J. S. STEINER.

Binding Attachment for Sewing Machines.

No. 46,722. Patented March 7, 1865.

Fig. 1.

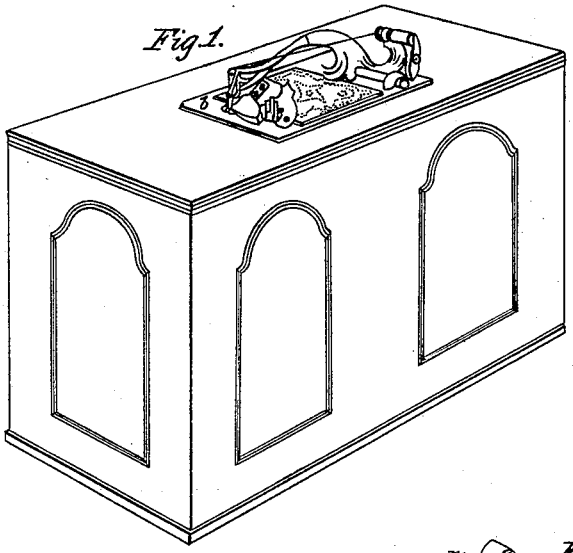


Fig. 2.

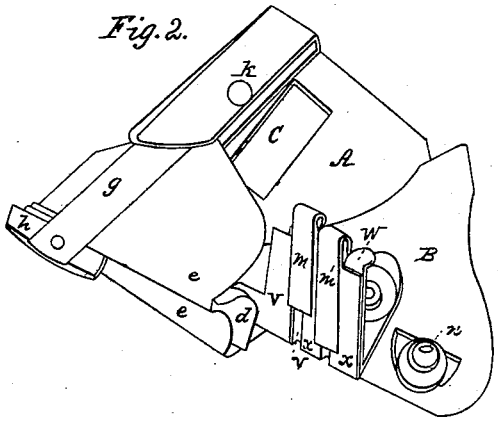
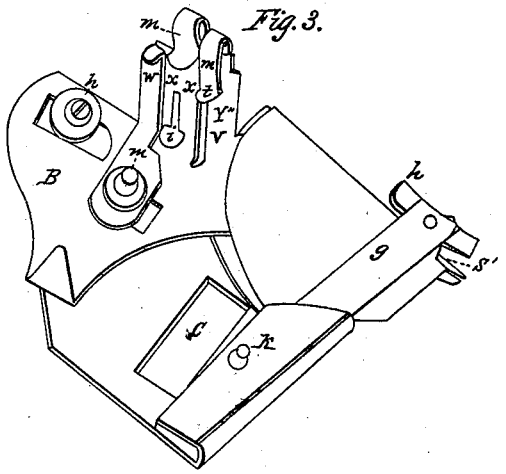


Fig. 3.



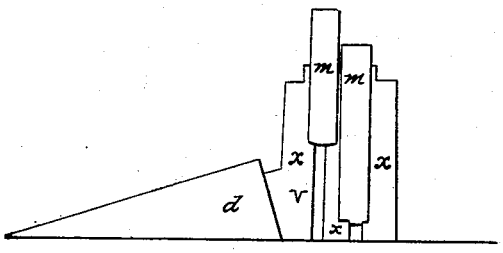
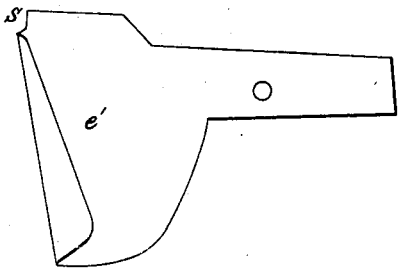


Fig. 5.



Witnesses:

M. Randolph

E. A. Steele

Inventor:

Jacob S. Steiner

UNITED STATES PATENT OFFICE.

JACOB S. STEINER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN BINDING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **46,722**, dated March 7, 1865.

To all whom it may concern:

Be it known that I, JACOB S. STEINER, of the city and county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Binding Attachments for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, and the letters of reference marked thereon and forming part of this specification, in which—

Figure 1 is a perspective view of a sewing-machine with one of the binding attachments affixed to it in working order. Fig. 2 is an enlarged perspective view of the top and front of the binding attachment. Fig. 3 is an enlarged perspective view of the top and back of the binding attachment. Fig. 4 is a front elevation of the attachment with the foot *h* and guides *e* and *e'* removed. Fig. 5 is a top view of the guide *e'*.

