No. 618,363. Patented Jan. 24, 1899.

J. H. NORTHROP.

LET-OFF MECHANISM FOR LOOMS.

(Application filed Oct. 6, 1898.)

(No Model.)

Fig: 1.

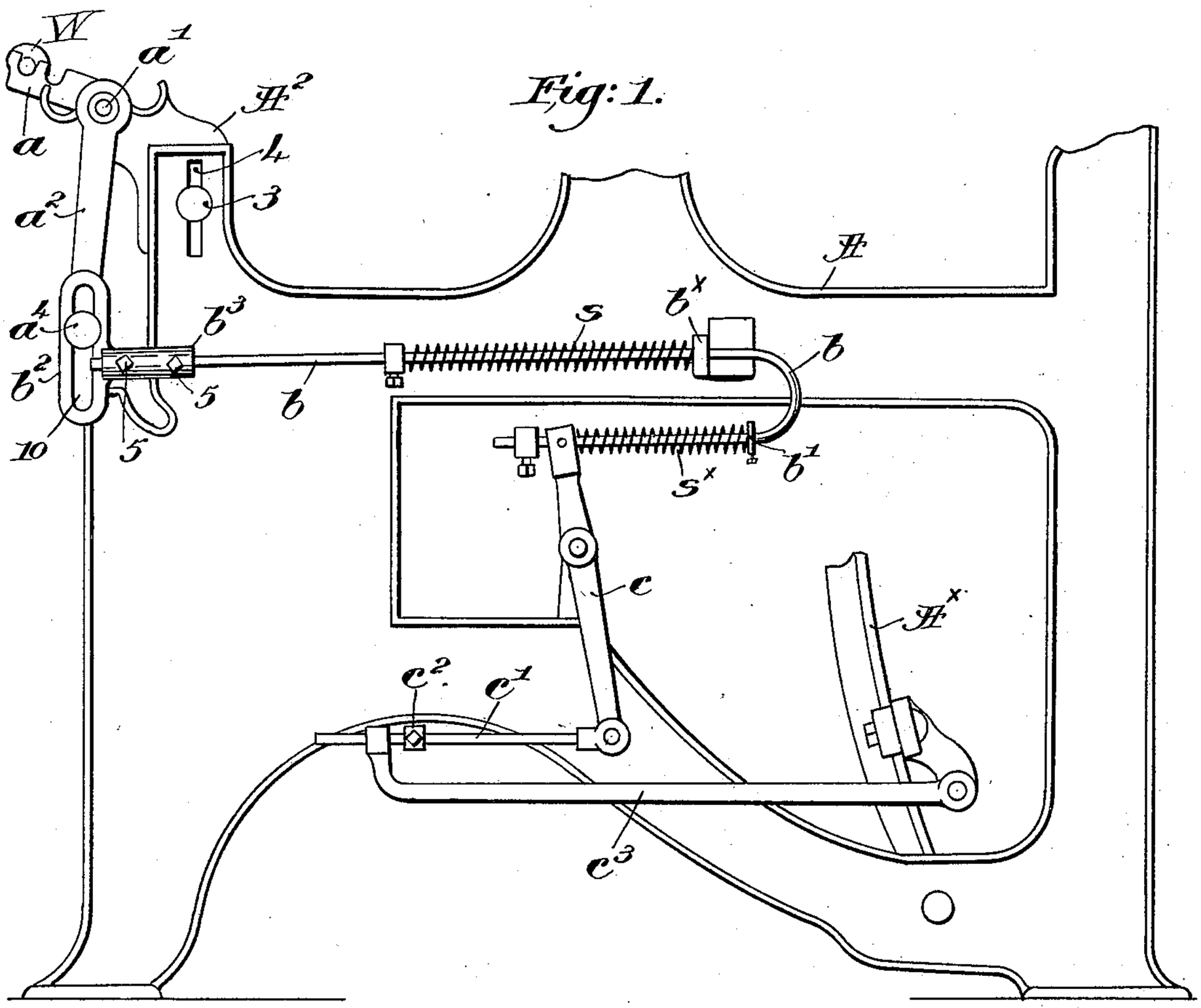
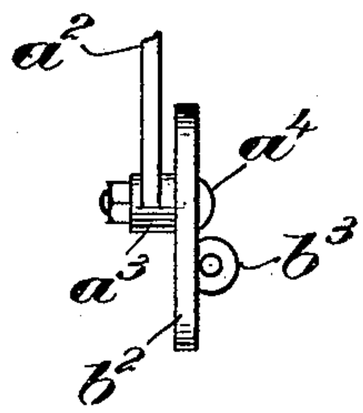


Fig: 2.



