(No Model.) 3 Sheets—Sheet 1.

# W. F. BEASLEY.

## MAIL BAG AND LOCK THEREFOR.

No. 542,323. Patented July 9, 1895.

Fig. 1.

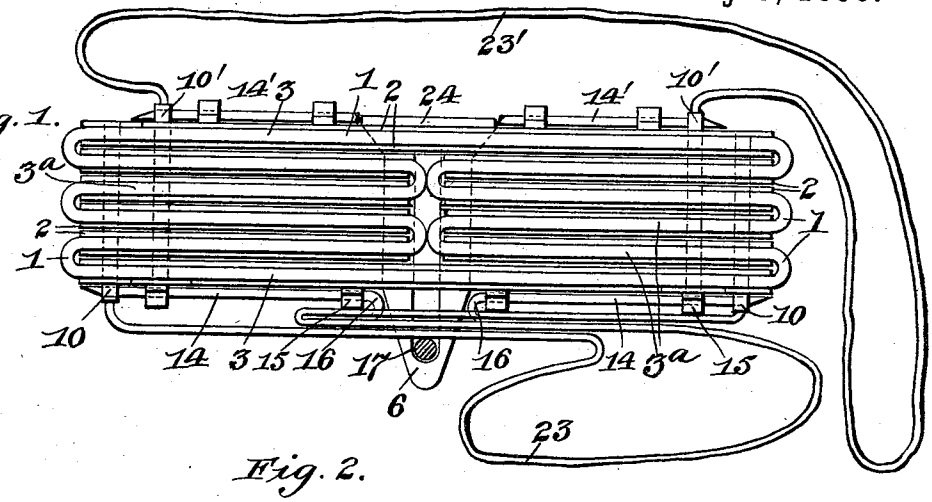



Fig. 2.

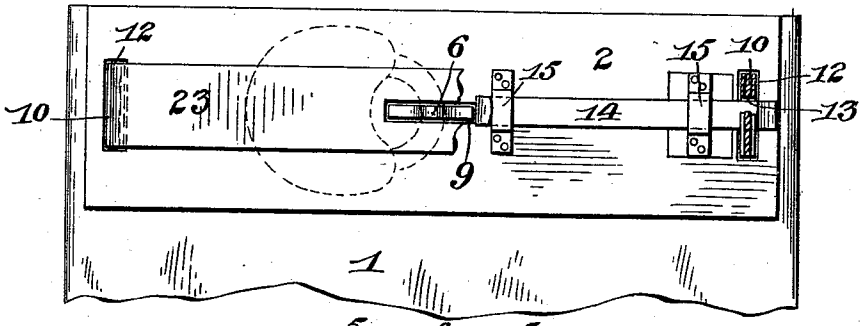
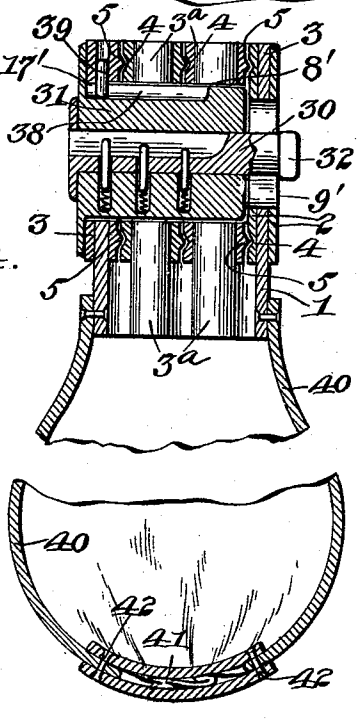



Fig. 4.

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(No Model.) 3 Sheets—Sheet 2.

# W. F. BEASLEY.

## MAIL BAG AND LOCK THEREFOR.

No. 542,323. Patented July 9, 1895.

Fig. 3.