The nature of the invention relates to so constructing a binding attachment that it may be applied to any sewing-machine, and which will work with equal facility on the most delicate fabric or the coarsest and heaviest material, and will leave no interstice or empty space between the binding and the fabric to which it is attached; but will press the binding close up to the edge of the thing bound in all instances.

The binding attachment is secured to the sewing-machine by means of the screws *a a* passing through the slot *c* in the bed-plate A of the attachment, and which are to be screwed down tight on the washers *o o*, which rest on the bed-plate A. For this purpose two holes with suitable screw-threads must be cut in the plate *b* of the sewing-machine.

The plate B is placed on top of the plate A, and is secured to it by means of the screws *n n'*, which pass through large slots in the plate B, so that when they are released it may be moved either laterally or longitudinally for the purposes hereinafter described.

Attached to the front edge of the plate B is the semi-conical guide *d*, the apex of which is placed even with the forward front corner of the plate B, and the two pieces are firmly fastened together in such a manner that the convex side of the guide *d* is toward the plate B, and the lower edge of it is parallel with the table on which it rests.

The guides *e* and *e'* are two pieces of thin metal, the front edges of which are bent over into triangular-shaped lips, which envelop the front edges of the semi-conical guide *d*, as seen in Fig. 2. The back ends of the guides *e e'* are securely fastened to the plate A by means of the screw *k*. There is a small square opening, S, left in the extreme fore front corner of the guides *e e'*, through which the needle passes in its operation. The foot *h* is placed opposite and close to the front edges of the guides *e e'* at the ends nearest the needle of the machine, and it is held in this position by means of the spring *g*, the opposite end of which is held fast by the screw *k*.

Along the front edge of the plate B, in the rear of the guides *e*, *e'*, and *d*, are erected the posts *x x' x''*, between which are placed the slides *m m'*, the backs of which are provided with the guides *i* and *t*, as clearly seen in Fig. 3. In the rear of the post *x* is a vertical guide, *w*, which is pivoted at *w'*. This guide may be opened so as to leave a space between it and the post *x*; or it may be closed tight against it, and it can be held fast in any desired position by tightening the screw *n'*.

To operate the guide, place the binding to be used between the post *x* and the guide *w*. From thence pass it between the guides *i* and *t*, thence through the slot *v*, which is left between the posts *x' x''*, thence between the guides *e*, *e'*, and *d*. The guide *w* should be set up just as close to the post *x* as it can be, and yet permit the binding to pass freely and easily between them. The guide *w* can be set off or brought close up to the post *x*, as has been shown, so as to accommodate binding of any thickness. The guides *i* and *t* may be moved farther apart or closer together, as may be desired, to accommodate wide or narrow binding. It is expected these guides will work against the posts *x x' x''* sufficiently tight to be held fast by friction. The guides *e*, *e'*, and *d* are placed as close together as they can be to allow the binding to pass between them easily. The lateral motion given to the guide *d* will be sufficient to allow the thickest binding to pass between it and the guides *e e'*; or it will close tightly upon the most delicate fabric. The longitudinal motion of the guide *d* will allow the lines of

contact between the guides e, e', and d to be wide or narrow, as may be desired, so as to close firmly upon and hold in place the widest or narrowest binding. The guides e e' hold the edges of the binding open, so that the edge of the article bound will press closely up to the center of the cavity of the guide d, thereby securing a perfectly-tight fit between the binding and the edge of the article bound. The foot h presses the article bound close up to the guide d, and insures a smooth, neat job. The usual foot of the machine rests upon the foot h of the attachment.

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

1. In combination with the edge turners or guides e e', the inclosed pressure-guide d, secured to the adjustable plate B, and arranged and operating substantially in the manner and for the purpose herein set forth.

2. The spring pressure plate or foot h, combined with the tapering edge-turners e e' and inclosed pressure-guide d, arranged and operating substantially as and for the purpose herein set forth.

3. The slides m m' and guides i and t, combined and arranged substantially in the manner and for the purpose herein set forth.

4. The employment of the adjustable guide w, substantially in the manner and for the purpose herein set forth.

JACOB S. STEINER.

Witnesses:
M. RANDOLPH,
E. A. SKEELE.