

**No. 689,637.**

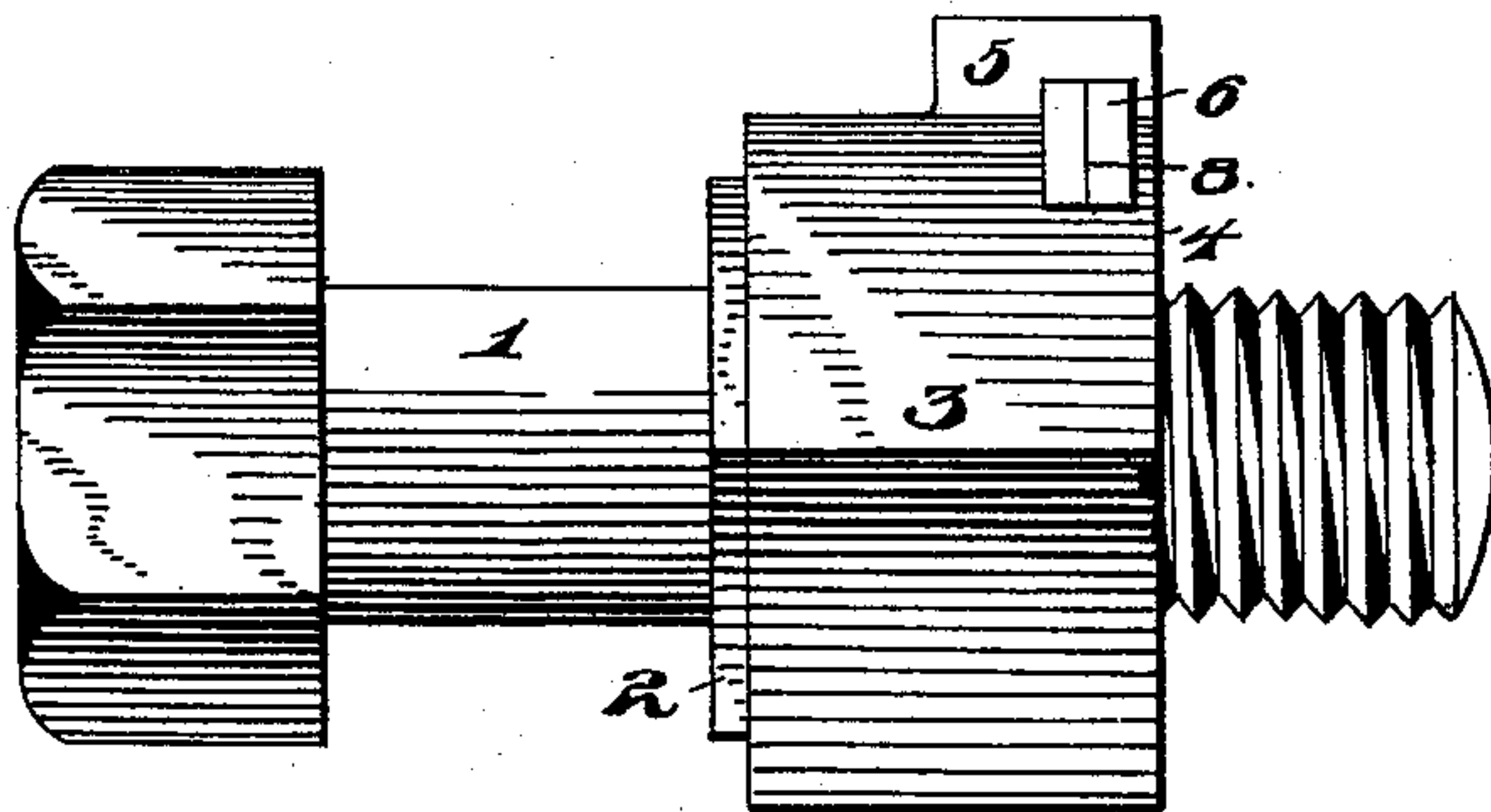
**Patented Dec. 24, 1901.**

**I. M. CHANNEL.**  
**NUT LOCK.