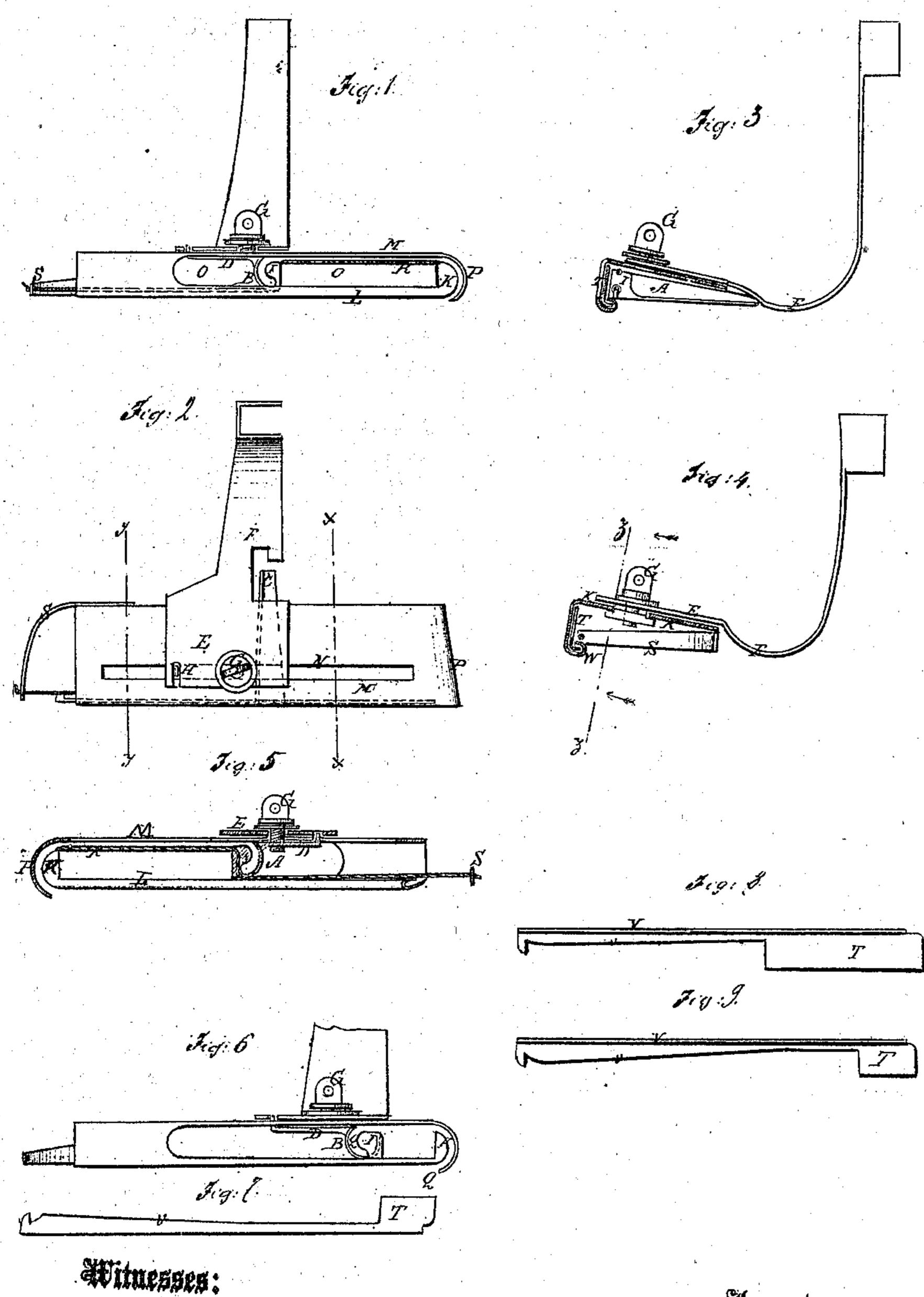
A.J. Bartlett,
Herriner

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## United States Patent Office.

ABEL H. BARTLETT, OF SPUYTEN DUYVIL, NEW YORK.

## IMPROVEMENT IN HEMMERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 107,650, dated September 27, 1870.

To all whom it may concern:

Beit known that I, ABEL H. BARTLETT, of Spuyten Duyvil, in the county of Westchester and State of New York, have invented new and useful Improvements in Hemmers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in that class of hemmers for sewing-machines which are designed for marking hems of different widths, and which are attached to the presser-foot.

