No. 864,882. PATENTED SEPT. 3, 1907.

W. H. BRAWLEY.

NUT WRENCH.

APPLICATION FILED DEC. 18, 1905.

Fig. 1.

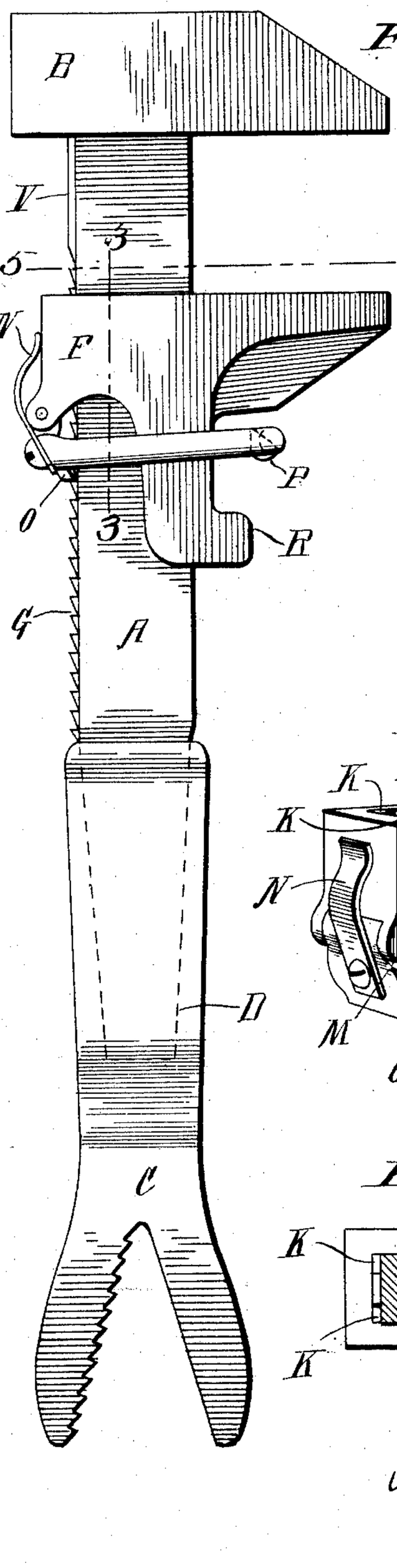


Fig. 2.

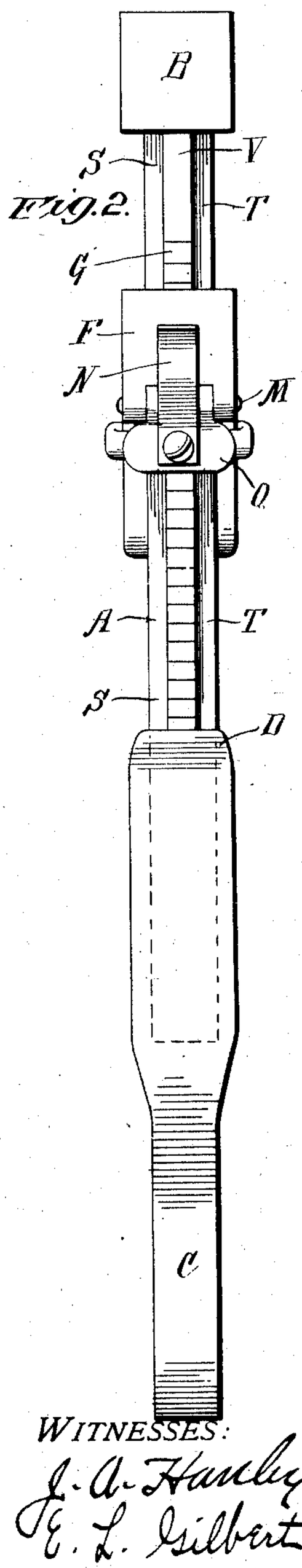


Fig. 3.

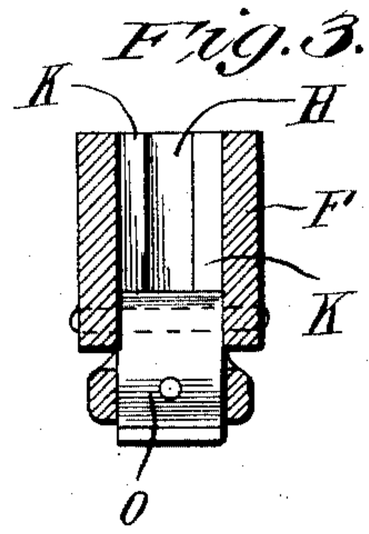


Fig. 4.

