

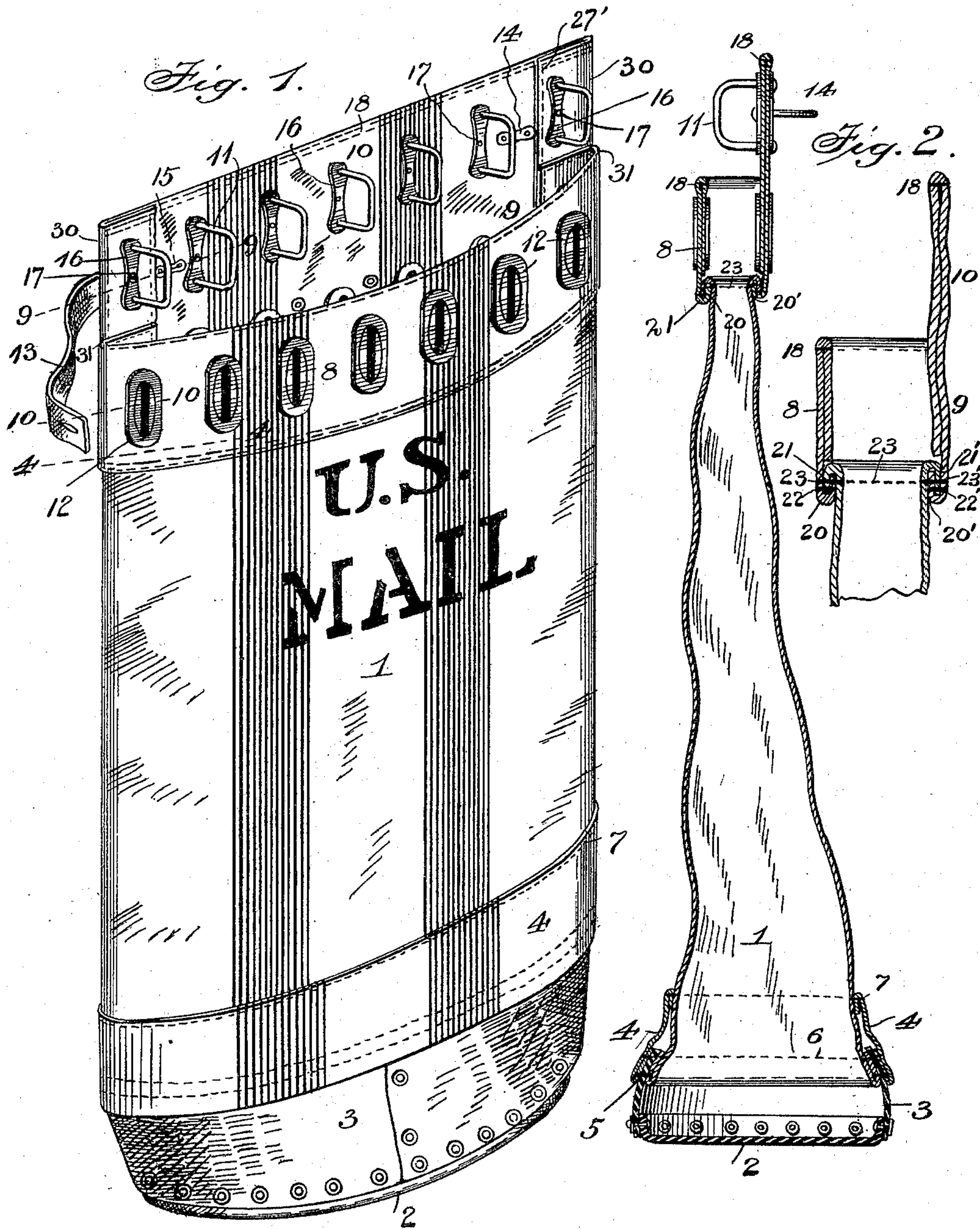
(No Model.)

3 Sheets—Sheet 1.

C. F. LIGHTHOUSE.
MAIL BAG.

No. 584,726.

Patented June 15, 1897.



