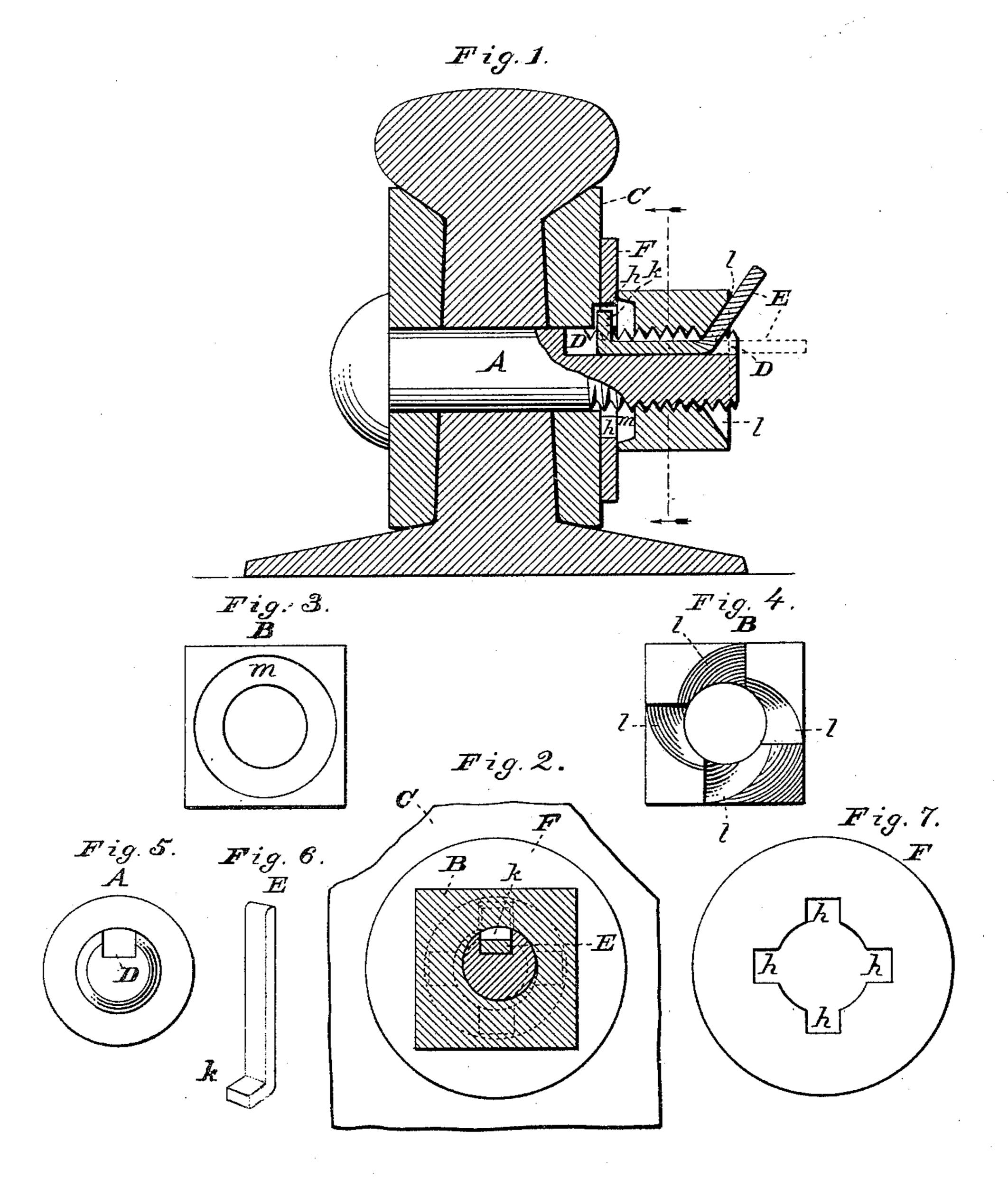
(No Model.)

J. D. CLEEK.

NUT LOCK.

No. 394,097.

Patented Dec. 4, 1888.



WITNESSES

Villette Anderson, CRanguson. INVENTOR. J. D. Cleek Ty E, W. Anderson.

Attorney.

## United States Patent Office.

JAMES D. CLEEK, OF ABINGDON, VIRGINIA, ASSIGNOR OF PART TO GEORGE H. GRIFFIN, WILLIAM J. BROWN, JAMES C. GREENWAY, T. P. TRIGG, O. BARRETT, AND G. V. LITCHFIELD, ALL OF SAME PLACE.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 394,097, dated December 4, 1888.

Application filed June 19, 1888. Serial No. 277,564. (No model.)

To all whom it may concern:

Be it known that I, James D. Cleek, a citizen of the United States, and a resident of Abingdon, in the county of Washington and State of Virginia, 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention and is a vertical section. Fig. 2 is a vertical section taken where the broken line x x is marked on Fig. 1. Fig. 3 is a detail showing the under side of the nut. 20 Figs. 4, 5, 6, and 7 are details.

This invention has relation to devices for locking bolts and nuts; and it consists in the construction and novel combination of devices, as hereinafter set forth.

In the accompanying drawings the letter A designates a bolt, and B a nut thereon.

C designates a fish-plate or other bearing, which may have a slight depression at q.

The bolt A is formed with a longitudinal groove, D, along its threaded portion, said groove being shallow and having sufficient breadth to receive a key, E, which is thin enough to be seated in the groove within the sweep of the thread, so that the nut B can be turned home when the key is in position.

F is a washer having a central opening for the passage of the bolt and the rectangular offsets h h to said opening, forming lockingnotches for the outwardly-extended foot k of the key. This foot k is bent at right angles to the shank of the key and serves to hold the bolt and washer in relative position. The nut B at its outer end is provided around the opening with the sloping ratchetnotches l, said notches extending outward at 45 an obtuse angle from the threaded portion of the opening, as shown. At its inner end or bar the nut may be formed an annular recess or chamber, m, around the central threaded opening of sufficient dimensions to receive 50 the foot of the key when desired.

Before applying the nut the key is laid in the groove of the bolt, with its foot engaging one of the notches of the washer and the depression g of the bearing. The nut having 55 then been turned home, the end of the key which projects outward beyond the nut is bent to one side, so that it will engage one of the ratchets of the nut. The key is also easily restored to its normal straight shape when 60 it is desired to remove the nut. In order to turn the nut without straightening the key—as, for instance, when it merely needs setting up or loosening—the key can be moved outward a little, bringing its foot into the recess 65 m, when the nut will turn freely.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a nut-lock, the combination of the grooved 70 bolt, the key adapted to fit in said groove and having the outwardly-turned foot, the nut having the outwardly - sloping ratchet - notches around the outer end of the threaded opening and the annular recess around the inner 75 end of said opening, and the notched washer, all as shown and described.

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

JAMES D. CLEEK.

Witnesses:

R. E. Bolling, D. A. Preston.