

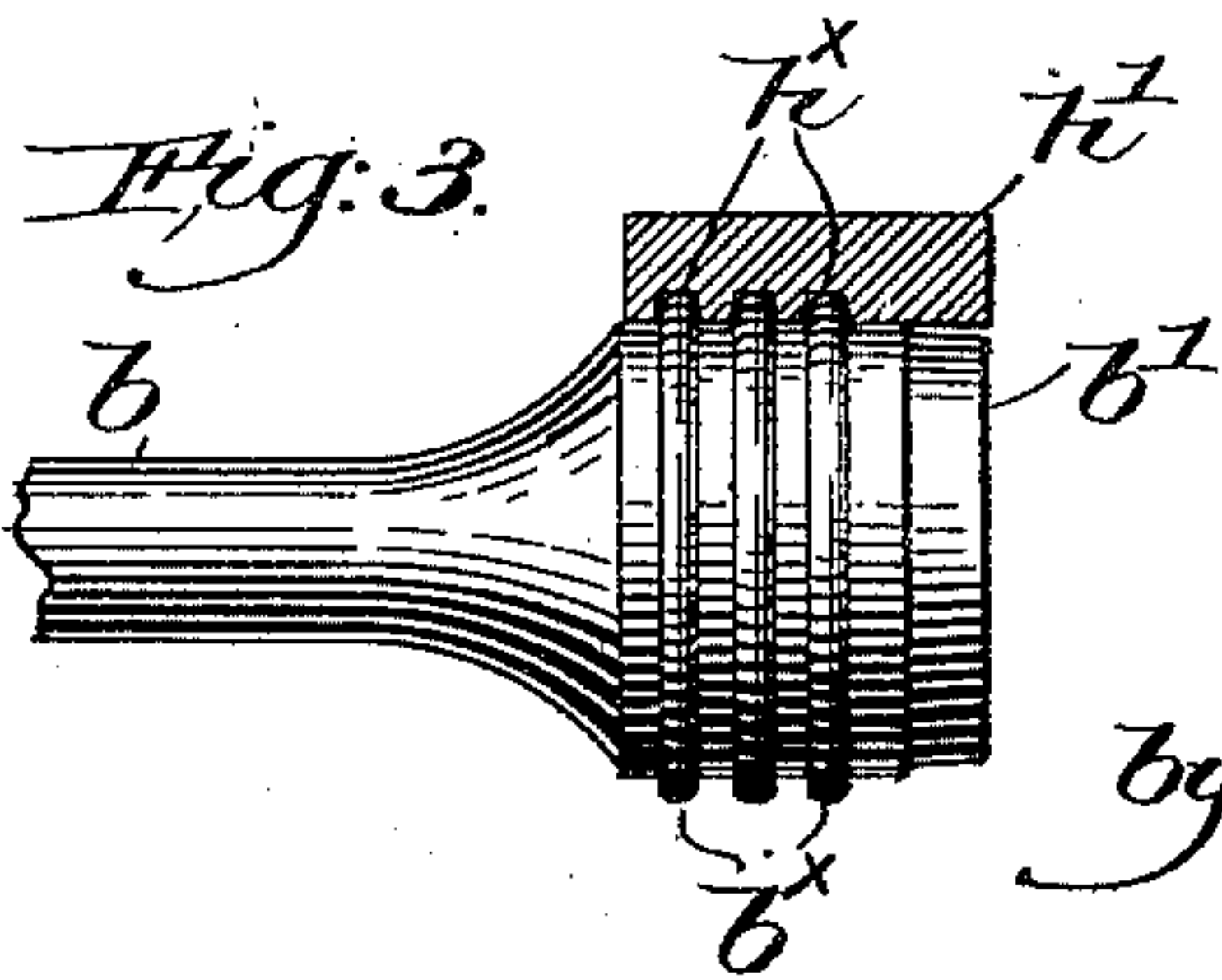