Witnesses
Frank L. Ourand
C. M. Catlin

Inventor
Charles F. Lighthouse
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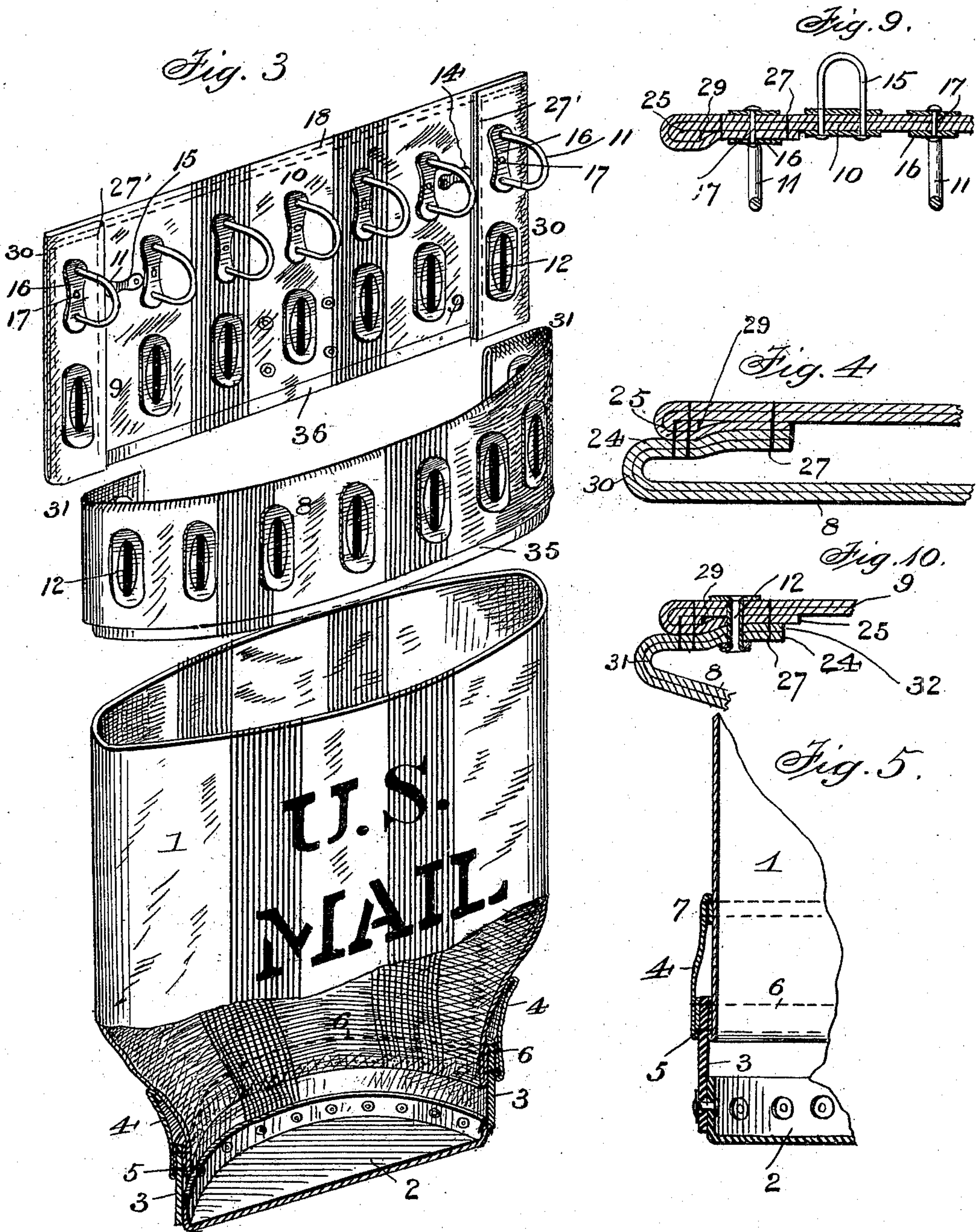
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3 Sheets—Sheet 3.

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Fig. 6.

