

HENRY CHATAIN.

Improvement in Frames for Drying Laces, &c.

No. 119,318.

Patented Sep. 26, 1871.

Fig. 1.

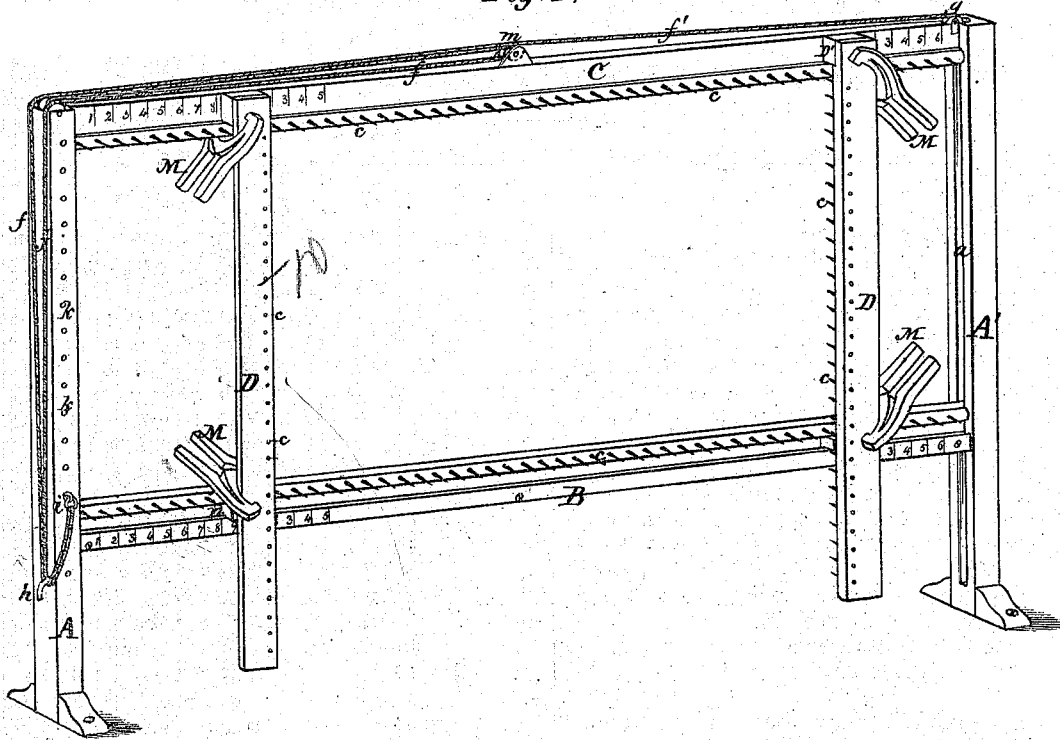


Fig. 2.

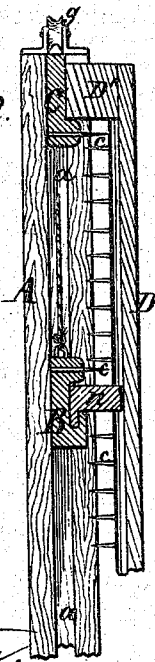


Fig. 3.

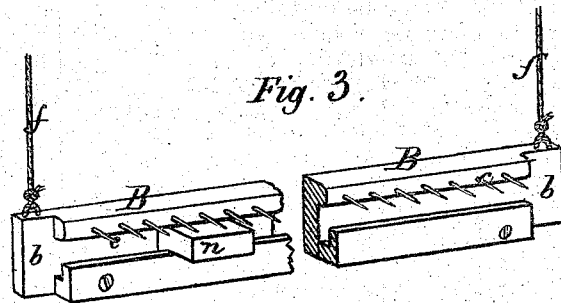
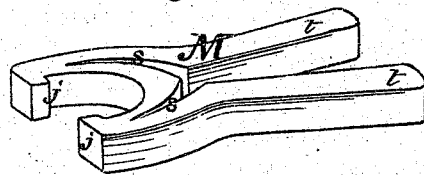


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY CHATAIN, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN FRAMES FOR DRYING LACES, &c.

Specification forming part of Letters Patent No. 119,318, dated September 26, 1871.

To all whom it may concern.