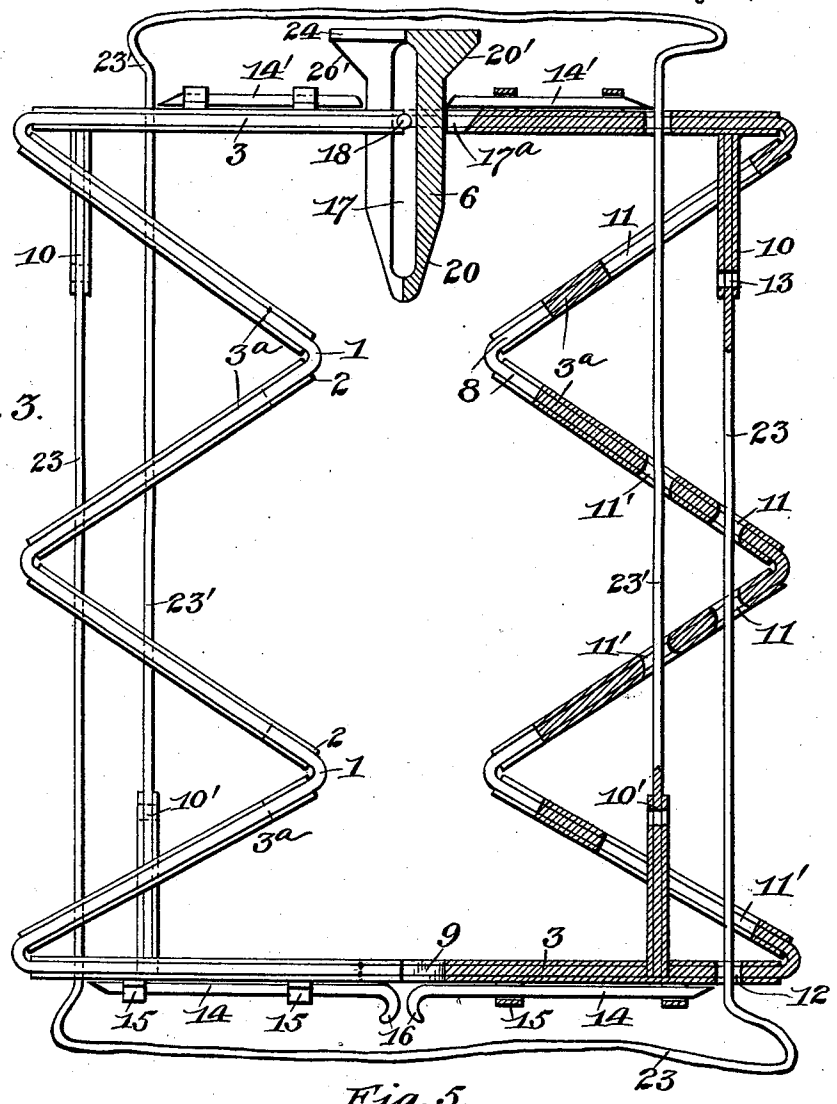
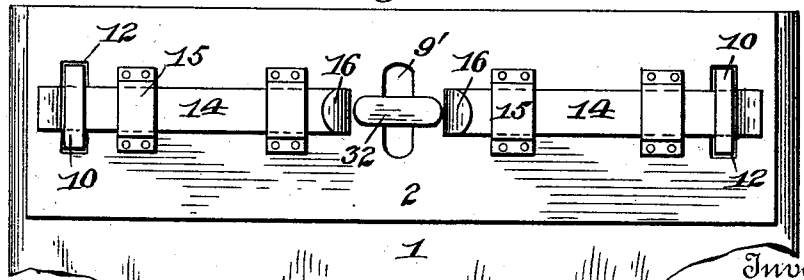



Fig. 5.

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(No Model.) 3 Sheets—Sheet 3.

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## MAIL BAG AND LOCK THEREFOR.

No. 542,323. Patented July 9, 1895.

Fig. 6.

