

No. 653,153

Patented July 3, 1900.

A. E. STAFFORD.
BRAKE MECHANISM FOR LOOMS.

(Application filed Jan. 29, 1900.)

(No Model.)

Fig. 1.

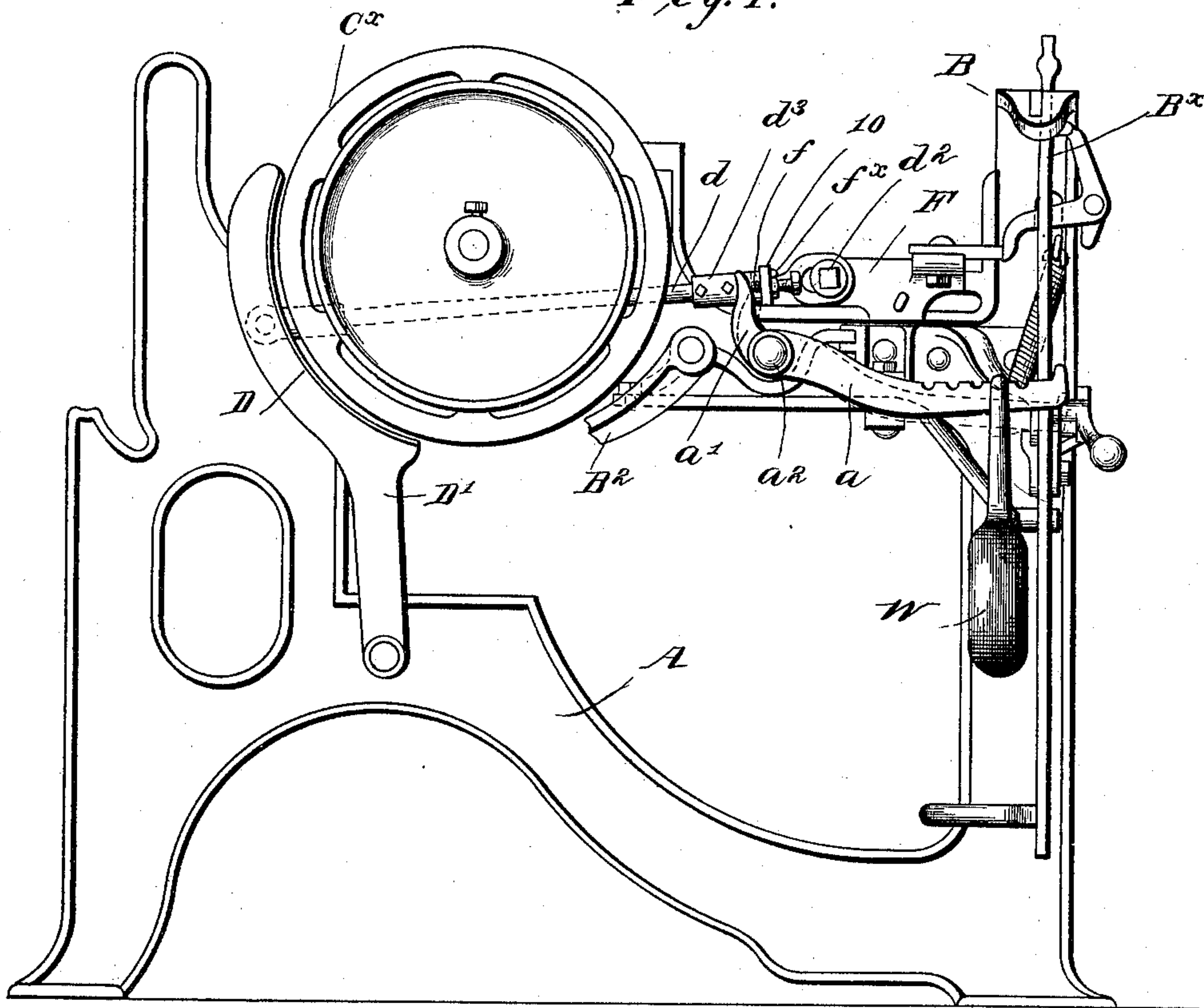
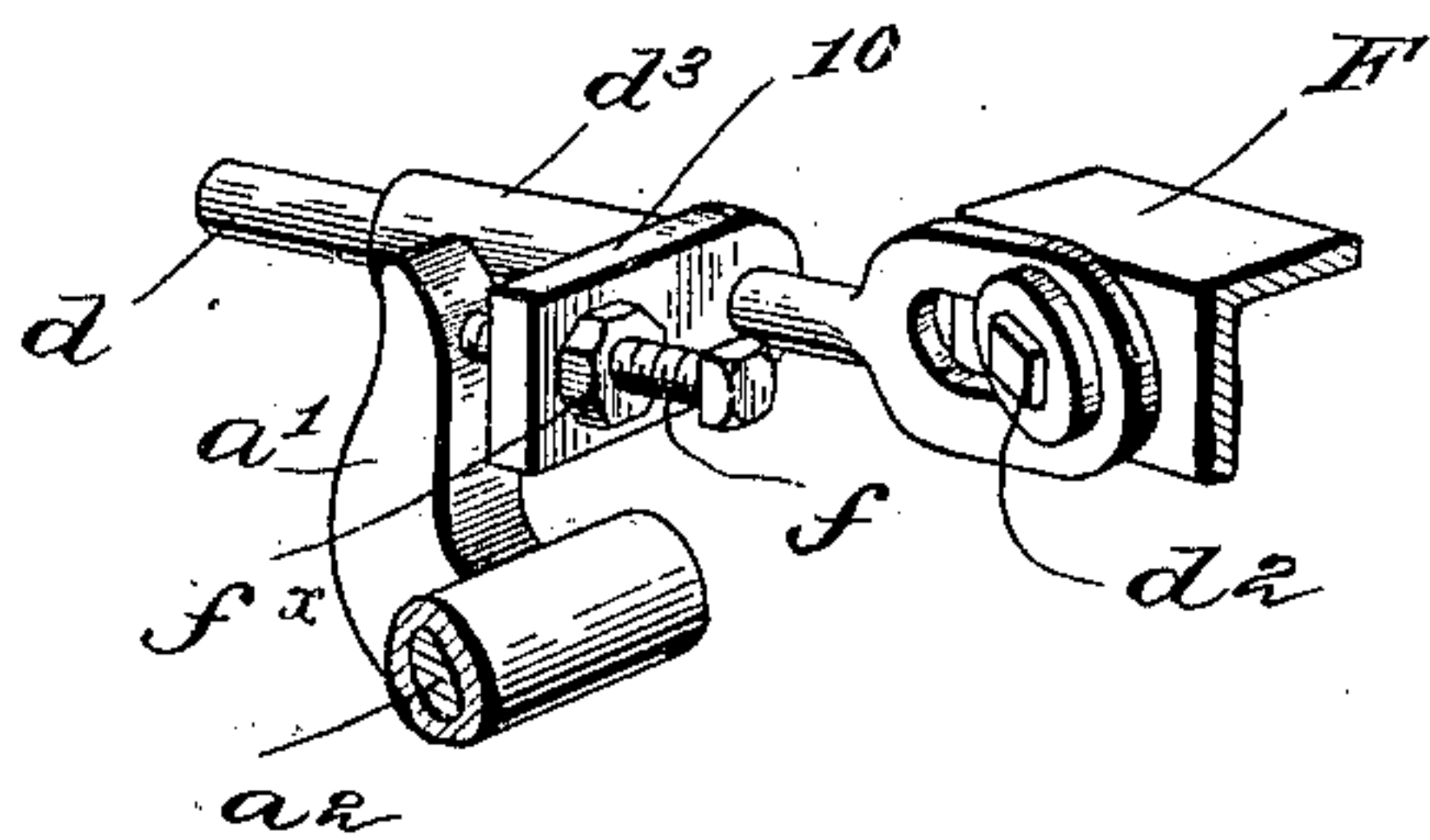


Fig. 2.



