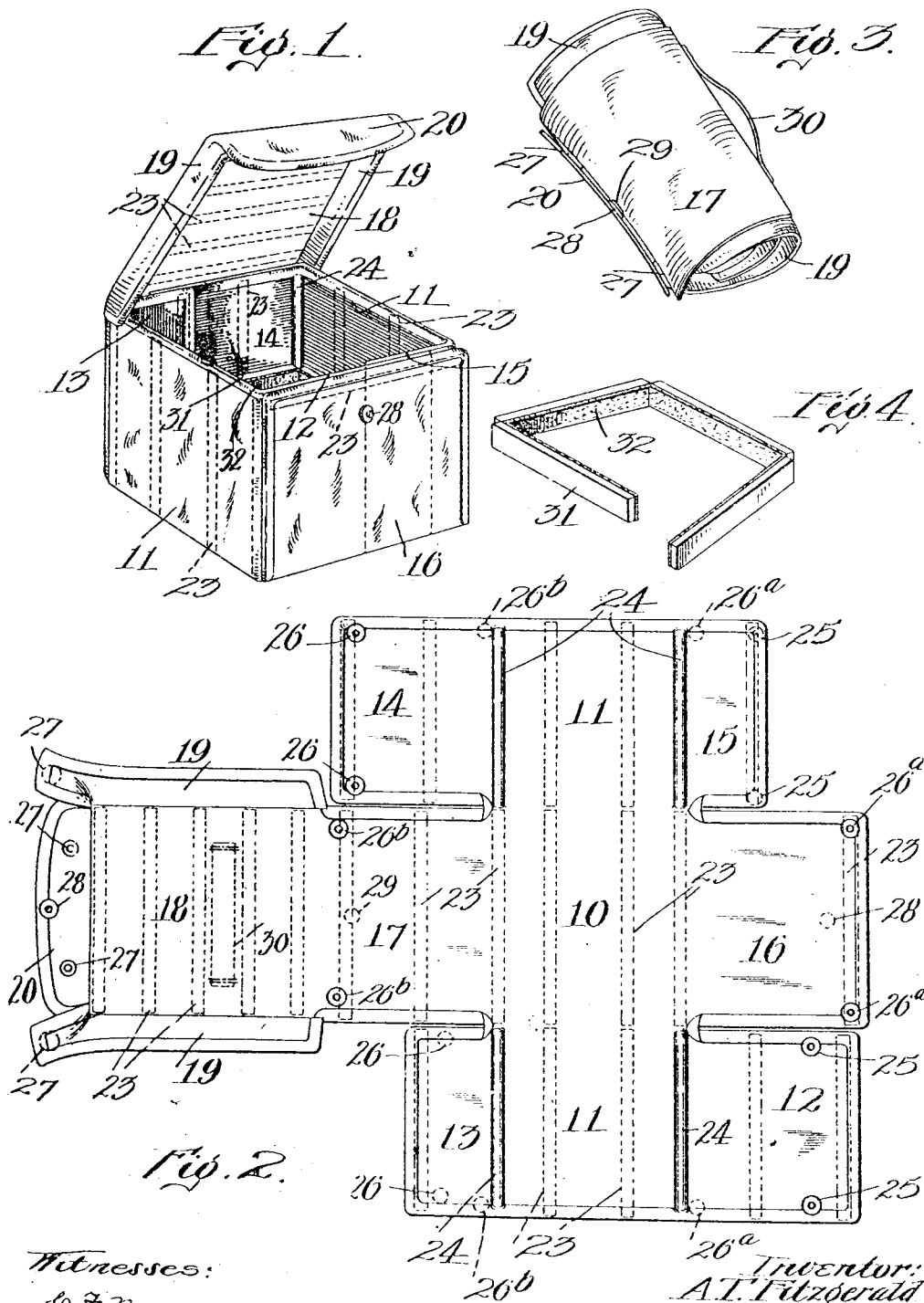


A. T. FITZGERALD.
FOLDING HAT BOX.
APPLICATION FILED JAN. 8, 1912.

1,040,300.

Patented Oct. 8, 1912.



Witnesses:
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UNITED STATES PATENT OFFICE.

ANNA T. FITZGERALD, OF WORCESTER, MASSACHUSETTS.

FOLDING HAT-BOX.

1,040,300.

Specification of Letters Patent.

Patented Oct. 8, 1912.

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To all whom it may concern:

Be it known that I, ANNA T. FITZGERALD, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Folding Hat-Box, of which the following is a specification.

This invention relates to a folding box or receptacle capable of being used in many ways, but particularly adapted for use as a hat box.

