

(No Model.)

W. HATHAWAY.

TAKE-UP MECHANISM FOR LOOMS.

No. 353,026.

Patented Nov. 23, 1886.

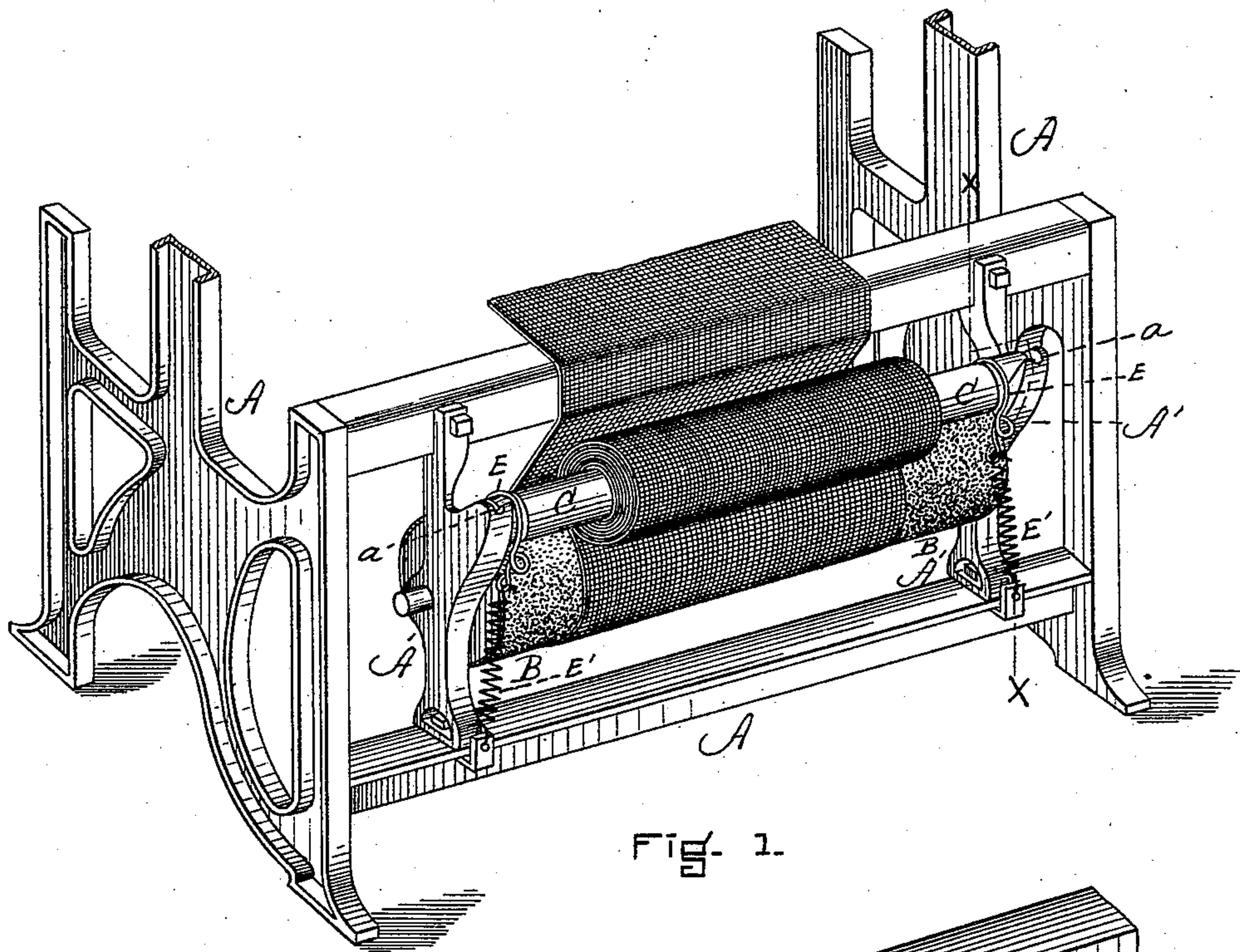


FIG. 1.

