

No. 724,865.

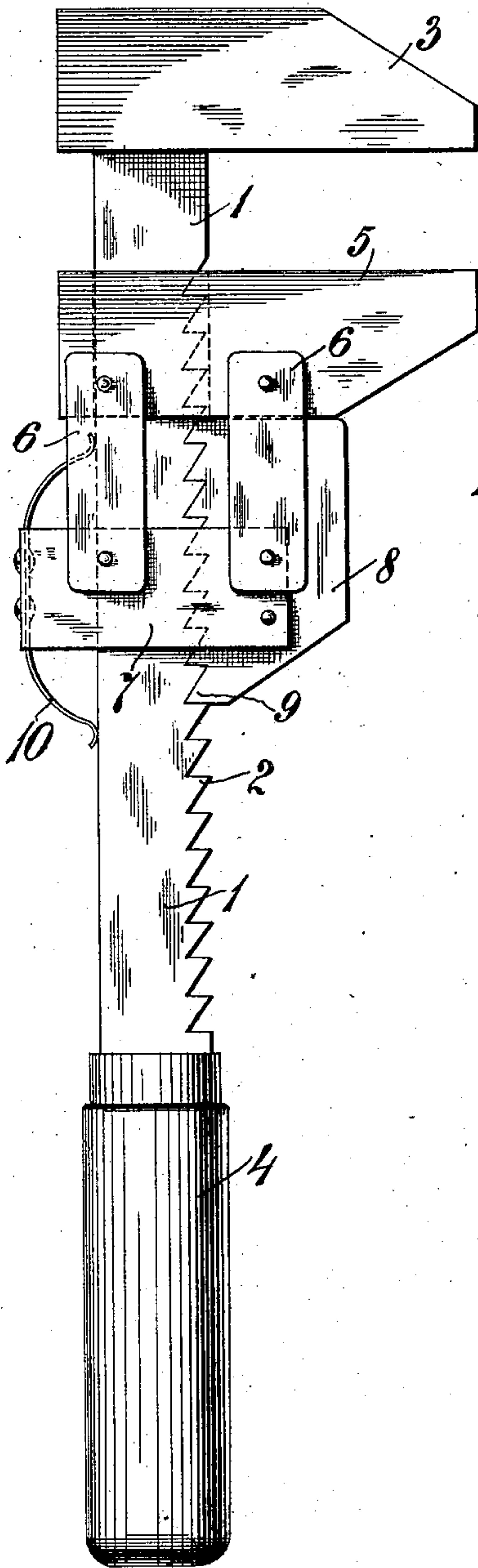
PATENTED APR. 7, 1903.

J. HOFFMAN.  
WRENCH.

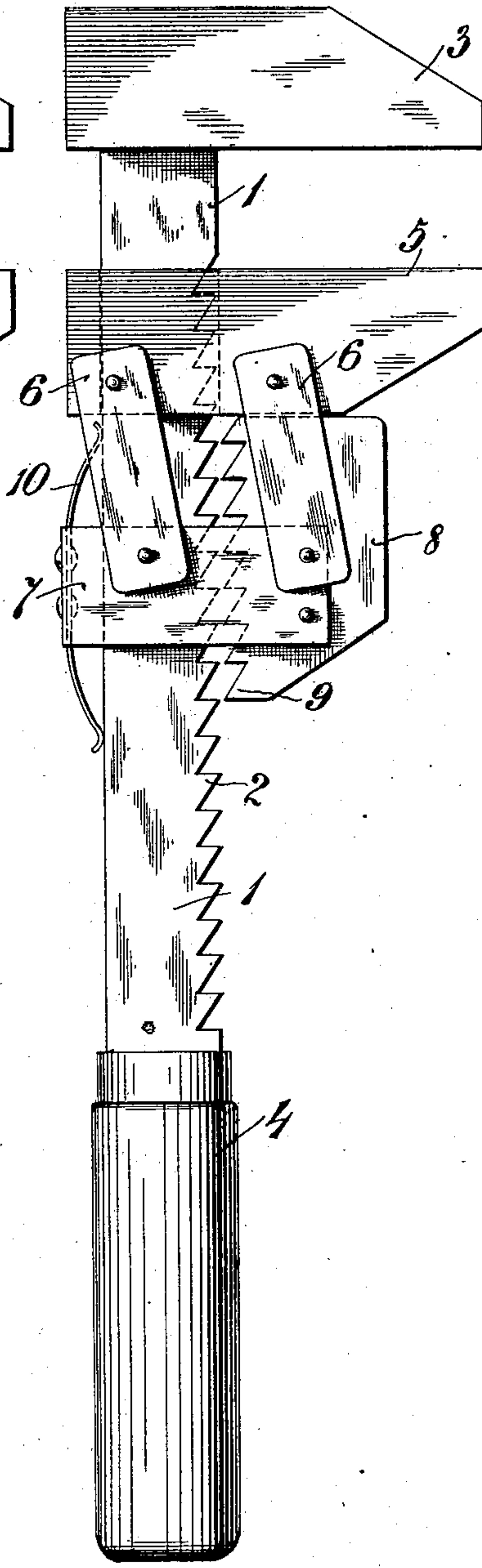
APPLICATION FILED JAN. 19, 1903.