The principal objects of the invention are to provide an article of this character composed of a single piece of material formed in such a way that it can be rolled up into very small compass for transportation when not in use, and capable also of having its parts assembled or set up in such a way that it will form a practicable washable, dust-proof box or receptacle provided with light and efficient strengthening walls so that it will be capable of protecting its contents. For this purpose the several parts comprising the bottom, sides, ends and top, as well as the flaps or the like for connecting them are formed of a single piece of flexible material, preferably fabric, and they are provided with strengthening ribs, preferably whalebone, all arranged parallel with each other, those of the parts which are connected at their ends being separated at the points of connection thereof, so that they can be folded over on each other and the whole thing rolled up. It can be made of waterproof material if desired. The device preferably has additional strengthening ribs at the corners also and other features as will appear hereinafter.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a perspective view of a preferred embodiment of the invention shown set up and ready for use with the cover inclined back from the top of the box. Fig. 2 is a plan of the entire article spread out flat and showing the inside surface thereof; Fig. 3 is a perspective view of the device when folded up and then rolled to form a package for transportation, and Fig. 4 is a perspective view of a strengthening device.

In the form illustrated the invention is shown as comprising a single sheet of flexible textile material formed in such a way as to provide a number of parts which when set up, as shown in Fig. 1 will constitute a

hat box. The parts are named herein with regard to the position which they occupy in the completed box. Near the center of the piece of fabric is a member 10 constituting the bottom of the box. At each side of this member are side pieces 11 and each one is provided with end flaps numbered 12, 13, 14 and 15 respectively. At each end of the bottom are end pieces 16 and 17 respectively. The sides are integrally connected with the bottom throughout their length, but the flaps on the sides are entirely separated from the end pieces. At the end of the rear end piece 17 is a top member 18 provided with side flaps 19 and an end flap 20. The side flaps also have tabs 21 entirely separated from the end flap 20. These several members preferably are suitably bound around the edges.

The parts above described, or most of them, are provided with strengthening ribs 23 in the form of pieces of whale bone inserted between the exterior fabric and the lining. These may be fastened by sewing along their sides or in any other desired way. The whale-bones of all the parts in which they are located are arranged parallel with each other and transverse to the longest dimension of the article. Obviously the whale-bones in the flaps 12, 13, 14 and 15 will be entirely separated from those in the end pieces 16 and 17 because there is no connection between them along their adjacent edges. The whale-bones in the two side pieces 11 are also entirely separated from the whale-bones in the bottom piece 10 along the line at which these members are connected with each other. For this reason it will be seen that each of the side pieces with its two flaps can be folded over on the bottom so that the device will occupy only a third of the width indicated in Fig. 2. Then on account of the strengthening ribs all being arranged in the same direction the whole article can be rolled up as indicated in Fig. 3. The flaps 19 and 20 are not shown as being provided with strengthening ribs, but they can be employed here also if desired provided they are entirely separated from the whale-bones in the top member 18. It will be seen that the bottom has two of its whale bones at its edges and that the ends have them at the top to form rigid edges for the box. At the two sides of the said pieces 11 are arranged strengthening

corner struts 24 preferably formed of round pieces of ratan, but other strengthening pieces can be substituted for them.

By reference now to Figs. 1 and 2 it will be seen that this article can be set up in a very simple way to form a rectangular box. For this purpose the two flaps 12 and 15 are brought up into contact and temporary fasteners 25 thereon are secured together so as to hold them in vertical position. In the same way the two flaps 13 and 14 are connected by fasteners 26. These parts however do not constitute in themselves the ends of the box, but the end flaps are depended upon for that purpose and for the purpose of covering the exposed edges of the flaps which have just been described as being connected. For this purpose the end piece 16 is brought into vertical position and secured to the two side flaps 12 and 15 by temporary fasteners 26^a with which it is provided. In the same way the rear end piece 17 is brought up to vertical position and connected to the two rear flaps by fastening devices 26^b. This forms the entire box with the exception of the cover which is located at the top of the rear wall. The side flaps of the cover can now be spread out and their tabs secured to the end flap by temporary fasteners 27 so that these three walls will be made vertical. Then when the cover is brought down over the box proper it can be secured by a temporary fastener 28 or the like. It will be seen also that the rear wall is provided with a temporary fastener 29 on the back by which the device is secured together when rolled up as shown in Fig. 3. A handle strap 30 is sewed on the cover 18 by which the device can be carried around. When the box is assembled in this way it will be seen that the four corner struts constitute posts to hold the parts up in vertical position and that the several whale bones or other strengthening devices on the side pieces and the flaps of the side pieces are all vertical. On the contrary the strengthening ribs or whale bones on the end pieces are brought into horizontal position by this assemblage of the parts so that they act just oppositely to the whale bone on the flaps. This constitutes a very strong and substantial arrangement for keeping the box in proper position to resist pressure from without, particularly on account of the way in which the two thicknesses of the ends are secured together near their corners. In order to increase this power, however, a strengthening device can be introduced inside the box in the form of pieces of wood 31 arranged in four-sided shape and just large enough to be inserted in the box midway between the top and bottom after it is set up. This adds greatly to the strength of the device and makes it rigid enough for all practical

purposes. The four pieces are hinged together by a strip of cloth 32 pasted to them. It is placed in the box horizontally about half way to the bottom.

