S. MORGEN AND S. HOFFMAN.

SEWING MACHINE GAGE.

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1,343,149. **Patented June 8, 1920.**

Fig. 1.

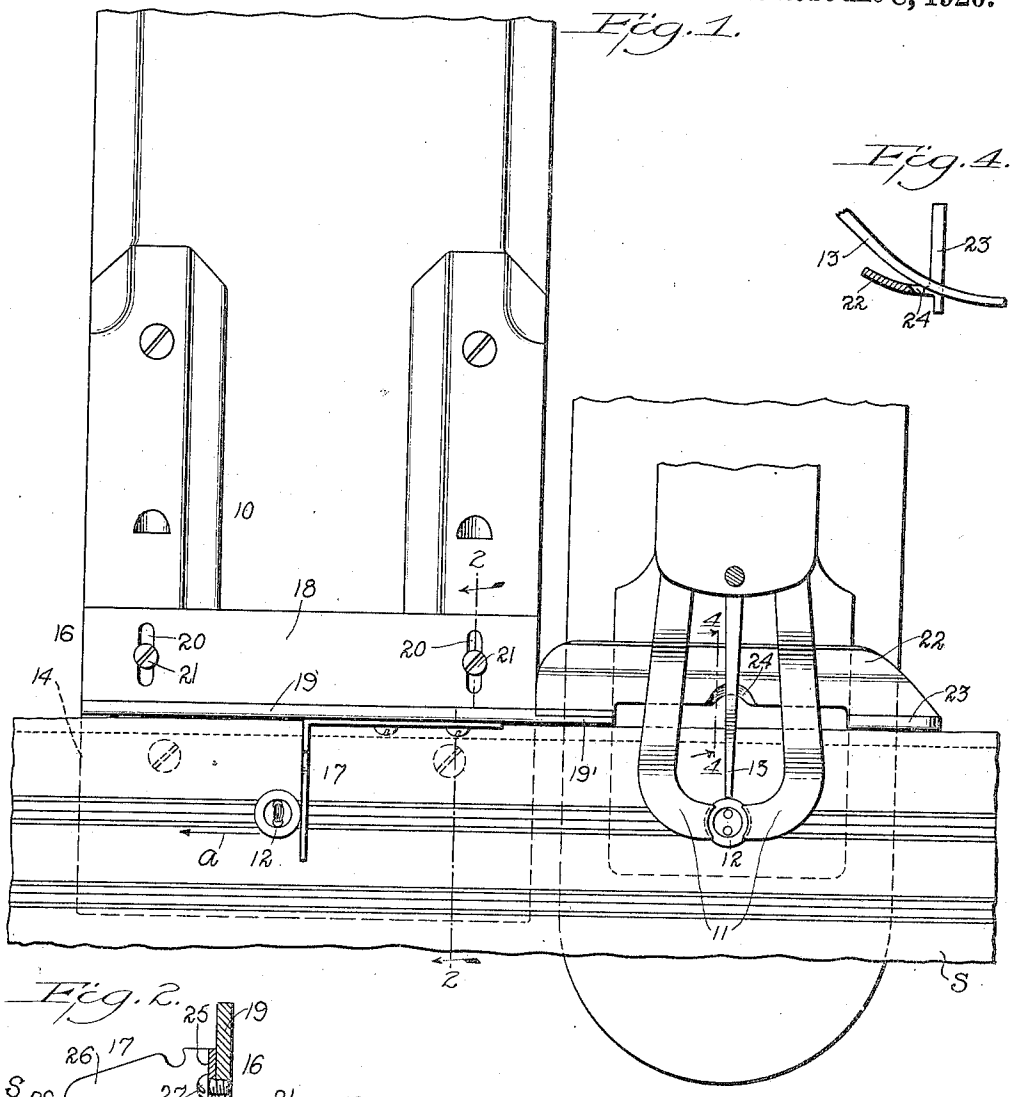


Fig. 4.

Fig. 2.

