

W. H. BUKER.
SEWING MACHINE.

No. 110,735.

Patented Jan. 3, 1871.

Fig. 1

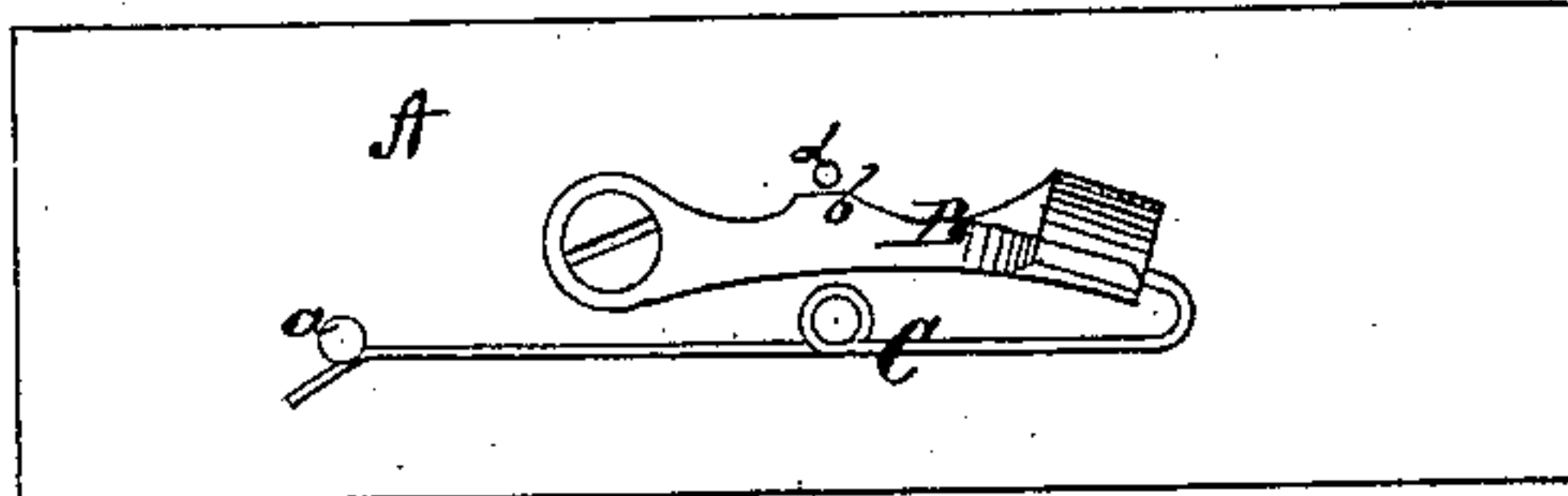
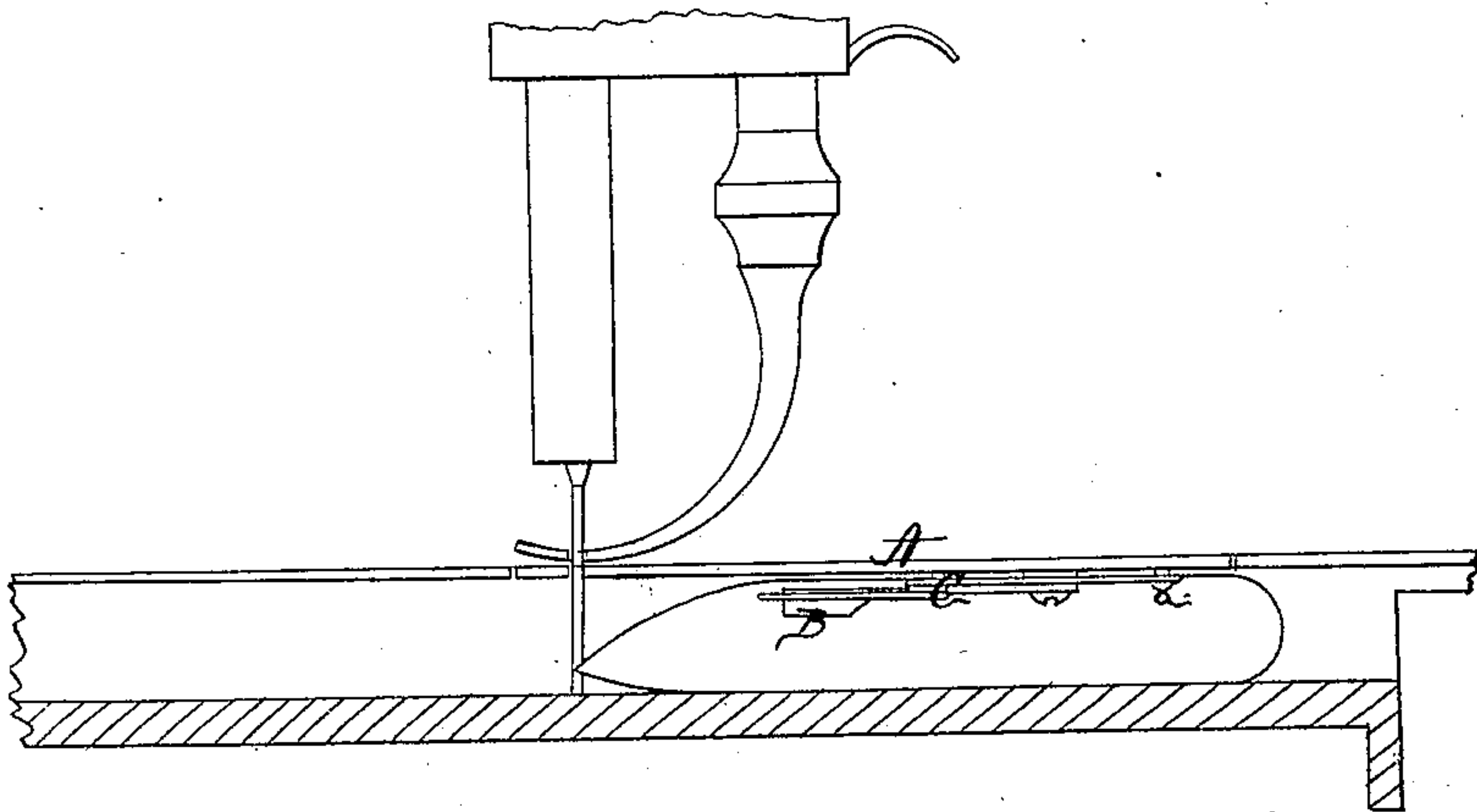


