

(No Model.)

P. ASHBY.
LOOM SHUTTLE.

No. 599,051.

Patented Feb. 15, 1898.

Fig. 1.

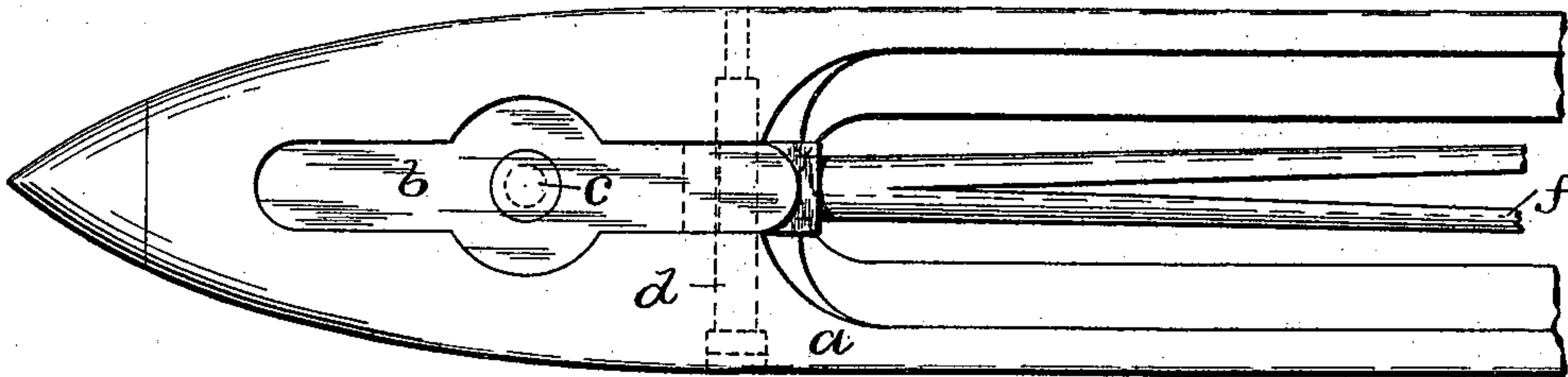


Fig. 2.

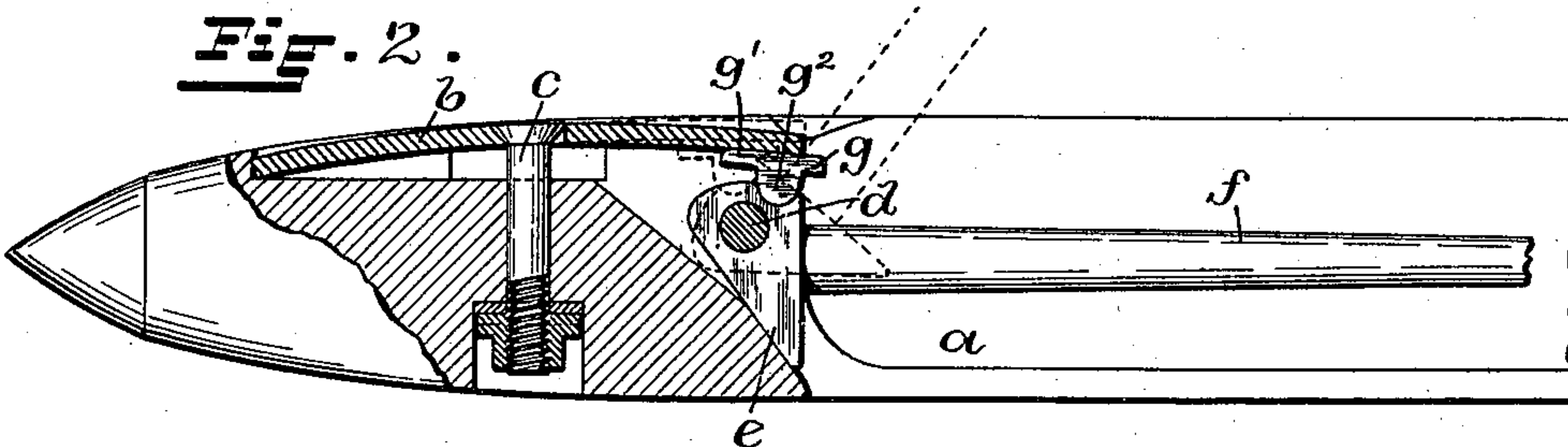


Fig. 3.

