

No. 650,401.

Patented May 29, 1900.

I. W. LAMB.  
TRUNK LID BRACE.  
(Application filed Nov. 3, 1899.)

(No Model.)

Fig 1.

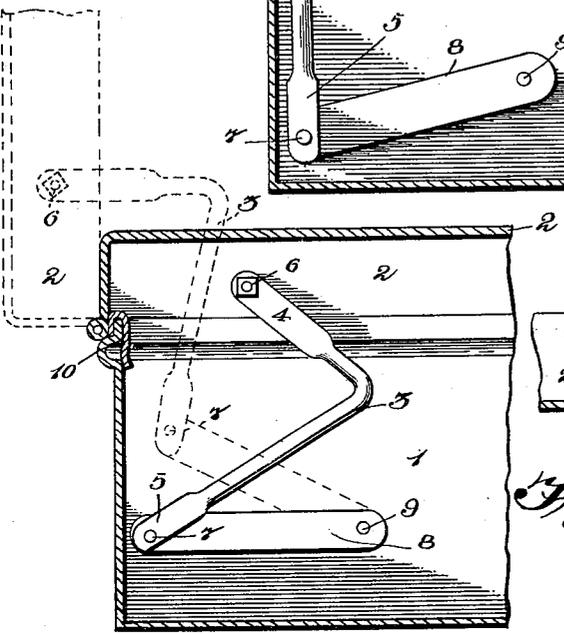
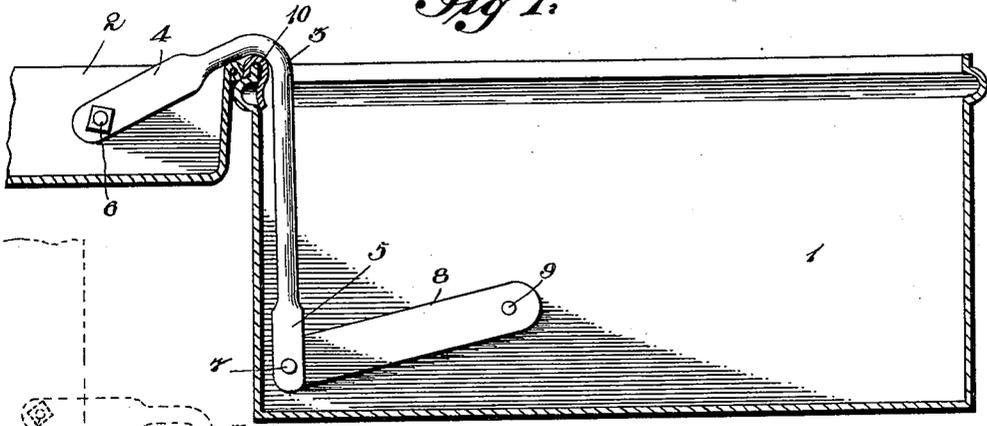


Fig 3.

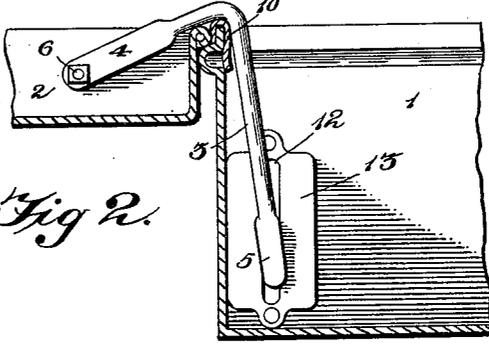


Fig 2.

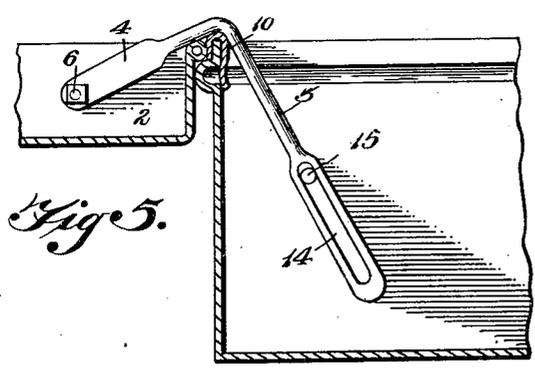


Fig 5.