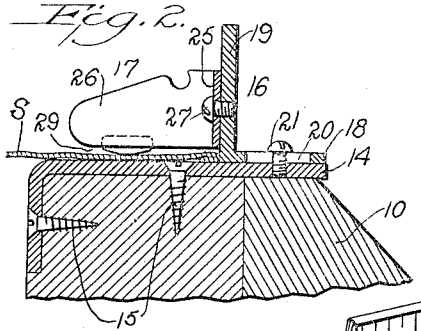
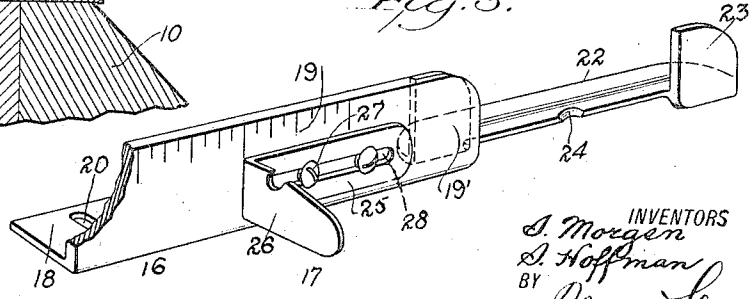


Fig. 3.



WITNESSES

Olive W. Holmes

Geo. L. Beeler

INVENTORS

S. Morgen

S. Hoffman

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

SIMON MORGEN, OF BROOKLYN, AND SAMUEL HOFFMAN, OF NEW YORK, N. Y.

SEWING-MACHINE GAGE.

1,343,149. Specification of Letters Patent. Patented June 8, 1920.

Application filed June 10, 1919. Serial No. 303,172.

To all whom it may concern:

Be it known that we, SIMON MORGEN and SAMUEL HOFFMAN, citizens of the United States, and residents of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, and the city of New York, borough of the Bronx, in the county of Bronx and State of New York, respectively, have invented a new and Improved Sewing-Machine Gage, of which the following is a full, clear, and exact description.

This invention relates to factory sewing machines and has particular reference to gage means for facilitating the sewing of buttons on shirt fronts, waists, or other analogous garments.

Among the objects of the invention is to simplify the operation of sewing on buttons whereby the demand for preliminary measuring and marking of garments is unnecessary and consequently a great saving of time and expense is accomplished.

To properly position the buttons to correspond with the several holes previously made the garment must be stretched on a form, the collar buttonholes being registered over a peg or pin and the facing strips are then brought down with the buttonholes lying over the places for the buttons, which places are then determined by pencil marks or the like through the button holes. All this requires a great deal of time on the part of a skilled operative, and in brief the gist of this invention resides in a simple effective easily understood means for avoiding such waste of time.

Figure 1 is a plan view of the butten sewing gage and parts associated therewith.

Fig. 2 is a vertical transverse section on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of a gage detached from its base or pedestal.

Fig. 4 is a vertical transverse sectional detail on the line 4—4 of Fig. 1.

Referring now more specifically to the drawings we show in Fig. 1 a base or pedestal 10 located at one side of the button sewing devices, such devices including a pair of flexibly supported buttonholding arms 11 between which and just back of the button 12 is located a limit stop 13. It will be understood that the button sewing needle, not shown, will operate in alternation in the several eyes of the button in the usual manner and that the buttonholding and sewing devices have a substantially fixed field of operation which may be spoken of as determined by the center of the button.

Fixed upon the upper end of the pedestal 10 is a rigid base plate 14 formed preferably of metal and fixed in the base as by means of screws 15. Except as soon to be described the upper and front surfaces of the base plate 14 are perfectly smooth and the corner of the angle of which the base plate is composed is rounded to facilitate the operation of the garment thereover.