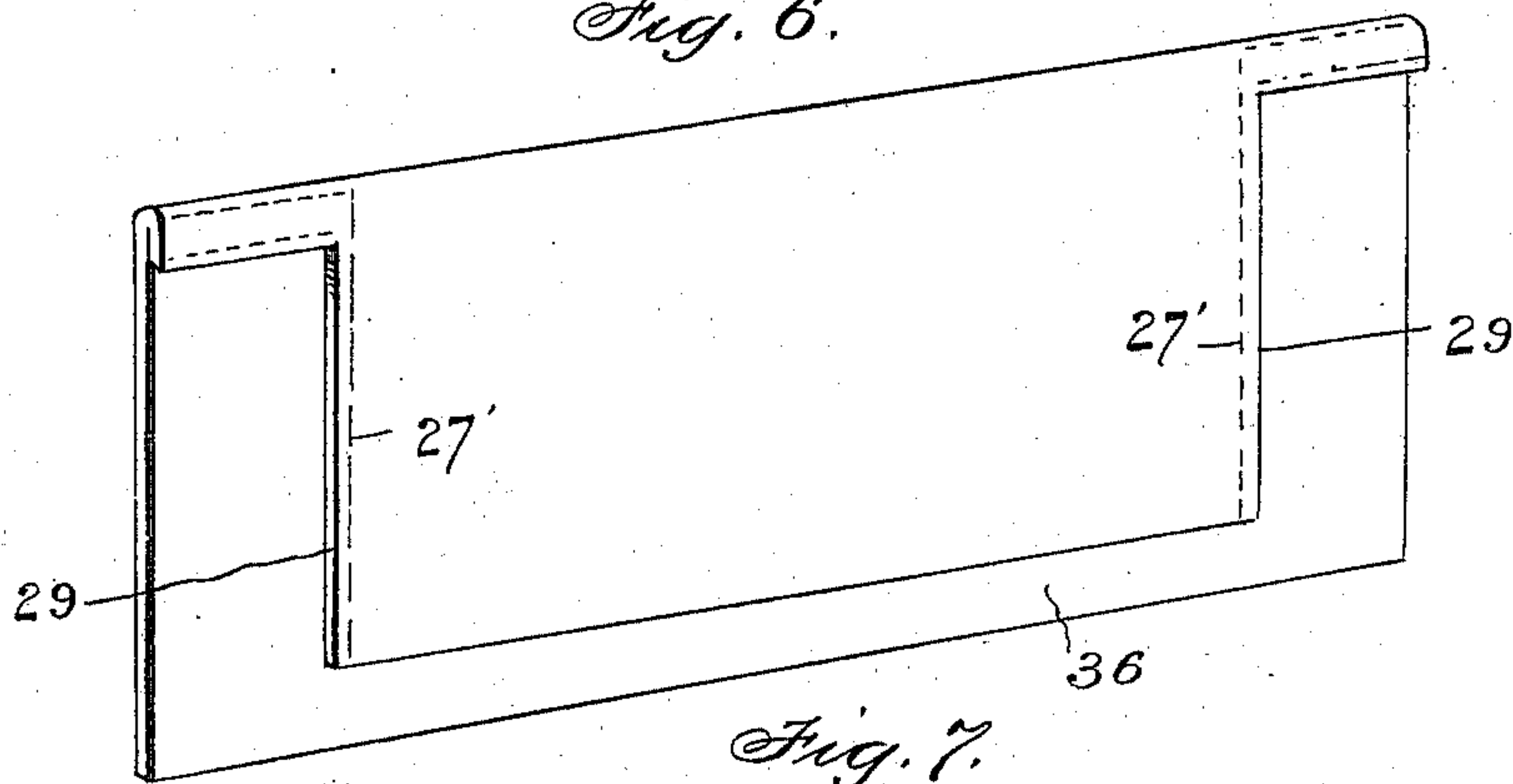


Fig. 7.

