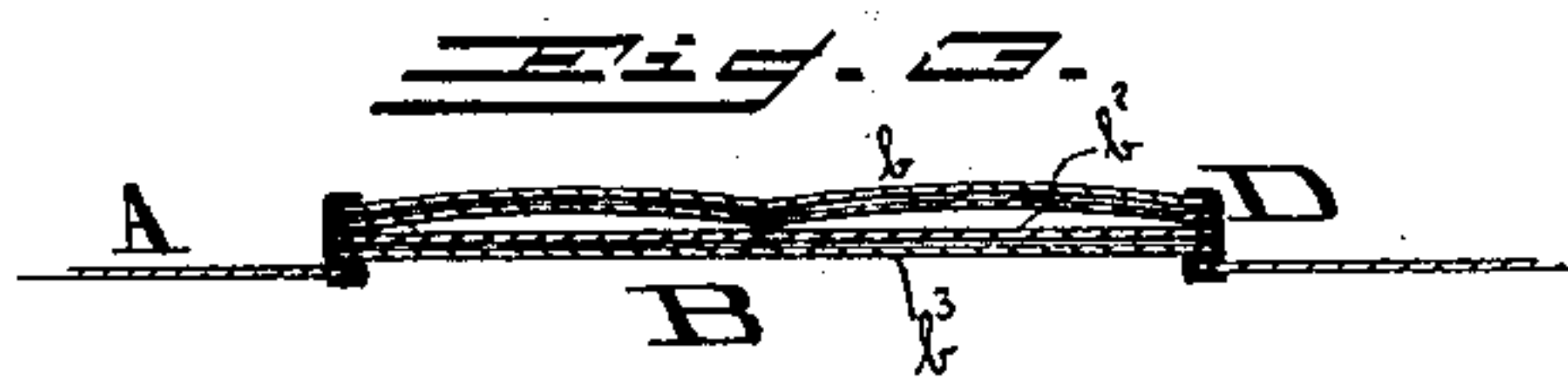
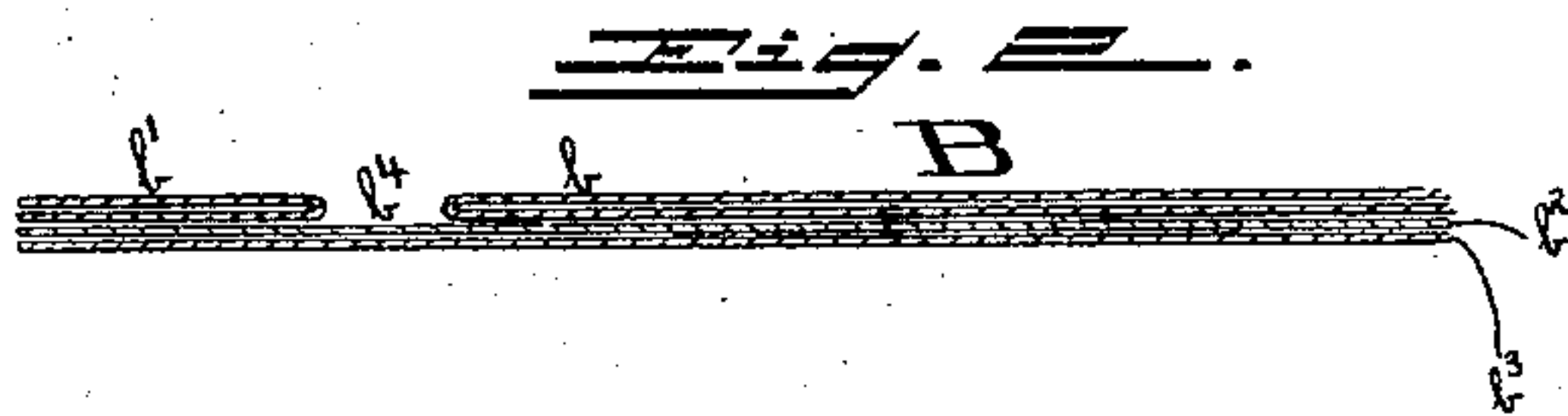
