J. A. SCHLEICHER.

COMBINED FRICTION AND SPANNER WRENCH.

APPLICATION FILED NOV. 21, 1921.

1,422,308. Patented July 11, 1922.

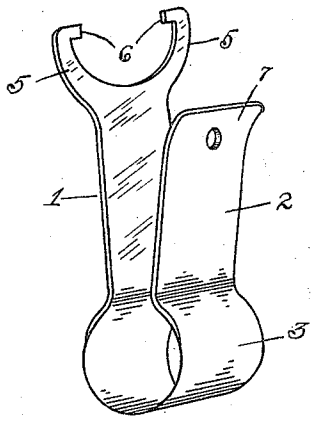


Fig. 1.

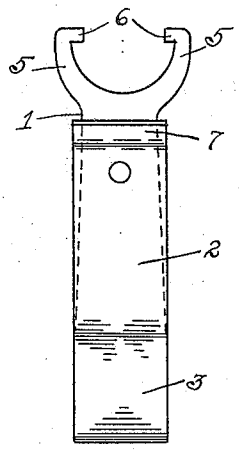


Fig. 2.

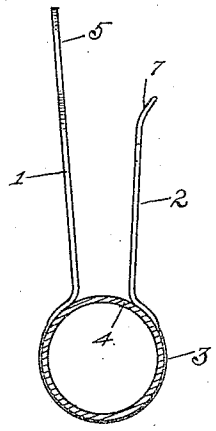


Fig. 3.

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UNITED STATES PATENT OFFICE.

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COMBINED FRICTION AND SPANNER WRENCH.

1,422,308. Specification of Letters Patent. Patented July 11, 1922.

Application filed November 21, 1921. Serial No. 516,572.

To all whom it may concern:

Be it known that I, JOHN A. SCHLEICHER, a citizen of the United States of America, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Combined Friction and Spanner Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to a combined friction and spanner wrench which is particularly applicable to micrometer gages or the like for securing adjustment of the sleeve relative to the thimble and also the nut threadedly engaged by the barrel. The invention has for its object the provision of a simple form of article provided with a bifurcated portion which forms a wrench and also with a resilient portion for embracing a member which forms a friction wrench adapted to hold the embraced member stationary. More specifically the article has a bifurcated end portion forming a wrench engageable with the nut of a micrometer gage and also has a resilient segmental portion forming a friction wrench engageable with the sleeve of a micrometer gage to hold the same from rotation during relative rotative adjustment of the sleeve and thimble. Other objects of the invention reside in the novel features of construction as more fully hereinafter set forth.

In the drawings:

Figure 1 is a perspective view of the combined friction and spanner wrench embodying my invention;

Figure 2 is a plan view thereof;

Figure 3 is a side elevation thereof showing the same in engagement with the sleeve of a micrometer gage.

The combined friction and spanner wrench has a side elevation which, broadly speaking, is U-shaped and it comprises the arms 1 and 2 and the base 3 connecting the arms and normally holding the same spaced and diverging outwardly from each other. The base is adapted to embrace a member such as the cylindrical sleeve 4 of a micrometer gage or the like, the gage in the present instance being a micrometer caliper. This base 3 is a resilient segment permitting of spreading the arms 1 and 2 apart sufficiently to pass the same over the sleeve and afterward manually moving the arms toward each other to clamp the segment upon the sleeve and thereby holding the latter from rotation. The segmental base is preferably of less thickness than either of the arms 1 and 2.

The arm 1 has the bifurcations 5 at its free end which are provided with the opposite inwardly extending projections 6 to form a spanner wrench for engagement with a member such as a micrometer caliper nut. The bifurcated portion of the arm 1 extends beyond the bent free end 7 of the arm 2 so that the latter will clear the member engaged by the spanner wrench and consequently will not interfere with its operation.

The article as shown in the drawings is drawn to substantially double scale.

What I claim as my invention is:

1. A combined friction and spanner wrench for a micrometer gage formed from a single piece of material comprising a resilient embracing portion and a bifurcated portion for adjusting members of the gage without mutilation or destruction thereof.

2. A U-shaped combined friction and spanner wrench, comprising a pair of normally spaced arms, one of said arms having a bifurcated free end extending beyond the free end of the other of said arms, and a curved resilient embracing portion connecting said arms.

3. An article comprising a bifurcated end portion provided with inwardly extending projections and a resilient segmental portion of less thickness than that of said end portion.

4. A combined friction and spanner wrench for a micrometer gage comprising a pair of arms, a resilient embracing portion connecting said arms and normally holding the same spaced and diverging outwardly from each other, one of said arms having a bifurcated end portion provided with inwardly extending projections for adjusting members of the gage without mutilation or destruction thereof.

5. A combined friction and spanner wrench for a micrometer gage formed from a single piece of material comprising a pair of arms, a resilient embracing portion connecting said arms, one of said arms being longer than the other and provided with a bifurcated end portion having projections extending inwardly from said bifurcated end portion.

In testimony whereof I affix my signature.

JOHN A. SCHLEICHER.