No. 797,489. PATENTED AUG. 15, 1905.

E. L. BELLMAN.

WRENCH.

APPLICATION FILED MAY 5, 1905.

Fig. 2.

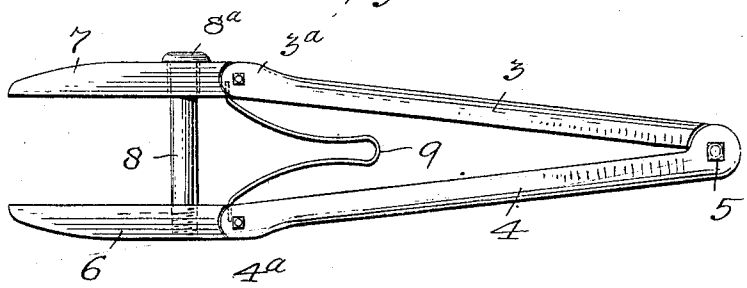
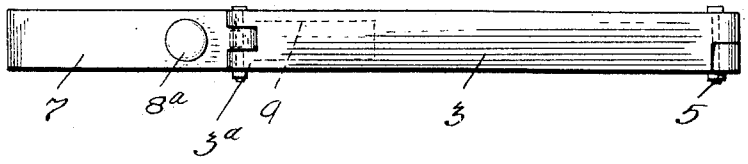


Fig. 1.



Attest:
C. S. Mitchell
Edward N. Barton

Inventor:
Edward L. Bellman.
By Pierce Mitchell Donaldson & Perry Attys.

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD L. BELLMAN, OF FORT ATKINSON, WISCONSIN.

WRENCH.

No. 797,489. Specification of Letters Patent. Patented Aug. 15, 1905.

Application filed May 5, 1905. Serial No. 259,039.

To all whom it may concern:

Be it known that I, EDWARD L. BELLMAN, a citizen of the United States, residing at Fort Atkinson, Wisconsin, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to improvements in wrenches; and the object of the invention is to secure an extremely simple and efficient device which may instantly be operated to fit any size nut by merely tightening the grasp of the hand by which it is held. When so adjusted or tightened upon the nut, the lateral pressure exerted in turning the nut will automatically clamp the movable jaw, relieving the hand of the necessity of holding the movable jaw in place.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a plan view.

According to my invention I provide a handle which comprises two members 3 and 4, pivoted together at their outer ends by a suitable pivot 5. To the forward ends 3^a and 4^a of the parts 3 and 4 of the handle I pivotally connect the jaws 6 and 7, one of which, 6, carries a pin or bolt 8, which projects through a cylindrical opening in the other jaw 7.

The pin 8 may conveniently be made detachable or separable from the jaw 6 and secured thereto by being screwed into a threaded opening in the jaw 6, as shown; but it will be evident that it need not necessarily be made independent.

The two parts or members 3 and 4 of the handle are normally forced apart by a suitable spring, such as a leaf-spring 9, and the outward movement is limited by a suitable stop on the pin 8, which may conveniently be in the shape of a flange or enlargement 8^a on the end of the pin.

It will be noted that the pin is located nearer the points of pivotal connection between the jaws and the handle members, leaving the greater part of the jaws projecting on the opposite side. By reason of the close proximity of the pin to said pivotal points the tightening of the hand grasp upon the handle members 3 and 4 will cause them to be drawn together against the tension of the spring and will draw 6 and 7 toward each other, and the pin 8 will slide through the opening in the jaw 7, permitting the jaws to be pressed together until in contact with the nut which it is desired to turn. When, however, the jaws have been brought in contact with the opposite sides of the nut and the handle is moved bodily toward one side to turn the nut, the jaw 7 will be tilted in relation to the jaw 6 and the pin carried thereby, which will result in binding the jaw 7 firmly to the pin 8, and the greater the force exerted upon the wrench to turn the nut the tighter will the jaw 7 and pin 8 be held together.

It will be obvious that the jaws may be made of any desired configuration, either plain or serrated.

Instead of having only one pin on the jaw I may provide two arranged side by side.

Having thus described my invention, what I claim is—

1. A wrench comprising a handle having two members movable relatively toward and from each other, a jaw member pivotally connected to each handle member, and a locking device rigidly carried by one jaw and having a sliding engagement with an opening in the other jaw, substantially as described.

2. A wrench comprising a handle including two members movable relatively toward and from each other, a jaw pivotally carried by each member, a locking member carried by one jaw and extending through a transverse opening in the other jaw, means for limiting the outward movement of the jaws in relation to each other, and a spring tending to separate the handle members, substantially as described.

3. A wrench comprising a pair of handle members pivotally connected together at one end, a jaw member pivotally connected to each handle member at the opposite end, and a bolt rigidly connected to one jaw and extending through a transverse opening in the other jaw in proximity to the points of pivotal connection of said jaws with the handle members, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD L. BELLMAN.

Witnesses:

CHARLES B. ROGERS,

EDWARD N. SARTON.