(No Model.)

## J. M. CALENDER.

NUT LOCK.

No. 336,892.

Patented Mar. 2, 1886.

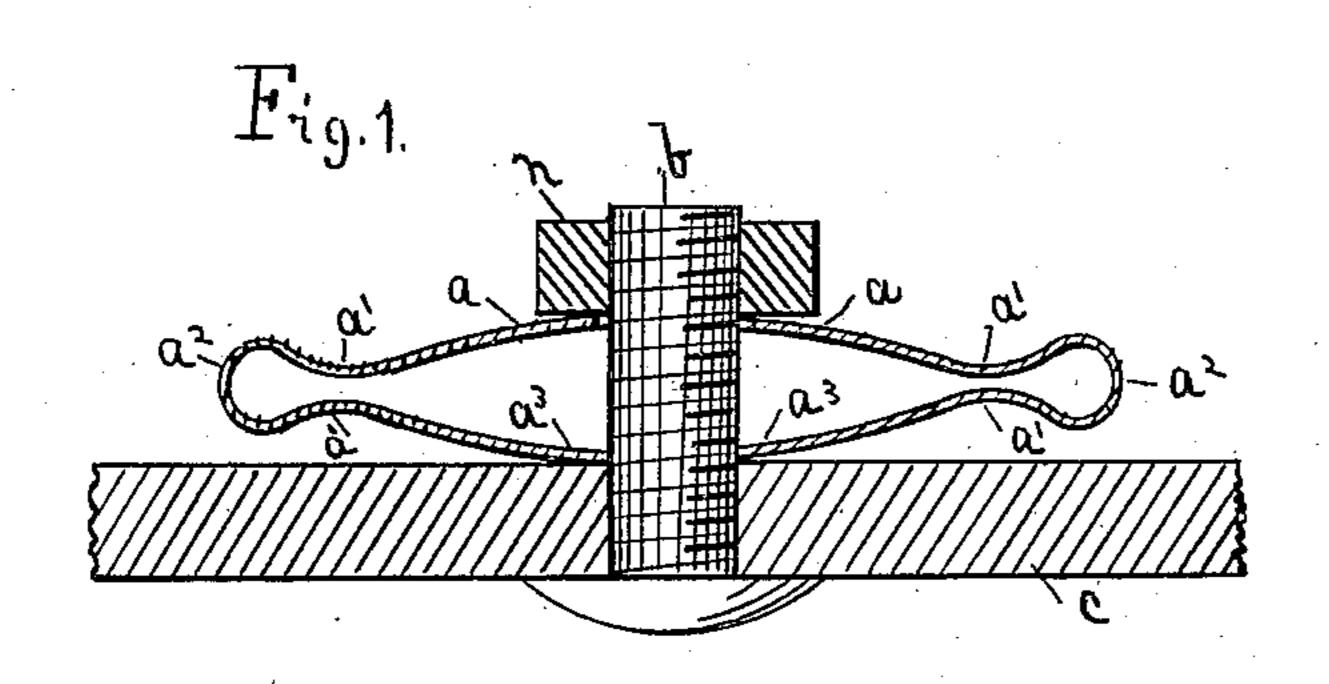
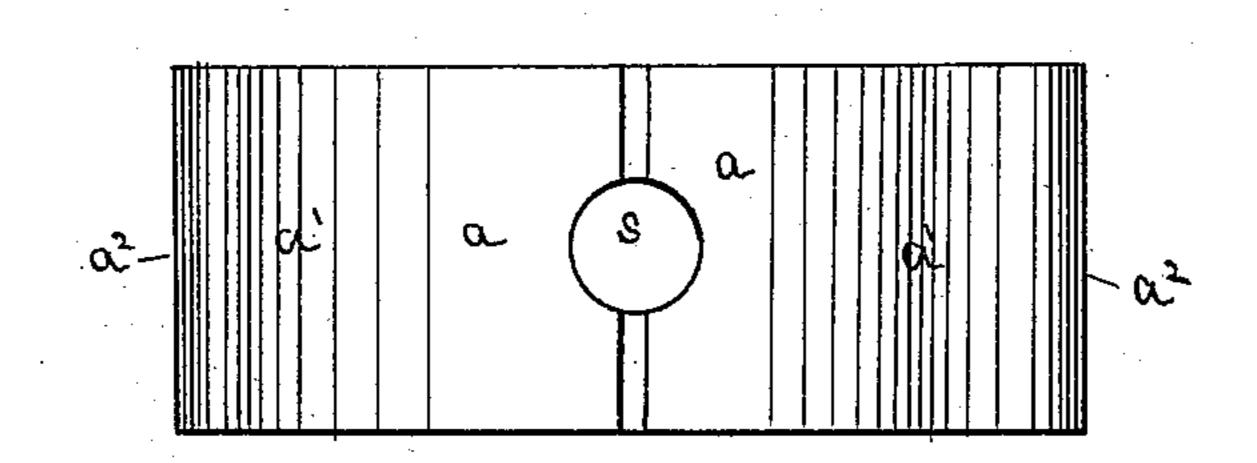


Fig. 2.



Harry 2. Beatly Muly Frimmel

James M. Calender James M. Calender by Bradford Howland Demount

## United States Patent Office.

Y.

·
.

JAMES M. CALENDER, OF MILTON, OHIO.

## NUT-LOCK. a

EFECIFICATION forming part of Letters Patent No. 336,892, dated March 2, 1886.

Application filed December 30, 1885. Serial No. 187,172. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. CALENDER, a citizen of the United States, residing at Milton, Mahoning county, Ohio, have invented a 5 new and useful Improvement in Nut-Locks, of which the following is a specification.

My invention consists of a metallic plate, preferably of steel, formed with a bolt-hole, and having its ends doubled or bent over to 10 come in contact with the under side of the nut, as hereinafter more particularly described.

In the drawings forming a part of this specification, Figure 1 represents a longitudinal section of the nut-lock, and Fig. 2 is a plan of 15 the same.

The nut-lock is a thin steel plate formed with a bolt-hole, s. and having its ends bent over, as shown, and partially surrounding the bolt b. The ends of the nut-lock, when 20 thus bent, are of a loop-like form, a2, having depressions a' opposite each other in the top and bottom. The upper and lower parts of the plate or nut-lock are divergent from depressions a' to the bolt-hole s. When nut n25 is screwed down on bolt, b, it forces down the

upper part, a, of the nut-lock until the upper

and lower depressions or parts, a', are in contact. By screwing the nut still farther down only the upper and lower parts, a a3, of the nut-lock between depressions a' are com- o pressed. The contact of the upper and lower depressed parts, a', prevents excessive bending of the loop-like ends  $a^2$ , and consequently untempered steel may be used in making the nut-lock.

•

I claim as my invention—

1. A nut-lock formed of a single metallic plate having the bolt hole s, and the ends of the plate doubled or bent over to bring their upper sides in contact with the under side of 40 the nut, substantially as described.

2. A nut-lock formed of a single metallic spring plate having the bolt-hole s, upper and lower depressions, a', opposite each other, and the upper and lower parts, a a3, divergent 45 from depressions a' to the bolt-hole, substantially as described.

JAMES M. CALENDER.

35

Witnesses: CHAS. I. TOD, JOHN WITHERSTAY.