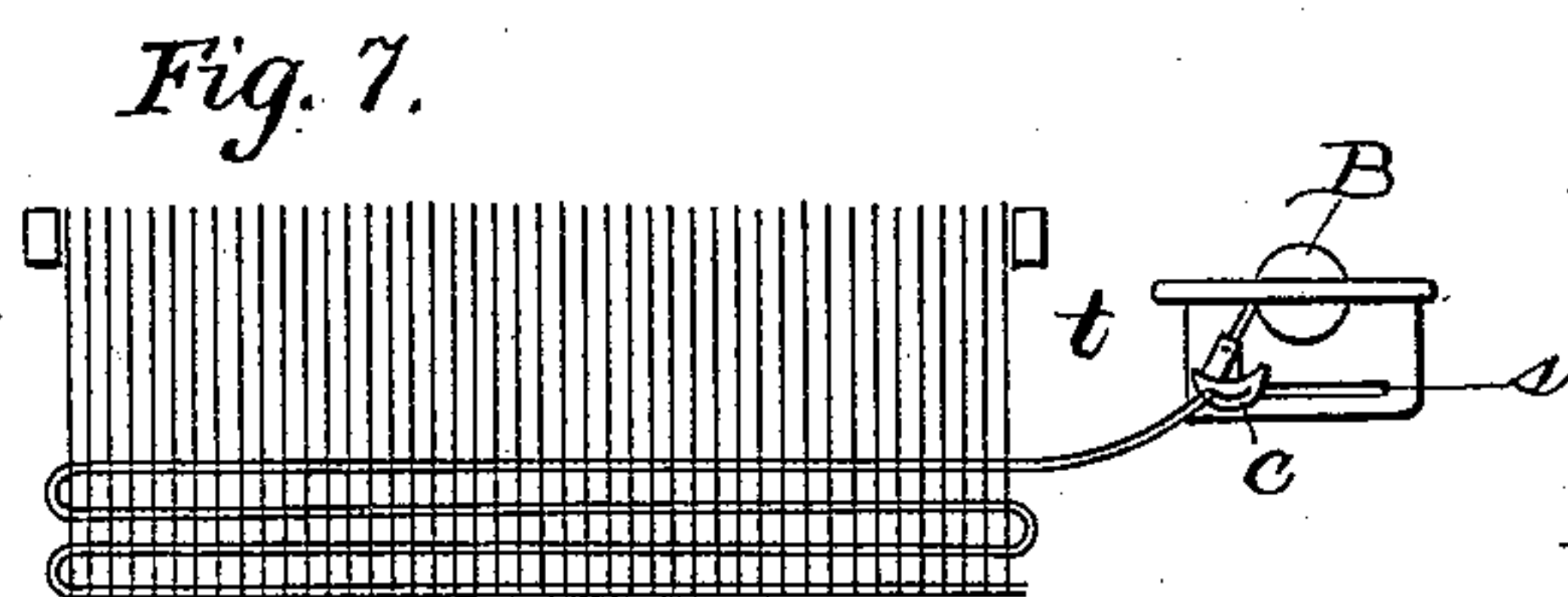
