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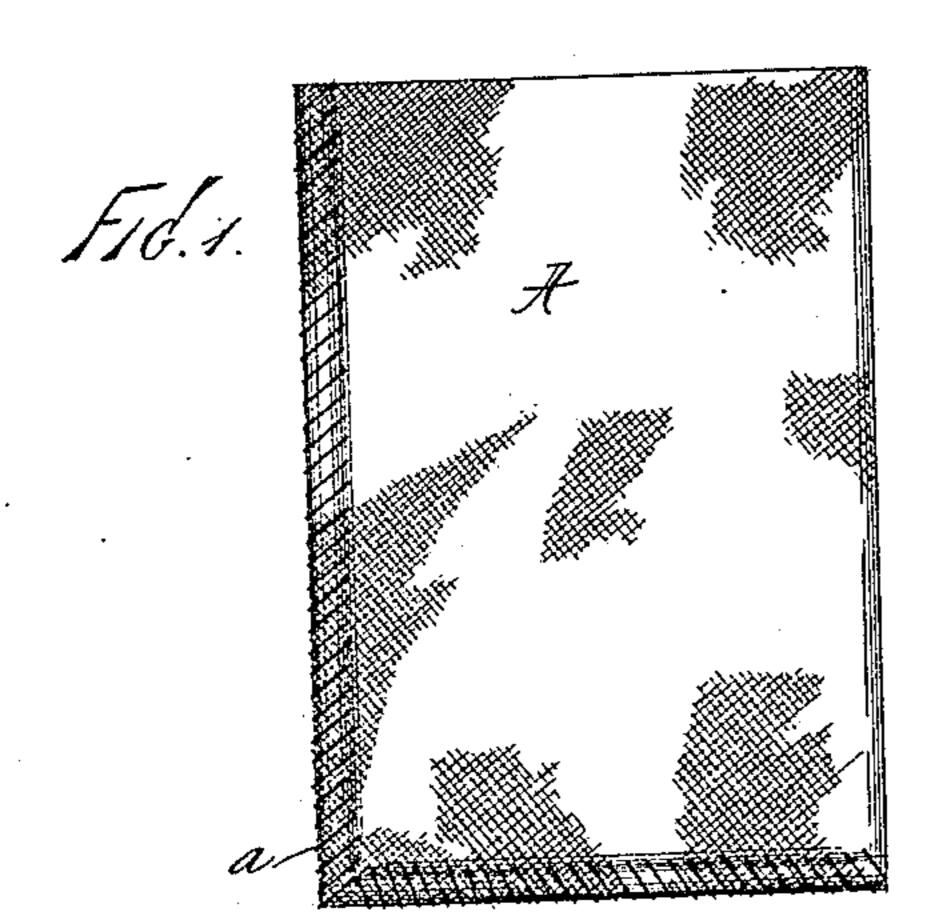
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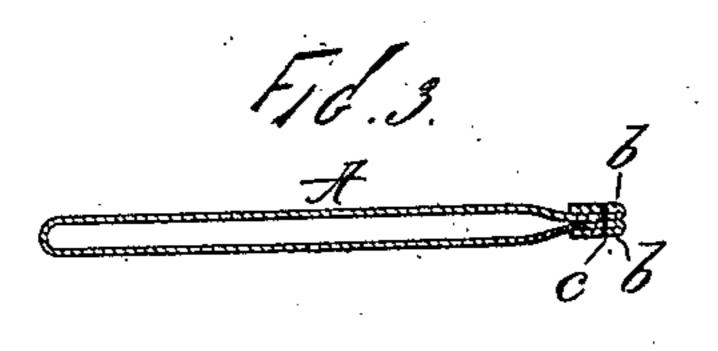
No. 490,103.

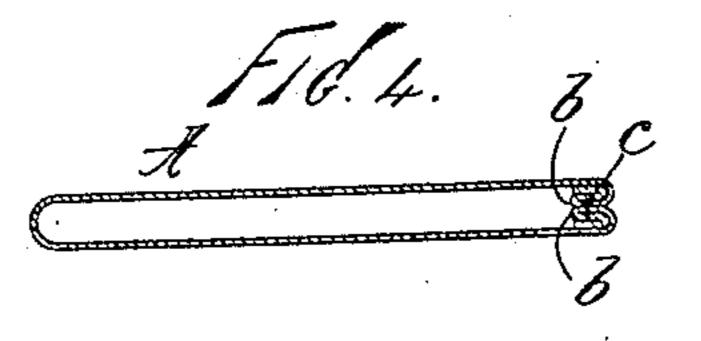
J. R. COLLINS.

BAG.

Patented Jan. 17, 1893.







