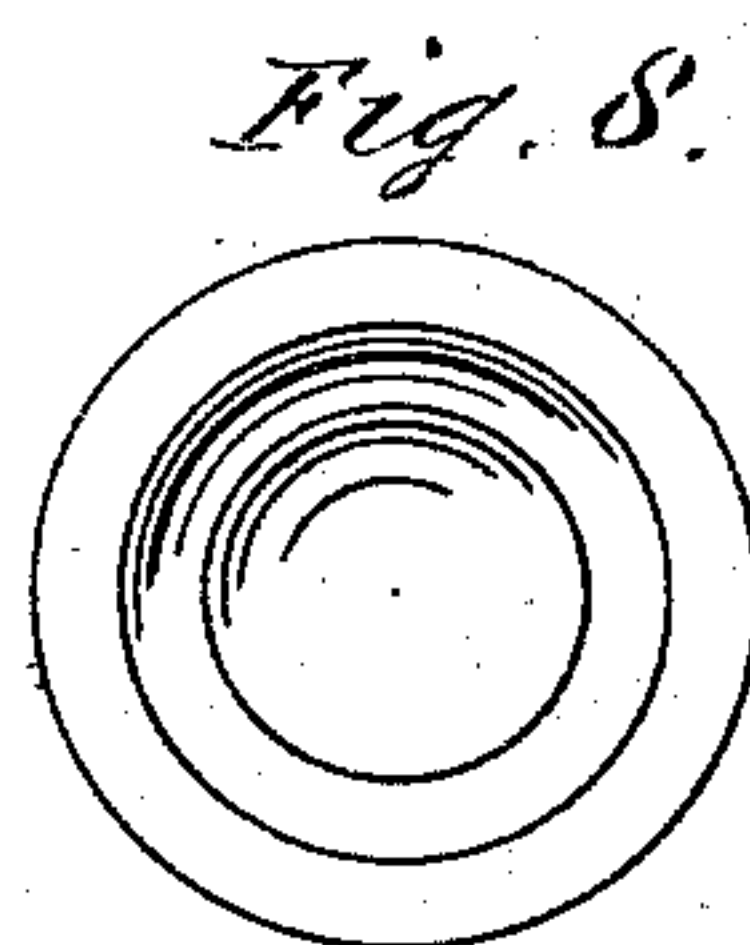