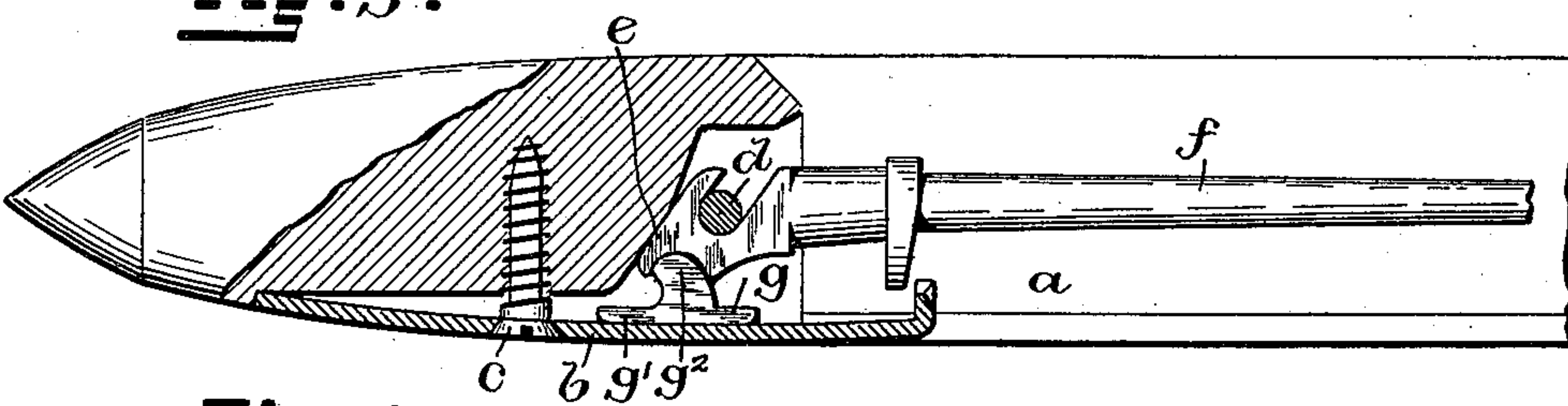
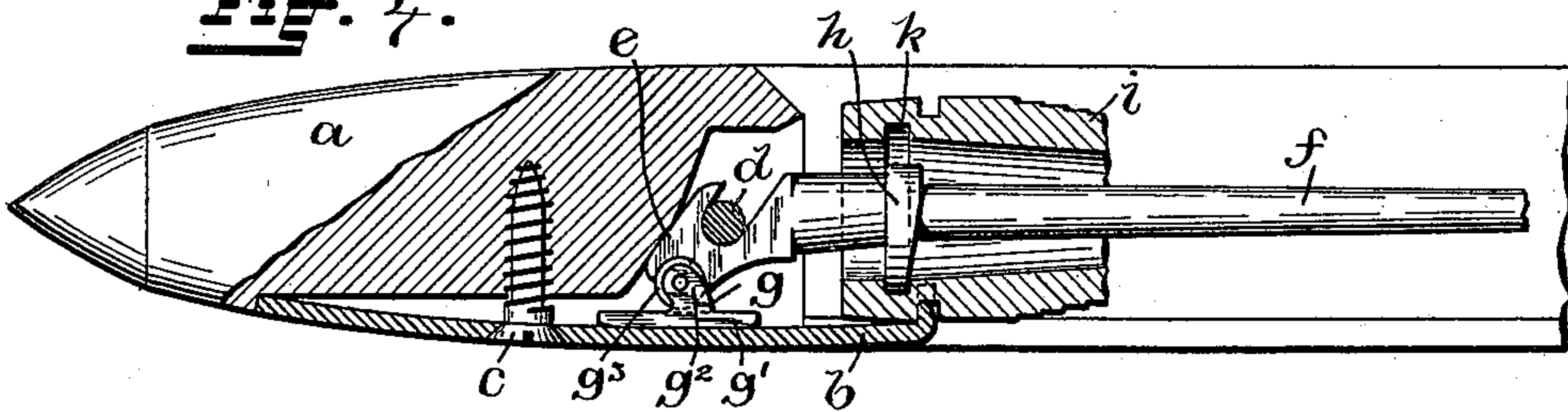