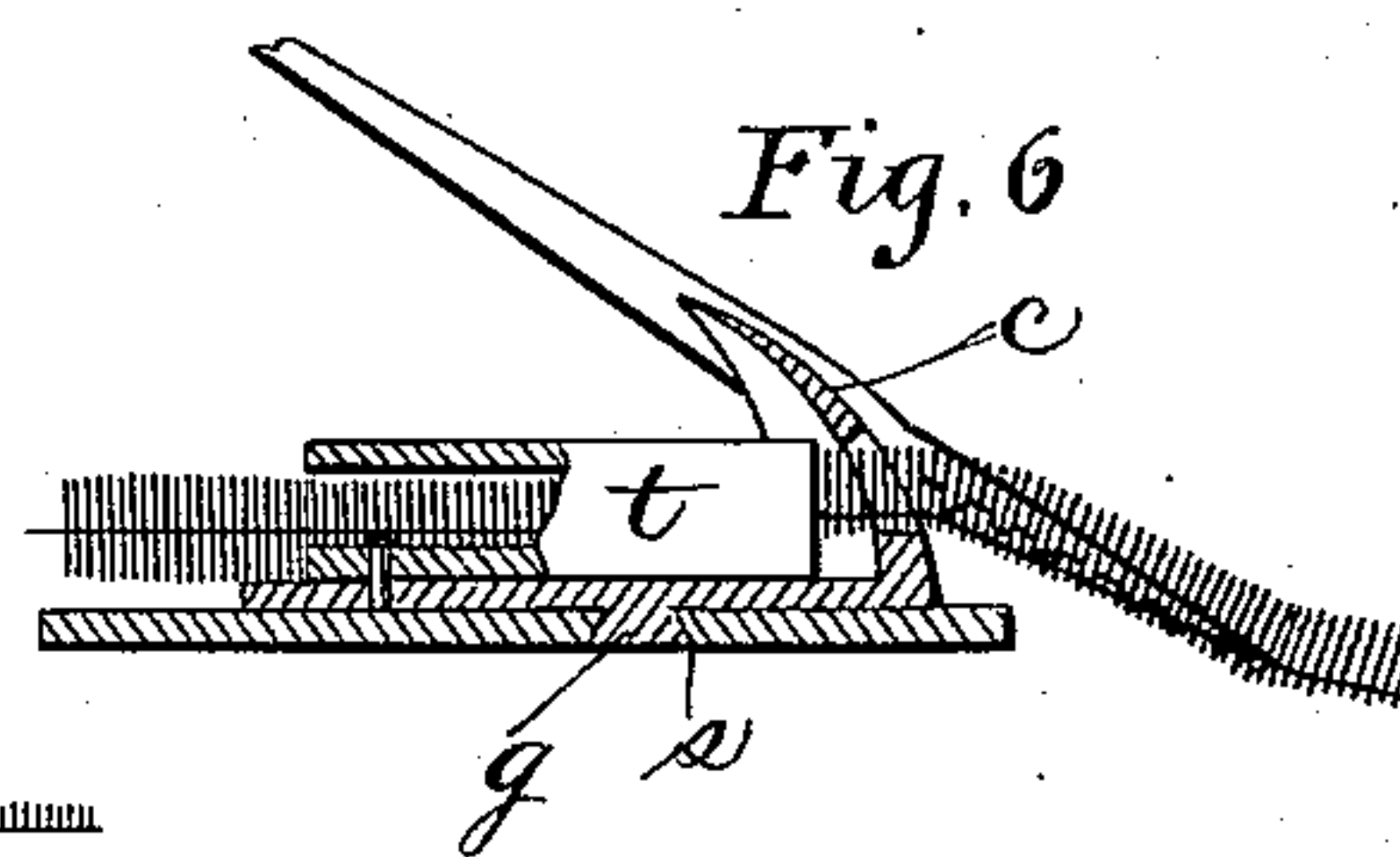
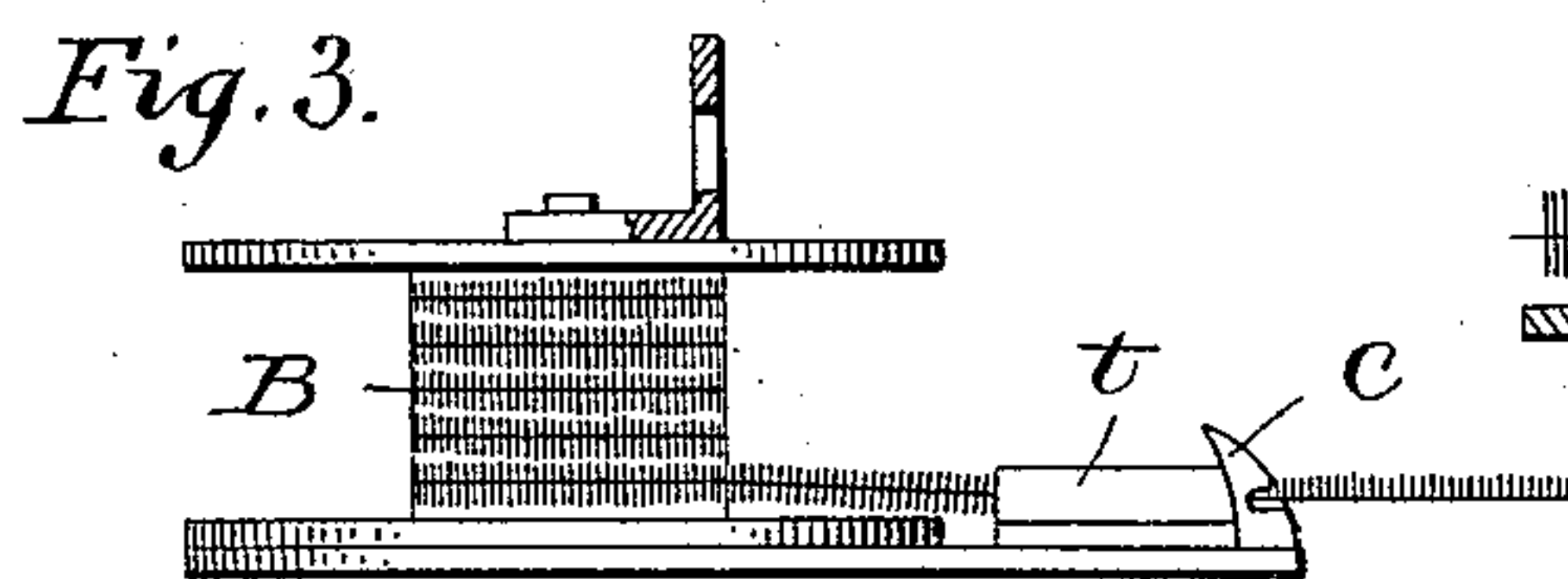
