

J. L. COLES.
Binder for Sewing Machine.

No. 112,019.

Patented Feb. 21, 1871.

Fig. 1.

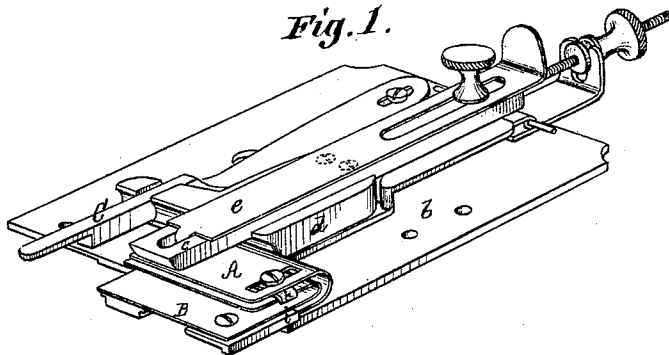


Fig. 2.

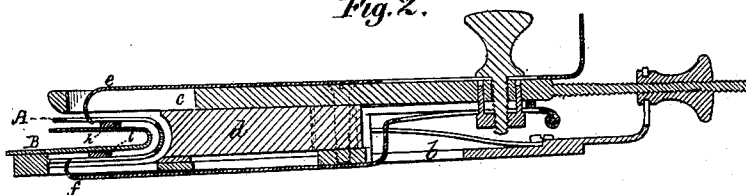
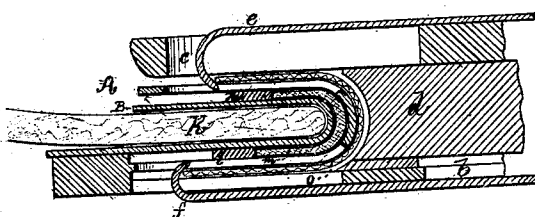


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

JACOB L. COLES, OF NEWARK, NEW JERSEY, ASSIGNOR TO HIMSELF AND
JAMES W. COREY, OF SAME PLACE.

IMPROVEMENT IN BINDERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **112,019**, dated February 21, 1871.

To all whom it may concern:

Be it known that I, JACOB L. COLES, of the city of Newark, in the county of Essex and State of New Jersey, have invented a certain Improved Attachment to Binders for Sewing-Machines; and I do hereby declare that the following specification, taken in connection with the drawing furnished and forming a part of the same, is a true, clear, and exact description thereof.

On the 3d day of January, 1871, Letters Patent of the United States No. 110,740 were granted to me for certain improvements in binders adapted to the purpose of laying braid upon the rims of hats.

My present improvement consists in combining with my binding-guide, as described in said Letters Patent, an auxiliary U-shaped folder and suitable edge-gages, and thereby provide a practicable means by which such "hat-brim stiffeners" as are described in the Letters Patent issued to J. W. Corey, November 1, 1870, may be neatly and evenly secured in position by and beneath the braid, which is also simultaneously applied.

In the accompanying drawing, Figure 1 represents one of my improved binders complete in perspective. Fig. 2 represents the same in longitudinal vertical section. Fig. 3 represents, on an enlarged scale, a sectional view of my improved binding-guide, with the hat-rim "stiffener" and braid in position in the manner of its use.

It is considered unnecessary to enter into a detailed description of the several parts of the device not embraced within my present improvement, as they are not only well understood by persons skilled in the art, but are described specifically in my Letters Patent referred to.

It is to be understood, however, that the "Corey hat-brim stiffener" referred to consists of a strip of textile fabric stiffened by the application of a solution of brittle gum. This stiffener is applied to the rim of the hat folded, and extending from the top of the rim over the edge and under the lower side. Outside of this rim binding-braid is applied in the usual manner.

A in the drawing represents the main U-

shaped guide. Between bed-plate *b*, bar *c*, and block *d* is the space occupied by the binding-braid, the adjustable hooks *e* and *f* serving as edge-gages.

B in the drawing represents an auxiliary U-shaped guide, which, in this combination, constitutes the important novel feature of my improvement. Between its exterior surfaces and the interior surfaces of the main U-shaped guide A the Corey stiffener is introduced. The adjustable bars *h* and *i* serve as edge-gages. Between the inner surfaces of this auxiliary U-shaped guide B the rim of the hat is introduced.

In Fig. 3, *k* represents the hat-rim; *m*, the stiffener, and *o* the binding-braid.

The stiffener having a tendency to resist the laying action of the binding-guides is liable to spring out of position after leaving the guide on its way to the needle. I have therefore devised and applied a spring-presser, C, which bears vertically upon the top of the braid, immediately adjacent to the needle, and between it and the ends of the binding-guides. By its action the two thicknesses of stiffener and braid are closely compressed between this presser and the bed-plate, securing a proper relation between them during the stitching operation. This spring-presser is capable of a great variety of constructions. I prefer a simple spring-lever secured at one end of the bed-plate, as shown in the drawing, on account of its simplicity and economy of manufacture, as well as for its efficiency for the purposes desired.

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

1. The auxiliary U-shaped folding-guide B, provided with edge-gages *h* and *i*, in combination with the main U-shaped folding-guide A, over which the braid is folded, as and for the purposes specified.

2. In combination with the auxiliary and main folding-guides A B, the spring-presser C, as and for the purposes specified.

JACOB L. COLES.

Witnesses:

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