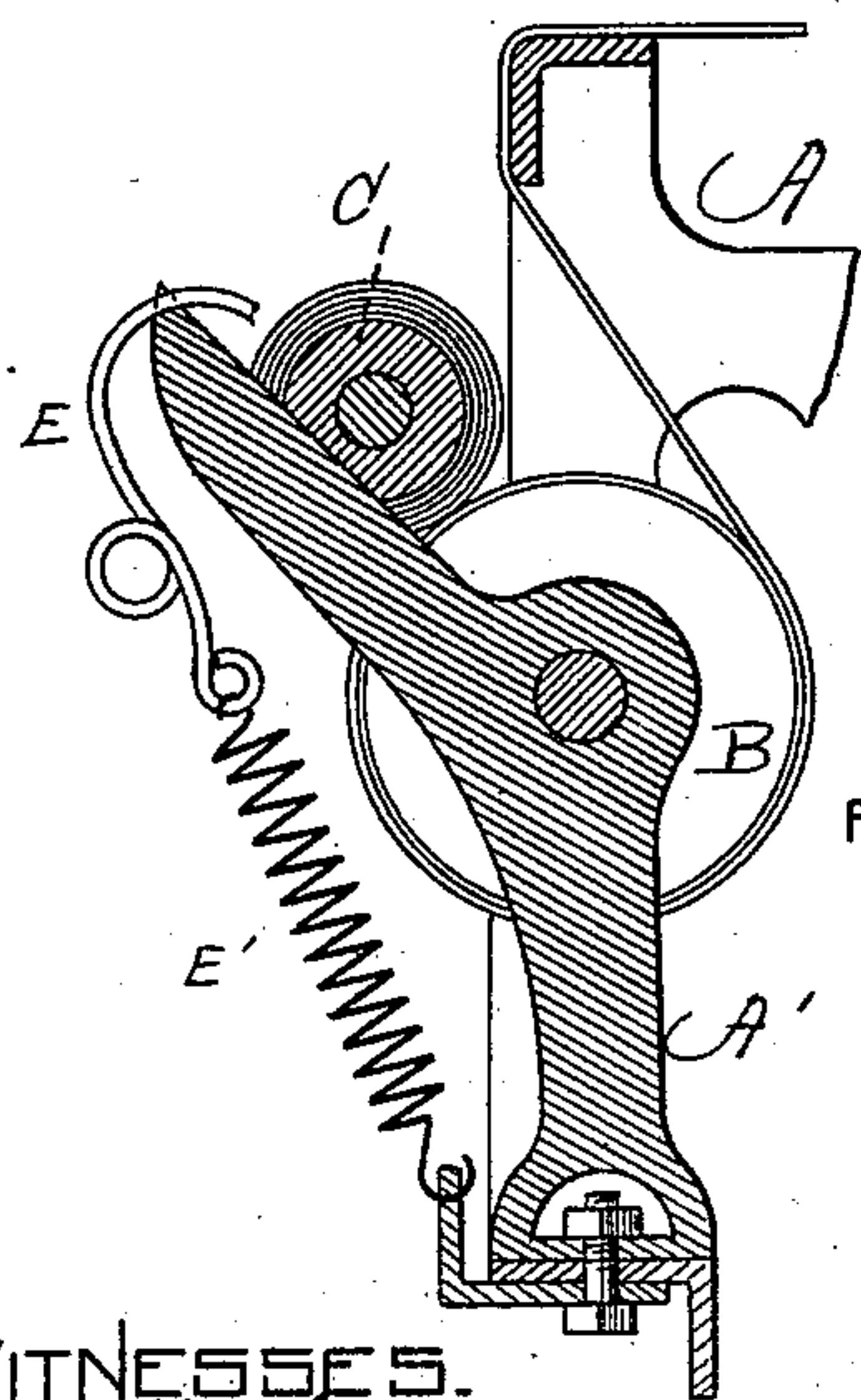


FIG. 2.