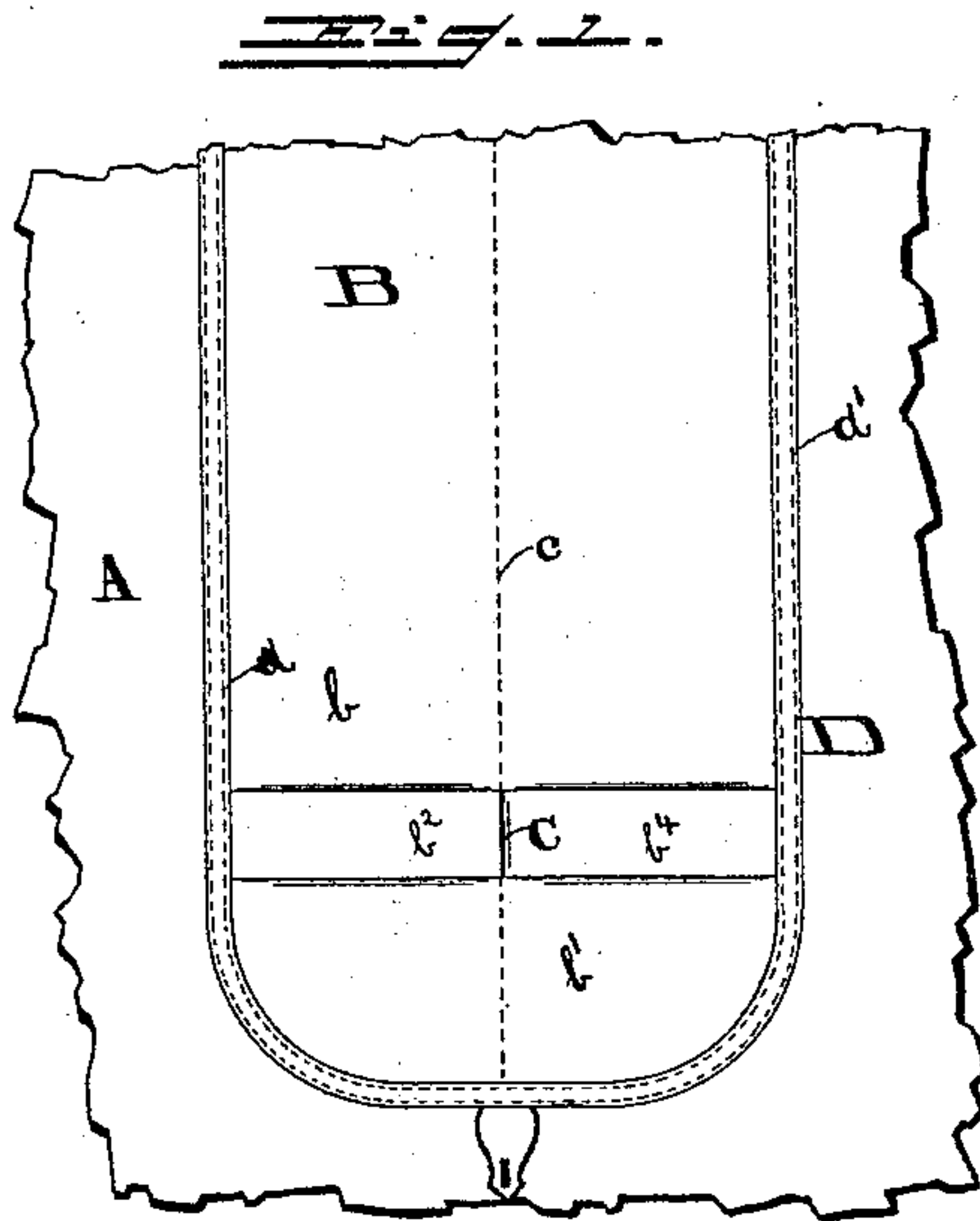


