J. M. VAN HEUSEN.

COLLAR.

APPLICATION FILED JUNE 16, 1917.

1,254,294. Patented Jan. 22, 1918.

Fig. 1,

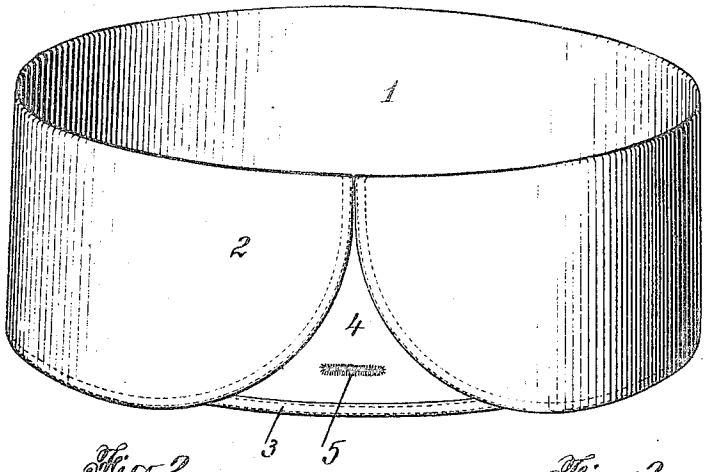


Fig. 2,

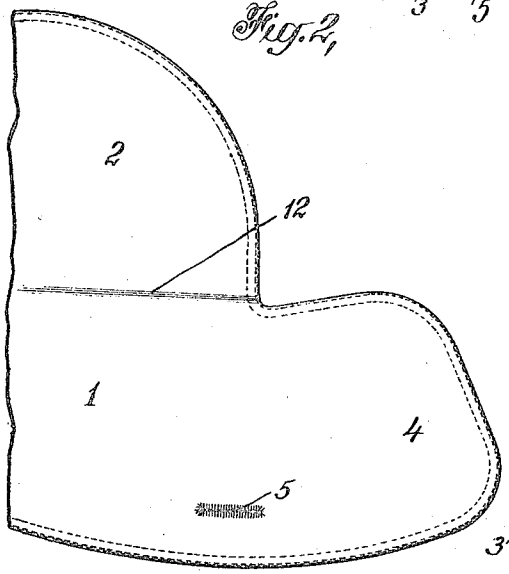


Fig. 3,

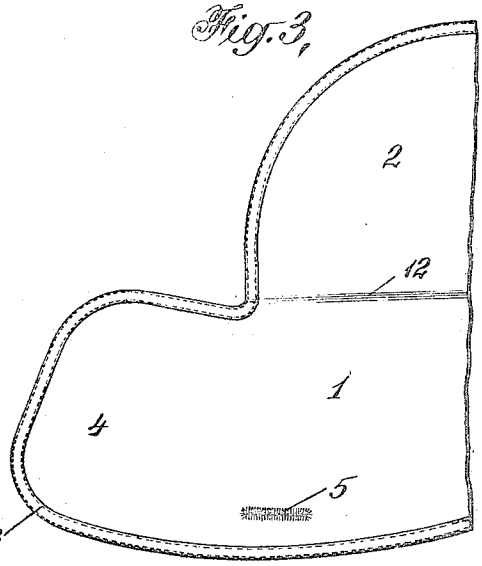


Fig. 4,

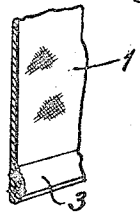
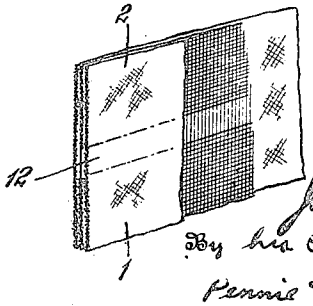


Fig. 5.



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COLLAR.

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To all whom it may concern:

Be it known that I, JOHN MANNING VAN HEUSEN, a citizen of the United States, residing at Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Collars; and I do hereby 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.

This invention relates to improvements in collars, and more particularly soft folding collars made in whole or in part of multiply fabric.

Where collars are made in whole or in part of multiply fabric so woven and constructed that the collar will be self-supporting without being starched, and when the collar is stamped or cut from the multiply fabric, the collar blank is left with its edge unprotected. The edge of such a multiply fabric is much thicker than the edge of ordinary cotton fabric, for example, about three times as thick in the case of a three-ply fabric.

The present invention relates to improvements in such collars, made up in whole or in part of such multiply fabric. According to the present invention the edge of the fabric, which is left unprotected when the collar blank is cut from the fabric, is turned after the fashion of a half hem, and the turned edge of the fabric is overlaid with a narrow binding tape secured to the edge of the collar by a double row of stitches. The arrangement is such that one row of stitches passes through the turned edge as well as through the outer edge of the binding tape and thereby holds the turned edge firmly in place. The binding tape extends beyond the turned edge of the fabric and confines the same, the second or inner row of stitches passing through only the binding tape and the one thickness of the multiply fabric.

The invention will be described more in detail in connection with the accompanying drawings illustrative of one embodiment thereof.

In the drawings:

Figure 1 shows, conventionally, a folding or turn-down collar embodying the invention.

Fig. 2 shows one end of the collar, unfolded.

Fig. 3 shows the reverse side of the end of the collar.

Fig. 4 is a sectional view of the edge of the collar with the parts somewhat exaggerated to illustrate the construction, and

Fig. 5 is a sectional view of the central or fold portion of the collar.

