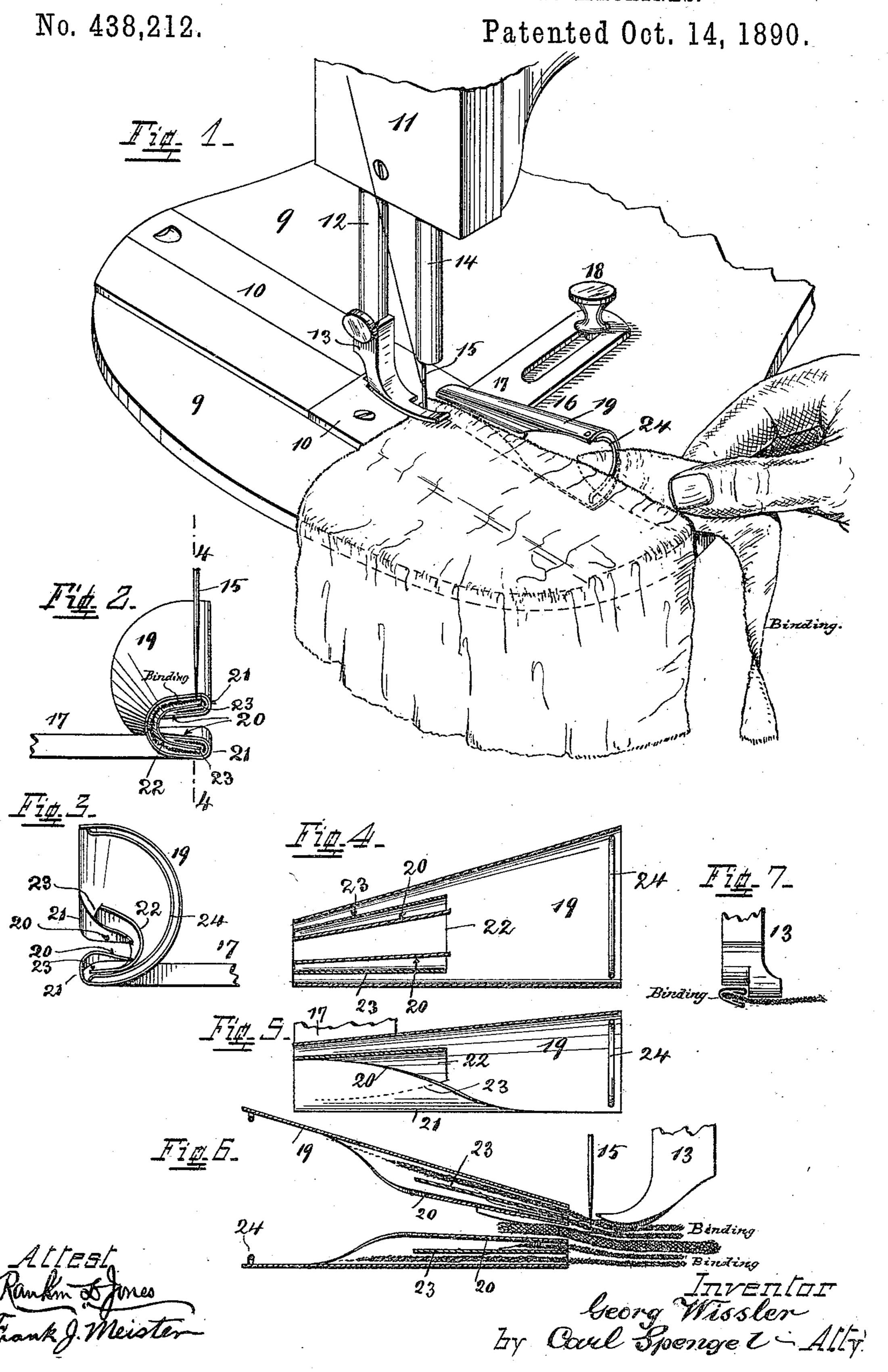
G. WISSLER.

BINDING ATTACHMENT FOR SEWING MACHINES.



UNITED STATES PATENT OFFICE.

GEORG WISSLER, OF CINCINNATI, OHIO.

BINDING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 438,212, dated October 14, 1890.

Application filed April 7, 1890. Serial No. 346,829. (No model.)

To all whom it may concern:

Be it known that I, GEORG WISSLER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Attachments to Turn In the Cut Edges of Fabric-Binding; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to attachments for sewing-machines whereby they are put in condition to do some special work in addition

to the ordinary sewing.

The special object of the attachment under consideration is to sew on binding cut out of cloth, cotton goods, and other similar fabrics. Binding of this character, not having a selvage edge, like a so-called "ribbon-binding," which has one, must have its edges turned in, in order to prevent them from fraying out. Such cut fabric-binding is in many cases cheaper than ribbon-binding, and also preferable in cases where it is desirable to have the binding of the exact shade and color of the balance of the material, and in which case the former is simply cut off in strips from the same material.