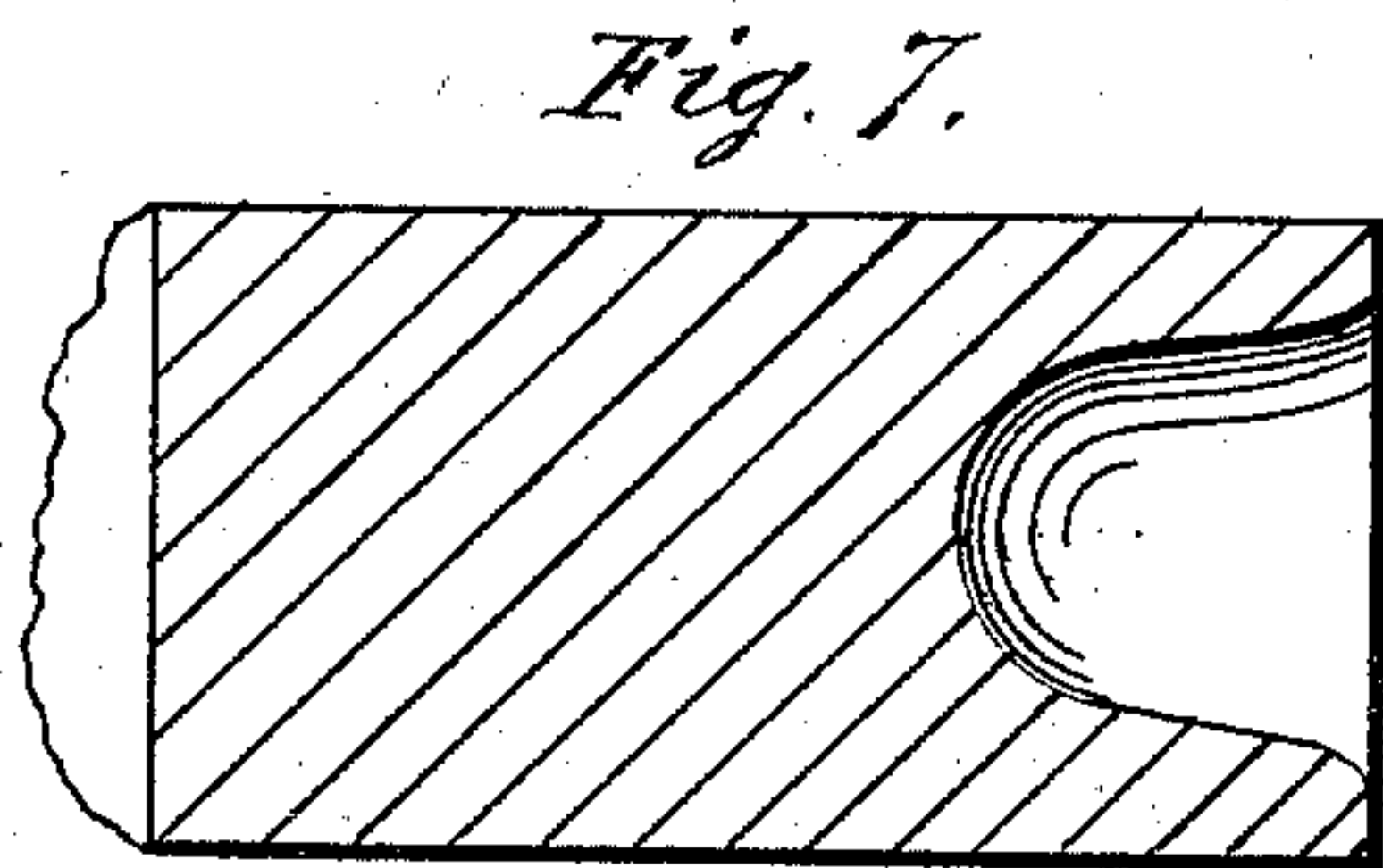
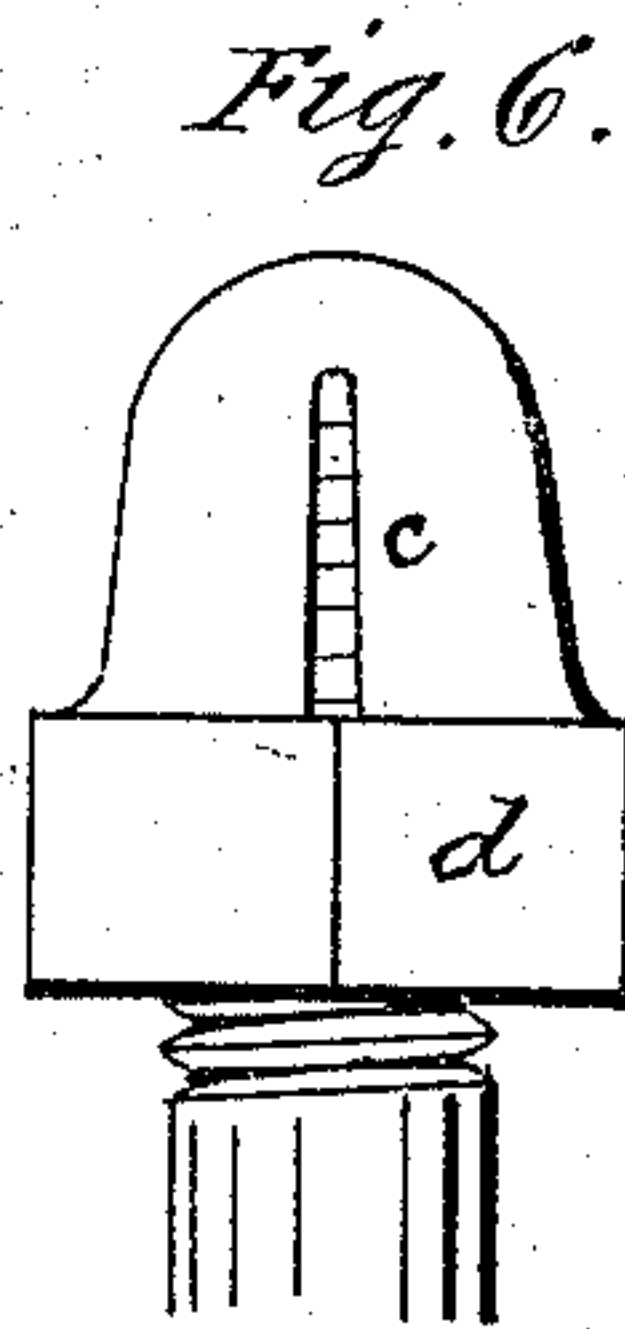
