No. 892,747. PATENTED JULY 7, 1908.

A. LAWSON.

EQUALIZING DEVICE.

APPLICATION FILED APR. 3, 1908.

Fig. 1.

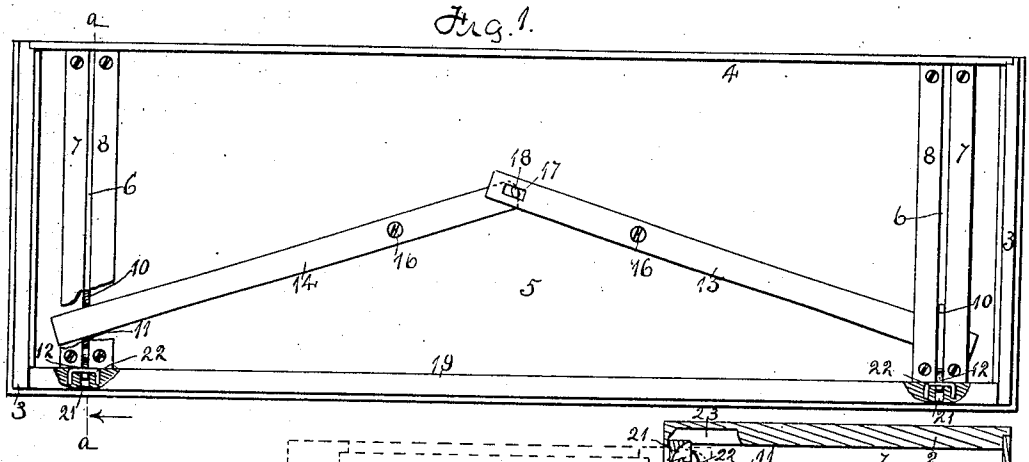



Fig. 4.

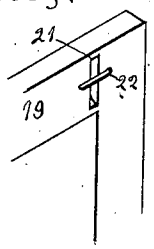



Fig. 5.

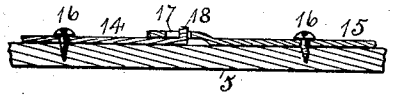



Fig. 6.

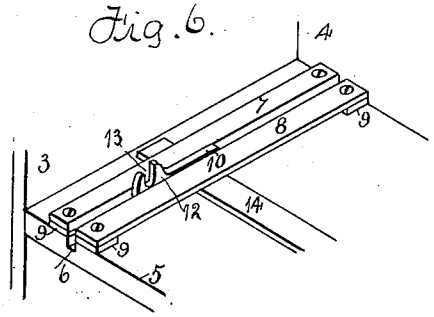



Fig. 2.

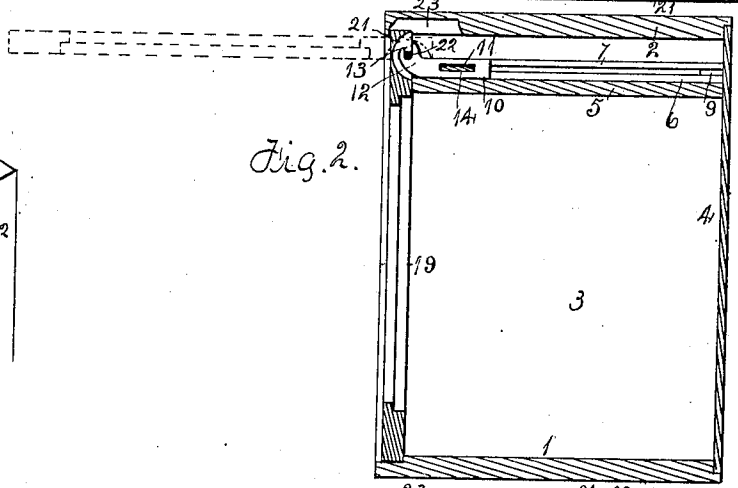
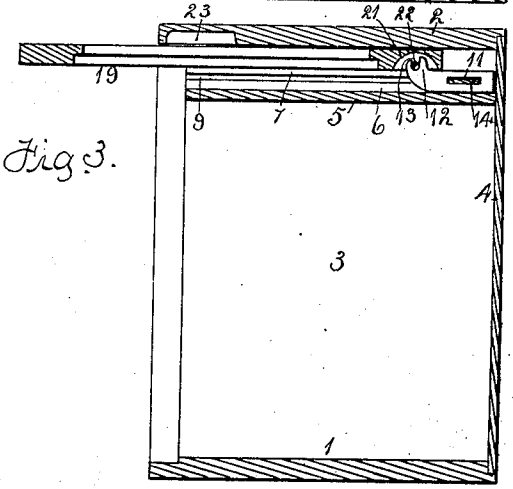



Fig. 3.

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Inventor:
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By A. O. Behel
Attis.

