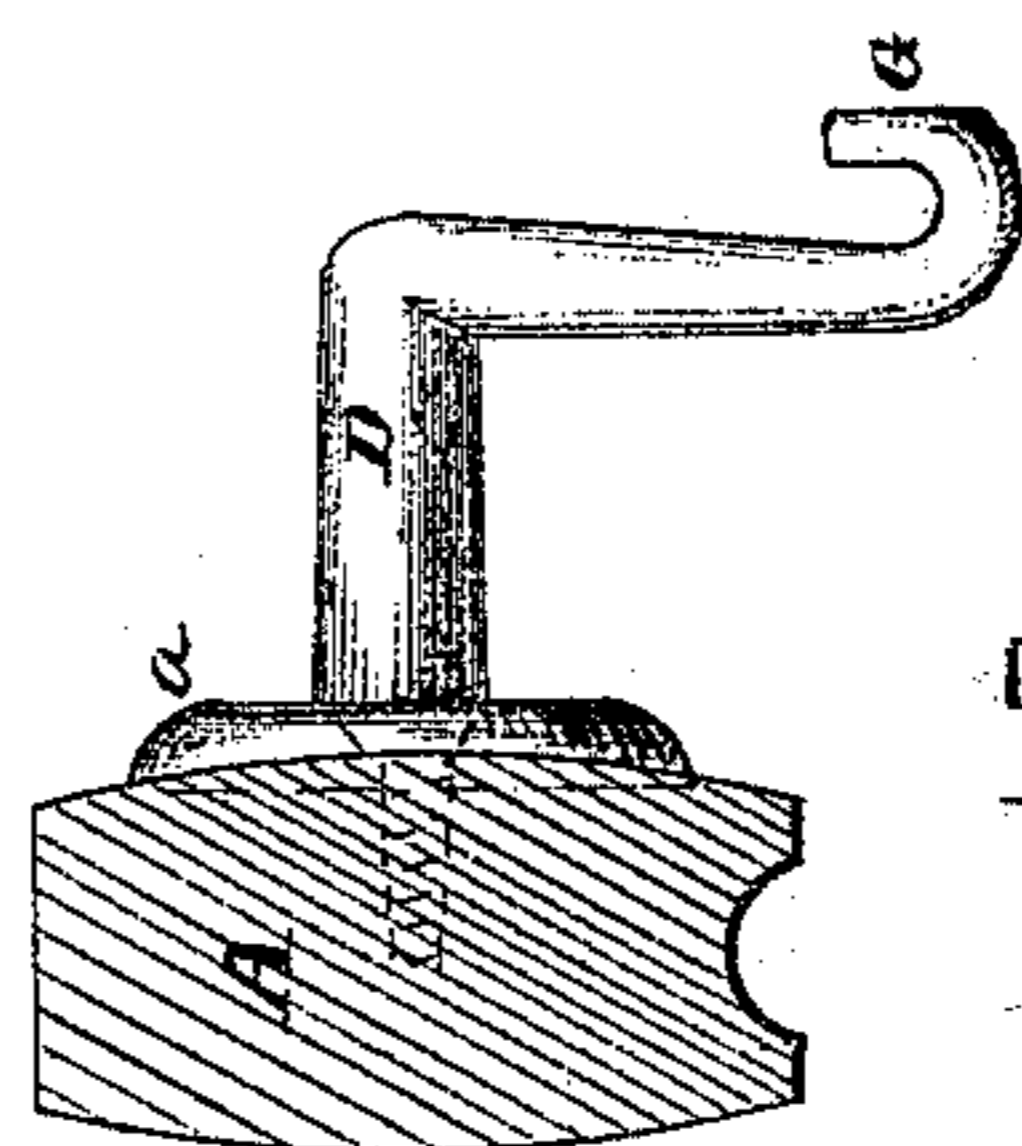
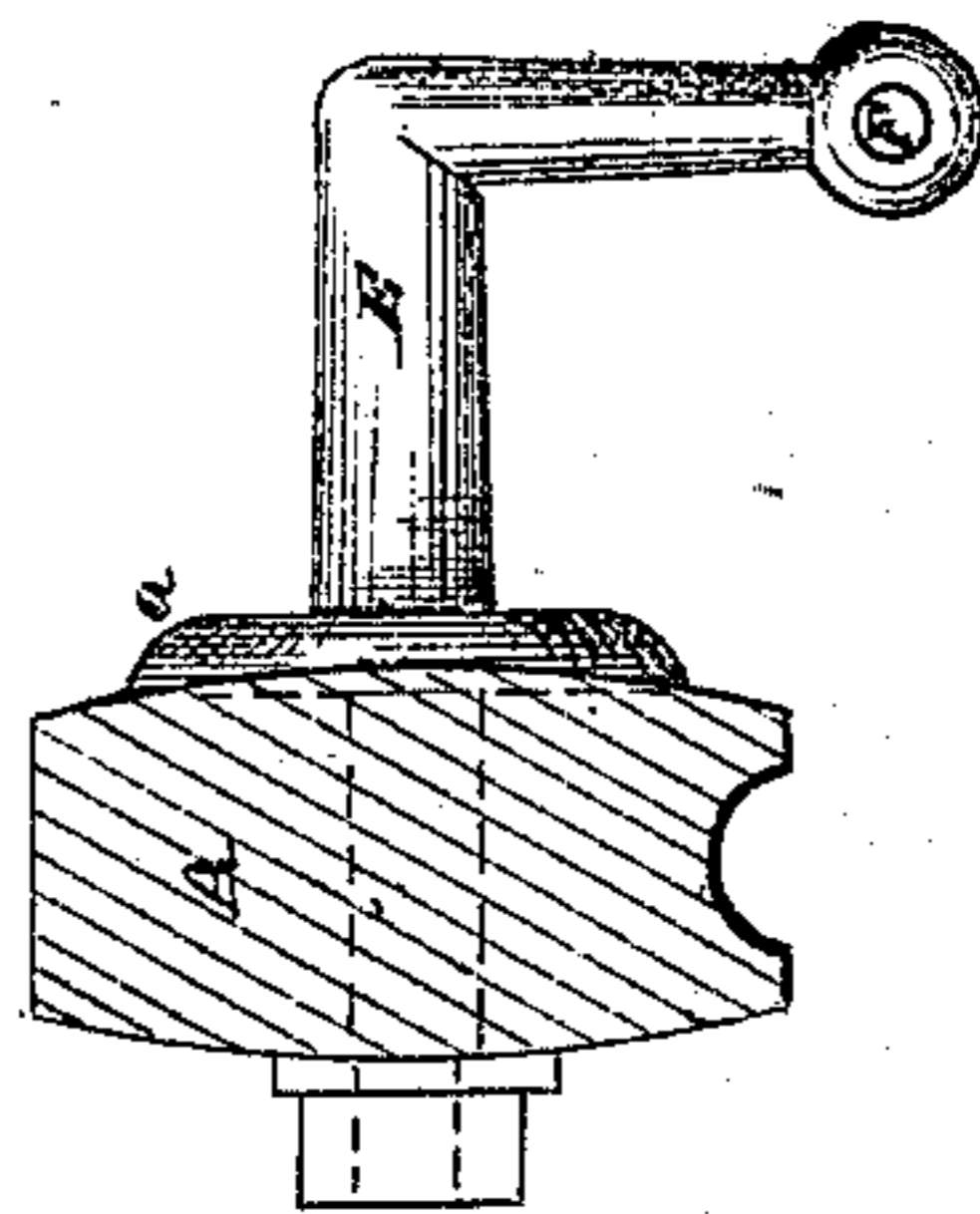