**

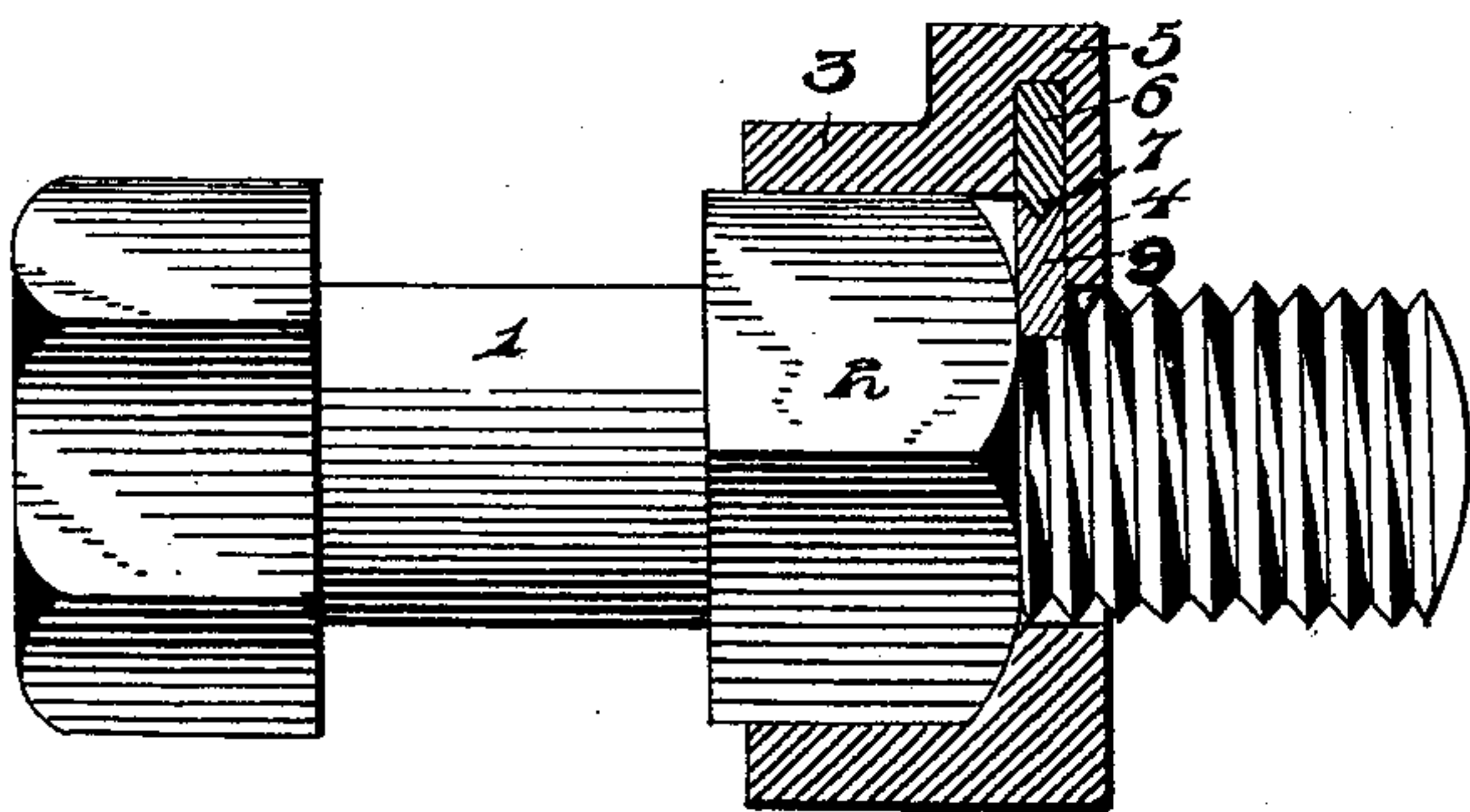
(Application filed Aug. 28, 1901.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*

