

No. 719,485.

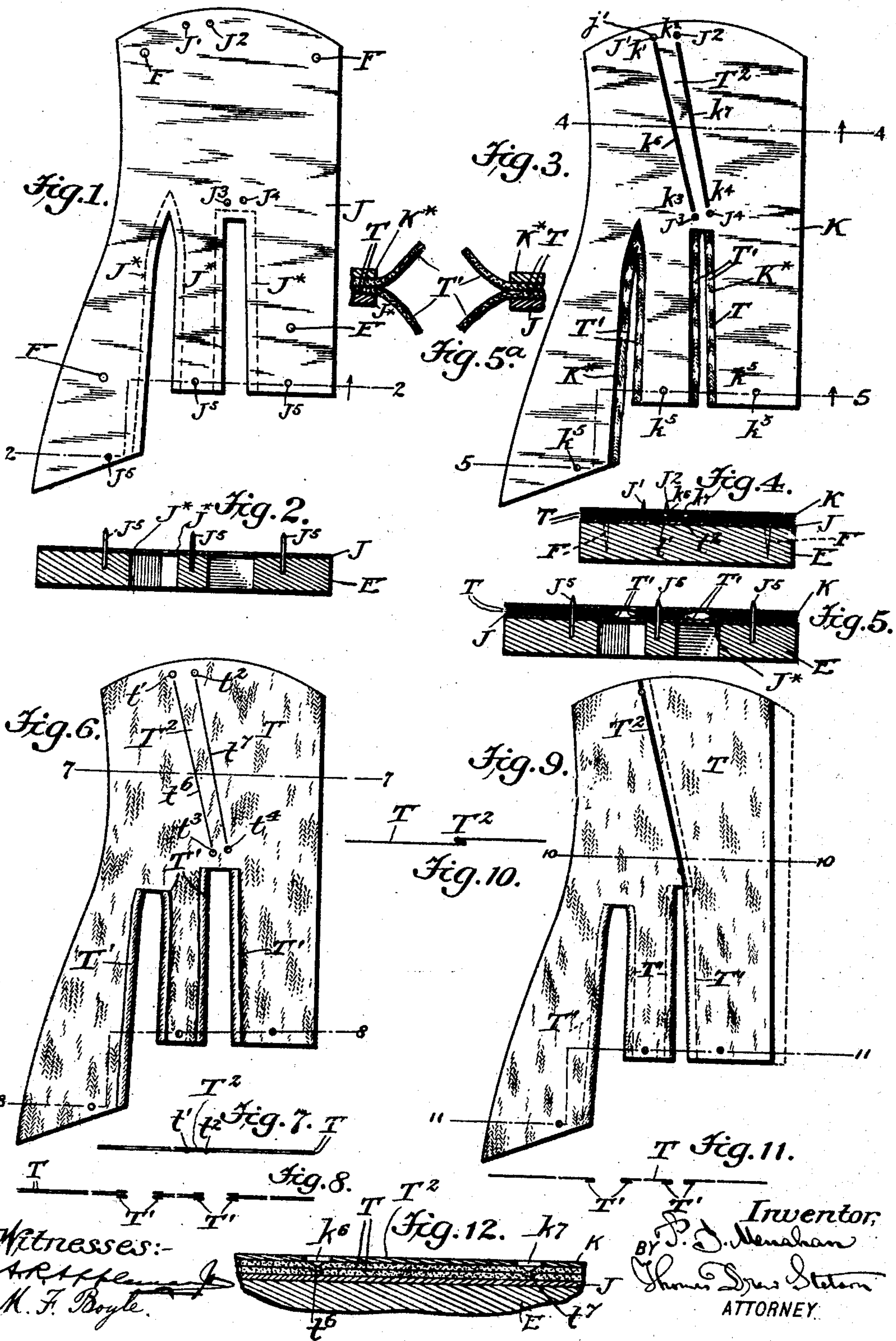
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**METHOD OF MARKING AND FOLDING GARMENT SECTIONS.**

APPLICATION FILED DEC. 10, 1900.

