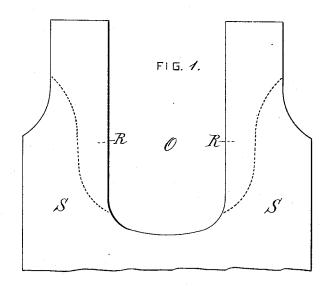
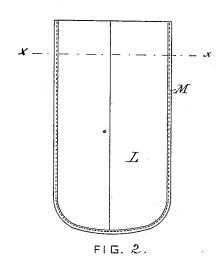
C. S. DEAN.

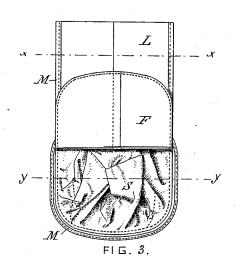
METHOD OF INSERTING BOSOMS IN SHIRTS.

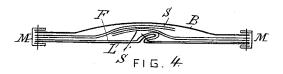
No. 386,425.

Patented July 17, 1888.











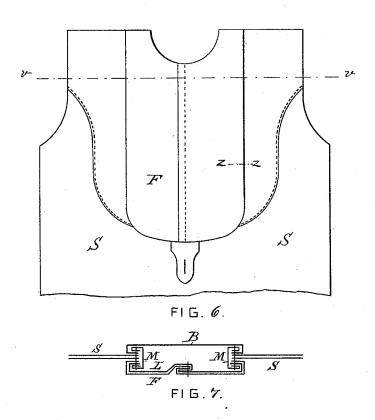
WITNESSES. Won & Lowe. Edward S. Berrall. Charles S. Dran. By Same a Scillon.

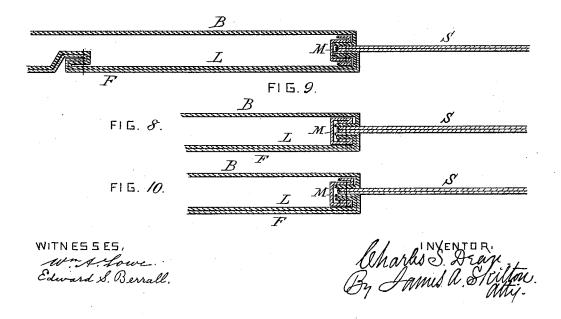
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METHOD OF INSERTING BOSOMS IN SHIRTS.

No. 386,425.

Patented July 17, 1888.





UNITED STATES PATENT OFFICE.

CHARLES S. DEAN, OF TROY, NEW YORK, ASSIGNOR TO GEORGE B. CLUETT, BRO. & CO., OF SAME PLACE.

METHOD OF INSERTING BOSOMS IN SHIRTS.

SPECIFICATION forming part of Letters Patent No. 386,425, dated July 17, 1888.

Application filed February 9, 1888. Serial No. 263,460. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. DEAN, a citizen of the United States, residing at the city of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Improvement in the Method of Inserting Bosoms in Laundered Shirts, (for which I have obtained no foreign Letters Patent whatever,) of which the following is a specification.

My invention relates to improvements in the method of inserting bosoms in laundered shirts.

The objects of my invention are to secure the bosom, of whatever number of layers, in the shirt, the body of which may also be pro-15 vided with a re-enforce or not, as desired, the insertion to be accomplished by one operation and resulting in a strong, durable, and sufficient fastening of the two together by one line of stitching, whatever may be the shape 20 of the bosom, in such a manner as also to prevent the escape of threads from the raw edges between the layers of the bosom, and thereby prevent the defacement of the bosom through the absorption of starch by the loose threads 25 and free raw edges and the formation of starch clots caused thereby, and also to effect the production of a thick and firm border of material at the edge of the bosom, but concealed, for the absorption of an extra amount of starch and 30 the consequent formation of a stiffened margin or frame to aid in preserving the form and shape of the bosom, in preventing the wrinkling of the same, and in increasing the durability of the same.

In the accompanying two sheets of drawings, Figure 1 is a back plan view of the upper portion of the shirt-body front cut out to receive the shirt-bosom and provided on its front with re-enforce pieces on each side of the opening. 40 Fig. 2 is a plan view of the entire shirt-front and bosom as it appears just after the shirt-bosom and shirt-body front are secured together. Fig. 3 is a partially plan and partially perspective view of the same with a part 45 of the bosom-ply raised, so as to expose the interior appearance of the lower part of Fig. 2.

Fig. 4 is a sectional view cut on the line X X, Fig. 5 is a sectional view cut on the line Y Y, Fig. 5. Fig. 6 is a front plan view of the upper portion of the shirt-body front with the bosom inserted. Fig. 7 is a sectional view cut on the line V V, Fig. 6. Fig. 8 is an en-

larged view cut on the line ZZ. Figs. 9 and 10 show slight modifications.

Similar letters refer to similar parts throughout the several views.

