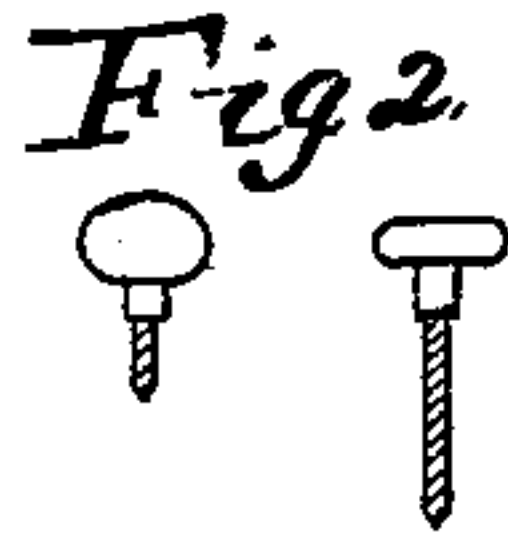


W. D. HARRISON.  
BOX LID.

Patented Sept. 2, 1890.



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# UNITED STATES PATENT OFFICE.

WILLIAM D. HARRISON, OF PINE BLUFF, ARKANSAS, ASSIGNOR OF ONE-FOURTH TO JOHN O. HARRISON.

## BOX-LID.

SPECIFICATION forming part of Letters Patent No. 435,541, dated September 2, 1890.

Application filed April 25, 1890. Serial No. 349,539. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM D. HARRISON, a citizen of the United States, residing at Pine Bluff, in the county of Jefferson and State of Arkansas, have invented certain new and useful Improvements in Box-Lids; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to box-lids; and it consists in the novel construction and arrangement of its parts.

Figure 1 is a perspective view of a box, showing my invention attached thereto. Figs. 2, 3, 4, and 5 are detail views.

My invention is described as follows: The lid is composed of an upper part A and a lower part B. The upper part consists of the side pieces 1, end pieces 2, glass 3, and metal spring (indicated by the dotted lines 4) sunk into grooves in the side pieces 1, which constantly keeps the lower edge down against the surface of the cylindrical rod C. The lower part B is exactly similar to the upper part, having the corresponding side pieces 1, the end pieces 2, glass 3, and spring 4. The said upper and lower parts are united by proper hinges D, which may be constructed as follows: I take a piece of sheet metal and cut away a part from both sides 5 and 6, leaving a neck 7, Fig. 4, which is perforated to receive the pivot ends 8 of the rod C, and then said two sides are bent around the free ends of the end pieces 2 of said upper and lower parts, part of the wood having been first cut away, so that the outer surface of the said hinges will be flush with the outer surface of said pieces. A recess 9 is cut in each end of said rod, and in said recess is wound a spiral spring 10, one end being fastened under one part of the said hinge and the other end under the other part of said hinge, so that the upper part of said lid is held down to said box by said springs, or the said hinges D may consist of two pieces of sheet metal 11, Figs.

3 and 5, having the upturned ears 12, in which case the said hinge is put on the under part of the said upper and lower parts 2, part of the wood having been first cut away, so that the outer face of the hinge will be flush with the outer surface of the wood, and the pivots 8 are made as long as the said hinges are wide, and the said spiral springs are wound around said pivots and their ends secured under the plates 11. To each end of the upper part of said lid is secured by bolts E two sheets of metal F. Said sheets are one-fourth of a circle, each having the upper circular slot  $f$ , with the  $L f'$ , and the straight slot  $f^2$ , with the  $L f^3$ . Said quadrant-sheets are secured to the ends of the box by means of headed bolts  $g$  and  $g'$ . These bolts are so constructed and so situated that the said quadrant is allowed to move back and forth with the upper part of said lid, said bolts sliding in said slots, and when the lid is back to an angle of ninety degrees said bolts catch in said  $Ls' f' f^3$ . These quadrants may be put on the inside of the box or may run in a slot cut or made in the body of the box; but in my present model they are put on the outside of the box, and answer well the purposes for which they are intended—that is, to keep the lid open when desired and to keep the crackers, fruit, or whatever else may be in the box from falling out. The said rod C is situated so that the lower edge of the upper glass 3 and the upper edge of the lower glass rest against its periphery, said edges being exactly opposite each other, and said glasses have their said edges pressed constantly, by means of said springs 4, against the periphery of said rod, and when the upper part of the lid is open the edge of said glass slides around on said rod. Thus at no time is there any space left open between said rod and said glass.

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

1. In a box, the combination of the upper frame A, glass 3, fitted in said frame, lower frame B, glass 3, fitted in said frame, cylindrical rod C, fitted in suitable hinges between said frames and said glasses, and springs 4, pressing the inner edges of said glasses against



the periphery of said rod, substantially as shown and described, and for the purposes set forth.

2. In a box, the combination of the upper  
5 frame A, glass 3, fitted in said frame, lower  
frame B, glass 3, fitted in said frame, cylindrical rod C, fitted in suitable hinges between  
said frames, springs 4, pressing the inner  
edges of said glasses against the periphery of  
10 said rod, and sliding quadrant-sheets secured  
to the ends of said upper frame A, substantially as shown and described, and for the  
purposes set forth.

3. In a box, the combination of the upper  
15 frame A, glass 3, fitted in said frame, lower  
frame B, glass 3, fitted in said frame, cylindrical rod C, fitted between said frames and  
said glasses, springs 4, pressing the inner  
edges of said glasses against the periphery of  
20 said rod, hinges D, consisting of the plates 11  
and ears 12, and coil-spring 10, working around  
the pinions 8 of said rod and their ends se-

cured under the plates 11, substantially as shown and described, and for the purposes set forth.

4. In a box, the combination of the upper  
25 frame A, glass 3, fitted in said frame, lower  
frame B, glass 3, fitted in said frame, cylindrical rod C, fitted between said frames and  
said glasses, springs 4, pressing the inner  
edges of said glasses against the periphery of  
30 said rod, hinges D, consisting of the plates 11  
and ears 12, and quadrants F, secured to each  
end of the upper frame A and adapted to  
slide against the ends of said box, substan- 35  
tially as shown and described, and for the  
purposes set forth.

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

WILLIAM D. HARRISON.

Witnesses:

DAVID S. MILLS,  
RUFUS H. M. MILLS.