G. F. LYNCH.

COLLAPSIBLE RECEPTACLE.

APPLICATION FILED OCT. 10, 1908.

960,360. **Patented June 7, 1910.**

Fig. 1

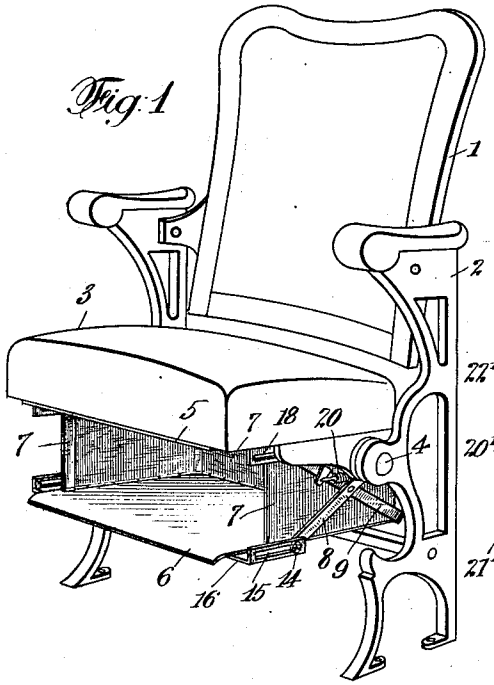


Fig. 2

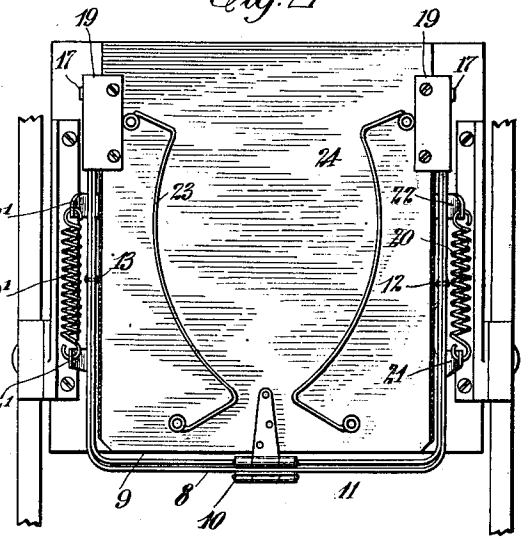


Fig. 3

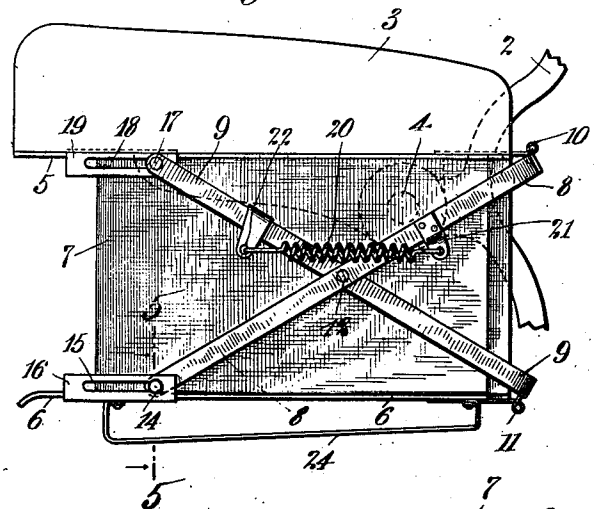


Fig. 4

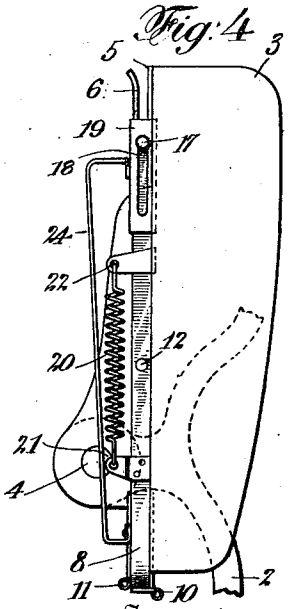
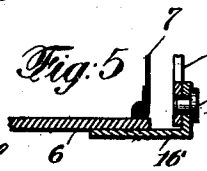


Fig. 5



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COLLAPSIBLE RECEPTACLE.

960,360. Specification of Letters Patent. Patented June 7, 1910.

Application filed October 10, 1908. Serial No. 457,066.

