

J. WATERS.
Stopping Mechanism for Looms.

No. 205,451.

Patented June 25, 1878.

Fig. 1.

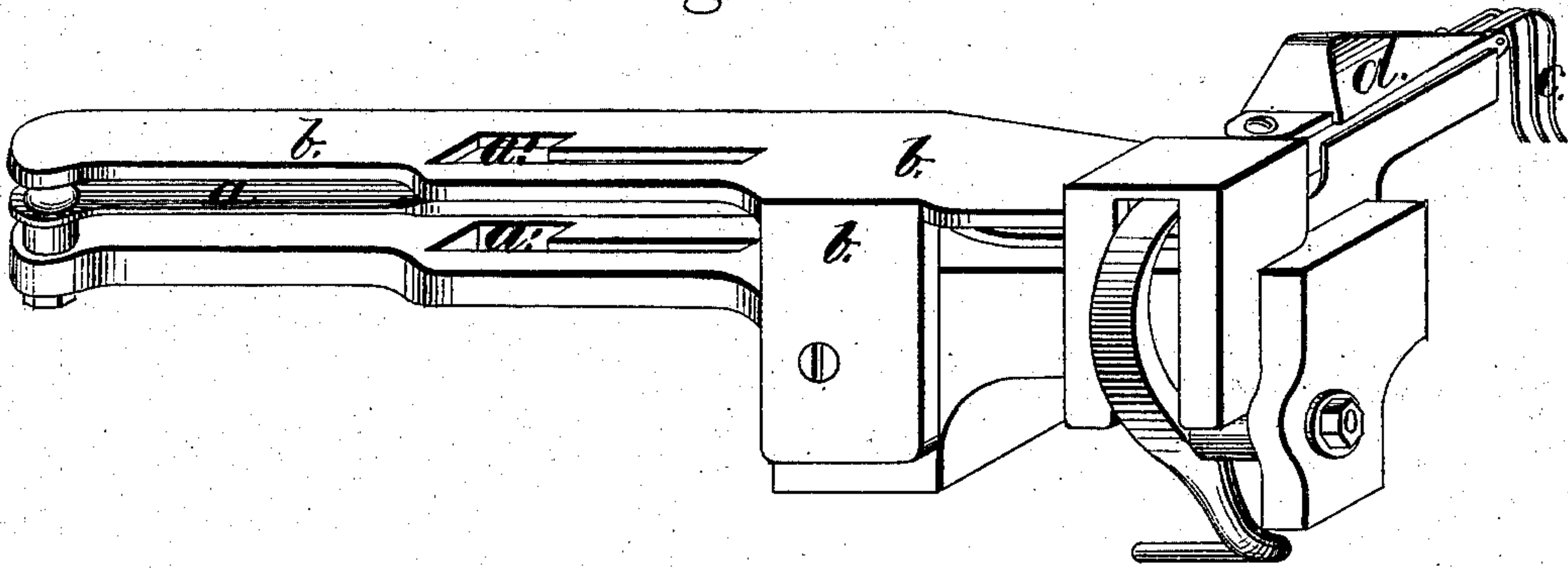


Fig. 2.

