No. 881,492 PATENTED MAR. 10, 1908.

W. A. SCHILLER.

LID SUPPORT.

APPLICATION FILED JUNE 2, 1906.

Fig. 1.

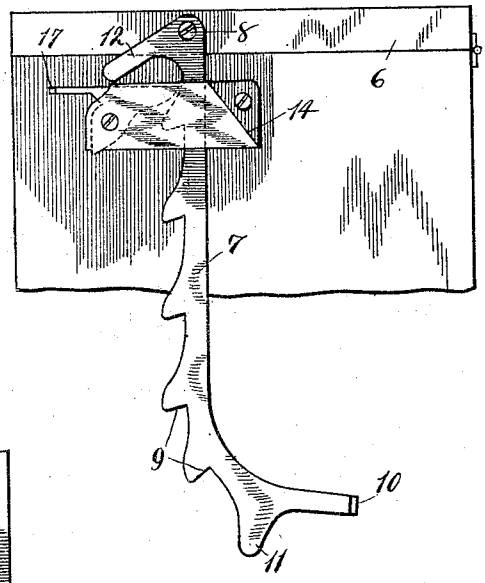
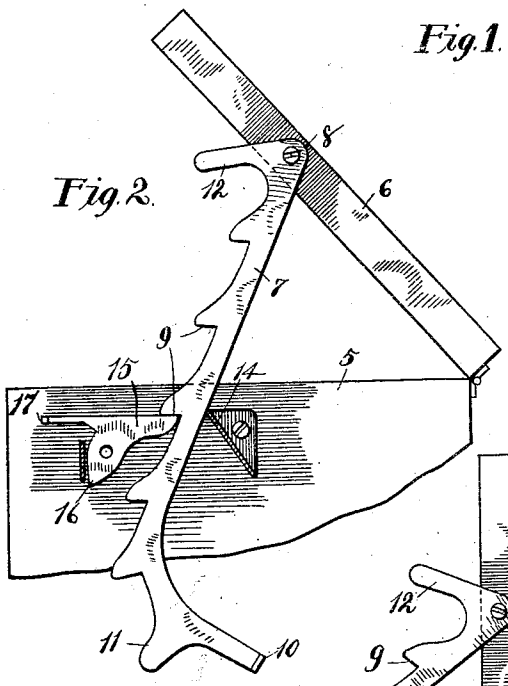


Fig. 2.



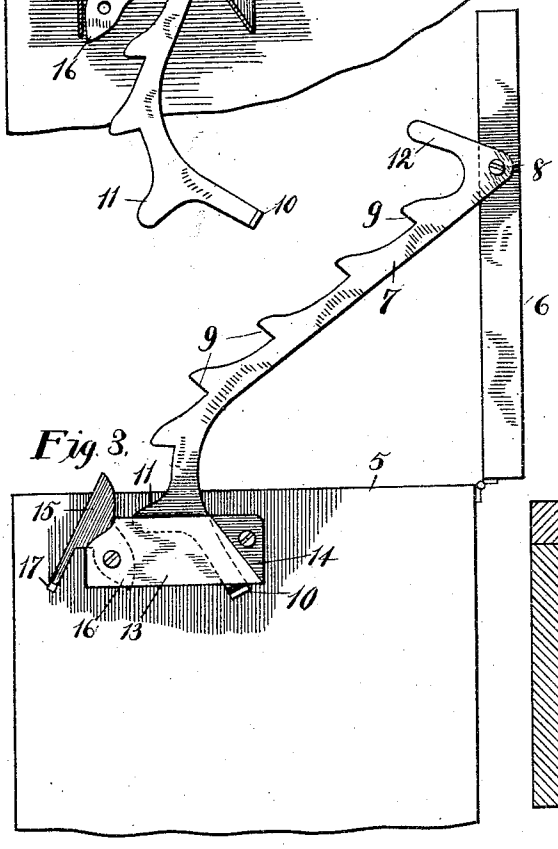
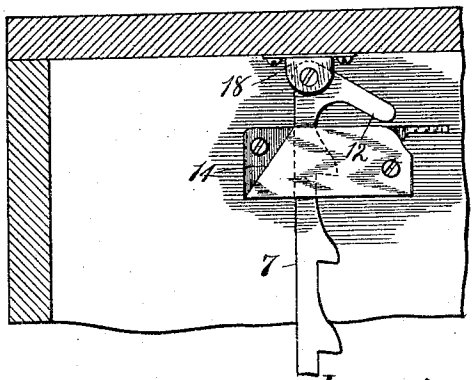


Fig. 3.

Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM A. SCHILLER, OF CHICAGO, ILLINOIS.

LID-SUPPORT.