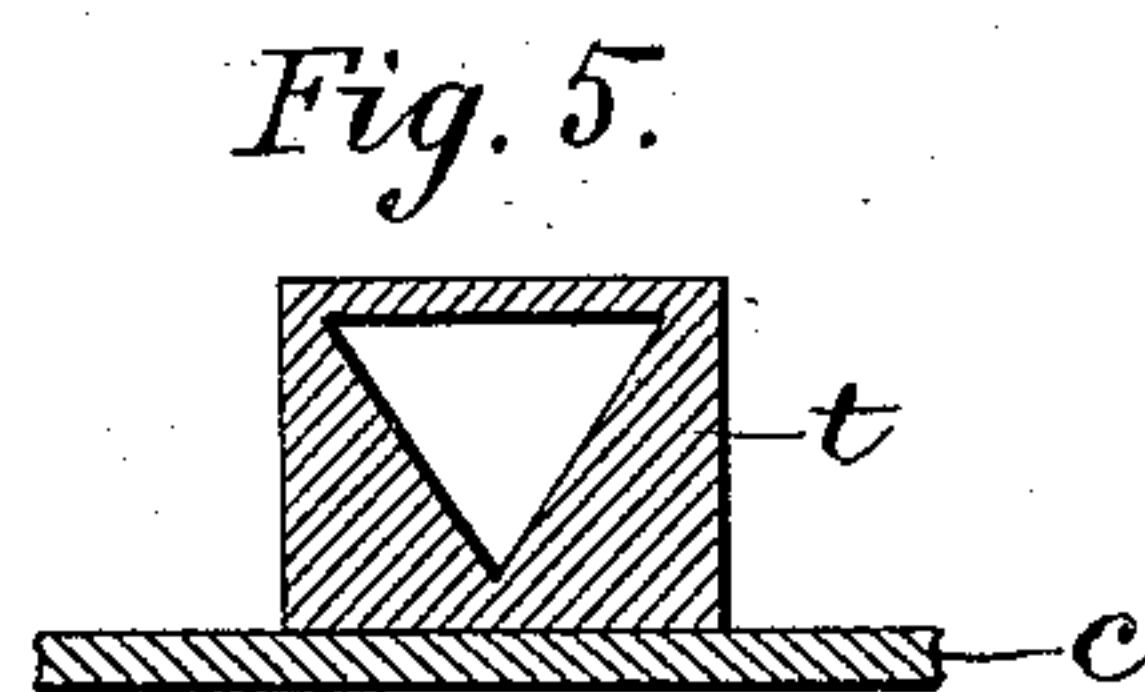