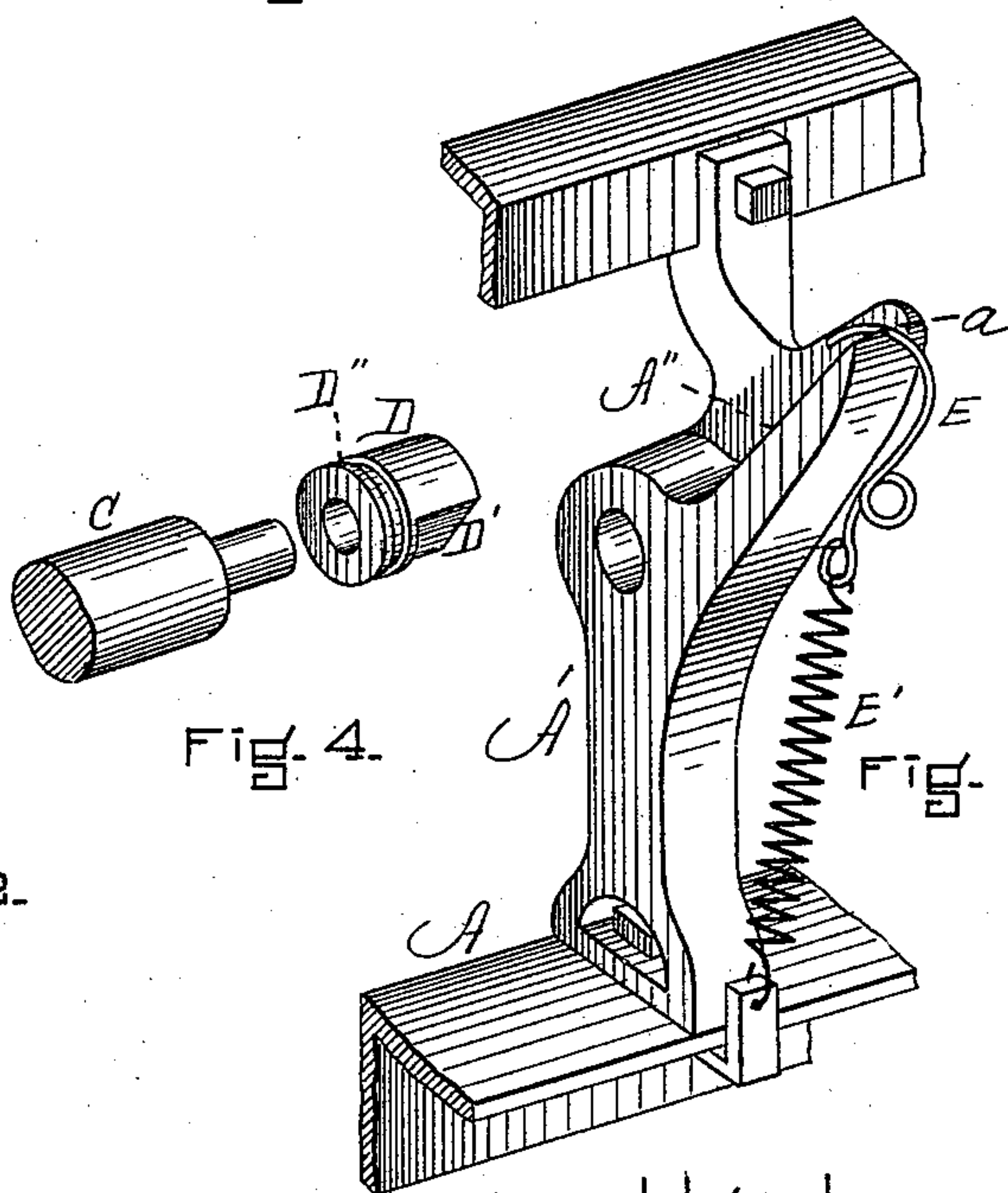


FIG. 4.

FIG. 3.

WITNESSES.

J. H. Hartnett.
L. B. W. Williams

INVENTOR.

William Hathaway
By his Atty.

Henry W. Williams

UNITED STATES PATENT OFFICE.

WILLIAM HATHAWAY, OF FALL RIVER, MASSACHUSETTS.

TAKE-UP MECHANISM FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 353,026, dated November 23, 1886.

Application filed April 9, 1886. Serial No. 198,343. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HATHAWAY, of Fall River, in the county of Bristol and State of Massachusetts, have invented new and
5 useful Improvements in Take-Up Mechanism for Looms, of which the following is a specification.

This invention relates to certain improvements in mechanism for winding cloth on the
10 cut-roll, the object being to prevent said cloth from becoming slack and moving to an end of said roll, and by that means cutting the selvage.

In the accompanying drawings, in which
15 similar letters of reference indicate like parts, Figure 1 is a perspective view of a portion of a loom embodying my invention. Fig. 2 is a vertical section on line *x*, Fig. 1. Fig. 3 is an enlarged detailed view of a portion of the device. Fig. 4 is a view of one end of the cut-
20 roll with the bush removed.

A represents the frame, and A' that portion in which the cut-roll and sand-roll are immediately supported.

25 B is the sand-roll, and C the cut-roll. This cut-roll, instead of having its bearings directly in the stand A', is provided at each end with a bush, D, flattened upon one side, D', so as to be stationary in the stand by presenting said
30 flattened surface to the portion A'' of said stand. Each bush is further provided with an annular groove, D'', in which lies a curved wire, E, connected by a spring, E', with the lower portion of the stand A', or with the
35 frame A. The function of these springs and wires is to hold the cut-roll down constantly upon the sand-roll. When the cut-roll is to be removed, the curved wire or hook E may

be caught in the notch *a* of stand A', as shown in Fig. 4, thus relieving the pressure from the
40 cut-roll.

In looms as at present usually constructed the cut-roll is simply turned smaller at its ends, so as to bear in the stand, and is held
45 against the sand-roll by its weight alone, and its frequent stopping wears flat places in the portions bearing in the stand. The cloth winds slackly around the cut-roll when it stops, and moves from its place to the end of the roll,
50 thus cutting the selvage and losing from two to five yards on every cut of cloth.

In my improvement the springs hold the cut-roll constantly and firmly against the sand-roll, winding the cut tightly and not allowing
55 the cloth to move from its place to the end of the roll. By turning the ends of the cut-roll smaller and putting the loose bushes upon them, flattened so as to lie upon the incline of the stand in connection with the pressure of
60 the springs, the turning of the cut-roll is positive whenever the sand-roll turns.

Weights being the mechanical equivalent of the springs E', may be used in place thereof, if desired.

Having thus fully described my invention, 65 what I claim, and desire to secure by Letters Patent, is—

The combination of the cut-roll C, provided with the flattened bushes D, the hooks E, and
70 springs E', the sand-roll B, and the supporting-stand A', provided with the notches *a*, substantially as and for the purpose set forth.

WILLIAM HATHAWAY.

Witnesses:

FELIX MCKENNEY,
CHARLES C. COOK.