

(Model.)

4 Sheets—Sheet 1.

H. LORENTZ.
BOX FASTENER.

No. 301,135.

Patented July 1, 1884.

Fig. 1.

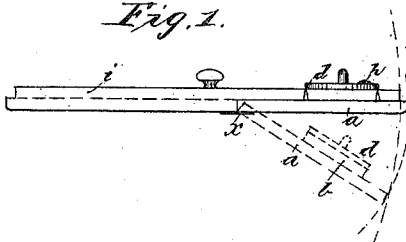


Fig. 2.

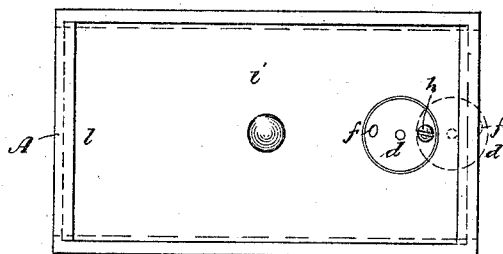
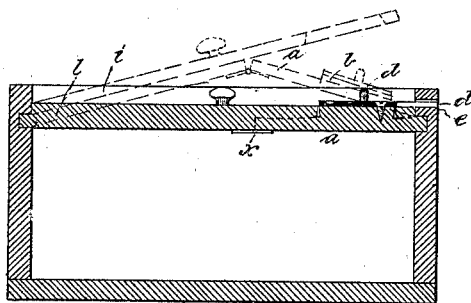


Fig. 3.



WITNESSES

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Fig. 4

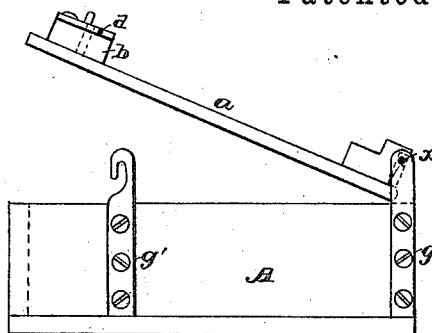


Fig. 5

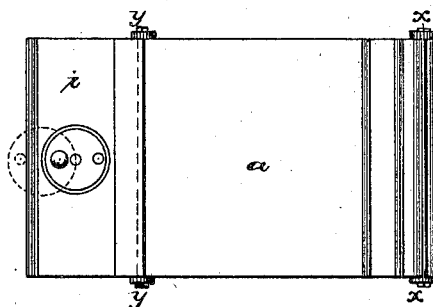


Fig. 6

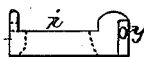
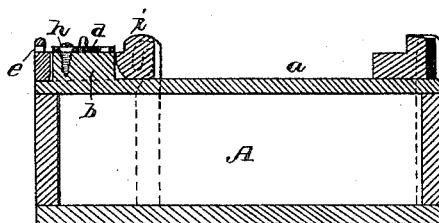


Fig. 7



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Fig. 8.

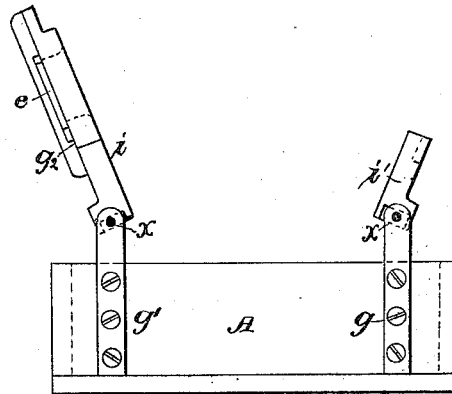


Fig. 9.

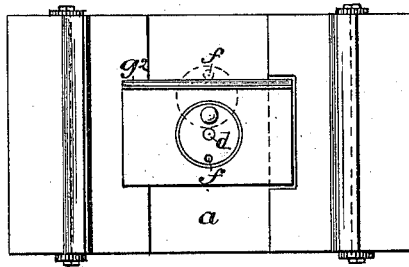


Fig. 10.