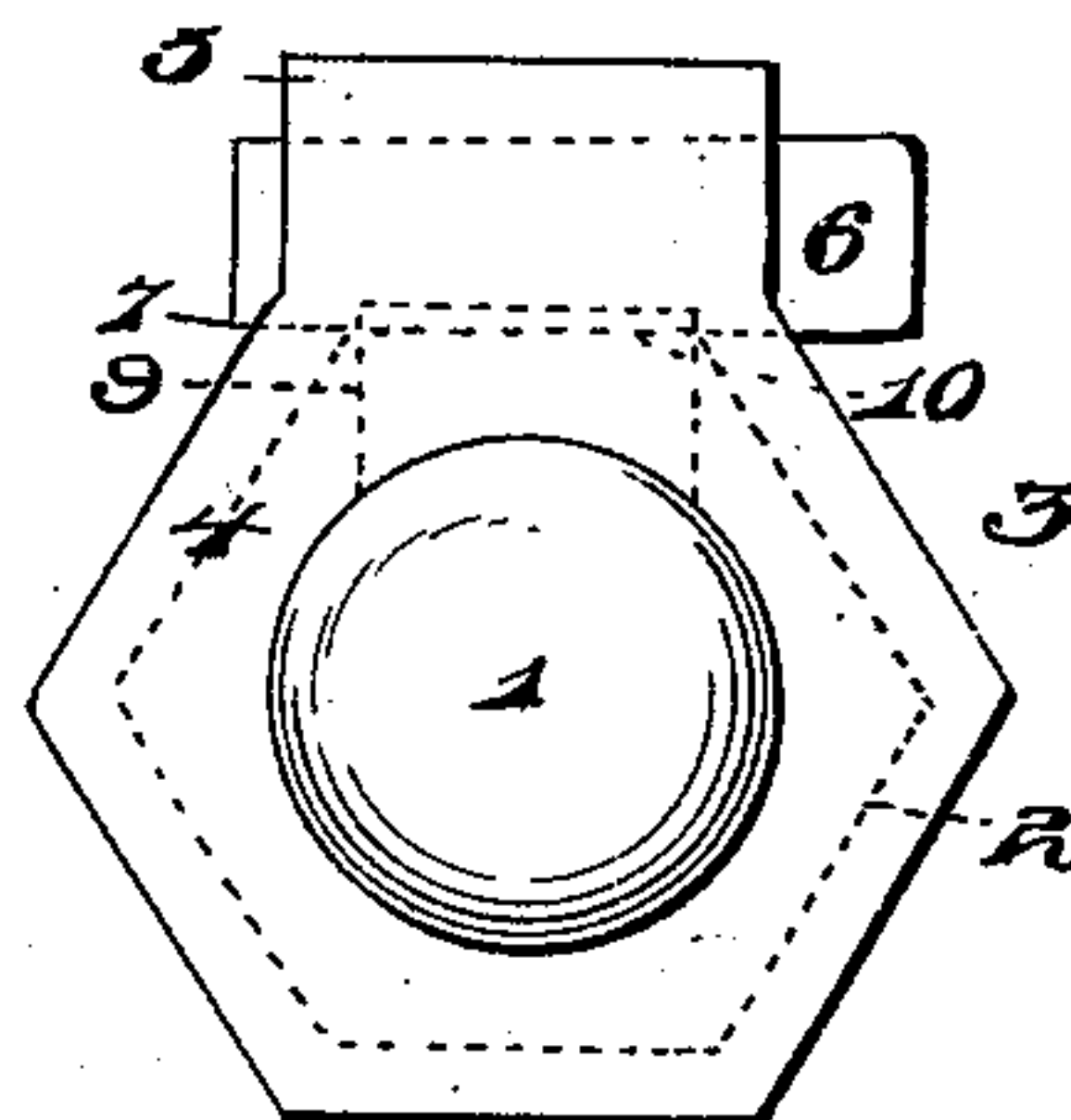
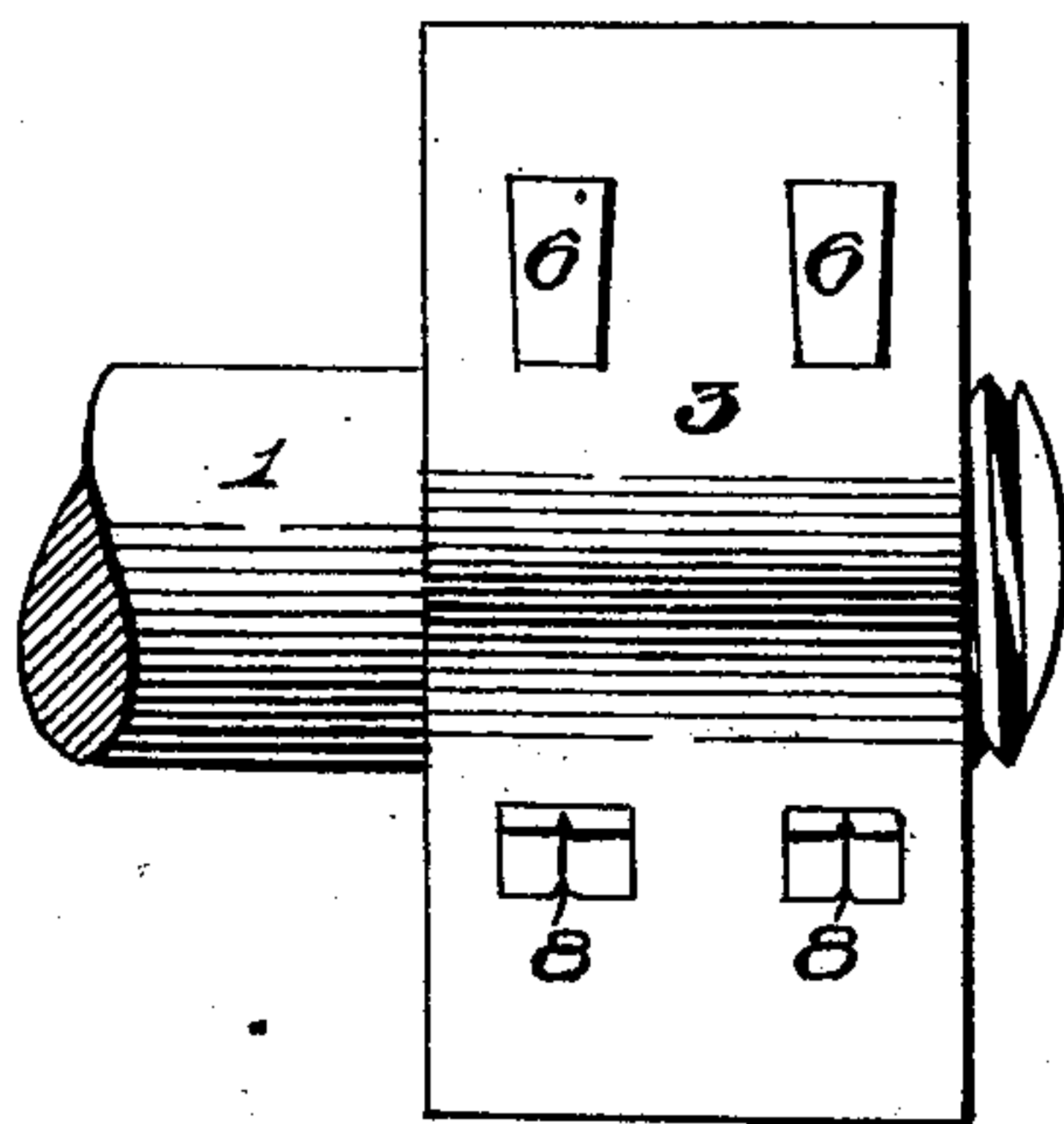