(No Model.)

S. DEUTSCH.  
SHIRT BOSOM.

No. 435,288.

Patented Aug. 26, 1890.



WITNESSES

Oliver N. Lissou.  
George W. Dale.

INVENTOR

Sigmund Deutsch  
By his Attorney,  
Wm. B. Powell.

# UNITED STATES PATENT OFFICE.

SIGMUND DEUTSCH, OF PHILADELPHIA, PENNSYLVANIA.

## SHIRT-BOSOM.

SPECIFICATION forming part of Letters Patent No. 435,288, dated August 26, 1890.

Application filed July 7, 1890, Serial No. 357,959. (No model.)

*To all whom it may concern:*

Be it known that I, SIGMUND DEUTSCH, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Shirt-Bosoms, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to shirt-bosoms of the character shown and described in Letters Patent of the United States No. 130,056, dated July 30, 1872, and has for its object to improve the construction and increase the efficiency thereof.

My invention consists of certain details and in the combination of parts, as hereinafter fully described, and as illustrated in the drawings, having reference particularly to the provision, in lieu of the two single plies beneath the front ply of the bosom, of a single piece of material twice as long as the aforesaid single plies and of a length equal to double the distance from the upper end of the bosom to the upper edge of the transverse diminished portion of the same, and a similar piece for the part thereof below such portion, at the edges of which latter, and forming the same thereby, such pieces are doubled or bent over upon themselves and have their meeting ends secured at the top and bottom of the bosom, thus forming continuously two of the bosom-plies and dispensing with the hems which of necessity are formed on the edges of the single plies at the diminished portion, as heretofore, and which of course multiply the number of plies or thicknesses of material at such edges beyond that of the main portion of the bosom and prevent the smooth and uniform ironing of the bosom by the production of ridges therein. The edges of the diminished portion, furthermore, in lieu of being secured by parallel lines of stitching, are secured at their ends and centers only by the binding which secures the bosom to the body of the shirt and the plait-stitching in the center of said bosom, the parts of said doubled plies between their edges and centers being independent of the face of the bosom or of the adjacent plies, leaving open spaces between them, which al-

low of the ingress and egress of water to and from such spaces, thus permitting of the perfect washing of the bosom, both outside and inside, and the cleansing therefrom of all dirt and perspiration absorbed by the bosom when worn under certain circumstances; also, the starching of said bosom is facilitated, and the same can be accomplished to a greater degree of stiffness than heretofore, owing to the possibility of the starch being applied to the interior of the bosom through the aforementioned open spaces. Furthermore, the doubling of the material at the edges of the diminished portion affords a rigid resistance to the stretching tendency of the ironing operation and prevents the distortion of the edges of such portion, while the hemming of such edges without the double length of material above mentioned does not afford such rigid resistance. Consequently the said edges gradually become disaligned and irregular to such an extent as to prevent the attainment perfectly of the desired result.

Referring to the accompanying drawings, Figure 1 is an under side view, partly broken away, of a shirt made after the improved method and secured to the body of a shirt. Fig. 2 is a vertical longitudinal section of a portion of the bosom, and Fig. 3 is a vertical transverse section of the parts as shown in Fig. 1.

A represents the body of the shirt, or so much thereof as is necessary to illustrate the application of my improvements thereto. B is the improved bosom, composed of the two doubled plies  $b\ b'$  and the two single plies  $b^2\ b^3$ , the latter being the front ply of the bosom, the first two of which being in the same plane and have their points at which they are doubled opposite and at some distance from each other, leaving the space  $b^4$ , the bottom of which space is formed by the ply  $b^2$ , so that while the bosom beneath the space  $b^4$  is of but two plies the portions of such bosom at each side of said space are of four plies. Thus the desired folding of the bosom at the weakest or thinnest part is facilitated by the stiffness of the four-ply portions at each side of said part pushing in opposite directions when the shirt is worn. Yet this thin portion, being of two plies, is sufficiently



thick to withstand any amount of bending when stiff without injuring the fabric of which the bosom is composed at this point. The various plies composing the bosom are  
5 secured in their proper relative positions through the medium of the line of stitching *c*, running down the center of the bosom parallel with the narrow central pleat *C*, as shown in the drawings. Obviously, if the  
10 bosom-pleat be wide, the stitching, instead of being in the center thereof, will be along both edges, so that instead of the plies being secured together by a single line of stitching the same end will be accomplished by two  
15 lines of stitching near the center.

*D* is the binding or tape which, as shown in Fig. 3, secures the edges of the plies *b b' b'' b'''* in close relation through the medium of the stitching *d*, and at the same time secures  
20 the bosom to the body *A* by the stitching *d'*, said binding curling around the edges of said plies and then curls in the opposite direction and grasps the edges of said body. It will thus be seen by reference to the last-men-  
25 tioned figure that, by reason of the fact that the double plies are secured to the single plies only at their edges and middles, the portions of such double plies intermediate said points of fastening can be drawn wholly  
30 away from said single plies, for the purposes hereinbefore described.

By reason of the fact that the plies adjacent to the diminished portion of the bosom are doubled and two plies are made from one continuous piece, the necessity for hemming, 35 which is present when single plies are used instead of double ones, is entirely dispensed with. Consequently the labor involved in such operation is saved, as is the expense thereof, thus lessening the cost of the com- 40 plete bosom in addition to the advantages hereinbefore set forth.

What I claim as my invention is as follows:

In a shirt-bosom, the combination of a 45 piece of material folded upon itself and extending from the top of the bosom downwardly and a similar piece extending from the bottom of the latter upwardly, the folded edges of said pieces being opposed to and at 50 such distance from each other as to leave a space between them, such pieces forming the inner plies of and being secured to the remainder of the bosom, for the purpose specified. 55

In testimony whereof I affix my signature in presence of two witnesses.

SIGMUND DEUTSCH.

Witnesses:

WM. H. LOWELL,  
R. DALE SPARHAWK.