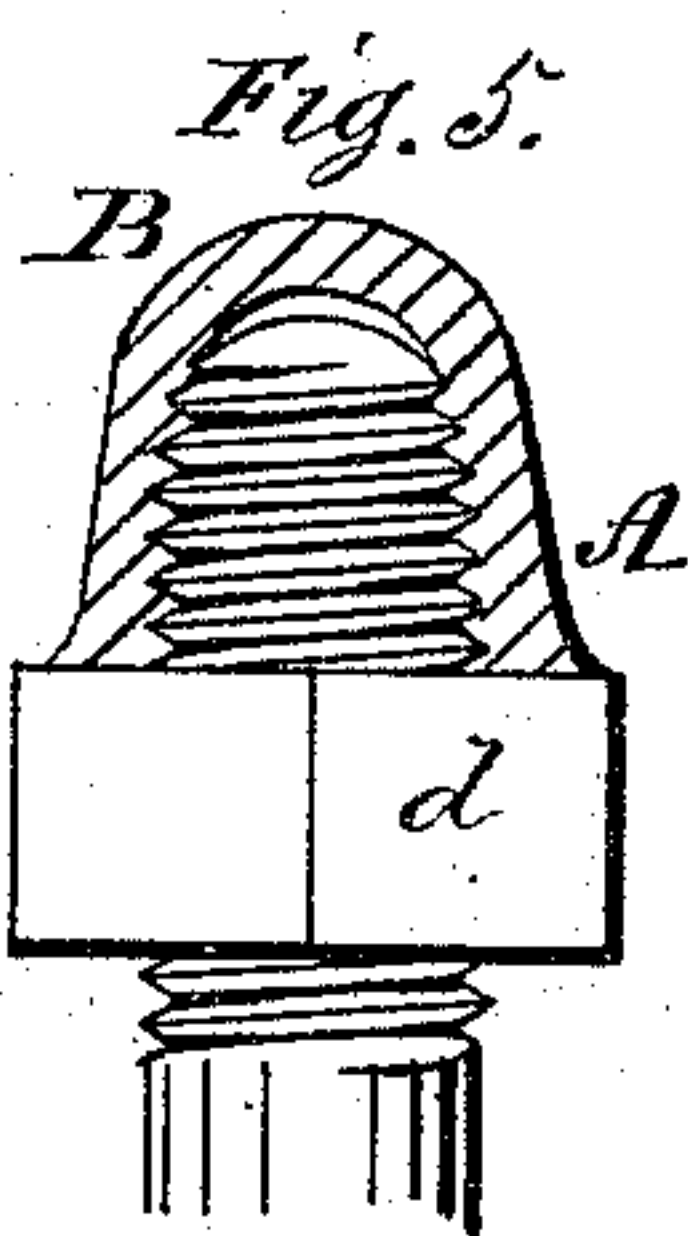
