

No. 721,676.

PATENTED MAR. 3, 1903.

G. F. DOBBS.

NUT LOCK.

APPLICATION FILED DEC. 2, 1902.

NO MODEL.

Fig. 1.

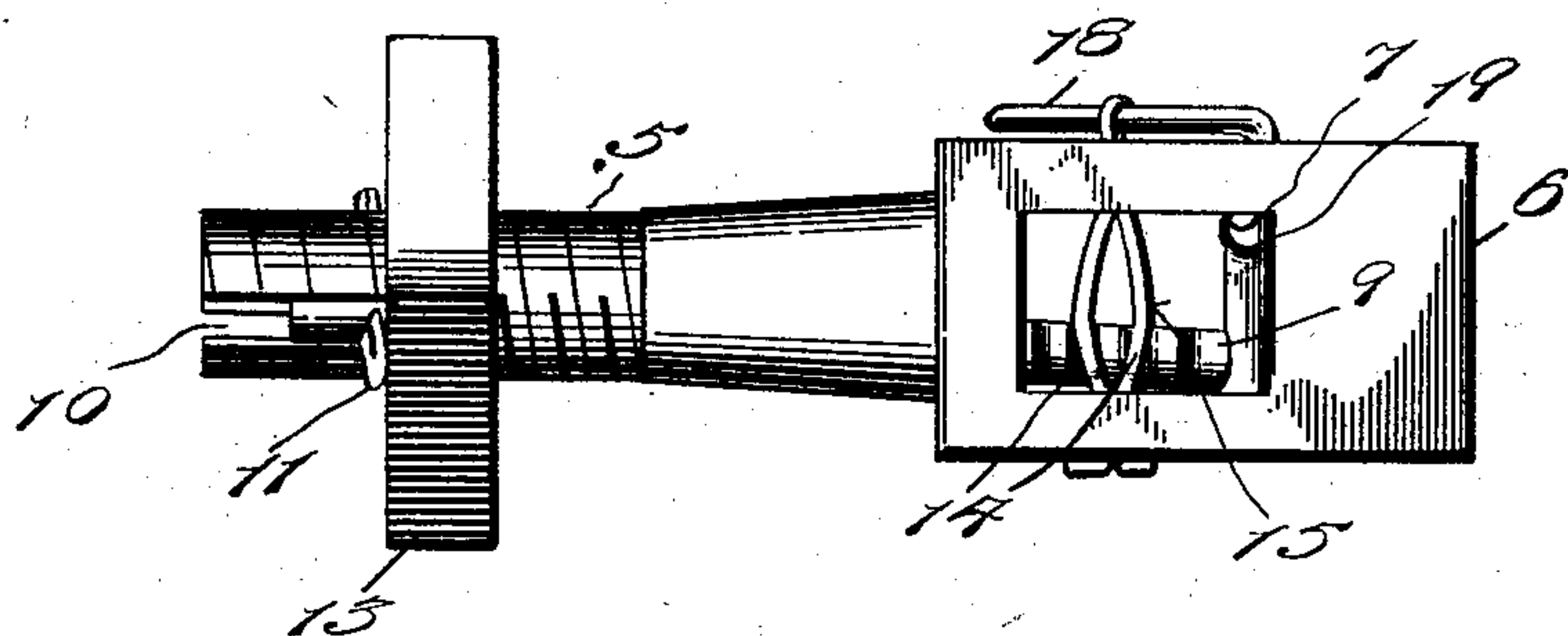


Fig. 2.