The collar illustrated is of the folding or turn-down type and is made of three-ply fabric as indicated in Fig. 5. The collar comprises the usual neck-band portion 1 and folding or turn-down portion 2 with the usual end tabs, one of which is indicated at 4 having therein a button-hole 5. This collar is made of a single piece of three-ply fabric woven with a fold portion 12 of increased flexibility. This fold portion may be made in various ways but is shown in Fig. 5 as a weakened fold portion made by leaving out certain of the warp threads of the fabric from the middle layer or ply. The inner and outer layers or plies of the three-ply fabric are thus left unconnected with each other at the weakened portion, but are nevertheless continuous so that both the inside and the outside of the collar present a finished and pleasing appearance. The provision of this weakened fold portion facilitates folding of the collar. When the fabric is thus woven with a weakened fold portion, and when the collar blank is cut from the fabric, the collar is completed except for the button-holes and for the edge binding.

When the multiply fabric is woven with the turned-down portion longer than the neck-band portion, the collar will have a curvilinear fold portion and will have, when folded, a permanent curvilinear set so that it will retain its curvilinear form without starching.

As indicated more particularly in Fig. 4, but also in Figs. 1 and 2, the edge of the col-

lar blank or fabric is turned after the fashion of a half hem and a narrow tape 3 is laid over the turned portion and secured by a double row of stitches. The outer row of stitches passes through the outer side of the tape and the double thickness of the fabric, while the inner row is beyond the turned edge and passes through the inner side of the tape and one thickness of the fabric. The turned edge is thus held firmly bound by the tape and by the outer row of stitches.

The turning of the edge, the laying of the tape, and the placing of the stitches, can all be done in one operation on a two needle machine equipped with a tape guide placed on the presser foot, the tape being thereby laid at the point where the needles penetrate the fabric. The placing of the tape guide at this point insures accuracy in the tape laying and securing. A folder of the most accurate type has been found essential. From the folder the goods pass to the presser foot. The tape is inserted through the tape guide on the top foot and comes through under the line of the two needles which seize it immediately upon its entrance. The binding can thus be applied around the entire edge of the collar (where the whole collar is made of multiply fabric), including even curves of small radius and sharp corners.

A binding for the collar is thus provided with only a small portion of the multiply fabric turned over and with only a narrow tape for binding this turned edge. The multiply fabric of which the collar is made up, and the collar itself, are supported and reinforced along the edge. The folding or turned-down panel of the collar is thus more or less stiffened along its lower edge and also along its ends at the front of the collar. This stiffening and reinforcing contributes to the substantial set of the collar and correspondingly tends to deprive it of its tendency to present a flimsy appearance such as that usual in soft collars as commonly made. In fact, when appropriate multiply fabric is utilized in the production of the collar, and when the collar is provided with the binding above described, and when the collar is made with a permanent curvilinear set, it will stand up and be self-supporting as indicated in Fig. 1.

Where the collar fabric is provided with a weakened fold portion such as that illustrated in Fig. 5, the collar will be correspondingly weakened at its ends where it is folded, but the provision of the binding will reinforce the collar at these points, thus giving added strength without objectionable increase in thickness, the bound edge of the collar, as well as the collar as a whole, naturally folding at the weakened fold portion.

When it is considered that as many as ninety operations are commonly involved in the manufacture of an ordinary starched collar, including as many as nine different sewing machine operations; and when it is further considered that the collar of the present invention, when stamped from a single piece of multiply fabric, requires, for its completion, merely the provision of the buttonholes and the single sewing machine operation incident to the folding and binding of the edge of the collar; it will be evident that the collar of the present invention is one which involves a minimum number of operations in its production.

This collar nevertheless presents a finished and pleasing appearance comparable to the appearance of starched collars. This appearance will be apparent from Fig. 1 from which it will be seen that the binding tape and the bound edge of the collar are so arranged that only the two rows of stitches appear at the outer edge of the folding or turned-down portion of the collar. The only place where the binding is exposed to view is along that portion of the front tab which is between the ends of the folding portion, and this exposed portion of the binding likewise presents a finished and pleasing appearance.

It will be understood that the collar may be made of different materials, and of materials of different fineness of weave. Thus the multiply fabric may have its outer exposed layer of finer or more expensive material than its other layers. So also, collars may be constructed of various shapes and designs, as will be readily understood.

I claim:

1. A collar of multiply interwoven fabric having a narrow portion of the edge of the multiply fabric turned and overlaid with a binding tape secured to the edge of the collar by a double row of stitches, one row passing through both the tape and the narrow turned edge of the collar and the other passing through the tape beyond the turned edge, substantially as described.

2. A folding collar made up of multiply interwoven fabric having a weakened fold portion of increased flexibility, said collar having a narrow portion of the edge of the multiply fabric turned and overlaid with a binding tape secured to the edge of the collar by a double row of stitches, one row passing through both the tape and the narrow turned edge of the collar and the other passing through the tape beyond the turned edge, substantially as described.

3. A folding collar made up of a neckband and folding portion of multiply interwoven fabric, the collar being provided with a curvilinear fold portion of increased flexibility, said collar having a narrow portion of the edge of the multiply fabric

turned and overlaid with a binding tape secured to the edge of the collar by a double row of stitches, one row passing through both the tape and the narrow turned edge of the collar and the other passing through the tape beyond the turned edge, said collar having a permanent curvilinear set and being stiffened and reinforced by the turned edge and the binding applied thereto, substantially as described.

In testimony whereof I affix my signature.

JOHN MANNING VAN HEUSEN.