

J. H. & R. C. BROWN.

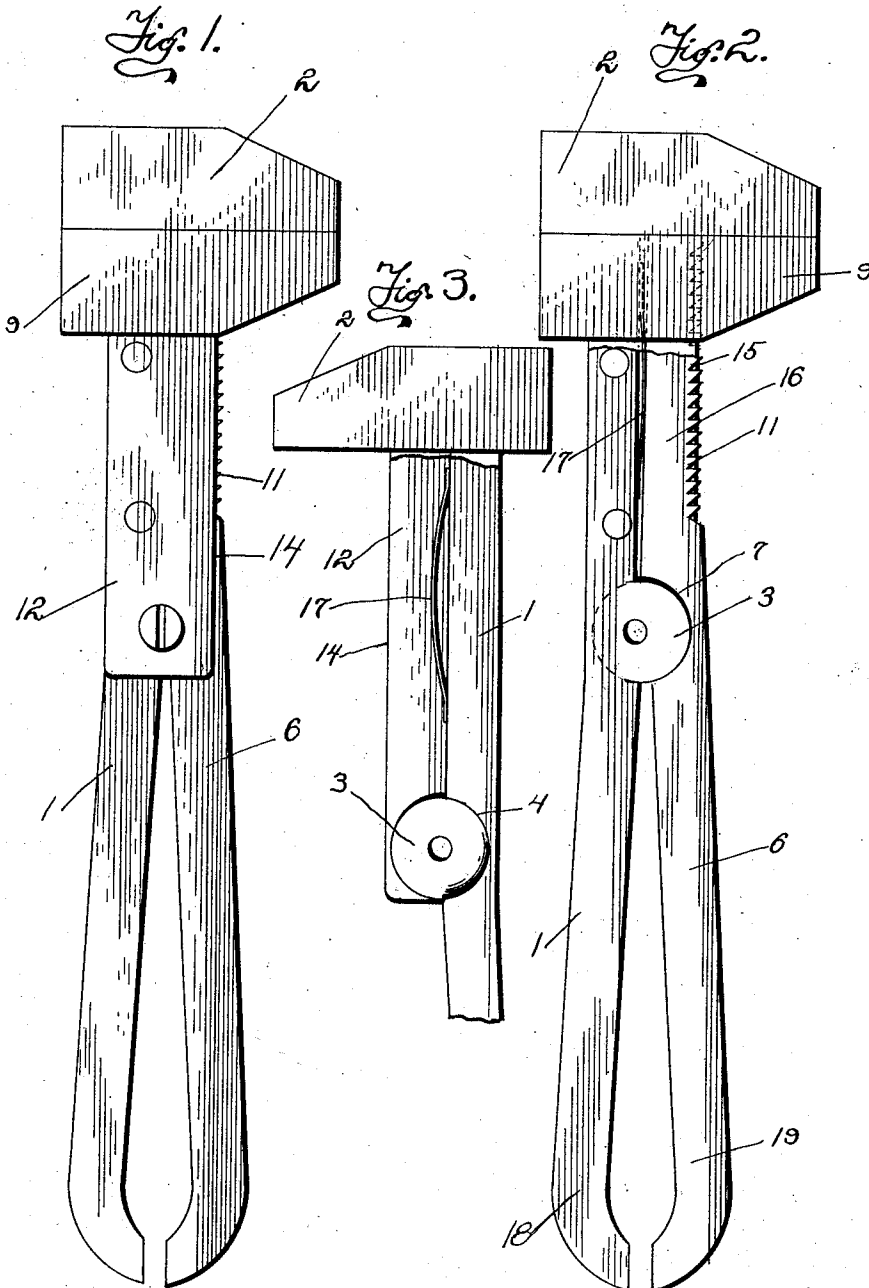
WRENCH.

APPLICATION FILED AUG. 3, 1912.

1,061,978.

Patented May 20, 1913.

