(No Model.)

# B. F. BENNETT.

## AUTOMATIC SELF SETTING WRENCH.

No. 323,776. Patented Aug. 4, 1885.

Fig. 1.

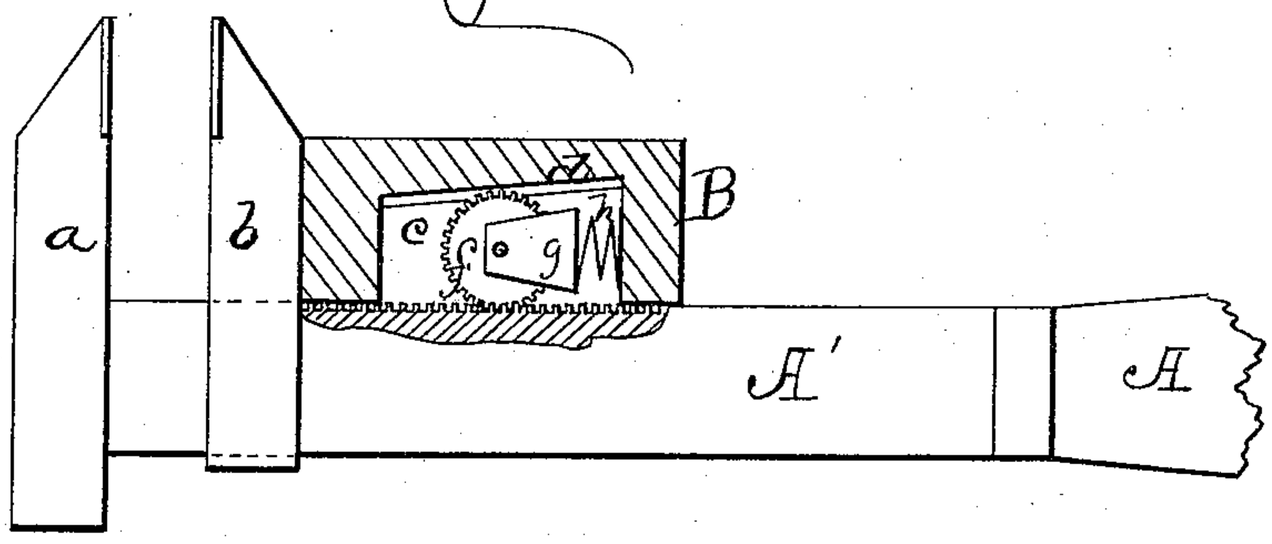



Fig. 2.

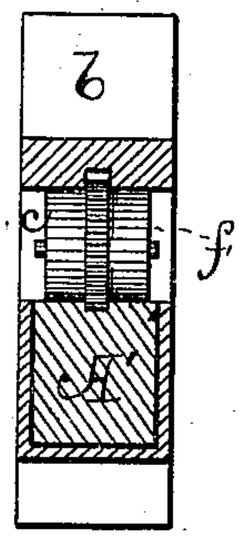



Fig. 4.

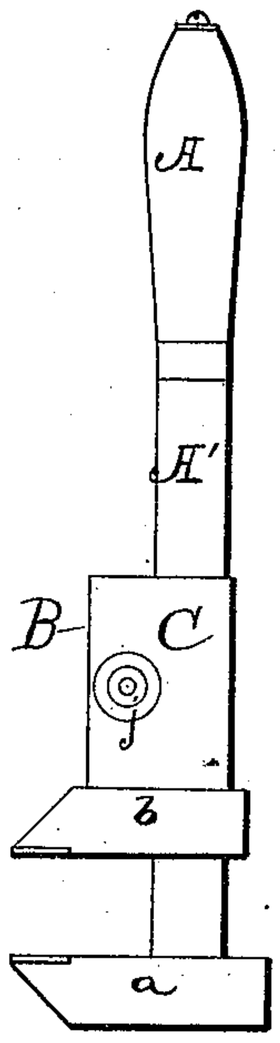
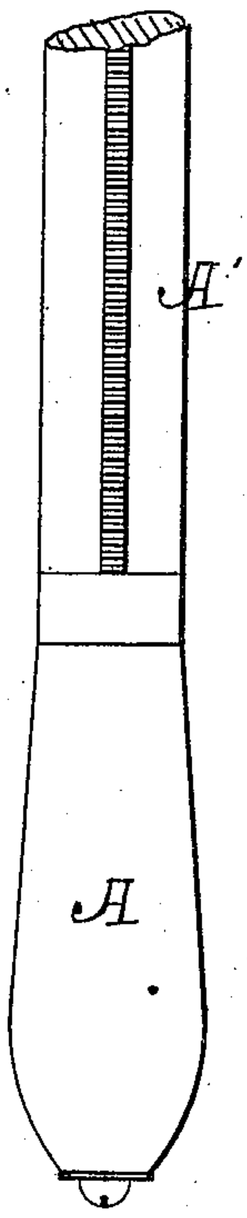