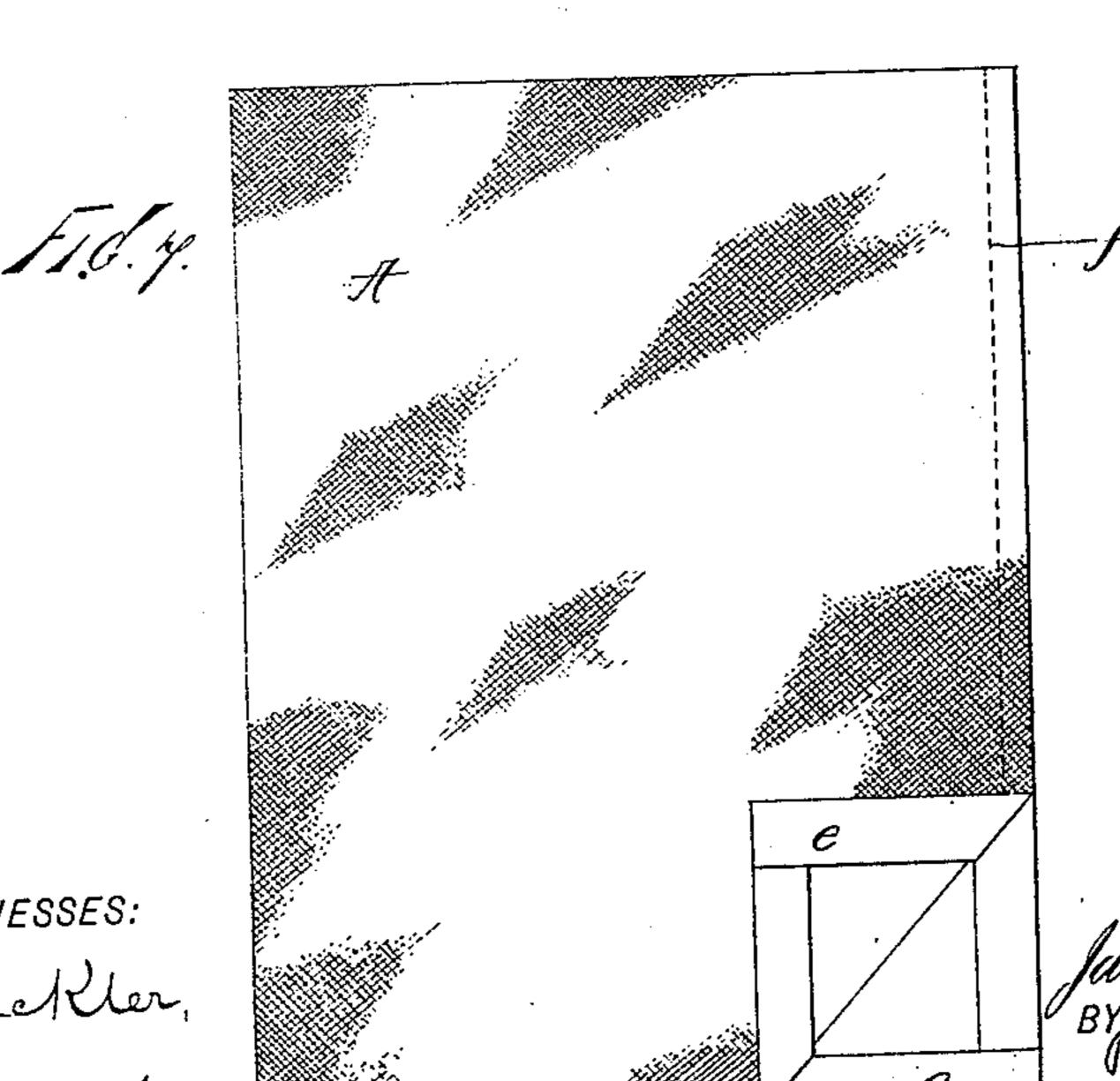


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WITNESSES: Con Buckler, Gifwallarrod. INVENTOR

James Ross Collins,

BY

My Cappellin.

ATTORNEY.

## United States Patent Office.

JAMES ROSS COLLINS, OF BROOKLYN, NEW YORK.

## BAG.

SPECIFICATION forming part of Letters Patent No. 490,103, dated January 17, 1893. Application filed June 4, 1892. Serial No. 435,550. (No model.)

To all whom it may concern:

Be it known that I, James Ross Collins, a citizen of the United States, and a resident of Brooklyn, county of Kings, and State of New 5 York, have invented certain new and useful Improvements in Bags, of which the following

is a specification.

My invention relates to grain and other bags of a like coarse quality and intended to re-, so sist hard usage and wear, the object of my invention being primarily to reduce the cost of manufacture from the burlap or other fabric, and secondarily, to produce a simple cheap and durable bag of the general class indicated above, in which the stitching will not be so liable to damage as in bags as formerly made, and in which the several edges will be smooth, strong, and compact.

To accomplish all of this, and to secure other 20 and further advantages in the manufacture of the bags as well as in the articles produced, my improvements involve certain novel and useful features of invention, all as will be herein first fully described and then pointed

25 out in the claims.

To facilitate an understanding of the scope, character, and relation of my invention, I have represented in the drawings the most common forms of bags as heretofore made, and, in con-30 trast therewith, my improve a manufacture in detail.