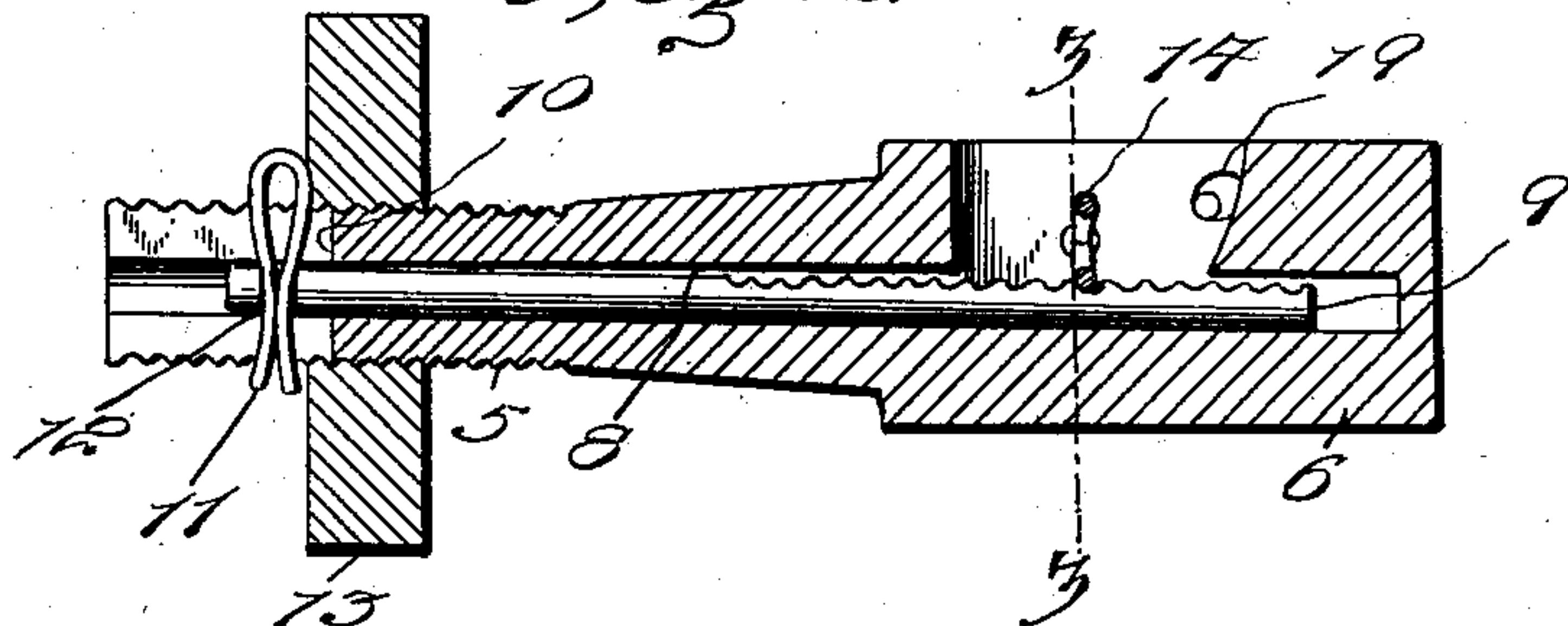
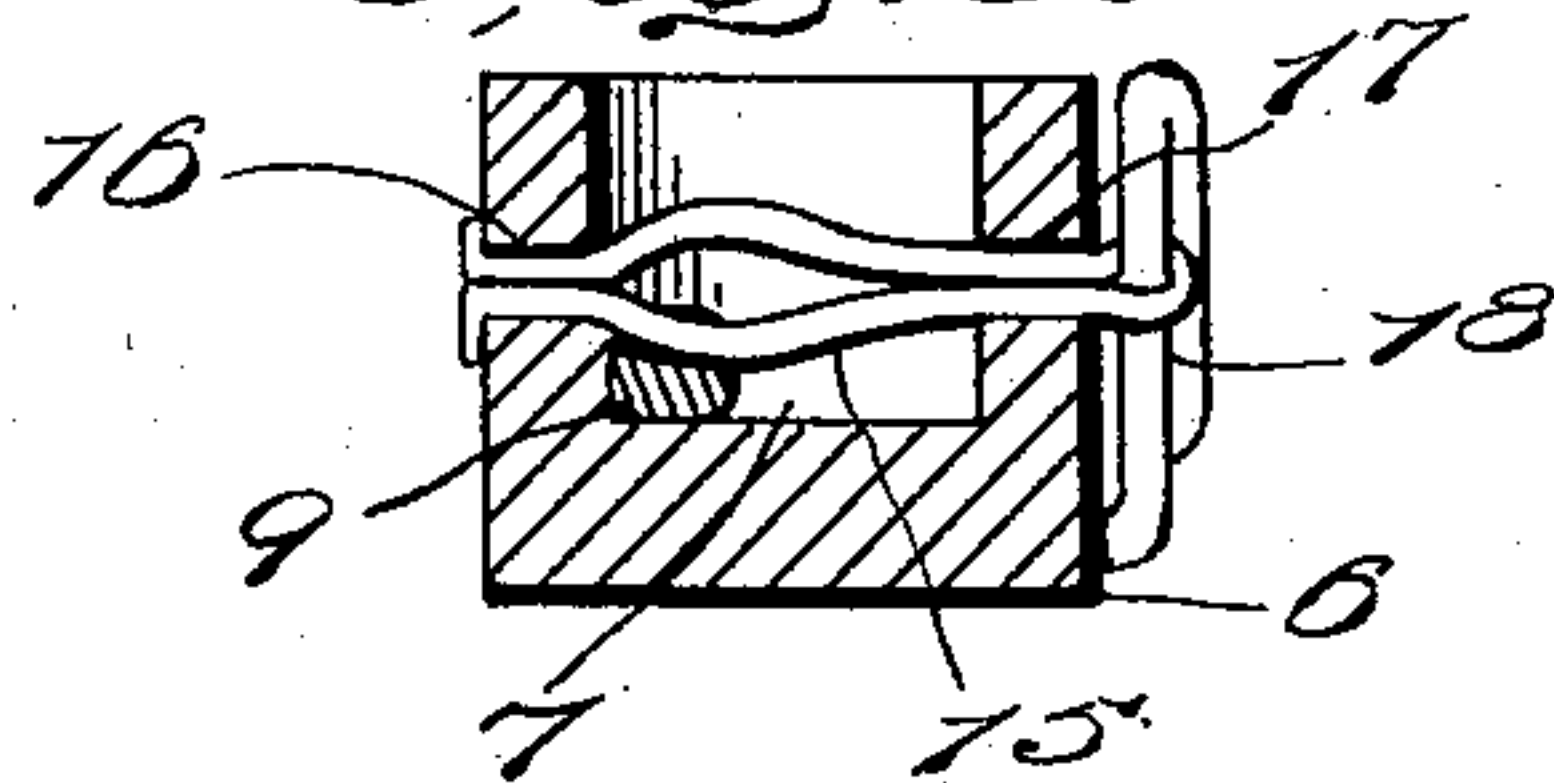


Fig. 3.



