V. LAPHAM.

UNDER-BRAIDERS FOR SEWING-MACHINES.

No. 169,910. Patented Nov. 16, 1875.

Fig 1

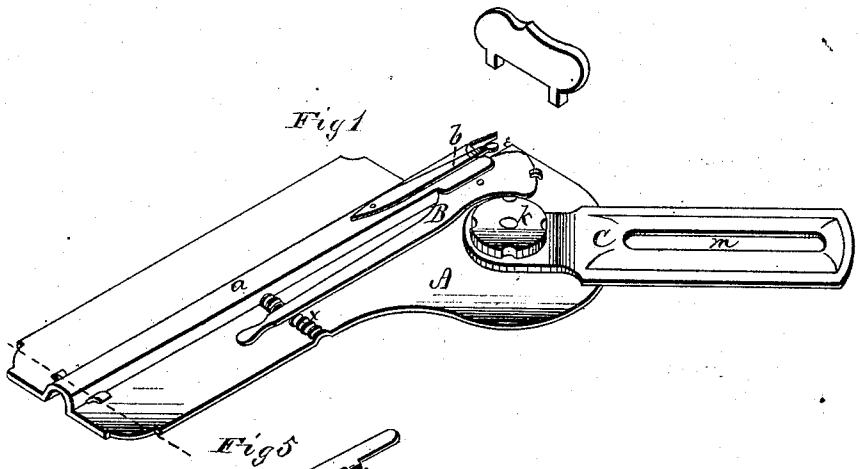


Fig 5

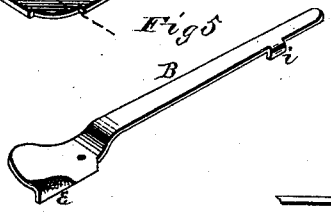


Fig 4

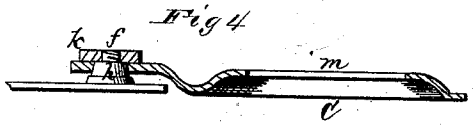


Fig 3

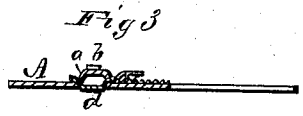
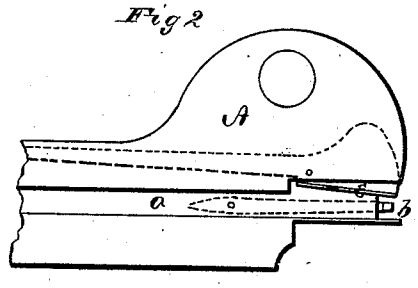


Fig 2



WITNESSES

H. L. Ourand.

C. L. Ewerk.

INVENTOR

Valentine Lapham

per Alexander & Mason

ATTORNEYS

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

VALENTINE LAPHAM, OF MARION, OHIO.

IMPROVEMENT IN UNDER-BRAIDERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **169,910**, dated November 16, 1875; application filed March 17, 1875.

To all whom it may concern:

Be it known that I, VALENTINE LAPHAM, of Marion, in the county of Marion and in the State of Ohio, have invented certain new and useful Improvements in Under-Braiders for Sewing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a braider for sewing-machines, as an improvement on the Letters Patent No. 150,059 granted to me April 21, 1874, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my braider. Fig. 2 is a bottom view of the grooved plate. Fig. 3 is a section through the line *x x*, Fig. 1. Fig. 4 is a longitudinal section through the fastening-arm; and Fig. 5 is a perspective view of the lever for adjusting the width of the braid-groove.

A represents a plate of any suitable dimensions, provided on its under side with a longitudinal groove, *a*, stamped in the plate and forming a rib on the upper side. The inner end of this rib is beveled, as shown, and open on top where the braid leaves the groove *a*, so as to allow the needle to strike inside of the end of the plate, and thereby prevent it from missing striking the center. On the top of the race *a* is fastened a spring, *b*, the loose end of which extends down in the open end of the race *a* to hold the braid down in front before the needle strikes, and when the needle is raised it prevents the braid from slipping back when doing fine work. This spring is of much importance at all times. At the outer end of the race *a* is a small staple, *d*, clinched to the plate, as shown in Fig. 3, and forming the entrance to the race and holding the braid properly therein. On the plate A is pivoted a lever, B, one end of which extends into the race *a* at the inner end, the race being slotted for that purpose. Within the end of the race *a* the edge of the lever is bent downward, forming the braid-guide *e*, as shown in Fig. 5. By means of this combined lever and braid-guide the race is made adjustable for different widths of braid, and the lever is made fast at the desired point by means of notches *x* on the bed-plate and a tongue, *i*, on the lever. At a suitable point on the bed-plate A is a stationary screw, *f*, with a cone-shaped center, *h*, to fasten the arm C upon, and it being upon a wedge principle, when the nut *k* is screwed down it forms a firm fastening. The arm C has an elongated slot, *m*, through which the set-screw passes to fasten the arm to the bed-plate of the machine, and at one end it has a hole or slot to fit over the conical head *h* of the screw. The center of the arm C along the slot *m* is raised, so that the bearing comes on the edges only, which makes a firmer and more solid fastening than a flat plate. The slotted arm C gives room to move the braider to or from the feed, and the lever B being adjustable it is very easy to locate the braider so that the needle will strike the center.

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

The combination, with the bed-plate A, provided with the race *a* and notches *x x*, of the pivoted lever B, provided with the braid-guide *e* and tongue *i*, as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of December, 1874.

VALENTINE LAPHAM.

Witnesses:
JOHN F. MCNEAL,
FRANCIS M. SCRIBNER.