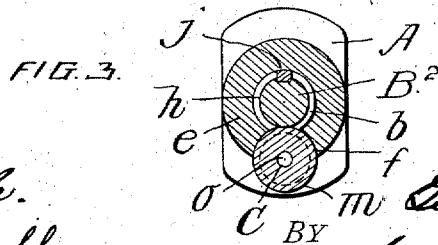
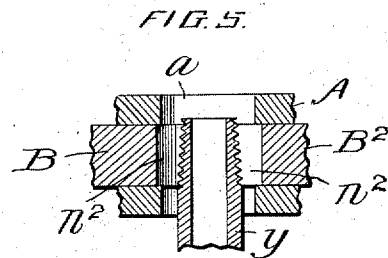
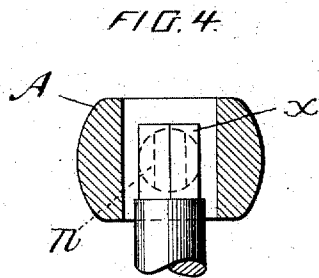
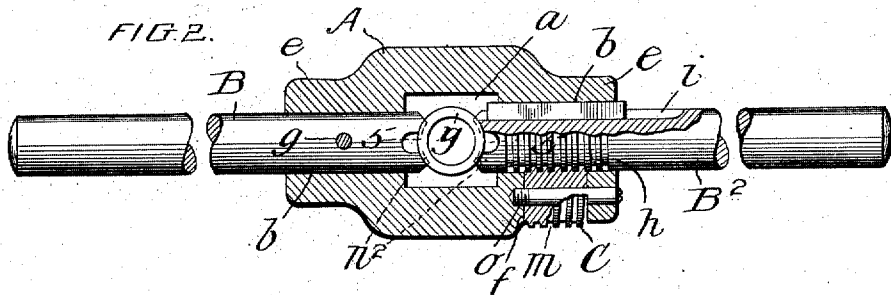
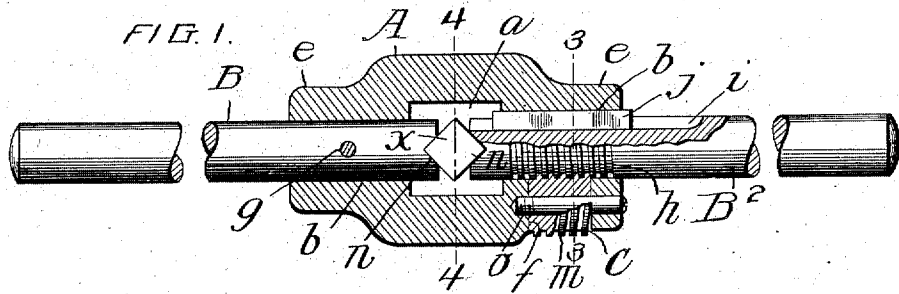


G. J. GOTTSCHÉ.
 SCREW CUTTING WRENCH.
 APPLICATION FILED NOV. 15, 1910.

985,523.

Patented Feb. 28, 1911.



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SCREW-CUTTING WRENCH.

985,523.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed November 15, 1910. Serial No. 592,477.

To all whom it may concern:

Be it known that I, GEORGE J. GOTTSCHÉ, a citizen of the United States of America, and resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Screw-Cutting Wrenches, of which the following is a full, clear, and exact description.

This invention relates to improvements in screw cutting wrenches and is similarly applicable in an implement for holding a tap or in an implement for cutting screw threads externally on a round piece of stock.

The object of the invention is to produce a screw cutting wrench or implement which is of extremely simple construction and composed of very few and cheaply made parts.

The invention is described in conjunction with the accompanying drawings and set forth in the claims.

In the drawings:—Figure 1 is a partial plan and partial horizontal longitudinal sectional view through the device indicated as adapted for the purposes of a tap wrench. Fig. 2 is a similar view showing the jaw member of the implement made as screw threading dies. Fig. 3 is a cross section on a somewhat enlarged scale taken on line 3—3, Fig. 1. Fig. 4 is a cross sectional view on line 4—4, Fig. 1. Fig. 5 is a partial vertical sectional view as taken longitudinally, on the line 5—5, Fig. 2.

In the drawings, A represents the body or stock of the implement made with an aperture *a* through its middle and having longitudinally alined bar receiving bores *b b* through its portions *e e* at opposite sides of its middle aperture; and one of its portions *e* has a recess *f* which opens inwardly to the longitudinal bore through such portion. A handle bar B is fitted through the bore in one of the end portions of the body A, and has its end protruding within the aperture *a* and is rigidly affixed in its position as shown by any suitable means, as, for instance, by a fastening pin *g*. Another handle bar B² is fitted and is slidable endwise through the other bore, and it has a portion thereof provided with spiral threads *h*; and these are provided for preventing the rotation of the endwise slidable handle bar B², which in the present instance is a splining construction composed of the longitudinal groove or key way *i* in the bar and the key *j* located within the bore *b* and engaged

in the keyway. C represents a cylindrical element, located in the aforementioned recess *f* and made, peripherally with worm threads *m* for engagement with the threads or teeth of the handle bar B². *o* represents the pivot pin penetrating the body A from an end thereof offside from its longitudinal center and serving as the journal for the worm C. The approached ends of both of said bars B and B² which have their locations within the central aperture *a* are constructed with coacting jaws, those *n n* in Figs. 1 and 4 being represented as of V-shape, that is having 90 degree recesses therein to adapt them for gripping the squared shank *x* of a tap die; but in Figs. 2 and 5 the approached coacting inner end portions of the handle bars have the jaws *n², n²* thereof shown as dies for cutting screw threads on a round piece, such as indicated at *y*.

The mere turning of the worm C adjusts the jaw portion of the movable handle bar to its required degree of separation from the jaw portion at the inner end of the rigidly connected handle bar B; and the adjusting device being in substance a worm gear is held firmly and reliably locked against any displacement force excepting such as is purposely and intelligently applied.

Although in the drawings the teeth *h* on the round handle bar B² are represented as produced by spirally threading the bar,—such being one very convenient mode of producing the teeth, the latter manifestly may be produced otherwise.

In addition to its entire operative efficiency, an important merit of the described implement, as an inspection of the drawings will indicate, will be appreciated as dependent on the very few components and the simple structural character thereof.

I claim:—

In an implement of the character described, in combination, a body intermediately apertured, having longitudinally alined bar receiving bores through its portions at opposite sides of its aperture, and having a recess in its portion at one side of its aperture which inwardly opens to the longitudinal bore through such portion, a bar fitted through and secured in one of said bores, and another bar fitted and slidable through the other bore, having a portion thereof provided with teeth, and means

for preventing the rotation thereof, both
said bars being formed with coacting jaws
at their approached ends within the inter-
mediate aperture, a worm located in said
5 recess engaging the spiral threads of the
movable bar, and means for pivotally sup-
porting the so located worm on the body.

Signed by me at Springfield, Mass., in
presence of two subscribing witnesses.

GEORGE J. GOTTSCHÉ.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
