

No. 783,017.

PATENTED FEB. 21, 1905.

W. CASE.
NUT LOCK.

APPLICATION FILED JULY 26, 1904.

Fig. 1.

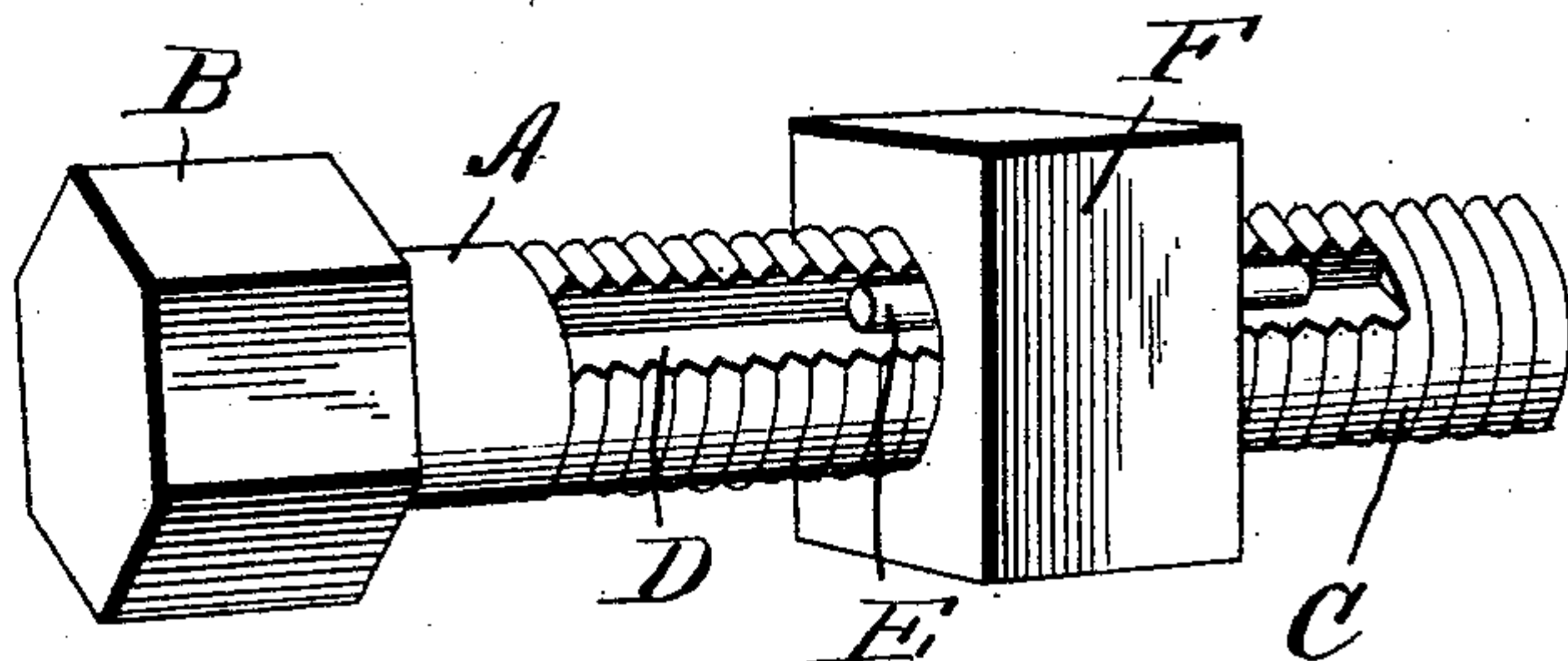


Fig. 2.

