

No. 630,263.

Patented Aug. 1, 1899.

J. B. NEWELL.
SHUTTLE GUARD FOR LOOMS.

(Application filed Apr. 13, 1899.)

(No Model.)

Fig. 1.

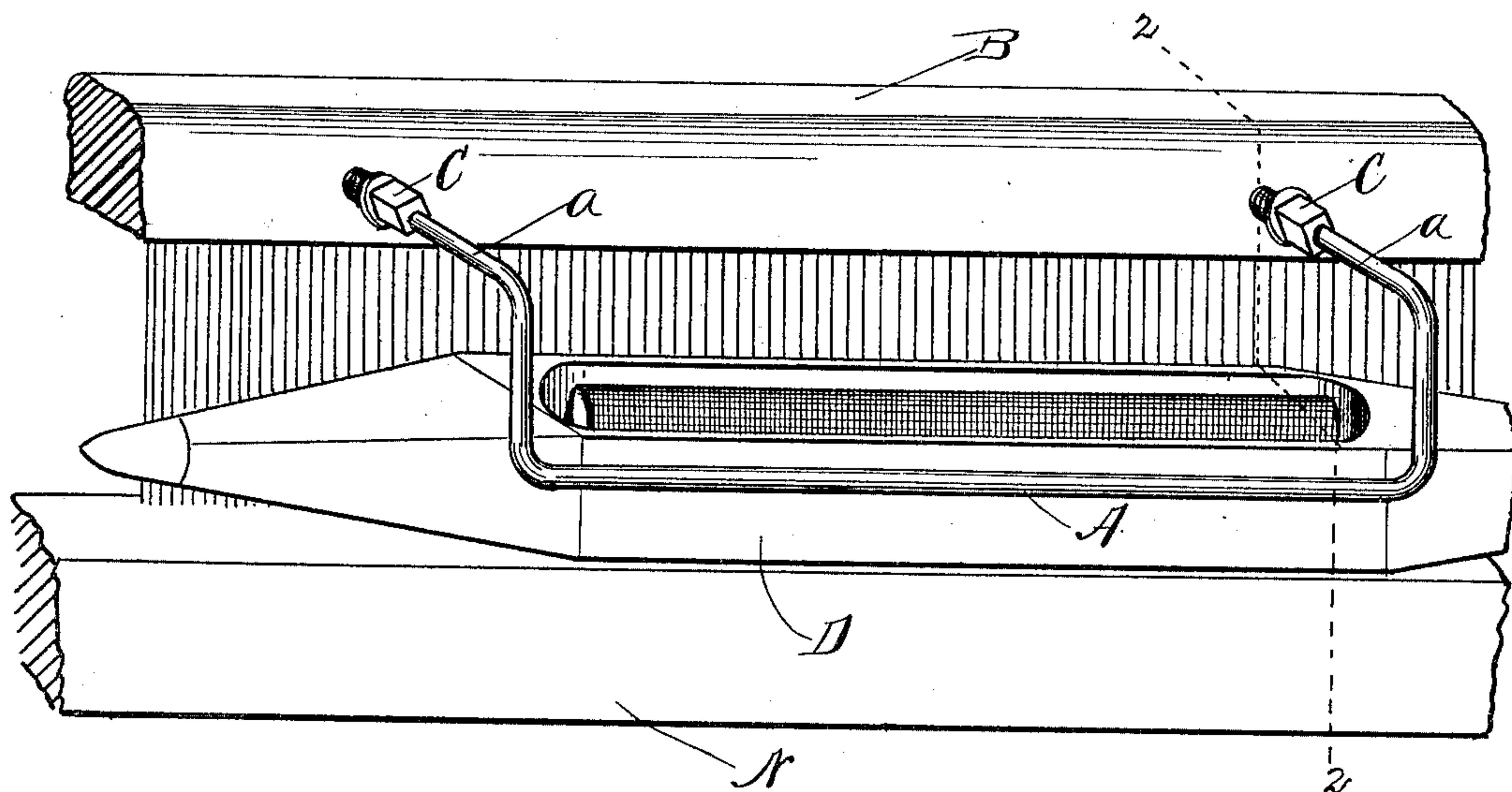


Fig. 2.