My invention relates to hemmers for sewingmachines; and it consists in certain improvements thereon, which will be first fully described in connection with all that is necessary to their clear understanding, and then

specified in the claims. Figure 1 represents a front elevation of my improved hemmer. Fig. 2 is a plan view of the same. Fig. 3 is a transverse section on the line x x of Fig. 2. Fig. 4 is a transverse section on the line y y of Fig. 2. Fig. 5 is a section on the line zz of Fig. 4, looking in the direction of the arrows shown in Fig. 4. Fig. 6 is a front elevation of the same when arranged for the cloth-supporting plates to be used instead of the cord. Fig. 7 is a front elevation of one of the plates used to support the cloth in the space between the two parts of the former when the latter is separated; and Figs. 8 and 9 are views of two of said plates, the same being inverted.

Similar letters of reference indicate corresponding parts.

A represents a hem-folding and guide plate for aiding in folding the edge of the cloth and guiding it after it has been folded and turned under to the needle. It is made semicircular, or nearly so, at the receiving end B, and terminates next to the needle in an angular form, as shown at C. This grooved guiding-plate is connected to or made a part of a plane plate, D, by which it is to be attached to the plate E, which is a prolongation of the presser-foot F. The connection with this plate E is made by a clamping-screw, G, and a stud, H, which enter slots in the end of plate E, to be secured by the clamping-nut, so that the attachment

or removal may be effected without taking the

clamping-nut out of plate D.

The front end B of the guide A is provided with a block or plate, I, which, together with the block or plate K, I call the "folder," over which the cloth is to be turned to form the fold of the hem, the width of which is to be governed by these plates. The plate K is mounted on a long arm, L, formed from one edge of a plate, M, bent perpendicular to the said plate, so that when the latter is clamped between the guide A and the plate E by the clamping-screw G passing through a slot, N, in it the said arm will rest on the plate of the machine in front of the end B of the guide A and perpendicular to it. The said arm L is separated from the plate M by a space, O, twothirds, or thereabout, the length of the plate M. Beyond the end of the arm L to which the plate or block K is attached the plate M is bent around the convex side of plate K, as shown at P, to form the cloth-guide for the outer edge of the fold and for turning the cloth in making the first fold. These two plates or blocks I K form a divided and extension folder, which, when brought close together by adjusting the plate M along the plate D and clamping-screw G to the required position, form the interior wall of a scroll-groove, Q, in which the cloth is turned to form the hem. The outer wall of the groove is formed by the bent end P of the plate M, a part of the top of the latter, and the guide A. These two parts I K are designed to be, when reduced to practical form, of the proper size to form the narrowest hem to be made when placed close together, and by separating them more or less widely apart it is designed to make hems / of any required width. When making wide hems it is necessary to support the cloth between the tops of the two parts of the folder, level with the same. This may be done in various ways. For instance, a cord, R, of any kind may be attached to the top of plate K, extended to the top of I, passed through it in a hole so arranged that the cord will pass out at the bottom on the opposite side, and thence along the arm L to a spring, S, beyond, for holding it taut, the arrangement being such that in adjusting the plates M and K along one way or the other the cord will run through the plate I freely.

Instead of the spring S, the cord may be at-

tached to any other support, and the slack which occurs by the stretching of the cord may be taken up from time to time; or, instead of the cord for supporting the cloth, plates T, made in different lengths for hems of different widths, may be used, the said plates being provided with long arms U, with flanges V to fit in the channels in the arms L, formed by turning up one edge, as shown at W, so that the plates T may slide into or out of position between the plates IK; or these plates T may be made without the arms U, and hinged or otherwise attached to the arms L, so as to lie down on a projecting and supporting flange arranged above the table of the machine when not required for use, and be raised up for use and supported in any approved way. They may be made in short sections for the hems of different widths when arranged in this lastmentioned way, and one or more sections may be raised up for use, as required. The plates T, whether made to slide in and out or hinged to be raised up for use, as described, may be arranged in specific lengths and have the same marked on them in figures, so that the required plate for a specified width of hem may be readily selected, and the plates I K may be readily and accurately adjusted by it.

The object of the stud H in the plate D is to act in conjunction with the clamp-screw G to prevent the said plate D and the plate M from being turned on the screw; and the object of shaping the folding and guiding plate A so as to terminate in the angular form shown is to provide a flat level surface on which the fold, after it has been completed, may slide along toward the needle, close up to the vertical part of plate A, which here assumes the character of a guide, against which it is desired that the fold shall move, so that the said vertical part shall govern the distance of the line of stitching from the edge.

Having thus described my invention, I claim as new and desire to secure by Letters Patent-

1. The combination of plates I K with the cord R, for the purpose specified.

2. The combination of cord R with tensionspring S, when relatively arranged in connection with a hemmer, as and for the purpose specified.

The above specification of my invention signed by me this 17th day of May, 1870. ABEL H. BARTLETT.

Witnesses:

GEO. W. MABEE, T. B. Mosher.