

J. M. VAN HEUSEN.
COLLAR.
APPLICATION FILED SEPT. 12, 1917.

1,309,380.

Patented July 8, 1919.
2 SHEETS—SHEET 1.

Fig. 1,

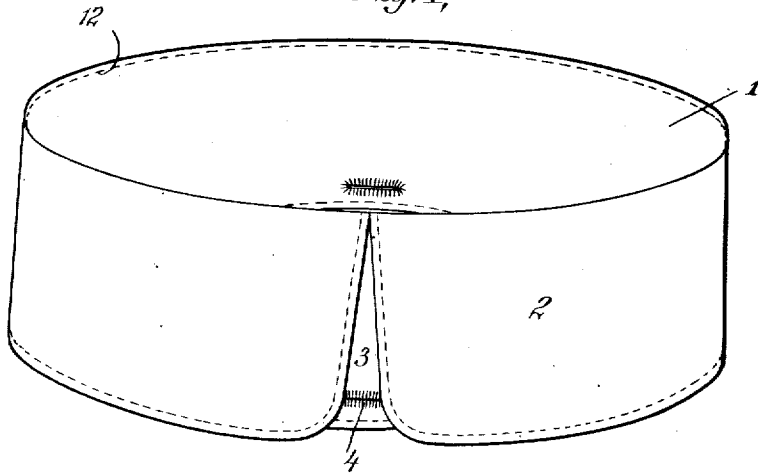


Fig. 2,

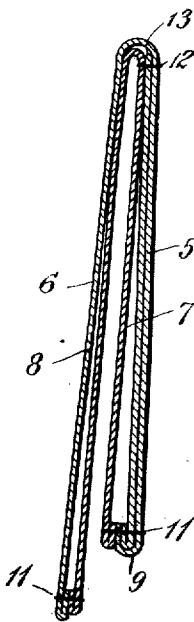


Fig. 3,

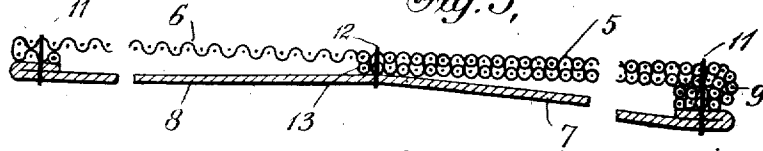
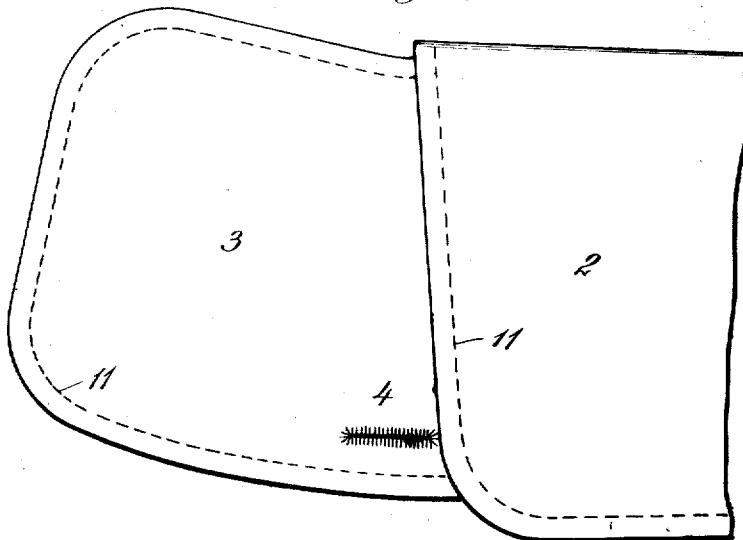


