

No. 840,277.

PATENTED JAN. 1, 1907.

J. H. WILLIAMSON.  
BOX.

APPLICATION FILED AUG. 28, 1905.

Fig. 1.

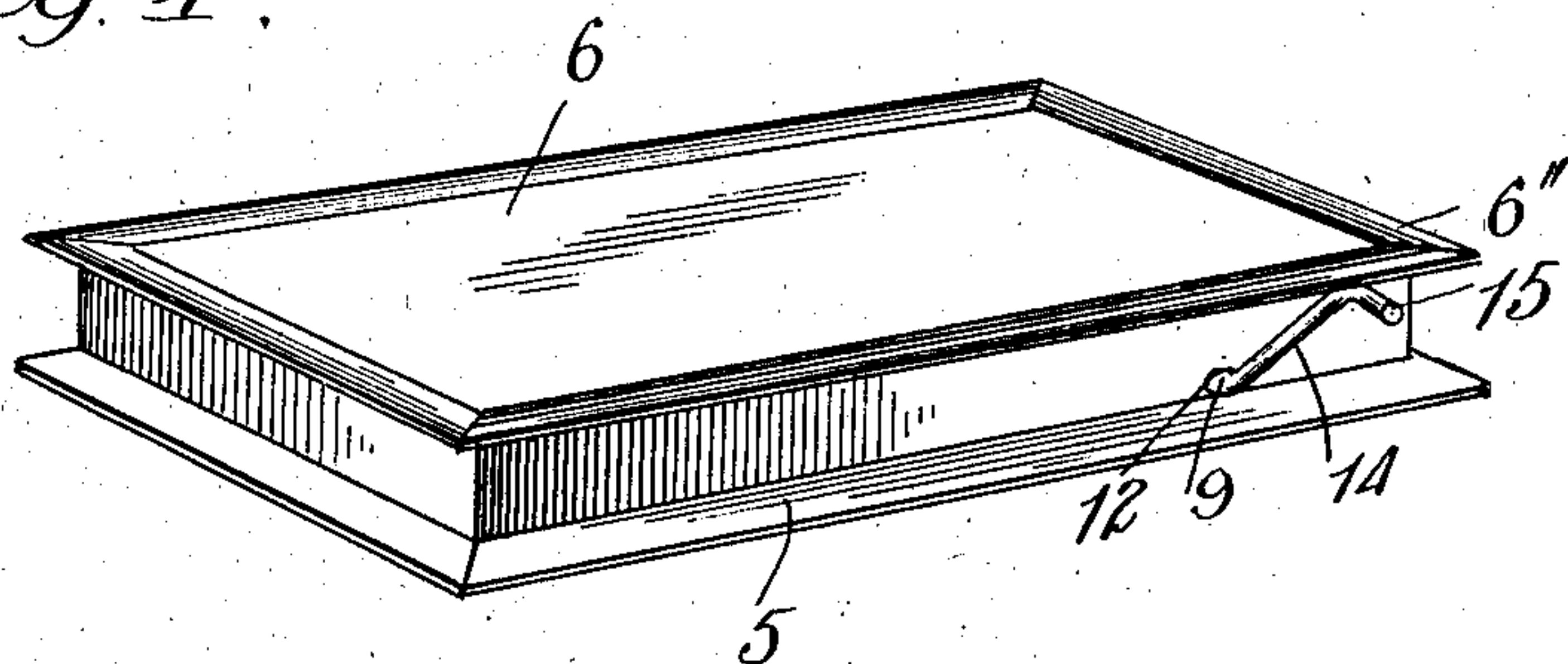


Fig. 2.

