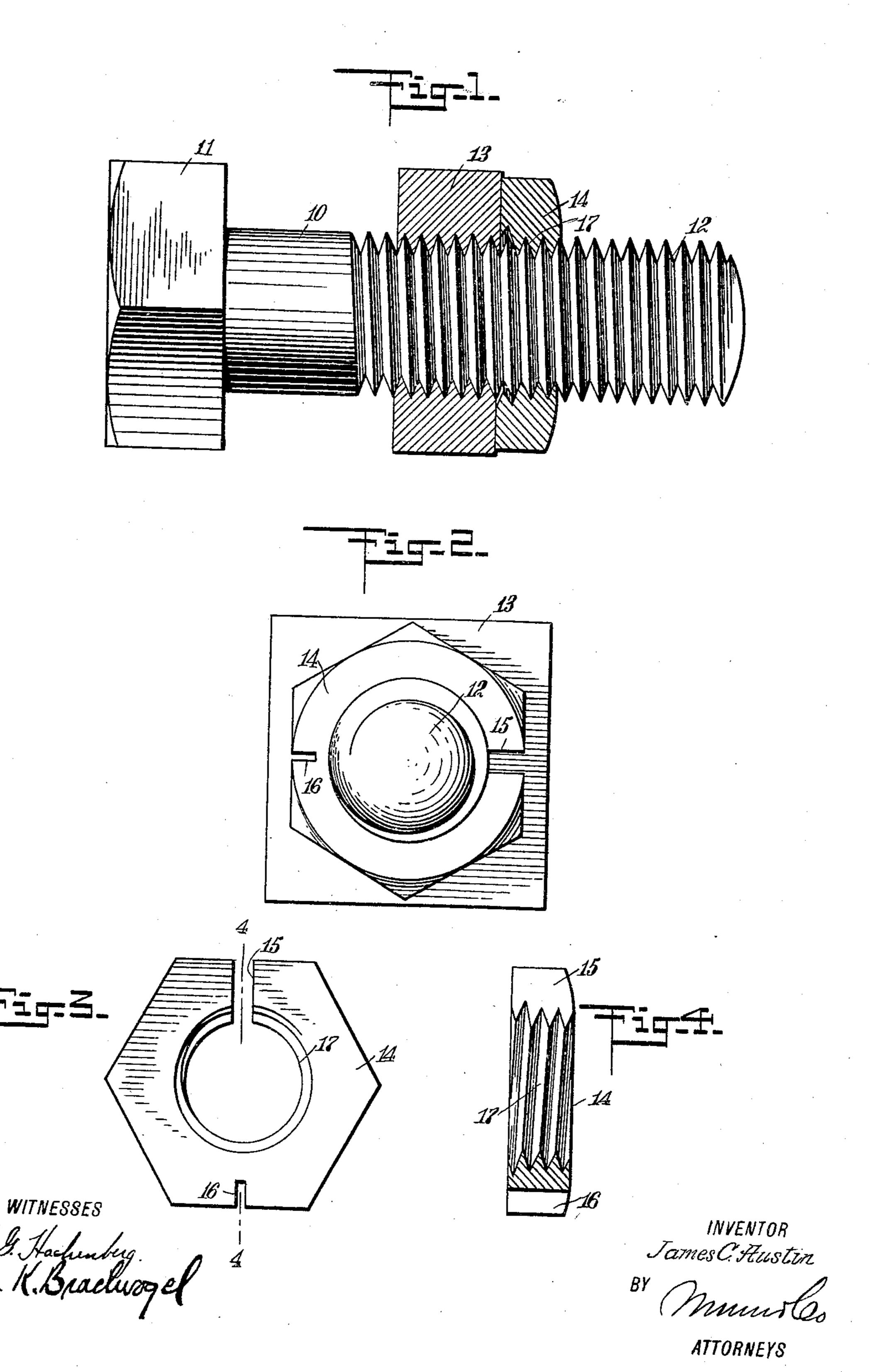
J. C. AUSTIN. NUT LOCK. APPLICATION FILED OCT. 26, 1909.

961,063.

Patented June 7, 1910.



UNITED STATES PATENT OFFICE.

JAMES C. AUSTIN, OF NEW YORK, N. Y.

NUT-LOCK.

961,063.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed October 26, 1909. Serial No. 524,639.