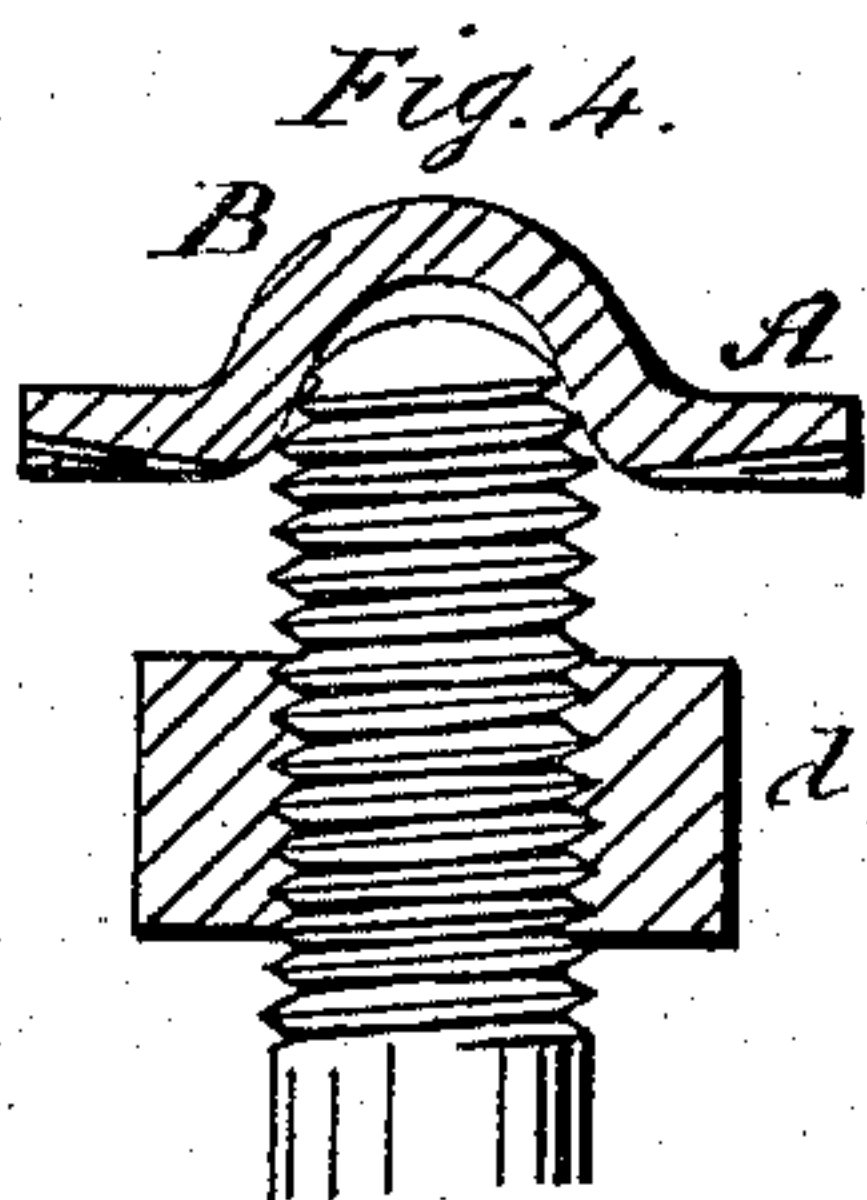