Witnesses.

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BRAKE MECHANISM FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 653,153, dated July 3, 1900.

Application filed January 29, 1900. Serial No. 3,128. (No model.)

To all whom it may concern:

Be it known that I, ALFRED E. STAFFORD, a citizen of the United States, residing at Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Brake Mechanism for Looms, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to brake mechanism for looms whereby the operation of the stopping means effects the application of suitable brake mechanism, and my invention is herein shown as embodied in a brake mechanism such as is shown and described in United States Patent No. 593,070, dated November 2, 1897. With the mechanism referred to and with others the stoppage of the loom frequently results in the formation of cracks in the cloth owing to inability to adjust or set the mechanism with sufficient fineness or delicacy to be efficient under all circumstances. By my invention I am enabled to absolutely prevent the formation of cracks in the cloth.

Figure 1 is a left-hand side elevation of a loom with brake mechanism of the type referred to, one form of my invention being embodied therein; and Fig. 2 is an enlarged perspective detail of the means for effecting the adjustment of the brake mechanism in accordance with my invention.

The loom side A, breast-beam B, shipper-lever B^x, the brake-wheel C^x, secured to or to rotate with the fast pulley, the belt-shipper B², (partly shown,) and connections between it and the shipper-lever are and may be of usual construction, and the brake-shoe D, mounted on an arm D', pivoted to the loom side, the connected rod d, slotted at its forward end to receive a stud d² on the frog F, forming part of the protector mechanism, the collar d³ on the brake-rod, and the brake-actuator a, fulcrumed at a² on the loom side and having an upturned ear a' are substantially as in the patent referred to. This actuator is moved by the action of a weight W when released by the operation of the stopping means, all as in said patent and requir-

ing no further detailed description herein. 50
The toe a' in the said patent acts directly upon the collar d³ to move the brake-rod d longitudinally to the right to apply the brake when the loom is stopped; but in accordance with my invention I mount an adjustable 55
abutment f on the collar to be engaged by the toe a' of the actuator when the latter operates. A lateral extension 10 of the collar d³ is provided with a threaded hole to receive the screw f, which constitutes the adjustable 60
abutment, a check-nut f^x locking the latter in adjusted position, the rear end of said abutment being located in the path of the toe a'. By turning the screw f in one or the other 65
direction the engagement therewith by the toe a' of the actuator will be delayed or accelerated correspondingly, so that the application of the brake is adjusted or varied relative to the operation of the stopping means.

It will be manifest that the adjustment can 70
be effected with the greatest nicety and accuracy according to circumstances, and the formation of cracks in the cloth, due to the stopping of the loom, will be absolutely prevented, the brake action being made thoroughly 75
efficient at all times.

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

1. In a loom, a brake-shoe, a longitudinally- 80
movable brake-rod connected therewith and provided with a collar secured thereto, an abutment adjustably mounted on the collar, an actuator provided with a toe to engage said abutment and thereby apply the brake, 85
and stopping means for the loom, stopping movement of said means effecting the operation of the actuator.

2. In a loom, stopping means, a brake, an actuator therefor, means for supporting an 90
abutment on one and a cooperating toe on the other, mechanism for adjusting the abutment with relation to its supporting means, and separate means to lock the abutment in position, the operation of said stopping means 95
effecting the operation of the actuator.

3. In a loom, stopping means, a brake, a connected brake-rod having a lateral exten-

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sion, an abutment adjustable on said extension, means to lock the abutment in adjusted position and an actuator for the brake, having a toe movable in the path of and to engage said abutment, to apply the brake, operation of the stopping means effecting the operation of the actuator to apply the brake.

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

ALFRED E. STAFFORD.

Witnesses:

GEORGE OTIS DRAPER,
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