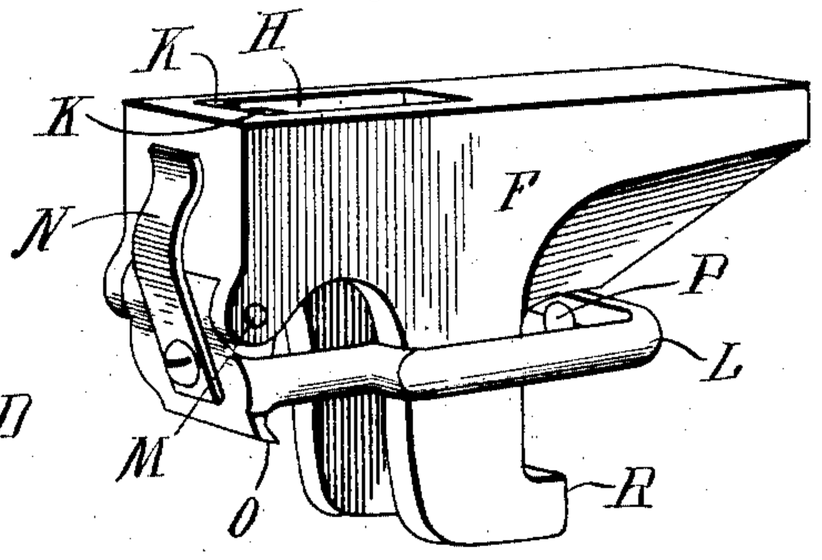
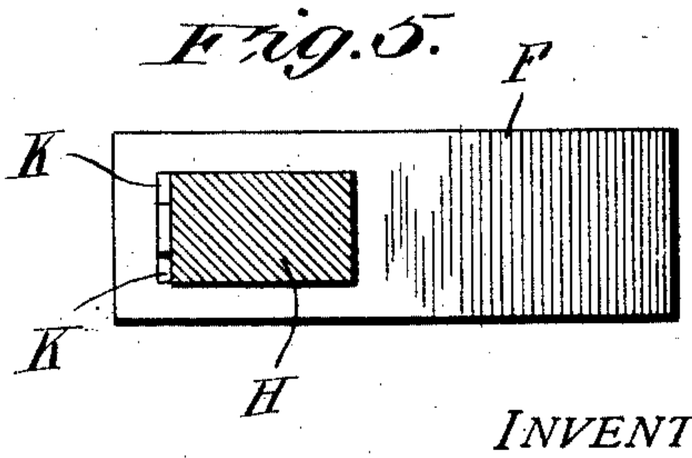


Fig. 5.



WITNESSES:

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NUT-WRENCH.

No. 864,882. Specification of Letters Patent. Patented Sept. 3, 1907.

Application filed December 18, 1905. Serial No. 292,256.

To all whom it may concern:

Be it known that I, WILLIAM H. BRAWLEY, a citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, have invented new and useful Improvements in Nut-Wrenches, of which the following is a specification.

The invention relates to that class of nut wrenches which are provided with a sliding jaw capable of suitable adjustment; and it has for its object to provide a device of this class which shall be simple in construction, inexpensive and durable, and which may be readily adjusted.

To the accomplishment of this object the invention consists in certain novel features of construction and arrangement of parts which will hereinafter be fully described and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my improved wrench showing the nut wrench assembled. Fig. 2 is an edge view of the same, Fig. 3 is a detail sectional view of the sliding jaw taken on the line 3—3 of Fig. 1, Fig. 4 is a perspective view of the movable head. Fig. 5 is a detail view partly in section taken on the line 5—5 of Fig. 1, showing the movable jaw with the flat surface presented.

My improved wrench consists of the stock A, having the stationary jaw 3 formed at one end and a handle member C at the other. The opposing jaw member F is slidably disposed upon the stock between the jaw B and the handle C as shown. Upon the free end of the collar L is a suitably located stop P adapted to meet a stop R on the jaw member F to prevent displacement of the collar.

In operation, the sliding jaw F may be readily adjusted to any desired position by depressing the free end of the collar in such a manner as to disengage the pawl O from the rack bar G. When proper adjustment has been made the collar is released and the pawl O, actuated by the flat spring N engages the teeth of the rack bar G, by which means the movable head F is held securely to its position.

As shown in Fig. 2, the wrench stock A is cut away at S and T, leaving a raised rectangular ridge V along the face of the stock which is utilized as a rack bar as shown at G. Since the movable head F slides upon this bar, provision is made for its fitting securely thereto by the insertion within its rectangular opening H of two metallic strips or feather keys K fused or brazed to the movable head, which engage the flanges S and T on the stock member, and leave the longitudinal channel H for the reception of the rack bar G. By means of the flanges on either side of the rack bar, the serrated teeth are relieved of torsional strain as said strain comes to the bar through the feather keys, thus preventing any disarrangement of the metallic collar, pawl, spring or ratchet teeth by reason of said torsional strains.

Having thus described my invention what I claim is:

1. In a wrench, the combination with a shank, a head provided with a wrench jaw and integral with said shank, teeth on said shank and integral therewith on the opposite side from the jaw and extending transversely of, and at right angles to said shank but of shorter length than the width of the shank, depressed slideways on the same side of the shank as the teeth, one on each side of said teeth and extending from the handle to the head, an adjustable head mounted on said shank and carrying a jaw to cooperate with the rigid jaw on the shank and provided with raised bearing shoulders adapted to bear upon and slide on said slideways, a spring pressed integral collar pivoted to the adjustable head on the side thereof opposite to the jaw, and extending around said shank and head, and guided and prevented from twisting by sliding contact with the sides of said head, a pawl integral with said collar adapted to normally engage the teeth on the shank, and to be moved out of engagement therewith by oscillating the collar on its pivot.

2. In a wrench, the combination with a toothed stock terminating in an integral head forming a jaw, of a movable jaw slidably mounted upon said stock, a spring controlled collar pivotally connected to the movable jaw and extending around said stock and head and guided and prevented from twisting by a sliding contact with the sides of said head, a pawl integral with said collar and adapted normally to engage the teeth on the shank.

In testimony whereof I have hereunto affixed my signature in the presence of subscribing witnesses.

WILLIAM H. BRAWLEY.

Witnesses:
J. A. HANLEY,
E. L. GILBERT,
CHAS. NIELS.