NO MODEL.



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# UNITED STATES PATENT OFFICE.

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## METHOD OF MARKING AND FOLDING GARMENT-SECTIONS.

SPECIFICATION forming part of Letters Patent No. 719,485, dated February 3, 1903.

Application filed December 10, 1900. Serial No. 39,291. (No specimens.)

*To all whom it may concern:*

Be it known that I, PATRICK J. MENAHAN, a citizen of the United States, residing in the borough of Brooklyn, in the city and State of New York, have invented a certain new and useful Improvement in Methods of Preparing Parts of Garments; and I do hereby declare that the following is a full, clear, and exact description thereof as applied to the manufacture of corsets.

My method treats two pieces at a time and prepares them rapidly and very perfectly without requiring highly-skilled labor. The treatment is applicable to the manufacture of various garments where any considerable number are to be produced alike. I will describe the invention as applied to the preparation of back pieces for a pair of corsets.

In the manufacture of corsets there are separately made back pieces, of muslin or other fabric, which require to be accurately shaped and formed each with a tapering plait in the upper part. These back pieces are also specially treated along certain edges and joined to differently-formed pieces in the corset, so as to give the required graceful and well-fitting form. For each back piece there is a counterpart of the same size and a reversely-corresponding form to apply in the opposite half of the corset. Blanks for these pieces of the proper outline and so much larger along certain edges than the completed pieces as will allow about the ordinary margin for the infolds are previously cut from the fabric. This cutting is an old and well-known step and may be effected by any ordinary or suitable means, as extending the material smoothly in many layers, usually forty-eight, and cutting through the whole at one operation by a knife moved by hand around a template of the required form and size. When very many are required, these blanks of fabric may be more economically produced by forcibly depressing a cutting-die of the required size and form. The blanks for each pair of back pieces are afterward treated by holding, marking, wetting, and folding by my method in the manner fully described below. I shall assume the pieces to lie horizontally on a bench during this treatment.

I can operate the method by many varieties of apparatus or by handwork alone.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a plan view of the lower (the main) plate and block, the strong lines indicating the outline of the plate and the dotted lines within certain edges indicating the inner margin of the smaller block which underlies and supports it. Fig. 2 is a cross-section on the line 2 2 in Fig. 1. Fig. 3 is a corresponding view after the pair of blanks and the top plate have been applied in position ready for the treatment of the blanks. Fig. 4 is a cross-section on the line 4 4 in Fig. 3. Fig. 5 is a cross-section on the line 5 5 in Fig. 3, with the overhanging portions of the fabric of the pair of blanks deflected apart to make their condition more conspicuous. Fig. 5<sup>a</sup> is a corresponding section of a portion on a larger scale. Fig. 6 is a plan view of the pair of blanks with the portions which previously overhung completely folded, the uppermost upward and the lowermost downward. Fig. 7 is a cross-section on the line 7 7 in Fig. 6. Fig. 8 is a cross-section on the line 8 8 in Fig. 6. Fig. 9 is a corresponding view of the lower of the blanks (that intended for the left side of the corset) after the plait or double fold has been formed by folding along the proper lines. The dotted lines show how it has been contracted by the forming of the plait. It will be understood that the upper blank will be separately and similarly treated and will present a similar appearance in the reversed position. Fig. 10 is a cross-section on the line 10 10 in Fig. 9. Fig. 11 is a cross-section on the line 11 11 in Fig. 9, and Fig. 12 is a cross-section of a small portion on the line 12 12 in Fig. 10 on a larger scale.

Similar letters of reference indicate like parts in all the figures where they appear.

The thickness of the several plates is exaggerated to show the construction and effect plainly.

J is the main plate of metal, having the form and size of a completed back piece.