Fig. 2



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM H. BUKER, OF JOHNSTOWN, NEW YORK.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **110,735**, dated January 3, 1871.

To all whom it may concern:

Be it known that I, WILLIAM H. BUKER, of Johnstown, in the county of Fulton, and in the State of New York, have invented certain new and useful Improvements in Attachments for Sewing-Machines; 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, making a part of this specification.

In the operation of all shuttle sewing-machines it is a well-known fact that when the machine is in constant use the shuttle becomes worn out and unfit for use in a very short time, caused by the shuttle wearing off on its under side, where it comes in contact with the shuttle raceway or groove. Being worn off on its under side, it causes the shuttle to rock away from the loop of thread thrown out by the needle, whereby stitches are skipped and imperfect work made. It is therefore necessary, before the machine will work well, that a new shuttle should be put in the machine.

To avoid this trouble and constant expense is the object of my invention; and it consists in the construction and arrangement of a guide or regulator, as hereinafter described, and placed so as to be always close to the shuttle, and whereby said shuttle is always securely held in its proper relative position, thereby avoiding any skipping of stitches, and by this arrangement the shuttle may be used until it is clear worn through, the guide holding it in its proper position at all times, no matter how much worn the shuttle may be.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and arrangement, referring to the annexed drawings, in which—

Figure 1 is a view of the under side of the sliding plate above the shuttle, to which plate my device is attached. Fig. 2 is a transverse vertical section of the sewing-machine bed through the shuttle-race, showing my device in position to operate upon the shuttle.

A represents the sliding plate, which is generally inserted in the bed-plate of a sewing-machine to cover the shuttle-race.

On the under side of the plate A is pivoted an arm, B, constructed as shown in Fig. 1, its outer or loose end being beveled or concaved,

so as to conform to the shape of the shuttle at the point where said end will come in contact with it.

To the outer end of the arm B, which I call a "guide" or "regulator," is attached a wire spring, C, which runs along the back of the guide and beyond the point where the same is pivoted to the sliding plate. This end of the spring C is loose and bears against a stud, *a*, on the plate A, whereby the loose end of the guide is pressed forward against the shuttle. By the use of this regulator or guide, no matter how much the shuttle may be worn on the under side, it will always be held in its place and do good and perfect work until the shuttle is completely worn through.

At or near the center of the front edge of the guide B is a projection, *b*, and opposite the same, on the plate A, is a stud, *d*, as shown, said stud preventing the guide from being thrown over too far when the shuttle is at either end of the race. If the guide should be thrown over too far, the shuttle would catch on the same and could not pass by. The stud or pin *d* prevents this occurrence. If the shuttle should become so much worn that the pin *d* would prevent the guide or regulator from operating, the projection *b* may be readily filed off, so as to allow the guide to move closer in toward the shuttle.

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

1. The combination of the shuttle-covering plate with the guide-regulator and its spring, arranged and operating substantially as described.

2. The guide or regulator B, constructed as shown and described, and provided with the spring C, substantially as and for the purposes herein set forth.

3. The combination of the plate A, regulator B, with projection *b*, the stud or pin *d*, and spring C, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of November, 1870.

WILLIAM H. BUKER.

Witnesses:

C. L. EVERT,
A. N. MARR.