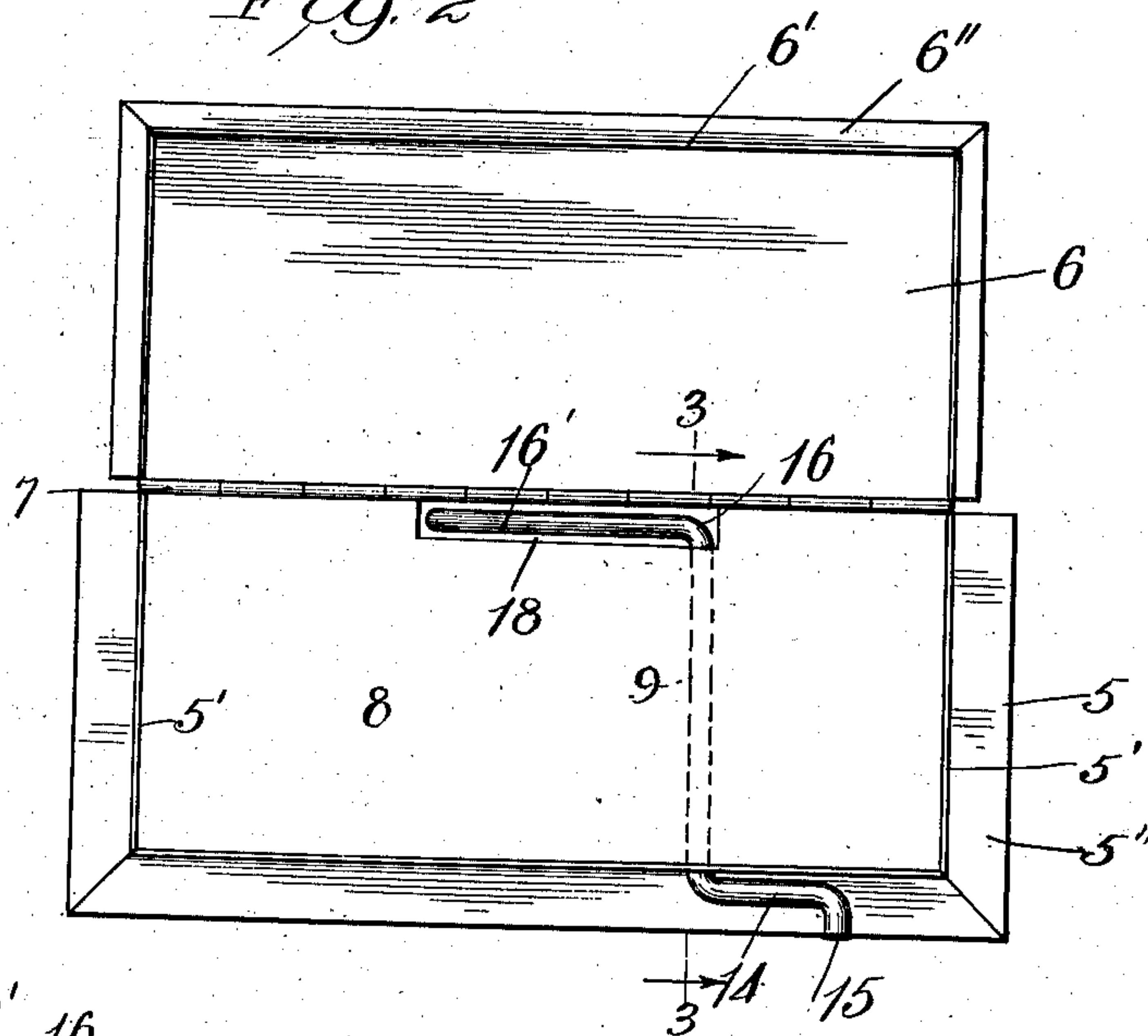


Fig. 4.