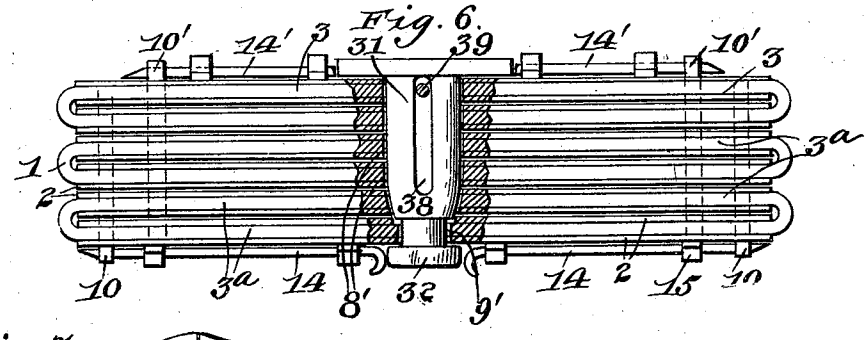



Fig. 7.

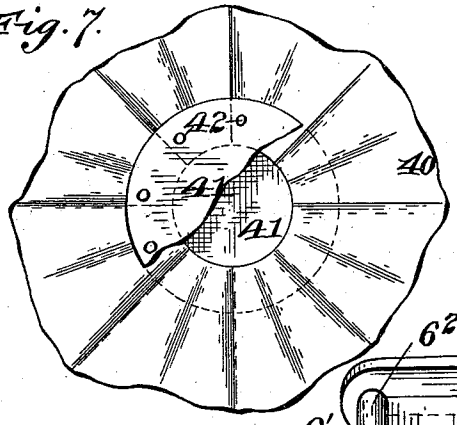



Fig. 9.

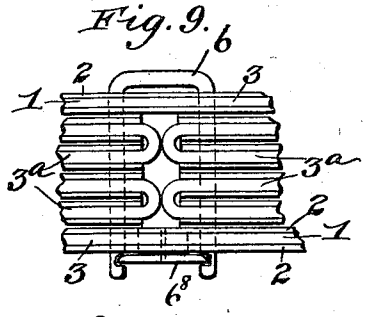
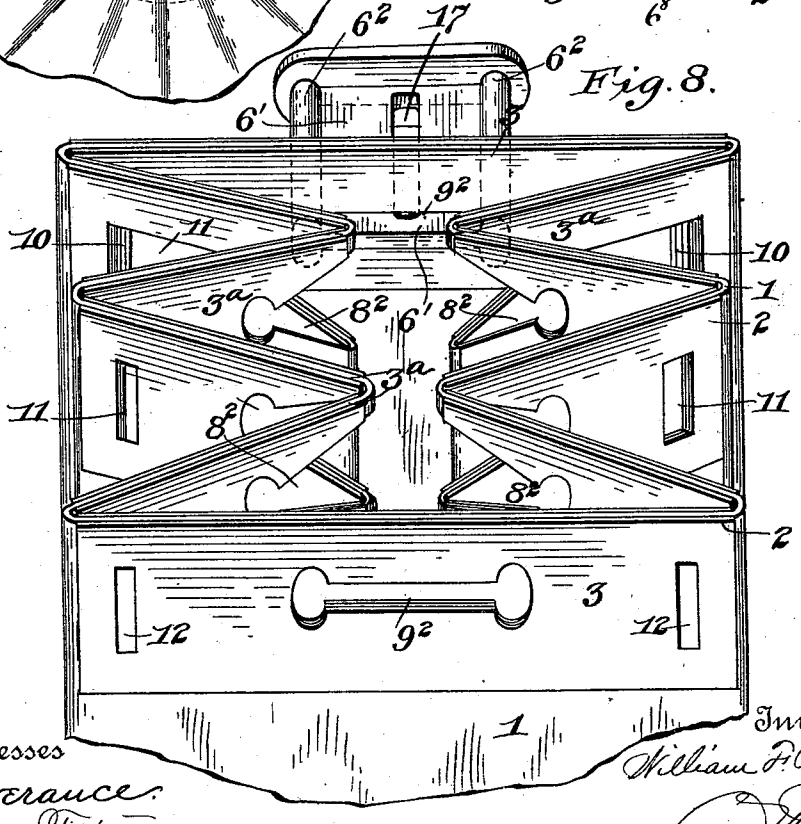



Fig. 8.