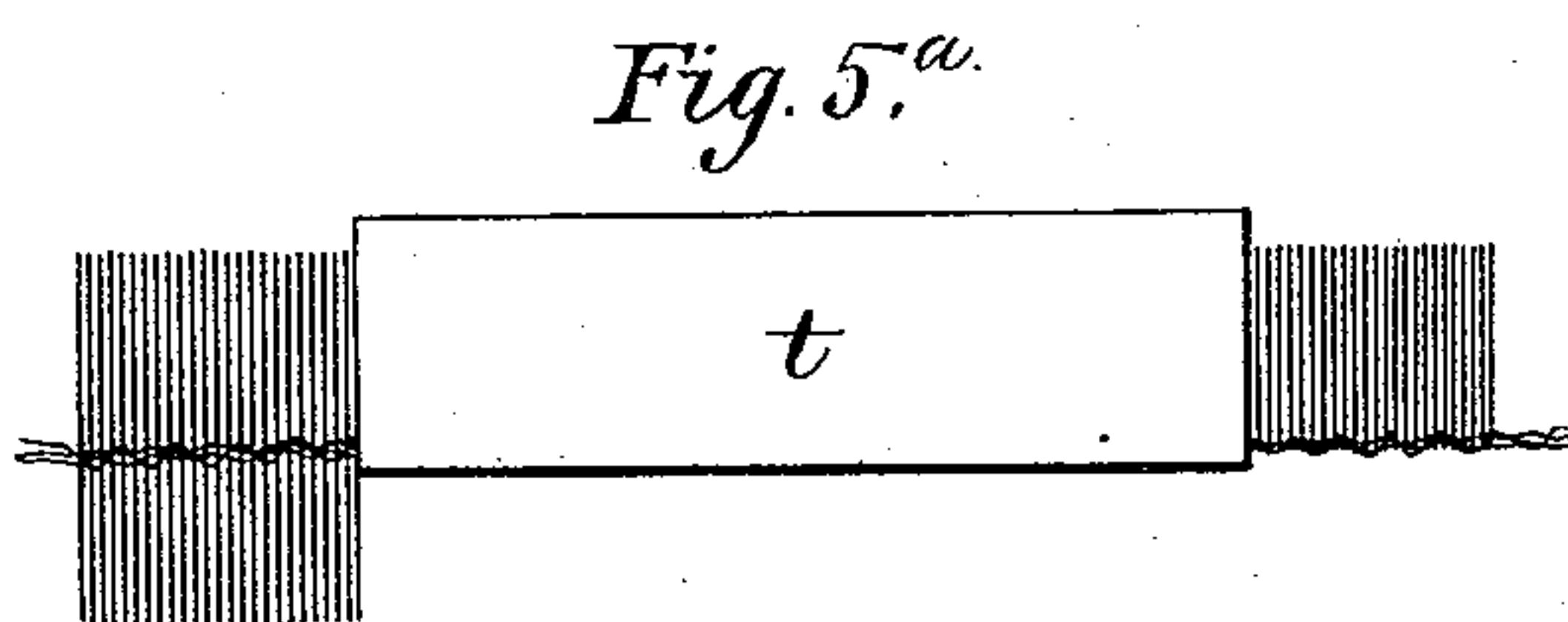
