

CYRUS A. HOOPER.

Improvement in Picker Staff Checks for Looms.
No. 120,068.

Patented Oct. 17, 1871.

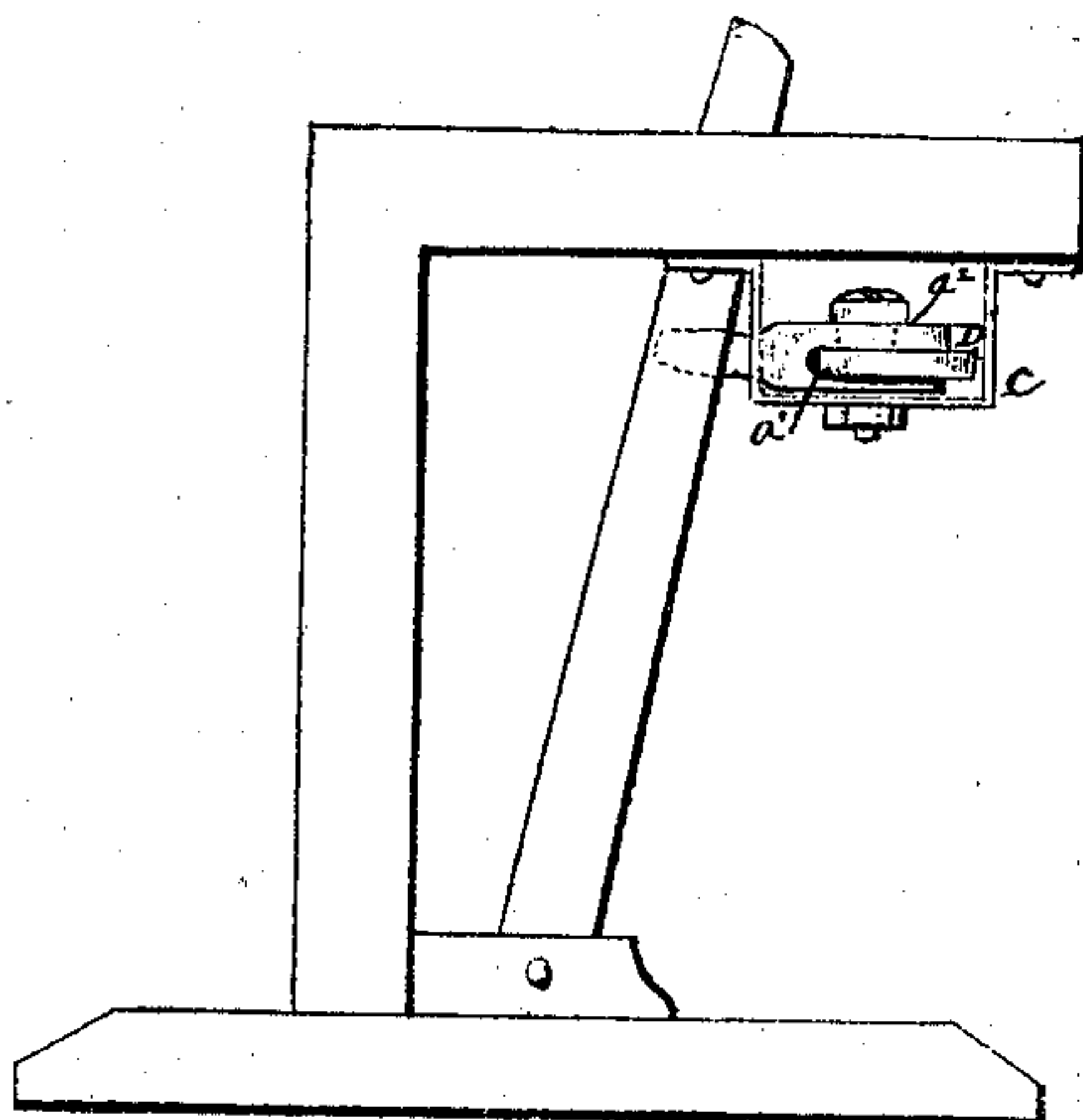


Fig. 1.