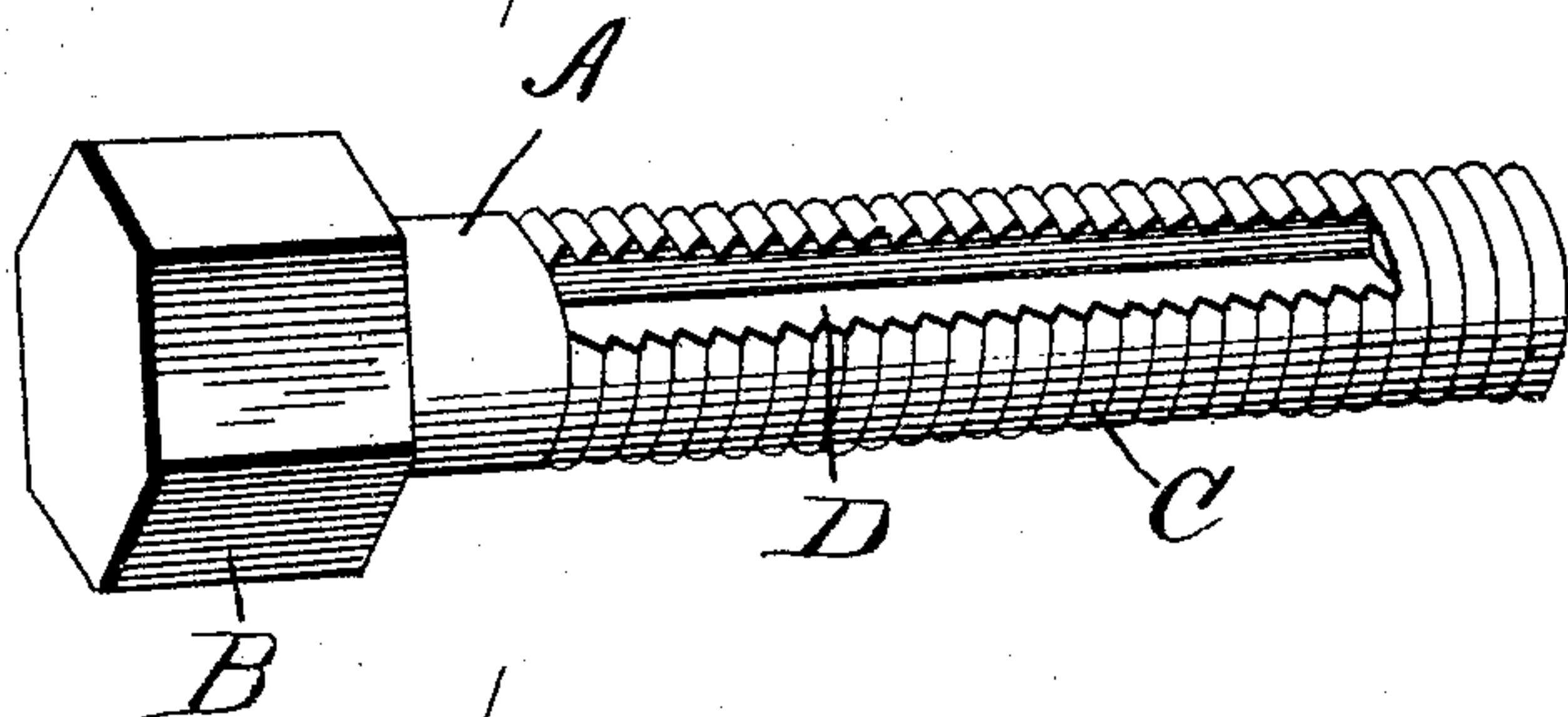


Fig. 3.



Fig. 4.