The many uses to which the device can be put need not be recited in detail. It is designed particularly as a hat box for ladies who do considerable traveling, and it will be clear that it can be used for that purpose very efficiently and that when not in use it will occupy very little space. It can be used for any other purpose also in which it is desired to have a large bulky receptacle while in use and yet have it in convenient form to carry from place to place.

Although I have illustrated and described a preferred embodiment of the invention, I am aware that many modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to all the details of construction herein shown and described, or to the particular material specified but

What I do claim is:—

1. As an article of manufacture, a box consisting of a single piece of flexible material having portions which when assembled in certain relation to each other constitute the sides, ends, bottom and top of the box, and which can be spread out into a flat form, said sides, ends and bottom having strengthening ribs therein, all of said strengthening ribs terminating at the joints between said sides, ends, and bottom and being parallel with each other when spread out flat, whereby it can be folded and rolled up into small compass.

2. As an article of manufacture, a box or receptacle consisting of a sheet of flexible material having members integrally connected together and constituting the bottom, sides, and ends of the box, the sides being provided with flaps at their edges, those of one side being adapted to be removably secured to those of the other side in order to hold the sides in upright position, the ends being adapted to fold outside said flaps and to be temporarily secured to the flaps when in upright position, the sides having strengthening ribs where the flaps are connected to them.

3. As an article of manufacture, a box or receptacle consisting of a sheet of flexible material having members connected together and constituting the bottom, sides, and ends of the box, the sides being provided with flaps at their edges, those of one side being adapted to be removably secured to those of the other side in order to hold the sides in upright position, the ends being adapted to fold outside said flaps and to be secured to the flaps when in upright position, the sides and flaps being provided

with strengthening ribs all in vertical position when the parts are assembled in the form of a box, and the ends being provided with strengthening ribs in horizontal position when so assembled, and a top piece integrally connected with one of said ends and provided with strengthening ribs arranged across the same from side to side, whereby when the parts are spread out flat all of said ribs will lie parallel with each other, said top being provided with downwardly extending sides and front end adapted to be spread out flat and having means for securing their edges together in position perpendicular to the top, whereby they constitute walls for covering the top edges of the sides and end.

4. As an article of manufacture, a box or receptacle consisting of a sheet of flexible material having members connected together and constituting the bottom sides, and ends of the box, the sides being provided with flaps at their edges, those of one side being adapted to be removably secured to those of the other side in order to hold the sides in upright position, the ends being adapted to fold outside said flaps and to be secured to the flaps when in upright position, the sides and flaps being provided with strengthening ribs at their meeting edges all in vertical position when the parts are assembled in the form of a box, and the ends being provided with strengthening ribs in horizontal position when so assembled and independent of the first named strengthening ribs; and a top piece integrally connected with one of said ends and provided with independent strengthening ribs arranged across the same from side to side, whereby when the parts are spread out flat all of said ribs will lie parallel with each other.

5. As an article of manufacture, a box or receptacle formed of a single sheet of material having arranged in a central line an end piece, a bottom, an end piece, and a top in the order specified, said bottom being provided at its side edges with a pair of integrally connected pieces constituting the sides of the box, said sides having flaps at their opposite ends, said flaps being free from the end pieces, and having temporary fastening means for connecting each flap to the oppositely located flap and to the end piece on the corresponding edge of the bottom when said flaps and end piece are brought to a position perpendicular to the bottom, said bottom and side piece being provided with strengthening ribs arranged end to

end therealong, but disconnected from each other at the points at which the bottom and sides are connected, whereby the sides can be folded flat on the bottom and the whole structure rolled up into small compass.

6. As an article of manufacture, a box or receptacle formed of a single piece of material having two end pieces, a bottom, and a pair of side pieces, said side pieces having flaps at their opposite ends, said bottom and side pieces being provided with strengthening ribs arranged end to end therealong, but disconnected from each other at the points with which the bottom and sides are connected, and the end pieces and flaps also being provided with strengthening ribs parallel with the strengthening ribs of the bottom and sides but entirely separated therefrom, whereby the sides can be folded flat on the bottom and the whole structure rolled up into small compass.

7. As an article of manufacture, a box or receptacle consisting of a sheet of flexible material having members connected together and constituting the bottom, sides, and ends of the box, the sides being provided with flaps at their edges, those of one side being adapted to be removably secured to those of the other side in order to hold the sides in upright position, the ends being adapted to fold outside said flaps and to be secured to the flaps when in upright position, the sides and flaps being provided with strengthening ribs all in vertical position when the parts are assembled in the form of a box, and the ends being provided with strengthening ribs in horizontal position when so assembled, and a top piece integrally connected with one of said ends and provided with strengthening ribs arranged across the same from side to side, whereby when the parts are spread out flat all of said ribs will lie parallel with each other, said top being provided with downwardly extending sides and front end adapted to be spread out flat and having means for securing their edges together in position perpendicular to the top, whereby they constitute walls for covering the top edges of the sides and end, said sides having vertical corner struts at their front and rear edges.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

ANNA T. FITZGERALD.

Witnesses:

ALBERT E. FAY,
C. FORREST WESSON