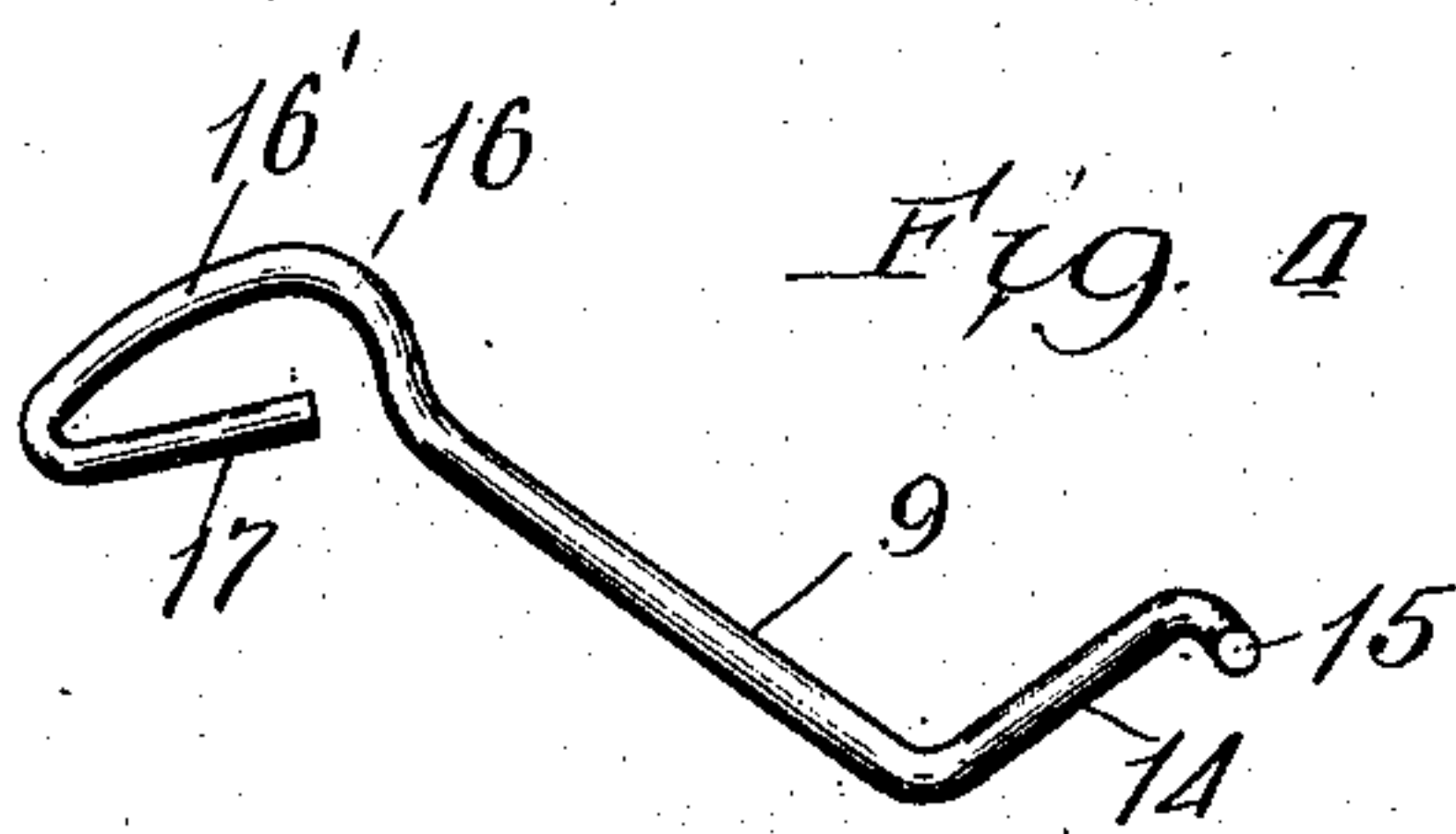
