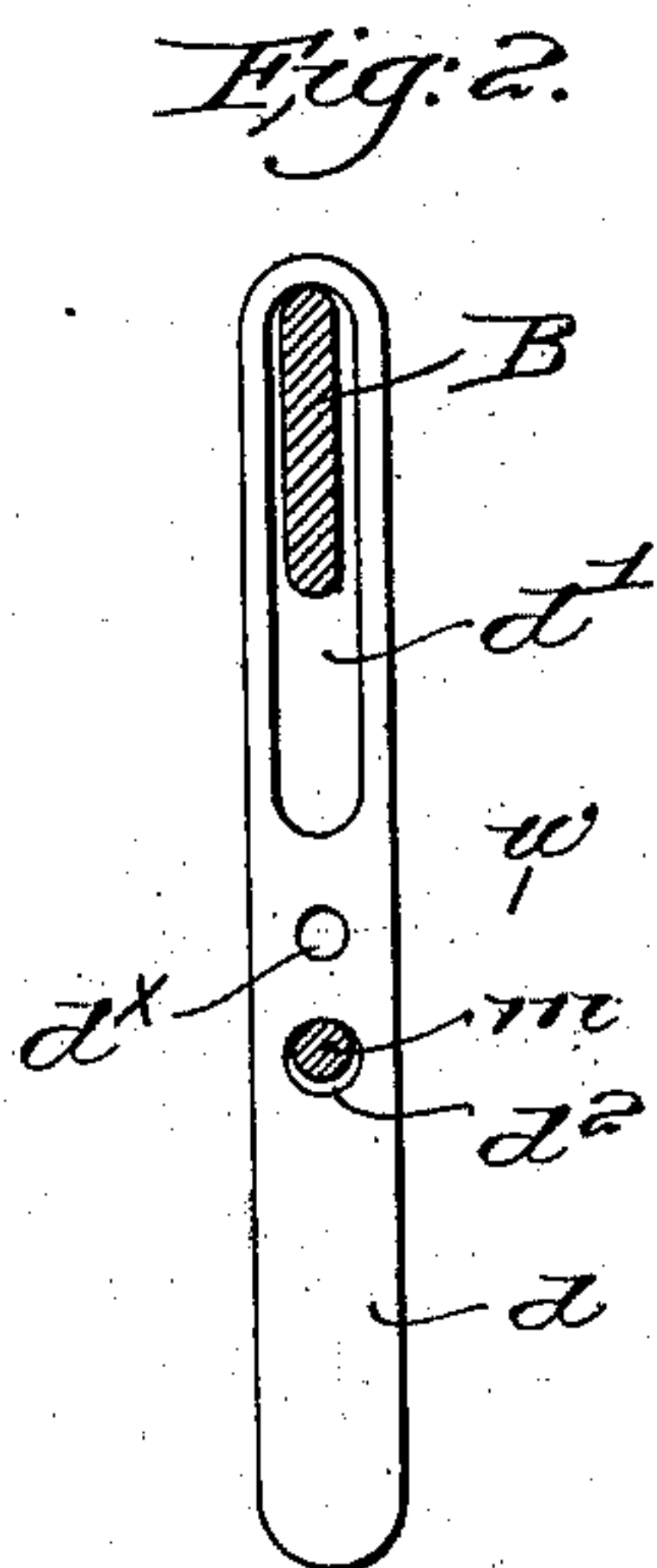
