

(Model.)

4 Sheets—Sheet 1.

H. LORENTZ.
BOX FASTENER.

No. 301,135.

Patented July 1, 1884.

Fig. 1.

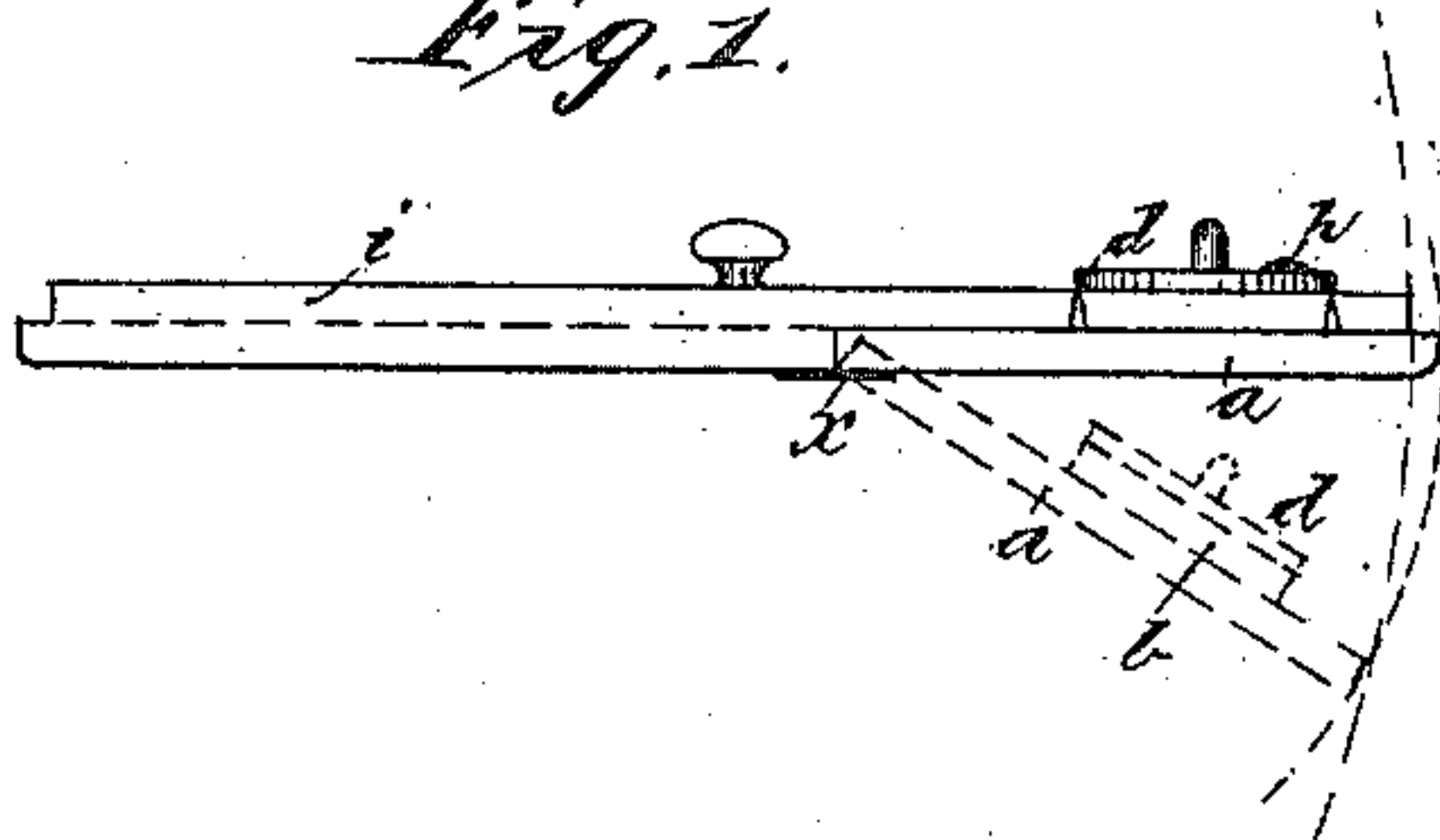


Fig. 2.

