J. M. Dailey,

Hinge.

No. 47,092. Patented Apr. 4, 1865.

Fig. 1.

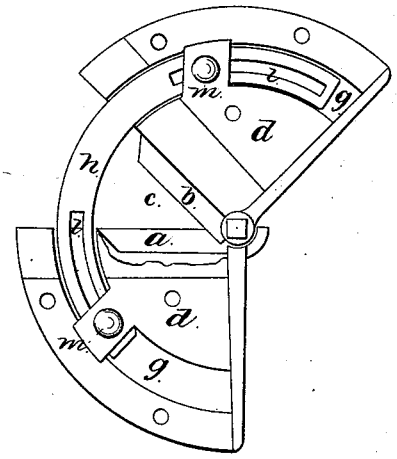


Fig. 2.

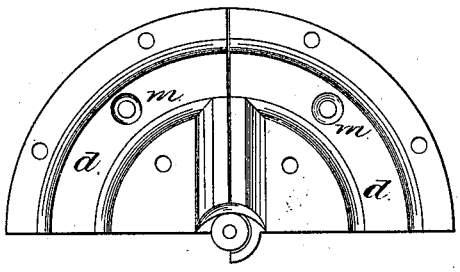
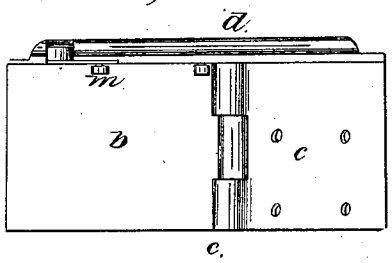


Fig. 3.



Witnesses:
M. Ahearne Jr
Thw. Tasch.

Inventor:
J M Dailey.
Per Munn & Co
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN M. DAILEY, OF NEW YORK, N. Y.

IMPROVED TRUNK-STAYS.

Specification forming part of Letters Patent No. 47,092, dated April 4, 1865.

To all whom it may concern:

Be it known that I, JOHN. M. DAILEY, in the city, county, and State of New York, have invented a new and useful Improvement in Stays for Trunks, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

In the manufacture of trunks to be used for traveling purposes straps of leather, cloth, or other suitable flexible materials have heretofore been used for holding and preventing their tops when opened from falling backward, which would in time wrench their hinges off, these straps being simply fastened at each end respectively to the top and body portions of the trunk. To the use of these stay-straps, however, there are many serious objections, of which may be mentioned that in the insertion and removal of clothes from the trunk it is necessary to be quite careful, for if either one of the straps are accidentally struck by the clothes it oftentimes causes the top to be suddenly closed; that the straps continually break from wear and frequently become unfastened, and also are apt to be caught between the top and body of the trunks, unless particular care is taken to bend them in before it is entirely closed, &c.

By the present invention I have entirely obviated the many disadvantages resulting from the use of flexible stay-straps, the same consisting in the use of stays made of metal, wood, or other inflexible material, in and through each of which grooves of the proper direction and curve are formed extending nearly their entire length, which grooves, when the trunk is opened or closed, travel upon and are guided by stationary guide-pins fastened in the proper positions in the cover and body of the trunk. The grooves are of course made of sufficient length that the cover of the trunk can be swung back far enough to prevent its falling forward by its own weight, and also are of the proper curve to freely pass over the guide-pins as the trunk is opened or closed. In practice, however, I find it advantageous and much more simple, in lieu of making these stays and attaching them to the trunk as distinct and separate from any of the other parts composing the same, to combine them with the ordinary hinges, or, rather, form the two together as one device, and therefore in the following description, as well as in the accompanying drawings, they are represented and shown as if of one and the same piece, although it is evident that it is not necessary to their successful operation to so combine them.

My improvements are represented in the accompanying drawings, of which Figure 1 is a view of inside face of hinge, &c.; Fig. 2, a view of outside face, and Fig. 3 a plan or top view with hinge partially turned.

a a represent an ordinary hinge made in the usual manner, of two parts or pieces, *b* and *c*, and with suitable apertures for fastening the same to the trunk. To each of the parts *b* and *c*, on the two contiguous edges thereof, are fastened in any proper manner, by one of its straight sides, a quadrantal sector-shaped plate, *d d*; or these plates may be cast with their respective hinge part in one and the same piece, if desired. In the face *f f* of each of the sector-plates *d d* is a narrow groove or way, *g g*, having the direction of a curve, the center of which is at the turning-point of the hinge, the grooves in the two sector-plates, when brought together, forming one continuous groove, as seen in Fig. 1.

In the groove *g* of each plate, extending across the junction of the same, and having the same curved shape, is placed a connecting bar or plate, *h*, having a narrow slot or groove, *l*, extending nearly its entire length. This plate *h* is free to slide in the grooves *g g*, and suitable cross-pieces can be fastened upon the sector-plates *d d* over the grooves *g*, to prevent the plate *h* from being sprung out of its groove or way as the hinge is turned. *m m* are two stationary pins passing through apertures in sector-plates and bearing in the slot *l* of bar *h*, which are so arranged as to stop the sliding bar *h* at the proper time as each end of its slot comes to a bearing on the same.

The hinge, with its sector-shaped plates, connected together by a sliding tie-piece arranged as described, can be applied to a trunk in the ordinary manner, one part of the hinge being fastened to the top or cover and the other to the body, or, which I deem the best

manner, fastened upon the outside of the trunk, the hinge parts to the back side and the sector-shaped plates to the ends, in which case the parts of the hinge and sector-plates act as clamps and as strengthening-pieces for the corners.

The hinge, constructed as described and applied to a trunk, in raising the cover of the trunk the fixed pin in its sector-piece, bearing against one end of the slot of the connecting-bar *h*, pulls on the same and causes it to move in its groove until the lower end of said slot comes to a bearing on the fixed pin in the other sector-plate, the two pins being so arranged with regard to each other as to allow the cover sufficient play as that in a vertical plane when the connecting-bar has come to both of its bearings, as described, it shall be in such position that it can neither fall forward and close nor fall backward, the said connecting arm or bar acting then as a stay, as is evident without further description.

In lieu of arranging the connecting-bar *h* within and forming a part of a trunk-hinge, it can be made separate therefrom and applied either outside or inside of the trunk, as may be desired.

Although I have herein particularly described my improvements as applicable to trunks alone, it is apparent that there are many other and various purposes to which they can be readily adapted, and therefore I do not intend to limit myself to any particular application of the same.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The use of one or more curved bars or plates moving upon suitable guiding-pins in the cover and body of a trunk or other case, arranged and operating substantially as herein described, and for the purpose specified.

2. The combination, with an ordinary hinge, of the curved bar *h*, arranged together and operating substantially as and for the purpose specified.

JOHN M. DAILEY.

Witnesses:
M. M. LIVINGSTON,
C. L. TOPLIFF.