Witnesses
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Eleanor Tippett.

Inventor
William F. Beasley
Attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM F. BEASLEY, OF BALTIMORE, MARYLAND.

## MAIL-BAG AND LOCK THEREFOR.

SPECIFICATION forming part of Letters Patent No. 542,323, dated July 9, 1895.

Application filed September 11, 1894. Serial No. 522,723. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. BEASLEY, a citizen of the United States, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Mail-Bags and Locks Therefor; 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 appertains to make and use the same.

My invention relates to certain new and useful improvements in mail-bags and in locks therefor, and more especially to that class of such devices to which my prior patents, No. 463,349, dated November 17, 1891, and Nos. 471,166 and 471,167, dated March 22, 1892, belong—that is to say, to that class of bags which are closed by folding the top back upon itself and securing the several folds together by a locking mechanism projecting therethrough.

My invention consists in certain improvements upon this class of bags, (which, it is obvious, may be used not only for the transportation of mail, but for the packing, storing, and transportation of other valuables;) and it more especially consists in the combination, construction, and arrangements of the several parts of the bag and the lock therefor, as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, in which corresponding parts are designated by similar marks of reference, Figure 1 is a plan view of a bag embodying my invention, it being shown closed. Fig. 2 is a partial front elevation thereof. Fig. 3 is a view half in plan and half in section on the line *y y* of Fig. 2, showing the bag as open. Fig. 4 is a vertical section through a bag having a modified form of locking mechanism. Fig. 5 is a front elevation showing such modified form of mechanism. Fig. 6 is a plan view of a bag, part thereof being broken away for the purpose of better illustration of the said modified form of the said locking mechanism. Fig. 7 is a detail view showing the manner of forming the bottom of the bag. Fig. 8 is a perspective view of an open bag, showing another form of locking mechanism. Fig. 9 is a fragmental plan view of a bag, showing another form of locking mechanism.

The upper edge or top of the bag 1 is strengthened by a series of sets of gussets or plates 2, of any suitable material, each of the said sets consisting of an outer and inner gusset containing between them the material of the top of the bag. By this means each of the said sets of gussets is hinged to the set on each side thereof by means of the material of the top of the bag itself, (although it is obvious that special hinges may be used if desired,) thus permitting the top of the bag to be folded, each of the sets of gussets and the material of the bag between them forming a fold. Two of these sets of gussets, which for purposes of description I will call the "rear set" and "front set," and which are opposite to each other, I make of a length which it is desired may be the width of the top of the bag when folded, while the remaining sets of gussets are made of such a length that the folds $3^a$ formed thereby are one-half as long as the folds 3 formed by the said front and rear sets. By this means, instead of each fold extending entirely across the mouth of the bag when the latter is closed, all but two of the said folds, and those two the exterior folds 3, extend but one-half way across, thus adding materially to the capacity of a bag of any given size.

In order to strengthen the several folds of the bag against vertical displacement and to serve as guides whereby the several folds may be brought into proper alignment I form each of the gussets with a channel 4 and a corresponding beading 5, (see Fig. 4,) the beading upon one gusset being adapted to enter the channel of the adjacent gusset of the next fold when the mouth of the bag is closed. These channels and beadings also serve to prevent the introduction of any implement between the several folds for the purpose of abstracting the contents of the bag.

