G. E. Milroy.

Stopping.

No. 88,322. Patented Mar. 30, 1869.

Fig: 3.

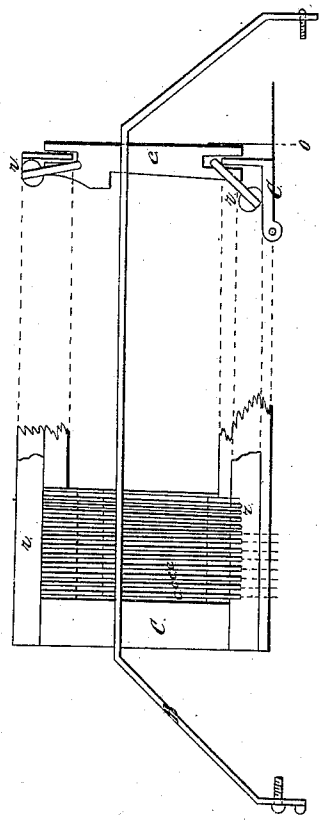
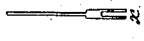


Fig: 2.

Fig: 4



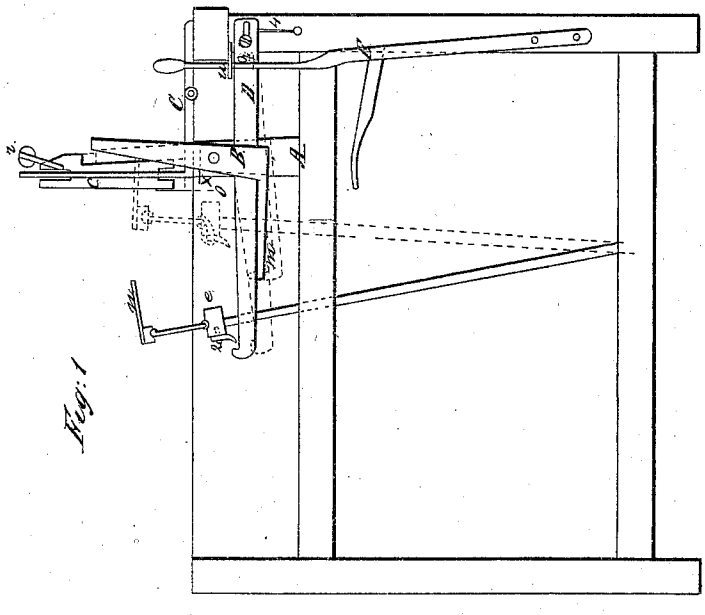


Fig: 1

Witnesses.
Wm. Roberts
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Inventor.
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UNITED STATES PATENT OFFICE.

GEORGE E. MILROY, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN STOP-MOTIONS FOR LOOMS.

Specification forming part of Letters Patent No. **88,322**, dated March 30, 1869.

To all whom it may concern:

Be it known that I, GEORGE E. MILROY, of the city of Lowell, county of Middlesex, State of Massachusetts, have invented a new and useful Method of Stopping Looms; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification.

Figure 1 is an end view of a loom, with the stop-motion. Fig. 2 shows front view of stops, with reeds *r r* between stops. Fig. 3 is a full-sized end view, as shown in Fig. 1. Fig. 4 shows a modified form of the points *o o*, in which modification the points are attached in groups of two or more to a single stop.

A represents the frame of a loom, with two additional posts (one shown) for supporting the guard B, and also serving as a rest for the frame C and the bar *x*.

c is a series of pieces of brass or other suitable material, cut as shown, with steel points *o* attached. The pieces of brass are slotted at each end, and move freely up and down in the frame C, as shown in Figs. 2 and 3.

I keep the pieces *c* apart by inserting pieces of common weaving-reed *r r* between the plates, as shown in Figs. 2 and 3.

C is an iron frame, attached to the front part of the loom by two straps, with hinge-joints in them.

D is a latch for operating the shipper E.

4 is a spring to keep the latch in place.

u is a guard, to hold the upper end of the shipper.

e is the lathe, with a catch, 2, on back of it.

n are two pieces (one shown) in the top of the reed-cap, so that when the lathe moves forward, as shown by the dotted lines, the pieces *n* hit the guard B, and push it back out from under the notches in the stops *c*.

The bar *x* rests on the posts A, and goes across the loom under the cloth, just back of the points *o*, so as to support the cloth and keep it from sagging.

The cloth moves between the iron frame C and the bar *x*, and the points *o o* rest on the cloth about one-quarter of an inch back of the edge of the cloth that is being woven.

As long as the cloth remains perfect the points *o o* remain on top of it, thus keeping the stops *c* in place, as shown, and the guard B falls under the notches, which allows the arm *m* (supporting one end of the latch D) to fall, with the latch, down to the dotted lines, so as to be out of the way of the catch 2. But when any imperfections occur in the cloth, such as breaking out of threads, or from the warp becoming tangled or knotted, so as to cause "overshots," or any other imperfections, the points *o* drop through the cloth, and the stops *c* attached fall to the position shown in dotted lines in Fig. 1, thus stopping the guard B, which keeps the latch D, as shown, so as to be acted on by the catch 2 as the lathe goes back, which takes the latch with it, and the pin 3 in the end of the latch catches the handle of the shipper E and pulls it out of its recess, thus shipping the belt and stopping the loom, so that the necessary repairs may be made.

B is shown in Figs. 2 and 3 as going across the loom under the notches in the stops *c*. If the weaver wants to mend a thread, she springs the arm *m* out from under the latch D and turns the guard B down on the front beam of the loom. This allows the frame C, with stops *c*, to be tipped forward by means of the hinged joints in C, so that the weaver can get at the work.

I do not confine myself to the exact method of arranging the different parts herein described, as that may be varied; but

What I do claim as my invention, and wish to secure by Letters Patent, is as follows:

I claim the mechanism herein described for stopping a loom on the occurrence of imperfections in the woven cloth, when constructed, combined, and operated substantially as set forth.

GEO. E. MILROY.

Witnesses:

CHARLES CLARK,

WM. ROBERTS.