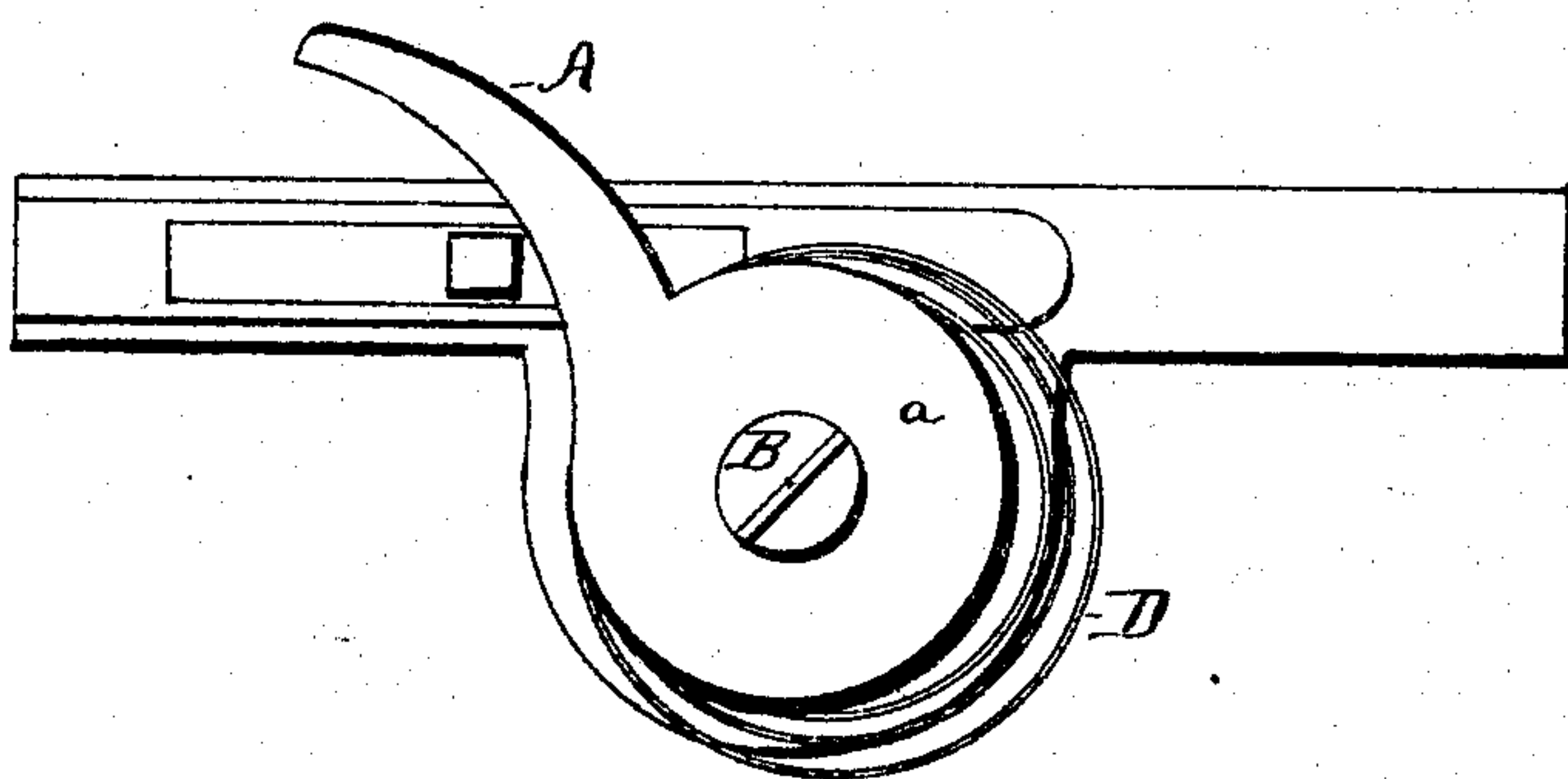


Fig. 2.

