

No. 723,395.

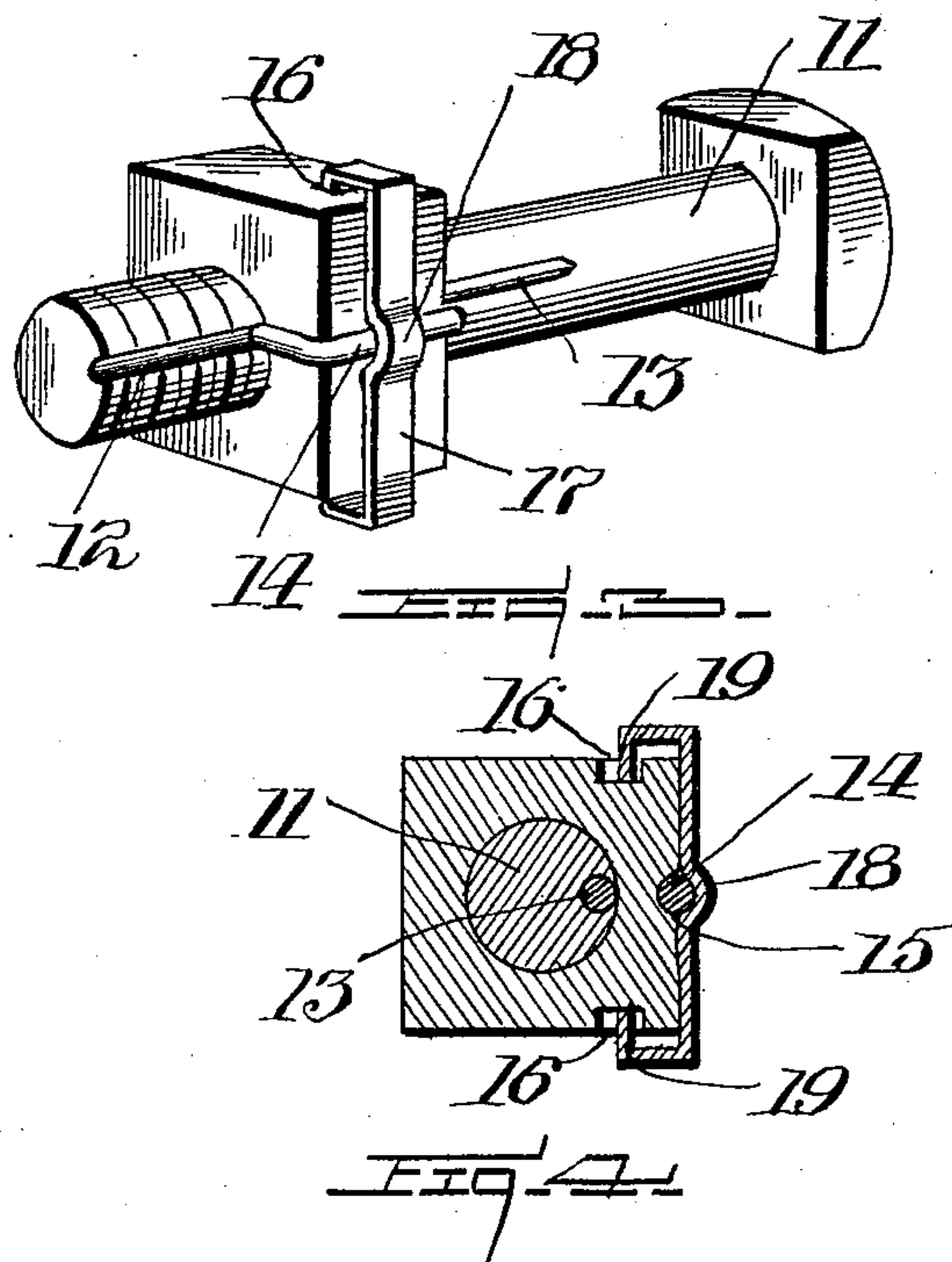
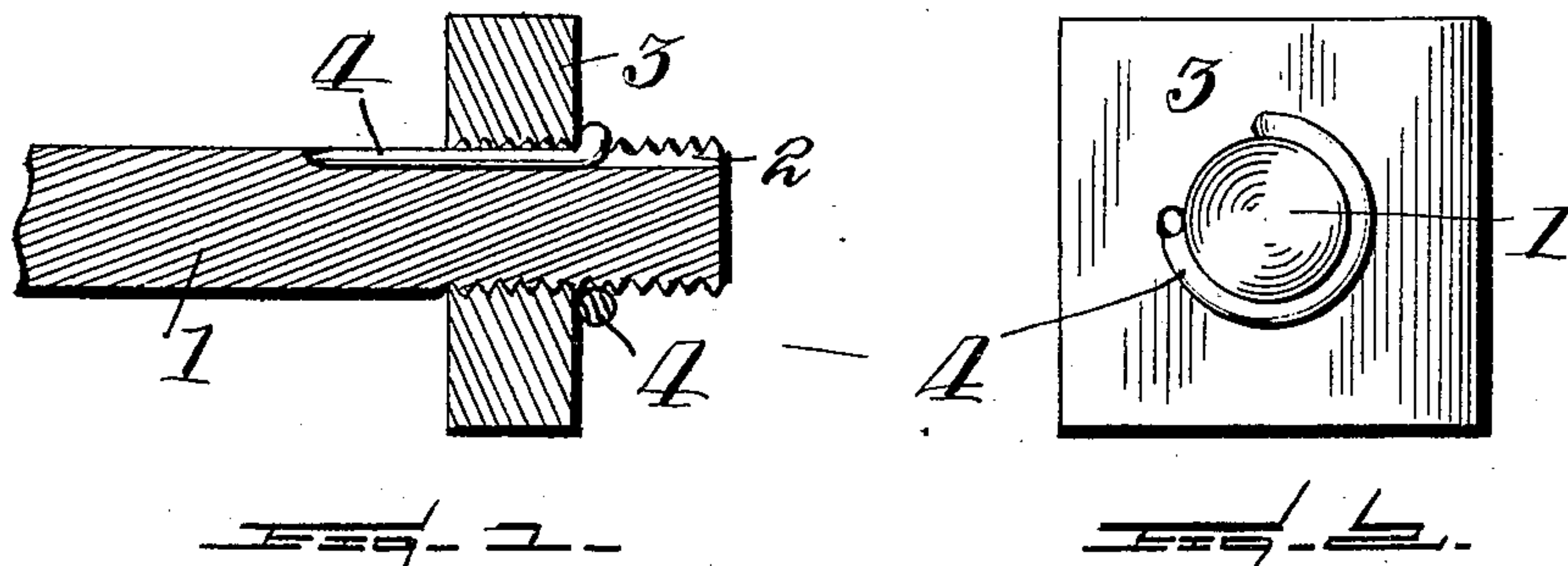
PATENTED MAR. 24, 1903.