It will be seen that when the mouth of the bag is closed the several shorter sets of gussets and the folds $3^a$ formed thereby are contained between the rear and front sets of gussets or the front and rear fold 3, and to lock the mouth of the bag it will be therefore necessary only to prevent the separation of the front and rear folds. In Figs. 1, 2, and 3 the means I have shown to accomplish this consists of a leaf or tongue 6, secured to the rear

fold 3 and projecting inwardly therefrom, so that when the bag is folded it passes through open slots 8, formed at the interior angles of adjacent folds $3^a$, and projects through a slot 9 in the front fold 3, it being adapted to be held therein by means of a suitable lock or padlock. (Shown in dotted lines in Fig. 2.) In order to afford a convenient means of locking the end of the front and rear fold 3 together, I may also secure suitable posts 10, one at each end of the rear fold, which project forwardly therefrom and pass when the bag is closed through slots 11, formed in the intermediate folds $3^a$, to the forward or outer side of the front fold 3, the said posts 10 passing through slots 12 in the said front fold 3. These posts, which are of such a length as to project slightly in front of the outer face of the front fold, have slots 13 formed in their ends, through which slots 13 sliding bolts 14, mounted in staples 15 on the outer face of the forward fold, are adapted to pass when the bag is closed, the said bolts being provided with handles 16 for manipulating them when desired. The inner end of each of the bolts 14 projects over and in front of the slot 9 when the said bolts are retracted—that is to say, disengaged from the posts 10. It will thus be seen that when the mouth of the bag is closed and the posts 10 projecting through the slots 11 and 12 in the several folds extend forwardly from the forward face of the front fold the bolts 14 can be passed into the slots 13 in the said posts, thereby preventing the separation of the ends of the front and rear folds 3. In order to permit the bolts 14 to remain retracted until the bag is fully folded and the slots 13 are in front of the forward fold 3 it is necessary to provide for a forward and rearward motion of the tongue 6 in the rear fold 3, and this is accomplished by forming a central slot 17 within the said tongue, through which a pin 18, secured to the rear fold, passes, thereby permitting the said tongue to have a limited amount of play in the slot $17^a$ formed in the rear fold for its passage. Therefore when the said bolts have been caused to engage the posts 10 the tongue may be shoved forwardly, passing through the slot 9 and between the handles 16 of the bolts 14, where it may be locked by a padlock passed through the slot 17, thereby preventing the retraction of the bolts until it is unlocked and again shoved back.

It is thus obvious that the single padlock not only locks the central parts of the front and rear fold together, but also, by preventing the withdrawal of the tongue 6, prevents the retraction of the bolts 14, that secure the ends of the said folds, and it will also be seen that if desired the head of the tongue may be beveled, as at 20, so that when it is shoved forwardly through the slot 9 in the front fold (the bag being folded) it will itself drive the said bolts outwardly and into engagement with the posts, and that suitable springs 21 may be provided for retracting the said bolts when the tongue is shoved back.

In some cases it may be desirable to use drawing-straps in order to assist in folding the bag, and in such a case I form the posts 10 with a central recess, in which are secured the ends of a strap 23, said strap passing through the slots 11 and 12, provided for the passage of the posts, the said strap serving to guide the opposite posts through the respective slots 11 and 12. When such a strap is used, (and I have found that with a properly-constructed bag no difficulty will be experienced in the passage of the posts through the slots without the use of the strap,) the strap may be brought up and caught over the projecting end of the tongue before the padlock is put on, as is shown in Fig. 1, and, indeed, when the bag is not subjected to extremely rough usage it will be found that the posts 10 may be dispensed with, the ends of the front and rear folds being sufficiently secured together by drawing the strap tight and locking it on the tongue, as described.

In Figs. 1, 2, and 3 I have shown the use of two sets of posts and two straps, the additional set of posts 10′ being secured upon and to the forward fold and passing with the straps 23′, secured thereto, through the slots 11′ and 12′, the said slots being nearer the middle of the folded bag than the corresponding slots 11 and 12, and by this means double drawing-straps are provided. When the second set of posts 10′ are used, their engagement is provided for by placing bolts 14′ upon the outer face of the rear fold, the said bolts 14′ being adapted to be driven outwardly and into engagement with the post 10′ by means of bevels 20′, formed forwardly of the head 24 of the tongue, the said bevels 20′ serving to force the bolts 14′ out simultaneously with and similar to the manner in which it has been stated the bolts 14 may be shoved out by the taper point 20 of the tongue.

