

(No Model.)

W. C. VON BUCHWALD.
METHOD OF MAKING SMOCKING.

No. 422,268.

Patented Feb. 25, 1890.

FIG. 5.

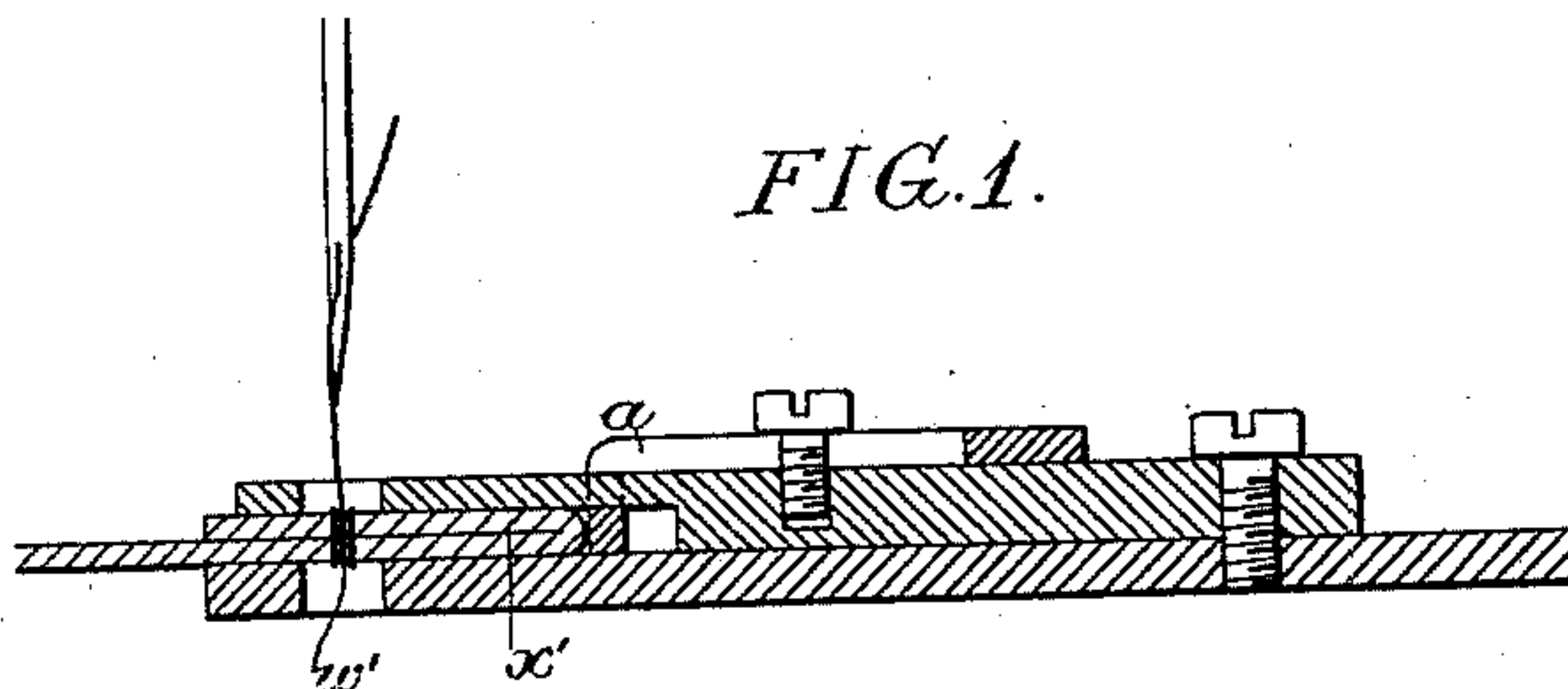
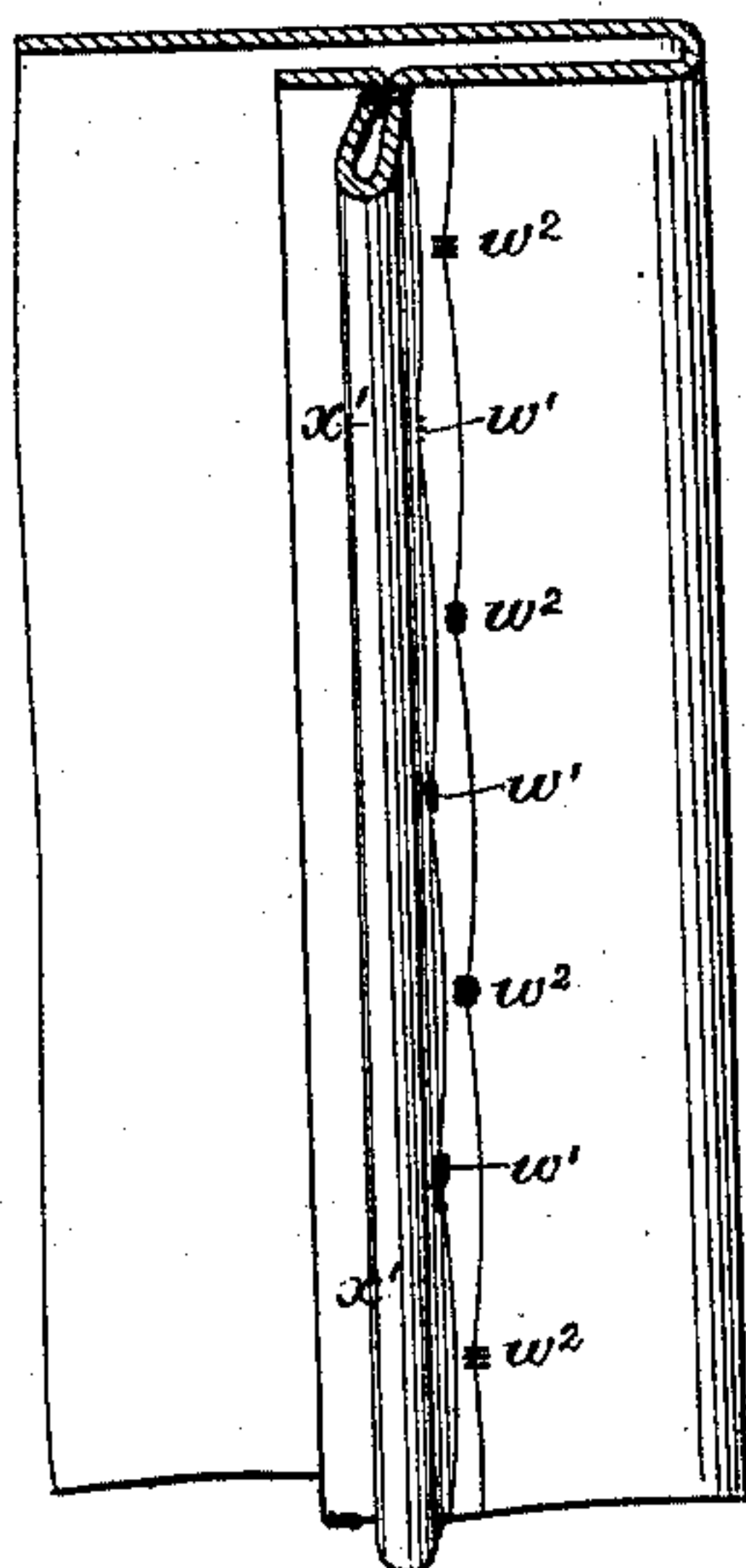
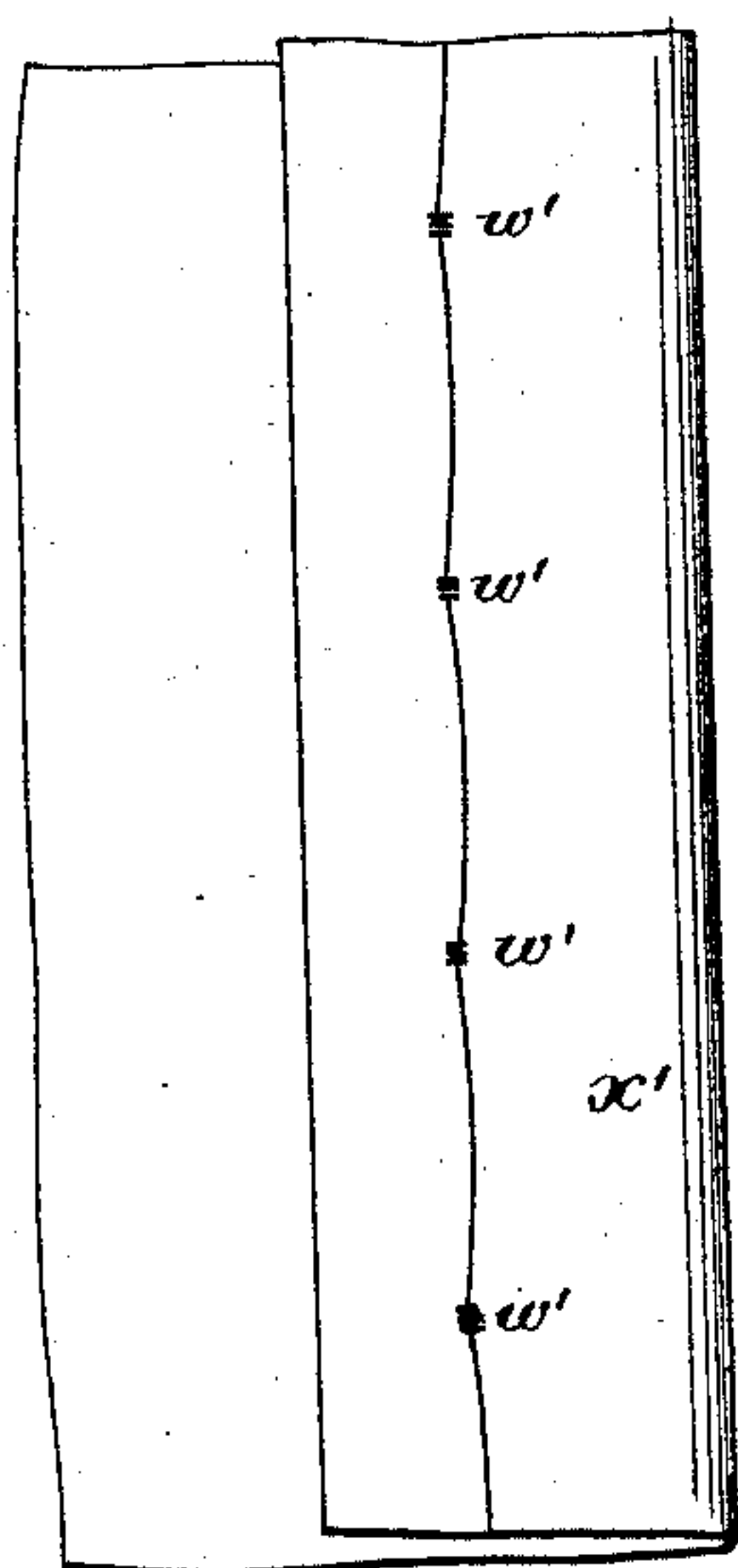