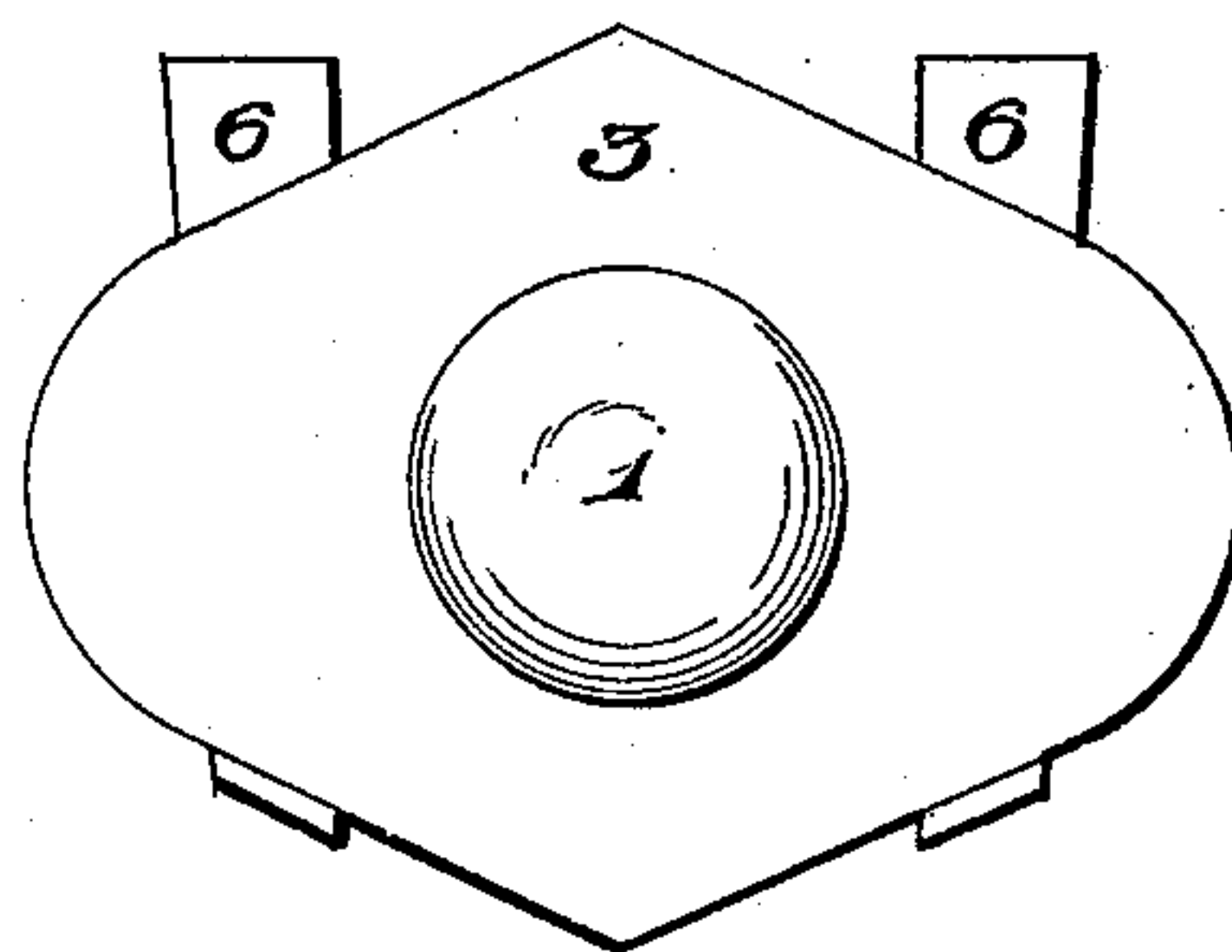