Fig. 3.




Witnesses:

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J. R. Drake, Atty.

# UNITED STATES PATENT OFFICE.

BENJAMIN F. BENNETT, OF LOCKPORT, NEW YORK.

## AUTOMATIC SELF-SETTING WRENCH.

SPECIFICATION forming part of Letters Patent No. 323,776, dated August 4, 1885.

Application filed August 1, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN F. BENNETT, a citizen of the United States, residing at Lockport, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Automatic Self-Setting Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements on my automatic self-setting wrench, patented November 6, 1883, No. 287,996, the object being to prevent any backset or slipping of the movable jaw when put on other than square nuts, such as octagonal, &c., or on almost immovable nuts; and the invention consists in combining with the inclined chamber a roller working therein by frictional contact, as before, having the addition of a central toothed ring meshing into a toothed rack in the central part of the upper surface of the stationary bar, all as hereinafter fully explained.

In the drawings, Figure 1 is a side elevation, partly in section; Fig. 2, front view of a portion in cross-section, showing the friction-roller with the toothed ring, &c.; Fig. 3, top plan of part of the bar, showing the toothed rack therein; Fig. 4, side elevation of device when covered by the plate and ready for use.

A A′ represent the usual handle and bar, having the stationary jaw *a* on its outer end. *b* is the movable jaw on the end of the short bar B, and which slides on bar A′. In this short bar is the chamber *c*, having the under side of the upper surface, *d*, inclined toward the jaws, as in my previous patent referred to, and also having the frictional roller *f* therein in an open frame, *g*, with the spring *h* at the back of the frame and against the back of the chamber, to keep the follower or frame and roller in proper position, as before. In addition, the center of the surface of the roller is provided with a narrow rim of projecting teeth, which mesh into corresponding teeth formed in the center of the top of the bar A′, and a central groove is made in the inclined top of the chamber for the free moving of the roller-teeth therein, so that they may not come in contact with any part of the incline as the roller revolves.

In cases of turning peculiarly-formed nuts, or where great pressure on the wrench is necessary these teeth on the roller and in the bar aid the frictional contact of the smooth parts of the roller with the incline of the chamber and the smooth portions of the top of the bar A′, and prevent any slipping of the movable jaw. One chamber and one friction-roller will be sufficient. A metal case, C, will cover the chamber, and in its sides a longitudinal slot, *i*, (not shown,) receives the ends of the roller-shaft, and which are provided with knobs or buttons *j*, by which the roller is pushed back by the fingers of the operator to release the movable jaw from contact with the nut. The slightest push on the case C or movable jaw throws the same forward. The operation or working of the wrench is the same as in my patent before referred to, the teeth being employed in this to insure a positive stop.

I claim—

In a wrench, in combination with the bar A′ and movable bar B, having the inclined chamber *c* with upper groove therein, the frictional roller *f*, having the central projecting teeth thereon, and the bar A′, provided with corresponding teeth in the central upper surface thereof, all substantially as and for the purpose specified.

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

BENJAMIN F. BENNETT.

Witnesses:
J. R. DRAKE,
T. H. PARSONS.