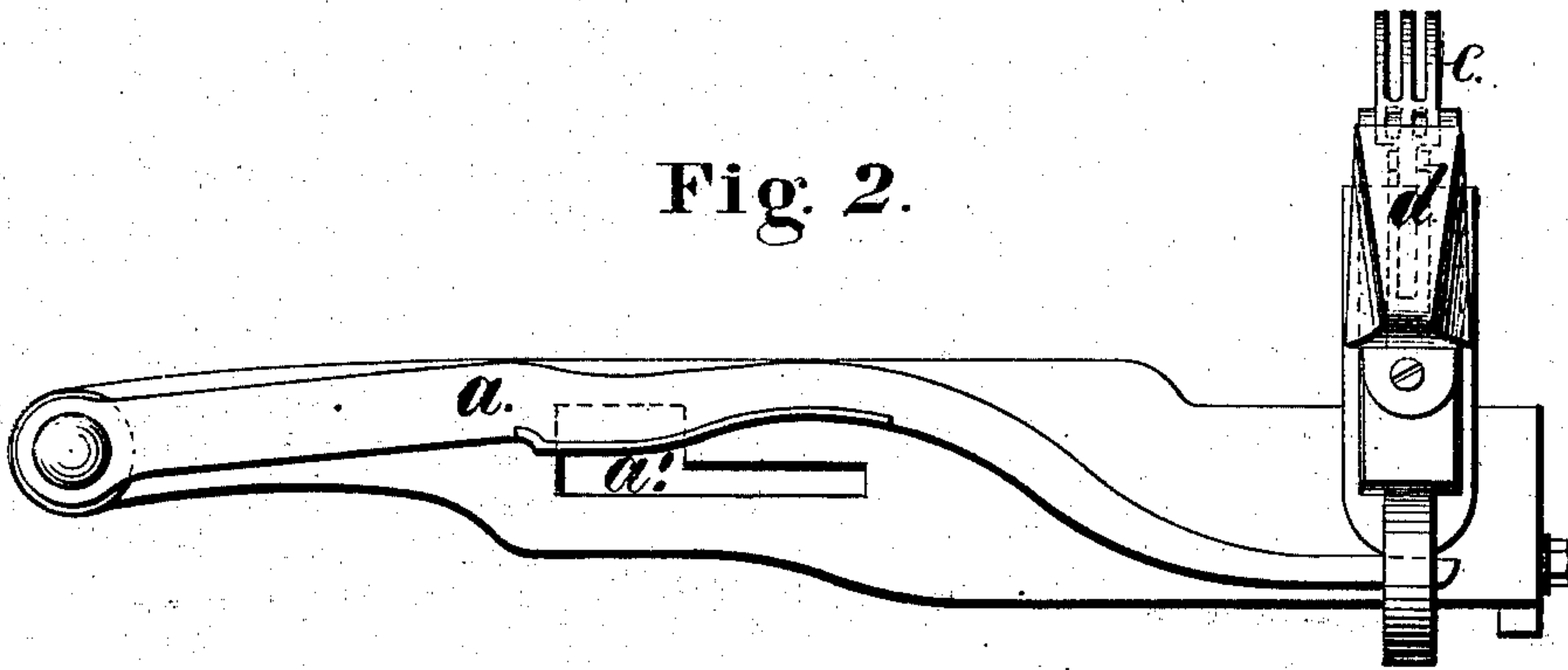


Fig. 3.

