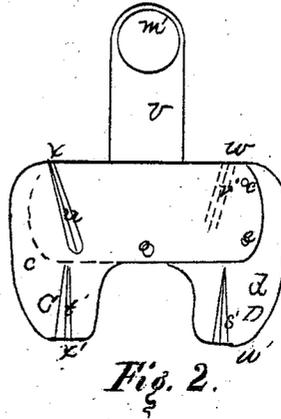
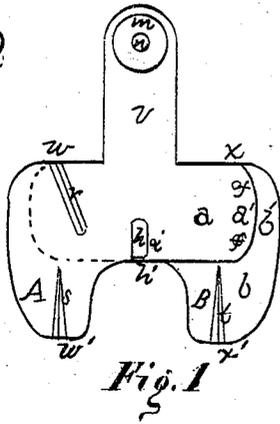


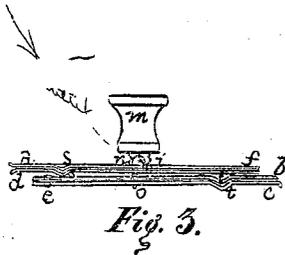
OTIS W. HERR

Improved lap-seam guide for sewing machines.

72642



PATENTED
DEC 24 1867



Witnesses. *Augustus Coolidge* *Otis W. Herr* Inventor.
T. Allen

United States Patent Office.

OTIS W. HERR, OF CHICOPEE, MASSACHUSETTS.

Letters Patent No. 72,642, dated December 24, 1867.

IMPROVEMENT IN LAP-SEAM GUIDE FOR SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, OTIS W. HERR, of Chicopee, in the county of Hampden, and Commonwealth of Massachusetts, have invented a new and useful Lap-Seam Guide for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a plan view of one side of the guide,

Figure 2 is a plan view of the reverse side of the guide, and

Figure 3 is an end view of the guide.

The nature of my invention consists in the arrangement and construction of different plates of metal, together forming a guide with which to facilitate the sewing together of pieces of cloth, by what is known as a lap-seam upon a sewing-machine, to which the guide is attached.

That others skilled in the art may be able to make and use my invention, I will proceed to describe its construction and its operation.

In the drawings, *a* represents a thin plate of metal, being elongated at one portion of the back end into the ear-piece *v*, said ear-piece *v* being perforated near one end, into which perforation is firmly secured the pin *n* having a head, *m'*; a male-screw thread being cut upon the other portion of said pin *n*, upon which turns the nut *m*, having a female-screw thread cut therein. The opposite end of the plate *a* is elongated near one side and formed into the tongue A. The small piece *h* is secured to the plate *a*, the part *h'* of the piece *h* being bent or turned so as to stand nearly perpendicular to the surface of the plate *a*. The plate *d* is of the same general shape as the plate *a*, with the exception that it has no ear-piece *v*, said plate being of about the same thickness as the plate *a*. The plates *b* and *c* are of the same general form as the plate *d*, and are placed together so as to conform to each other in shape and size, and they form together one pair of plates. The plates *a* and *d* are also placed together, conforming to each other in size and shape, and forming together the other pair of plates. A pin, *i*, is firmly attached to the plate *a*, and a hole is made in the plate *d*, immediately under the pin *i*, through which hole the said pin *i* protrudes. This pin *i* serves as a stop, against which the edge of one piece of cloth runs while being sewed. A pin, *o*, is also firmly attached to the plate *b*, and protrudes through a hole made directly under it in the plate *c*, said pin *o* serving as a stop against which the edge of the other piece of cloth moves while being sewed. In securing these plates or pairs of plates together, to form the guide, the end *b'* of one pair is placed underneath the end *a'* of the other pair, in such manner that the tongues A and B shall be opposite each other, the tongue A being upon one side of the guide and the tongue B upon the opposite side. When thus placed together, the pair composed of the plates *a* and *d* are firmly riveted or fastened together, and also to the plate *b* of the other pair, so that the plates *a*, *d*, and *b* shall be firmly secured together near one end by the rivets *f f* or other proper fastenings. The other pair, comprising the plates *b* and *c*, are firmly secured to each other near their ends by means of the rivets or fastenings *e e*. After both pairs of plates are thus firmly secured together, and to each other, the grooves or guides *r s t u* are made by striking a blow upon some blunt-edged instrument placed upon the plates. This makes a depression upon one side of the plates *a* and *b*, which depression should be slight at one end and increasing in depth as it lengthens, and of course forms a ridge or protuberance upon the reverse side of said plates *a* and *b*. At the same time the depression is made in the plates *a* and *b*, the force of the blow makes a like depression or groove in the upper side of the plates *d* and *c*; the ridges or protuberances upon the under side of the plates *a* and *b* fitting into the grooves made in the upper side of the plates *d* and *c*. The outer edges of the plates *a d* and *b c* are slightly bent or turned apart to allow of a free and unobstructed movement of the cloth between them while being sewed together.

The operation of the guide is as follows: In attaching the guide to a sewing-machine, the side shown in fig. 1 becomes the under side; the pin *n*, having the screw-thread cut upon it, being inserted through an aperture in the sewing-machine table, the projection *h'* of the piece *h* being inserted in another aperture in said table to prevent any lateral movement of the guide, and the nut *m* is then turned on firmly to the pin *n*, thus attaching the guide securely to the table. If, now, it is desired to sew two pieces of cloth together, by what is

known as a lap-seam, one piece of cloth is inserted at the end *w* between the plates *a* and *d*, and the other piece is inserted at the end *x* between the plates *b* and *c*, and both are drawn through towards the ends *w' x'*. The two ridges or guides *u r*, between the plates *b c* and *a d*, commencing at the points *w x*, and extending diagonally across the plates, and approaching each other, cause the two pieces of cloth thus placed between the plates to move inward, until one edge comes against the pin *i*, while the edge of the other piece comes against the pin *o*. The edges of the two pieces are now lapped one over the other, and as the feed of the machine draws them through between the plates, the pins *i* and *o* prevent a further lapping of the two pieces, and the ridges or guides *s t* cause the two pieces to move on in a straight and parallel direction. It is evident that the ridges and grooves might be formed by any other desirable method, but I prefer the method above described, as it is economical and practical.

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

A lap-seam guide for sewing-machines, composed of two pairs of guiding-plates, said plates being arranged with reference to each other, and also ridged, grooved, and provided with stops *i* and *o*, and the ear-piece *v*, all constructed and operating substantially as and in the manner herein set forth.

OTIS W. HERR.

Witnesses:

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T. A. CURTIS.