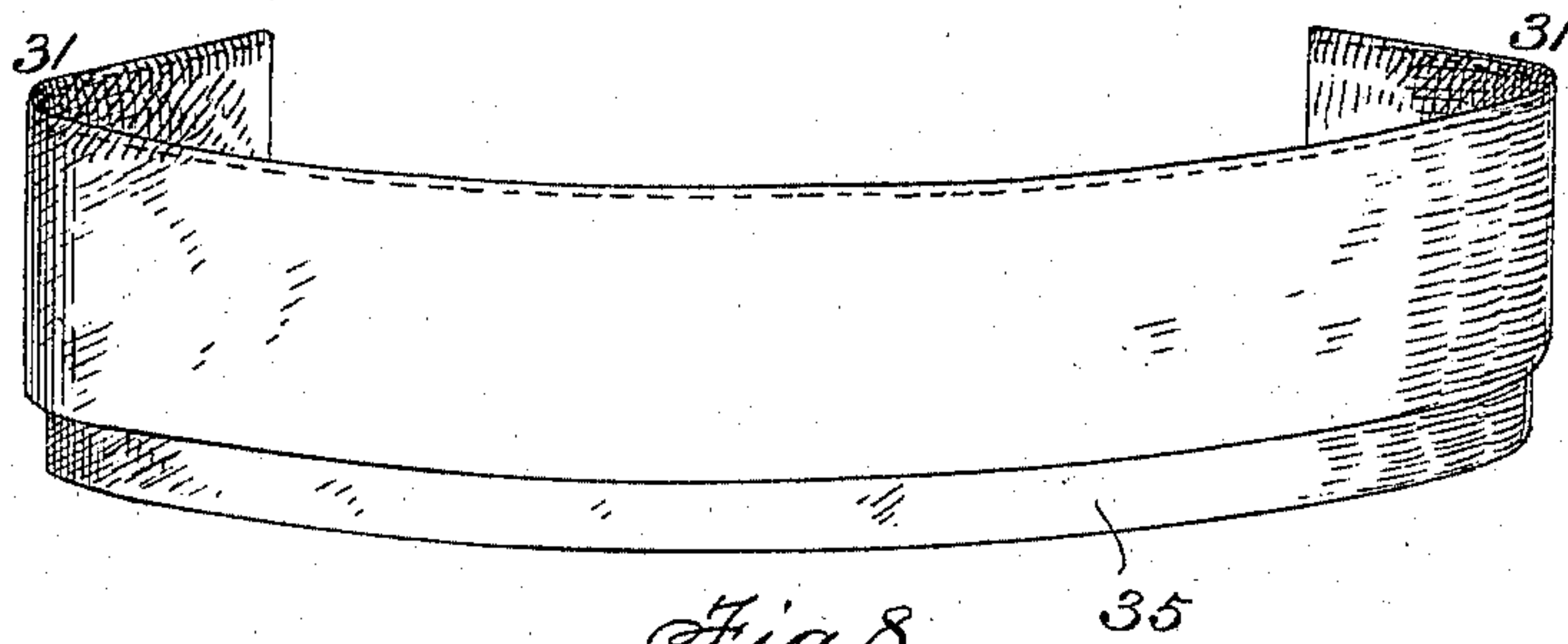
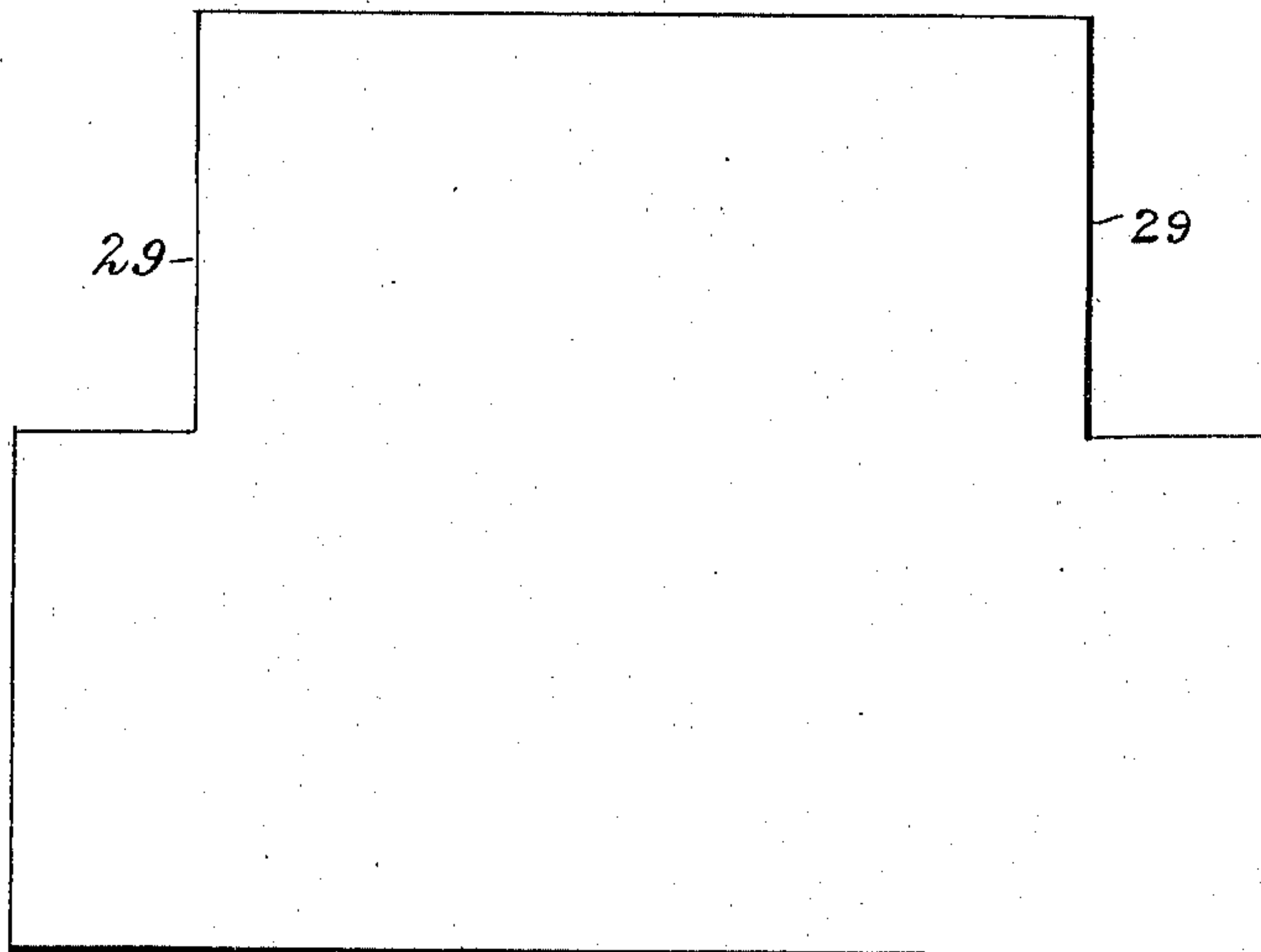


