

A. DUDLY, SR.
WRENCH.
APPLICATION FILED APR. 4, 1911.

1,003,997.

Patented Sept. 26, 1911.

Fig. 3.

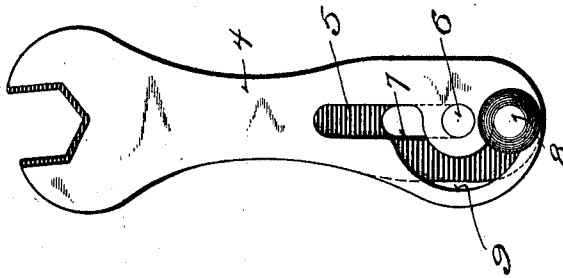


Fig. 2.

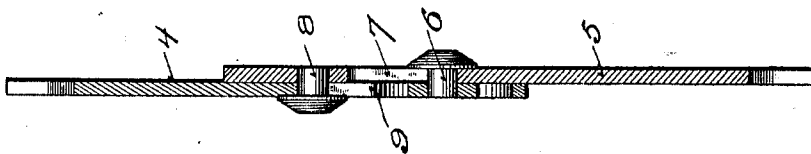
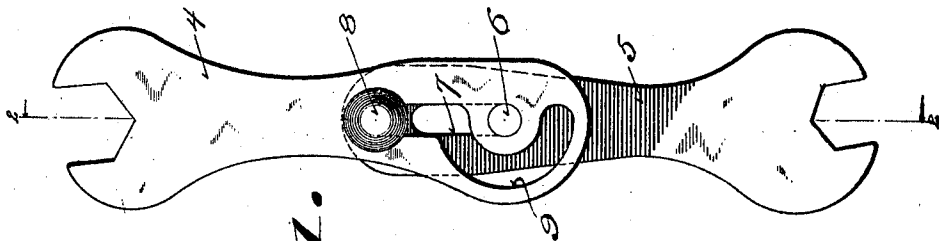


Fig. 1.



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Casimir Young
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UNITED STATES PATENT OFFICE.

ALBERT DUDLY, SR., OF MENOMINEE, MICHIGAN.

WRENCH.

1,003,997.

Specification of Letters Patent.

Patented Sept. 26, 1911.

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To all whom it may concern:

Be it known that I, ALBERT DUDLY, Sr., a citizen of the United States, and resident of Menominee, in the county of Menominee and State of Michigan, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in what is herein particularly set forth with reference to the accompanying drawings and pointed out in the claim of this specification, its object being to provide simple, economical, light, strong and durable laterally folding tools of the wrench type especially designed for the use of operators of motor vehicles, the weight and compactness of the folded tools being such that they may be readily carried, singly or in sets, in a pocket of a garment, and when extended each has the strength and durability of a single bar wrench, although it is made up of a pair of members in pivotal and sliding connection, the outer end of each member being provided with a nut or bolt-head recess of different size from that of the other.

Figure 1 of the drawings represents a side view of one of my laterally folding wrench-type tools extended; Fig. 2, a sectional view of the extended tool on the plane indicated by line 2—2 in Fig. 1, and Fig. 3, a side view of said tool having the members thereof folded.

Referring by numerals to the drawings, 4 indicates one and 5 the other of a pair of members that go to make up a laterally folding wrench in accordance with my invention. The outer free end of each of the wrench members is provided with a gripping recess for a nut or bolt-head of predetermined size, the recess in the member 4 being of a size different from that of the recess in member 5, and the recesses herein shown are designed for the engagement of corresponding sizes of hexagon nuts or bolt-heads, that in said member 4 being larger than the one in said member 5.

The wrench-member 4 is provided with a headed pivot-stud 6 that engages a straight central slot 7 in the wrench member 5 longitudinally of the same. A headed stud 8

of the wrench member 5 engages a partly straight and partly semi-circular slot 9 in the wrench member 4 also longitudinally of the same, the semi-circular portion of the compound slot being concentric with the stud 6 when at one extreme end of the slot 7.

The wrench being folded, its members are parallel, and if their outer end recesses be uppermost, the studs 6 and 8 are at the lowermost extremities of the slots with which they engage, as shown in Fig. 3, whereby said wrench is longitudinally contracted. The folded wrench may be utilized upon a nut or bolt-head that corresponds with its end recess of least size, but with less leverage than when the tool is extended to provide for the employment of the same on nuts or bolt-heads of different sizes.

To extend the wrench, the member 5 thereof is swung laterally on the pivot 6 extending from the member 4, whereby the stud 8 extending from said member 5 is caused to move in the semi-circular portion of the slot 9 in said member 4 until both studs are alined longitudinally of the tool, then by a sliding movement of either or both wrench members, said stud 8 of one is caught full up in the straight portion of said slot 9 of the other, there being corresponding movement of said stud 6 in the slot 7 of said wrench member 5 with which it engages. The wrench is now straightened out so that either end of the same may be utilized and its members are firmly interlocked. To fold the wrench, operations reverse to those aforesaid are performed.

It is intended to provide the wrenches in sets, each designed for two sizes of nuts or bolt-heads, and a convenient holder may be provided for each set. A set of four wrenches can be made to serve for eight different predetermined sizes of nuts or bolt-heads, say from $\frac{1}{4}$ up to $\frac{25}{32}$ of an inch, and when folded they occupy but little space and are light enough to be carried about in a garment pocket of the person requiring the same.

I claim:

A wrench comprising a pair of members one of which is provided with a compound straight and semi-circular slot and the other

with a straight slot, and a headed stud extending from each member in engagement with the slot of the companion member, each member being provided at its free outer
5 end with a gripping recess that differs in size from the one in the other member.

In testimony that I claim the foregoing I

have hereunto set my hand at Menominee in the county of Menominee and State of Michigan in the presence of two witnesses. 10
ALBERT DUDLY, Sr.

Witnesses:

A. W. BLOM,

GEO. W. HAGGERSON.

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