Witnesses,
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UNITED STATES PATENT OFFICE.

JAMES H. NORTHROP, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO THE DRAPER COMPANY, OF SAME PLACE AND PORTLAND, MAINE.

LET-OFF MECHANISM FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 618,363, dated January 24, 1899.

Application filed October 6, 1898. Serial No. 692,792. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. NORTHROP, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Let-Off Mechanism for Looms, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

This invention has for its object the production of means for permitting the whip-roll stand of let-off mechanism to be raised or lowered, as desired, without interfering with the position or operation of the other parts of the mechanism.

Figure 1 is a side elevation of a loom provided with let-off mechanism embodying my invention, and Fig. 2 is a detail in end elevation of the self-adjusting coupling or connection between the whip-roll rocker-arm and the let-off mechanism.

I have herein shown my invention as applied to the well-known "Bartlett" let-off mechanism, which latter includes a rocking carrier for the whip-roll W, the carrier comprising the supporting-arms a, attached to a rock-shaft a', which latter has a depending rocker-arm a^2, pivotally connected with a bent rod b, longitudinally movable in a fixed bearing $b^\times$ on the loom side A, said rod having springs s $s^\times$, the latter being held between an adjustable collar b' on the rod and the perforated end of a lever c. A link c', broken off in Fig. 1, connects the lever with the usual pawl-carrier, (not shown,) and a collar c^2 on the link is engaged by the actuator-rod c^3, shown in Fig. 1 as connected with and operated by the lay-sword $A^\times$.

Usually the rod b is jointed or pivoted directly upon the rocker-arm a^2; but I have herein made the stands A^2 for the whip-roll rock-shaft a' vertically adjustable by means of set screws or bolts 3 and vertical slots 4 in the loom sides, and as the stands can be raised or lowered, as desired, I have devised a simple and efficient self-adjusting coupling or connection between the rocker-arm a^2 and the rod b.

Referring to Fig. 2, the lower end of the rocker-arm a^2 is provided with a boss a^3, which supports a headed pin or stud a^4, the latter entering a longitudinally-slotted upright fin b^2 on the sleeve-like body b^3 of the coupling member, which latter receives the end of the tension-rod b and is secured thereupon by set-screws 5. The stud a^4 enters the slot 10, and when the whip-roll stands A^2 are vertically adjusted the stud slides up or down along the slot, so that the position and operation of the other parts of the let-off will not be interfered with in the least, while the pivotal connection between the rocker-arm a^2 and rod b is always maintained.

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

1. In a let-off mechanism for looms, a rocking whip-roll carrier, a rocker-arm attached thereto, vertically-adjustable supports for the said carrier, a tension-rod, and a self-adjusting connection between it and said rocker-arm, to compensate for adjustment of the supports.

2. In a let-off mechanism for looms, a rocking whip-roll carrier having an operating rocker-arm, vertically-adjustable supports for said carrier, the longitudinally-movable tension-rod, and a slotted coupling member mounted thereon and in pivotal engagement with the rocker-arm.

3. In a let-off mechanism for looms, a rock-shaft having supporting-arms for the whip-roll, a depending rocker-arm having a laterally-projecting stud, vertically-adjustable stands on which the rock-shaft is mounted, a longitudinally-movable tension-rod, and a coupling member thereon having an upright, slotted portion entered by the stud, whereby the connection between the rocker-arm and tension-rod may adapt itself to vertical adjustment of the stands.

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

JAMES H. NORTHROP.

Witnesses:
GEO. OTIS DRAPER,
ALBERT H. COUSINS.