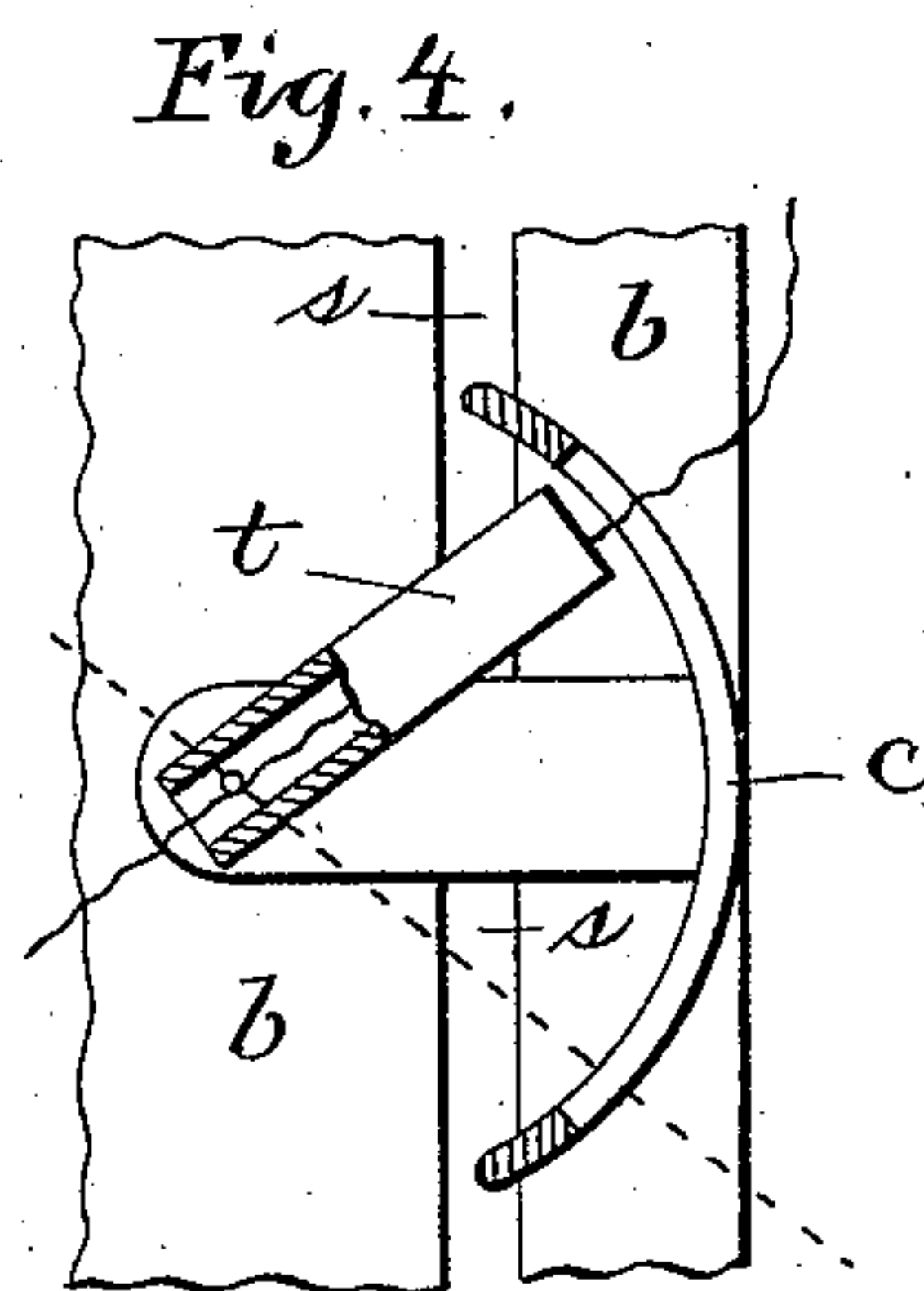
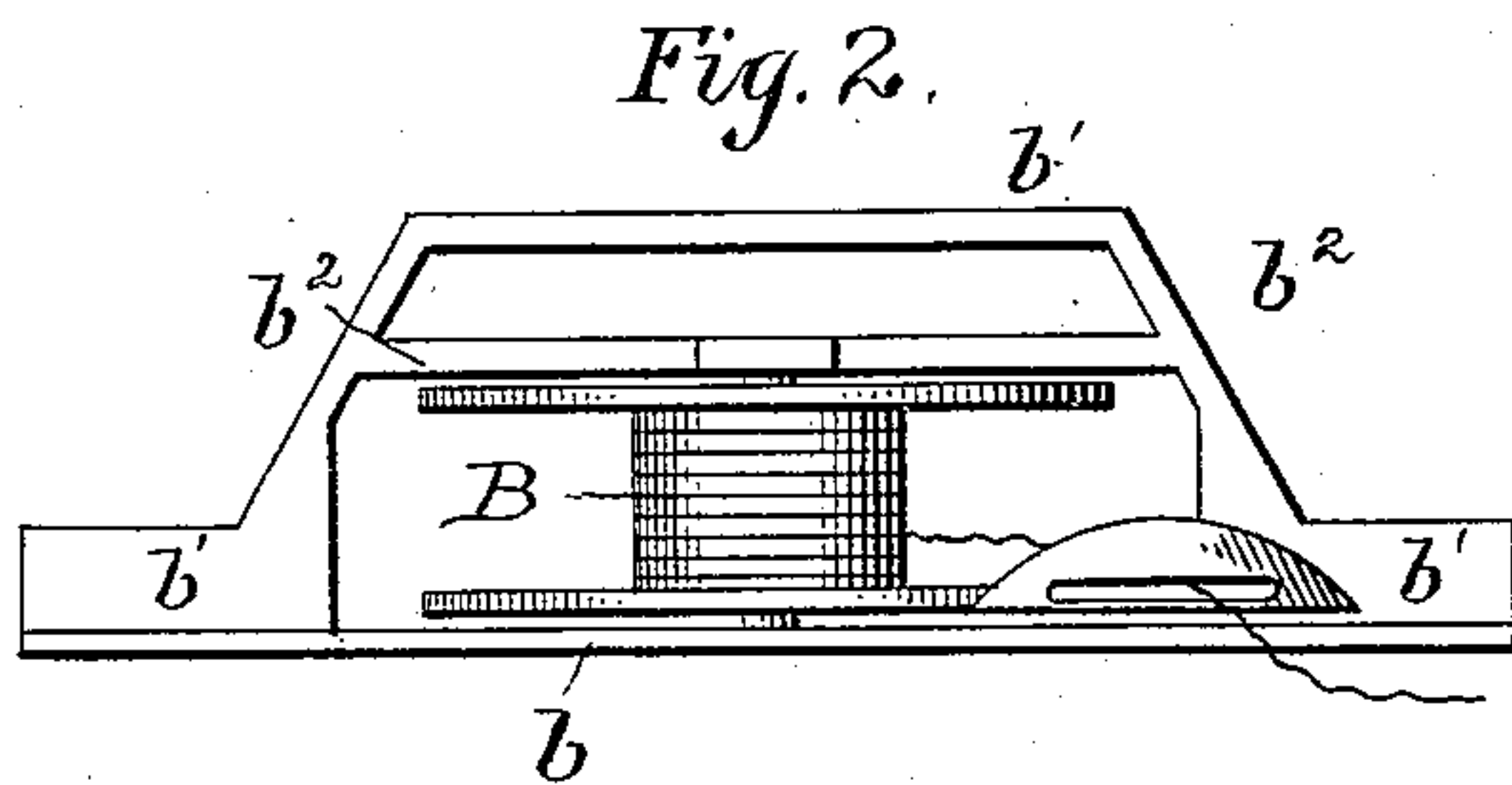
