No. 711,126.

C. F. ROPER. Patented Oct. 14, 1902.

FILLING CARRIER RECEPTACLE FOR FILLING REPLENISHING LOOMS.

(No Model.) (Application filed June 6, 1902.)

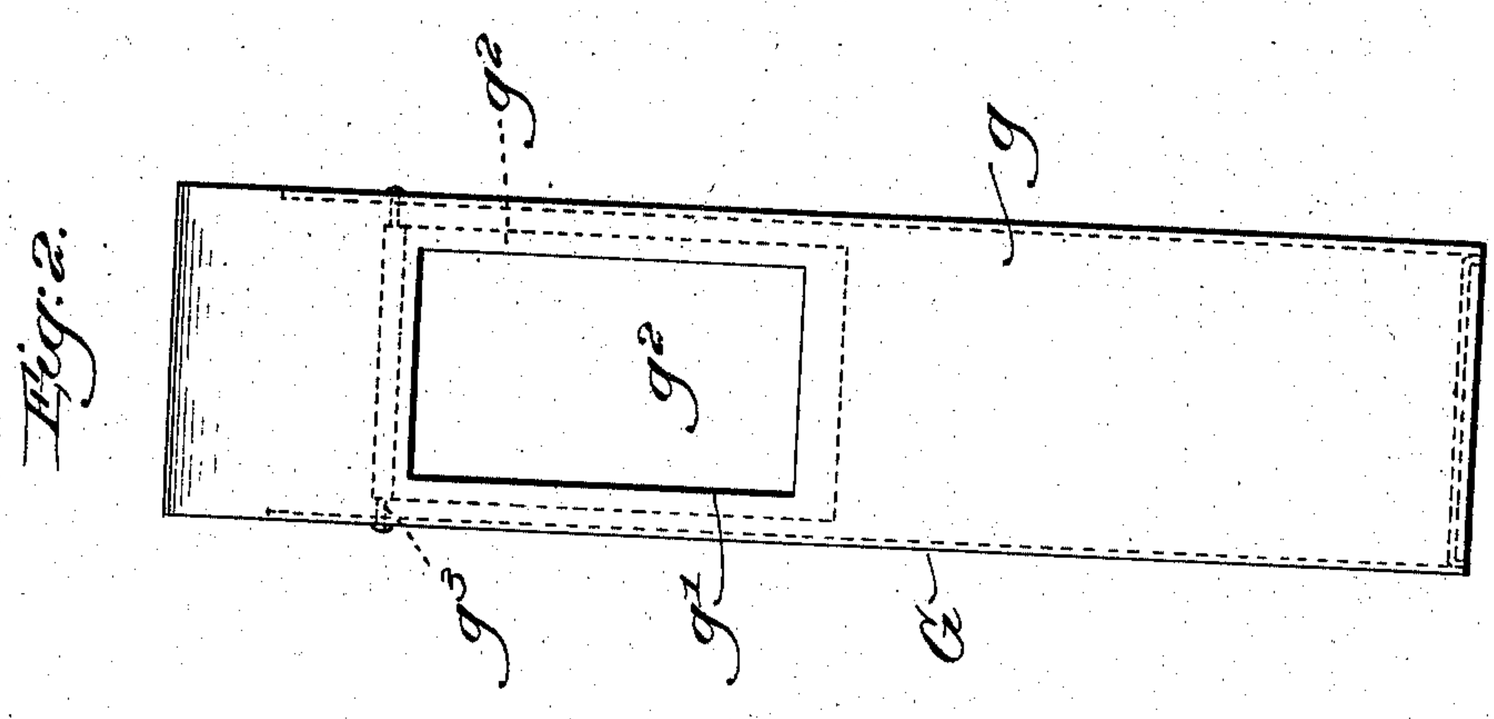

Fig. 2.

