

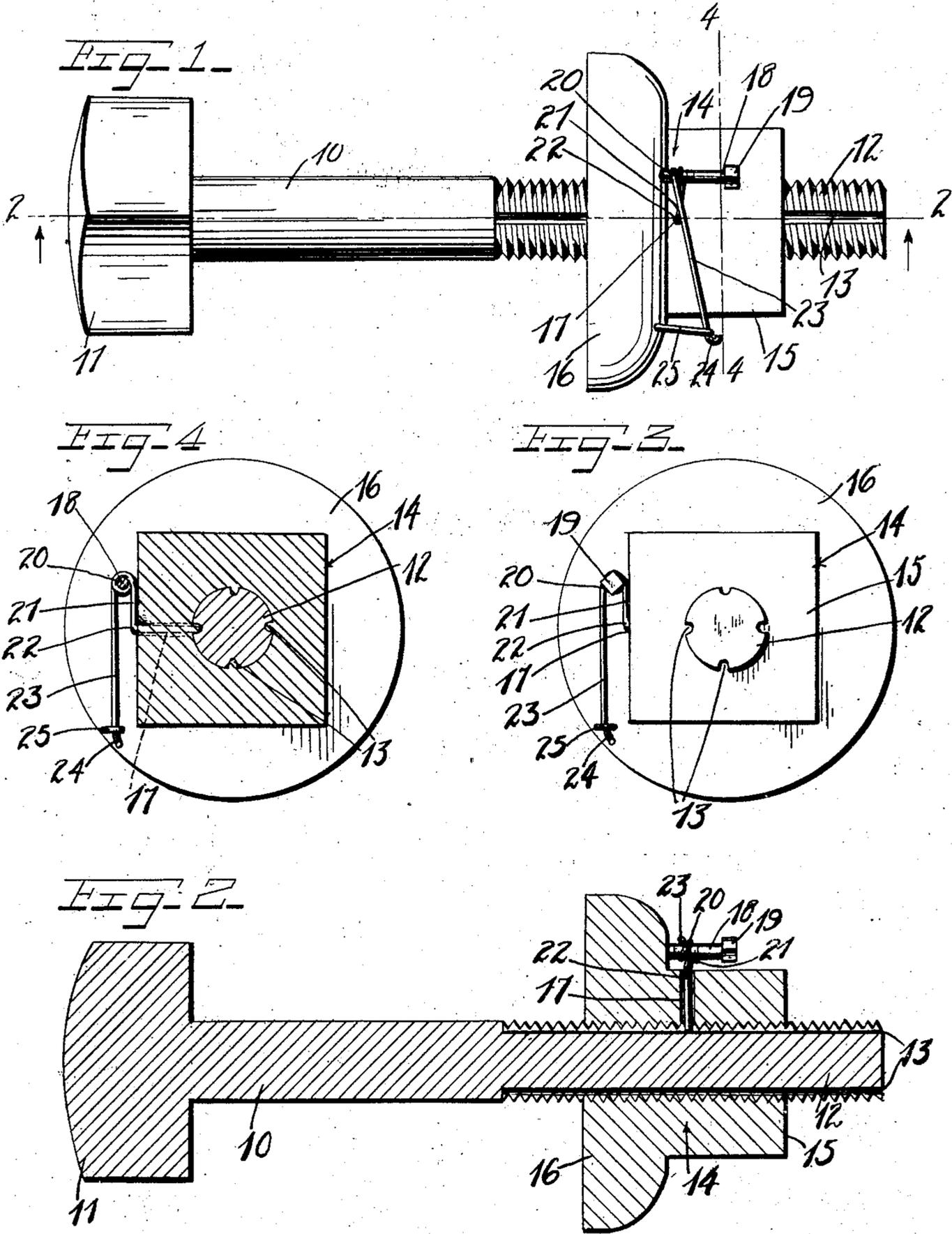
R. W. BRIDGMAN.

NUT LOCK.

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973,853.

Patented Oct. 25, 1910.



Inventor

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Witnesses

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NUT-LOCK.

973,853.

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To all whom it may concern:

Be it known that I, ROBERT W. BRIDGMAN, a citizen of the United States, residing at Dayton, in the county of Montgomery, State of Ohio, have invented certain new and useful Improvements in Nut-Locks; and I do hereby 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 appertains to make and use the same.

This invention relates to nut locks and has for its object to provide a nut lock that will be more readily accessible for manually unlocking to permit of the removal of the nut than usual.

With the above end in view, the invention consists of the novel details of construction and combination of parts hereinafter fully described and claimed, it being understood that various modifications of the minor details of construction may be made within the scope of the appended claim.

In the accompanying drawing forming part of this specification: Figure 1 is a side elevation of a bolt and nut equipped with a nut lock constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view taken on the line 2—2, Fig. 1. Fig. 3 is an end elevation of the bolt and nut. Fig. 4 is a cross sectional view taken on the line 4—4, Fig. 1.

The reference character 10 designates a bolt having an angular head 11 and a threaded end 12, the latter being provided with a plurality of longitudinal oblong rabbets 13. Threading on the bolt is a nut 14, this nut having a squared head 15, the sides of which provide flat wrench faces, and a base flange 16, this base flange being preferably circular in outline as shown. Formed in the wrench head 15 is a transverse opening 17, through which the locking spring hereinafter described projects. Threaded into the base flange of the nut and extending approximately parallel with one side of the wrench head is a screw 18, this screw having a squared retaining head 19. Mounted on the shank of this screw is a helical spring 20, one terminal of this spring being provided with a straight portion 21 which engages the adjacent side face of the wrench head and is then bent at right angles as shown at 22 and engaged through the opening in the wrench head, the extreme end of this latter named bent portion projecting into one of the lon-

gitudinal rabbets 13 of the bolt. The opposite terminal 23 of the spring is directed laterally approximately parallel with the straight portion 21 of the spring and terminates in a hooked extremity 24.

A hook 25 is fixed upon the base flange of the nut and engages the free extremity 23 of the spring adjacent its terminal hook, the latter preventing the accidental withdrawal of the free terminal of the spring from the fixed hook. The fixed hook is so arranged upon the base flange that the free end of the spring will be held under considerable tension when engaged in the fixed hook so that the free end of the spring must be depressed and then pressed laterally against its own tension to effect its release from the fixed hook, which pressure it is obvious would not be likely to be exerted by any other agency than manual.

In removing the spring from operative position, the free end is disengaged from the fixed hook and the spring rocked upon the pivot screw 18 until the opposite end of the spring is withdrawn from engagement with the rabbet in the bolt. The nut may now be retracted in the ordinary manner.

What is claimed is:—

The combination with a bolt having a plurality of longitudinal rabbets in its threaded end, of a nut having an angular wrench head provided with an opening in one of its sides communicating with its bore and having a perimetral base flange, a pivot pin fixed on the base flange, a helical spring mounted on said pivot pin having one terminal bent laterally and engaging the adjacent wrench face of the wrench head, then bent at right angles and engaged through the opening therein, the extremity of this latter named bent portion projecting into one of the rabbets in said bolt, the opposite extremity of said spring being directed laterally and approximately parallel to the wrench face engaging portion of the spring, and means for holding the free end of the spring under tension whereby to prevent the accidental disengagement of the spring from operative position.

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

ROBERT W. BRIDGMAN.

Witnesses:

EUGENE G. KENNEDY,
GRACE W. DONOVAN.