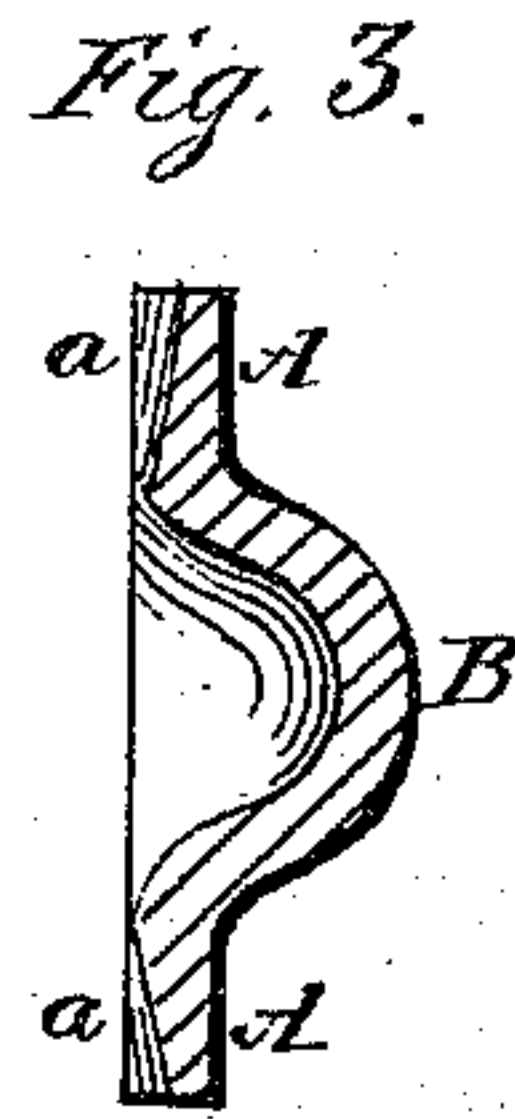
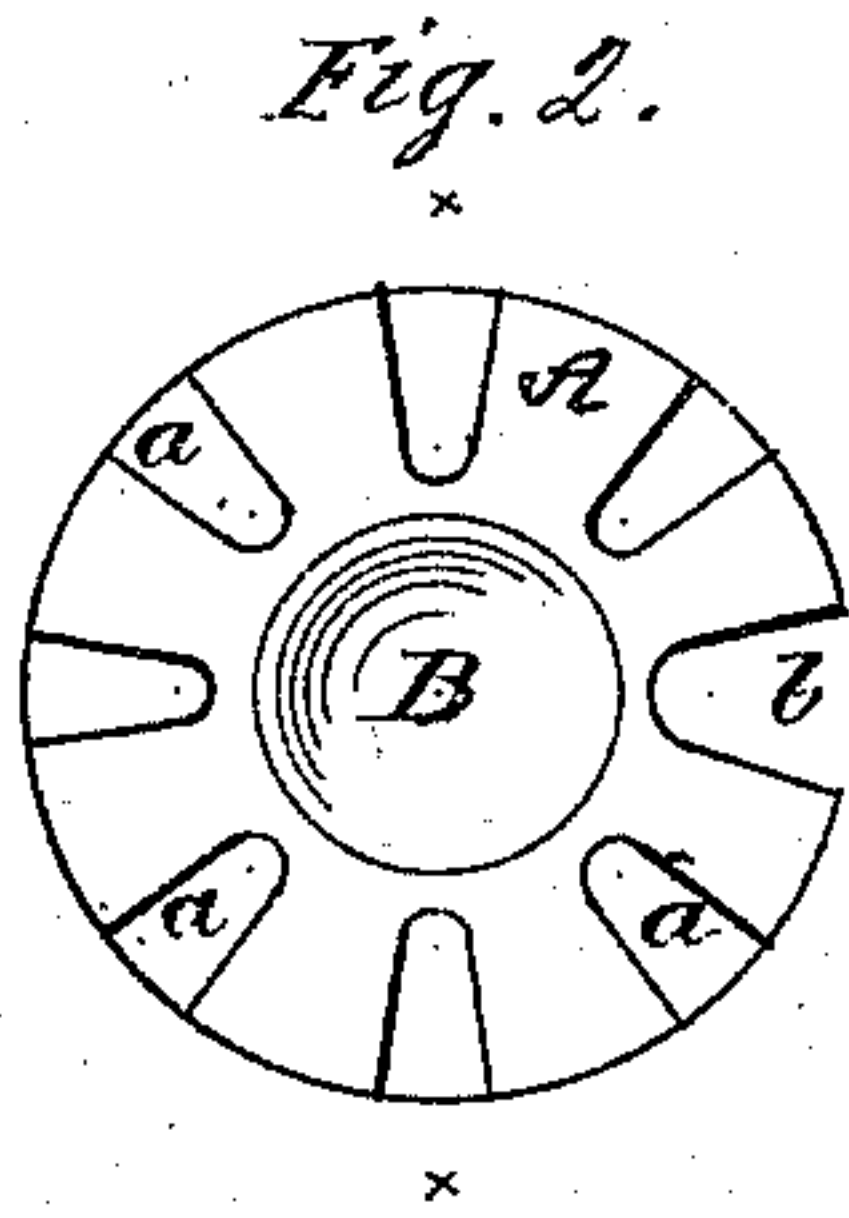