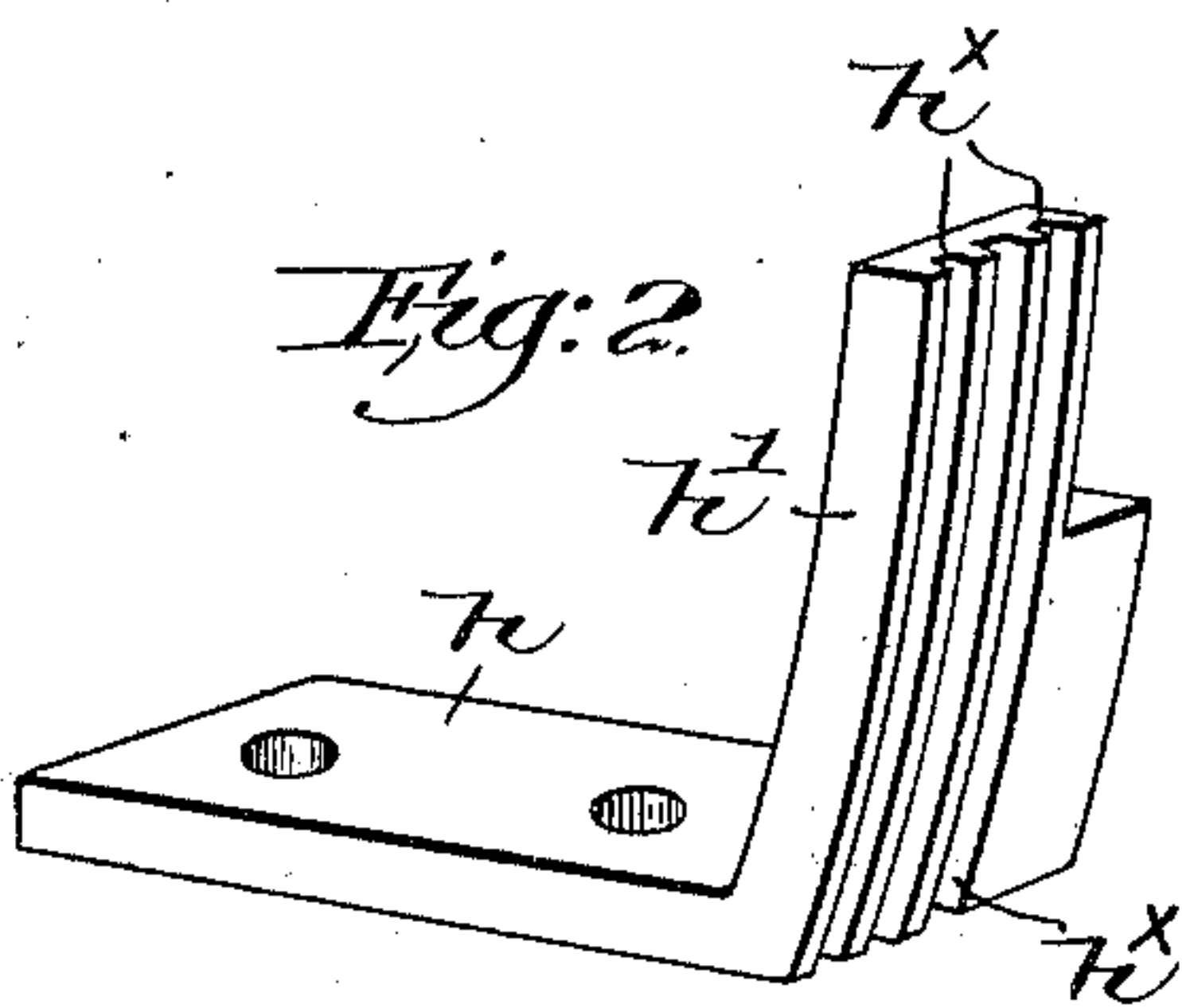