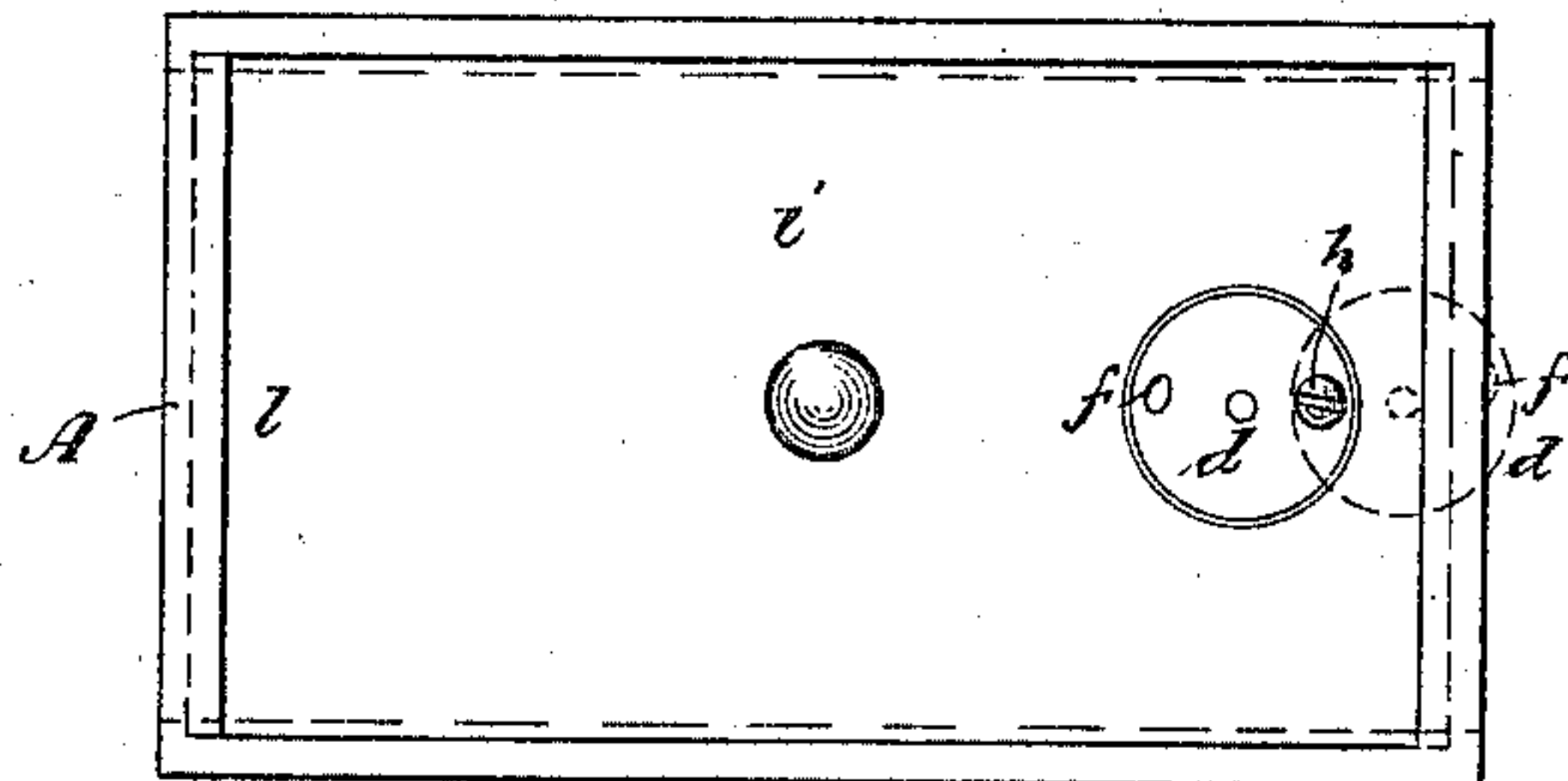
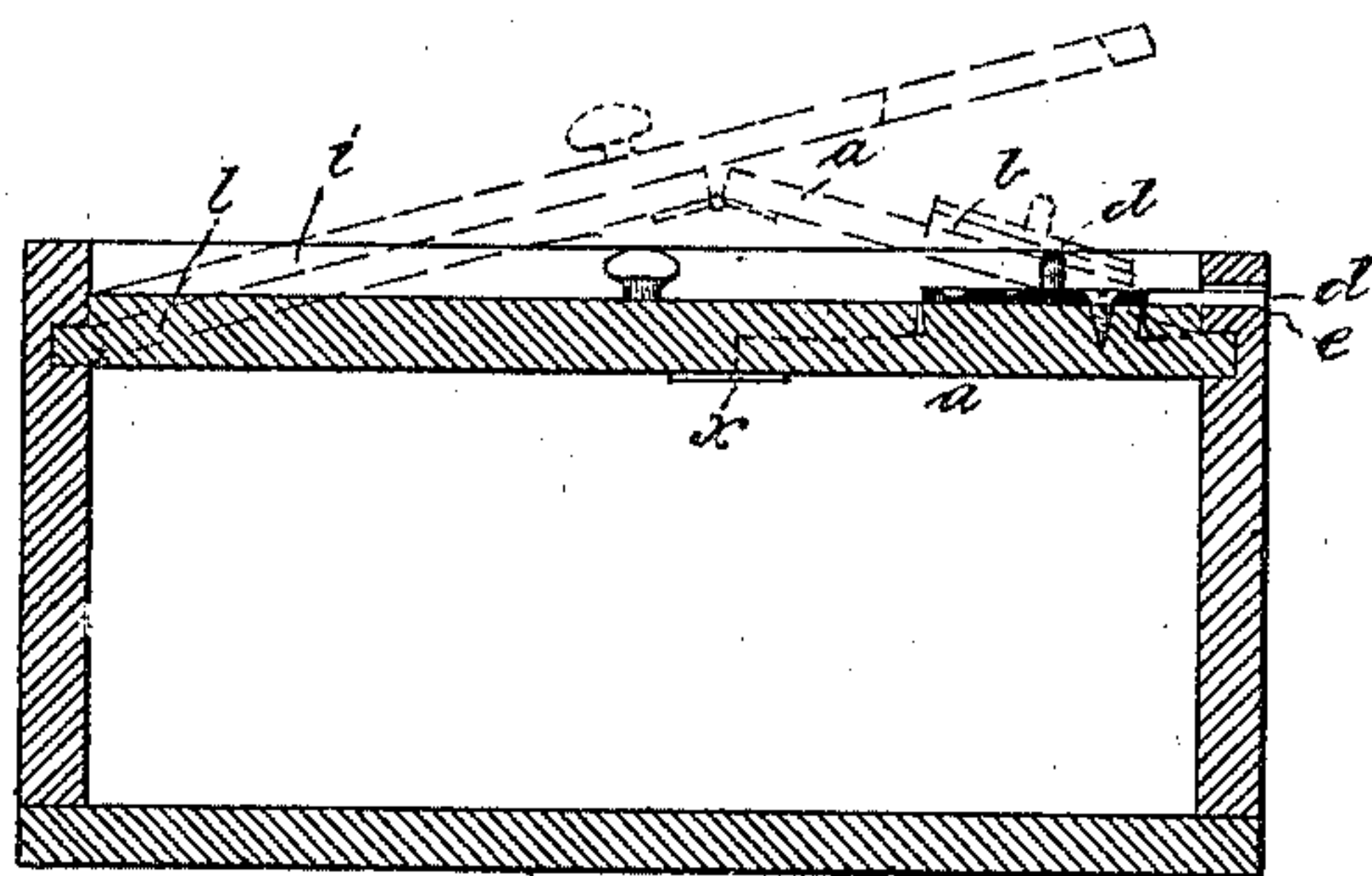


Fig. 3.



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C. J. Bell,
A. M. Tanner

INVENTOR,

Heinrich Lorentz,

By *Paine & Ladd,*
Attorneys.