In the drawings, Figure 1, is a plan and Fig. 2, a cross-section of a bag made with the rolled or thickened edge secured by the sin-35 gle thread "overhand" stitch. Fig. 3, is a cross-section of a bag in which the raw edges which are turned out and back upon themselves, have been secured by a stitching, requiring a subsequent turning (inside out) of 40 the bag thus produced to complete the article, and Fig. 4, is a cross-section of this bag as it appears when completed. Fig. 5, is a section of a piece of burlap or other material, showing the raw edges folded back after the 45 manner of practicing my invention. Fig. 6 is a cross-section, and Fig. 7, a plan view of the improved bag completed in accordance with my invention, a portion of the corner of the bag in the last named figure being turned

50 up or back for purposes of illustration.

wherever they occur indicate corresponding parts.

A indicates a piece of material, such, for instance, as burlap, which is to be used in 55 making the bag. The upper edge of this material forming the mouth of the bag is usually a selvage, but of course it may be hemmed if desired.

In the form indicated in Figs. 1 and 2, the 60 edges of the material are turned in or back upon themselves and stitched down to such material by a line of stitching extending along the same. The material is then folded in the middle, bringing the edges thus stitched 65 together, as in Fig. 3, and a continuous thread a run in and out through the whole, being exposed on the exterior as shown. The particular style of sewing thus used to unite the edges is familiarly known in the art as "over 70 handing," although it is accomplished in practice by a peculiar well known machine in which the needle is spiral. The knotted end of the thread is first carried through the cloth by the spiral needle, is then caught, the nco- 75 dle turned back leaving the thread, and the thread is then required to be fastened at both its ends. This manner of sewing makes the needle holes unnecessarily large and therefore alone weakens the material. It likewise 80 consumes more than double the amount of time which would be required in any other ordinary mode of sewing by machinery; but farther and apart from all this, it not only requires a separate seam along each edge of 85 the material, but the seam by which the edges are united draws the edges of the material into a hard roll much enlarged beyond the two thicknesses of which the bag is composed, and this roll is always exposed to wear, by 90 which the thread is cut and the bag therefore very soon destroyed. In this form, the rolling up or enlarging of the edges is necessary, else the thread would draw in places and the bag move or weave at the seams as 95 soon as loaded or handled and thus itself be destroyed instead of the thread. The thread moreover, as will be observed, is not continuous on the face of the seam, leaving a space between the stitches which is not secured.

In the next form indicated in Figs. 3 and 4, In all the figures like letters of reference, the edges to be stitched and first turned out

and back, as at b b, Fig. 3, and then stitched down in this position by a line of stitching, indicated at c; then the bag thus far progressed must be turned inside out which 5 brings eight folds of bagging to the edges. In this construction the prominent disadvantages which it is my purpose to overcome are, the labor and time required to effect the turning of the bags after the line of stitching has been applied, the thickened edge produced by the eight thicknesses of material and the consumption of material or bagging required to form this peculiar seam. These old forms fairly represent the products of the art as heretofore produced.

According to my invention, I simply turn the raw edges of the material back and down upon itself, as indicated at e e Fig. 5, and then fold such material along its median line, 20 so as to bring the folded edges in instead of out, as in Fig. 6; with their outer margins registering one with the other. While in this position, the stitching is accomplished, the thread ff passing through the fourfolds and 25 extending from one perforation of the needle to the next. The stitching can be done on any of the ordinary forms of sewing machines. The resulting product is a bag with a firm, smooth, durable and not unduly thick edge, 30 and one which can be easily made with economy of material and labor over and above those heretofore produced.

The turning over of the edges of the material may be easily accomplished in any desired way, and the stitching may be of the "chain" or "lock" variety, the thread being protected by the material at the edge, which is never so hard as to prevent the thread from being suitably embedded therein, and being continuous on the face of the seam, reaching, as it does, from one needle hole to the next, the entire line of material is firmly secured.

The improved bag, in contrast with older forms, is produced with economy of time and labor in handling and stitching, economy of 45 bagging material and thread, without detriment to the body or seam, and, withal, is well calculated to answer all the purposes and objects of the invention previously referred to.

Having now fully described my invention, 50 what I claim as new herein and desire to secure by Letters Patent of the United States is—

1. As a new article of manufacture, the herein described bag, the same having the edges of the body at the several portions turned in without being stitched and secured together by a single line of stitching passing from the exterior through the four thicknesses formed by the sides of the bag and the inturned edges, with the thread extending from one perforation of the needle to the next along the sides of the bag, whereby the turning of such bag, during the process of manufacture, is obviated, and a secure joining of the edges thereof insured, as set forth.

2. The combination with the body of the bag provided with the unstitched inturned edges ee, of a single line of stitching for uniting such edges formed from thread f passing from the exterior of the bag through the four 70 thicknesses formed by the sides and the inturned edges thereof, with such thread extending from one perforation of the needle to the next along the sides of the bag, whereby the turning of such bag during the process of 75 manufacture is obviated, and a secure and close joining of the edges thereof insured, as and for the purposes described.

In testimony whereof I have hereunto set my hand this 27th day of May, 1892.

JAMES ROSS COLLINS.

Witnesses:

T. B. LOWRIE, M. V. CHILDS.