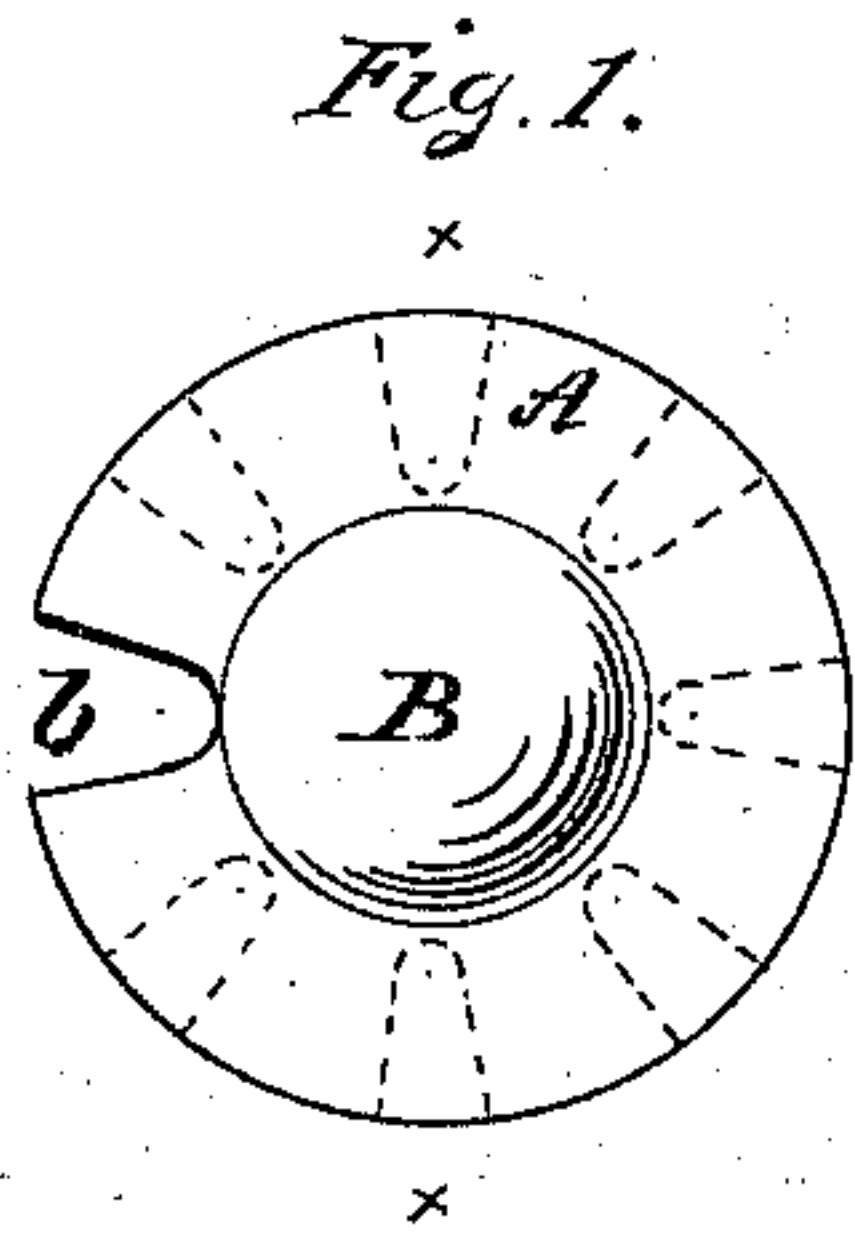


