

No. 675,316.

Patented May 28, 1901.

T. BEHAN.

NUT LOCK.

(Application filed Sept. 28, 1900.)

(No Model.)

Fig. 1.

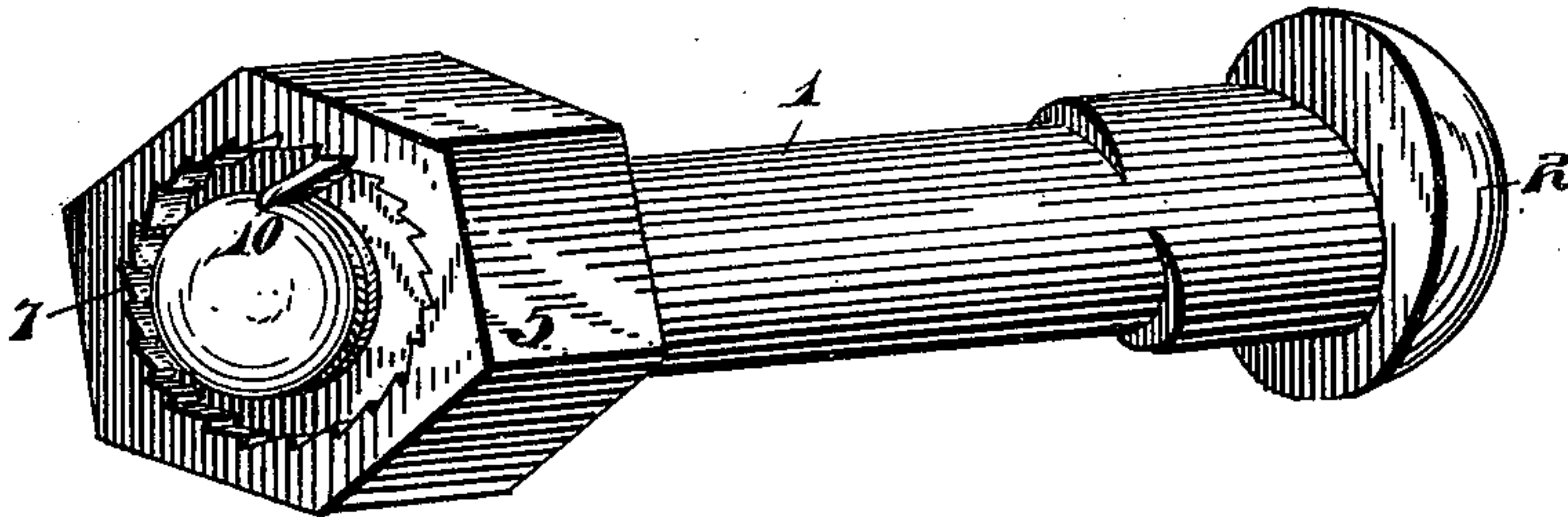


Fig. 2.