To all whom it may concern:

Be it known that I, GERTRUDE F. LYNCH, a citizen of the United States, residing at No. 207 East Fifteenth street, in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Collapsible Receptacles, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make out the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a collapsible or folding box or receptacle which may be readily opened or extended when articles are to be placed therein and also easily folded or collapsed when not in use.

The principal objects of my invention are to provide a device of this kind which is very compact either when opened or closed and that is particularly well adapted for being applied to the underside of the seat of a bench, chair or the like, and more particularly to the seats of folding or theater chairs.

With these and other objects in view my invention consists in the various novel and peculiar arrangements and combinations of the several different parts of the device, all as hereinafter fully set forth and then pointed out in the claims.

I have illustrated a type of my invention in the accompanying drawings, wherein:—

Figure 1 is a perspective view of an ordinary folding or theater chair having my improved collapsible receptacle or box attached beneath the chair seat, which is down in position for use, the receptacle also being shown as open or extended ready for use. Fig. 2 is an enlarged front view of the chair seat and the collapsible receptacle, the seat being folded up and the receptacle closed. Fig. 3 is an enlarged view of the chair seat and flexible receptacle shown in Fig. 1, and with the greater part of the chair frame removed. Fig. 4 is an enlarged side view of the parts shown in Fig. 3, but with the relative positions thereof being changed, the chair seat being folded up and the collapsible receptacle being closed against the under side seat. Fig. 5 is a sectional view of details, the plane of the section being indicated by the line 5—5, Fig. 3.

In the accompanying drawings, in which like numbers of reference indicate like parts throughout, 1 indicates the back, 2 the frame work or side members, and 3 the seat of a folding or theater chair, the seat being mounted on pivots 4, at each side thereof, respectively and being so constructed that the seat may be swung down into substantially horizontal position, as shown in Figs. 1 and 3, or tipped up toward the back of the chair, as shown in Figs. 2 and 4.

To the underside of the seat 3 is secured the collapsible receptacle, which is shown as comprising an upper part or attaching plate or member 5, which may be securely fastened to the underside of the seat in any suitable manner, and the bottom 6 between which and the attaching member 5, is secured flexible material 7, which extends around three sides of the structure leaving the front thereof open so as to form a receptacle or box-like device. In the construction shown, the flexible material 7, is of substantially uniform depth on all three sides, and the bottom 6 of the receptacle is substantially parallel with the underside of the seat, when the receptacle is fully extended, as shown in Figs. 1 and 3, so as to provide a commodious storage space, though this, of course, may be varied. In order to hold the receptacle in closed position and also to maintain it firmly in open position, I provide spring-actuated mechanism which may also have the additional function of sustaining the weight of the contents of the receptacle and thus relieve the flexible material of undue strain. In the present construction, I have shown this spring-actuated mechanism as comprising a pair of U-shaped members 8 and 9, the former of which near its center is pivoted or hinged at 10, to a suitable point on the attaching plate 5, or if preferred to the seat 3 itself, while the latter member 9 is pivoted or hinged near its center at 11, to a suitable point on the bottom or lower part 6 of the receptacle. The side arms of the U-shaped members 8 and 9, respectively, are crossed upon each other and pivoted together at 12 and 13, respectively, and the free ends of the members 8 are each provided with a pin or stud 14, which travels in a slot 15 formed in a bracket 16, which is secured to the bottom 6 of the receptacle, at the side thereof and near its forward end. In the same manner, the free ends of the U-shaped member 9, are each provided with a pin or stud 17, which travels in a slot 18 formed in a bracket 19, which

is secured to the upper part or attaching plate 5, or directly to the seat 3, itself in case the part 5 is dispensed with. When the receptacle is closed, the pins 14 and 17, lie at the outer ends of the slots in their respective brackets, and when the receptacle is opened to its full extent, the pins lie at the inner ends of the slots, respectively, as shown in Figs. 1 and 3. From this it will be seen that the U-shaped members 8 and 9, which in respect to the other constitute a pair of pivoted levers, on the lazy-tongs order, give a substantial support to the bottom of the receptacle when it is opened and supplied with articles at the same time these members serve as side-guards or protectors which in a way act to protect the flexible sides, and likewise the contents of the receptacle. This form, also, has the advantage of causing the pivoted crossed members to operate simultaneously, and thereby give a more balanced and smoother action in operating these parts. These members 8 and 9, are given a spring action through means of a coil spring 20, one end of which is attached at 21 to the member 8, at a suitable point beyond the pivoted point 12, when measured from the free end of the part 8, while the other end of the spring is attached at 22, to a suitable point on the member 9, at a point between the pivotal points 12, and the free end of the lever. In this way, a snap action is given the mechanism, at a time when the pivoted members are opened on each other a considerable distance and again at a time when they are nearly closed on each other, the spring thereby serving to maintain the receptacle firmly closed and to likewise maintain it in open position. The spring 20, and its attaching parts are duplicated upon the opposite side of the receptacle, such parts being indicated by the numbers 20′, 21′ and 22′, respectively. Of course, any well known form of spring actuated mechanism may be applied for this purpose.