Fig. 8.

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UNITED STATES PATENT OFFICE.

CHARLES F. LIGHTHOUSE, OF BROOKLYN, NEW YORK, ASSIGNOR TO JOHN L. BURLEIGH, OF SAME PLACE.

MAIL-BAG.

SPECIFICATION forming part of Letters Patent No. 584,726, dated June 15, 1897.

Application filed February 1, 1897. Serial No. 621,440. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. LIGHTHOUSE, a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Mail-Bags; 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 pertains to make and use the same.

The invention relates to mail-bags, and has for its object to facilitate their manufacture, lessen their weight and cost, and increase their efficiency; and the invention consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings, Figure 1 is a side elevation. Fig. 2 is a view showing a longitudinal section and a similar partial section enlarged. Fig. 3 is an isometric view of several parts of a bag detached. Fig. 4 is a section on line 4 4 of Fig. 1. Fig. 5 is a section on line 5 5 of Fig. 1. Fig. 6 is a plan of a rear mouthpiece and flap partially folded and stitched together. Fig. 7 is a blank for forming the said mouthpiece and flap. Fig. 8 is an isometric view of the front mouthpiece partially folded and stitched. Fig. 9 is a section on line 9 9 of Fig. 1. Fig. 10 is a view of a modified detail.

A portion of the improvements relates to the lower part of the bag, which will be first described.

Numeral 1 denotes the body of the bag, made of any suitable fabric and preferably of canvas woven in tubular or seamless form, and 2 a leather bottom formed of one piece, which parts, however, may be made of any usual or desired form and material.

3 indicates a band of leather or other suitable material secured to and joining the said body and bottom, and 4 is a band of canvas or the like designed to cover and reinforce the upper joint of the leather band and canvas body.

Heretofore the canvas body has been extended down to the lower edge of the leather joining-band and below the upturned edge of the bottom and between said edges, and rivets, such as indicated by 6, have secured the

bottom rim, body, and band together. Such construction is defective, because it is difficult thereby to make a close joint, considerable time and care being required to suitably dispose, hold, and fasten the canvas between the leather parts. Further, such joint cannot be made sufficiently close to avoid the occasional introduction and sticking of letters or other objects in the spaces left between the corners and bottom. The interposed fabric is not needed, for the reason that the leather parts are sufficiently strong, and it makes a coarse joint, adding unnecessarily to the weight and the cost of the article.