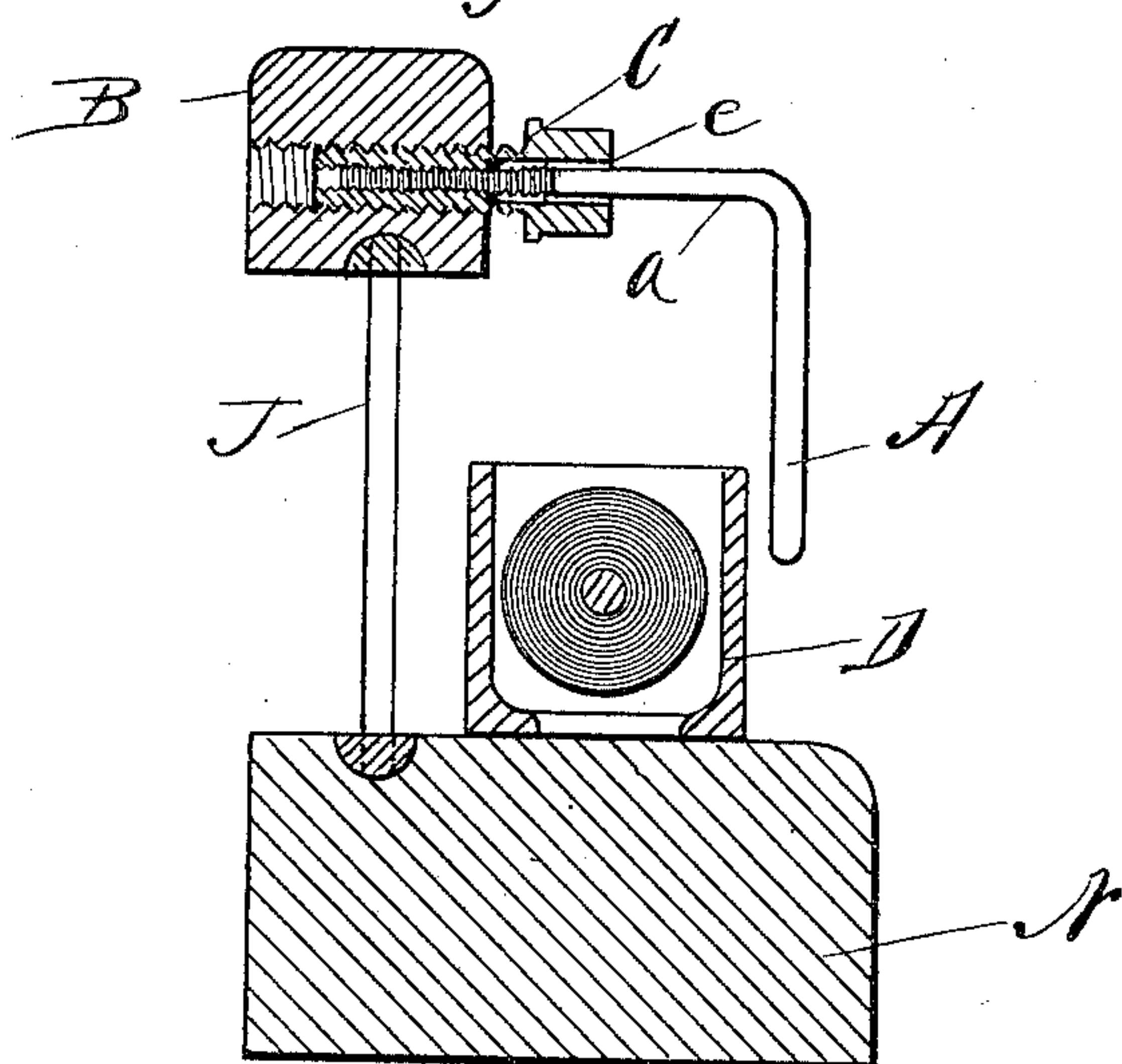
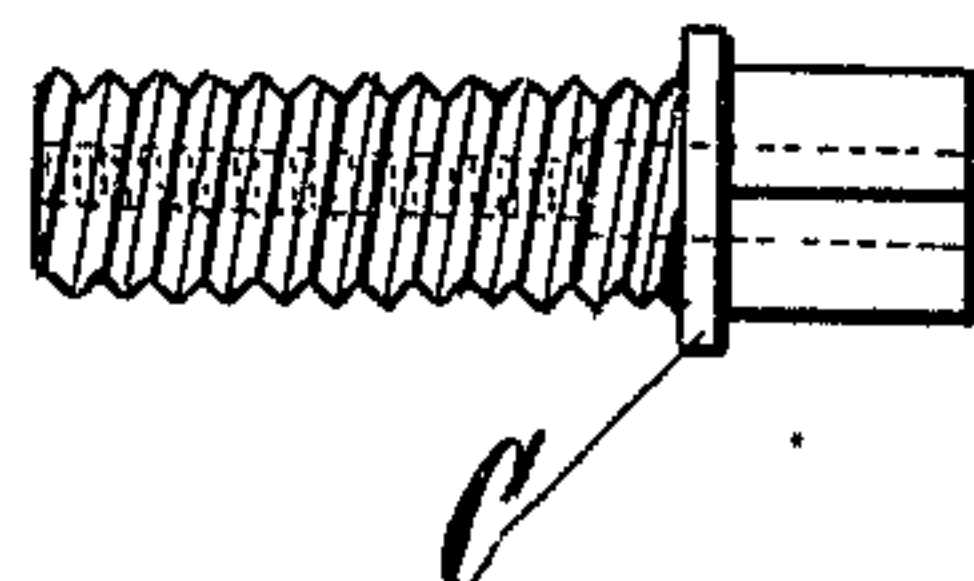