In Figs. 4, 5, and 6 a form of the invention is shown in which the front and rear folds are locked together by a rotating barrel carrying a cross-head, after the manner shown and described in my hereinbefore-mentioned Letters Patent, Nos. 471,466 and 471,467—that is to say, the revolving barrel 30 is mounted in an elliptical housing 31 and, projecting beyond the housing, carries a cross-head 32, the housing 31 being contained within the slot or eye 17′ of the rear fold and 8′ of the intermediate folds, and itself contains any suitable form of lock, preferably a pin-lock, which is adapted to lock the barrel 30 in such a position that the cross-head 32 thereof is at right angles to the elongated slot 9′, corresponding to the slots 17′ and 18′, formed in the forward fold—that is to say, to lock the said cross-head in a horizontal position.

The form of housing and of the locking mechanism which I prefer to employ is fully shown and described in my two last-mentioned

Letters Patent, and such construction therefore needs no further description here. Bolts 14, such as have been hereinbefore described, are used to engage the posts 10, and it will be seen that when the cross-head 32 has been inserted through the vertical slot 9′ and has been rotated through ninety degrees, so that it is horizontal, it will lie between the handles of the said bolt and by bearing thereon prevent their retraction, at the same time preventing the separation of the middle portion of the front and rear folds.

While it is not necessary in the construction of the locking mechanism, as described, that the housing 31 should have a fore-and-aft play in the slot 17′ of the rear fold or gusset 3, still it is desirable, in order that when the bag is open for the removal of its contents the housing may project as little as possible into its mouth, and for this reason a groove 38 is formed in the housing, into which a pin 39, projecting from the rear fold 3, extends, thus permitting the desired limited fore-and-aft motion of the housing.

As under normal conditions of use the mouth mechanism of a bag constructed as hereinbefore provided for will be found to outlast the bag itself, I may, if I desire, mount the gusset 2 on some material possessing great strength—such as leather—while the body of the bag can be formed of canvas and sewed upon or riveted to the lower edge of the leather mouth, as is shown at 40 in Fig. 4. Thus upon the wearing out of the bottom or canvas portion of the bag the leather mouth and parts attached thereto can be removed and secured to a new lower section.

In forming the bottom I plait the lower or canvas section of the bag, and close the opening formed thereby by a double bottom 41, of leather, one piece of the leather being placed upon the inside and the other upon the outside of the canvas, the whole being held together by rivets 42, passing through the plaits in the canvas in the double bottom. I by preference take up sufficient of the canvas in plaiting to cause the bottom of the bag to be hemispherical.

In the following claims I have designated any gusset which is adapted to enter into or receive an adjoining gusset, as is the case when channels 4 and beading 5 are used, as being "corrugated," and I wish it to be understood, and I have used the term "bag" as not only covering a bag complete with bottom, but I intend and desire to cover thereby the mouth *per se*, whether or not a lower section or bottom is secured thereto.

I may, if I desire, use a tongue of the form shown in Fig. 8, either in connection with the posts 10 or without them. The tongue shown in this figure has an I-shaped cross-section, its web being across the mouth of the bag, and is adapted to be contained in slots $9^2$ in the front and rear folds of the bag and in slots $8^2$ in the intermediate folds. Each of the slots $9^2$ corresponds in shape to the tongue, being therefore I-shaped, while the slots $8^2$ in each of the intermediate folds are formed by a funnel-shaped open slot having its base at the interior junction of each fold with the adjoining one and an enlargement or chamber at its apex, the distance from the base of the funnel to the end of the chamber $8^3$ being substantially equal to one-half of the length of the slots $9^2$, and, indeed, I prefer to make the slots 8 (shown in Figs. 1, 2, and 3) in the intermediate folds of the form of an open-based funnel in order that the tongue 6 may the more easily be inserted therein. Thus when an I-shaped tongue is used and is inserted in the slots $9^2$ and $8^2$ the flanges $6^2$ of the tongue, by their engagement with the shoulders formed by the chambers $8^3$, will prevent the lateral movement of the intermediate folds sidewise from the medial line, which might result in a sufficient opening in the mouth of the bag to permit the abstraction of its contents.