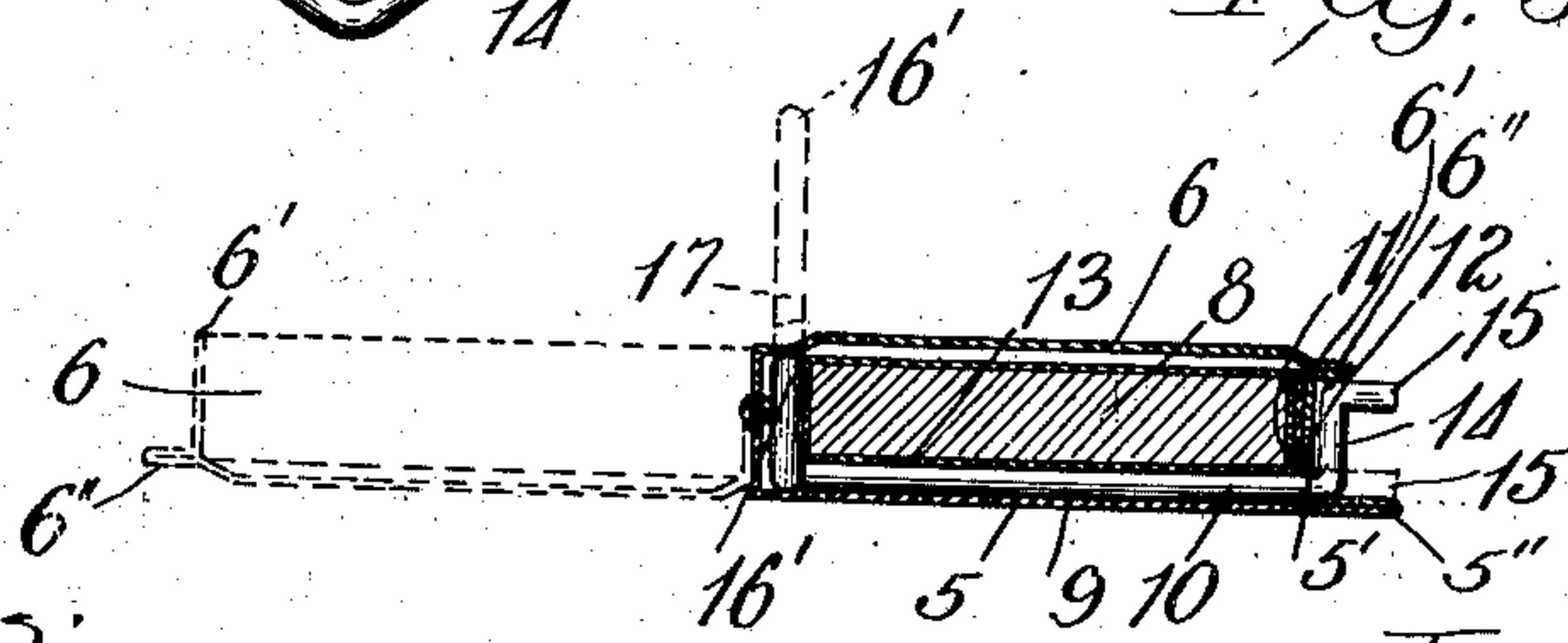