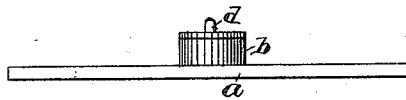
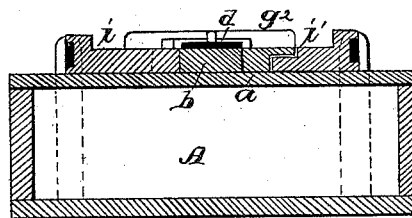


Fig. 11.



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Fig. 12.

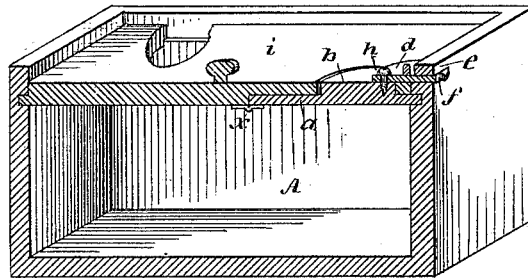


Fig. 13.

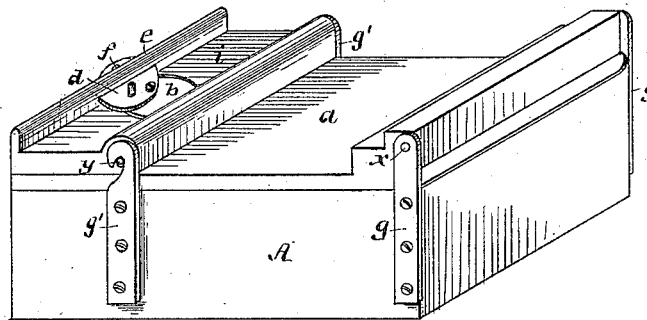
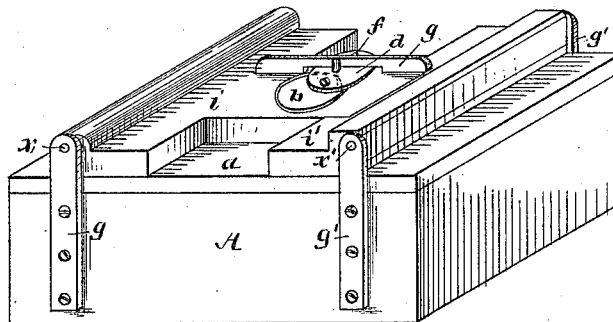


Fig. 14.



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UNITED STATES PATENT OFFICE.

HEINRICH LORENTZ, OF STETTIN, PRUSSIA, GERMANY.

BOX-FASTENER.

SPECIFICATION forming part of Letters Patent No. 301,135, dated July 1, 1884.

Application filed August 8, 1883. (Model.)

To all whom it may concern:

Be it known that I, HEINRICH LORENTZ, a subject of the Kingdom of Prussia, Germany, residing at the city of Stettin, in the Kingdom of Prussia, Germany, have invented certain new and useful Improvements in Box-Lids and Fastenings therefor, of which the following is a specification.

The present invention relates to means for closing boxes and other receptacles; and it consists in the construction and combination of devices which will be hereinafter more fully described, and then set forth in the claims.

In the drawings, Figure 1 is a side elevation of a box-cover constructed according to my invention. Fig. 2 is a top view showing the cover applied to a box. Fig. 3 is a longitudinal section of a box and cover having a movable end section. Figs. 4 to 11, inclusive, are modifications of the invention. Fig. 12 is a perspective view of a box, half in section, illustrating the form of cover and fastening shown by Figs. 1 to 3, inclusive. Fig. 13 is a perspective view of the modification illustrated by Figs. 4 to 7, inclusive; and Fig. 14 is a similar view of the box embodying my invention as exhibited by Figs. 8 to 11, inclusive.