E is a small block of wood or other suitable



material upon which the plate J is firmly and permanently secured by nails F with their heads sunk flush. I employ permanently-set pins extending up from the plate J and shown as supported mainly in the block.

The bounds of the double fold or plait T<sup>2</sup> are indicated by the pins J<sup>1</sup> J<sup>2</sup> near the upper end, which constitute a pair accurately set in the position to define such bounds by plainly-visible though small holes produced in the pair of blanks. Another pair of the pins J<sup>3</sup> J<sup>4</sup> similarly produce holes which indicate the border of the narrower portion of the plait near its lower end. Further pins J<sup>5</sup> are set at distant points.

K is a top plate of metal coinciding in form and dimensions with the plate J and adapted to be applied thereon. It is provided with holes which match on the pins and maintain the top plate in its true position laterally while in use. The plate K is also provided with a closed slot k<sup>6</sup>, extending along the lines k<sup>1</sup> and k<sup>3</sup>, and a corresponding closed slot k<sup>7</sup>, extending along the converging lines between k<sup>2</sup> and k<sup>4</sup>.

A pair of pieces of fabric cut to constitute the proper blanks are marked T T'. Each is of such size and form as to produce a back piece corresponding to the plates J and K with sufficient margins extending over certain edges J K to fold and form the seam-margins or infolds T', by which each complete piece shall be joined to the other parts of the corset. (Not shown.)

To operate the invention, the plate K is temporarily removed, a pair of blanks T T' and T T' in the extended condition are placed on the main plate J with all the pins J<sup>1</sup> J<sup>2</sup>, &c., extending up through the fabric, so as to hold the two pieces (the blanks) reliably against horizontal displacement. The holes t<sup>1</sup>, t<sup>2</sup>, t<sup>3</sup>, t<sup>4</sup>, and t<sup>5</sup> produced by the pins remain in the blanks and the first four are of importance. Next the top plate K is applied and marks are made by any suitable implement, as the edge of a dull knife, pressed upon the pair of blanks T T' T T' in the slots k<sup>6</sup> k<sup>7</sup> and moved along the entire length of each slot successively. This treatment produces two indented marks t<sup>6</sup> t<sup>7</sup> on both the blanks, which indicate the proper lines, the mark t<sup>7</sup> and the holes t<sup>2</sup> and t<sup>4</sup> indicating the line on which a sharp fold in the fabric is to be made to produce the proper bound for one side of the plait—the right side in the figures—and the mark t<sup>6</sup> and holes t<sup>1</sup> t<sup>3</sup> indicating the line along which such fold is to be held and secured to produce the plait or double fold required. Next the projecting edges T' of the blanks are wetted by a sponge or otherwise and are separated, the lower one folded downward under the main plate J G and the upper one folded upward upon the upper face of the plate K. The support or block E, which holds up the main plate J, is sufficiently smaller to allow the margin for the seam to be thus folded smoothly under.

It is shown as of the same form; but this is not important, as it performs no function in directly shaping. Now the preparation of this pair of pieces is completed and the pair of matched blanks T T' and T T' are lifted off together and laid on the bench or on the pile of previously-prepared pieces, taking care when there is much piling of these completely-formed pieces that the seam-margins or infolds T' be not flattened out, but, on the contrary, be held folded still flatter as the weight of succeeding instalments is applied above. I have determined by experiment that it is easy to mark the required lines t<sup>6</sup> t<sup>7</sup> on the two blanks and that the marking will not only be clearly shown on the upper of the pair of blanks, but the mark will also be shown with nearly equal distinctness on the corresponding blank which lies below and which being a counterpart of the upper is to apply in a corresponding reversed position in the opposite half of the corset. Thus the marking and the folding fit each of the two pieces T T' and T T' to serve on their respective sides. The two blanks are separated and extended singly each with the proper face upward. In this condition the thin fabric, moistened, if desired, along the proper lines, is double folded or plaited, the mark t<sup>6</sup> in each blank being brought to coincide with the nearly-parallel mark t<sup>7</sup> in the same and the holes t<sup>2</sup> t<sup>4</sup> being also made to coincide with the holes t<sup>1</sup> t<sup>3</sup>, both the pairs of holes and the pair of marks serving as marks by which to exactly adjust the material, and the blank thus conditioned is passed through the sewing-machine and a line of stitches put in which secures the folds and forms the plait. My invention gives great perfection with little labor and may be worked by relatively unskilled operators.