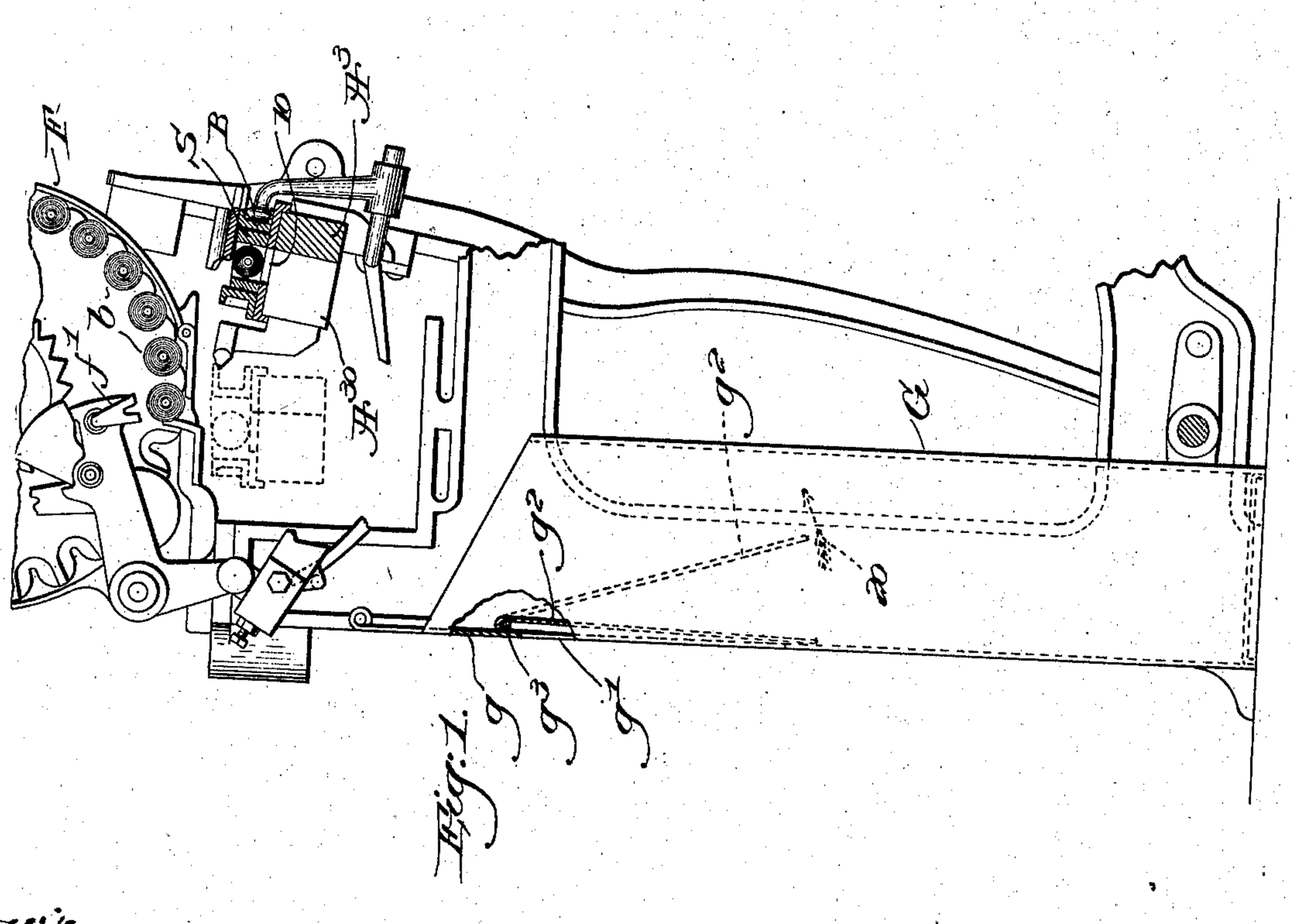

Fig. 1.

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UNITED STATES PATENT OFFICE.

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FILLING-CARRIER RECEPTACLE FOR FILLING-REPLENISHING LOOMS.

SPECIFICATION forming part of Letters Patent No. 711,126, dated October 14, 1902.

Application filed June 6, 1902. Serial No. 110,421. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. ROPER, a citizen of the United States, residing at Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Filling-Carrier Receptacles for Filling-Replenishing Looms, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention has for its object the production of a novel receptacle or box particularly adapted to receive the filling-carriers discharged from the lay from time to time in an automatic filling-replenishing loom.