Fig. 3.



Witnesses:

Harry R. L. White

Ray White

Inventor:

Joseph. H. Williamson

By Forre Bain and May Atty's,



# UNITED STATES PATENT OFFICE.

JOSEPH H. WILLIAMSON, OF CHICAGO, ILLINOIS.

## BOX.

No. 840,277.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed August 28, 1905. Serial No. 275,999.

*To all whom it may concern:*

Be it known that I, JOSEPH H. WILLIAMSON, a 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 Boxes, of which the following is a specification.

My invention relates to improvements in boxes, and has for one of its salient objects to provide a box of the type having a hinged cover overlapping when closed the body or base, wherein means are provided for preventing the undue closure of the box—that is to say, the forcing of the lid farther down upon the box-body than it is intended to go—with a consequent wedging of the lid or cover in such abnormal position.

A further object of my invention is to provide by such means for preventing the wedging of the cover upon the base, a construction whereby the box is made strong enough to resist great pressure applied downward upon the top thereof without crushing.

Another object of my invention is to provide a box of the character described wherein the body and cover are each made of a single piece and wherein one or both of said parts is provided with a flat projecting lip or flange extending beyond the confines of the box and serving, among other functions, to afford convenient finger-holds.

Yet another object of my invention is to provide, in combination with a box of the character described, means whereby the box may be opened without touching the box; and a further object of my invention is to provide a box and opener construction wherein the individually advantageous features specified cooperate in combination to provide a novel and advantageous box structure.

In the drawings, wherein I have illustrated a convenient embodiment of my invention, Figure 1 is an isometric perspective of the complete box. Fig. 2 is a plan view of the same in open position. Fig. 3 is a transverse section through the box, and Fig. 4 is a detail of the box-opening lever.

Throughout the drawings like numbers refer to like parts.

5 indicates in general the box base or body, and 6 the lid or cover hinged thereto, as at 7, by any suitable hinge construction.

I prefer that the body 5 of the box be constructed of a single piece of material, preferably metal, blanked out and suitably bent or formed to constitute the flat bottom, the ver-

tical sides 5' 5', and a folded lip or flange 5'', projecting outwardly from the box at right angles to the vertical sides thereof and extending along one or more sides of the box—for instance, along three sides, as shown. I also prefer that the top should be constructed in like general manner, being provided with the top part of suitable configuration in cross-section, the vertical side walls 6' 6' and the folded projecting lip or flange 6'', preferably of less width than the lip 5'' of the base.

One or more of the vertical sides of the base or lid, or both, is of such height as to contact when the box is closed with a rigid part of the opposing member extending at right angles thereto, so that strain upon the closed box or wedging of its lid upon its base is positively prevented. Specifically, I prefer that one or more vertical sides of the cover and also one or more vertical sides of the base be so extended that the sides of the one member coact when the box is closed with the projecting flange of the other, while the vertical sides of such other member coact with the horizontal surface within the confines of the first said member. In the particular embodiment shown I have illustrated the box as so constructed that all of the free vertical sides of the base are adapted and arranged for contact throughout their length with the top of the cover 6, while the vertical sides of such cover are disposed for contact with the rigid horizontal lip 5'' of the base. It will be obvious that such construction lends to the box great strength to resist crushing strains.

While such box as that above described is widely applicable, I have found it to be particularly well adapted for the reception of inking-pads such as are used to ink hand-stamps, as it is easy of manipulation and never wedges shut.

It is well known to users of hand-stamps that the handling of inking-pads is apt to result in the soiling of the fingers of the user, as the ink is apt to get smeared upon the box-lid and the fingers will sometimes slip from the cover or the base member onto the pad-surface. With a view to overcoming this objection and supplying a simple means for effecting the opening of ink-pad and other boxes or receptacles I preferably provide means extending to the exterior of the box for positively opening the box without necessarily touching the box proper, such means comprising in general a lever having one end



