No. 698,384. Patented Apr. 22, 1902.

# W. R. ABERCROMBIE.

## BINDER FOR SEWING MACHINES.

(Application filed Aug. 1, 1901.)

(No Model.)

Fig. 1.

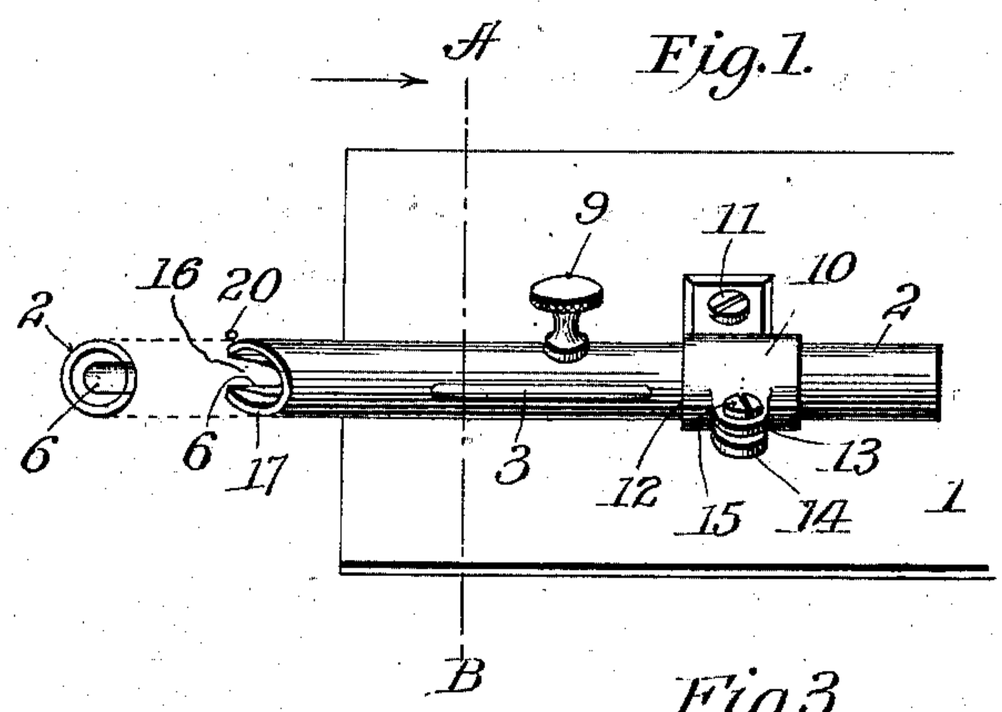



Fig. 2.

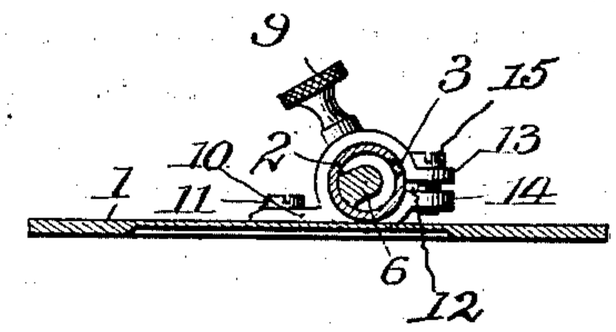



Fig. 3.

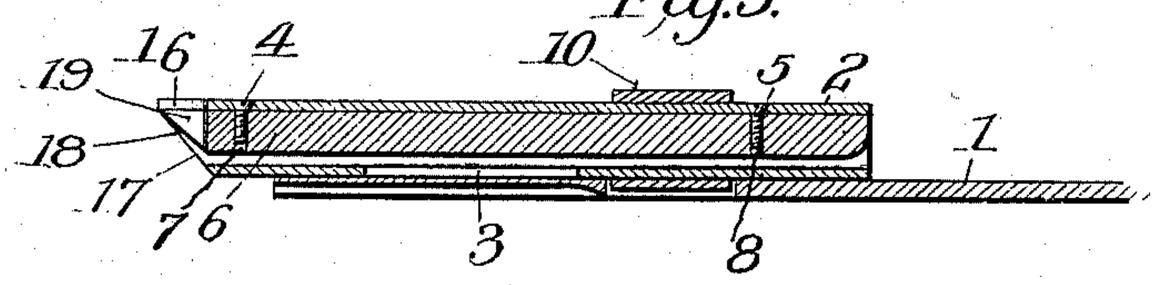



Fig. 4.

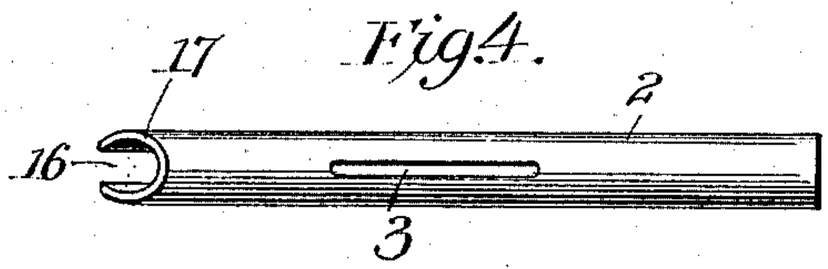



Fig. 5.