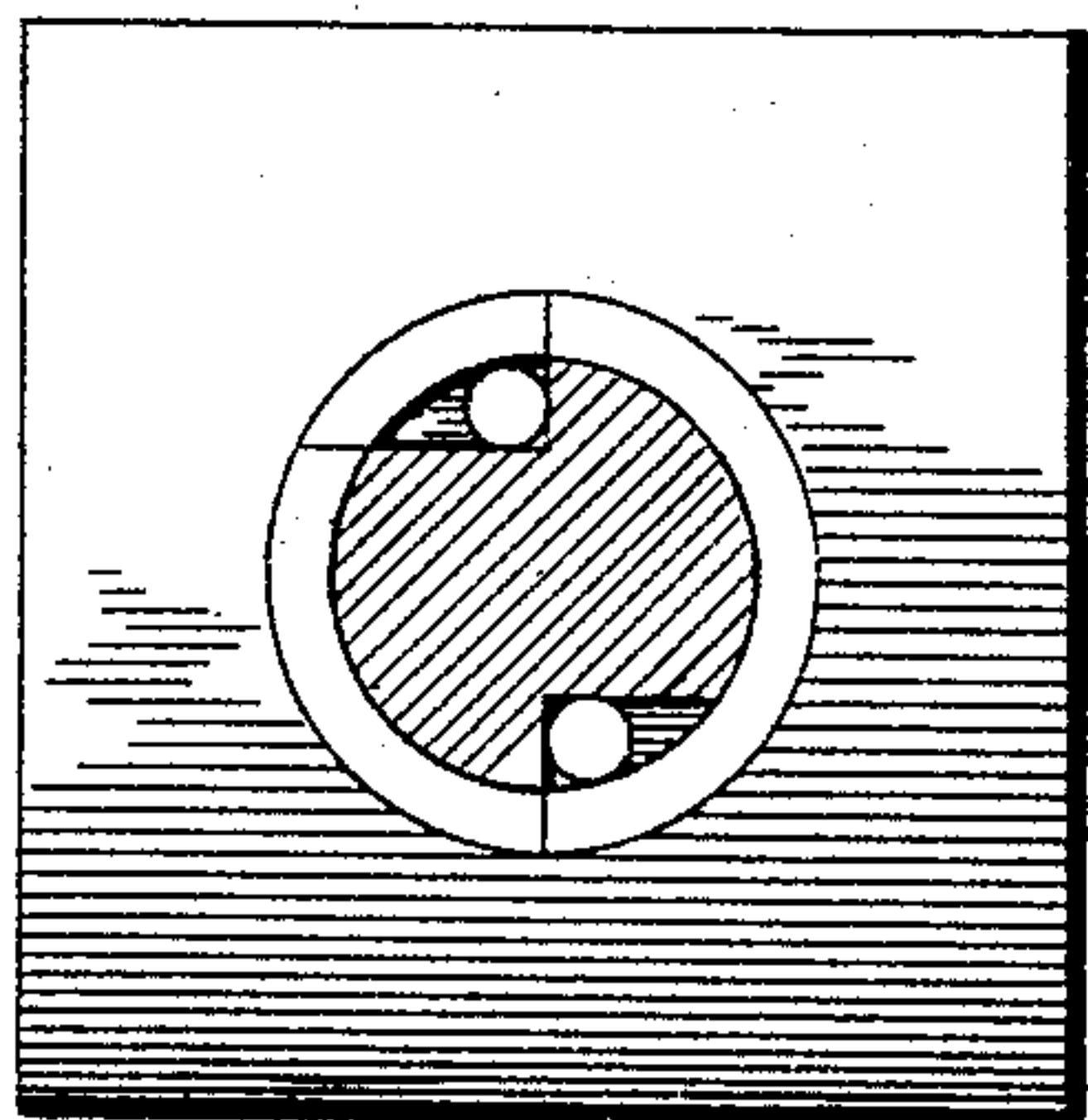
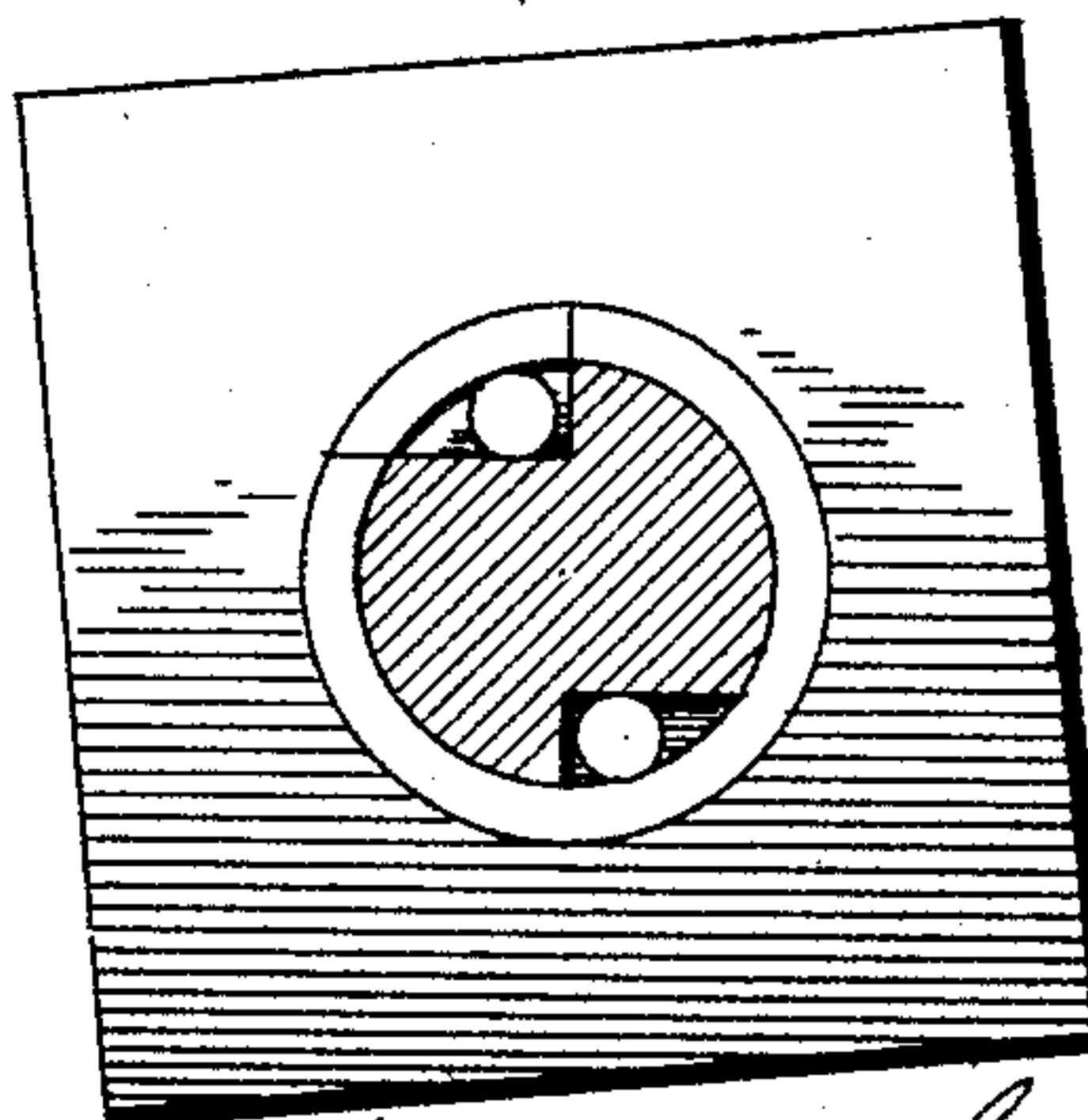


