July 24, 1962 E. C. SWANSON 3,045,890

COMBINATION CLOSURE AND OPENER ON STITCHED BAGS

Filed July 5, 1960

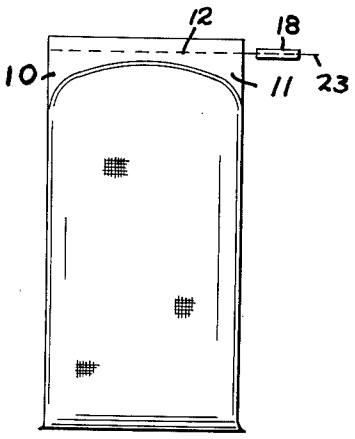



Fig. 1

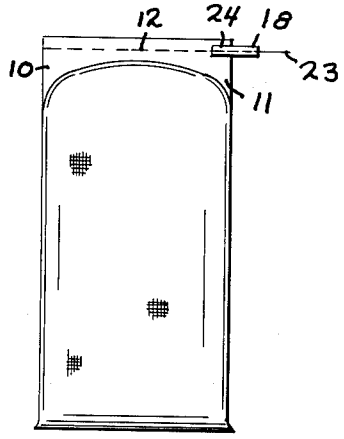



Fig. 2

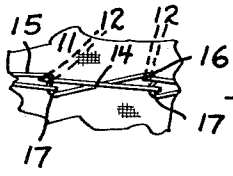



Fig. 3

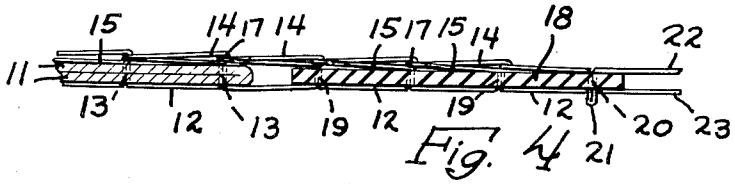



Fig. 4

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3,045,890

Patented July 24, 1962



# 3,045,890
# COMBINATION CLOSURE AND OPENER ON STITCHED BAGS

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Filed July 5, 1960, Ser. No. 40,765
1 Claim. (Cl. 229—66)

My invention pertains to a device or arrangement for closing and opening bags.

An object of my invention is to provide a device which will allow convenient and rapid opening of the upper end of a bag containing flour or any other substance.

A further object of my invention is to provide a special type of closure member at the bag end and exteriorly of the bag end, which closure is of stretchable material so that it will grip and firmly engage the bag opening threads to retain the same.

A further object of my invention is to provide the device in various forms such as exteriorly of the bag and adjacent to the bag.

With these and other objects in view, my invention consists in the construction, arrangement, and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which:

FIGURE 1 is a forward elevation of a conventional bag showing one form of my invention,

FIGURE 2 is a similar elevation showing a further form,

FIGURE 3 is a plan view of the usual 2-thread type of stitching, and being a plan view of a portion of FIGURE 4, and

FIGURE 4 is an enlarged sectional view showing the 2-thread stitching as applied to the bag, and to the plastic or stretchable retaining member.

The present invention relates to a certain extent to my co-pending Bag Closure and Opening Device application, filed October 28, 1957, Serial No. 692,831, now Patent Number 2,945,615.

I have used the character 10 to designate the top portion of a bag made of fabric or any other material, and although my invention will explain the use of the closure device at the upper portion of the bag, it should be specifically understood that the device could be used also at the bottom of the bag as well, without departing from the essential spirit of the invention.

The character 11 indicates the folded-over plies of the bag at the portion 10.

FIGURES 3 and 4 show more specifically the use of the stretchable member in combination with the usual two-thread stitching, FIGURES 3 and 4 being on a considerably increased scale in order to show more clearly this type of stitching, however, it should be understood that my invention pertains to other types of stitching as well.

In the present type of stitching the character 12 indicates one of the threads, which can be called the needle thread, this thread or cord passing upwardly through the bag plies 11, through the openings 13, and which cord 12 continues into the integral loops 14.

At the other side of the bag, the character 15 indicates the other thread or cord, which thread loops about the



cord portions 12 at 16 (see FIGURE 3) and thence loops between the loop portions 14 at 17, this stitching passing along the entire other side of the bag.

Spaced from the bag (see FIGURES 1 and 4) is a plastic, or other strip 18, which strip is made of stretchable material, this strip having the various openings 19, the stitching passing through these openings in the same manner, and I also provide the extra opening at 20 (see FIGURE 4) which is of restricted size, and the cord 15 is pulled downwardly through this opening forming the loop 21, the cord then continuing into the portion 22, the end of the cord 12 being indicated by the character 23.

The loop 21 within the opening 20 provides a positive locking method for locking the stitching so that the stitching will not unravel, and this is due to the fact that the material 18 is of a stretchable nature, and due to the fact that the opening 20 is of restricted size, the above locking action is thereby provided.

When it is desired to unlock the stitching, the end 22 can be pulled as well as the end 23, whereby the stitching will then unravel in the usual manner and the bag can be opened.

FIGURE 2 shows a modification wherein the same stitching is employed, and wherein all of the same construction is used with the exception that a portion 24 of the strip 18 will lie adjacently to one side of the bag and will be stitched thereto.

It will now be seen that I have provided the advantages mentioned in the objects of my invention with further advantages being apparent.

Some changes may be made in the construction and arrangement of the parts of my invention without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claim any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

A bag closure and opening device comprising a pair of stitching cords stitched along a normally open end of a bag, one of said cords passing through the bag plies and including integral loops, the other of said cords looped engaging about and through said integral loops consecutively and thus continuing successively and retaining the same, a stretchable member attached at the end of said continued stitching and firmly retaining the integral loops of said cord of the stitching thus formed, said stretchable member including a tightly restricted extra opening, the other of said cords being looped and being engaged and retained in said tightly restricted extra opening, a portion of said stretchable member being positioned adjacently to one of the bag plies at a corner thereof.

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