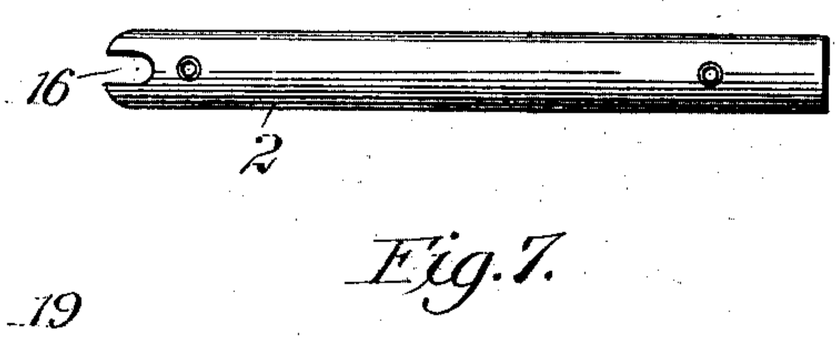



Fig. 6.

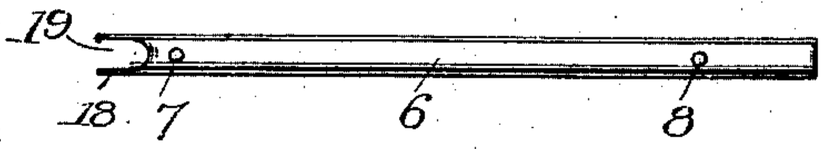



Fig. 7.

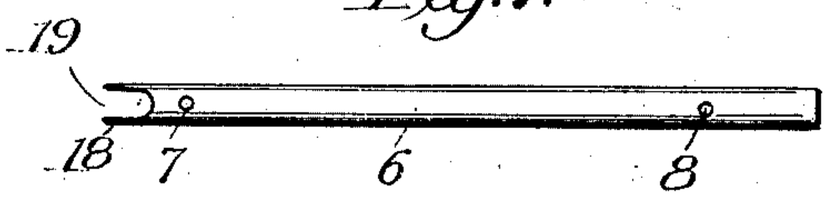



Fig. 8.

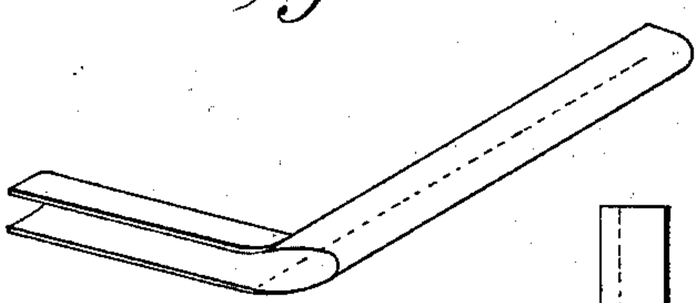


Fig. 9.

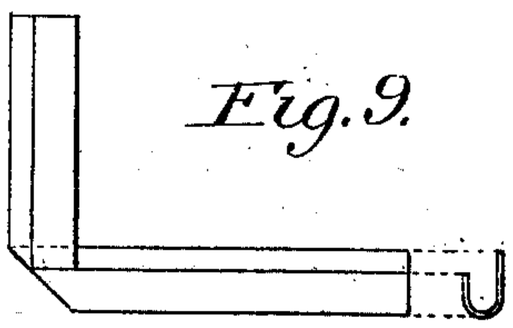
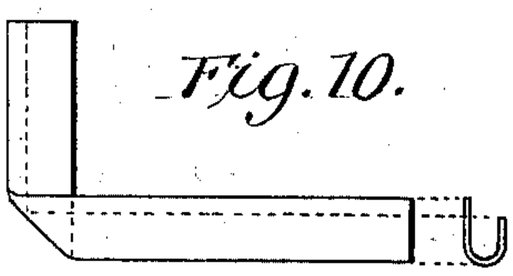


Fig. 10.



Witnesses:
H. S. Robrer.
E. A. Finnerel.

Inventor:
William Robert Abercrombie
by Wm. H. Finnerel
his Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM ROBERT ABERCROMBIE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO WHEELER & WILSON MANUFACTURING COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

## BINDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 698,384, dated April 22, 1902.

Application filed August 1, 1901. Serial No. 70,543. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ROBERT ABERCROMBIE, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in Binders for Sewing-Machines, of which the following is a full, clear, and exact description.

This invention relates to improvements in binder attachments for sewing-machines, and has for its object to provide means whereby the binding material may be presented for the action of the needle, so as to meet varied requirements of manufacturers and effect an equal or a greater or less width of binding on the opposite sides of the material being bound.