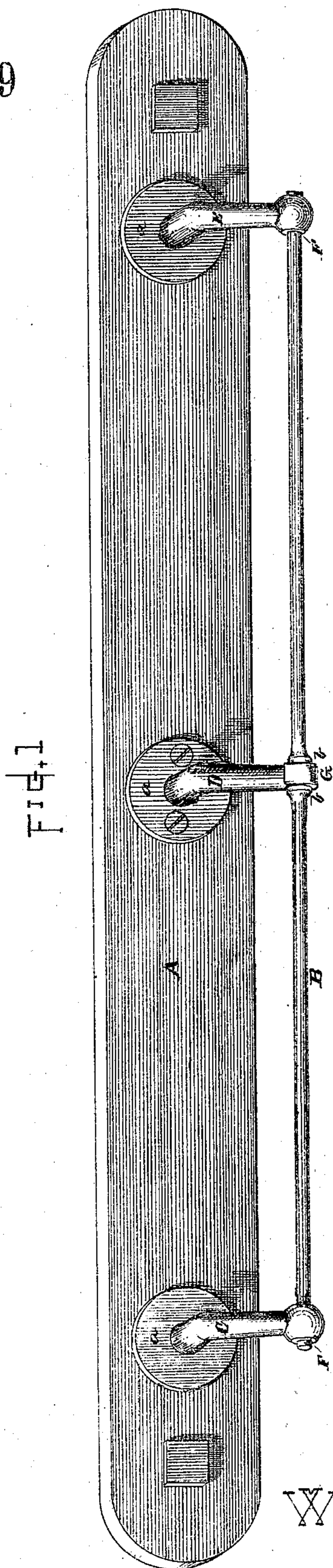