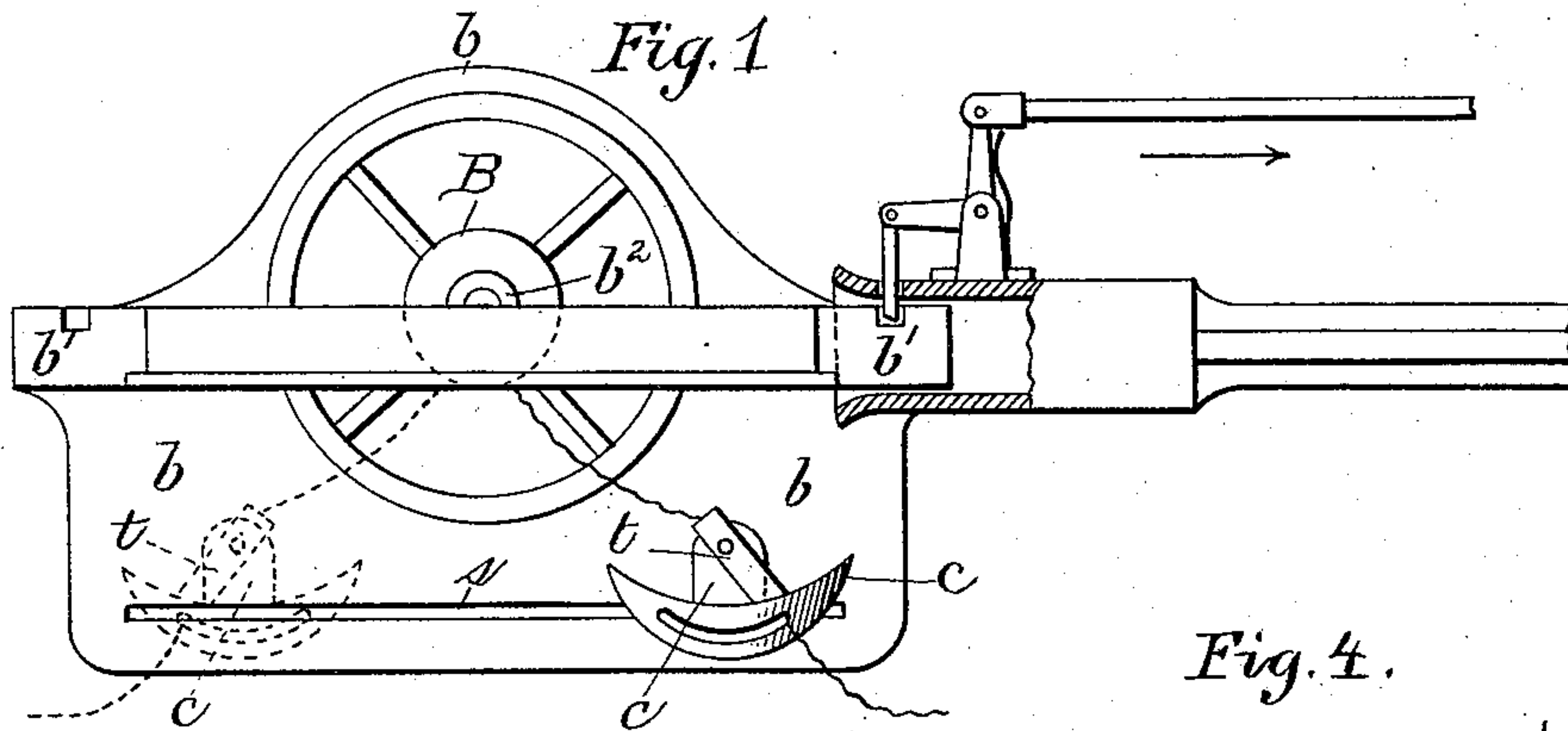