Fig. 5.



Witnesses

W. F. Doyle
A. Hough

By

William Case,

Franklin N. Hough

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM CASE, OF SHERMAN HEIGHTS, TENNESSEE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 783,017, dated February 21, 1905.

Application filed July 26, 1904. Serial No. 218 223.

To all whom it may concern:

Be it known that I, WILLIAM CASE, a citizen of the United States, residing at Sherman Heights, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Nut-Locks; and I do 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 ap-
10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in nut-locks; and it has for its object the provision of a simple, inexpensive, and positive nut-locking device which will serve to effectually lock the nut upon the bolt at any desired point and will prevent the
20 same from being accidentally loosened from any cause. The device, while adapted for use in any connection in which a nut-locking device is required, is upon account of its simplicity and cheapness of construction especially adapted for locking nuts upon bolts used in railway construction.

To the above ends and to such others as the invention may pertain the same consists in the novel construction and peculiar arrangements and combinations of parts, all as will be more fully hereinafter described, as shown in the accompanying drawings, and then specifically defined in the appended claim.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a perspective view of my invention, the same being shown as applied in locking the nut to the bolt. Fig. 2 is a like view of the bolt with the nut removed. Fig. 3 is a perspective view of one of the locking-rollers detached. Fig. 4 is a transverse section through the bolt, showing the locking-rollers in the position which they assume when the
40 bolt is being tightened; and Fig. 5 is a like view showing the rollers engaged to lock the bolt.

Reference now being had to the details of the drawings by letter, A represents a bolt 50 having the usual head B and a screw-threaded shank or body portion C. Upon two opposite faces of the screw-threaded portion of the bolt I provide recesses D, these recesses being right-angled in cross-section, as shown in 55 Figs. 4 and 5 of the drawings. The said recesses extend longitudinally of the bolt, each terminating at a corresponding end at a point adjacent to the inner end of the threaded portion of the bolt, the opposite end of each recess being a short distance removed from the other end of the bolt. These recesses or slots are, as stated, preferably two in number and arranged upon opposite sides of the bolt. Within these recesses are placed metallic roll- 65 ers E.

F is a nut of ordinary construction, being interiorly screw-threaded to engage the threads of the bolt. In use the rollers E are placed within the slots D, and the nut is turned upon 70 the bolt, passing over the rollers, which while the nut is being turned are retained in the positions indicated in Fig. 4 of the drawings. When it is designed to lock the nut, the rollers E are released and will be carried by the 75 movement of the nut downwardly, so as to wedge or bind against the thread of the nut, as is indicated in Fig. 5 of the drawings. When it is desired for any reason to remove the nut from the bolt, it is merely necessary 80 by the use of any tool adapted to the purpose to force the rollers back into the positions indicated in Fig. 4 of the drawings, thus releasing them from engagement with the nut, when the nut may be readily removed. 85

The simplicity and reliability of my form of nut-locking device will recommend it as adapted to general use for the purposes for which it is designed.

While I have shown the bolt as provided 90 with two recesses disposed upon opposite sides of the screw-threaded portion of the bolt, it is at once evident that the number and relative arrangement of the slots or recesses may be varied without departing from the spirit 95 of my invention.

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

5 A nut-lock comprising a threaded bolt having two longitudinal recessed edges formed therein at points diametrically opposite each other, the recesses having walls at right angles to each other and terminating in end walls at right angles to the length of the bolt, and

a cylindrical pin seated in each of said recesses 10 and having a play therein limited by the ends of the recesses, as set forth.

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

WILLIAM CASE.

Witnesses:

W. H. LANE,

H. K. BEARDEN.