The specific construction of this attachment is fully explained in the following description and illustrated in the accompanying draw-

ings, in which—

Figure 1 is a perspective view, showing the attachment in position and also adjacent parts of the sewing-machine. Fig. 2 is an end 40 view of the attachment, showing its smaller end, the one which is turned toward the needle. Fig. 3 shows the larger end of the attachment, the one remote from the needle. Fig. 4 is a section of the attachment, taken on 45 a line 44 of Fig. 2 and looking to the left from this line. Fig. 5 is a central horizontal, and Fig. 6 is a vertical section, of the attachment, taken on line 44 of Fig. 2 and looking to the right from the said section-line. This latter 50 view also shows the presser-foot in its relative position. Fig. 7 is a rear view of the presser-foot. Figs. 2 to 7 are enlarged.

9 is the bed-plate of a suitable sewing-machine.

10 is the slide; 11, the face-plate; 12, the 55 presser-bar; 13, the presser-foot; 14, the needle-bar, and 15 the needle.

16 is the attachment, having a slotted lateral extension 17, whereby it is held in posi-

tion by means of a set-screw 18.

19 is the main body of the attachment, consisting of a funnel-shaped piece of sheet metal, having its side cut open and its cut edges 20 bent at a point indicated by 21 and turned in along a straight line passing through this 65 point. These turned-in portions of the main body are not of equal width, as is most plainly shown in Fig. 5.

22 is another piece of metal, bent semicircularly, its inner opening a little wider than 70 its outer one, and its edges 23 reaching into the space between the main body 19 and its inturned edges 20, to the extreme innermost termination of which edges piece 22 is connected, preferably by soldering, and thus held 75

in position.

24 is a guide-bar, by which the binding is forced to assume the proper shape and position within the attachment while being fed into it. The width of the binding cannot be 80 more than the length of the space between this guide-bar and the main body of the attachment. It may, however, be alittle smaller.

The binding is preferably cut somewhat pointed, in order to facilitate at the begin- 85 ning its introduction into the attachment. (See Fig. 1.) Guide-bar 24 keeps the binding close against the inside of body 19, which by its convergency gradually turns its edges over and toward each other as the binding ap- 90 proaches the narrower exit end. This puts the binding in its proper position around the edge of the material which is to be bound, its edges not being turned in yet. Being, however, a binding cut in strips from larger pieces 95 and having no selvage edge, it becomes necessary to turn its cut edges in and sew them on in this position, in order to prevent their fraying out. The binding is so cut that its width is in excess of the length of the dis- 100 charge-mouth of the attachment, measured from one point 21 around to the other one. As a consequence, the edges of the binding, after having passed edges 23 of piece 22 and

reached point 21 inside of the attachment, will be compelled to follow its inturned edges 20, and passing around edges 23 are finally forced into the space between the infolded 5 edges of the attachment and the corners 23 of piece 22. In this shape the binding is now delivered and sewed on, the needle 15 passing through the same in a position as shown in Fig. 2, fully catching and securing its inturned edges. The thus doubled edges of the binding, as the latter passes from the attachment, are held up and kept constantly in proper position by the inner edges 23, which prevent the binding from receding or otherwise passing out from the path of the needle.

It is necessary to have the attachment not too close to the needle, for the reason that the upper half of the delivery-opening holds the upper half of the binding somewhat up, and thus prevents the sewing-machine from drawing the stitch tight. If, however, placed somewhat away from the needle, the paid-out binding has become sufficiently slack, so as not to interfere with the tension devices of the ma-

25 chine.

To equalize the pressure of the presser-foot on all parts of the material as it passes through the machine, part of its under side or face has been cut away to provide sufficient room so for the increased thickness caused by the twice-doubled material of the binding. (See

Figs. 6 and 7.)

The peculiar construction of this attachment makes it possible to use profitably binding of the nature described, inasmuch as it can be sewed on quickly and with one stitching, whereas now the sewing on of such binding is such a tedious and laborious operation that it cannot be used with advantage. I am aware that there are binding attachments performing the same function, but they differ

greatly in their specific construction, and in many cases are very complicated.

Having described my invention, I claim as new—

1. A binding attachment for the purpose of delivering binding in the proper shape and position, ready to be sewed onto the material to which it is to be attached, its deliveryopening being formed by the smaller end of 50 a funnel-shaped piece of metal, which is open on its side and has its open edges turned inwardly, in combination with a U-shaped guide-piece supported within the main body by the inturned edges of the latter in such a 55 manner as to have its round portion concentric with the round part of the said main body and its free sides parallel with the flat sides of the former, said free sides reaching into the space between the main body and its 60 inturned edges, substantially as shown and described.

2. An attachment for turning in the edges of binding, consisting of the combination of a funnel-shaped piece of metal open on its 65 side and having its open edges turned in, as shown, an internal guide-piece supported by the said inturned edges at and within the delivery end and being substantially parallel and concentric with the main body, and a 70 guide-bar secured within the latter and at the receiving end of the attachment being also concentric with it and used for the purpose of supporting the in-feeding binding in proper shape, all as fully shown and described. 75

In testimony whereof I affix my signature in

presence of two witnesses.

GEORG WISSLER.

Witnesses:

FRANK J. MEISTER, RANKIN D. JONES.