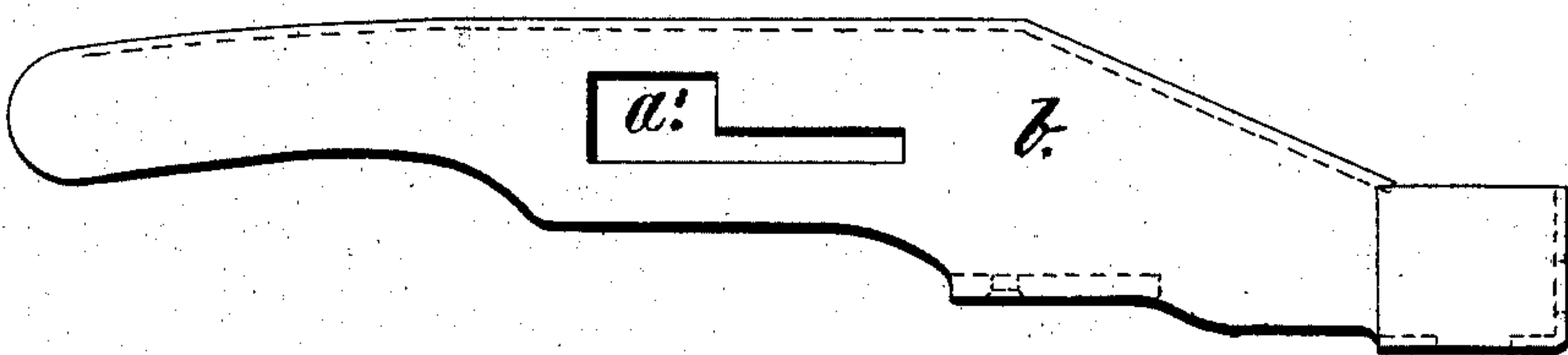


Fig. 4.



WITNESSES.

Henry J. Miller
Jos. A. Miller Jr.

INVENTOR.

Joseph Waters
by Joseph A. Miller
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH WATTERS, OF FALL RIVER, MASSACHUSETTS.

IMPROVEMENT IN STOPPING MECHANISMS FOR LOOMS.

Specification forming part of Letters Patent No. **205,451**, dated June 25, 1878; application filed March 22, 1877.

To all whom it may concern:

Be it known that I, JOSEPH WATTERS, of the city of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Looms; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

The object of the invention is to protect the shipper-detaching lever and the weft-fork, so that the weaver cannot stop the loom by either of these, and is compelled to use the shipper for stopping the loom.

Figure 1 is a perspective view of a portion of a loom, showing the guard for the shipper-detaching lever, and also the cap or guard for the lever of the weft-fork. Fig. 2 is a top view with the lever-guard removed. Fig. 3 is the shipper-lever guard, and Fig. 4 a sectional view of the weft-fork guard.

Looms are generally provided with automatic stop-motions, arranged to stop the loom when the weft-thread breaks or gives out. These stop-motions are usually operated through the weft-fork, and are arranged so that suitable mechanism transmits the motion to a lever, which disengages the shipper-handle, and thus throws the belt on the loose pulley and stops the loom.

There is a great temptation to the operative to quickly stop the loom by either touching the weft-fork, and thus set the stop-motion in operation, or by pulling the detaching-lever, and thus release the shipper. Both of these methods are injurious to the cloth in process of weaving, as they interfere with the regular and consecutive operations of the various parts of the loom; and to prevent this is the object of the invention.

In the drawings, *a* is the detaching-lever, and *a'* the shipper-slot. When this lever is in its normal condition the shipper is held by the enlarged end of the slot, and when the stop

mechanism is operated the lever *a* pushes the shipper out of the recess, and allows it to slide in the shipper-slot.

b is a guard placed over the detaching-lever *a*, and also provided with the slot and recess *a'*, in which the shipper moves. When the guard *b* is secured to the loom the operative cannot reach the lever *a*, and must stop the loom by means of the shipper-handle.

c is the weft-fork; and to also prevent the operative from touching the same, and so stopping the loom, I provide the cap *d*, by which the weft-fork is securely covered, and cannot be touched.

By this construction all parts of the loom are left free to perform their functions in their regular successive order, and all uneven and defective wearing of the cloth is avoided, the weft-fork is free to detect and operate, and also kept free from dust and waste, and the operative can stop and start the loom only by the legitimate means provided for this purpose.

I do not base any claim upon the weft-fork *C*, used in connection with the guard, as the same is not my invention.

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

1. The combination, in a loom, with the detaching-lever *a*, of the guard *b*, arranged substantially as and for the purpose described.

2. In combination with the weft-fork *c*, the cap *d*, arranged substantially as and for the purpose set forth.

3. The guard *b* and cap *d*, in combination with the automatic stop mechanism of a loom, substantially as described, by which the parts are protected, and the loom can be stopped by the same only when the weft-thread gives out or breaks, as and for the purpose specified.

JOSEPH WATTERS.

Witnesses:

JOSEPH A. MILLER,
AMOS A. WHITE.