(No Model.)

L. LETALLE.
LOOM SHUTTLE.

No. 475,125.

Patented May 17, 1892.



Witnesses
Albert B. Blackwood
Stephen Jannus

Inventor
Léon Letalle

By his Attorney
Frankland James.

UNITED STATES PATENT OFFICE.

LÉON LETALLE, OF BEAUVAIS, FRANCE.

LOOM-SHUTTLE.

SPECIFICATION forming part of Letters Patent No. 475,125, dated May 17, 1892.

Original application filed March 20, 1891, Serial No. 385,934. Divided and this application filed March 25, 1892. Serial No. 426,408. (No model.) Patented in France January 13, 1890, No. 203,116; in England January 20, 1891, No. 1,005; in Austria-Hungary February 7, 1891, No. 7,591 and No. 22,371, and in Germany February 25, 1891, No. 59,821.

To all whom it may concern:

Be it known that I, LÉON LETALLE, a citizen of the Republic of France, residing at Beauvais, in the Department of the Oise, Republic of France, have invented certain new and useful Improvements in Loom-Shuttles, of which the following is a description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 This specification relates to improvements in the shuttles used in looms for weaving long-pile fabrics, and is a division of my application, Serial No. 385,934, filed March 20, 1891, and patented April 19, 1892, No. 473,261, and

15 which shuttle has been patented in France January 13, 1890, No. 203,116; in Great Britain January 20, 1891, No. 1,005; in Germany February 25, 1891, No. 59,821, and in Austria-Hungary February 7, 1891, No. 7,591 and No.

20 22,371.

The principal features of my invention are the circular spool for receiving the weft-thread, the slotted plate and sliding deliverer therein, the convex-faced shoe for raising the

25 warp-threads in depositing the chenille weft between them, the pivoted V-shaped delivery and leading tube, and also generally the improved construction.