Fig. 4,

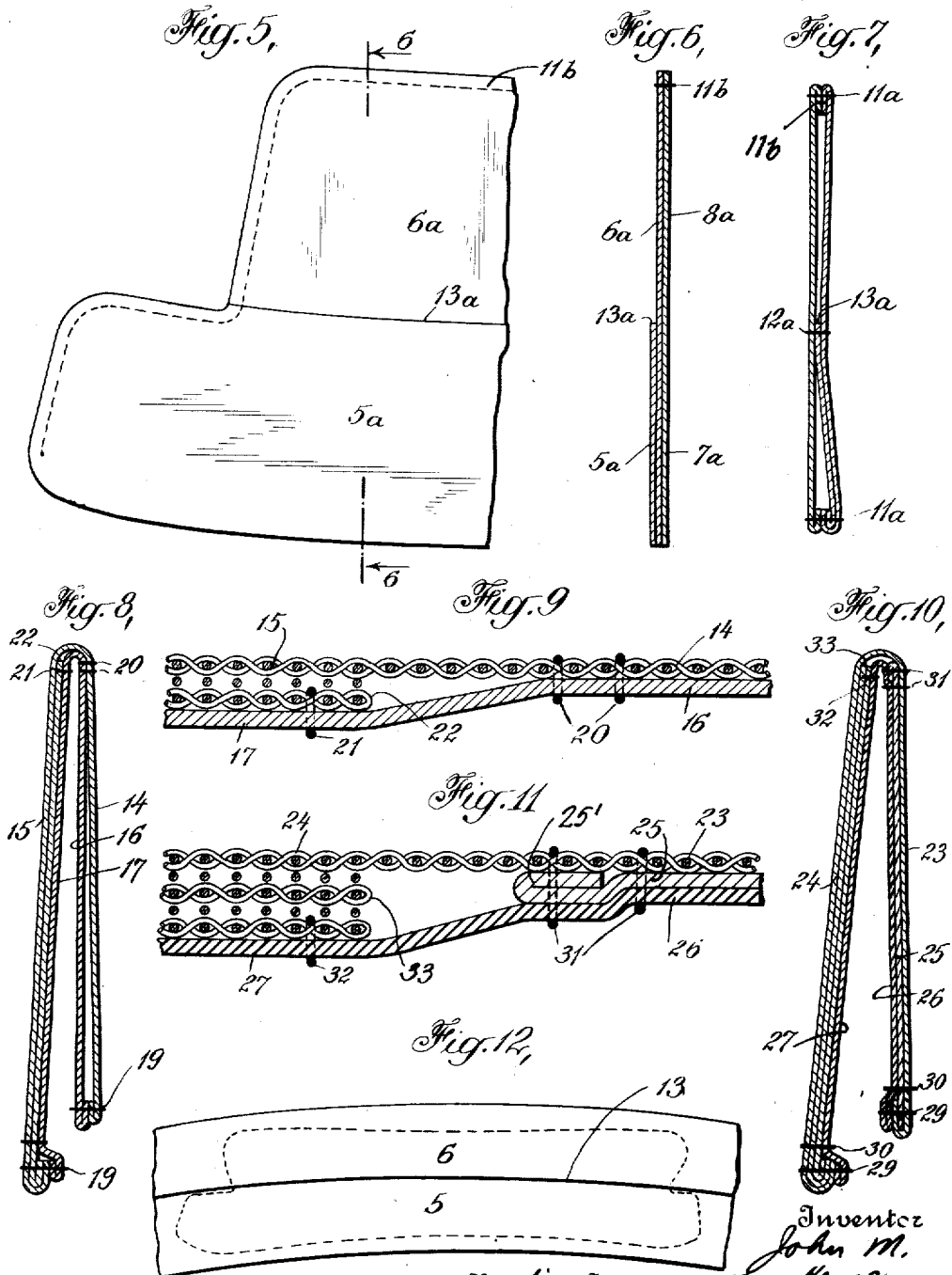


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By his Attorneys
Pennie Davis Warren & Edmunds

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UNITED STATES PATENT OFFICE.

JOHN MANNING VAN HEUSEN, OF BOSTON, MASSACHUSETTS.

COLLAR.

1,309,380.

Specification of Letters Patent.

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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.

My invention relates to improvements in folding or turned-down collars made up in part of multiple-ply interwoven fabric, and having either the neck-band portion thereof, or the folding portion thereof, made up of a panel of the multiply fabric, said multiply fabric having one or more plies thereof extended and attached to, or forming a part of the other portion of the collar.

The invention relates particularly to soft folding or turned-down collars which are adapted to be worn without starching but which will nevertheless have a construction making them self-supporting without added stiffness or with a minimum of such added stiffness. It is a further object of the invention to provide a collar having either the neck-band or folding portion of multiply fabric with an improved edge binding for the multiply fabric in the form of a separate layer or layers of fabric which enter into the collar construction and which further contributes to the binding of the collar and of the edge of the multiply fabric.

In the preferred embodiments of the invention, either the neck-band portion of the collar or the folding portion of the collar is made of an appropriate multiply interwoven fabric having one or more separate plies extended therefrom; and the multiply fabric and its extension are united together along a line of union which corresponds to the fold line of the collar when completed.

