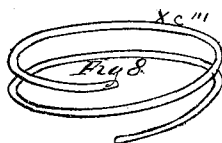
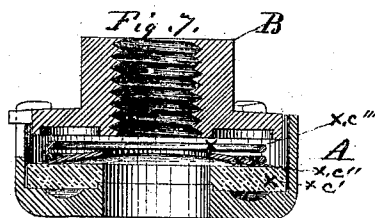
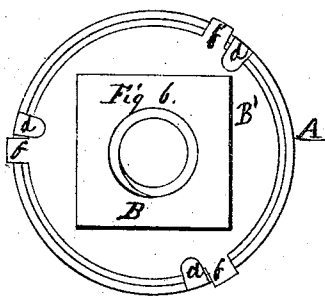
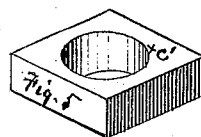
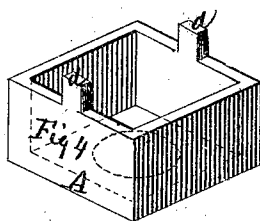
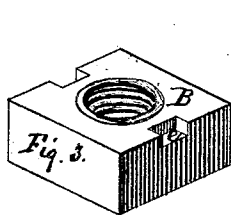
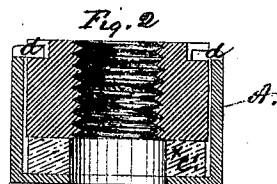
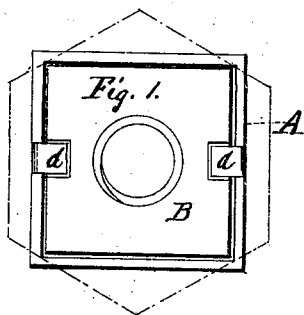


D. R. Pratt,

Spring Nut.

No. 99232.

Patented Jan. 25. 1870.



Witnesses:

*Wm. Blackford
Robert McCalvert*

Inventor:

Daniel R. Pratt.

by B. F. James.

his Atty.

United States Patent Office.

DANIEL R. PRATT, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 99,232, dated January 25, 1870.

IMPROVEMENT IN SPRING-NUT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DANIEL R. PRATT, of the city and county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in "Spring-Nuts;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

The nature of my invention consists in the construction of a metallic case, into which the nut is placed.

The case contains within it rubber, cup, spiral or other springs, which springs are placed within the case, and upon said springs is placed the nut, so that when the projecting ears upon the case are bent or pressed within the slots, formed upon the nuts on their outer side, the whole will form a "spring-nut" adapted to use in all positions where the tendency is for any strain to come upon the bolt or nut.

In the drawings—

Figures 1 and 6 represent top views of the nut, completed in all its parts, the first figure representing a square-shaped nut, and the dotted lines another form of the nut. Fig. 6 represents a round nut.

Figure 2 shows a section of the nut as taken through its centre vertically.

Figure 3 represents the nut before it is placed within the case.

Figure 4 represents the casing.

Figure 5, one kind of spring used within the case.

Figure 7 shows a vertical section through the centre of the spring-nut, containing within the case springs of various kinds used, and

Figure 8, a detached view of one of the springs.

The casing A is made of any strong metal, either square, round, octagonal, or other convenient shape,

and upon said casing lips, *d*, are formed, two or more, so that when the nut B is placed within the case and upon the spring or springs, these ears *d* may be turned down into the slots *e*, as at figs. 1, 2, 3, or upon the flange of the nut B', when the nut is made circular, and in the form represented in fig. 6.

The springs used may be rubber, spiral, or coiled, cup, or plate, or other kinds that are susceptible of being confined within the casing referred to, so that a space is left in the springs within and through which the bolt is passed.

These springs in position are represented in fig. 7, as *x c' x c' x c''*.

In using this nut, and when the same is turned, there can be no abrasion or injury to the spring or springs within the case, as the ears of the case come in contact with the nut itself, forming a rigid connection therewith.

In fig. 6, *fff* represent projections formed upon the nut itself, which fit into slots cut upon the casing A, being the reverse of that shown in fig. 1.

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

1. A spring-nut, constructed and arranged in the manner and for the purpose herein described.

2. The combination of the casing A, nut B, and the springs *x c'*, *x c'*, and *x c''*, in the manner and for the purpose herein described.

3. The combination of a nut and outer casing with a spring or springs to form a spring-nut, in the manner and for the purpose herein described.

DANIEL R. PRATT.

Witnesses:

B. F. JAMES,

EDM. F. BROWN.