To all whom it may concern:

Be it known that I, James C. Austin, a citizen of the United States, and a resident of the city of New York, borough of Man-battan, in the county and State of New York, have invented a new and Improved Nut-Lock, of which the following is a full, clear, and exact description.

This invention relates to nut locks for use with ordinary or special bolt nuts and the like, and relates more particularly to a device of this class having a resiliently expansible body and provided with a threaded

bore of varying diameter.

The object of the invention is to provide a simple, strong and durable nut lock by means of which bolt nuts and the like can be securely locked upon the bolts, which does not require a special tool to manipulate it, which grips resiliently, and which may be of square, hexagonal, or any other suitable form, so that it can be conveniently manipulated by a monkey wrench or other tool usually employed for the purpose.

expansible vided with which is substantially threaded of less distributed by a conveniently manipulate it, and which may be of square, hexagonal, or any other suitable form, so that it can be conveniently manipulated by a monkey wrench or other tool usually employed for the purpose.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set

30 forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a side elevation of a bolt showing in cross section a nut, and an embodiment of my nut lock mounted thereon; Fig. 2 is an end view of the bolt, showing the nut lock; Fig. 3 is a front elevation of the nut lock; and Fig. 4 is a transverse section

on the line 4—4 of Fig. 3.

Before proceeding to a more detailed explanation of my invention, it should be clearly understood that while the same can be fashioned from any material adapted for the purpose, I prefer to employ steel, which renders the nut lock resiliently expansible, so that, as will appear more clearly hereinafter, it can securely, though resiliently, grip the bolt, and so that after its removal it will return to its normal size. The disclosed form of the nut lock, which may be of square or other suitable shape, as well as certain of the other details, can be varied

in accordance with individual preference and special conditions, without departing from the underlying spirit of the invention.

Referring more particularly to the drawings, I have shown for example, a bolt 10 60 of ordinary type, having a head 11, and the usual threaded part 12 which is formed to receive a correspondingly threaded nut 13. I provide a nut lock having a body 14 which is, broadly, of annular form and has a split 65 15. At the side opposite the split 15, the body is preferably provided with a kerf or groove 16, as shown for example herewith, at the outside, to increase the resiliency and expansibility of the body. The lock is pro- 70 vided with a threaded bore 17 therethrough which is of varying diameter, being partly substantially equal in diameter to the threaded part 12 of the bolt and being partly of less diameter. I prefer to vary the bore 75 so that one or more of the end threads correspond to the threads of the bolt, so that as far as these threads of the lock are concerned the latter can be screwed easily upon

It will be understood that to screw the nut lock upon the bolt entirely, a suitable wrench or the like must be employed, and owing to the partly smaller diameter of the threaded bore 17, the lock will expand resiliently when forced back upon the bolt, so that it grips the bolt and thus serves to lock the nut 13 when brought to bear against it. The lock can expand owing to the provision of the split 15, as well as owing to the nature 90 of the material from which it is fashioned.

It will be understood that the thread of the lock which is substantially equal in diameter to the threads of the bolt, constitutes a "taking" thread to permit the lock to be 95 screwed partly upon the bolt.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent:

1. A nut lock, having a body provided ¹⁰⁰ with a bore having concentric threads of varying diameter, said body being expansible in its own plane and at substantially right angles to the length of said bore.

2. A nut lock having a body fashioned ¹⁰⁵ from resilient material and provided with a split, and opposite thereto a kerf to increase the resiliency of said body, said body further having a threaded bore therethrough adapted to receive a bolt, and, in diameter ¹¹⁰

being partly less than and partly approximately equal to, the diameter of the thread-

ed part of the bolt.

3. The combination, with a bolt having a threaded part and a nut thereon, of a nut lock comprising a split body fashioned from resilient material and having opposite to the split a kerf, said body having a threaded bore adapted to receive said threaded part of said bolt, said bolt being partly smaller in diameter than said threaded part of said body, whereby said lock binds upon said threaded part of said bolt.

4. A nut lock, comprising a threaded body adapted to receive the threaded part of a bolt, and substantially smaller in diameter

of bore than that of the threaded part of the bolt, the lock having a "taking" thread approximately corresponding in diameter to the threads of the bolt.

5. An expansible nut lock, having internal, concentric threads of different diameters, and expansible in a plane at substantially right angles to the axis of said threads.

In testimony whereof I have signed my 25 name to this specification in the presence of two subscribing witnesses.

JAMES C. AUSTIN.

Witnesses:

J. L. McAuliffe, Philip D. Rollhaus.