No. 751,851. PATENTED FEB. 9, 1904.

J. HEIL.

QUICK ACTING MONKEY WRENCH.

APPLICATION FILED OCT. 2, 1903.

NO MODEL.

Fig. 1.

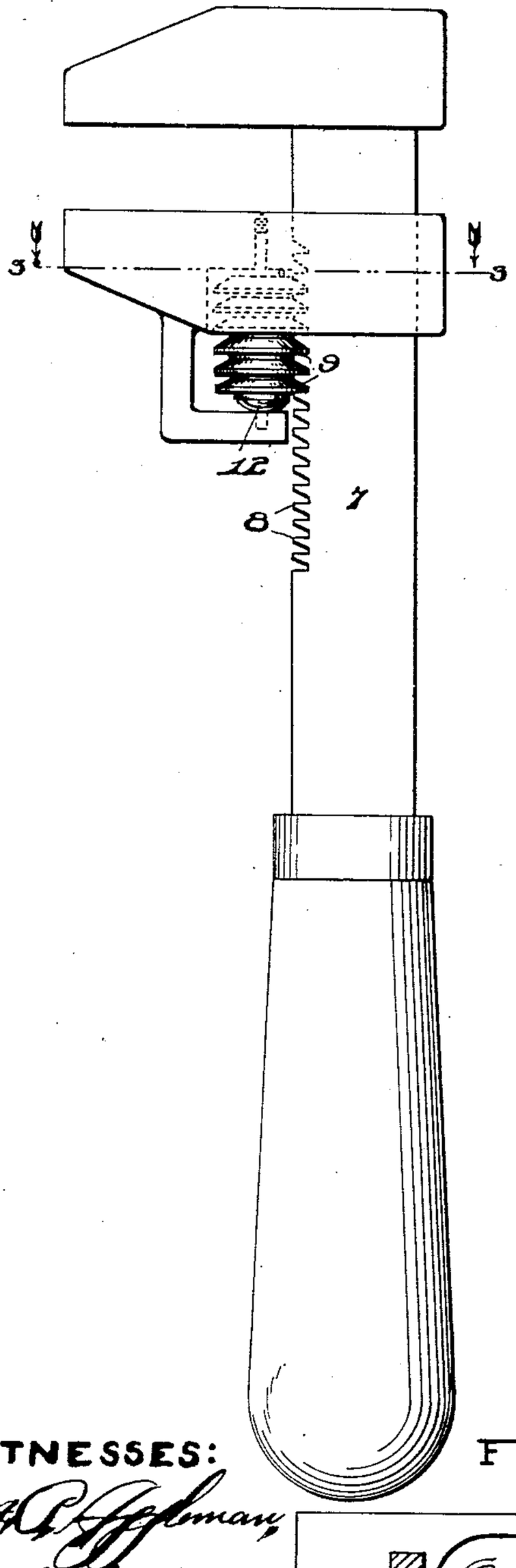


Fig. 2.

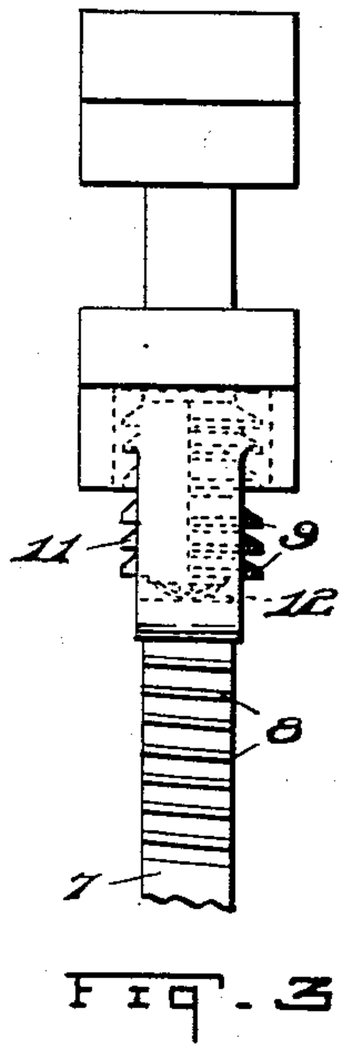


Fig. 3.