projecting from the box in such position as to be readily accessible and its other end disposed for coaction with the box-lid to open the same. In the specific construction shown 5 8 indicates an inking-pad located, as usual, in the base of the box, and 9 indicates in general the box-opening lever. Preferably said lever comprises a shank 10, extending transversely through the box from front to back 10 thereof through the aperture 11 in the box-body, the recess 12 in the front edge of the lid, and the recess 13, formed in the bottom of the pad 8. At its front or exterior end the shank 10 is connected to or made integral 15 with a handle 14, preferably having a finger-piece 15 at its end, and at its rear end said shank is connected to or made integral with a lid-elevating element 16, preferably comprising a cam-shaped part 16' and a counterweight part 17. The elevating-element part 20 16 is disposed in a suitable recess 18, formed therefor in the pad 8, and when in normal position rests with its counterweight part 17 in contact with the bottom of the box and the 25 crest or highest arched portion of its cam member 16' contacting with the cover 6, adjacent its hinge 7, the handle 14 at the other end of the shank 10 being in raised position. If now pressure be applied to the handle 14 30 to depress the same, the shank 10 is oscillated and the extended end of the cam member 16' is elevated, exerting a thrust upon the lid or cover 6 adjacent its hinge, and thereby lifting the lid. If the handle 14 be sharply depressed, the lid is thrown to open position 35 with a quick movement. It will be apparent, further, that the front extension 5" of the box serves to afford a wide bearing extending beyond the pivotal point of handle 40 14 and serving to prevent the box from tipping when pressure is applied to the handle 14. Also, it will be noted, the construction of the box heretofore described insures that the box may be freely opened, and it will be obvious that the provisions of means for preventing the sticking of the box-cover is important in a construction involving an opening-lever, for the reason that the point of application of power of the opening-lever is so 50 close to the hinge that should the box-cover become wedged a very considerable force would have to be applied to the opening-handle to force the disengagement of the parts. It will thus be seen that the various advantageous features of my construction coact to mutual advantage; but it will also be apparent that the opening-lever might be used in conjunction with any form of hinged box without the auxiliary features described and 60 that the box structure is advantageous considered without reference to the opening-lever. Furthermore, while I have described in some detail a specific embodiment of my invention, which I deem to be valuable, it will 65 be apparent that modifications might be

made in the specific structure both as to box construction and lever arrangement without departure from the spirit and scope of my invention as viewed in its broader aspects.

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

1. In a box, a base member, a cover member hinged thereto, and a lever, pivoted on said base member adjacent the bottom thereof and having a handle portion extending to the exterior of the box, and another portion within the box coacting with the cover adjacent the hinge, whereby the depression of the handle portion effects the opening movement of the cover. 75 80

2. In a box, a base member, a lever extending within and without the box arranged to be operated from without the box to raise the cover, and a forwardly-projecting part upon said base member constituting an extension-bearing to prevent the box from tipping when the exterior portion of the lever is depressed. 85

3. In a box, a base member, a cover member hinged thereto, a lever extending through the side of the box, comprising a handle portion arranged without the box, a shank portion traversing the box, and an elevating element disposed to coact with the cover adjacent its hinge and arranged to raise said cover when the handle portion is depressed. 90 95

4. In a box, a base, a cover hinged thereto, and a cam-lever comprising a shank 10 traversing the box at the bottom thereof, a handle portion 14 standing at an angle to horizontal, and an elevating cam portion 16 disposed adjacent the cover-hinge. 100

5. In a box, a base member, a hinged cover member a lever comprising a shank 105 traversing the box at the bottom thereof and extending to the exterior thereof at the front of the box, a handle without the box, and a cam member within the box adapted for coaction with the cover adjacent its hinge to raise the same when the handle is depressed, said member being heavier than the handle member. 110

6. In a box, a base member, a cover member hinged thereto along one side, the side of one of the members, opposite the hinge, being arranged to closely overlies the corresponding side of the other member, and the side of the underlying member being provided with a substantially horizontal projection arranged to receive the edge of the overlying side of the other member, and a lever extending within and without the box, having a handle portion without the box, a shank portion traversing the box and an elevating element disposed to coact with the cover adjacent its hinge and arranged to raise the cover when the handle portion is depressed. 115 120 125

7. In a box, a base member comprising vertical sides, and a horizontal bottom, ex- 130



tended along one of the sides in a horizontal  
plane beyond the confines of the vertical side  
portions to form an extension of the box-bot-  
tom, and a cover member, comprising a top  
5 portion, and a side member at substantially  
right angles thereto, arranged when the box  
is closed to overlie a side of the base member  
and to effect contact along its edge with the  
bottom extension of the base member afore-  
10 said, said cover member being hinged to the

base member along another side, whereby  
when the box is closed wedging of the base  
and cover members together is positively  
prevented.

In testimony whereof I hereunto set my 15  
hand in the presence of two witnesses.

JOSEPH H. WILLIAMSON.

In presence of—

L. L. MILLER,  
FORÉE BAIN.