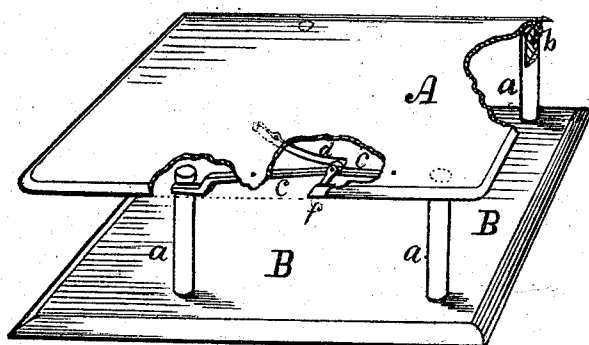


R. L. LEECH.

Movable Cloth-Plates for Sewing-Machines.

No. 142,404.

Patented September 2, 1873.



Witnesses,
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UNITED STATES PATENT OFFICE.

ROBERT L. LEECH, OF WINTERSSET, IOWA.

IMPROVEMENT IN MOVABLE CLOTH-PLATES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **142,404**, dated September 2, 1873; application filed July 14, 1873.

To all whom it may concern:

Be it known that I, ROBERT L. LEECH, of Winterset, in the county of Madison and State of Iowa, have invented an Improvement for Sewing-Machines, of which the following is a specification:

My invention is a simple means of securing the cloth-plate of a sewing-machine without the aid of screws, and in such a manner that it can be readily and instantly attached and detached at pleasure. It consists in attaching hooks or bent dowel-pins on the under side of the plate to enter corresponding holes or eyes in two of the corner-posts, and in pivoting levers to the under side of the same plate to be operated by a spring in such a manner that the ends of the levers will engage catches in the opposite corner-posts, all as hereinafter fully set forth.

My drawing is a miniature perspective view illustrating the construction and operation of my invention.

A is the movable cloth-plate. B is the base upon which it is mounted. *a a a* are corner-posts supporting the cloth-plate. The fourth corner-post is concealed by the plate. *b* is one of the hook-form dowel-pins, rigidly attached in any suitable manner to the under side of the cloth-plate, and at points corresponding with the positions of the rear corner-posts *a a*. A horizontal hole in each corner-post receives the end of the hook or pin *b*, and prevents the plate A from moving in any direction except rearward. A second pin, *b*, is connected with the plate in the same manner near the opposite rear corner-post. *c c* represent levers pivoted to the front and under side of the plate A. Their inner ends are hinged together and their outer ends are bent and shaped to fit into suitable catches at or near the tops of the front corner-posts *a a*. The form of the catches in the posts, and the ends of the levers entering them may vary, but should be so shaped that when the ends of the levers *c c* engage the catches they will be held rigidly and lock the plate firmly to the corner-posts *a a*. *d* is a spring, of suitable

form, attached to the under side of the plate in such a manner that it will press against the hinge-joint of the pivoted levers *c c*. *f* represents a thumb-piece connected with the hinge-joint of the levers *c c*, in such a manner that it will move in and out with the levers when they are operated.

The drawing represents the plate in position with parts broken away to show the attachments.

To remove it, simply press upon the thumb-piece *f*. This will relieve the levers *c c* from the pressure of the spring *d* and disengage their ends from the catches in the front corner-posts *a a*. Raise the front edge of the plate to free it from the front posts, and then pass it rearward under the presser-foot until it is entirely free.

To put it on, pass it from the rear to the front under the presser-foot and allow the pins *b* to engage the holes or eyes in the rear corner-posts, and then press it down flat upon the tops of the four posts. The ends of the levers *c c* co-operating with the catches on the front posts will press back the spring *d* and allow the ends of the levers to enter the catches in or on the front posts. As soon as they have entered, the reaction of the spring will press and hold them in place, and securely lock the cloth-plate in its position.

By this means the cloth-plate can be instantly attached and locked and rigidly held, and also removed at pleasure without requiring the time and trouble of inserting and withdrawing four screws every time the plate is moved.

I claim as my invention—

The movable cloth-plate A connected with the corner-posts *a* by means of the pins *b*, levers *c*, spring *d*, and thumb-piece *f*, substantially as described, and for the purposes specified.

ROBERT L. LEECH.

Witnesses:

RANSOM THOMAS,
GEORGE KOONS.