The multiply interwoven fabric may be, for example, a two-ply fabric either with or without an appropriate filling between the two plies or a three-ply fabric or other appropriate fabric which has a sufficient body and stiffness to contribute to the stiffness of the collar as a whole. The multiply fabric need not in itself be sufficiently stiff to give the collar the desired stiffness inasmuch as there is applied thereto a separate layer of fabric which is secured thereto by an edge

binding which further contributes to the stiffening of the collar as a whole.

Instead of making the collar in part of multiple-ply woven fabric, it may be made of a single thickness of fabric of special weave having sufficient body and thickness to impart the desired degree of stiffness to the collar, and having a thin extension therefrom united thereto along the fold line of the collar.

The multiply fabric and the single ply extensions thereof may have their line of union in the form of a straight line, but it is more advantageous to weave the fabric with a curvilinear union between the heavy fabric and the thin fabric and to so weave this curvilinear union that it will conform to the fold line of the collar and thereby contribute to the shape of the collar and to the permanent curvilinear set of the collar.

The single ply or thin extension of the multiply fabric may in itself form a complete layer of fabric of the other portion of the collar, or it may be united to the other portion, so long as the union of the thin fabric with the heavy fabric gives a fold line at the top of the collar which determines the folding thereof.

In constructing the collar of the present invention, it is particularly advantageous to form one portion of the collar of the multiply interwoven fabric and to provide this fabric with an integral extension thereof in the form of one or more single plies which form the other portion of the collar; and to combine with the composite fabric thus utilized a further single layer preferably of fabric which likewise forms part of the neckband and folding portion of the collar, so that the collar as a whole is made up of but two pieces of fabric, one single ply throughout, and one of the composite fabric above described having a line of union which determines the fold line of the collar.

In constructing a collar in this way, it is further advantageous to so combine the single layer of fabric with the multiply fabric at its edges that there is provided an efficient binding for the multiply fabric. This is of importance for the reason that a multiply interwoven fabric is relatively rigid and difficult to turn in and finish in the usual way. In order to provide for the inturning and binding of the edge of a stiff fabric, I have found it advantageous to provide a binding in a form which will inclose the in-

turned edge of the heavy fabric and hold it firmly in place.

The invention will be further described in connection with the embodiments thereof illustrated in the accompanying drawings, in which Figure 1 shows one form of completed collar embodying the invention; Fig. 2 is a sectional view of the collar of Fig. 1; Fig. 3 is an enlarged sectional view of the same collar with parts broken away; Fig. 4 shows one end of the collar; Fig. 5 illustrates one mode of constructing the collar; Fig. 6 is a sectional view taken on the line 6-6 of Fig. 5; Fig. 7 shows a further step in the collar construction, the view being a sectional view; Fig. 8 is a sectional view similar to Fig. 2 of a modified construction; Fig. 9 is an enlarged sectional view of the fold portion of the collar of Fig. 8; Fig. 10 is a sectional view showing a still further modification; Fig. 11 is an enlarged sectional view of the fold portion of the collar of Fig. 10; and Fig. 12 shows a fabric from which the composite portion of the collar may be cut. The collar of Figs. 1 to 4 is made up of the neckband portion 1 and the folding or turned-down portion 2 having the usual end tabs, one of which is indicated at 3, provided with the usual button-hole 4. The neckband portion of the collar is made up in part of a panel of multiply fabric 5 having an integral single ply extension 6 forming part of the folding portion of the collar. Secured to this composite fabric is a single ply fabric having a neckband portion 7 and a folding portion 8 corresponding in shape to the portions 5 and 6 of the composite fabric. The multiply fabric 5 is illustrated as a two-ply fabric having one ply ending at 13 and the other ply extended to form the folding portion 6 of the collar. The multiply fabric 5 is turned in at its edge as indicated at 9 in Figs. 2 and 3, and the single fabric 7 is likewise folded in and the returned edges then stitched together by a row of stitches 11. The single thickness fabrics 6 and 8 likewise have their edges turned in and stitched in the manner illustrated. A further row of stitches is indicated at 12 for the purpose of securing the upper edge of the neckband portions of the collar together.