2 SHEETS—SHEET 1.



Witnesses
Otlook.
R. Kislink

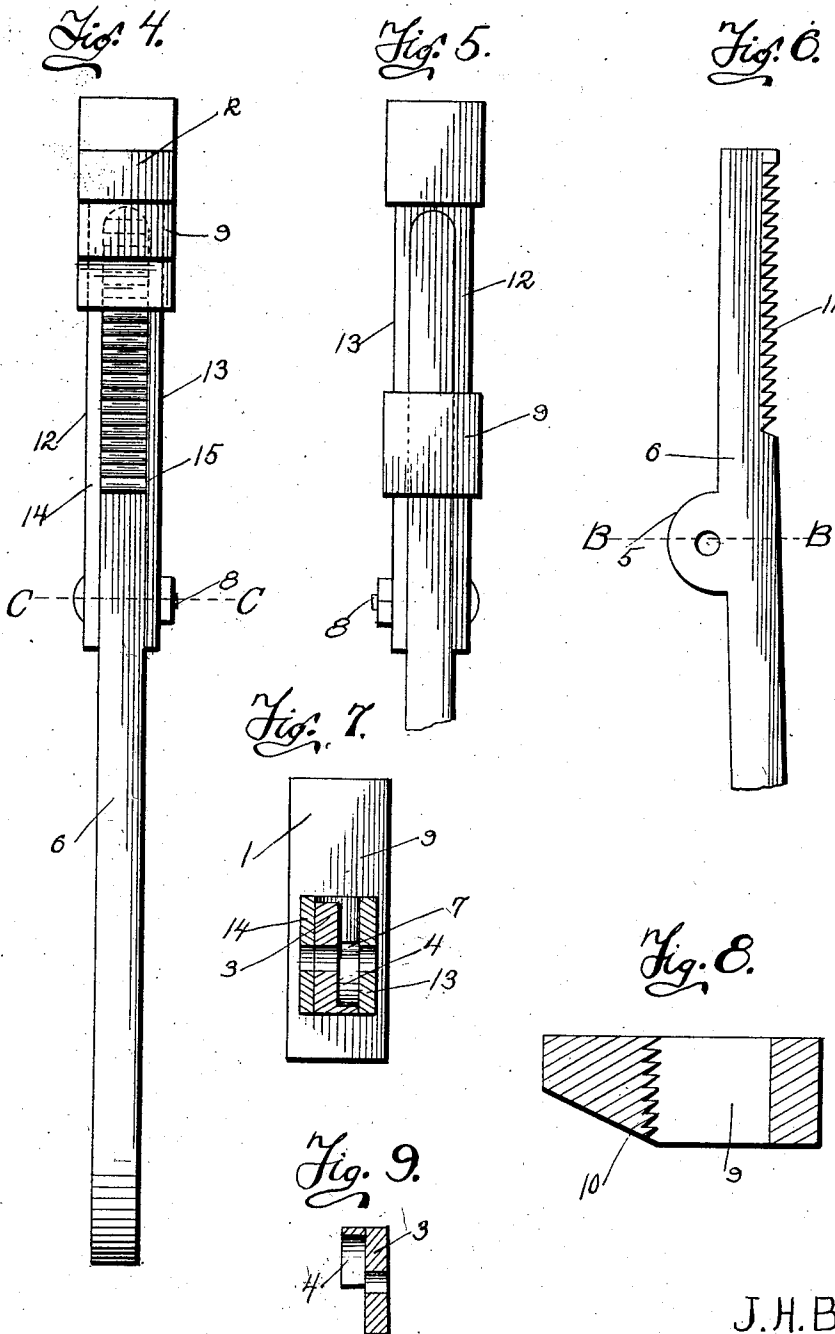
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J. H. Brown.
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UNITED STATES PATENT OFFICE.

JAMES H. BROWN AND ROBERT C. BROWN, OF CUDDY, PENNSYLVANIA.

WRENCH.

1,061,978.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed August 3, 1912. Serial No. 713,180.

To all whom it may concern:

Be it known that we, JAMES H. BROWN and ROBERT C. BROWN, citizens of the United States, residing at Cuddy, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches and has for its object to provide a quick acting wrench having means whereby a loosely sliding jaw may be instantly locked in fixed position.

Another object of the invention is to provide a wrench having a pivoted locking lever so constructed as to relieve its pivot member from all strain.