In showing my improved device as applied to a folding or theater chair, I have also shown the ordinary wire device 23 and 24, which is usually secured to the underside of the seat, for the purpose of receiving and holding a hat in inverted position, the rim of the hat being inserted within the wire members 23 and 24, in a manner well known. It will thus be seen that this receptacle does not make it necessary to dispense with this form of hat-holder, which may be used to hold a hat either with the receptacle in closed or open position, thereby increasing the capacity of the device as a storage place for the ordinary articles of wearing apparel which a person removes and lays aside when using a chair of this kind.

If preferred, the upper part or attaching member 5 may be dispensed with, as the slotted brackets and the hinge, as well as the flexible material forming the three sides of the receptacle, may be secured directly to the underside of the seat itself. It will also be understood that any suitable character of flexible material may be used instead of the imperforate kind shown herein. Ordinary netting or open work material of any suitable character may be used. Furthermore, if preferred the spring-actuated mechanism for snapping the receptacle into open or closed position and retaining it in either of such positions may be wholly concealed by the flexible material extending around the outside of it and this may be done by having two thicknesses of flexible material between which these operating parts are mounted. Accordingly, I wish to be understood as not limiting my invention to the particular forms of the various different parts herein shown, as many changes may be made in the same without, however, departing from the spirit of the invention.

In applying my improvements to ordinary folding or theater chairs, the depth of the receptacle, or the distance from the under side of the seat, may well be restricted to a point which will keep the receptacle, when filled with articles, substantially within the lines of the forward part of the chair, in order to permit persons to pass in front of the chair when the seat is tipped up, without disturbing the receptacle. It may also be noted that this receptacle when combined with the seat of a chair or bench is of great use in theaters, churches, schools or other places where persons assemble in numbers, and require a handy place for temporarily storing the ordinary articles of wearing apparel which they lay aside on such occasions.

This receptacle is opened by pressing down on the front part of the lower rim and closed by pushing up on it.

Having thus described my invention what I claim and desire to secure by Letters Patent is:—

1. The combination with a seat, of a collapsible receptacle mounted upon the under side thereof and provided with an opening in one side through which the articles are introduced into and removed from the receptacle, a pair of vertically arranged levers upon each of two opposite sides of said receptacle and each pair having its two levers pivoted together intermediate their respective ends and the ends thereof pivoted to the top and bottom of said receptacle, respectively, with a sliding connection between one end of one lever and said top and one end of the other lever and said bottom, each pair of said levers being provided with a spring acting to snap the levers into open or closed position after the initial movement has been given the same to open or close them.

2. The combination with a seat, a collapsi-

ble receptacle provided with an opening in one side through which the articles are introduced into and removed from the receptacle, a pair of levers upon each of two opposite sides of said receptacle and each pair having the two levers pivoted to each other and having their ends pivoted to the top and bottom of said receptacle, respectively, the corresponding levers upon the said opposite sides being secured at their rear ends to rigid members hinged, respectively, to said top and bottom of said receptacle, and a spring acting to snap said pivoted levers into open and closed positions, respectively, after the initial movement is given such levers in the operation of opening and closing said receptacle.

3. The combination with a seat, a collapsible receptacle provided with an opening in one side through which the articles are introduced into and removed from the receptacle, spring-actuated mechanism operatively connected between two opposite sides of the receptacle and comprising a set of U-shaped members pivoted by their central parts to said opposite sides of the receptacle, respectively, and having their side parts crossed upon each other and pivoted together at the crossing points, and a spring acting upon said crossed members to snap the same into open and also into closed position.

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

GERTRUDE F. LYNCH.

Witnesses:
WILLIAM J. GIBSON,
WILLIAM J. LEWIS.