# John Rycroft and Lucius A. White's Imp<sup>d</sup> Shuttle Guard

116499

PATENTED JUN 27 1871



Inventors.

*John Rycroft*  
*Lucius A. White*

Witnesses

*Thos. H. Dodge*  
*Chas. H. Burleigh*

# UNITED STATES PATENT OFFICE.

JOHN RYCROFT AND LUCIUS A. WHITE, OF MILLBURY, MASSACHUSETTS.

## IMPROVEMENT IN SHUTTLE-GUARDS FOR LOOMS.

Specification forming part of Letters Patent No. 116,499, dated June 27, 1871.

*To all whom it may concern:*

Be it known that we, JOHN RYCROFT and LUCIUS A. WHITE, both of Millbury, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Shuttle-Guards for Looms; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, and in which—

Figure 1 represents a perspective view of our improved shuttle-guard. Fig. 2 represents a side view of one of the end supports. Fig. 3 represents a side view of the central support, and Fig. 4 represents the central flanged portion of the guard-bar.

To enable those skilled in the art to which our invention belongs to make and use the same, we will proceed to describe it more in detail.

The object of our invention is to produce a guard for preventing the shuttles from being thrown from the loom, which shall be simple and durable in its construction, and which can be quickly and conveniently taken off and replaced upon the loom, thereby allowing the operator ready and convenient access to the warp-threads and reed below and back of guard. The nature of our invention consists in the combination, with the hand-rail, of a peculiarly-constructed shuttle-guard, as hereinafter described.

In the drawing, the parts marked A represent the hand-rail upon the upper part of the lay of the loom. B indicates the guard-bar, which is supported by three standards, C D E, projecting from the front of the hand-rail A, as shown. The standards C D E are provided with broad base-flanges *a* that rest upon the face of the hand-rail A, to which latter they are rigidly secured either by means of screws or by long shanks which pass through the rail, and are furnished with nuts at the back side thereof. The front ends of the standards turn downward at a right angle, and those at the ends C and E are furnished with eyes F to receive the extremities

of the guard-bar B, while the center standard D is furnished with a hook or loop, G, at its lower end, in which the central portion of the guard-bar B is held. The bar B is provided with two circular flanges, *bb*, which set up against the sides of the hook G when said bar is in proper position, as shown in Fig. 1, and thereby retain it securely in place. The guard-bar B can be readily removed from the standards by raising its central portion from the hook G, and then sliding it to the right and left so as to free its ends from the eyes F of the end standards C E, and it can be as readily placed in position again by reversing the operation. The standards C D E may be made in a somewhat different form from that shown in the drawing, provided they support the guard-bar B in the same relative position as regards the hand-rail A, and are provided with the eyes F and hook G for retaining said bar in the manner indicated.

Those skilled in the art to which our invention belongs will readily perceive the advantages which our improved guard possesses over the guards as heretofore constructed, wherein the bar is held in place by means of screws and nuts or other permanent attachments.

Having described our improvements in shuttle-guards for looms, what we claim therein as new and of our invention, and desire to secure by Letters Patent, is—

1. The combination, with the central portion of the guard-rod B, provided with flanges *b b*, of a hooked or looped central support, D G, substantially as set forth.

2. The combination, with the flanged guard-bar B, of the hooked central-supporting standard D G, and end-supporting standards C and E provided with eyes F, substantially as and for the purposes set forth.

JOHN RYCROFT.  
LUCIUS A. WHITE.

Witnesses:

THOS. H. DODGE,  
CHAS. H. BURLEIGH.