Witnesses

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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 721,676, dated March 3, 1903.

Application filed December 2, 1902. Serial No. 133,627. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. DOBBS, a citizen of the United States, residing at Rossiter, in the county of Indiana, State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to nut-locks; and it has for its object to provide a construction wherein after the nut is screwed into place a stop may be arranged behind it to prevent return movement, the construction being such that the nut may be locked at any point of its adjustment.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevation showing a bolt constructed and equipped in accordance with the present invention and having a nut engaged therewith. Fig. 2 is a longitudinal section through the bolt and nut. Fig. 3 is a section on line 3 3 of Fig. 2.

Referring now to the drawings, there is shown a bolt 5, which is threaded at one end and which at the opposite end is provided with the elongated head 6, in one side face of which is a recess 7. Through the stem of the bolt is a longitudinal passage 8, which intersects the recess 7 and is continued beyond the rear wall thereof, and in this passage is slidably disposed a rack-bar 9. The rack-bar has a rack at one end thereof, and which end extends into the recess 7, the bar being disposed with its rack in the direction of the opening in the side of the head. In the free end of the stem of the bolt is formed a transverse slot 10, which extends longitudinally of the stem and is adapted to receive a key 11, which is engaged in the transverse perforation 12 in the outer end of the rack-bar, so that as the rack-bar is reciprocated in the longitudinal passage 8 the key will be correspondingly moved in the slot 10. The key 11 may be the ordinary split key or pin, as shown, so that it may be readily inserted and

removed and when in place may be spread to prevent withdrawal.

In practice a nut 13 is screwed onto the bolt, and the key 11 is then engaged with the perforation 12 of the rack-bar. The rack-bar is then moved longitudinally to draw the key into contact with the outer face of the nut, so that backing up of the nut will be prevented. To draw the rack-bar rearwardly, an adjusting-key is provided and in the present instance consists of a wire bent upon itself to form the spaced members 14, which at their point of connection are bowed to form the loop 15. The adjusting-key is passed through the alining perforations 16 and 17 in the sides of the head of the bolt and through the recess 7, the free ends of the key being spread apart to prevent its withdrawal, while the sides thereof within the recess 7 are spread apart, so that as the key is rotated these latter portions will successively engage the rack-bar to slide the bar longitudinally in either direction, corresponding to the direction of rotation of the key. A bar 18 is engaged through the loop 15 to facilitate rotation of the key, and when the key has been operated to clamp the outer key against the nut the end of this bar, which is turned laterally, is engaged in a recess 19 in the side of the head of the bolt. When the nut is to be removed, the above-described operation is reversed.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. The combination with a bolt having a longitudinal passage through its stem, a transverse slot in its stem intersecting the passage and a recess in its head intersecting the passage, of a reciprocatory rod in the passage and projecting into the recess, means engaged with the head and lying partly in the recess for engagement with the rod to reciprocate it, and a key removably engaged with the rod and projecting through the transverse slot in the stem for engagement with a nut upon the stem when the rod is reciprocated.

2. The combination with a bolt having a longitudinal passage through its stem, a trans-

verse slot in its stem intersecting the passage and a lateral recess in its head intersecting the passage, of a reciprocatory rack-bar in the passage and extending into the recess, an
5 adjusting-key mounted in the head and having a portion within the recess adapted for engagement with the rack-bar to adjust it longitudinally, and means engaged with the outer end portion of the rack-bar and projecting from the slot of the stem to clamp a
10 nut upon the bolt when the rack-bar is shifted in one direction.

3. The combination with a bolt and a nut thereon, said bolt having a longitudinal passage through its stem, a transverse slot in its
15 stem intersecting the passage and a lateral recess in its head intersecting the passage of a reciprocatory rack-bar in the passage extending into the recess, said rack-bar having

a transverse perforation in its outer end portion, a clamping-key removably engaged in the perforation of the bar and projecting from the slot of the bolt in which it is movable with the rack-bar longitudinally of the bolt, a key
20 engaged through the head of the bolt and having a portion lying in said recess and adapted for engagement with the rack-bar to reciprocate it, said adjusting-key having a loop exterior to the head of the bolt, and a bar removably engaged in the loop and adapted for
25 engagement with the head of the bolt to hold the adjusting-key against rotation.

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

GEORGE F. DOBBS.

Witnesses:

J. J. ARMSTRONG,
SAMUEL MORRISON.