With the above and other objects in view, we have invented the wrench illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of our improved wrench, Fig. 2 is a view similar to Fig. 1 with a casing member broken away, Fig. 3 is an elevational view with the casing and handle broken away and the lever removed, Fig. 4 is an edgewise elevational view, Fig. 5 is an opposing edgewise view with the handle broken away, Fig. 6 is a detail view of a lever member with one end broken off, Fig. 7 is a transverse sectional view taken on line C—C of Fig. 4 with the member 6 removed, Fig. 8 is a detail sectional view of a sliding jaw, and Fig. 9 is a section on line B—B of Fig. 6.

Like reference characters indicate like parts in the following specification and in the several views in the drawings in which 1 indicates a handle having a fixed jaw 2, on one of its ends. Said handle is provided with an outstanding arcuate lug 3 and an arcuate recess 4 adjacent said lug to receive an arcuate lug 5 in a lever member 6 which is also provided with an arcuate recess 7 adjacent said lug 5 to receive the lug 3 on said handle 1 whereby the lugs 3 and 5 seating in the recesses 4 and 7 form a hinge and fulcrum for the lever 6. A bolt 8 connects the members 6 and 1 together, but all strain which might be brought to bear by the operation of the wrench is relieved from said bolt by the formation of said lugs and their sockets as described.

Mounted slidably on the handle 1 is a jaw 9 which has one of its walls provided with teeth 10 which are adapted to be engaged by the teeth 11 on the lever 6. Mounted on

each side of the handle near its jaw end are members 12 and 13 which form bearings for the bolt 8 and also form a trough with said handle 1 to receive the toothed end of said lever 6, said members or walls being of a sufficient width to permit the teeth to drop below the surface of their edges, said edges being adapted to hold said teeth 10 in said sliding jaw out of engagement with said teeth 11 when the toothed portion 16 of said lever falls inwardly of said edges, whereby said sliding jaw may be freely moved for adjustment. Seated between the handle 1 and the portion 16 is a spring 17 which is adapted to hold the portion 16 normally in engagement with said sliding jaw, but by forcing the free ends 18 and 19 of said handle and lever apart the tension of the spring is overcome and the toothed portion separated.

Having now described our invention that which we claim to be new and desire to procure by Letters Patent is:

1. A wrench consisting of a handle having a fixed jaw thereon, members on the opposing sides of said handle adapted to form a channel, a lever pivoted away from its outer end to said handle, said outer end being toothed, a jaw slidable on said members and engageable by said end.

2. A wrench consisting of a handle having a fixed jaw thereon, members on the opposing sides of said handle adapted to form a channel, a lever pivoted away from its outer end to said handle, said outer end being toothed, a jaw slidable on said members and engageable by said end, said end adapted to be raised above the surface of said channel to engage said movable jaw.

3. A wrench consisting of a handle formed of a shank and a lever, said lever having its outer end toothed, said lever being pivoted to said shank between said toothed portion and its inner end, a fixed jaw on said shank and a toothed movable jaw straddling said shank and toothed portion of said lever.

4. A wrench consisting of a handle formed of a shank and a lever, said lever having its outer end toothed, said lever being pivoted to said shank between said toothed portion and its inner end, a fixed jaw on said shank and a toothed movable jaw straddling said shank and toothed portion of said lever, a recess in said shank and a lug on said lever adapted to seat in said recess.

5. A wrench consisting of a handle, a

fixed jaw thereon, a slidable jaw having a toothed surface on said handle, a lever having a toothed surface adapted to engage said slidable jaw, said handle and lever being
5 pivoted together, means for relieving said pivot from strain, said means consisting of a lug on said handle and a recess in said lever to receive said lug, and a lug on said lever and a recess in said handle to receive
10 said last-named lug.

6. A wrench consisting of a handle formed of a shank and a lever, said lever having its outer end toothed, said lever being pivoted to said shank between said toothed portion
15 and its inner end, a fixed jaw on said shank,

a toothed movable jaw straddling said shank and toothed portion of said lever, a recess in said shank, a lug on said lever adapted to seat in said recess, a recess in said lever and a lug on said shank adapted to seat in said
20 latter recess, said lugs being the fulcrum of said lever.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES H. BROWN.
ROBERT C. BROWN.

Witnesses:

ALEX. J. WEDDERBURN, Jr.,
WM. McC. HERRON.

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