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Fig. 4

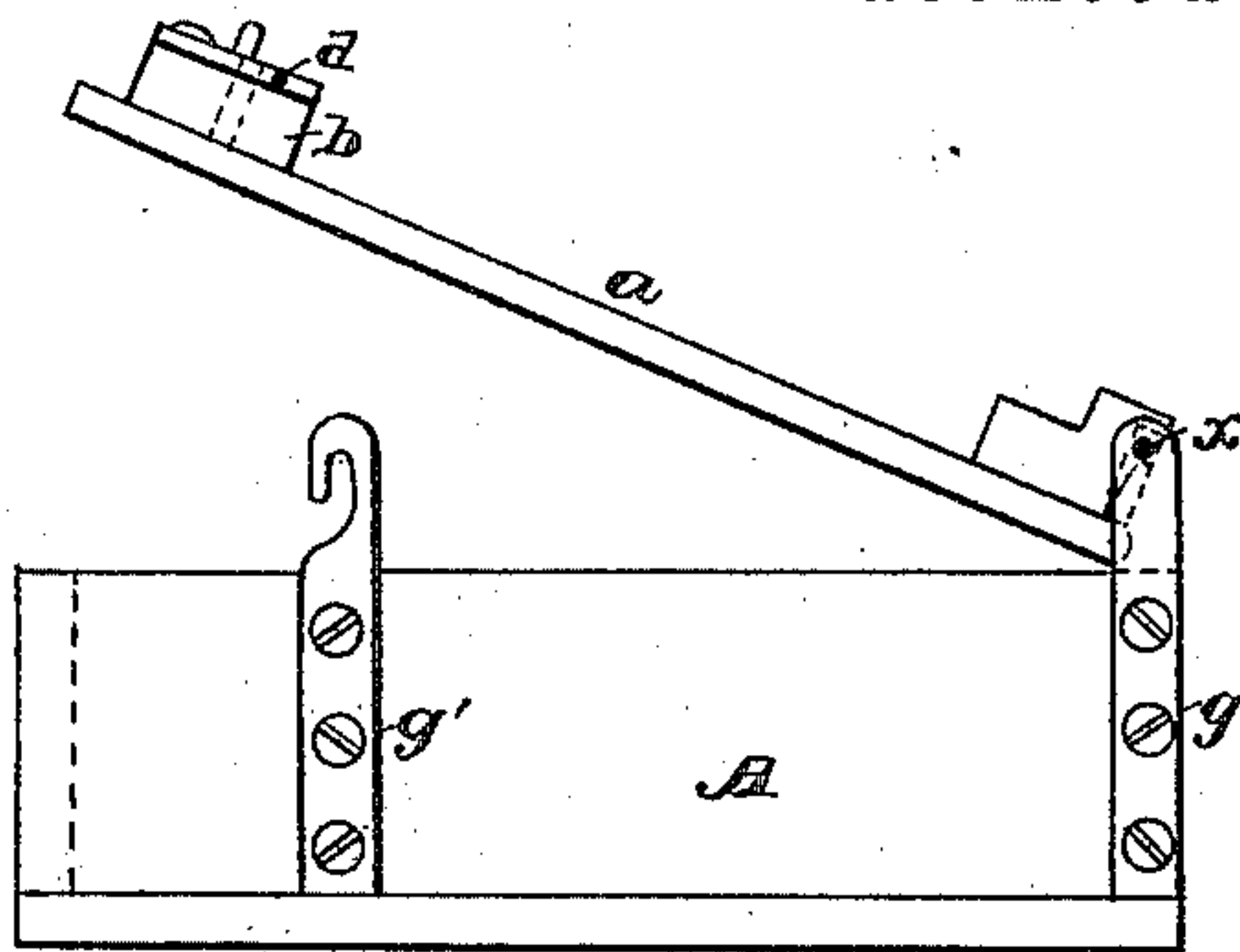


Fig. 5

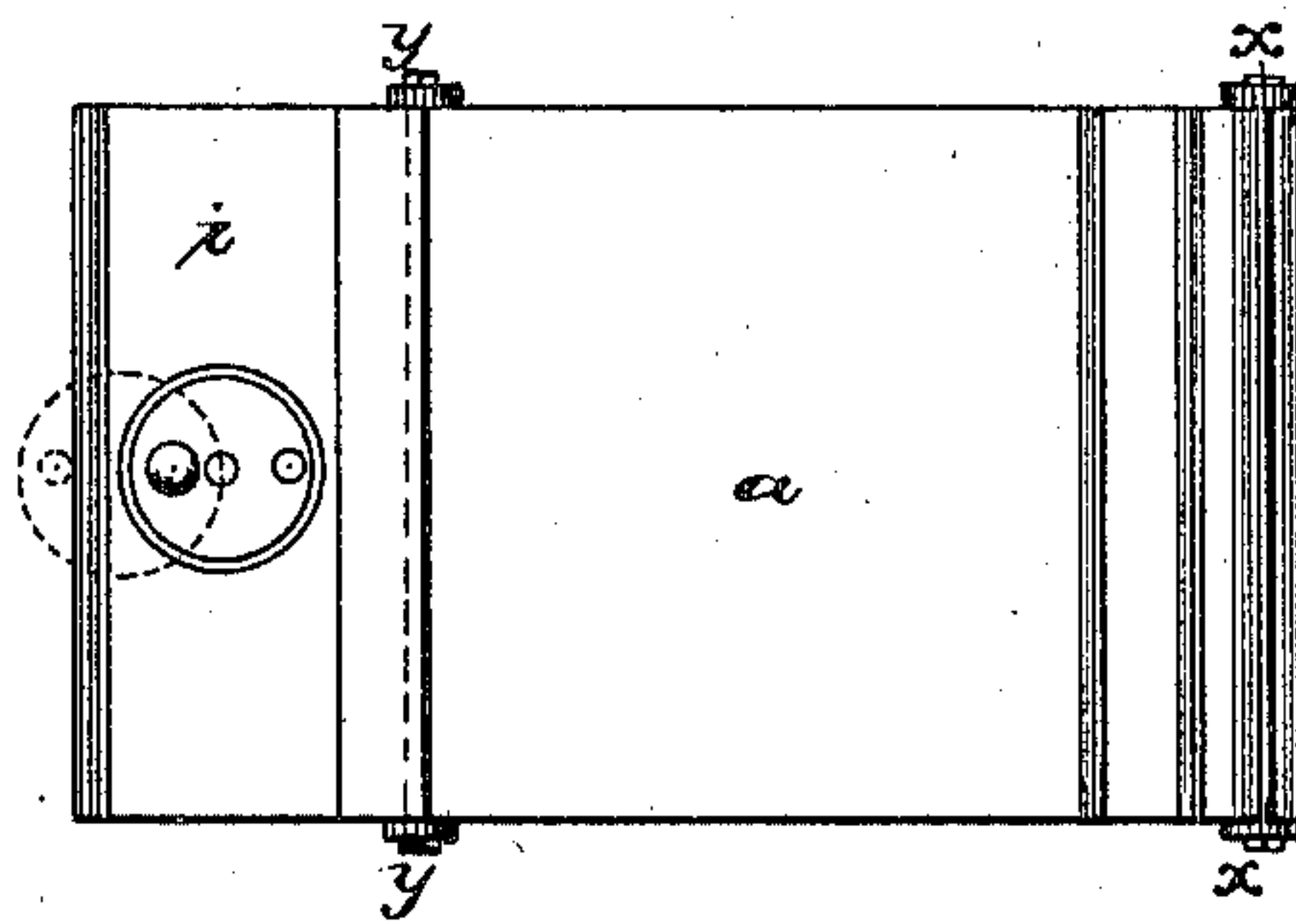


Fig. 6

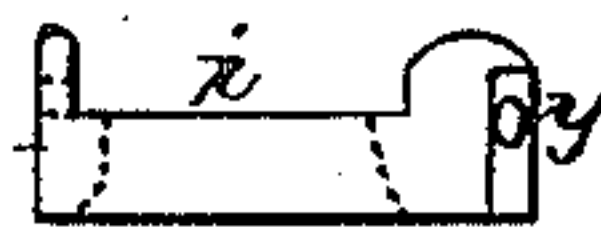
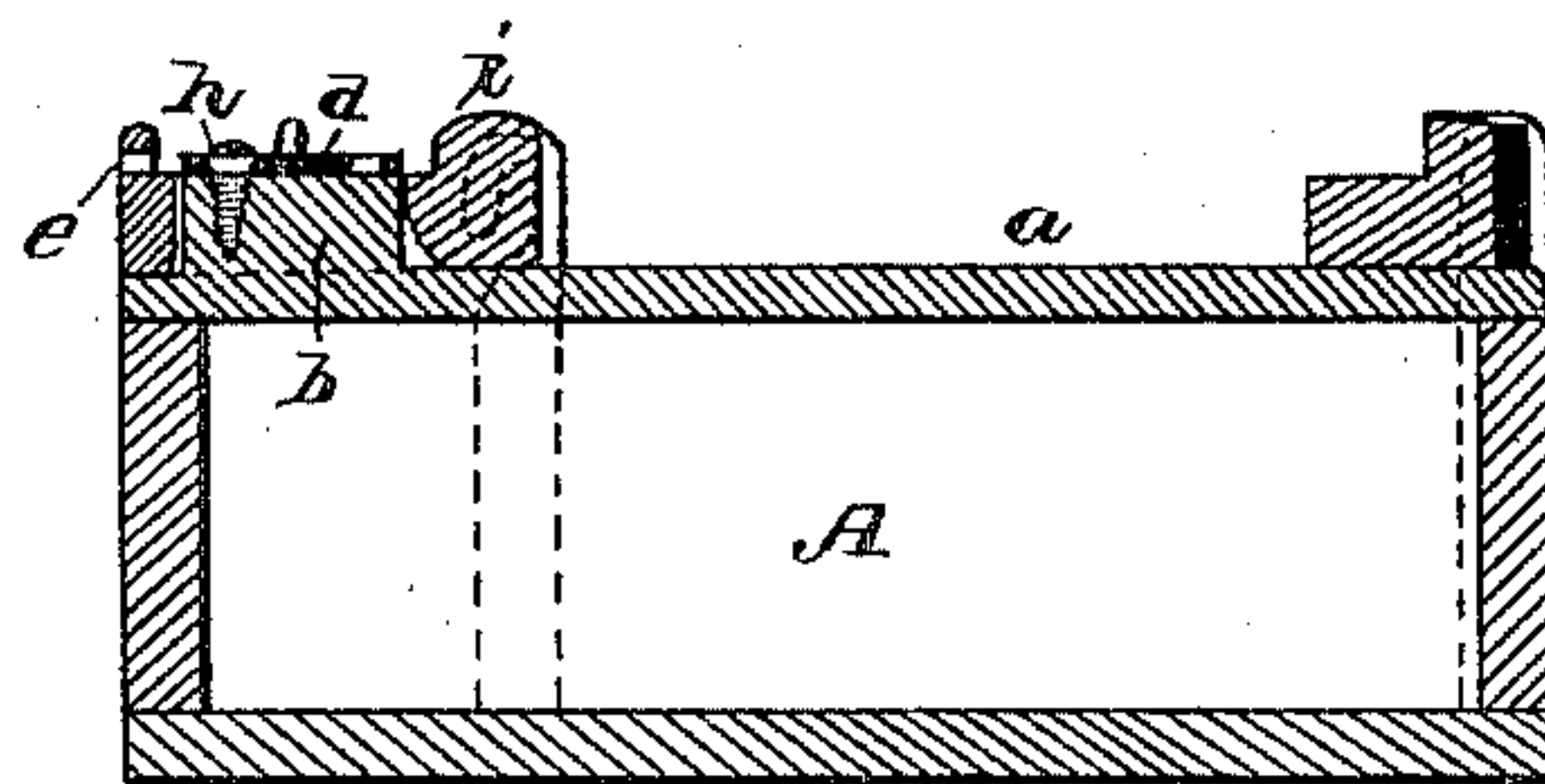


Fig. 7



WITNESSES

Wm. J. Panner
C. J. Bell

INVENTOR,

Heinrich Lorentz,

By *Pinner & Co.*

Attorneys.

(Model.)

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H. LORENTZ.

BOX FASTENER.

No. 301,135.

Patented July 1, 1884.

Fig. 8.