The button sewing gage consists essentially of two parts, a holder 16 and a guide 17. The holder is shown as being in the form of an angle member having a horizontal or base flange 18 and a vertical flange 19. These parts are straight and the base flange has a length equal to the width of the pedestal and length of the base plate 14. The base flange 18 is shown provided with a a pair of parallel slots 20 through which binding screws 21 operate to secure the holder at any desired position forward or rearward with respect to the fore and aft distance between such holder and the center of the button. In other words the front vertical face of the flange 19 determines a plane with which the hemmed edge of the garment coöperates in the sewing of the buttons to the garment at predetermined distances from said finished edge. The slots 20 are arranged perpendicular to said vertical face, and hence when the screws 21 are loosened the gage as a whole may be adjusted forward or rearward in order to determine the desired distance between the centers of the buttons and the finished edge of the garment and thereafter the screws are tightened to lock the gage in fixed position where it will remain throughout the operation of sewing the buttons on any desired number of standard garments made in accordance with the adjustment determined.

22 indicates an extension arm formed integral with or otherwise rigidly secured to the end 19′ of the holder nearest to the needle and buttonholding mechanism. The arm 22 may be of any suitable form in cross section and may be located at any desired elevation with respect to the plane of the bottom flange 18 of the holder. We show, however, that the arm is made of a concave form whereby a strip of metal lighter than is used for the other parts affords sufficient stiffness and also we indicate that said arm

is located somewhat above the level of the flange 18 and back of the vertical flange 19. This disposition of the arm affords maximum clearness for manipulation of the buttons. At the outer end of the arm is fixed a small vertical plate 23, the front active face of which lies in the plane of the active face of the vertical flange 19. The button setting devices are located directly between the end 19′ of the vertical flange and the plate 23. The arm 22 is notched at 24 to avoid any conflict or interference with the limit stop 13.

The guide 17 comprises two flat portions 25 and 26 arranged in vertical planes at a right angle to each other. The part 25 constitutes an anchorage for the guide against the front face of the flange 19, the anchorage being effected by means of a pair of screws 27 operating through a slot 28 and into the flange 19. The slot and screws are arranged in a horizontal plane and provide for the adjustment of the guide horizontally so as to vary the distance between the gage pointer 26 and the center of the button to be sewed on. The guide is anchored to the vertical flange 19 of the holder sufficiently far above the base plate 14 to allow free movement of the garment S along the space 29.

Considering the center of the button as the fixed point of operation in the adjustment of the device, the holder will first be adjusted by means of the slots 20 and screws 21 to determine the distance or width between the centers of the buttons and the edge of the garment strip to which the buttons are to be sewed, and the guide 17 will then be adjusted longitudinally of the slot 28 to determine the space between the buttons according to the number of buttons and the diameter of the buttons. In other words if the shirt design calls for four buttons in addition to the collar button at the neck band the guide 17 will be adjusted in accordance with the number of buttons and the size of the buttons so that the operator after the adjustment is made will position the garment to receive the first button by holding the collar buttonhole of the neck band just beneath the pointer 26 with her left hand and after placing the button in the holders 11 she will hold the edge of the garment with her right hand in taut position and against the flange 19 and plate 23 while the button is being sewed. She then moves the garment to the left as shown by the arrow *a* bringing the edge of the button against the face of the pointer 26 remote from the site of the next button, when the operation will be repeated. It will be noted that the space between the active face of the pointer 26 and the center of the button is equal to the intended space between centers of buttons less the radius of a button.

We claim:

1. A sewing machine gage comprising an L-shaped holder having horizontal and vertical flanges, the horizontal flange of said holder being provided with a plurality of parallel slots, a screw passing through each of said slots serving to adjustably clamp the holder in position to hold the other flange in a certain plane, and an L-shaped gage member adjustably carried by the vertical flange of said holder arranged to determine the distance between successive fields of operation on a garment.

2. A sewing machine gage comprising an L-shaped holder having horizontal and vertical flanges, the horizontal flange of said holder being provided with a plurality of parallel slots, a screw passing through each of said slots serving to adjustably clamp the holder in position in a certain plane, a guide member spaced from but fixed coplanar with the vertical flange of said holder, and an L-shaped gage member adjustably carried by the last mentioned flange of said holder arranged to determine the distance between successive fields of operation on a garment.

SIMON MORGEN.
SAMUEL HOFFMAN.