FIG. 1.

FIG. 2.

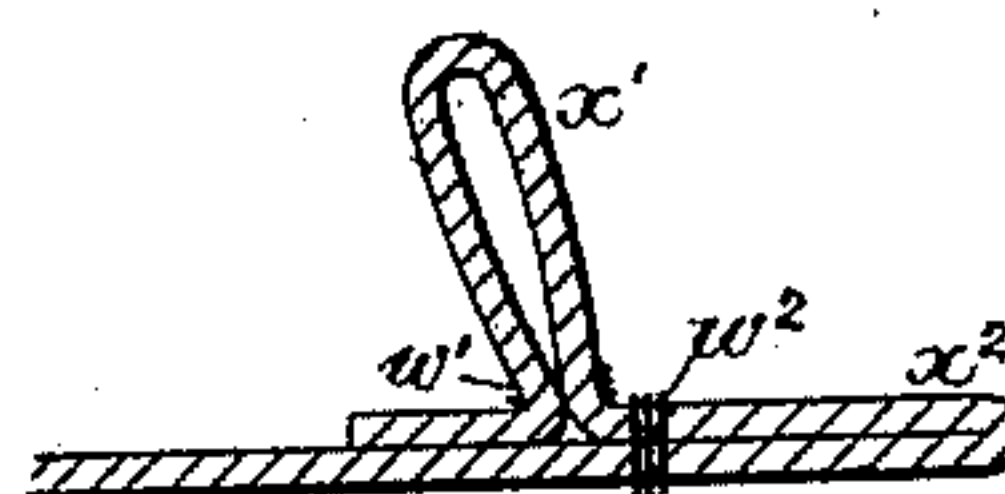


FIG. 3.