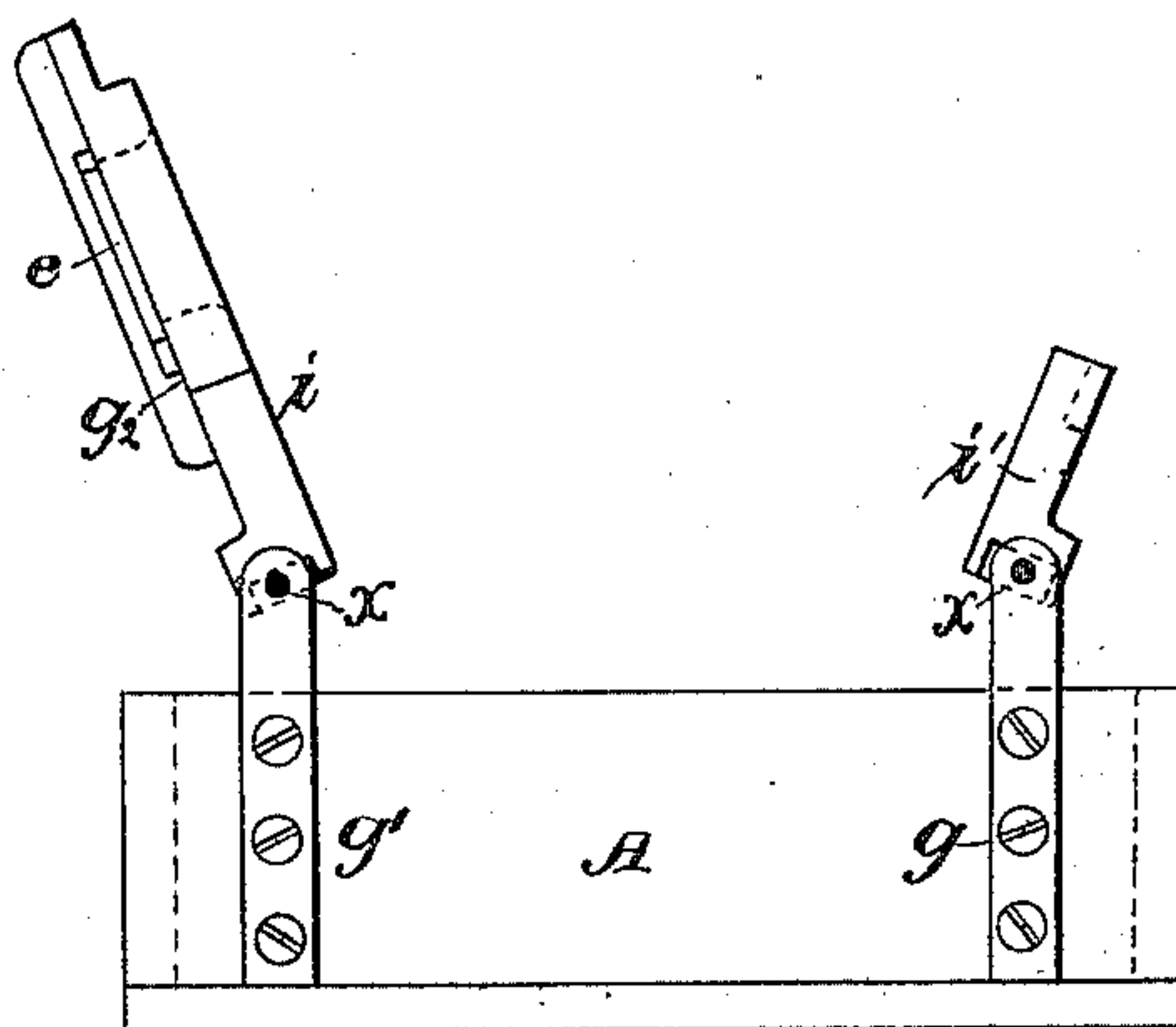


Fig. 9.

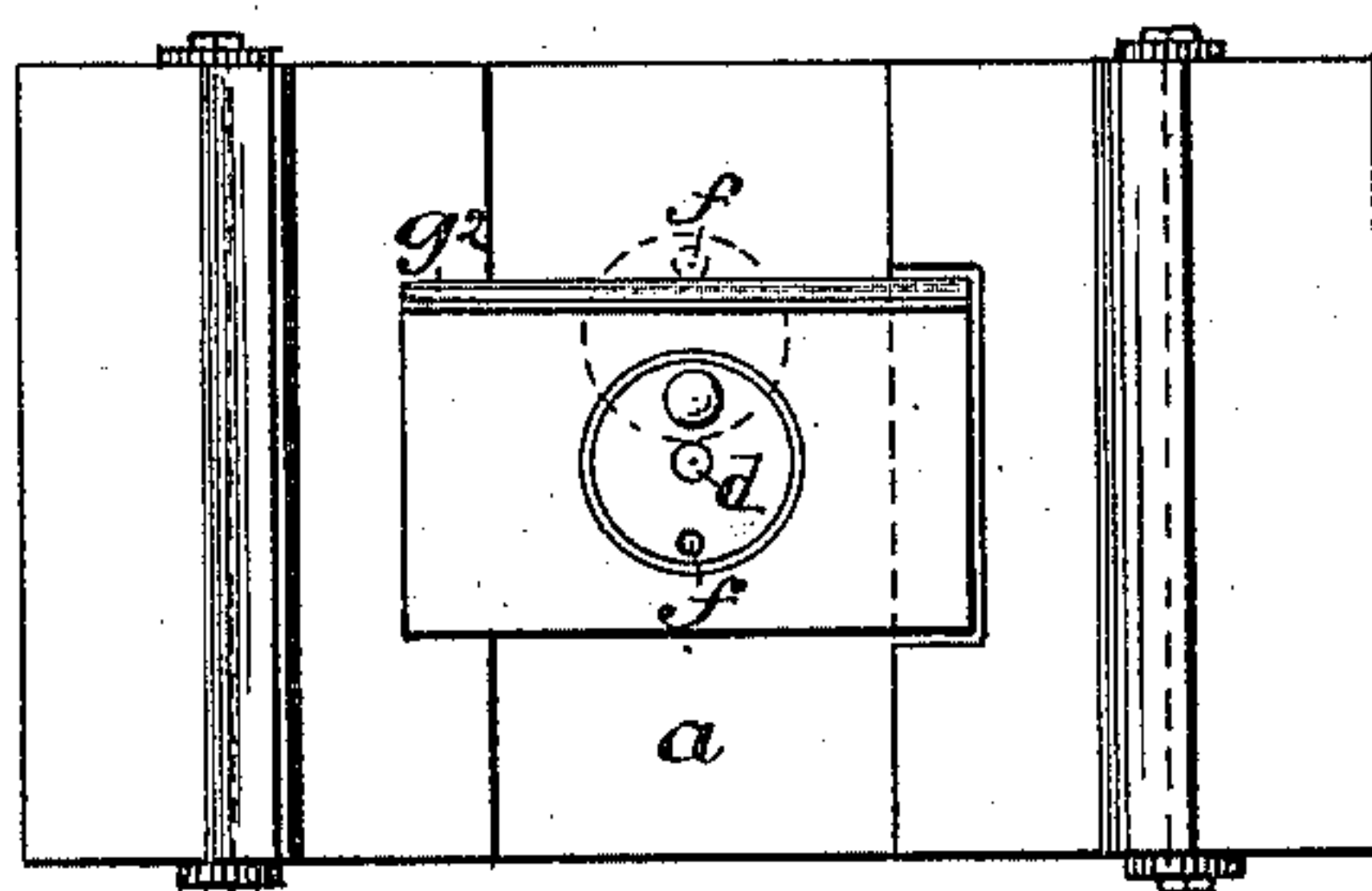


Fig. 10.