To avoid the above-named evils and waste of material, the canvas bag-body is attached to and terminated at the upper edge of the band 3 on its inside. A canvas covering band or strip 4 is by preference attached to the said band 3 on the outside. This is effected by placing the parts together so that the bottom edges of the covering band or strip 4 and body 1 shall coincide with the upper edge of the leather band 3, situated between them, and then stitching or otherwise securing together a single thickness of each, as indicated at 5. The parts are then turned so as to double the canvas over the line of stitching 5 on each side of band 3, and the portions of the canvas strip and bag-body thus turned back adjacent the upper part of band 3 are secured to the said inclosed folds and band and to each other by one or more rows of stitches 6, situated above the seam 5. The upper edge of the canvas band 4 is then turned in and stitched, as indicated at 7. The bottom having been riveted to the joining-band 4 the bottom of the bag is complete and without the objections above noted.

The bottom is molded from one piece of leather and has an integral upturned rim. The joining-band is preferably made of one piece of leather, though it may be made of lengthwise sections. The band and rim, being comparatively stiff and adapted to maintain a suitable form, can be fastened together, so as to leave no crevices that will permit the entrance of the corners of letters or other packages. Further, the folded bottom of the bag-body, being situated near the band, fends

off any article liable to penetrate a crevice, and in like manner the joint between the body and band is protected by the fending action of the bottom rim and of the body itself, and whatever opening, ledge, or crevice exists faces downwardly and is situated near the defensive rim of the bottom. The construction is much less liable to catch and hold packages than one in which a joint made of flexible or elastic fabric is upwardly turned in situation exposed to descending articles. Such joints cannot be so tightly closed, and by means of the flexibility of the fabric and the exposed situation they have proved liable to catch and hold mail-matter.

Another part of the improvement relates to the mouth of the bag and means for closing it. These comprise front and back mouthpieces joined to the upper edges of the bag-body and joined to each other at the sides, one of these pieces being made large enough to form a flap which carries staples to secure itself and the front and back parts of the bag-mouth together by the aid of grometed holes, as in a general way is usual in this class of bags. Heretofore the flap has operated defectively, because it could not be turned down by a single movement effected from one end of the flap at the near edge of the bag in manner to enter the staples in all the gromets. The prior construction has been such that the flap would bind at its junction with the mouth of the bag at the mouth-corner and its outer end would lag behind in the turning or closing movement and the remoter staples would fall short of their seats, making a separate pull of the flap necessary to bring the staples down to their work. This, besides the inconvenience of the manipulation, impairs the flap, and being often repeated causes it to wear or crack. These evils are avoided by the hereinafter-described construction.

8 and 9 denote the front and back pieces, respectively, and 10 the flap, staples being denoted by 11, gromets by 12, and a securing-strap by 13. The strap is fixed to the back or outer side of the flap by a staple 14, and having been suitably passed through the staples 12 is locked to a staple 15, as is customary. The several staples are secured to the flap by means of plates 16. Rivets to aid in holding the plates together upon the canvas are indicated by 17. This is a very secure construction, but is not new at this date, being the subject of Patent No. 459,869, granted to me September 22, 1891.

The front mouthpiece is separately shown in Fig. 8, which represents it as folded a little above its longest diameter to leave a single thickness 35 for attachment of the bag-body. The rear combined mouthpiece and flap are similarly folded to leave a like margin 36 of single thickness, as indicated in Fig. 6, for a like purpose. The front mouth folded double, as stated, is stitched, as indicated at 18. Its lower edge is also folded inwardly, as indicated at 20, and is inserted within a

corresponding fold 21 of the bag-body, and this fold 21 of the bag and the fold 20 of the front mouthpiece are stitched to each other and to the body of the front piece by a line of stitches 22, and the bag-body and front piece and their folds are stitched together, as indicated at 23.

The back piece that carries the flap is secured to the bag-body in a similar manner, as shown, the folds being indicated by 20' and 21' and the lines of stitches by 22' and 23', respectively.

The ends of both the doubled front and back pieces have at the line of the edges of the bag inwardly-folded edges 24 and 25, respectively. The inner edges of these folds 24 and 25 (see Figs. 4, 9, and 10) are stitched to each other and to the back piece by stitches 27. Stitch-lines 27 are continuous with lines 27', (see Figs. 1, 3, and 6,) securing the edges of the flap-folds to said flap. The folds of the flap are, however, securely fastened to the main part thereof by the outer staples and gromets, as shown, so that the parts would be joined with a reasonable degree of security were the stitching around these staples and gromets omitted. In prior constructions this additional effect of the staples and plates and gromets has not been secured and stitching has been the sole means of securing the edges of the folds, which parts, being subject to great wear, are perfectly defended by the present improvement.