Fig. 4.



*Fig. 5.*



*Fig. 6.*

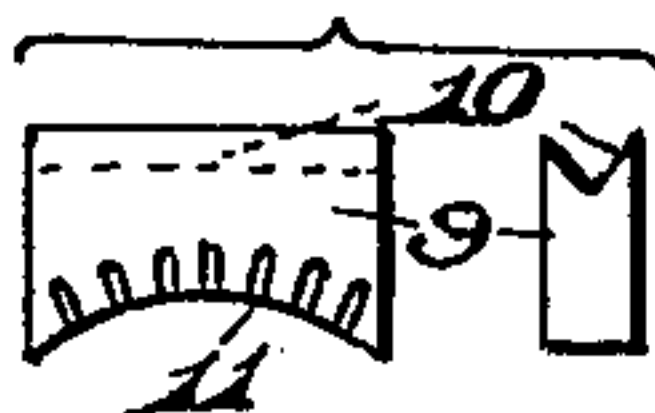
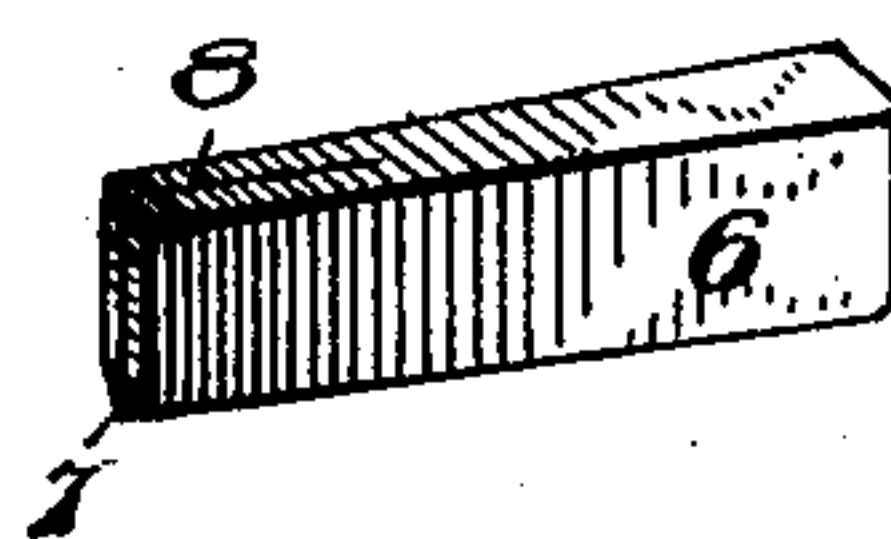