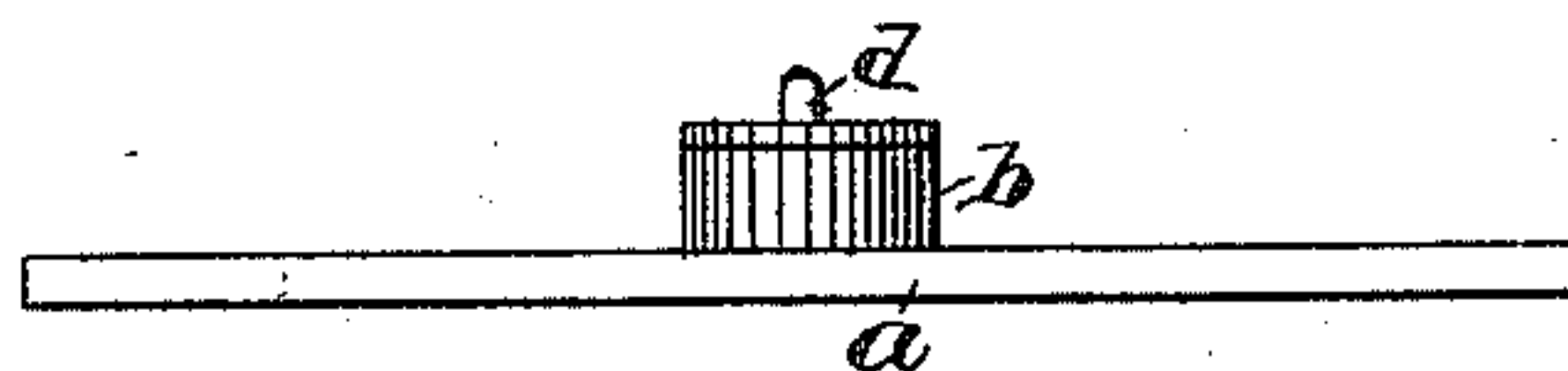
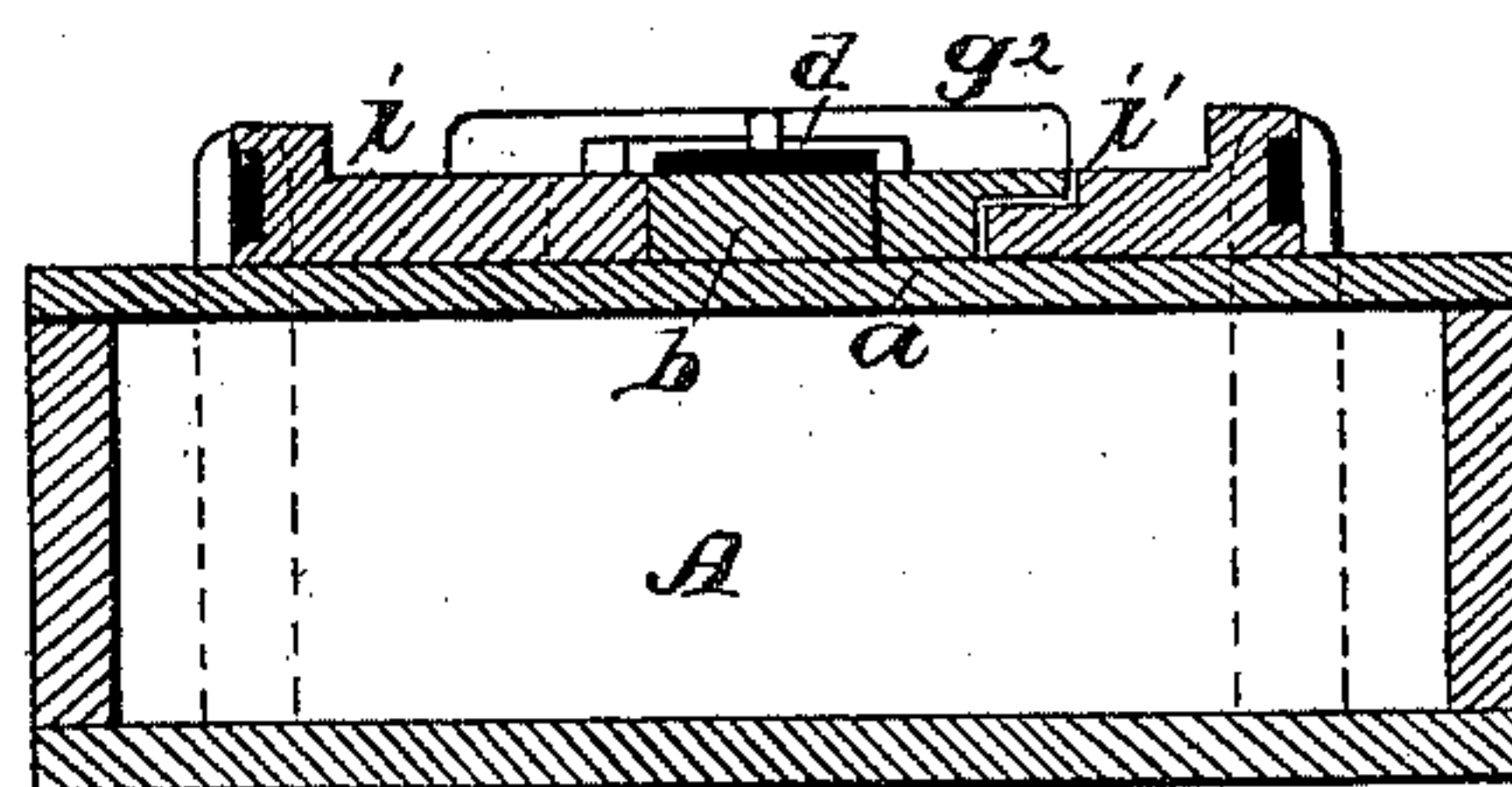


Fig. 11.