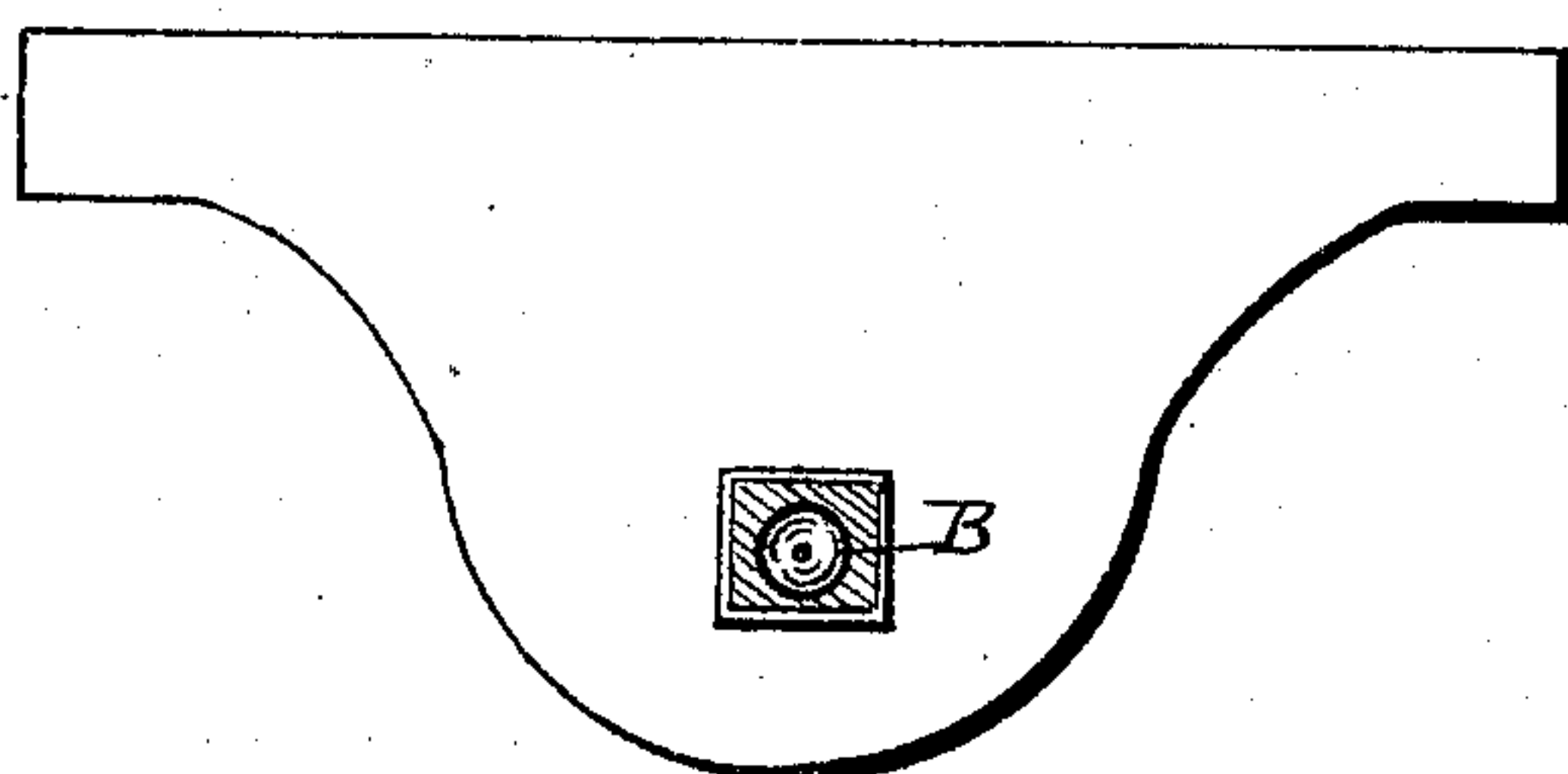


Fig. 3.

Witnesses :

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UNITED STATES PATENT OFFICE.

CYRUS AUGUSTUS HOOPER, OF LEWISTON, MAINE.

IMPROVEMENT IN PICKER-STAFF CHECKS FOR LOOMS.

Specification forming part of Letters Patent No. 120,068, dated October 17, 1871.

To all whom it may concern:

Be it known that I, CYRUS AUGUSTUS HOOPER, of Lewiston, in the county of Androscoggin and State of Maine, have invented a new and Improved Picker-Staff Arrester; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention has for its object the production of a simple and easily-adjustable device for easing and arresting the movement of the picker-staff when struck by the shuttle as the latter enters the shuttle-box, for the purpose of preventing the shuttle from bouncing, and thereby breaking or throwing off the cop of yarn; and consists in certain details of construction, which will be fully described hereinafter.

In the drawing, Figure 1 represents a side elevation of the picker-staff and the lay of the loom, with my device attached to the latter. Fig. 2 represents a plan view enlarged, and Fig. 3 a view of the device detached in a reversed position.

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

A represents a finger provided with an enlargement, a , at one end, having a horizontal slot, a^1 , and vertical orifice a^2 , as shown. B represents a bolt, which, when in place, rests in the vertical orifice a^2 of the finger A. By means of this bolt the finger is securely attached to the frame c , by means of which it is attached to the lay of the loom, as shown. D represents a coiled spring, one end of which is secured in any proper manner to the bolt B, and the other to the finger A, it being so arranged as to exert its force to throw the free end of the finger forward against the picker-staff. The lower end of the bolt, where

it passes through the orifice in the lower part of the frame is made square, and the orifice, being made of corresponding form, the bolt is thus securely held from turning, and permitting the spring to uncoil. By means of this construction the spring may be adjusted to press more or less strongly, as may be desired. If it is desired to increase the pressure the square end of the bolt should be withdrawn from the square socket and the bolt turned in the proper direction to coil the spring until the necessary pressure is obtained, when it should again be inserted in its place. The pressure may be diminished by permitting the spring to uncoil.

The operation is as follows: As the shuttle enters the box it strikes against the picker-staff, which is in its turn pressed back against the finger A, by which latter its movement is gradually arrested. By this means the shuttle is prevented from bouncing or rebounding, and, consequently, the liability to break or throw off the cop of yarn is avoided.

The device described is exceedingly simple in its construction, and yet efficient in operation.

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

1. The finger A, in combination with the bolt B, spring D, and the holding-frame c , as described.
2. The bolt B, provided with a square end, in combination with frame c provided with a square socket, and the finger A and spring D, as described.

This specification signed and witnessed this 29th day of August, 1871.

CYRUS AUGUSTUS HOOPER.

Witnesses:

JOHN SMITH,
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