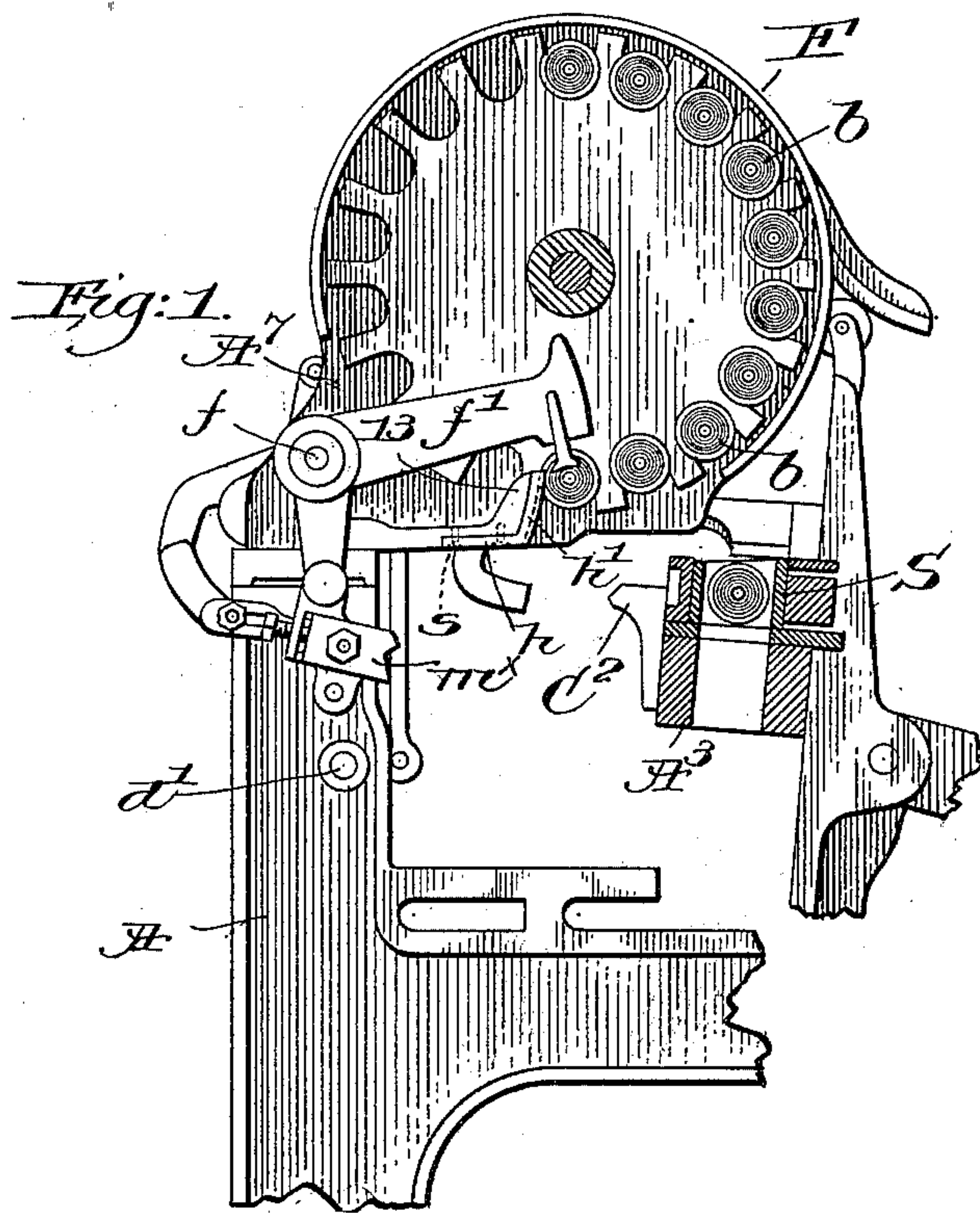
No. 652,222.