In Fig. 9 a form of the invention is shown in which the tongue is slotted from one end to near the other, leaving it in the form of a double-tined staple $6^6$, the staples of which project through aligned apertures in the several folds of the bag; the apertures in the intermediate folds being near the inner ends thereof, while the open slots in the inner ends of the intermediate folds are dispensed with, the ends of the tines of the staple being held by a turn-button $6^8$ on the face of the forward fold. It is obvious that this construction can be used with or without the posts 10.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A bag having a series of apertured gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded, and the intermediate gussets having a length not greater than half of that of the forward and rear gussets, and folding flat between them, the said gussets being corrugated and resting the one within the other in combination with means to prevent the separation of the said front and rear gussets, the said means passing through the apertures in the several gussets, and being secured to the exterior gussets at the apertures therein, substantially as described.

2. A bag having a series of apertured gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded, and the intermediate gussets having a length not greater than half of that of the forward and rear gussets and folding flat between them, the open tines in some of the intermediate gussets being elongated to fold over the ends of the posts, in combination with posts secured to one of the exterior gussets and projecting through the apertures in the intermediate gussets to the outer surface of the opposite exterior gusset

and means secured to the last named exterior gusset to engage the said posts, substantially as described.

3. A bag having a series of gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded and the intermediate gussets having a length not greater than half of that of the forward and rear gussets, and folding flat between them, the said gussets being corrugated and nesting the one within the other, substantially as described.

4. A bag having a series of gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded, and the intermediate gussets having a length not greater than half of that of the forward and rear gussets, and folding flat between them, in combination with a piece slidingly secured to one of the exterior folds and adapted to project between the opposite intermediate gussets and through the other exterior fold, posts secured to one of the said exterior gussets, and through the intermediate gussets and the opposite exterior gussets, bolts engaging the said post and held by the said piece, and means to prevent the withdrawal of the said piece from within the said gussets substantially as described.

5. A bag having a series of gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded and the intermediate gussets having a length not greater than half of that of the forward and rear gussets and folded flat between them, each of the said forward and rear gussets having I shaped slots therein and the intermediate gussets each having one half of a corresponding I shaped slot, in combination with a tongue, the said tongue consisting of a rigid piece slidingly connected to one of the exterior gussets whereby it may be retracted from the interior of the mouth of the bag, and means for detachably securing the said locking means to the opposite exterior gusset secured to one of the exterior gussets and adapted to pass through the slots in the opposite exterior gusset and in the intermediate gussets, the said tongue being I shaped in cross section, substantially as described.

6. A bag having a series of gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded, and the intermediate gussets having a length not greater than half of that of the forward and rear gussets and folding flat between them, in combination with means for locking the exterior gussets together passing through the exterior and the opposite intermediate gussets, thereby holding the gussets against displacement, the said intermediate gussets having open slots in their inner ends to receive the said means, substantially as described.

7. A bag having a series of gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded, and the intermediate gussets having a length not greater than half of that of the forward and rear gussets and folding flat between them, in combination with an I shaped tongue passing through the exterior and the opposite intermediate gussets, thereby holding them against displacement, each of the opposite pairs of said intermediate gussets having the one-half of a correspondingly shaped open slot in its inner end, substantially as described.

8. A bag having a series of apertured gussets around its upper edge, the forward and rear gussets being the width of the mouth of the bag when folded and the intermediate gussets having a length not greater than half of the forward and rear gussets, in combination with posts secured to one of the exterior gussets and adapted to pass through the apertures in the opposite exterior gusset and intermediate gussets when the bag is folded, straps secured to the said posts and passing through the said apertures, whereby the posts are guided to their seats when the bag is folded, and means upon the exterior gusset to lock the said posts against retraction, substantially as described.

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

WILLIAM F. BEASLEY.

Witnesses:
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PETER H. HOOE.