A. C. FLETCHER.

Nut-Locks.

No. 152,737.

Patented July 7, 1874.



Witnesses
M. S. Grimmer
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UNITED STATES PATENT OFFICE.

ADDISON C. FLETCHER, OF NEW YORK, N. Y.

IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. **152,737**, dated July 7, 1874; application filed December 22, 1873.

To all whom it may concern:

Be it known that I, ADDISON C. FLETCHER, of the city, county, and State of New York, have invented an Improved Jam or Lock Nut, of which the following is a specification:

This invention is designed to furnish a simple and cheap means of securing nuts in place on their bolts, to prevent them from working loose by jar or similar causes; and it consists in a cap of compressible material applied to the protruding nose of a bolt, and to be compressed around the same and against the surface of the nut in such manner as to preclude the possibility of the latter from working loose; furthermore, in a novel construction of such cap or jam-nut, which, while it may be manufactured at a trifling cost, can be applied with ease and rapidity, thus furnishing an article much needed on railways and on various machines in which the least jar is experienced.

This invention is illustrated by a drawing, in which Figure 1 represents a top view of my jam or lock nut; Fig. 2, a view of the under side of the same. Fig. 3 is a central transverse section thereof taken on the line *xx* on Fig. 1 or 2. Fig. 4 shows the same, in section, as about to be applied to a bolt. Fig. 5 is the same after having been struck up to its bearing. Fig. 6 shows a jam-nut of cast metal applied in like manner. Fig. 7 is a longitudinal section of a tool adapted to strike up such jam-nuts in their application; and Fig. 8 is a face-end view of the same.

The same letters occurring on the several figures indicate like parts.

This jam or lock nut is intended to be made of sheet-lead or other soft metal or compressible material, cut and formed by suitable dies; or it may be cast in molds.

The main portion A, when formed of sheet metal, being circular, and its central portion

B cupped up to about a hemispherical contour, and at the same time that the portion B is thus cupped up, the under side of the flange or main portion A is indented with a series of radial cavities, *a*, to the depth of about one-half of the thickness of the metal, a portion of said flange being entirely cut away, as shown at *b*.

When cast in molds, I make it of a form somewhat resembling a thimble, with a slit, *c*, in one side of sufficient width to allow the body to be compressed into the threads of the bolt before said slit is entirely closed.

In the application of this jam-nut to a bolt, it is to be placed on the end or nose of the latter, as represented in Fig. 4, and a die, similar to that represented in Figs. 7 and 8, is used to deflect the flange portion, and to compress it on, in, and around the threads of the bolt, and against the nut *d* thereon, whereby it is so closely compacted around the bolt and between its threads as to prevent any probability or possibility of the nut *d* being loosened by ordinary jar or like causes.

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

1. A jam-nut constructed of soft metal, susceptible of compression into and around the threads of a bolt, in the manner substantially as shown and described.

2. A disk of soft metal formed with radial depressions *a*, or corrugated radially, substantially as and for the purpose specified.

3. The method of securing a nut upon a bolt, by the compression of a soft-metal cap around the protruding portion of the bolt and against the nut, substantially as set forth.

ADDISON C. FLETCHER.

Witnesses:

W. MORRIS SMITH,

J. W. HAMILTON JOHNSON.