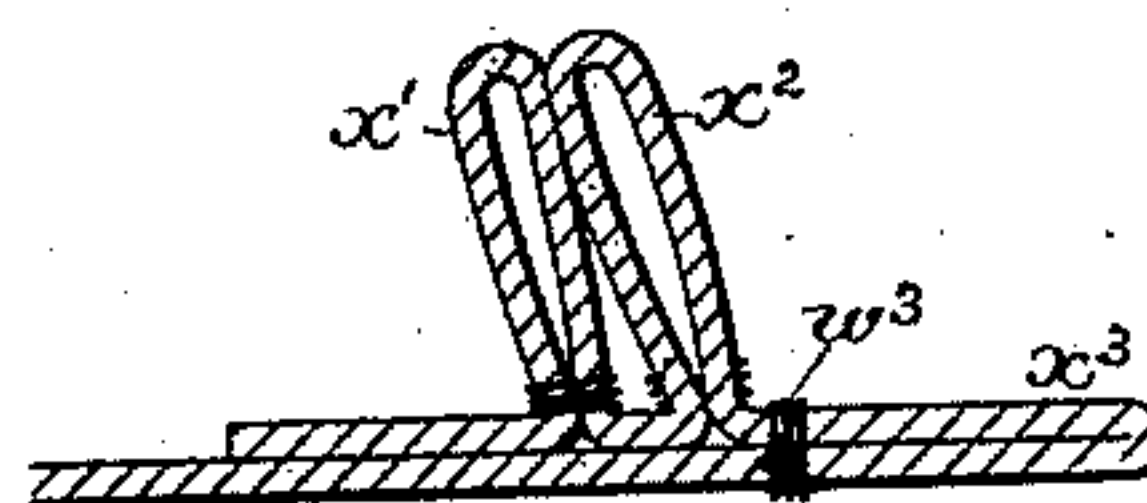


FIG. 6.

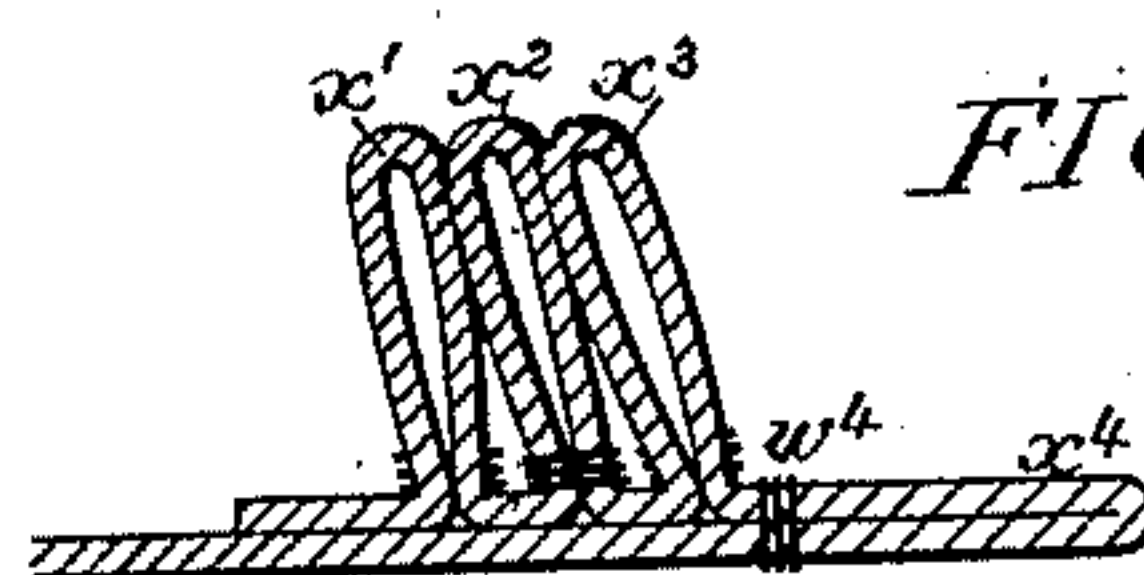


FIG. 4.

Witnesses:
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by his Attorneys
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UNITED STATES PATENT OFFICE.

WILLIAM C. VON BUCHWALD, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
OF ONE-HALF TO FRANK A. BYRAM, OF SAME PLACE.

METHOD OF MAKING SMOCKING.

SPECIFICATION forming part of Letters Patent No. 422,268, dated January 25, 1890.

Application filed April 15, 1889. Serial No. 307,306. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. VON BUCHWALD, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have
5 invented certain Improvements in Sewing Smock-Work, of which the following is a specification.

The object of my invention is to so effect the sewing operation known as "smocking" that it can be performed with facility upon a sewing-machine without requiring the exercise of any particular skill on the part of the operator, and this object I attain in the manner hereinafter set forth, reference being had
10 to the accompanying drawings, in which—

Figures 1, 2, 3, and 4 are diagrams on an exaggerated scale, representing the method of carrying out my invention. Fig. 5 is a view of the fabric after the performance of the first
20 step of the process, as in Fig. 1; and Fig. 6 is a view of the fabric after the performance of the second step of the process, as in Fig. 2.