Fig. 4.



WITNESSES:

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LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 599,051, dated February 15, 1898.

Application filed December 23, 1896. Serial No. 616,760. (No model.)

To all whom it may concern:

Be it known that I, PETER ASHBY, of Valley Falls, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Loom-Shuttles; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

10 In the usual construction of loom-shuttles the skewer on which the cop or bobbin which carries the filling is supported is pivotally secured at one end in the shuttle, and this end is provided with a heel-piece, one part of which bears on a spring and another part on a part of the shuttle, so that when the skewer is swung with its free end out of the shuttle to remove the cop or bobbin the part of the heel bearing on the spring grinds and wears 20 the metal of the spring, making, in time, a groove in the spring and causing the spring to break.

One object of this invention is to reduce the wear on the spring; and another object 25 of my invention is to secure a better hold on the bobbin and prevent longitudinal movement of the bobbin on the skewer, for in throwing the shuttle in a power-loom, when the bobbin is held in place by the end of the spring bearing on the bobbin, the ends are liable to split off and allow the bobbin to move on the skewer. 30

The invention consists in providing a sliding member between the heel of the skewer 35 and the spring to lessen the wear on the spring and in providing the skewer with a bearing for the inner portion of the bobbin, as will be more fully set forth hereinafter.

Figure 1 is a top view of part of a loom-shuttle provided with a skewer, adapted for the use of a quill or cop of filling-yarn. Fig. 2 is a longitudinal sectional view of the shuttle. Fig. 3 is a sectional view of a loom-shuttle adapted to use a filling-bobbin. Fig. 4 is 45 a sectional view of a loom-shuttle, showing a modified form of a spring-bearing.

Similar letters of reference indicate corresponding parts in all the figures.

In the drawings, *a* indicates the body of the shuttle; *b*, the spring; *c*, the screw by 50 which the spring is secured and its tension adjusted; *d*, the pivot secured in the shuttle-body; *e*, the heel of the skewer *f*. The bolster *g* is interposed between the heel *e* of the skewer and the spring *b*. It consists of the 55 base *g'*, which has a long flat bearing on the spring, and the bolster *g''*, which has a convex bearing in the concaved heel *e* of the skewer.

In the modification shown in Fig. 4 the bolster *g''* is provided with the roller *g'''*. 60

When the skewer is raised at its free end to take off or renew a quill, cop, or bobbin, the bolster slides on the spring and by reason of its extended surface reduces the wear on the spring formerly caused by the angular edge 65 of the heel, and thereby increases the durability of the spring.

To hold the bobbin more securely, I provide the skewer *f* with the projection *h* on the side coacting with the spring. This projection 70 forms a short segment of a circle. It may be made so as to bear on the inside of the bobbin *i* or to enter a groove *k* formed on the inside of the bobbin. When the bobbin is inserted and in place, it is firmly held between 75 the projection *h* and the spring *b*.

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

In a loom-shuttle, the combination with the 80 shuttle-body, the skewer, the heel of the skewer having a concave transverse groove, the spring secured at one end to the shuttle-body, and a bolster provided with a convex head which enters into the groove in the heel 85 of the skewer, and an extended base bearing on and sliding on the spring, as described.

In witness whereof I have hereunto set my hand.

PETER ASHBY.

Witnesses:

JOSEPH A. MILLER,

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