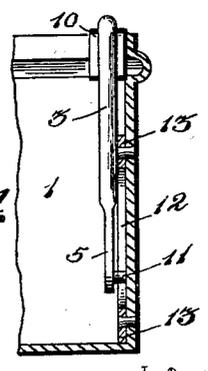


Fig 4.

Witnesses

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# UNITED STATES PATENT OFFICE.

ISAAC W. LAMB, OF PERRY, MICHIGAN.

## TRUNK-LID BRACE.

SPECIFICATION forming part of Letters Patent No. 650,401, dated May 29, 1900.

Application filed November 3, 1899. Serial No. 735,687. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC W. LAMB, a citizen of the United States, residing at Perry, in the county of Shiawassee and State of Michigan, have invented a new and useful Trunk-Lid Brace, of which the following is a specification.

This invention relates to trunks and similar receptacles having hinged lids or covers, and has for its object to provide improved means for bracing the lid in its open position, so as to relieve the strain from the hinges and to support the lid in a substantially-horizontal position, so as to serve as a tray for supporting various articles while packing or unpacking the trunk. It is furthermore designed to provide such a brace which may be applied to any trunk or similar receptacle without altering or changing the construction thereof and which will automatically fold and unfold when the lid is being closed and opened, and therefore does not require to be operated separately from the lid.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a transverse sectional view of a trunk or the like having the present invention applied thereto and supporting the lid in open position. Fig. 2 illustrates the position assumed by the brace when the lid of the trunk is closed and also indicates in dotted lines the intermediate position of the brace when the lid is in its vertical position. Fig. 3 is a view similar to Fig. 1 and illustrating a modified arrangement of the brace. Fig. 4 is a detail transverse sectional view taken through one end of the trunk and illustrating the adjustable connection between the modified brace and the trunk-body. Fig. 5 is a view similar to Fig. 1 and illustrating another modified form of the brace.

Corresponding parts in the several figures

of the drawings are designated by like characters of reference.

Referring particularly to Figs. 1 and 2 of the drawings, it will be seen that 1 designates the body of a trunk or other suitable receptacle having a hinged cover 2. These parts have been shown to more fully illustrate the application and operation of the present invention.

In carrying out the invention I provide an angular brace-rod 3, the intermediate portion of which is preferably circular in cross-section and has its opposite ends 4 and 5 flattened, so as to form terminal arms or links. The upper and shorter arm 4 has a pivotal connection 6 with the inner side of one end of the lid and adjacent to the hinged edge thereof. The main portion of the brace-rod is located within the body of the trunk, and the free end thereof forms a link which is pivoted, as at 7, to the free end of a link or arm 8, which has its opposite end pivoted to the inner side of the adjacent end of the trunk, as indicated at 9. It will be understood that the brace is arranged adjacent to the end of the trunk, as plainly shown in Fig. 4 of the drawings, and also that it is preferable to employ similar braces at opposite ends of the trunk, although but one brace has been shown in the drawings.

By reference to Fig. 2, which shows the lid of the trunk in closed position, it will be seen that the brace-rod is entirely within the body of the trunk. In opening the lid to the upright position thereof, as indicated in dotted lines, it will be seen that the brace-rod is moved vertically with the lid by reason of the pivotal connection afforded by the link 8. When the lid has been folded back into a substantially-horizontal position, as indicated in Fig. 1, it will be seen that the brace-rod descends with the lid until the angled portion of the arm rests upon the upper edge of the back of the trunk, whereby the weight of the lid is supported by the arm and the latter is in turn supported upon the upper edge of the trunk, and thereby relieves the hinges of all strain. To protect the upper edge of the back against the action of the angled portion of the brace-rod, I prefer to employ a substantially U-shaped metallic clip 10, which embraces the upper edge of the back of the trunk and

receives the wear of the brace-rod, and thereby forms a reinforcement for the back.