The work known as "smocking" or "smock-work" consists of raised plaits or wales of
25 fabric having the upper edges of adjoining plaits sewed together at intervals, the sewing, however, being rather in the nature of "tacking" than ordinary sewing, as there is at each point of connection of the plaits or wales only
30 a few closely-bunched stitches, the points of connection in one row being midway, or thereabout, between the points of connection in adjoining rows, so that a cellular or honey-comb-like effect is produced. Heretofore this
35 class of work has generally been produced by hand, although in an application for patent filed by me on the 5th day of February, 1889, Serial No. 298,705, I described a machine for producing this class of work. In its operation, however, this machine followed the
40 usual practice—that is to say, the stitches were formed at the crowns of the plaits and on the face of the work, the thread floating from one bunch of stitches to the next, and these floating threads being afterward trimmed off. I
45 find, however, that a much simpler method of producing this class of work is to reverse the usual method of operation, the sewing being effected from the back and the bases of
50 successively-formed folds or plaits being

tacked together at the appropriate intervals, for the bases of the plaits on the back of the fabric are the crowns or tops of the plaits on the face; hence while the fabric presents on the face the same appearance as ordinary
55 hand-smocking the floating threads between the different points of connection are on the back of the fabric, and hence do not have to be trimmed off as before, the work in this respect exactly resembling the ordinary hand-
60 work.

My process can be carried out upon any sewing-machine having provision for holding down the plaits and imparting a slight to-and-fro movement to the work or to the needle, so as to form the closely-bunched series
65 of stitches necessary for tacking the successive plaits together, the machine shown in my former application being available for the purpose by simply lengthening the pressing-
70 finger of the guide and providing the latter with an adjustable gage *a* to regulate the depth of plait, as shown, for instance, in Fig. 1.

The method of carrying out my invention
75 will be more clearly understood on reference to the various views of the drawings.

The fabric is first doubled, as shown at x' in Fig. 1, and stitches w' are formed at such a distance from the folded edge as the desired
80 depth of plait or wale to be produced may suggest, the stitches passing through but two thicknesses of fabric instead of through four thicknesses, as in sewing adjoining plaits together at the crown in the usual manner.
85 After the first bunch of stitches has been completed the fabric is moved along the proper distance for the formation of the next bunch, this distance being determined by the length of cell which the smock-work is to present.
90 After the desired number of successive bunches of stitches have been thus formed the fabric is again folded at a point farther in advance, as shown at x^2 in Fig. 2, the first
95 fold or plait x' being turned back out of the way, so as to permit the successive formation of the properly-spaced bunches of stitches w^2 at the base of this second fold or plait, in the same manner as they were formed at the base
100 of the first fold or plait, the bunches of

stitches of the second fold, however, being located midway, or thereabout, between the stitches of the first fold. The third fold x^3 is then formed at a point still farther in advance, 5 as shown in Fig. 3, and this fold or plait is stitched together at its base, these stitches w^3 being in line with those of the first fold. After this fold has been stitched together at the proper points a fourth fold x^4 is formed, and 10 the base of this fold is stitched together at the points w^4 , which are in line with the stitches w^2 of the second fold, and the operation is thus repeated indefinitely, the points of connection of the fifth fold being in line 15 with those of the first and third, and the points of connection of the sixth fold being in line with those of the second and fourth, and so on until the desired number of folds have been made.

20 It will be evident that by this method the manipulation of the material is a very simple one, such as can be performed by a sewing-machine operator without the exercise of any particular or special skill, the work being 25 complete when the sewing operation is completed, as no subsequent trimming of the work is required.

Having thus described my invention, I claim and desire to secure by Letters Patent—

The mode herein described of producing the 30 work known as "smocking," said mode consisting in forming a fold or fabric, stitching the two thicknesses of the material of said fold together at the base at properly-spaced points, turning back this fold and forming 35 another fold in advance of the same, stitching the two thicknesses of material of this second fold together at the base at points midway between the stitches of the preceding fold, and so on with successive folds, whereby when 40 the work is reversed the bases of the folds become the crowns of the plaits, and one thickness of each plait is stitched to one thickness of each adjoining plait adjacent to the crown of the same, substantially as speci- 45 fied.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM C. VON BUCHWALD.

Witnesses:

WILLIAM D. CONNER,
HARRY SMITH.