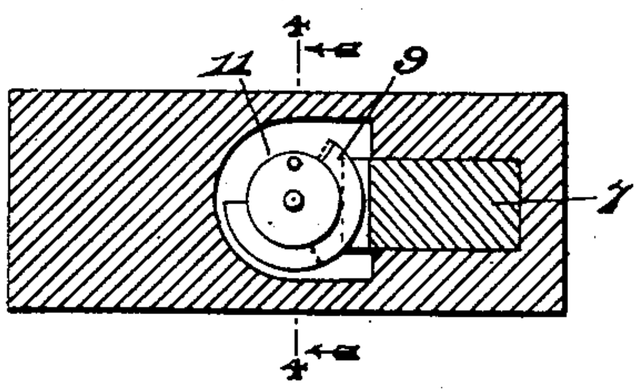


Fig. 4.

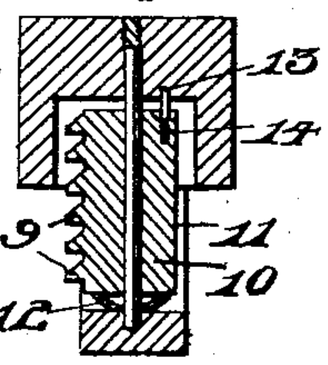


Fig. 5.

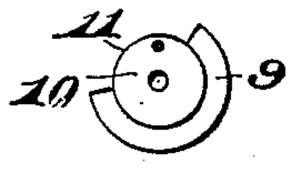
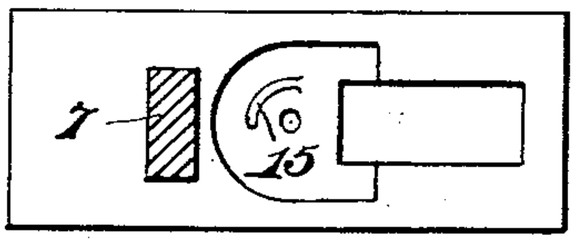


Fig. 6.



WITNESSES:

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No. 751,851. Patented February 9, 1904.

UNITED STATES PATENT OFFICE.

JOHN HEIL, OF MOUNT OLIVER, PENNSYLVANIA.

QUICK-ACTING MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 751,851, dated February 9, 1904.

Application filed October 2, 1903. Serial No. 175,470. (No model.)

To all whom it may concern:

Be it known that I, JOHN HEIL, a citizen of the United States of America, residing at Mount Oliver, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Quick-Acting Monkey-Wrenches, of which the following is a specification.

This invention relates to certain new and useful improvements in quick-acting wrenches, and has for its object to construct a wrench of this character that will be easy to operate, strong, durable, and practically inexpensive to manufacture.

Still another object resides in the spring-pressed locking-wheel. This I accomplish by a concave disk and also a pin, the function of which I will explain in the body of the specification.

Reference will be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the drawings.

Figure 1 is a side view of my improved wrench. Fig. 2 is a top plan view with the handle removed. Fig. 3 is a cross-section taken on the line 3 3 of Fig. 1. Fig. 4 is a section taken on the line 4 4 of Fig. 3. Fig. 5 is a plan view of the locking-wheel. Fig. 6 is an inverted plan view of the lower jaw.

Referring to the drawings, 7 is an oblong stem having a series of inclined teeth 8, and fitting into these recesses are corresponding ridges 9, formed on the locking-wheel 10, permitting a close adjustment. The ridges are cut away, as shown at 11, and when it is desired to raise or lower the jaw turn the wheel until the opening comes in front of the notches 8, as shown in dotted lines of Fig. 3. This will allow the jaw to be readily raised or lowered. To prevent the locking-wheel from turning when once adjusted, I provide a concave disk 12 on the under face thereof, and when the wheel is drawn up as tight as possible the disk will flatten out somewhat and force the teeth of the wheel into engagement and prevent the wheel from revolving. To make the above locking means more secure, I insert a pin 13, that rests on a coil-spring 14, in the upper face of said locking-wheel, and when the wheel is turned the pin rides in the inclined groove 15, thus forcing the pin 13 down and compressing the spiral spring together and in conjunction with the lower spring-disk providing a positive lock.

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

In a wrench, a shank and jaw, teeth formed on the shank having inclined surfaces, a wheel having similarly-inclined ridges engaging the teeth, a spindle for the wheel, a slidable jaw having bearings for the spindle, a concaved disk interposed between the wheel and bearing, and acting as a spring, the slidable jaw having a cam-slot, and a spring-pressed pin carried by the wheel adapted to enter the slot.

In testimony whereof I affix my signature, in the presence of two witnesses, this 30th day of September, 1903.

JOHN HEIL.

Witnesses:
JOHN NOLAND,
D. C. DAVIS.