NO MODEL.

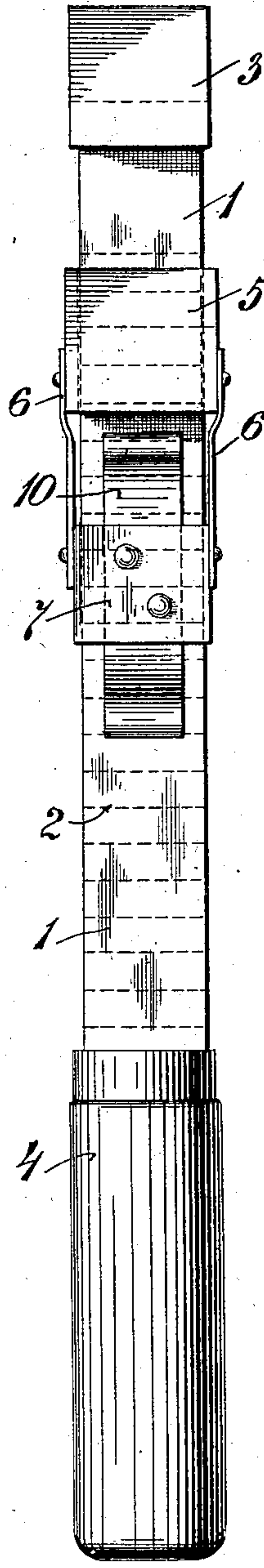
*Fig.1.*



*Fig.2.*



*Fig.3.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

JACOB HOFFMAN, OF TURTLECREEK, PENNSYLVANIA.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 724,865, dated April 7, 1903.

Application filed January 19, 1903. Serial No. 139,592. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB HOFFMAN, a citizen of the United States of America, residing at Turtlecreek, 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, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in wrenches, and it relates more particularly to that type generally known in the trade as "monkey-wrenches," the object of the invention being to provide  
15 means for quickly adjusting the movable jaw of this type of wrenches.

A further object of the present invention is to provide novel means for securely holding the movable jaw in the adjusted position, said means being operative under pressure to release the movable jaw and when pressure is relieved to automatically engage with the wrench-shank to hold the movable jaw.

Briefly described, the invention comprises  
25 a wrench-shank provided on its one face with teeth and the rear wall of which is inclined, whereby the movable jaw may be moved forwardly under pressure without disengaging the locking means from the teeth, merely allowing the same to ride thereover. A movable jaw is mounted to slide on the wrench-shank and has pivotally connected thereto a yoke or keeper which embraces the shank and carries the locking-block provided with  
35 teeth to engage the teeth of the wrench-shank. Means is carried by the yoke or keeper for engagement with the back of the wrench-shank to normally hold the locking-block in engagement with the wrench-shank, this means being adapted upon pressure being applied to the outer end of the yoke or  
40 keeper to permit the locking-block to be moved away from the teeth of the wrench-shank, whereby the movable jaw is free to be moved along the shank to the desired position. This construction will be hereinafter more fully described in detail and then particularly pointed out in the claims.