WITNESSES

Wm. J. Panner
C. V. Bell

INVENTOR,

Heinrich Lorentz,

By Raimund Ladd,

Attorneys.

(Model.)

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H. LORENTZ.

BOX FASTENER.

No. 301,135.

Patented July 1, 1884.

Fig. 12.

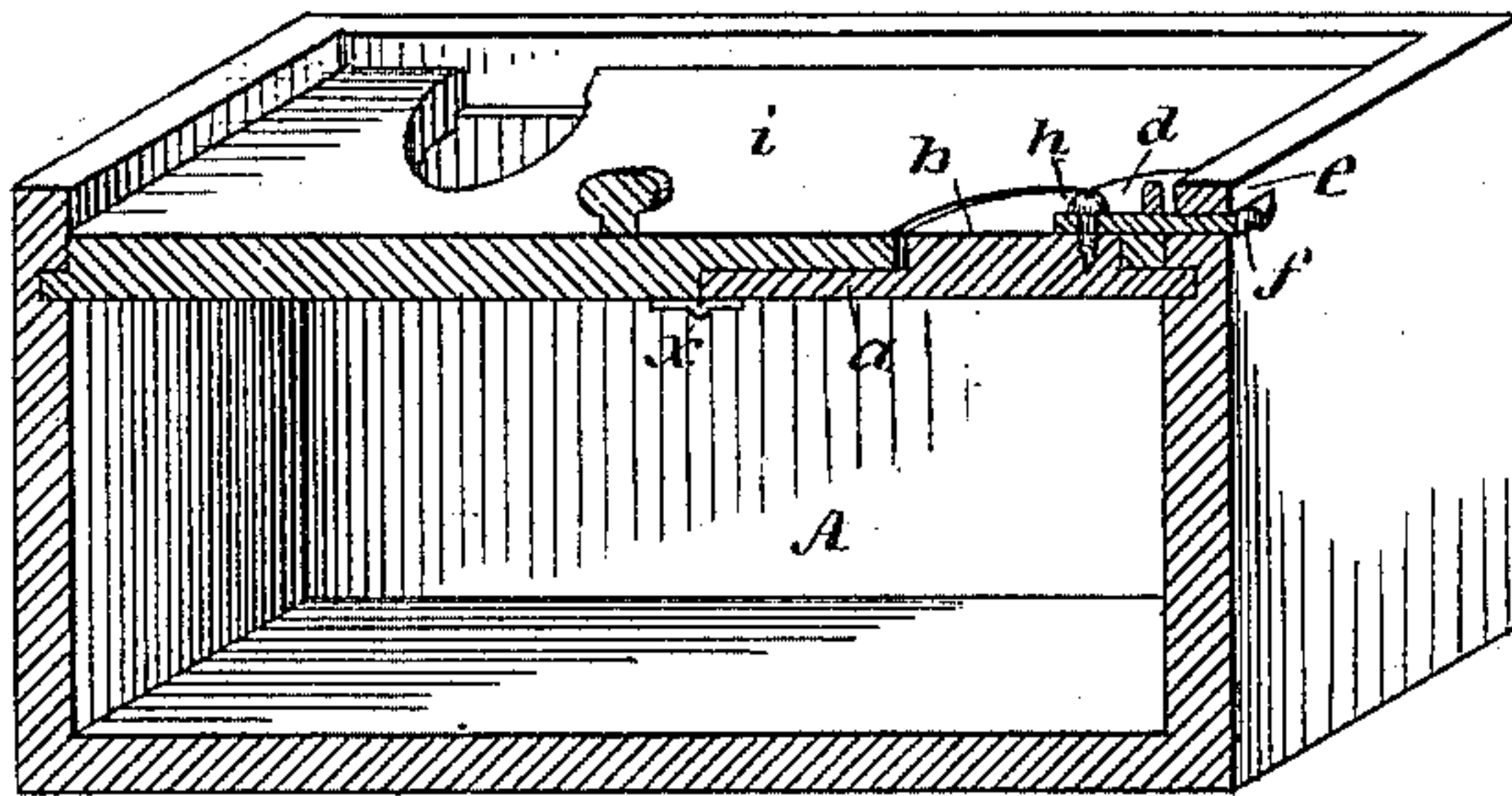


Fig. 13.

