

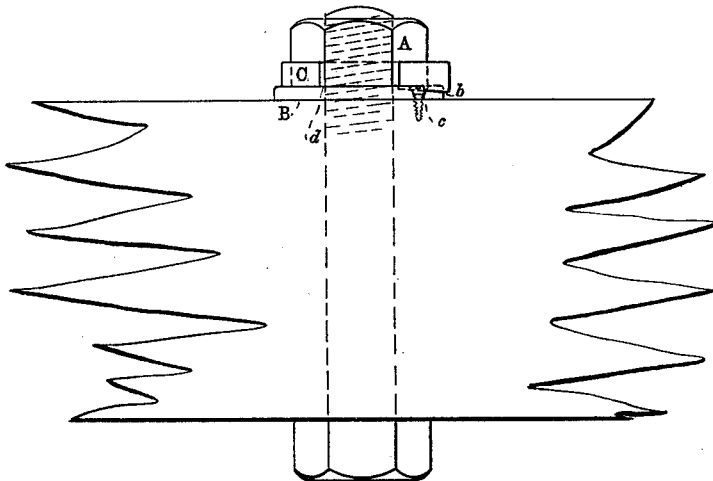
H. LIVINGSTON.

NUT-LOCK.

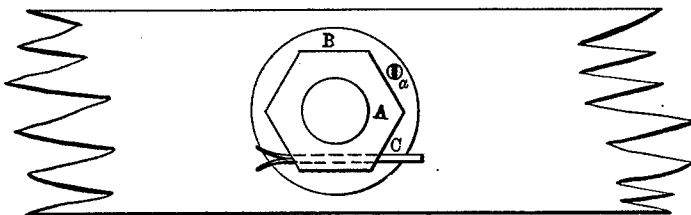
No. 175,122.

Patented March 21, 1876.

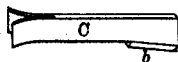
— FIG. I —



— FIG. II —



— FIG. III —



— WITNESSES —

Wm. H. Tinsford
W. H. Wharton

— INVENTOR —

Herbert Livingston
By G. H. M. J. Howard
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UNITED STATES PATENT OFFICE.

HERBERT LIVINGSTON, OF HANNIBAL, MISSOURI.

IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. **175,122**, dated March 21, 1876; application filed August 24, 1875.

To all whom it may concern:

Be it known that I, HERBERT LIVINGSTON, of Hannibal, county of Marion, State of Missouri, have invented certain Improvements in Lock-Nuts, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention relates specially to the key and the manner of its attachment to the nut and washer, which are, by means of the key, secured together, as hereinafter described.

In the description of my invention which follows, due reference must be had to the accompanying drawing, forming a part of this specification, and in which—

Figure 1 is a side view of a bolt, nut, and washer embodying my invention; Fig. 2, a plan of the same, and Fig. 3 a perspective view of the key.

Similar letters of reference indicate similar parts of the invention in all the figures.

A is the nut, and B the washer, secured from turning by means of a screw, *a*, which passes through it into the object clamped between the head of the bolt and the nut and washer. C is the key, one end of which is furnished with an inclined projection, *b*, having a sharpened or V-shaped lower edge. The inclined V-shaped edge rests within a notch, *c*, of corresponding shape and inclination in the washer. The key C passes through a slot,

d, in the nut, and is split at the entering end and spread, in order to prevent its being withdrawn after the nut is screwed to its place, and the desired tension placed upon the bolt.

The object of the inclined edge is to give firmness of bearing of the key in the notch, to compensate for the lack of surface of the key in contact with the washer, which this construction necessarily involves, the bifurcated end of the key having to be entirely above the upper surface of the washer to admit of its being spread, as described. The notch is cut in the washer by means of a chisel or file, after its position is ascertained; consequently no peculiar description of washer is necessary.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In combination with the slotted nut A and notched washer B, the key C, having the entering end bifurcated, and the driving end provided with the inclined and sharpened projection *b*, adapted to rest within the notch *c* in the washer aforesaid, substantially as set forth.

In testimony whereof I have hereunto subscribed my name this 12th day of August, in the year of our Lord 1875.

HERBERT LIVINGSTON.

Witnesses:

GEO. G. GOULD,
FRANK T. HENDAY.