No. 689,315. Patented Dec. 17, 1901.

J. A. KRUEGER.

DISPLAY LID FOR BOXES.

(Application filed Mar. 27, 1901.)

(No Model.)

Fig. 1.

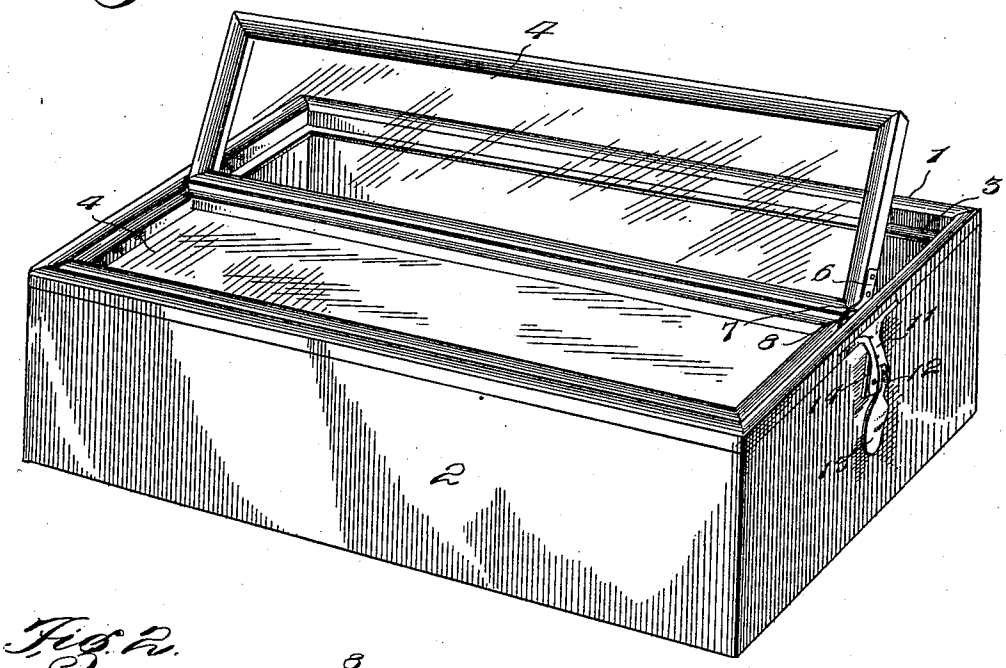


Fig. 2.

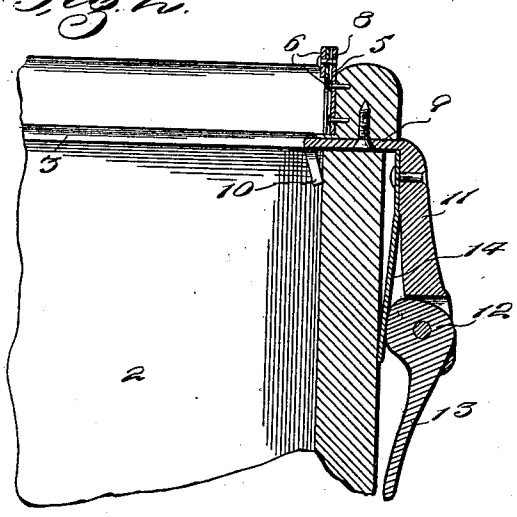


Fig. 3.

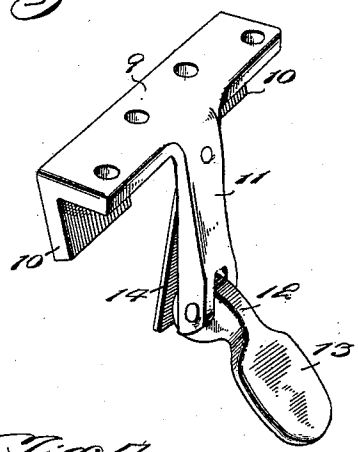
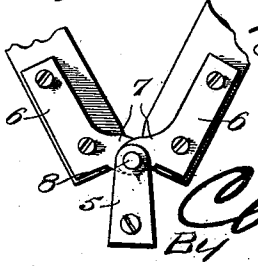


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

JULIUS A. KRUEGER, OF MICHIGAN CITY, INDIANA, ASSIGNOR OF ONE-HALF TO LOUIS J. HARTWIG, OF MICHIGAN CITY, INDIANA.

DISPLAY-LID FOR BOXES.

SPECIFICATION forming part of Letters Patent No. 689,315, dated December 17, 1901.

Application filed March 27, 1901. Serial No. 53,120. (No model.)

To all whom it may concern:

Be it known that I, JULIUS A. KRUEGER, a citizen of the United States, residing at Michigan City, in the county of Laporte and State of Indiana, have invented a new and useful Display-Lid for Boxes, of which the following is a specification.