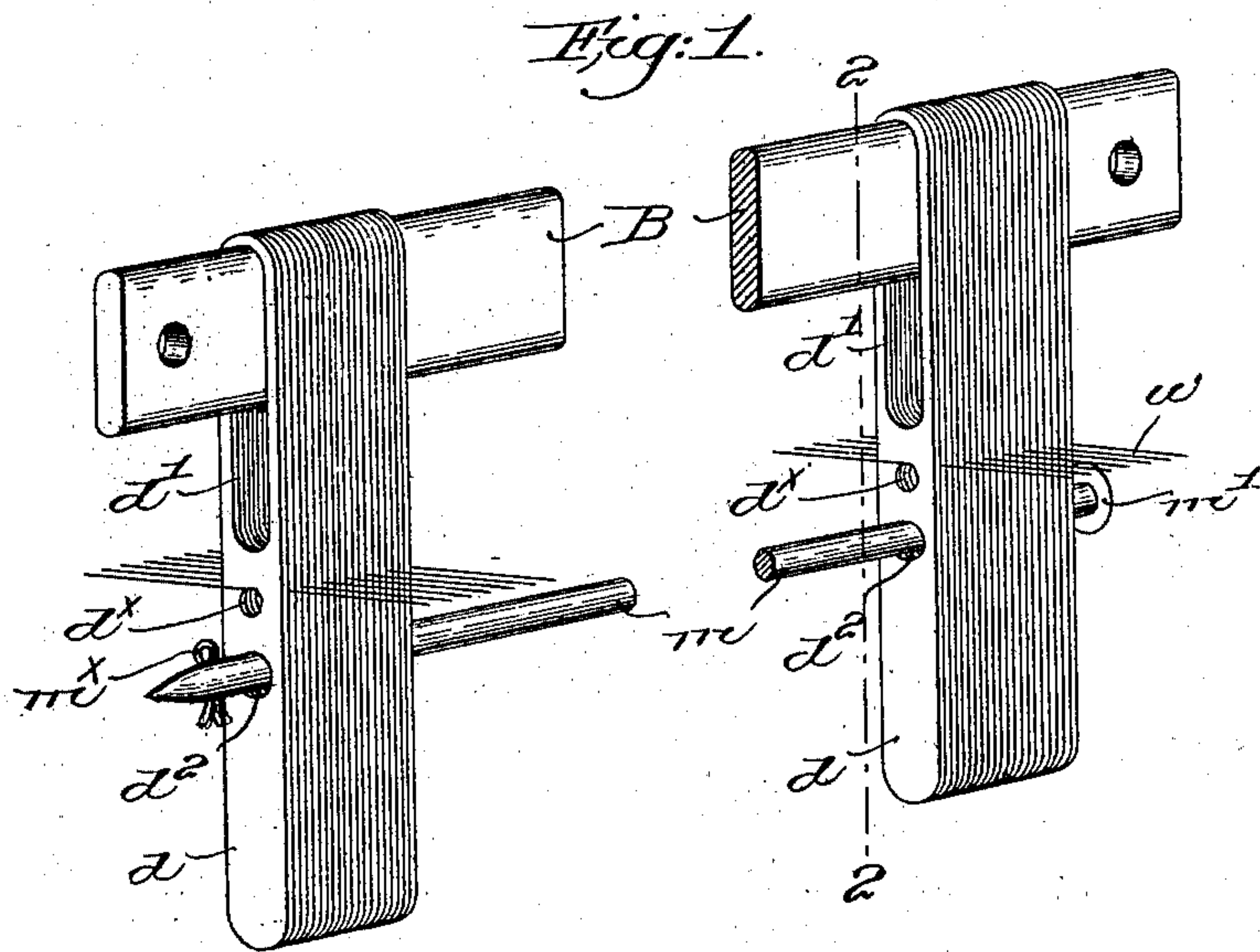