The sewing of the back piece to the other parts of the corset may be as usual, except that less labor is required to form the proper folds and to determine the correct position of each.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention.

When a fabric is used having a right and a wrong side, as is the case with satins and with many other kinds of goods, the layers of fabric must be reversely arranged. Such piling, the lower one with its right face upward and the next with its right face downward, may be done either in arranging the goods before the blanks are cut or after they are cut and when they are being applied on the main plate J.

I can adapt the invention to the production of other parts of the corset or of parts of other garments.

Along the edge or edges not to be treated the support E may be flush with the edge of the main plate J or may extend out beyond it. The edge or edges T' to be folded are shown along open slots within the border of



the piece. Other portions of the edges may similarly project and be wetted and folded instead of the edges shown, or, in addition thereto, taking care to provide suitable plates and pins and also suitable supports to allow space for folding under the lower plate and over the upper plate along the required lines.

The plaiting can be along other lines.

Parts of the invention can be used without others. I can treat single blanks instead of pairs. For such use the upper plate may be applied in the same manner and the marking may be done on the single fabric alone, which may be wetted and folded downward under the main plate in the same manner as the lower of each pair above described.

In treating blanks for all forms of pieces the main plate J instead of having a hard-metal surface may be faced on the upper side with a soft material, as blotting-paper or velvet, or both. Such would allow the dull knife or other marking-tool by sinking somewhat into the soft material to more distinctly mark both fabrics. I can use hard material and slightly groove along the lines to be marked. I have succeeded well with a hard plane surface, the marking by moderate pressure with a hard-metal tool being sufficiently visible after the goods have been allowed to lie several days. It is not common to make a delay in the treatment of more than a few seconds, thus effecting the sewing while the folding is fresh and while the edges are still wet, and the remainder of the piece retains the greater stiffness due to its dry condition.

I do not in this patent claim the apparatus, such being made the subjects of separate applications for patent.

I claim as my invention—

1. The method of preparing parts of garments, by laying blanks for the right and left sides of a garment, respectively, one on the other upon a suitable support, so clamping the superposed blanks as to leave a margin of each blank unconfined, folding the said margins in opposite directions while the bodies

of the blanks are thus temporarily clamped, and unclamping the blanks, the folding of the margins in opposite directions while the blanks are superposed, bringing the folded margins on the same face of the garments made with the prepared parts, substantially as described.

2. The method of preparing parts of garments, by laying blanks for the right and left sides of a garment, respectively, one on the other upon a suitable support, and marking the superposed blanks by the same operation, the said marking while the said right and left blanks are superposed bringing the marks and the seams made in accordance therewith into symmetrical positions on opposite sides of the garments made with so-marked blanks, substantially as described.

3. The method of preparing parts of garments, by laying blanks for the right and left sides of a garment, respectively, one on the other upon a suitable support, so clamping the superposed blanks as to leave a margin of each blank unconfined, wetting the unconfined margins and then folding the wet margins in opposite directions, the wetting and folding being both performed while the bodies of the blanks are temporarily clamped, marking the bodies of the superposed blanks, both blanks by the same operation and unclamping the blanks, the said margin-folding and body-marking while the said right and left blanks are superposed, bringing the folded margins on the same face and the body-marks and the seams made in accordance therewith into symmetrical positions on the garments made with the prepared parts, substantially as described.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

P. J. MENAHAN.

Witnesses:

J. B. CLAUTICE,  
M. F. BOYLE.