Fig. 1 shows the upper part of the shirt-body front S, the lower part or tail not being shown, for the reason that it is not necessary. The first step consists in cutting out the opening O, 60 into which the bosom is to be inserted. The two dotted lines—one on each side of the opening—indicate the lines of stitching which secure the re-enforce pieces R. The second step consists in folding the shirt-body front S in 65 the manner shown in Figs. 3, 4, and 5, and in such dimension that the edge of the material surrounding the sides and bottom of opening O shall be in position to conform to and be substantially coincident with the edges of the 70 several plies composing the bosom when laid out flat. The third step consists in placing the several plies constituting the bosom—consisting, say, of the front ply of linen, F, the interlining L, and the back lining, B-and the 75 shirt-body front and re-enforce in certain relations to each other, the shirt-body front S being so arranged that the front of it faces the back lining, B, as shown in Figs. 4 and 5, and so that the back of the same faces the front 80 ply, F, which is the front linen of the bosom, and the interlining L being laid on the outside of the linen front, as shown in Figs. 2, 3, and 4, the edges of all these separate parts constituting the bosom, the shirt-body 85 and the re-enforce being coincident at the sides and bottom of the bosom parts and of the opening O. The fourth step consists in applying and securing a narrow strip of material, M, to the outer raw edges of the several 90 layers of material so compiled by a single line of stitches, as shown in Figs. 2 and 4, the narrow folded strip being made to inclose, bind, and firmly secure, as to their edges, the three plies composing the bosom and the two plies 95 composing the shirt-body front and the re-enforce piece on each side of the same. As shown in Fig. 2 and at the end of this stage or step, the material constitutes a pocket open at the top only. The fifth step consists in turning 100 this pocket inside out, which being done, the relations of the parts become such as are shown

but on the inside of the same—that is to say, between the interlining and the back liningin position to cover and occlude all the raw edges of the material in a continuous pocket 5 all the way around the bosom, except at the top. As shown in Fig. 7, seven raw edges are thus inclosed and covered and the insertion of the bosom in the shirt-body front is completed at one operation, and as raw or frayed edges to permit the threads to expand they will at that point absorb a larger share of starch than elsewhere, and consequently beneficially create an increased stiffness at that point all the way around the edge of the bosom, instead of caus-15 ing or permitting starch clots, as in many bosoms, the effect of which will be to give increased stiffness and stability of form and position as well as durability to the bosom, and also to the shirt-body front and re-enforce piece adjacent thereto. For the narrow strip M, I prefer to use a strip cut from the piece diagonally across it, instead of straight across, for the reason that a bias or diagonal cut strip will conform itself or be conformed to the ex-25 ternal curves, as shown in Fig. 2, without gathering or wrinkling, whereas the tendency in case a straight-cut strip is used will be to gather and form wrinkles or corrugations at the points where the curve is sharpest, which 30 will be secured and made permanent by the line of stitches, and subsequently when the pocket is turned inside out the relation of the curve will be changed, and, the outside curve becoming in turn the inside curve, further 35 wrinkles, corrugations, or gathers will be formed, the tendency of which will be to deface the shirt-bosom. The bias cut strip, however, will accommodate itself to the original convexity, as in Fig. 2, and subsequently to to the concavity produced by the reversal of the curves caused by turning without the development of permanent gathers not only, but, if there is any tendency to develop gathers in the edges of the material composing the bosom 45 as turned inwardly in the completed front, the same will be covered and shielded by the folded strip in such a way as to prevent their showing on the front of the shirt-bosom to its injury.

While I prefer to use the bias cut strip, I do not desire to limit my invention thereto, as I am aware that a straight cut strip may be used in its place with advantage in the otherwise use of my invention. While it is the 55 better and more complete method to turn in and under the raw edges of the strips M, as shown in Figs. 4, 5, 7, and 8, I do not desire to limit my invention thereto, as I am aware that the strip M may be applied in the man-60 ner shown in Fig. 9, in which the raw edges of the strip M are neither of them inclosed and covered within the fold of the strip, and also as shown in Fig. 10, wherein one of these edges

is inclosed within the strip and the other is 65 not so inclosed. Either one of these methods

may be used to advantage.

I am aware that the interlining may be omitted, and also that it may be originally placed on the outside of the back lining, B, and so as to come upon the inside of it when the 70 pocket is turned inside out, as previously described. I am aware that the re-enforce pieces may be omitted without avoiding my inven-

It is evident that in taking the fourth step 75 in the improved method herein described more than one line of stitches might be usedthat is to say, that an additional line or lines of stitches might be unnecessarily used; but the first line of stitches through all the parts 80 will form the pocket, and if additional lines of stitches are added they will be unnecessarily added, since a single line of stitches will be sufficient to complete the product of the invention, and an additional line of stitches 85 (one or more) will merely add, at best, to the strength and solidity of the fastening.

By the method hereinbefore described I avoid the expense and trouble of turning in the edges of the bosom and shirt-body prepar- 90 atory to stitching the edges together in the

manner usually adopted.

I have only described the method of inserting the bosom into the shirt-body front. The shirt for which the shirt-body front is intended 95 is to be finished and completed in any usual manner; but as that portion of the work constitutes no part of my invention, I do not consider it necessary to describe or illustrate any method of doing the work.

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I claim as my invention-

The improved method of inserting shirtbosoms in shirt-body fronts, consisting in, first, cutting out an opening in the shirt-body front to receive the shirt-bosom; second, fold- 105 ing the shirt-body front so cut out, and also the re-enforce pieces, in such a manner that the edge of the material surrounding the opening shall be capable of conforming to or of becoming substantially coincident with the sev- 110 eral edges of the plies constituting the bosom when laid out flat and fully extended; third, placing the shirt body front so folded between the back lining and the front linen of the bosom with its face against the back of the 115 back lining and its back against the face of the front ply or linen; fourth, applying a narrow strip of material to the outer raw edges of the pile consisting of the back lining, the shirt-body front, and the front linen, and se-120 curing all these parts together by stitches, so as to form a pocket, and, fifth, turning the pocket inside out, so that the binding strip will cover the raw edges between the plies of the bosom, substantially as shown and de- 125 scribed.

CHARLES S. DEAN.

Witnesses:

CHAS. D. CAMPBELL, J. Wesley Griffin.