Fig. 7.



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

ISAAC M. CHANNEL, OF DUQUESNE, PENNSYLVANIA.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 689,637, dated December 24, 1901.

Application filed August 28, 1901. Serial No. 73,606. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC M. CHANNEL, a citizen of the United States of America, residing at Duquesne, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks, 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 nut-locks, and has for its object the provision of novel means that will effectually lock the nut to the bolt and prevent it from turning or jarring loose.

15 The present invention aims to construct a device of the above-described character wherein it will not be necessary to change the construction of either the bolt or nut and one that may be applied to all standard forms of  
20 nuts and bolts.

Another object of the invention is to construct a nut-lock that will be extremely simple in its construction, strong, durable, and comparatively inexpensive to manufacture.

25 With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts, to be hereinafter more particularly described, and specifically pointed out in the  
30 claim.

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  
35 parts throughout the several views, in which—

Figure 1 is a side elevation of a bolt and nut provided with my improved nut-lock. Fig. 2 is a similar view showing the nut-lock in vertical section. Fig. 3 is a front view thereof. Fig. 4 is a side elevation of a modified  
40 form of nut-lock. Fig. 5 is an end view of the same. Fig. 6 is a side and end detail view of the lock. Fig. 7 is a perspective view of the locking-wedge.

45 In the drawings the reference-numeral 1 represents the bolt, and 2 the nut, both being of the ordinary and well-known construction.

The reference-numeral 3 represents a casing having a front plate 4, through which the threaded portion of the nut extends. The  
50 casing 3 also carries an enlarged portion 5, through which the locking-wedge 6 extends. This locking-wedge has formed on its under

face a V-shaped engaging face 7, and the ends of said wedge are split, as shown at 8. 55

The reference-numeral 9 represents the lock, having formed in its upper face a V-shaped groove 10 to receive the V-shaped engaging face of the wedge. The lower side of the lock compares with a portion of the bolt  
60 and is provided with a series of serrations 11.

The modified forms of my invention, as illustrated in Figs. 4 and 5 of the drawings, show a duplication of the locking wedges and keys, one pair of wedges above and one pair below  
65 the nut, as in some constructions I find it of special advantage to use the device in this manner. In using two pairs of wedges, one pair on the opposite side from the other pair, I form the casing with enlarged portions on  
70 opposite sides in order to receive such wedges. In this form the wedges are passed through parallel and in alinement with one another.

The mode of operating my improved nut-lock will be readily apparent from the foregoing description and by referring to the accompanying drawings. It will be noted, however, that various changes may be made in the details of construction without departing  
75 from the general spirit of my invention. 80

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

In a nut-lock, the combination with a nut and bolt, of a casing carrying an enlarged  
85 portion entirely surrounding the peripheral faces of the nut and engaging the said bolt, said enlarged portion having a slot formed therein and extending entirely therethrough, a lock having a V-shaped groove on its upper  
90 face, and a serrated lower face engaging the threads of the bolt, said lock secured in said slot, and a wedge-shaped key having a V-shaped lower face and one of its ends split  
95 engaging in said slot with its lower face engaging the upper face of said lock, the said split end being bent in opposite directions to engage said casing when the wedge is in position, substantially as described.

In testimony whereof I affix my signature 100 in the presence of two witnesses.

ISAAC M. CHANNEL.

Witnesses:

JOHN NOLAND,  
H. C. EVERT.