A. KISSINGER & H. J. COLL.

NUT LOCK.

APPLICATION FILED AUG. 4, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALBERT KISSINGER AND HUGH JOHN COLL, OF PITTSBURG,
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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 723,395, dated March 24, 1903.

Application filed August 4, 1902. Serial No. 118,255. (No model.)

To all whom it may concern.

Be it known that we, ALBERT KISSINGER and HUGH JOHN COLL, citizens of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Nut-Locks, of which improvement the following is a specification.

Our invention relates to certain new and useful improvements in nut-locks, and has for its object a device of this character which shall embrace novel means for securing the nut in locked engagement with the bolt.

Further objects of the invention reside in the simplicity and economical features of construction, the comparative inexpense to manufacture, the efficiency in operation, and one which shall embrace few parts in its entirety.

With the above and other objects in view the invention further resides in the novel details of construction and combination of parts to be fully described in the following specification and then set forth in the claim.

Referring to the accompanying drawings, forming a part of this application, and wherein like characters of reference indicate similar parts throughout the several views, Figure 1 is a longitudinal sectional view of the device. Fig. 2 is an end elevation thereof. Fig. 3 is a perspective view of the invention, showing the clip for locking the key. Fig. 4 is a transverse sectional view through the nut.

The bolt 1 is provided through its upper portion with a keyway 2, which extends through the outer end thereof. Received within this keyway is a key 4, preferably circular in cross-section, which seats in the keyway, extends through the nut, passing snugly through the latter. Said key is bent at right angles about an edge of the nut and is seated in a groove therein and engages the outer face of the nut. The end is then looped or bent to engage around the protruding end of the bolt, as will be seen from inspection of the drawings. Where the nut is subjected to any great jar or vibration, it has been found that it is best to secure the key, so that the same

be secured against any movement whatever. In Figs. 3 and 4 I have shown a means for securing the key against this movement, the bolt being designated by the numeral 11, having the keyway 12 therein, in which is received the key 13, this key passing through the nut and is then bent down to engage the outer face of the same. From this point it is bent to engage one of the peripheral faces of the nut. This end 14 of the key is received within a recess of a semicircular form in the peripheral face of the nut, as shown at 15. The nut at its upper and lower ends, or rather at its diametrically opposite faces, is provided with apertures 16 for the reception of the engaging ends of the clip 17, this clip being bowed outwardly, as at 18, to receive the end 14 of the key. The inner face of the key is in engagement with the face of the nut, as will be noted, and the ends of the clip are bent inwardly and downwardly, as shown at 19, which ends engage in the apertures formed on the sides of the nut. It will be noted that with this construction it will be impossible for the key to have any movement whatever, and the clip will serve as a protection therefor and prevent accidental disengagement of the same.

The clip is made of spring metal, so that its engaging ends may be sprung into engagement with the nut by merely pulling the engaging ends away from one another, as will be obvious.

While in the accompanying drawings the invention is illustrated in its most practical form, still it will be noted that various changes in the details of construction and combination of parts may be made without departing from the general spirit and scope of the invention.

Having thus fully described the invention, what we claim as new, and desire to secure by Letters Patent, is—

A nut-lock comprising, in combination with a bolt having a longitudinal channel therein, a nut having a groove in one of its peripheral faces, the faces of the nut adjacent to its grooved face being recessed at locations opposite each other, a key adapted to be insert-

ed in said channel and engaging over the edge of the nut, and seated in said groove, and a flexible locking-clip 17 having a central recessed portion fitting over the key, and having angled ends engaging in said recesses, as set forth.

In testimony whereof we have hereunto

signed our names in the presence of two subscribing witnesses.

ALBERT KISSINGER.

HUGH JOHN COLL.

In presence of—

JOHN GROETZINGER,

M. HUNTER.