In the drawings, Figure 1 is a top plan view of a shuttle embodying my invention, and also showing the catcher and part of the slide-bar for operating it, as in ordinary positive shuttle-motion looms. Fig. 2 is a front or side view showing the position of the spool and the general construction of the shuttle.

35 Fig. 3 is an end view. Fig. 4 is a top plan view of a part of the shuttle, showing the pivoted delivery-tube and the convex delivery-shoe in section. Fig. 5 is a detail showing

40 the V-shaped groove in the pivoted delivery-tube. Fig. 5^a shows the chenille passing through the tube. Fig. 6 is a detail of the shoe and tube, and also shows the manner of its operation in depositing the chenille weft

45 between the warp-threads. Fig. 7 shows the application of my device to the warp-threads of a loom.

In the drawings, *b* is the base-plate, from which the framing *b'* rises, and which has the

50 cross-piece *b*² below the arch of the framing

b', in order to furnish a bearing for the spindle or pivot of the spool or bobbin *B*, upon which is wound the chenille weft. A slot *s* is cut through the plate *b*, the sides of which widen toward the underneath face thereof. 55

A shoe or guide *c*, having a convex and rearwardly-inclined face, is provided with a guide *g*, which is dovetailed to fit into the slot *s* and guides the shoe from one to the other end thereof. Upon the shoe *c* is pivoted a tube *t*. 60

This tube is so pivoted that its outer or delivery end describes a curve conforming to the convex interior of the delivery-shoe. The interior of the tube is V-shaped, with the apex of the V at the bottom. The convex face of 65

the shoe *c* is slotted horizontally and the tube *t* presents the chenille immediately at the rear of this slot, through which it passes out between the warp-threads. The shoe *c* raises the warp-threads in passing and they descend into the nap of the chenille, securing it in position until acted upon in the usual and well-known manner by the batten. 70

The chenille in passing through the V-shaped groove of the tube *t* is folded upon itself, as it is under tension, and the warp-threads naturally have a tendency to be drawn down into the narrow part of the V of the groove. It therefore issues from the mouth of the tube and guide *c*, folded upon itself with 75

its tufts upward, as they have been folded into and passed through the wider part of the V-shaped groove. As will be readily understood from the drawings, the shoe *c* will change its position from one end to the other 85

of the plate *b* at every reciprocation of the shuttle, being free to slide in the slot *s*. With every change of position of the guide *c* the tube *t* will swing upon its pivot, and thus will deliver the chenille in a rearward direction 90

from the travel of the shuttle.

In order that no more of the chenille weft be unwound than is necessary when the shuttle leaves the warp at either side of the fabric, the shuttle passes only far enough beyond the selvage to permit the batten to pass. With my construction, in which the delivery is always from the rear end from the direction of travel of the shuttle, four or five centimeters is sufficient for this purpose. 100

I do not confine myself to the exact construction herein set forth, as many minor and detail changes might be made without departing from the spirit of the invention.

5 Having described my invention, what I claim, and desire to secure by Letters Patent, is—

10 1. A shuttle for delivering chenille weft, having a movable guide for the chenille delivered therefrom and a tube moving with said guide through which the chenille passes, the tube being constructed with a V-shaped groove which folds the chenille upon itself in its passage therethrough.

15 2. In a loom, a shuttle having a movable guide for the material carried thereby and a tube pivotally attached to the said guide for delivering the material thereto, said tube swinging on its pivot at each change of position of the guide.

20 3. In a loom, a shuttle having a movable guide for the material carried thereby, said

guide having a convex face for lifting the laying threads during the passage of the shuttle, and a pivoted tube for delivering the material to the guide. 25

4. A shuttle for chenille-looms, having a bobbin upon which the chenille weft is wound, a guide for delivering the chenille from said bobbin to its position between the warp-threads, and a tube pivotally attached to said guide and having a substantially-V-shaped groove which folds the chenille upon itself in its passage therethrough, the guide being formed with a semicircular and inclined face for raising the warp-threads in advance of its delivery-orifice. 30 35

In testimony whereof I hereto affix my signature in presence of two witnesses.

LÉON LETALLE.

Witnesses:

HONORÉ DUBAS,
HENRI LECLERC.