As is well known to those skilled in the art, the filling-carrier ejected from the lay at time of replenishment is discharged with great force and velocity, and they are customarily caught in a receptacle provided for the purpose. The attendant removes the filling-carriers from the receptacle from time to time, and his hand may be seriously injured if struck by a discharged filling-carrier, particularly if it be one of the metallic-pointed cop-skewers frequently used.

In my present invention I have provided very simple means to protect the hand of the attendant from such injury when he inserts it into the receptacle to withdraw one or more filling-carriers therefrom.

The receptacle in which I have herein illustrated my invention is more particularly adapted for use with so-called "feeler-looms," so that the discharged filling-carrier can be thrown far enough to drag out the length of filling cut by the thread-cutting means.

Figure 1 is a partial transverse sectional view of a portion of a loom provided with automatic filling-replenishing mechanism with my present invention applied thereto, partly broken out; and Fig. 2 is a front elevation of the filling-carrier receptacle shown in Fig. 1.

The lay A^8, Fig. 1, having a cut-away portion A^{30} beneath the discharge-opening 10 in the bottom of the shuttle-box B, the filling-feeder F for the filling-carriers *b*, and the transferrer *f'* may be and are of well-known construction, an ejected filling-carrier being discharged from the shuttle S through the opening 10 and cut-away part A^{30} of the lay by the fresh filling-carrier inserted in the shuttle. When the filling is replenished, the lay is in dotted-line position, Fig. 1, and the receptacle provided for the purpose receives the discharged filling-carrier at such time.

The receptacle is herein shown as an elongated upright rectangular box G, preferably made of sheet metal and having an open top, the receptacle being so placed as to conveniently receive the filling-carriers as discharged from the lay.

In order to provide for withdrawl of the filling-carriers from the box, I have provided one of its walls, as *g*, with an opening *g'*, shown as located near the top of the box and of such dimensions that the attendant can readily insert his hand through the opening to reach and withdraw filling-carriers which have been discharged thereinto. A cover g^2 for the opening is herein shown as pivoted at its upper end on the wall *g'* inside the box, as at g^3, the cover normally depending over and closing the opening *g'*, and at such time there is no obstacle within the box to the entrance of a discharged filling-carrier.

When the attendant wishes to withdraw anything from the box, he inserts his hand through the opening *g'* and in so doing swings the cover g^2 in the direction of arrow 20, Fig. 1, the cover not only uncovering the opening, but also acting as a shield or guard for the hand, its position (see dotted lines, Fig. 1) serving to deflect an incoming filling-carrier, so that it could not strike the hand of the attendant. When the hand is withdrawn, the cover automatically drops back into place, closing the opening and leaving a clear space within the box for the passage of a filling-carrier thereinto.

The long boxes, such as illustrated, give a long enough drop to enable the ejected filling-carrier to pull out from the shuttle-box the length of filling which has been severed by the cutting mechanism with which a feeler-loom is provided, thereby preventing the end from weaving into the cloth.

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

1. In a loom, a lay provided with a shuttle-box having an opening in its bottom for the discharge of a filling-carrier, a stationary receptacle having an open top adapted to receive filling-carriers when discharged from the lay, there being an opening in one of the walls of the receptacle to permit manual withdrawal of filling-carriers therefrom, and a swinging cover pivotally mounted within the receptacle above the opening and normally closing it.

2. In a loom, a lay provided with a shuttle-box having an opening in its bottom for the discharge of a filling-carrier, an upright, stationary receptacle having an open top, to receive a filling-carrier discharged from the lay, there being an opening in one of the walls of the receptacle near its top, and a hanging cover therefor pivotally mounted above said opening within the receptacle, the cover when swung up to uncover the opening acting as a shield for the hand when inserted through the opening into the receptacle.

3. A receptacle for automatically-discharged filling-carriers from a loom, consisting of an upright box having an open top and an opening in one of its walls, and a swinging cover mounted within the box and normally depending to close said opening, the cover when swung up to uncover the opening acting as a shield to protect the hand when inserted through said opening into the box.

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

CHARLES F. ROPER.

Witnesses:

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ERNEST W. WOOD.