Fig. 3.



Witnesses.

John Smith
E. B. Reed.

Inventor.

Joshua B. Newell.

By Arnold & Barlow
Attorneys

UNITED STATES PATENT OFFICE.

JOSHUA B. NEWELL, OF GEORGIAVILLE, RHODE ISLAND.

SHUTTLE-GUARD FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 630,263, dated August 1, 1899.

Application filed April 13, 1899. Serial No. 712,865. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA B. NEWELL, of Georgiaville, in the county of Providence and State of Rhode Island, have invented certain
5 new and useful Improvements in Shuttle-Guards for Looms; 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
10 of reference marked thereon, which form a part of this specification.

This invention relates to the shuttle-guards attached to the lathe in looms to prevent the shuttle from being thrown from the raceway
15 from any cause when the loom is running fast.

The object is to make the attachment of the guard to the cap-bar of the lathe simple in construction and easy to adjust with accu-
20 racy to accommodate the shuttle.

Figure 1 is a perspective view of a portion of the raceway and the cap-bar with the guard attached and a shuttle passing through back of the guard. Fig. 2 shows a vertical cross-
25 section of the parts seen in Fig. 1, taken through one of the set-screws of that figure. Fig. 3 represents one of the hollow set-screws separate.

The construction of the guard is as follows:
30 N is the raceway of the loom-lathe. B is the cap-bar, and J the reed held between B and N.

The guard consists of a small bar A, having a straight horizontal length that may be
35 about one-half or so of the width of the cloth woven in the loom. At each end of this front length the bar is bent directly up a short distance and then back horizontally at right angles to the front length. The length of these
40 back extensions should be sufficient to reach through the cap-bar when the front bar is far enough from the cap-bar to allow the shuttle to pass between them, as in Fig. 1. A comparatively fine right-hand screw-thread—say
45 twenty to the inch—is made for a short distance from the end on each of the back extensions, and two set-screws C C are made with holes through their centers lengthwise, and screw-threads are made in the holes to fit
50 onto the ends of the back extensions *a*. The

set-screws C C have coarse left-hand screw-threads of about ten to the inch made on their outsides, and holes are made in the cap-bar B in from the front, agreeing in distance apart with the screw ends of the extension *a*, into
55 which holes the set-screws C are fitted to turn snugly by means of a wrench applied to the square heads of the set-screws. In the outer half of the holes in the set-screws C, at *e*, Fig. 2, the screw-thread is drilled out so that the
60 screw-threads on the ends of the guard never show outside of the set-screws. This is to prevent the guard from breaking off if the weaver inadvertently catches hold of the guard to move the lathe, as it is very liable to break
65 at the end of the set-screw if the thread extends to or outside of the set-screw.

The guard is attached to the cap-bar by first screwing the nuts on the ends *a* of the bar a turn or so and then screwing the set-
70 screws into the holes in the bar until the front bar of the guard is at the right distance from the reed for the shuttle to pass freely. This makes an inexpensive guard easily applied to any loom, that can be easily adjusted, and
75 that will not be changed by the incessant beating up of the lathe.

Having thus described my improvement, I claim as my invention and desire to secure
80 by Letters Patent—

A shuttle-guard for looms, consisting of a bar or rod having a straight front horizontal portion, and bent up at each end a short distance, and then bent off horizontally at right angles to said front portion, and having a com-
85 paratively fine screw-thread made on the ends, in combination with two hollow set-screws having a coarse screw-thread made on them, and screw-threads made in them fitting on the threaded ends of the rod, said
90 screw-threads being bored out of the head end of the set-screws, and a cap-bar having holes made in it to receive said set-screws, substantially as described.

In testimony whereof I have hereunto set
95 my hand this 12th day of April, A. D. 1899.

JOSHUA B. NEWELL.

In presence of—

BENJ. ARNOLD,
E. B. READ.