50 In describing the invention in detail, reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like

parts throughout the several views, in which—

Figure 1 is a detail side elevation of my improved wrench, showing the movable jaw in the locked position. Fig. 2 is a like view showing the locking-block in the unlocked position, whereby the movable jaw is free to be adjusted along the wrench-shank. Fig. 3 is a rear elevation of my improved wrench.

To put my invention into practice, I provide the wrench-shank 1 on its inner face with teeth 2, the rear wall of which is inclined to conform to the reverse inclination which is given to the teeth on the locking-block, to be hereinafter described, whereby the locking-block will slide over the teeth 2 in one direction. The shank 1 is provided at its outer end with a rigid jaw 3 and at its other end with a suitable handle 4. Mounted to slide longitudinally on the wrench-shank 1 is a movable jaw 5, to each side face of which is pivotally connected a pair of straps or plates 6 6, which straps or plates are pivotally connected near their opposite ends to the yoke or keeper 7, of substantially U shape. This yoke or keeper 7 straddles and is pivotally secured to the locking-block 8, provided with teeth 9 on its inner face, conforming to the shape of the teeth 2. The yoke or keeper 7 has a bow-spring 10, riveted or otherwise firmly secured to the inner face of the back or cross-bar of the yoke or keeper, the ends of this spring being preferably curved and resting upon the back of the wrench-shank 1. The spring 10 tends to normally hold the locking-block 8 in engagement with the teeth 2 of the shank, as shown in Fig. 1 of the drawings; but when it is desired to adjust the jaw 5 it is simply necessary to apply pressure to the cross-bar or back of the yoke or keeper 7, forcing the back or cross-bar of this yoke or keeper toward the wrench-shank and moving the locking-block outwardly on the perfectly straight line, as seen in Fig. 2, the straps or plates 6 permitting such movement, due to the fact that they are pivoted both to the jaw 5 and the yoke or keeper 7. As soon as the pressure on the back of the yoke or keeper is relieved the spring will return the locking-block, whereby to engage the teeth 9 with the teeth 2 and securely hold the jaw in the adjusted position.



It will be evident that in adjusting the jaw 5 whereby to move the same toward the jaw 3 pressure applied to the rear end of the locking-block 8 will move the jaw 5 forwardly, 5 the teeth 9 riding over the teeth 2; but where the jaw 5 is to be adjusted whereby to move the same away from the jaw 3 the locking-block must necessarily be forced outwardly, as seen in Fig. 2, whereby to disengage the 10 teeth. It is to be noted that the adjustment is extremely simple, as well as rapid. The wrench is extremely simple in construction throughout, and the locking-block, having a purchase throughout its inner face with the 15 wrench-shank, must securely hold the jaw in the adjusted position.

While I have shown and described the invention as practiced by me, yet it will be noted that various changes may be made in the details of construction without departing from 20 the general spirit of my invention or the scope of the appended claims.

Having fully described my invention, what I claim as new, and desire to secure by Letters 25 Patent, is—

1. A wrench-shank provided on its one face with teeth and having a rigid jaw at its outer end, combined with a movable jaw mounted to slide on the said shank, a yoke or keeper 30 embracing said shank, a locking-block carried by said yoke or keeper and provided with teeth to engage with the teeth of the wrench-shank, side straps pivotally connected to the

movable jaw, and to said yoke or keeper, and means carried by the yoke or keeper for en- 35 gagement with the hinged shank to normally hold the locking-block in engagement therewith.

2. In a wrench-shank provided with inclined teeth and having a rigid jaw at its outer 40 end, a movable jaw mounted to slide on said shank, a yoke or keeper embracing the shank back of the movable jaw, side straps pivotally connected to said movable jaw and to the yoke or keeper, a locking-block having in- 45 clined teeth on its inner face for engagement with the inclined teeth of the wrench-shank, and a spring for normally holding the said locking-block in engagement with the shank, substantially as described. 50

3. In combination with a wrench-shank having a rigid jaw on its outer end, a movable jaw mounted to slide on said shank, a yoke or keeper embracing the shank, a locking-block carried by said yoke or keeper, side 55 straps pivotally secured to the movable jaw and to the yoke or keeper, and means for normally holding the locking-block in engagement with the wrench-shank, substantially as described. 60

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

JACOB HOFFMAN.

Witnesses:

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E. E. POTTER.