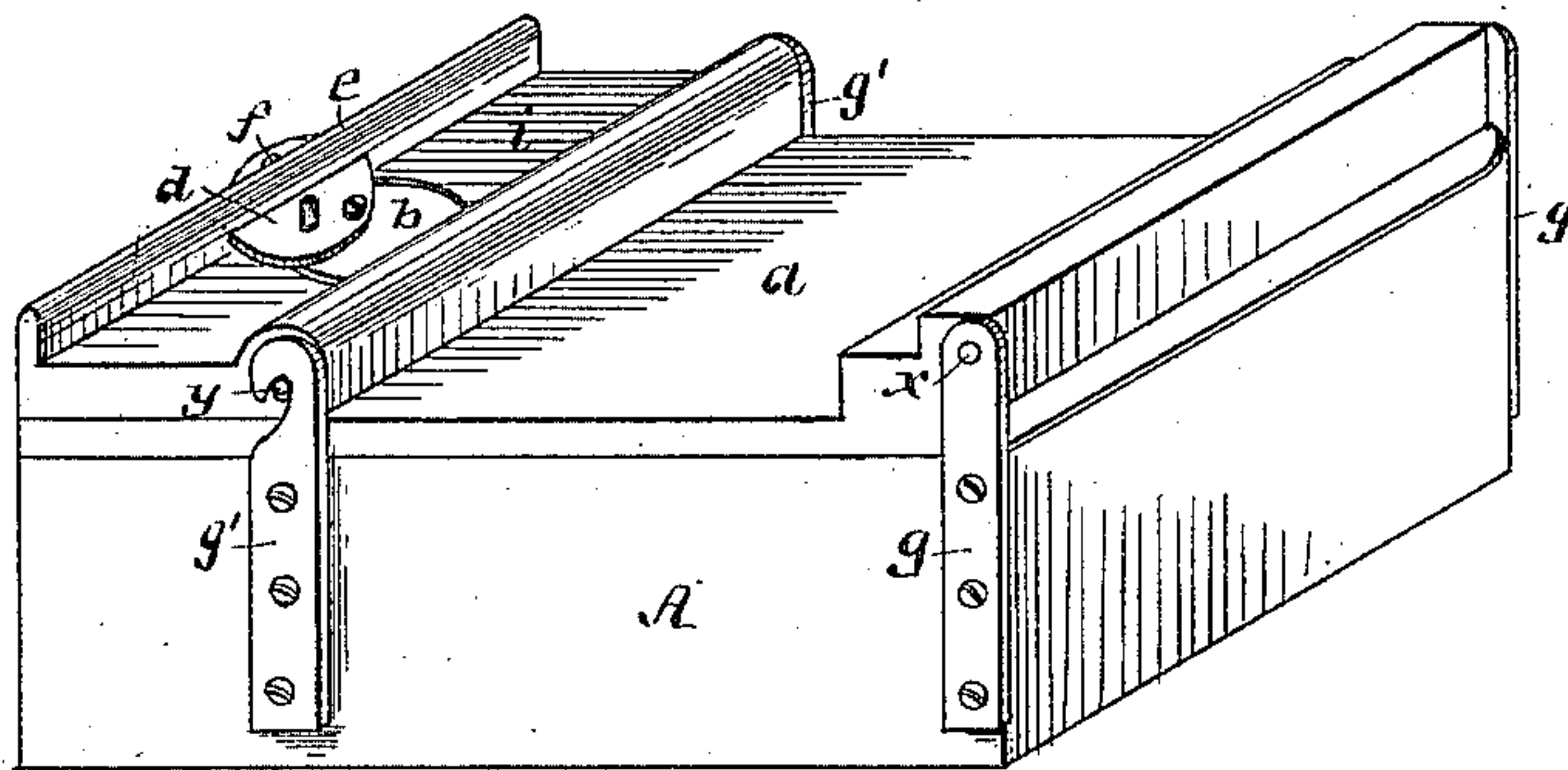
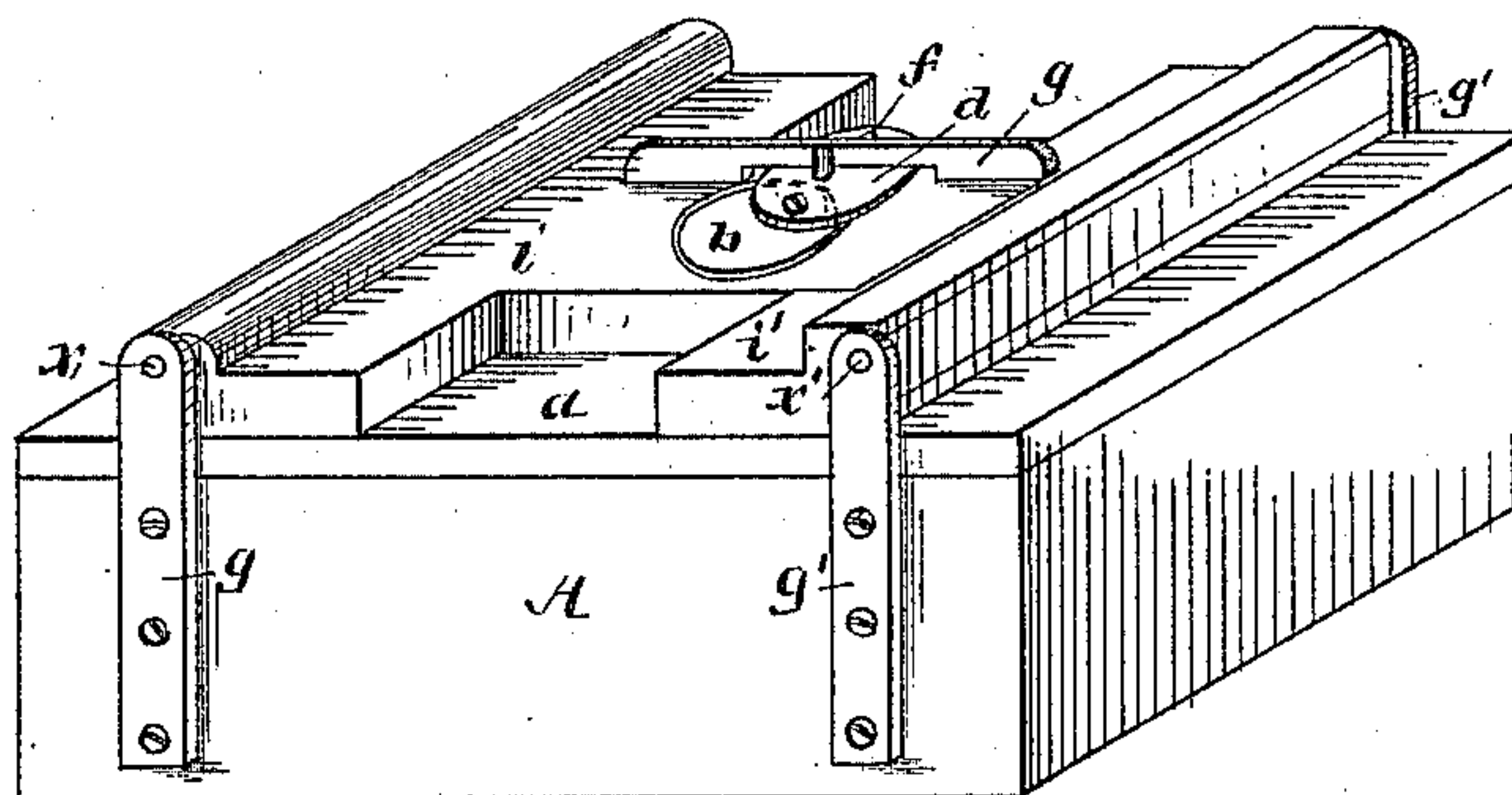


Fig. 14.



WITNESSES

C. J. Belk
Oscar Hauck

INVENTOR,

Heinrich Lorentz

By *Paine & Ladd*,
Attorneys.

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.