The invention consists in a binder attachment for sewing-machines in which a guide for the binding material is capable of adjustment to effect the laying of the binding material in equal or unequal widths on opposite sides of the material to which it is being applied.

In the accompanying drawings, illustrating this invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view of the binder, shown as attached to a section of the cloth-plate of a sewing-machine and its profile developed at the left. Fig. 2 is a cross-section taken in the plane of line A B, Fig. 1, looking in the direction of the arrow. Fig. 3 is a longitudinal section. Figs. 4 and 5 are plan views of opposite sides of the binder-attachment casing. Figs. 6 and 7 are plan views of opposite sides of the internal core or guide upon which the binding-strip is folded. Fig. 8 is a detail perspective view of the folded binding-strip in the shape which it assumes in passing through the binder. Fig. 9 is a detail view of the binding-strip folded so as to cast the greater width on the bottom. Fig. 10 is a view similar to Fig. 9, but with the binding-strip folded so as to cast the greater width on the top.

1 may designate a sewing-machine cloth-plate of any suitable shape and size and secured to the bed of the machine in any suitable manner common to sewing-machine construction.

2 is the binder-attachment casing, provided with a longitudinal slot or opening 3 and screws 4 5.

6 is a core or guide within the casing and upon which the binding-strip is folded. This guide is inserted in the binder-casing 2, as shown in Figs. 1, 2, and 3, and securely held therein by screws 4 5 entering the threaded holes 7 8, such holes extending entirely through the core or guide 6 for convenience of threading.

9 is a knob secured to the casing 2 to better facilitate longitudinal and rotatory adjustment of the binder attachment in the clamp 10, said clamp being secured to the cloth-plate 1 by screw 11 and provided with a longitudinal slit 12, ears 13 and 14, and pinch-screw 15 for securing the binder attachment in any desired longitudinal or rotatory position, dependent upon the production desired. The opening 3 is provided to facilitate the positioning of the binding strip or material in the attachment by moving it along between the core or guide 6 and casing 2 by the employment of any suitable pointed instrument—such, for instance, as a shear-blade or needle.

The casing is cut away at 16 and has the beveled end 17, and the core or guide 6 has its end 18 beveled and is cut away at 19, all so as to provide an opening (see Fig. 1) for the proper passage of the binding strip or material through the attachment.

To effect the results illustrated by Figs. 8, 9, and 10, it is simply necessary to give to the binder attachment a rotatory adjustment to or from the operator, dependent upon whether the binding material is to be placed equally or unequally on opposite sides of the material. If it be desired to place the binding as illustrated by Fig. 9—that is, with the greater width on the under side of the material—the adjustment of the binder attachment would be toward the operator, assuming that its prior adjustment was such as to effect the result illustrated by Fig. 8, wherein the binding is shown as equally distributed

on opposite sides of the material being bound. If it be desired to place the binding as illustrated by Fig. 10—that is, with the greater width on the upper side of the material—the adjustment of the binder attachment would be away from the operator.

20 illustrates substantially the relative position of the attachment and needle-hole of the sewing-machine. Of course it will be understood that this relative positioning of needle-hole and binder attachment in the direction of the feed of the material is not an important factor; but, generally considered, it is desirable to place the binder attachment as close to the line of action of the needle as is practicable, so as to enable the binding of small inner curves.

From the foregoing it will be understood that the binder attachment is adjustably secured, so as to enable the operator to adjust the same longitudinally to and away from the needle and to effect rotatory adjustment, so as to cause the binding to be laid equally or unequally on opposite sides of the material being operated upon, and this control of the positioning of the binder attachment by its rotatory adjustment is the inventive feature of my construction, enabling the operator to quickly and accurately adjust the binder attachment to varied thicknesses and effect a control of the binder, so as to position the binding strip or material equally or unequally on opposite sides of the material, as previously pointed out.

What I claim is—

1. A binder attachment for sewing-machines, employing an inner guide and an outer casing, and means whereby said guide and casing may be given rotatory and longitudinal adjustments, substantially as and for the purpose specified.

2. A binder attachment for sewing-machines, comprising essentially an inner guide and an outer casing spaced apart and rigidly connected, a support therefor, and means whereby said guide and casing may be given a rotatory adjustment within said support for laying the binding material equally or unequally on opposite sides of a fabric, and means whereby said guide and casing may be adjusted longitudinally in said support, substantially as described.

3. A binder attachment for sewing-machines, having an inner guide, an outer casing, and a clamp adapted to be secured to the cloth-plate of the sewing-machine, and means whereby the casing may be given rotatory and longitudinal adjustments, substantially as and for the purpose specified.

4. A binder attachment for sewing-machines, comprising a casing, a support for such casing, and means whereby the casing may be given a rotatory and also a longitudinal adjustment, a core or guide arranged within said casing, and means to fix said core or guide within said casing to partake of its adjustments, substantially as described.

In testimony whereof I have hereunto set my hand this 31st day of July, A. D. 1901.

WILLIAM ROBERT ABERCROMBIE.

Witnesses:
ABBIE A. DONIHU,
F. W. OSTROM.