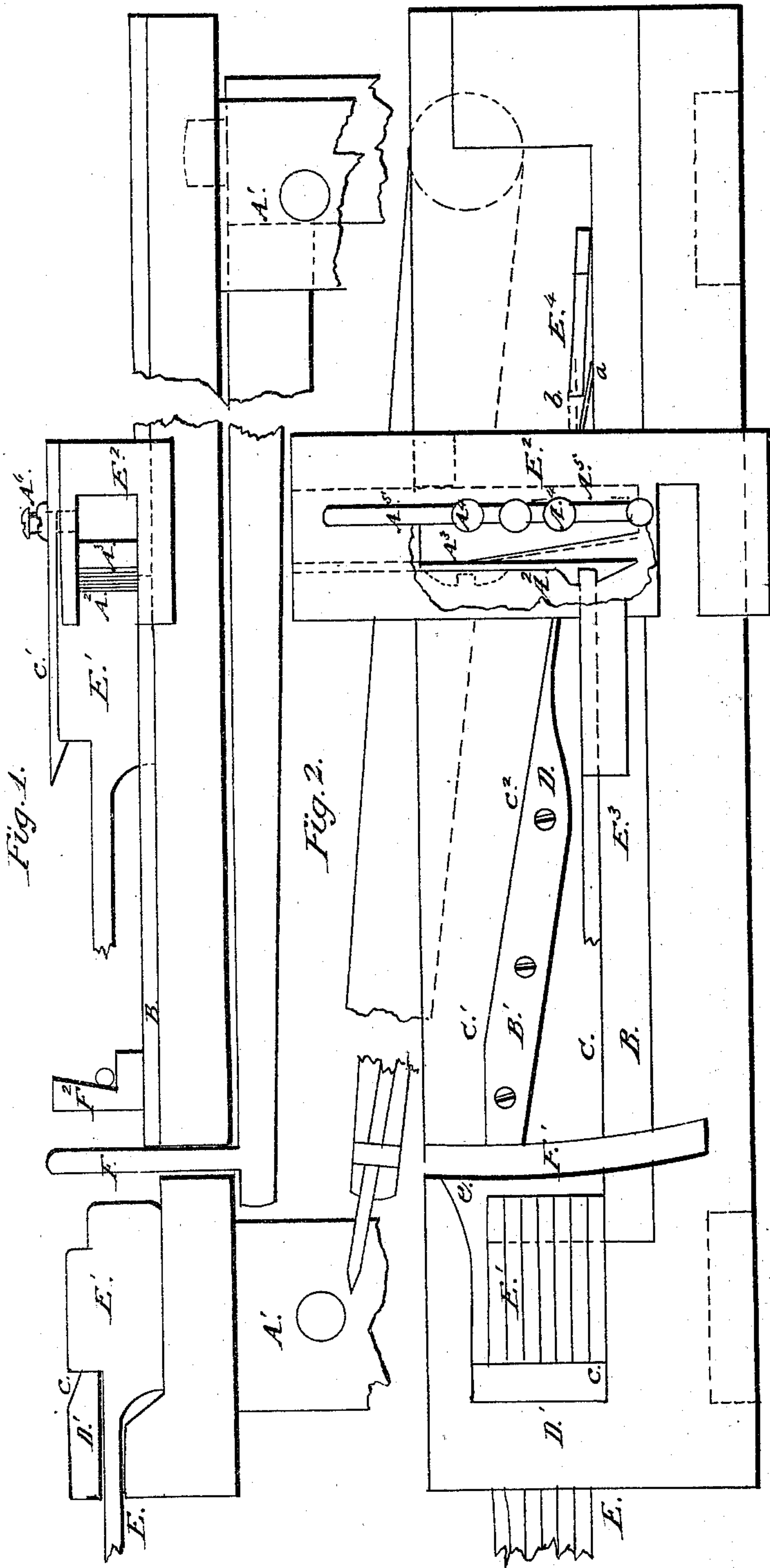


W. Webster.
Weaving Frie Fabric.

N^o 78,163.