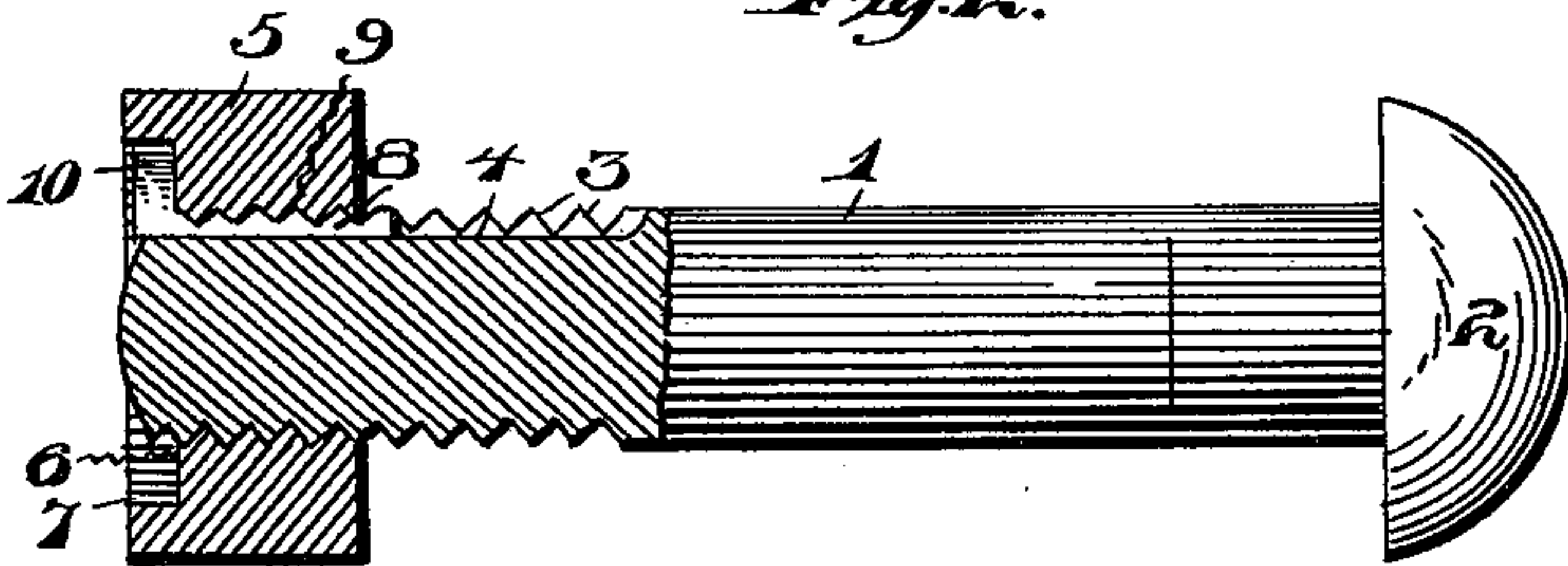


Fig. 3.

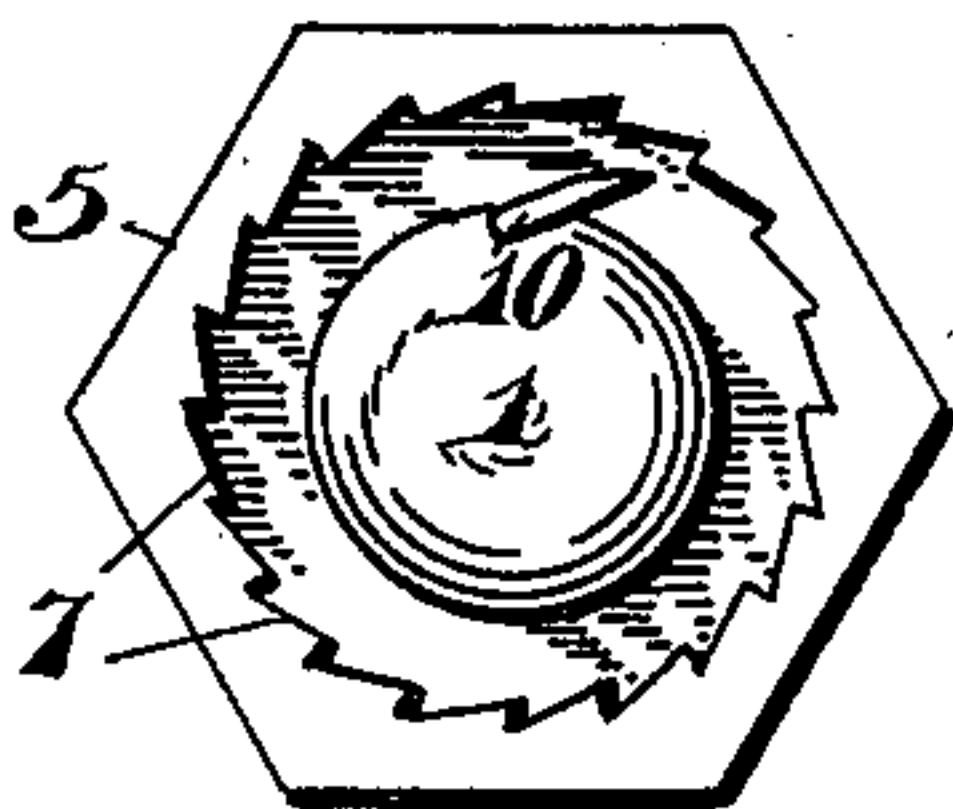


Fig. 4.