In the preferred embodiment of the invention, the composite fabric which forms the portions 5 and 6 of the collar is woven with a curvilinear union 13 as indicated in Fig. 12, so that, when the line of union is arranged at the top of the collar, it will conform to the fold line of the collar and determine the fold line. The neckband portion of the collar of Figs. 1 to 4, because of the multiply fabric which enters into its construction, will be stiffer than the folding portion and the folding portion will tend to fold along the edge of the multiply fab-

ric which thus determines the fold line of the collar. The thicker fabric which enters into the construction of the neckband will further contribute to the desired stiffness of the collar, making the use of added stiffeners unnecessary or minimizing the necessity for such use.

The arrangement of a composite fabric, part of which is of thick multiply weave and part of which is of single thickness, in such a way that the added separate layer of fabric is applied as in Figs. 2 and 3, causes the edge of the extra ply 13 to be concealed from view, while the spacing apart of the extension ply 6 and of the added ply 8 immediately beyond the end 13 of the added plies, further contributes to the folding of the collar in the desired manner.

From Figs. 2 and 3, it will be noted that only two single pieces of fabric are required in the collar construction there illustrated, one piece being the single ply thickness which forms the portions 7 and 8 and the other piece being the composite fabric which forms the portions 5 and 6. With this construction and arrangement, the necessity for sewing different pieces of fabric together at the upper edge of the neckband is avoided and a simple stitching of the two pieces together at that point is sufficient. Because of this simplicity of construction, the collar lends itself readily to production in such a manner as that indicated in Figs. 5, 6 and 7, that is, by cutting the two pieces of fabric of the proper size, stitching these together along all but one side, as indicated in Figs. 5 and 6, and then turning the collar inside out and applying further stitching as indicated in Fig. 7. The parts of the collar of Figs. 5, 6 and 7 are designated the same as those of Figs. 1 to 4 with the suffix "a" attached thereto, the added row of stitches being indicated by 11^a.

The collar of Fig. 8 has its outer or folding portion made up in part of the multiply interwoven fabric 15, while the integral single ply extension thereof 14 forms part of the neckband. A single ply fabric is secured thereto to form parts 16 and 17 of the neckband and folding portion. The edges of the neckband are turned in and stitched as indicated at 19 and the upper edge of the neckband is stitched together by one or more rows of stitches 20 and 21. The single thickness fabric 17 is likewise shown as stitched to the upper edge of the folding portion, but is so stitched that the stitches extend only part way through the multiply fabric and do not show on the outside of the collar.

The edge of the multiply fabric 15 is shown in Fig. 8 as turned to form a hem and as having the single fabric 17 likewise turned in and stitched to the multiply fabric by two rows of stitches, one row passing through the turned edge of both fabrics

and the other passing through the fabrics beyond the turned edges so that the unfinished edges of both fabrics are tightly bound. This arrangement moreover gives
 5 an edge of materially increased thickness which is also of materially increased stiffness and which thus further contributes to the stiffening of the collar as a whole including the entire folded portion thereof
 10 and the ends of the folding portion.

The construction of the collar of Fig. 8 is further illustrated by the enlarged sectional view of Fig. 9 from which it will be seen that the single ply fabric 14 is a continuation of one of the plies of the multiply
 15 fabric 15 and that the multiply fabric is a two-ply fabric having filling threads therebetween, the second ply terminating at 22 so that there is formed a space between the
 20 fabrics 14 and 16 at that point, and so that the collar will readily fold at that point.

The collar of Fig. 10 has its outer or folding portion 24 of three-ply fabric with one ply thereof extended to form the part of
 25 the neckband 23. A single ply fabric likewise forms part of the folding portion and neckband, as indicated at 27 and 26. A third thickness of fabric is applied at 25 being preferably folded at 25' and terminates at the upper edge of the neckband.
 30 The upper edge of the folding portion of the collar has the single ply fabric stitched to the multiply fabric at 32 in such a way that the stitching does not show from the outside of the collar, while the upper edge of
 35 the neckband portion is also suitably stitched together at 31. There is thus left a space between the ends 33 of the extra plies of the multiply fabric and the end of
 40 the layer 25 which provides a portion where the collar will naturally fold. By making the ends of the plies 33 of curvilinear contour similar to the fabric illustrated in Fig. 12, the collar will naturally tend, when
 45 folded, to have the desired curvilinear shape and set. The edge of the multiply fabric 24 is turned in in much the same manner as that of Fig. 8, and the added thickness 27 is likewise turned in and two rows of
 50 stitches 29 and 30 pass therethrough, one row passing through both inturned edges and the other passing through the fabrics beyond the inturned edges. With this arrangement, as with that of Fig. 8, there is
 55 provided a thickened edge which is firmly bound and which presents a pleasing appearance and which further has an added degree of stiffness which contributes to the stiffening of the collar as a whole.