Patented May 19, 1868.



Witnesses:

John P. Schumpp
William H. Webster

Inventor;

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William Webster

UNITED STATES PATENT OFFICE

WILLIAM WEBSTER, OF MORRISANIA, NEW YORK.

IMPROVEMENT IN WEAVING PILE FABRICS.

Specification forming part of Letters Patent No. 78,163, dated May 19, 1868.

To all whom it may concern:

Be it known that I, WILLIAM WEBSTER, of Morrisania, in the county of Westchester and State of New York, have invented a new and useful Improvement in Wire-Motions for Weaving Pile Fabrics, &c.; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, which make a part of this specification.

The nature of my invention consists in so constructing the support to the wire-head that on pushing the wire forward the head is transferred to a point quite or nearly opposite to the fell of the cloth, or where a wire is left on being bent up by the reed.

The following is a description of my improvement and its operation, in which—

Figure 1 represents a sectional part and side view of the frame A, guide B, (the paths not shown,) pusher E², wire E, and wire-head E¹. D' is a part of the frame A, which is slotted that a wire may pass through or between it, to keep the wire in upright position. c represents a nick to allow the hook c' (or any known means) to catch into and against the head of the wire to draw it out of the cloth. F and F² represent a guide to guide the point of the wire toward the open shed. The point of the wire is carried forward the instant it is drawn from out the cloth, and as this wire is being pushed into the shed, the guide recedes back to its former place to receive another wire, as before.

This guide is operated by any of the well-known means. As I do not claim it I do not show any device to operate it.

Fig. 2 represents a top view, and showing the two paths C and C¹, and guides B and B', spring or separator D, a number of wires, E, as shown, if woven into the cloth, and pusher E², which has a part of the top cut away to show the spring that catches the head of the wire. F¹ represents an open space for the guide F to come up to carry the point of the wire toward the open shed. This wire-motion is supported by two upright standards, A¹ A¹, (or otherwise,) to the body or frame-work of the loom. As the wires are withdrawn from out the cloth they enter upon a level plane or path, C, which is directly opposite to the wire to be drawn from the cloth. Said path is walled up on one side, as represented by B, which is also a guide to the wire on being drawn from out the cloth, as shown at E³.

When the wire is drawn out it comes in contact with the spring D, and presses it open toward b, as shown by the dotted line, and after the head passes by the point of it the spring again recedes to its first position, and as the wire is to be pushed forward it cannot re-enter the path, but is switched off into the other path C¹, as shown by the wire E⁴, which is also walled upon one side, as represented by C², which is a guide to the wire on being pushed in the shed and the open space e. These wires on being withdrawn from out the cloth, the heads of them enter into a nick made into the spring A², thus preventing the wire falling over. This is attached to a sliding block, A³, which is supported by two pins, A⁴, in a slot, A⁵, made in and through the top of the pusher. As the wires are pushed home the spring is pressed back from off the heads of the wires, when the spring is instantly drawn back by an elastic spring, A⁶, and catches the head of another wire, the end of the spring being made beveling or latch-shaped for that purpose.

Having thus minutely described my invention and its operation, I do not wish to confine myself to any particular-shaped paths or shaped spring or separator, nor in having the spring in the pusher attached to the block in supporting the head of the wire. For instance, the spring may be stationary, (not sliding,) and opposite to the head of the wire to be drawn from out the cloth; and instead of the spring with its nick to hold up the wire in the second path, I modify the shape of the sliding block, also have it made to touch the bottom of the path, and the end of it to bear against the head of the wire, pressing it up against the wall on guide B'. One or two other ways may be employed; but the first is preferable.

What I claim as my improvement in the construction of wire-motions, and desire to secure by Letters Patent, is—

1. In combination with the pusher, the spring A², sliding block A³, and spring A⁶, all constructed and arranged substantially as described.

2. The herein-described apparatus for operating pile-wires, when constructed and arranged substantially as described.

WILLIAM WEBSTER.

Witnesses:

JOHN P. SCHLUMPF,

WILLIAM H. WEBSTER.