Be it known that I, HENRY CHATAIN, of the city of Washington, in the District of Columbia, have invented certain new and useful Improvements in Frames for Drying Laces, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents, in perspective, my improved frame. Fig. 2 represents a transverse vertical section through the frame on an enlarged scale. Fig. 3 represents, in perspective, the bottom piece of the frame removed from the uprights. Fig. 4 represents a spring-clamp to hold the sides of the frame together.

Similar letters of reference where they occur in the separate figures denote like parts in the drawing.

Frames of this kind have been made heretofore, and were composed of different pieces held together by movable wooden pins, which soon worked loose by constant use and made it next to impossible to dry lace curtains in a position not out of square; and my invention consists in supporting the bottom piece of the frame by means of ropes passing over pulleys, which can be operated from the side by one person, and maintain the bottom piece always parallel to the top piece. My invention consists also in uniting together the top, bottom, and side pieces by means of spring-clamps cut out and formed of a single piece of wood, as shown.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawing.

A and A' are two posts about seven feet high, more or less, securely fastened in an upright position, in each of which a groove, *a*, is formed, in which the ends *b* of the bottom bar B slide in its motion up and down. C is the horizontal top bar which connects the two posts A A'. It is provided with pins, *c*, made of metal not liable to rust, on which the material to be dried is hung up. The bottom bar B and vertical side bars D are provided with similar pins *c*. The bottom bar B is suspended by means of two ropes, *f* and *f'*, attached to its extremities, the rope *f'*, passing over the pulley *g* and over the top bar C, passes over one of the three pulleys placed on the top of the post A to the hook *h*, where it may be

fastened, or under which it passes to the movable ring *i*, which is provided with a pin that can be introduced into any of the holes *k* in the post A. The rope *f* passes from the bar B to the middle pulley in the top of the post A, and from there to the pulley *m*, returning to the top of the post A and down under the hook *h* to the movable ring *i*, where the two ropes *f* *f'* are permanently fastened. The object in passing the rope *f* around the pulley *m*, which is in the center of the frame, is to have the two ropes *f* and *f'* of the same length, the dry or damp atmosphere acting in the same manner on both. The bottom bar B is provided with a groove for the reception of the sliding shield *n*. This shield *n* is to keep the vertical side bars D apart from the bar B, and prevents the pins *c* of either one to get blunted or bent, as they would be liable to become if the shield *n* did not keep them apart. To the top of each vertical side bar D is attached a block, D', to act as a shield for the pins of the top bar C. Each bar of the frame is made as light as possible for operating and handling, but has a projection where the pins *c* are coming through. This projection in the upper bar C is used as a rest for the vertical bars D to be hung upon by means of their block D', and the projection on the bottom bar B (as shown in Fig. 2) retains the shield *n* in position where it cannot be mislaid.

In drying lace curtains, shawls, &c., with this frame, the operation is as follows: The vertical side bars D having been put aside, the bottom bar B is let down to the bottom of the grooves *a* in the posts A A' by means of the ropes *f* and *f'*. The curtain is then hung on the pins of the top bar C. The bottom bar B is then raised up by the ropes *f* *f'* until it touches the lower edge of the curtain, and retained there by them. The side pieces D are then placed in a vertical position by remarking the corresponding numbers marked on the top and bottom bars, and secured in position by the spring-clamps M. The curtain is then fastened all around to the pins *c* on the side pieces D and bottom bar B. To remove the curtain from the frame the operation is reversed, and the bottom bar B is then raised by the ropes *f* *f'* out of the way, close under the upper bar C. When a large number of these frames are used in a drying-room with an artificial heat of over 100° it is important that the operation

should be done as expeditiously as possible, and I find my spring-clamps M superior to any other fastening for the purpose; they being made of wood, there is no danger of soiling the hands or laces in using them. The clamps M are cut (as shown in Fig. 4) out of hickory plank about an inch thick, the saw-cut at *s* allowing the jaws *j* to open when the handles *t* are compressed together, and retaining the position as shown when released.

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

1. In combination with the grooved posts A A/

and the top bar C of a frame for drying laces, &c., the lower bar B, as operated by ropes *ff*, with the shield *n* and spring-clamp M, substantially as and for the purpose specified.

2. In combination with a frame for drying laces, &c., constructed substantially as shown and described, the spring-clamp M, cut out of a single piece of wood, substantially as and for the purpose set forth.

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Witnesses:

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EDM. F. BROWN.

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