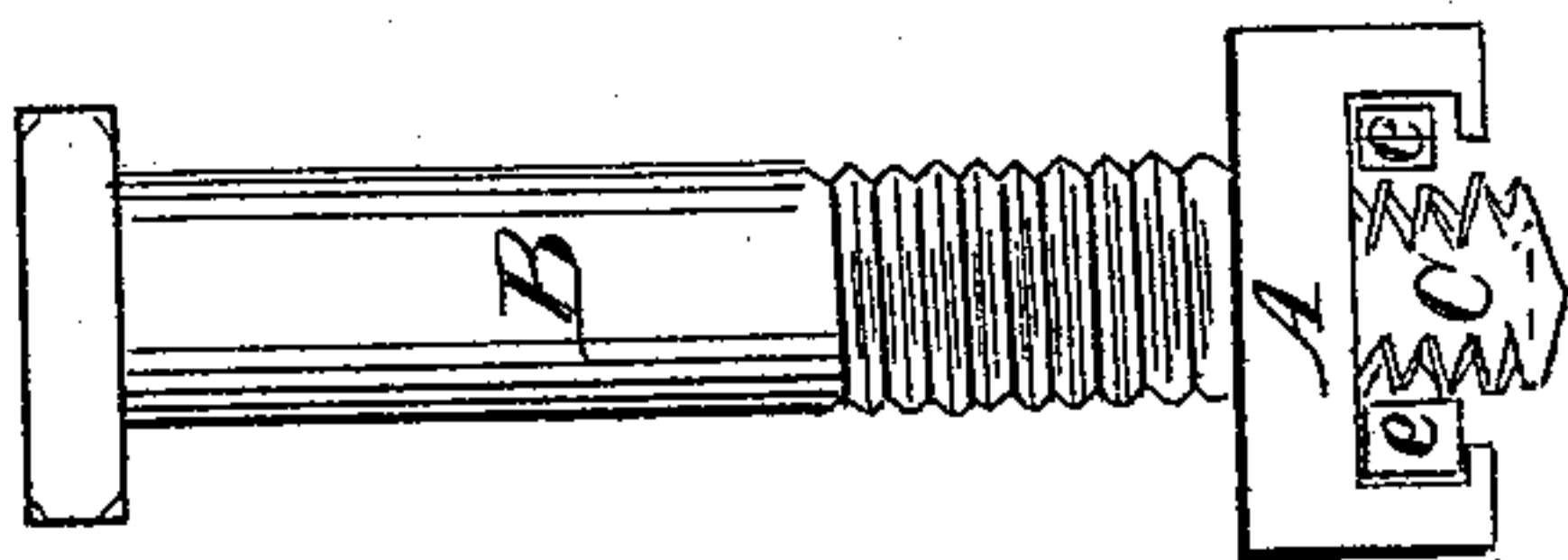


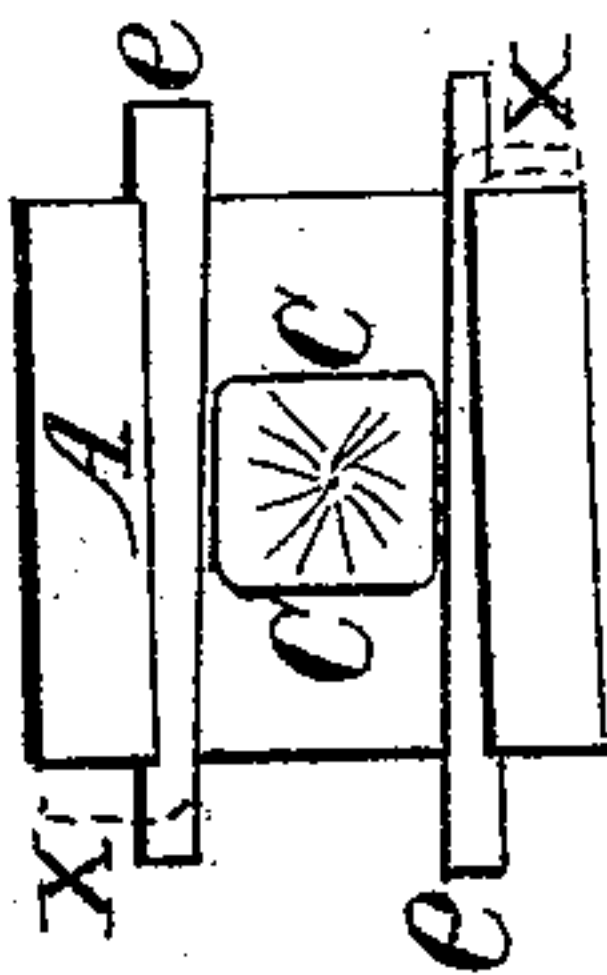
*T. Hagan,  
Lock Nut.*

*No. 92,721.*

*Patented July 20, 1869.*



*fig. 1.*



*fig. 2.*

*Witnesses David S. Stewart  
Jas. D. Patten } Thos. Hagan by his attorney J. Johnston*

# United States Patent Office.

THOMAS HAGAN, OF ROCHESTER, PENNSYLVANIA.

*Letters Patent No. 92,721, dated July 20, 1869.*

## IMPROVEMENT IN LOCK-NUTS.

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, THOMAS HAGAN, of Rochester, in the county of Beaver, and State of Pennsylvania, have invented a new and useful Improvement in Lock-Nut for Bolts; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in providing the screw-nut of a bolt with a recess or recesses for a key or keys, so arranged that a portion of the key or keys will extend over the opening of the screw-nut, so that by cutting away a portion of the thread of the bolt, the nut may be permanently secured on the bolt.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification—

Figure 1 is a side elevation of my improvement.

Figure 2 is an end view or plan of the same.

In the drawings—

A represents the lock-nut, which is provided with recesses for the keys *e*, as shown in fig. 1.

B represents the bolt, with a portion of the screw-

thread cut away, so as to form a flat surface on four sides of the bolt, as shown at C, in figs. 1 and 2.

The nut is placed on the bolt in the usual manner. The keys *e* are then driven into their recesses or chambers in the nut, and then bent over, as indicated at *x* in fig. 2.

By thus keying the nut on the bolt, it will be impossible for the nut to turn until the keys are removed.

I wish it clearly understood that I do not claim broadly the use of a key or keys, when used in combination with a screw-nut and bolt.

Having thus described the nature, construction, and operation of my improvement,

What I claim as of my invention, is—

A screw-nut, provided with recesses or chambers for keys, said recesses or chambers and keys being so arranged, with relation to the openings of the nut, as to secure it on the bolt through the medium of keys, as herein described.

THOMAS HAGAN.

Witnesses:

DAVID STEWART,

JAMES J. JOHNSTON.