60 With the constructions illustrated, where the same composite fabric forms the outside of both the folding and neckband portions of the collar, the only portion of the collar where the single fabric shows is at the end
 65 tabs, and even here there is no regular bind-

ing to show, but only the single ply fabric which extends the full height of the tabs, and gives to them the desired finish and pleasing appearance. This same advantage
 70 will be obtained in case the collar is intended as a reversible collar, since the reverse side of the collar also presents a finished and pleasing appearance without
 75 any edge binding other than that provided by the added layer of fabric which forms the part of the collar as a whole. It will be evident that when the collar is to be reversed, stitching such as that indicated at
 21 in Fig. 8 and at 32 in Fig. 10 may be omitted so that it will not show on the out-
 80 side of the collar.

The advantage of providing, as a part of the multiply composite fabric, an edge of one or more plies such as is indicated at 13
 85 in Fig. 2 and 33 in Fig. 10, gives a place in the collar where the thinner and more flexible fabric will more readily fold around the edge of the heavier fabric; and this will be the case whether the collar is folded in
 90 one direction or in the other; also, I believe it to be more advantageous to construct the collar as illustrated in Figs. 2, 8 and 10 with the edges of the extra plies inclosed between the single ply extensions and the added
 95 single ply fabric, and to arrange the added single ply fabric on the inside of the collar rather than on the outside.

The edge binding provided by the present invention, although of materially increased
 100 thickness and stiffness around that portion of the collar which is made in part of the multiply interwoven fabric, is nevertheless sufficiently flexible at the fold line of the collar where the collar is folded at its ends.
 105 The added stiffening effect of the edge binding will further tend to prevent folding of the collar at any place along the multiply fabric, but the thinner and more flexible portion of the collar at the edge of the multiply fabric will have a correspondingly
 110 more flexible bound edge than the bound edge of the multiply fabric. Accordingly, while the improved edge binding gives added stiffness where this stiffness is desired, namely, around the entire portion of
 115 either the neckband or folding portions of the collar, nevertheless the collar will be without objectionable stiffness where the binding is to be folded, at the fold line of the collar. Thus, although the collar of the
 120 present invention is a composite collar in the sense that it is made up in part of a single thickness fabric and in part of a composite fabric woven with a multiply portion and with one or more single ply extensions
 125 therefrom, nevertheless the collar as a whole has its fold portion determined by the edge of the multiply fabric where the single ply extensions are united thereto. It will be seen moreover that the stiffening effect of
 130

the edge binding is due largely to the multiply fabric, while the added layer or layers of fabric nevertheless contribute to the thickness and body of the collar and to the stiffening of the edge binding, without adding objectionable rigidity at the fold.

It will be evident that the different plies of the multiply fabric may be made of different materials and of different weaves.

- 10 The outer ply may thus be of silk or of a finer or more pleasing appearance than the plies which are hidden from view.

The collar of the present invention is intended primarily as a soft collar to be worn without starching; but it will be evident that it is available for use as a starched collar where such a collar is desired, and, when so used, the inherent stiffness of the collar itself will supplement the stiffening effect of the starch. Less starch will thus be required to give to the collar a certain stiffness.

I claim:

- 25 1. A soft folding or turned-down collar made up of a neckband portion and a folding or turned-down portion, one of said portions being made in part of multiply inter-

woven fabric having one or more single plies extended therefrom to form part of the other portion of the collar, and one or more added layers of fabric secured to the multiply fabric and the extension thereof, the union between the multiply fabric and the integral extension thereof being arranged at the top of the collar to determine the fold line thereof; substantially as described.

2. A soft folding or turned-down collar made of a neckband portion and a folding or turned-down portion, one of said portions being made in part of multiply interwoven fabric and having one or more plies thereof extended to form part of the other portion of the collar, and one or more pieces of fabric secured to the multiply interwoven fabric, the edge portion of the multiply fabric and of the fabric secured thereto being intumed and bound by two rows of stitches, one passing through the intumed edges of both fabrics and one through the fabrics beyond the intumed edge of the multiply fabric; substantially as described.

In testimony whereof I affix my signature.

JOHN MANNING VAN HEUSEN.