# UNITED STATES PATENT OFFICE.

ALBERT LAWSON, OF ROCKFORD, ILLINOIS.

## EQUALIZING DEVICE.

No. 892,747. Specification of Letters Patent. Patented July 7, 1908.

Application filed April 3, 1908. Serial No. 424,910.

*To all whom it may concern:*

Be it known that I, ALBERT LAWSON, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Equalizing Devices, of which the following is a specification.

The object of this invention is to construct an equalizing device for doors and drawers so that both ends will move in unison thereby preventing binding or cramping.

In the accompanying drawings. Figure 1 is a plan view of a case containing my improved equalizer, in which the top is removed. Fig. 2 is a transverse section on dotted line *a a* Fig. 1, in which the door is shown in dotted lines in a horizontal position. Fig. 3 is a similar section, in which the door is fully open. Fig. 4 is a perspective view of one of the upper corners of the door. Fig. 5 is a vertical section through the equalizing bars. Fig. 6 is a perspective view of a portion of one of the equalizing bars and its relation with other operative parts.

The case to which I have applied my improved equalizer may be of a solid structure or knock-down form, and in this instance comprises the bottom 1, top 2, ends 3 and back 4. Beneath the top 2 is located a shelf 5. The upper face of this shelf adjacent to its ends is formed with grooves 6 extending transversely of the shelf, and to the shelf adjacent to the grooves 6 are secured cleats 7 and 8 which are elevated on the end blocks 9, leaving a space between the cleats and shelf. Within the groove 6 and between the cleats of each end of the shelf is located a guide 10 formed with a slot 11, extending in the direction of the length of the guide, and having an upturned ear 12 formed with the vertical slot 13. To the upper face of the shelf are pivoted two equalizing bars 14 and 15 by the screws 16. These equalizing bars extend in the lengthwise direction of the shelf, and have their longer arms located in the slots 11 of the guides 10 and located beneath the cleats 7 and 8. The short arm of the equalizing bar 15 has a slot 17 extending in the direction of the length of the bar, and the short arm of the equalizing bar 14 has an upturned end 18, which is located in the slot 17 of the equalizing bar 15. This upturned end 18 being located in the slot 17 forms a connection between the equalizing bars 14 and 15. The equalizing bars being located in the slots 11 of the guides 10 hold the guides from displacement, but permitting their movement in the slots 6 between the cleats 7 and 8.

A door 19 is of a size to close the front of the case, and has its inner face at its upper edge, near the corners, each formed with a recess 21 across which is placed a bar 22 in staple form having its branches driven into the door. The bars 22 of the doors are located in the slots 13 of the guides 10, thereby suspending the door, and forming a pivotal connection between the door and the guides, and through the guides a connection is formed with the equalizing bars 14 and 15.

Fig. 2 shows the door in its closed position, and in dotted lines the door is shown raised into a horizontal position preparatory to being moved in under the top 2. The top is formed with a cut-away section 23 which permits the upper edge of the door to swing in opening or closing it. After the door has been raised into a horizontal position it may be moved beneath the top of the case as shown at Fig. 3. This movement will cause the guides 10 to move in the slots 6 of the shelf, and the movements of the guides will rock the equalizing bars 14 and 15 on their pivotal connections with the shelf. As the equalizing bars 14 and 15 are connected through the upturned end 12 in the slot 13, one cannot move faster than the other, which will insure both ends of the door moving parallel, thereby preventing binding or cramping of the door. The recesses 21 receive the ends 12 of the guides and the guides hold the door from longitudinal movement. After the door has been raised into a horizontal position it may be moved in a short distance which will move the guides in until the bars 22 can be disengaged from the ends 12 of the guides, and the door removed from the case, if it be necessary. The slot 17 will permit the upturned end 18 to move therein in order that the equalizing-bars may pass the dead center, or have a slidable connection which I have shown in my improvements in connection with a door of a case, it is evident that they might be applied to drawers for furniture as well.

I claim as my invention.

1. An equalizing device comprising a support, two bars pivotally connected to the support and having a slidable connection, guide-ways formed in connection with the support, guides in the guide-ways, a connection between the bars and guides, and a door or the like having a connection with the guides.

2. An equalizing device comprising a support, two bars pivotally connected to the support and having a slidable connection, guide-ways formed in the support, cleats located each side of a guide-way, a guide for each guide-way having a slot which receives the end of a bar, the bar located beneath the cleats, and a door or the like having a connection with the guides.

3. An equalizing device comprising a support formed with two guide-ways, two bars movably connected to the support and connected together, guides for the guide-ways having a connection with the free ends of the bars and each having a slotted upwardly projecting end, and a door or the like supporting bars for location in the slots of the guides.

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

ALBERT LAWSON.

Witnesses:
A. O. BEHEL,
E. D. E. N. BEHEL.