It will be observed that three forms are shown, all of which embody my invention, the essential feature of which is a cover for a box formed of two or more parts, one of which is provided with a boss, which fits into a corresponding opening in the other or one of the other parts of the cover, and is held by a button pivoted to the top of the boss, which can be turned through a slot in the box-rim, or in one of the other parts of the cover. In the form of my invention illustrated by Figs. 1, 2, 3, and 12 the cover *i* is provided with the end section, *a*, hinged to the cover *i* at *x*, and which is recessed into the bottom of the cover at one end. This movable section *a* has applied to the middle of its upper face a circular projection or boss, *b*, which projects through an opening in the cover *i* when the latter is closed or is in the position shown in Figs. 2 and 3. On this projection or boss is arranged a metallic disk, *d*, made of the same diameter as the projection *b*, and connected thereto by a pivot-pin, *h*. When this disk *d* is in the position shown in full lines in Fig. 2, the end section can turn freely on the hinges *x*, so as to move

in a downward direction and assume the position shown in dotted lines in Fig. 1. When, however, the disk *d* is turned on its pivot and brought into the position shown in dotted lines in Fig. 2, it is evident without further description that the section *a* is firmly united with the main portion *i* of the cover, so that these two parts can be considered as a single strong cover.

In order to close a box with a cover of the above description, it is only necessary to insert the end of the cover *i* and the end of the section *a* into grooves or between cleats provided at the ends of the box, as is shown by dotted lines in Fig. 3. Thereupon by pressing the cover *i* in a downward direction the end thereof, likewise the end of the section *a*, are firmly seated in the grooves in the box-walls, and the projection *b*, with its disk *d*, is caused to project through the opening in the cover *i*, as is clearly shown in Fig. 3. In order to lock the cover in its closed position, the disk *d* is turned into the position shown by dotted lines in Fig. 2, so as to cause it to project through a slot, *e*, made in the end wall of the box, near the top thereof. When the parts are in this position, it will be impossible to remove the cover; and as a greater safeguard I may pass a bolt, cord, or padlock through the hole *f*, made in the disk *d*.

In Figs. 4 to 7, inclusive, and Fig. 3, I have illustrated a modification of the box cover or lid. The box-body *A* is, in the present instance, provided at its opposite sides with metallic bands *g g'*, which project above the top of the box-body. The bands *g* receive pins or journals on the end portion of the cover or lid *a*, so as to form pivots *x*, for permitting the cover to turn. The projection or circular boss *b*, with its movable disk *d*, is located at the other end of the cover.

The manner of closing and retaining a cover or lid made in one piece, as is shown in Figs. 4 to 7, inclusive, and Fig. 3, is as follows, viz: The cover having been shut into or upon the box, as is seen in Figs. 5, 7, and 13, the transverse bar *i* is hooked into the bands *g'* and held down upon the cover. This bar *i* has end gudgeons or projections, *y*, which fit into the hooked extremities of the bands *g'*. When the transverse bar *i* is in position, as shown by Figs. 5, 7, and 13, the boss *b* will fill the

corresponding opening in the bar *i*, and the disk *d*, carried by the boss, can be turned through the slot *e* in the raised rim on the edge of the bar *i*. The portion of the disk *d* projecting beyond this slot has the hole *f* for the reception of a lock or other device. This completes the fastening of the cover; and in order to remove the same the disk *d* is turned back upon the projection *b* and the transverse bar *i* removed from its supports in the straps *g'*.

In Figs. 8 to 11 and 14 other modifications of the invention are known. In this construction, also, the lid or cover *a* has the circular boss or projection *b* provided with the disk *d*. Two transverse bars, *i i'*, are used, the same being connected with the straps *g g'* by means of the pivots *x y*.

The locking of the cover is effected in the following way, viz: The bars *i i'* having been brought into the position shown in Fig. 8, the cover *a* is slid under the same, whereupon the bars *i i'* are turned down upon the cover. An opening made in the bar *i* receives the projection *b*, and the adjoining ends of the two bars overlap each other, as is shown in Figs. 9, 11, and 14. A cleat or strip, *g²*, on the top of the bar *i* has a slot, *e*, into which is turned the

disk *d*, carried by the projection *b* of the cover. After this has been done the lock or other device is passed through the hole *f* of the disk *d*, for completing the fastening of the cover. In order to release the cover, the disk is turned back upon the projection *b* and the bars *i i'* raised, whereupon the cover can be removed.

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

In a box-fastener, the following elements, viz: a lid and a hinged board, one having a boss on its upper surface and a pivoted disk carried on the top of said boss, and the other having a hole to receive said boss, together with a keeper for said pivoted disk, all in combination and operating together substantially as described, and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HEINRICH LORENTZ.

Witnesses:

AUGUST MÜHLE,
AUGUST KÖHN.