Patented June 19, 1900.

E. S. STIMPSON.  
LOOM.

(Application filed Apr. 8, 1900.)

(No Model.)



Witnesses,  
Edward F. Allen,  
Adolf C. Kaiser

In witness whereof,  
Edward S. Stimpson  
by Wesley Ingey,  
attys



# UNITED STATES PATENT OFFICE.

EDWARD S. STIMPSON, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO THE  
DRAPER COMPANY, OF SAME PLACE AND PORTLAND, MAINE.

## LOOM.

SPECIFICATION forming part of Letters Patent No. 652,222, dated June 19, 1900.

Application filed April 6, 1900. Serial No. 11,828. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD S. STIMPSON, a citizen of the United States, residing at Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Automatic Looms, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 In that type of automatic loom shown in United States Patent No. 529,940 a fixed projection or stop is located in the path of the filling-carriers as they are brought singly into operative position by the movement of the filling-feeder, the stop engaging the filling-carrier next to be removed and maintaining the feeder at rest until a transfer is effected. The filling-carriers are now commonly provided with a series of rings or annular projections on their heads to enter correspondingly-recessed holding devices in the shuttle, as in United States Patent No. 574,864, dated January 5, 1897. Not infrequently these projections in riding over the smooth face of the stop during transfer will throw the filling-carrier out of its proper path or longitudinal movement of the filling-carrier will occur, so that it will not properly enter the shuttle.

30 This present invention has for its object the production of means for engaging and positively guiding the filling-carrier into its proper position relatively to the shuttle when transferred from the feeder.

35 Figure 1 is a transverse sectional view of a portion of a loom and its filling-supplying mechanism, taken through the feeder, with one embodiment of this invention applied thereto. Fig. 2 is an enlarged perspective view of the stop detached, showing the means for guiding and positively engaging the filling-carrier; and Fig. 3 is a part plan view of the head of a filling-carrier in engagement with the stop, shown in section.

45 The loom-frame A, lay A<sup>3</sup>, self-threading shuttle S, which in practice will be provided with holding-jaws for the head of the filling-carrier, the transferrer f', fulcrumed at f, the dog m<sup>x</sup>, operatively connected with the transferrer, the bunter C<sup>2</sup> on the lay, the controlling rock-shaft d', and the feeder F are and may be all substantially as shown in United

States Patent No. 627,803, dated June 27, 1899. The heads b' of the filling-carriers b, Fig. 3, are provided with rings or annular projections b<sup>x</sup>, as in Patent No. 574,864, referred to, to be engaged by the holding devices in the shuttle. The stand A<sup>7</sup>, on which the feeder F is mounted, is shown as provided with a projection I<sup>3</sup>, Fig. 1, at one side of the transferring-path, and in accordance with this invention a substantially L-shaped stop is secured thereto, the foot h of the stop being held in place by suitable screws or bolts s. The front end of the foot is upturned at h' to form the stop proper, which projects in the path of and engages the head of the filling-carrier next to be removed, and preferably the face of the stop is convexed from top to bottom to conform to the movement of the filling-carrier during transfer. A series of longitudinal grooves h<sup>x</sup> are herein shown formed in the convex face to receive the projections b<sup>x</sup> on the head of the filling-carrier, (see Fig. 3,) so that during transfer the stop positively engages and guides the filling-carrier until it enters the shuttle, effectually preventing any longitudinal displacement of the filling-carrier or any twisting from its proper position as it enters the shuttle. Much wear and tear on the heads and projections b<sup>x</sup> and on the holding devices in the shuttle are thus prevented by the positive guiding and proper positioning of the filling-carrier during transfer.

85 Having fully described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A movable filling-feeder to hold a series of filling-carriers and bring them singly into operative position, a stop to engage the filling-carrier next to be removed and maintain the feeder at rest, a transferrer, and means independent of the transferrer to positively engage and prevent longitudinal movement of the filling-carrier during transfer.

2. A movable filling-feeder to hold a series of filling-carriers and bring them singly into operative position, a stop having an upright, grooved face, to engage the head of the filling-carrier next to be removed and maintain the feeder at rest, the grooved face of the stop positively guiding the head of the filling-



carrier during transfer, and a transferrer to remove the filling-carriers.

3. A movable filling-feeder to hold a series of filling-carriers and bring them singly into  
5 operative position, each filling-carrier having annular projections around its head, a stop to engage the filling-carrier next to be removed and maintain the feeder at rest, the engaging face of the stop having grooves  
10 therein extending from top to bottom thereof to receive the projections on the filling-carrier and guide the latter when removed, and a transferrer to remove the filling-carrier from the feeder.

15 4. A rotatable filling-feeder to hold a series of filling-carriers and bring them singly into operative position, a pivotally-mounted trans-

ferrer to remove the filling-carriers from the feeder, and a stop having an upturned face  
convexed in the direction of its length and 20 grooved to receive the annular projections on the heads of the filling-carriers, said stop engaging the head of the filling-carrier next to be removed and the grooves positively guiding the head thereof as the transferrer re- 25 moves it from the feeder.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD S. STIMPSON.

Witnesses:

GEORGE OTIS DRAPER,  
ERNEST W. WOOD.