No. 881,492. Specification of Letters Patent. Patented March 10, 1908.

Application filed June 2, 1906. Serial No. 319,942.

To all whom it may concern:

Be it known that I, WILLIAM A. SCHILLER, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lid-Supports, of which the following is a specification.

This invention relates to devices for supporting hinged covers or lids for boxes, trunks or other articles, and the especial object of the improvements which form the subject matter of this application is to produce an adjustable device that will effectively support the lid at different angles and that will automatically lock and unlock itself by merely moving the lid.

General objects of economy of construction and simplicity of operation are attained by my invention as will be readily apparent.

In the accompanying drawing which forms a part of this application:—Figure 1 shows in elevation my invention as applied to a box and its lid; Fig. 2 shows in elevation my device in its lid supporting position; Fig. 3 shows in elevation the relative position of the parts when the brace is unlocked; Fig. 4 is a fragmentary detail showing a different method of connecting the supporting brace with the lid.

Referring to the details of the drawing, 5 represents so much of a box as is necessary to illustrate my invention, and 6, the lid which is hinged on the box.

7 represents the brace which is formed from a single piece of thin metal cut out in the shape shown, and provided with the teeth 9 along one edge, the outwardly bent lower end 10, the finger 11 near the lower end and the extension 12 at the upper end. This brace is loosely pivoted on a screw 8, which as shown in Figs. 1, 2 and 3, is secured in the side edge of the lid, and as shown in Fig. 4, is secured in a depending bracket 18 on the under side of the lid.

Pivoted on the side of the box near its upper edge is a latch 10 which consists of a metal plate formed with a rearward portion adapted to engage the teeth 9, with a lower extension 16 and with a forward extension 17 the end of which is slightly offset to form a suitable grasping portion.

Placed over the latch and secured to the side of the box, is a plate 13 which is bent to form a housing for the latch and a slideway for the brace, one bend forming an inclined shoulder 14 and the other bend forming a stop for the latch when the latter is in its operative and inoperative position, as shown in Figs. 2 and 3. The latch is pivoted off its center so that the rear portion overbalances the extension 17 and thus serves to normally retain the latch in operative position.

The construction and relative arrangement of the brace and latch is such that, as the lid 6 is raised, the curved upper side of the teeth 9 bearing against the curved lower edge of the latch partially turn the latch on its pivot, when the lid being released by the person raising it, the straight side of the teeth coming in contact with the upper straight edge of the latch, will cause the latter to drop into its locking position and thus hold the brace and its lid against downward movement, the angle at which the lid is held depending upon the position of the notch or tooth engaged by the latch.

If it be desired to release the latch, the lid can be raised to a vertical position as shown in Fig. 3, whereupon the finger 11 striking the under side of the latch will trip the latter and throw it upwardly and forwardly so that its greater weight will be on the front side of its pivot thus holding the latch in the position shown in Fig. 3. In this position, it will be seen that the brace teeth are entirely disengaged from the latch and that such condition will prevail while the lid is being closed, until the end of the extension 12 strikes the end of the latch, whereupon the latter will be restored to its normal or operative position.

It will be apparent that the rearwardly bent lower portion of the brace will strike against the inclined shoulder 11 of the housing plate and thus cause the finger to contact with the latch and throw the latter to the position indicated in Fig. 3.

This device may be connected with the inside or the outside of the box to which it is attached, and various changes may be made in the details of construction and manner of attaching. I therefore do not wish to be limited to the precise details shown, but

What I claim, is:—

1. A supporting device consisting of a pivoted brace having downwardly extending projections at its upper end and near its lower end and with teeth intermediate said projections, and a pivoted gravity operating latch adapted to engage said teeth to hold the brace in its adjusted positions and to be engaged by said downwardly extending pro-

jections to be thrown into operative and inoperative positions.

2. A supporting device consisting of a pivoted brace having downwardly extending projections at its upper end and near its lower end, a lateral projection at its lower end, and teeth intermediate said downwardly extending projections, a pivoted latch member adapted to engage said teeth to hold the brace in its adjusted positions and to be engaged by said downwardly extending projections to be thrown into operative and inoperative positions, and means engaging said lateral projection to limit the movement of said brace in one direction.

3. A support for a hinged device, consisting of an adjustable brace pivotally connected with said device and having teeth along one edge and a lateral projection at its lower end, and formed with extensions, a pivoted latch adapted to engage said brace and hold it in its adjusted positions, and to be engaged by said extensions, and a housing for said latch, said housing forming a stop for said latch and a slideway for said brace, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM A. SCHILLER.

Witnesses:

CHAS. F. E. SCHILLER,

M. A. MILORD.