No. 750,300.

PATENTED JAN. 26, 1904.

W. OLDFIELD.
WARP STOP MOTION FOR LOOMS.
APPLICATION FILED NOV. 23, 1903.

NO MODEL.



Witnesses,
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UNITED STATES PATENT OFFICE.

WILLIAM OLDFIELD, OF NEW BEDFORD, MASSACHUSETTS, ASSIGNOR TO
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OF MAINE.

WARP STOP-MOTION FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 750,300, dated January 26, 1904.

Application filed November 23, 1903. Serial No. 182,325. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM OLDFIELD, a citizen of the United States, and a resident of New Bedford, county of Bristol, State of Massachusetts, have invented an Improvement in Warp Stop-Motions for Looms, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention relates to warp stop-motions for looms wherein the controlling-detectors have elongated slots for the reception of a detector-support, the latter being suitably sustained in the loom and mounted on the harness-frame when the controlling-detectors also serve as heddles. Such latter arrangement is well known to those skilled in the art and is shown in United States Patent No. 590,551.

20 When the warps are drawn in, they are drawn through the detectors, and the beam, heddles, detectors, and reed are sent from the drawing-in room to the weave-shed to be positioned in the loom, and if the detectors are also heddles such detector-heddles accompany the beam and reed. It has been found that not infrequently the warps become twisted or tangled in the lower ends of the detectors during such transfer, as the detectors can move to a certain extent on their supporting-bar, so

30 that the weaver has to spend much time in straightening out the tangle when the new beam and accompanying parts are set up in the loom.

My present invention has for its object the production of simple means for temporarily controlling and holding together the lower ends of the detectors after the warps are drawn in and until the same are set up or positioned in the loom, thereby preventing

40 any tangling of the warps.

Figure 1 is a perspective view, centrally broken out, of a bank or series of controlling-detectors and the detector-support with one embodiment of my invention applied thereto and shown in operation; and Fig. 2 is a sectional view of Fig. 1 on the line 2 2.

The stop-motion controlling-detectors d , shown as thin flat strips, preferably made of sheet metal, have each an elongated slot d' at

the upper end and a warp-eye d^x below the slot, the slots receiving a detector support or bar B of less depth than the length of the slots in a manner well known to those skilled in the art. When the detectors serve also as heddles, the support B is attached to the up-
right side bars of the harness-frame to raise and lower the detectors to form the shed, while permitting a limited longitudinal movement of the detectors relative to such support.

Heretofore trouble has been caused by tangling of the warps with the loose lower ends of the detectors between the drawing-in operation and the positioning of the detectors in the loom. In the present embodiment of my invention I prevent such tangling by extending a tie-rod m through holes or openings d^2 in the detectors after the warps w are drawn in, the holes being made in the detectors below the warp-eyes, as shown. One end of the rod is headed, as at m' , Fig. 1, and a cotter-pin m^x or other fastening is attached to the opposite end of the rod after it has been passed through the detectors. The tie-rod holds the lower ends of the detectors in substantial alinement, so that they cannot spread apart or separate fore and aft, and it also prevents the warps from being accidentally drawn under the lower ends of or become entangled with the detectors. When the detectors are set up in the loom in proper operative position, the fastening m^x is removed and the tie-rod m withdrawn.

The simple device saves much time on the part of the weaver, as it entirely prevents tangling, and the detectors when set up in the loom are ready for work as soon as the tie-rod is withdrawn.

My invention is not restricted to the precise construction and arrangement shown and described, as the same may be modified without departing from the spirit and scope of my invention.

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

1. In a warp stop-motion for looms, a series of longitudinally-slotted controlling-detectors each having a warp-eye, a detector-support

extended through the slots, and means to temporarily retain the lower ends of the detectors in substantial alinement after the warps are drawn in and prior to positioning of the detectors in the loom.

2. In a warp stop-motion for looms, a series of longitudinally-slotted controlling-detectors each having a warp-eye, and an opening below it, a detector-support extended through the slots, and a tie-rod adapted to be temporarily inserted in the openings of the detectors after the warps are drawn in, to prevent separation of the lower ends of the detectors and entanglement with the warps prior to positioning of the detector-support and detectors in the loom.

3. In a warp stop-motion for looms, a series of longitudinally-slotted controlling-detectors each having a warp-eye, and an opening below it, a detector-support extended through the slots, a rod having a head at one end, adapted to be temporarily inserted in the openings of and retain the detectors substantially alined after drawing in of the warps, and a detachable retaining device for the other end of the rod.

4. In a warp stop-motion for looms, a series

of longitudinally-slotted controlling-detectors each having a warp-eye, a detector-support extended through the slots, and means to temporarily engage the individual detectors and hold their lower ends together after the warps have been drawn in, to prevent entanglement of the warps.

5. In a warp stop-motion for looms, a series of controlling-detectors each having a warp-eye, and a separate opening for a detector-support, and means cooperating with said detectors on that side of the warp-eyes beyond the support-receiving openings to hold the warps between said means and the detector-support.

6. In a warp stop-motion controlling-detector having an elongated slot adapted to receive a detector-support, a warp-eye, and an opening below and independent of the warp-eye, substantially for the purpose set forth.

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

WILLIAM OLDFIELD.

Witnesses:

H. C. MATHANEN,
JOSEPH I. DA TERRA.