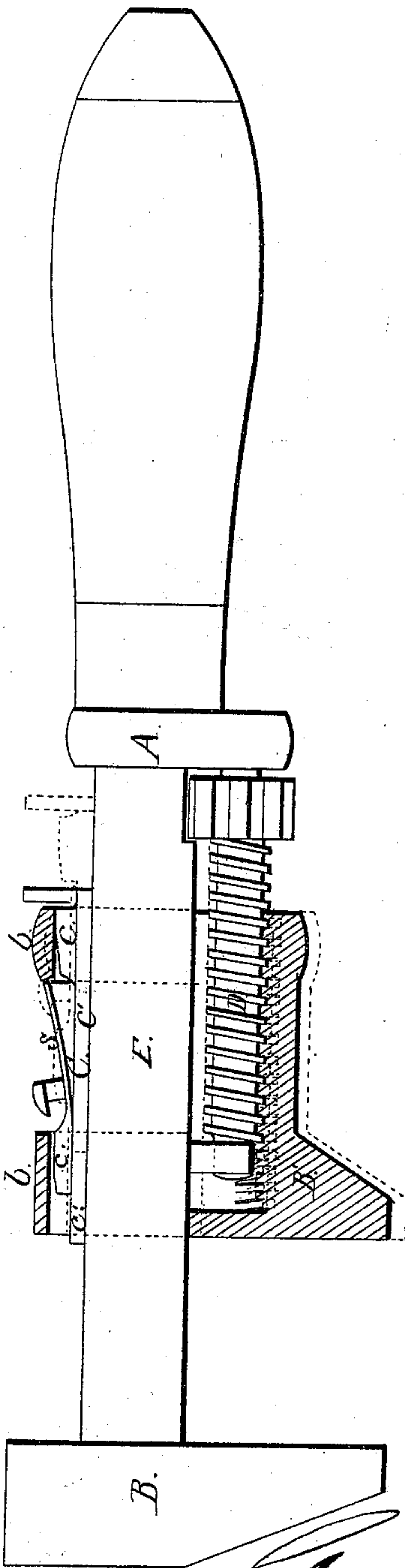


C. Hall.

Screw Wrench.

N^o 86,534.

Patented Feb. 2, 1869.



Witnesses:

J. M. Moody
A. Kemmer

Inventor:

Charles Hall



CHARLES HALL, OF NEW YORK, N. Y.

Letters Patent No. 86,534, dated February 2, 1869.

IMPROVEMENT IN SCREW-WRENCH

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES HALL, of the city, county, and State of New York, have invented a new and useful Improvement in Screw-Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, and in which is represented a longitudinal view of a screw-wrench, constructed according to my improvement, with its sliding jaw and nut shown in section.

Different letters of reference indicate the several parts thereof.

This invention consists in the construction of a screw-wrench, whereby the nut may be disengaged from the screw, or the screw from the nut, so as, by the sliding of the jaw along the shank, to provide for the rapid and convenient adjustment of the wrench.

In order that others may understand the construction and operation of my invention, I will proceed to describe it with reference to the drawing.

A is a screw-wrench of the ordinary construction, except as regards the novel construction of the sliding jaw B', and the parts for operating the same.

Said jaw B' is made to fit the shank loosely in an edgewise direction, and the inner portion of its nut, together with the thread thereof, is removed, so that by an edgewise motion or play of the said jaw and nut, the outer or remaining portion of the thread may be made to engage with or disengage from the thread of the screw D.

C is a compound sliding wedge, arranged between the back of the shank E and the loops b b of the said sliding jaw B', as represented, and having provided thereon swells c c, for fitting under the said loops b b while the nut is being held in its engagement with the screw D, and with thinner parts c' c', for fitting under

said loops when a disengagement of the said parts is desirable.

Said wedge C is retained within its place, when holding the nut against the screw, by means of a spring, s.

By forcing backward or outward the wedge C, which may be done by first pressing down the spring s, the thinner parts c' c' of said wedge are brought under the loops b b, so that by pressing said loops in the direction of the shank E, and against the said thinner parts c' c' of the wedge, the thread of the nut will be forced off from the thread of the screw D, as illustrated by those parts of the drawing represented in red outline, whereupon the said jaw and nut may be made to slide along the shank, and a re-engagement of the screw and nut effected at a different portion of the shank by the forward forcing of the wedge C, thereby providing for the rapid and convenient adjustment of the wrench to nuts of different sizes.

The application of the invention may be varied by giving the lateral motion or "play" to the screw D, instead of the sliding jaw and nut B'.

What I claim as my invention, and desire to have secured by Letters Patent, is—

1. The combination and arrangement of the screw, nut, and sliding jaw of a screw-wrench, whereby provision is made for throwing the screw out of gear with the nut, or *vice versa*, by a simple movement from the centre thereof, substantially as herein described, and provision afforded for sliding the jaw independently of the screw.

2. In combination with the above, the compound wedge C and spring s, substantially as and for the purpose herein set forth.

CHARLES HALL.

Witnesses:

J. M. DIXON,
A. KINNIER.