

P. McALEER.

NEEDLE BOARDS FOR REGISTERING.

No. 178,790.

Patented June 13, 1876.

Fig: 1.

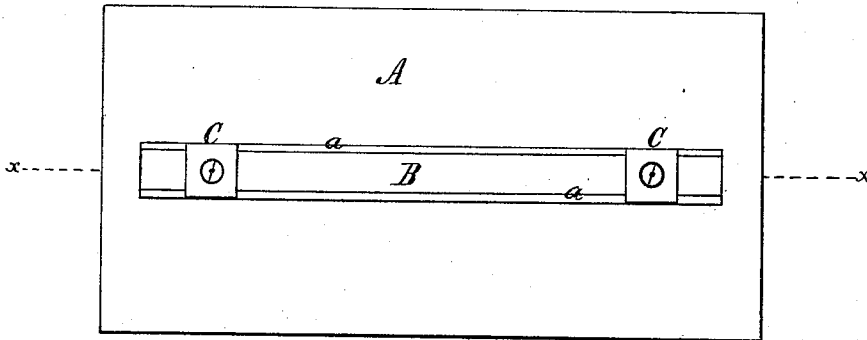
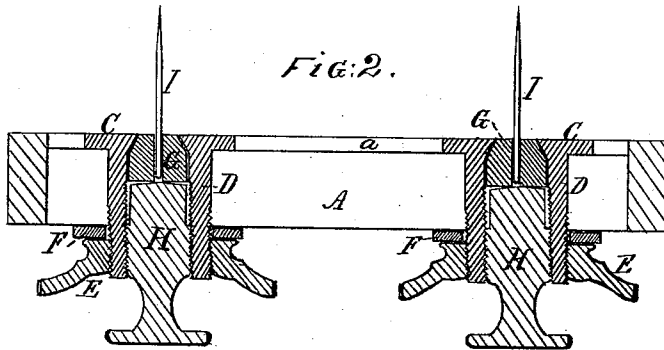


Fig: 2.



WITNESSES:

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PHILIP MCALEER, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN NEEDLE-BOARDS FOR REGISTERING.

Specification forming part of Letters Patent No. **178,790**, dated June 13, 1876; application filed December 10, 1875.

To all whom it may concern:

Be it known that I, PHILIP MCALEER, of the city and county of Washington, and District of Columbia, have invented certain new and useful Improvements in Needle-Boards for Registering; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification:

The object of my invention is to provide an improved needle-board for impaling sheets of printed matter on an accurate register-line for the purpose of subsequently trimming the marginal edges thereof. It very often becomes necessary that the needles or impaling-points should be placed nearer to or farther away from each other for securing sheets of different sizes. It is essentially important that this variation or adjustment should be readily accomplished, and that the degree of adjustment should be extensive.

My invention consists of a metallic box with a squared flanged top adapted to drop through a slot in a table or board, the flange resting in a rabbet, to prevent twisting or turning, while the box extends below the bottom plane of the table top, and secured by a running nut on the outside of the box, the needle being held by a split cone-chuck, forced upwardly to bite the shank of the needle, by an internal nut or follower within the box, as will be hereinafter more fully set forth.

To enable others to more fully understand my invention, I will proceed to describe the construction and operation of the same, referring by letters to the accompanying drawing, in which—

Figure 1 is a top view of a board provided with my needle-holding boxes, and Fig. 2 is a longitudinal section taken at the line *xx* of Fig. 1.

Similar letters indicate like parts in both figures.

A represents the table or board, which has a slot, B, cut through it, and of sufficient length to admit of suitable variation of the distances between the needle-points. *aa* is a rabbet or shoulder cut away on each top edge of the slot of sufficient depth to receive the top flange of the metal box, so that its top surface will lie in the plane of the top of the

table. The slot B is sufficiently wide to permit the passage and movement of the shank or stem of the box, and the rabbets sufficiently wide to neatly embrace the parallel edges of the flange or square top C of the box, and thus prevent it, when in place, from being turned or twisted. D is the shank or stem of the box, which may be square part of its length, or cylindrical throughout its entire length. It is sufficiently long to extend slightly below the bottom of the table or board, and is provided exteriorly with a screw-thread to receive a clamping-nut, E. F is a suitable washer, which, with the top of the nut E, is of sufficient diameter to bridge the slot B in the table, so that when the nut is run up the top flange of the box is drawn snugly down into the rabbet, and the box tightly clamped in position. The box is bored centrally, and for a short distance at the top is tapered to fit the tapered top of a split or halved cone-chuck, G, which is forced up to its place by a screw-plug or follower, H, running upon a thread cut on the interior of the box. The halves of the cone are provided at the center with a semicircular or other shaped slot of sufficient diameter to firmly grasp and hold the head of the needle when brought together by the taper. The top of the plug or follower H is slightly convex, the object of which is that when lowered slightly to loosen the gripe of the split cone, the bottom of which rests on the convex surface, the weight of the halves of the cone-chuck will induce them to separate and release the needles I. Of course the same result would be attained by making the top of the follower flat, and making the bottom of the cone convex.

It will be seen from the foregoing description that when desirable to move the needle-points closer to or farther away from each other, it is only necessary to loosen the clamping-nut E, when the box may be slid along in the groove until the proper adjustment is obtained, when the nut is again tightened and the box clamped in place, and when it is desirable to release the needle the plug or follower H is unscrewed, and the cone-chuck allowed to slightly drop down, which produces the effect desired.

It will be seen from the peculiar construc-

tion of my improved box and needle-holder that they may be readily applied to any ordinary table or board by simply providing the slot and rabbet.

What I claim as new, and desire to secure by Letters Patent, is—

1. The metallic box, provided with the top square flange and depending threaded stem, in combination with a suitable washer, and the clamping-nut E, substantially as and for the purpose set forth.

2. The metallic box, provided with a central bore, and threaded externally and inter-

nally near the bottom, in combination with the split cone G, follower H, and clamping-nut E, substantially as and for the purposes set forth.

3. The plug or follower H, having its top extremity convex, in combination with the split cone, substantially as and for the purpose set forth.

Witness my hand and seal.

PHILIP MCALEER. [L. S.]

Witnesses:

JOHN S. CRARY,
JNO. J. BONNER.