From the foregoing description it will be apparent that the lid may be opened and closed without separately operating the brace-rod as the latter automatically folds and unfolds during the movement of the lid.

The connection of the brace-rod with the end of the trunk may be formed in several other different ways, one of which has been shown in Figs. 3 and 4, in which the link 8 is dispensed with, and the lower free end of the brace-rod is provided with a transversely-extending pivot-pin 11, which extends toward the adjacent end of the trunk and is slidably received in a vertically-disposed slot 12, formed in the end of the trunk. Instead of forming this slot through the end of the trunk it is preferable to provide a reinforcing-plate 13, secured to the inner side of the end of the trunk and provided with the slot 12. By this construction an opening in the end of the trunk is obviated, which might weaken the latter. In this modified form of the device the upper arm 4 is pivoted to the lid, as in the first-described form, and by reason of the pivot-pin 11 being slidably received within the slot 12 the brace-rod may move vertically with the lid and also swing laterally upon the pivot-pin 11 as a center, so as to fold inwardly and outwardly, according to the position of the lid, so that the brace-rod may assume the positions as shown and described for the first form of the device.

Another modified form has been shown in Fig. 5, in which the lower end of the brace-rod is provided with a longitudinal slot 14, pivotally receiving a pivot-pin 15, fixed upon the adjacent end of the trunk, and also slidably longitudinally upon such pin as a guide. In this form of the device the pivot-pin 15 is located at a suitable distance from the bottom of the trunk and also from the back thereof, so as to permit of the lateral swinging movement of the arm upon the pivot-pin 15, as will be understood.

In each form of the device there is employed an angled brace-rod, the upper end of which has a pivotal connection with the lid and the lower end forming a link, which also has a slidably connection with the body of the trunk, so that the rod may move automatically with the lid, and its angled portion may embrace and rest upon the upper edge of the back of the trunk in the open position

of the lid, and thereby form a supporting-brace for the latter.

What I claim is—

1. The combination with a trunk or the like, having a hinged lid, of a brace for the lid, having its opposite ends connected to the trunk-body and the lid, respectively, and an intermediate portion of the brace resting upon the upper edge of the trunk-back, in the substantially-horizontal open position of the lid, the opposite ends of the brace being located below the upper edge of the trunk-back.

2. The combination with a trunk or the like, having a hinged lid or cover, of a brace, having its outer end connected to the lid, and its inner end having a vertically-slidable connection with the trunk, the entire brace having a bodily-vertical movement during the opening and closing of the lid, and hanging upon the upper edge of the back, in the substantially-horizontal and open position of the lid, entirely supporting the latter, and relieving the hinged connection of strain.

3. The combination with a trunk or the like, having a hinged lid, of an angled brace-rod, having its opposite ends pivotally connected to the trunk body and lid, respectively, and also having a bodily-vertical movement during the opening and closing of the lid, the angled portion of the brace-rod embracing and hanging upon the upper edge of the trunk-back, in the substantially-horizontal open position of the lid, and the opposite ends of the brace-rod being located below the upper edge of the trunk-back.

4. The combination with a trunk or the like, having a hinged lid, of an angled brace-rod, having its upper end pivoted to one end of the lid, its opposite end being located within the body of the trunk, and having a laterally-pivotal and vertically-slidable engagement therewith, the angled portion of the brace-rod embracing and resting upon the upper edge of the trunk-back, in the substantially horizontal open position of the lid, the lower end of the brace-rod being at its lowermost limit in both the open and closed positions of the lid.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ISAAC W. LAMB.

Witnesses:

W. J. DANCEY,  
L. C. WATKINS.