

E. MOLENCKI.
WRENCH.

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1,005,058.

Patented Oct. 3, 1911.

FIG. 1

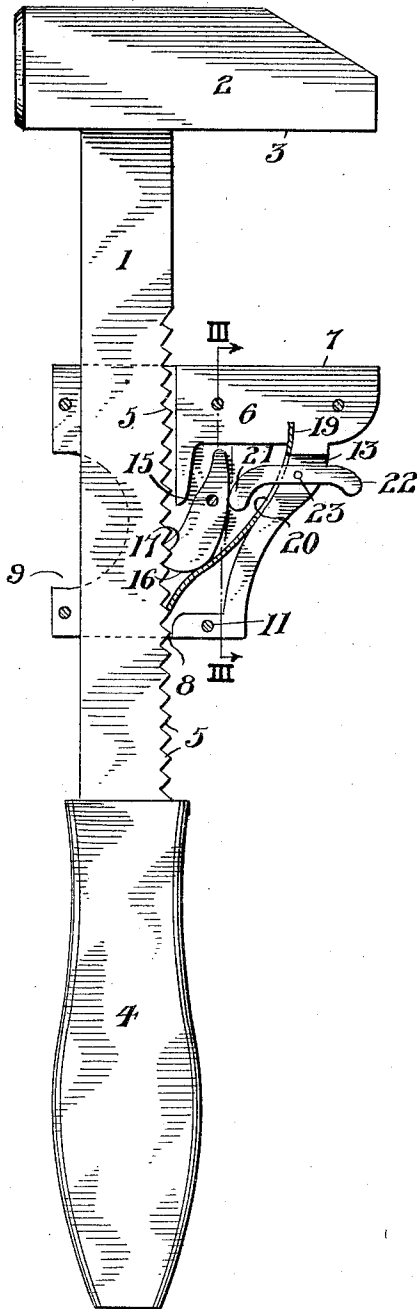


FIG. 2

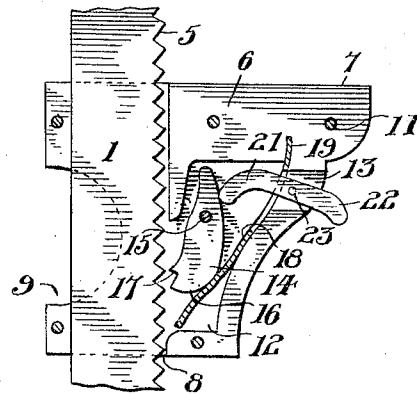
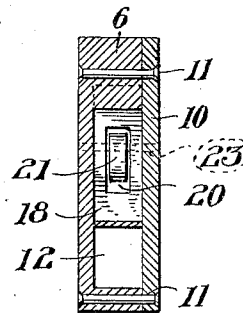


FIG. 3



WITNESSES:

J. C. Appelman,
Ralph C. Evert

INVENTOR.

E. Molencski

BY

W. C. Evert
ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWARD MOLENCKI, OF DETROIT, MICHIGAN.

WRENCH.

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To all whom it may concern:

Be it known that I, EDWARD MOLENCKI, a subject of the Emperor of Austria-Hungary, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to wrenches, and more particularly to that type used by machinists and other artisans in rotating nuts or bodies having flat gripping surfaces or facets.

15 The primary object of my invention is to furnish the adjustable jaw of a wrench with a double locking mechanism that will positively hold the adjustable jaw in an adjusted position.

20 Another object of this invention is to provide a locking mechanism corresponding in width to the entire width of the shank of the wrench and to arrange the locking mechanism whereby it can be easily and quickly operated.

A further object of my invention is to accomplish the above results by a mechanical construction consisting of comparatively few parts inexpensive to manufacture.

30 With the above and other objects in view, the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

35 Reference will now be had to the drawing, wherein like numerals designate corresponding parts throughout the several views, in which:—

40 Figure 1 is a side elevation of the wrench with the face plate of the adjustable jaw removed and the locking mechanism in a locked position, Fig. 2 is a similar view of a portion of the wrench showing the locking mechanism in an unlocked position, and 45 Fig. 3 is a vertical sectional view taken on the line III—III of Fig. 1.

The reference numeral 1 denotes a shank rectangular in cross section and having the upper end thereof provided with a fixed or stationary jaw 2 presenting a gripping surface 3. The lower end of the shank 1 has a handle 4 of the ordinary and well known type. The front side of the shank 1 is provided with transverse teeth 5 corresponding 55 in width to the shank.

The reference numeral 6 denotes an ad-

justable jaw body having a gripping surface 7 adapted to cooperate with the surface 3 of the jaw 2 in gripping the facets of a nut. The body 6 has a vertical slot 8 providing clearance for the shank 1 and said body is cut away, as at 9 to reduce the weight of the same. The adjustable jaw body 6 is retained upon the shank 1 by a face plate 10 riveted or otherwise connected, as at 11 to the body 6.

The adjustable jaw body 6 is provided with a recess 12 and a slot 13, said recess being in communication with the slot 8. Arranged within the recess 12 is a pawl 14 which is pivotally retained therein by a transverse pin 15. The lower end of the pawl 14 is beveled, as at 16 and provided with teeth 17 to engage the teeth 5 of the shank 1.

Arranged within the recess 12 is a flat resilient locking member or spring 18 having the upper end thereof mounted in a slit or slot 19 provided therefor in the upper wall of the recess 12. The lower end of the locking member 18 engages the beveled surface 16 of the pawl 14 and said member is adapted to engage the teeth 5 of the shank 1, as best shown in Fig. 1 of the drawing. The locking member 18 has a longitudinal slot 20 and extending through this slot and engaging the upper end of the pawl 14 is the curved end 21 of a lever 22. The lever 22 is pivotally mounted within the slot 13 by a transverse pin 23.

The tension or stress of the locking member is sufficient to retain the lower toothed end of the pawl 14 in engagement with the teeth 5 of the shank 1 and when the pawl is in this position, the lower end of the locking member 18 also engages the teeth. The pawl and the locking member correspond in width to the recess 12 and the shank 1, consequently a firm purchase is obtained upon the shank by this locking mechanism.

By pressing upon the outer end of the lever 22, the pawl 14 is shifted and the lower toothed end thereof moved out of engagement with the shank 1. This movement of the pawl shifts the lower end of the locking member 18 out of engagement with the shank, and the adjustable jaw can be shifted upon the shank.

It is essential that the locking member 18 be slotted to provide clearance for the lever 22, otherwise additional space would be required for this lever and it would be impos-

sible to make the locking member 18 the entire width of the shank 1.

What I claim is:—

5 In a wrench, the combination with a shank having a fixed jaw and a rack face, of an adjustable jaw body slidably mounted upon said shank, a pivoted toothed pawl arranged in said body and adapted to engage said rack, a resilient locking member normally
10 holding said pawl in engagement with said rack and with the lower end of said member in engagement with said rack and with the

lower end of said member in engagement with said shank, and a pivoted lever extending through said locking member and engaging said pawl and adapted to simultaneously move said pawl and said member out of engagement with said rack. 15

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

EDWARD MOLENCKI.

Witnesses:

ARTHUR A. KOSCIUSKI,
T. W. BUCHHOLZ.

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