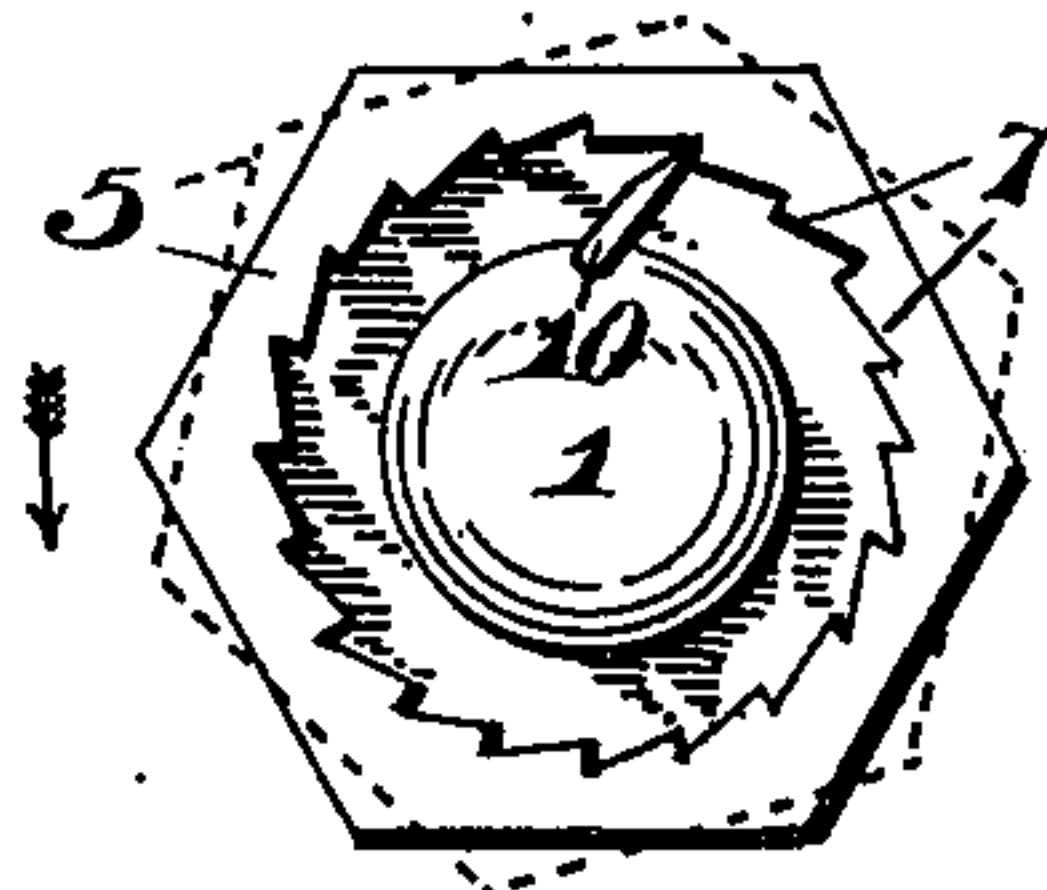


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 675,316, dated May 28, 1901.

Application filed September 28, 1900. Serial No. 31,342. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BEHAN, a citizen of the United States of America, residing at Woodlawn, in the county of Beaver 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 whereby a nut is securely locked upon a bolt.

15 The invention consists in cutting a longitudinal groove in the bolt transversely to the threads of the same and a corresponding groove in the nut, said grooves serving to receive the ratchet that will engage ratchet-teeth formed in the face of the nut.

20 Furthermore, the invention consists in arranging the parts in such a novel manner that when the nut is turned in the reverse direction the ratchet or dog will be tilted at a certain angle or will act as a perfect wedge to prevent the nut from turning in the opposite direction.

25 The invention still further consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

30 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 corresponding parts throughout the several views, in which—

35 Figure 1 is a perspective view of a bolt and nut having my improved attachment secured thereto. Fig. 2 is a side elevation, partly in vertical section, of a bolt and nut provided with my improvements. Fig. 3 is an end elevation of the same, showing the parts in position as they appear when the nut is applied to the bolt. Fig. 4 is a similar view showing the position of the parts when the nut is turned in the opposite direction to the ratchet or dog. Fig. 5 is a detail view in perspective.

40 In the drawings the reference-numeral 1 indicates the bolt, and 2 the head thereof.

50 3 represents the screw-threads, and 4 indicates a slot cut in said screw-threads.

The reference-numeral 5 indicates the nut,

said nut having formed on its outer face an annular recess 6 and provided with ratchet-teeth 7.

55 The reference - numeral 8 represents a ratchet or dog carrying teeth 9, adapted to register with the screw-threads 3, and carried on its one end a pawl 10, adapted to engage in the ratchet-teeth 7. The slot 4, arranged in the bolt, extends transversely through the screw-threads and is formed at an angle. The ratchet or dog when placed in position will also rest at an angle.

60 The operation of my improved nut-lock is as follows: The parts being applied in position as shown, the nut will readily turn in the desired direction; but as soon as the reverse movement is applied to the nut the ratchet or dog will tilt, as shown in Fig. 4, and engage the ratchet-teeth and also form a wedge against the interior threads of the nut to prevent the latter from turning.

65 It will of course be observed that various changes may be made in the details of construction without departing from the general spirit of my invention.

70 I am aware of the fact that prior to my invention ratchet nut-locks have been patented and are in general use. I therefore do not claim such construction as broadly new; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. In a nut-lock, a bolt having a longitudinal slot, a nut threaded thereon having a recessed face and ratchet-teeth, a ratchet lying in the groove of the nut and having a pawl adapted to lie diagonally across the face of the nut and engage the ratchet, substantially as described.

2. In combination, a bolt having a slot, a nut having ratchet-teeth on its face, a ratchet held in the groove of the bolt by the nut, a pawl formed with the ratchet, of greater length than the distance between the bolt-hole and the teeth on the nut; said pawl lying diagonally across the face of the ratchet-teeth, substantially as described.

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

THOMAS BEHAN.

Witnesses:

JOHN NOLAND,
H. C. EVERT.