This invention relates to boxes, and has for its object to provide an improved display-lid which is made removable, so as to be applicable to different boxes of the same size, and arranged to give convenient access to the contents of the box, as well as to display said contents. It is furthermore designed to arrange for connecting the lid to a box so as to prevent accidental displacement thereof and at the same time permit of the convenient removal of the lid for application to another box.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a box provided with the improved lid or cover. Fig. 2 is an enlarged detail sectional view taken through one end of the lid and the adjacent end portion of the box to show the detachable connection therewith. Fig. 3 is a detail perspective view of the clamp carried by the lid and for engagement with the box. Fig. 4 is a detail elevation of one of the hinge connections for the doors of the lid.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

Referring to the drawings, 1 designates a marginal frame, shown as rectangular in shape, so as to rest evenly upon the marginal edge of the open upper side or top of a cracker or other box 2. The inner edge of this frame is rabbeted or provided with an inner marginal flange 3, that is flush with the under side of the frame, so as to form an extended base therefor to lie upon the edge of the box. It will be understood that the outer margin of the frame is flush with the outer margin of the box.

The interior of the frame is covered by means of the opposite glass doors 4, which are equal in size, so as to close respective halves of the frame, and normally lie upon the marginal flange 3 as a stop to limit the inward or downward movement thereof, the doors being free to be swung outwardly, as indicated in Fig. 1, to give access to the interior of the box without removing the entire lid or cover.

It will be understood that the inner edges of the doors lie in the longitudinal axis of the frame, and the corresponding ends thereof have a mutual hinged connection, as best shown in Fig. 4 of the drawings. This connection comprises a fixed plate member 5, secured to the inner side of the adjacent end of the frame and above the flange, and the opposite movable plate members 6, which are secured to the respective ends of the doors and have terminal laterally-offset ears 7, that are overlapped mutually and also with the upper end portion of the fixed member, there being a common pivotal connection or pin 8 passed through all of the members, thereby connecting the doors to the frame and forming a hinged mounting therefor.

For connecting the frame to the box there is provided a clamp consisting of a bracket having a flat attaching-plate 9 secured to the under side of one end of the frame and flush therewith and provided with opposite terminal ears or projections 10, which depend from the plate and incline inwardly and transversely of the plate. At the middle of the outer edge of the plate there is a pendent arm 11 to lie at the outer side of the box and having its lower extremity bifurcated for the pivotal reception of a cam 12, having a handle or finger-piece 13. A plate or leaf spring 14 has its upper end only secured to the inner side of the arm, at the top thereof, with the opposite free end of the spring lying in frictional engagement with the inner edge of the cam,

so that said spring may be moved inwardly and outwardly by manipulation of the handled cam.

In applying the lid to a box the handle of the cam is thrown upwardly and the frame fitted to the upper side of the box, with the projections or ears 10 lying at the inner side of one end of the box and the arm 11 upon the outer side thereof, after which the cam-handle is forced downwardly, thereby pressing the spring against the side of the box and clamping the latter firmly between the cam and the projections 10, the inclination of the latter causing the free ends thereof to bite into the inner side of the box, and thereby form a firm connection for the frame. When thus applied to a box, the open top thereof is effectually closed against dust and foreign matter, the contents being displayed through the glass doors and the latter being movable upon their hinges to give access to the interior of the box without removing the entire lid.

It will be observed that the frame is the part that is secured to the box, the doors being free for movement upon the frame without loosening the fastening thereof, and the frame is interchangeable from one box to another by reason of the clamp to embrace one edge of the box.

What is claimed is—

1. A removable lid or cover, comprising a marginal frame, a movable door mounted thereon and closing the interior thereof, and a box-engaging clamp secured to the under face of one side of the frame, and having a pendent projection, and an opposite pivotal cam coöperating therewith, the projection and clamp being constructed to embrace opposite sides of the edge of a box.

2. A removable lid or cover for a box, having a box-engaging clamp, comprising an attaching-plate applied to the under face of the lid, and having an inner pendent ear or projection, and an opposite outer pendent arm, the outer extremity of which is bifurcated, a handled cam pivoted within the bifurcation, and a leaf-spring at the inner side of the arm, the inner end of the spring being connected to the arm, and the free end thereof resting frictionally against the marginal edge of the cam.

3. As a new article of manufacture, a box-engaging clamp for lids and covers, comprising an attaching-plate having perforations for the reception of fastenings, opposite terminal lateral projections at one edge of the plate, an intermediate lateral arm at the opposite edge and extending in the same direction as the projections, the outer end of the arm being bifurcated, a handled cam pivoted within the bifurcation, and a leaf-spring having its inner end secured to the inner side of the inner end of the arm and its opposite free end portion lying frictionally against the marginal edge of the cam.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JULIUS A. KRUEGER.

Witnesses:
I. I. SPIRO,
FRED PETERS.