To avoid making the corners of the flap too thick and heavy and to avoid impairing its flexibility, a part of the inner fold 25 on each end of the flap and back piece that would be under the outer staple-plates 16 and the gromets is cut away, as indicated at 29. (See Figs. 6 and 7.)

Instead of making the front and back mouthpieces 8 and 9 of the same length widthwise of the bag, as heretofore practiced, the front piece is made a little the longer, as indicated in Figs. 7 and 8, whereby it is insured that the outer edge 30 of the completed flap and of the back mouthpiece shall not extend outside the line of the edge of the bag, but shall rather lie within it, the purpose of which construction is to avoid the binding effect of the mouth-corner 31 heretofore common in this class of bags and whereby the closing of the flap is delayed and obstructed, as above stated. In the present improved construction the flap can be turned down and the staples entered or brought directly to the gromets by a single movement of one hand without requiring an extra pull crosswise of the bag or any unnecessary force tending to wear or distort the flap or bag-mouth.

Modifications of the above-described devices which do not involve essential departures from the principles of construction and operation can be made. In some cases one, two, or more rows of stitches can be employed to secure the parts, and in some cases a part of the stitching can be omitted. It is not es-

essential that the leather joining-band be made in one piece, nor is the use of the materials described essential, and referring to the lengths of the mouthpieces or bands the advantages of making the front band the longest could be secured, at least in part, by folding in a wider portion of the back piece than of the front piece. In such case the stitches 27 would be nearer the edges of the folds 24 of the front piece than to the edge of 25, as indicated in Fig. 10. It is, however, preferred that the front piece be made longer, as stated, and that this line of stitches should be equidistant from the edges of both folds, as shown.

The improvements in the flap are not entirely dependent on the use of the described mouthpieces. In some portions of the bag now shown and described as stitched together other means than stitching might be used to join parts, and wherever herein "stitching" or "stitches" are named it is not intended to exclude any equivalent fastening devices.

Having described my invention, what I claim is—

1. In a bag, the bottom, the bag-body having a fold at its foot, the covering-strip 4 having a fold at its bottom, the intermediate band 3 joining the bottom and body, said band being fastened to the bottom and between the body-fold and covering-strip fold near the lower part of the folds and fastened at or near its upper edge to the strip, body and folds, substantially as described.

2. In a bag, the leather bottom having an upturned rim, and the leather joining-band, each made of one thickness and the band secured to the upturned rim of the bottom, the woven seamless bag-body having a fold at its foot, an exterior covering-strip having at its foot a fold, said joining-band being secured to the folds of the body and strip near their lower edges and its upper edge secured to said folds near their upper edges and also secured to the strip and body, and the strip se-

cured to the bag-body above the band, all substantially as described.

3. In a bag, the mouth inclosed by the front and back pieces, the back piece having a flap, both pieces being secured to the bag-body at its top and secured to each other by a vertical seam near the line of the side edges of the bag, and the front piece made longer widthwise of the bag than the back piece adjacent their connection with each other to avoid the binding action on the flap of the seamed joint and to facilitate the manipulation of the flap, substantially as described.

4. In a bag, the flap made of a double thickness of material and having each thickness folded at its ends widthwise of the bag, said folds and double flap being fastened together and one of the interior folds 25 at each end being partially cut away, as at 29, outside the fold and flap fastenings to decrease the thickness and stiffness of the parts, substantially as described.

5. In a bag the front mouthpiece, the back mouthpiece with a flap, said mouthpieces having gromets and the flap having staples adapted to pass through the gromets, said flap being folded inwardly on itself at each end widthwise of the bag and said folds secured to the flap-body by staples, substantially as described.

6. In a mail-bag, the body having at its top a fold turned outwardly and downwardly, the mouthpiece having at its bottom a fold turned inwardly and upwardly, stitches passing through the body, mouthpiece and folds, and stitches passing through the mouthpiece and folds only and situated below the stitches first named, substantially as described.

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

CHAS. F. LIGHTHOUSE.

Witnesses:

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