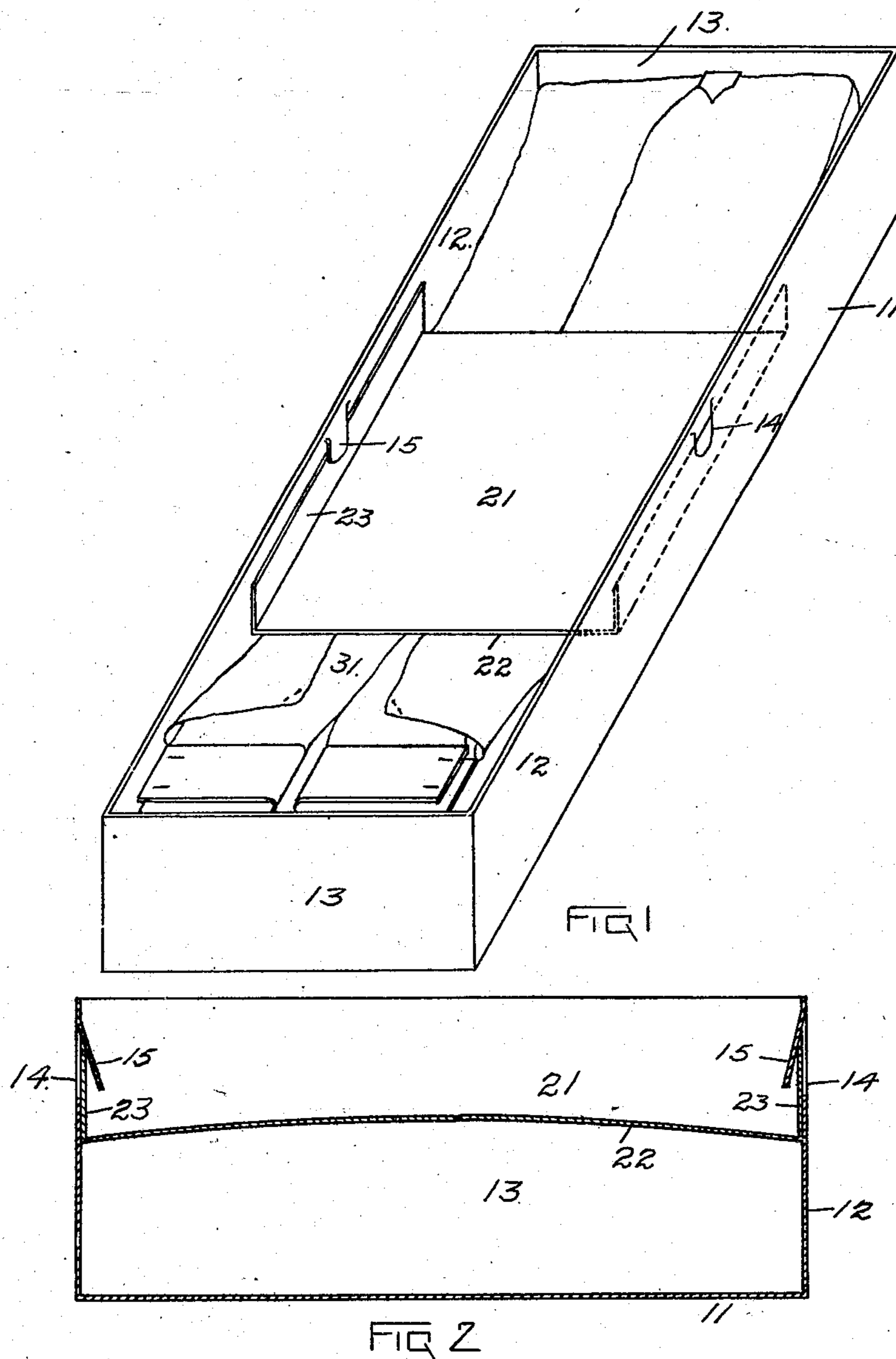


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 RETAINER FOR BOXES.  
 APPLICATION FILED OCT. 20, 1908.

923,885.

Patented June 8, 1909.  
 2 SHEETS—SHEET 1.



WITNESSES  
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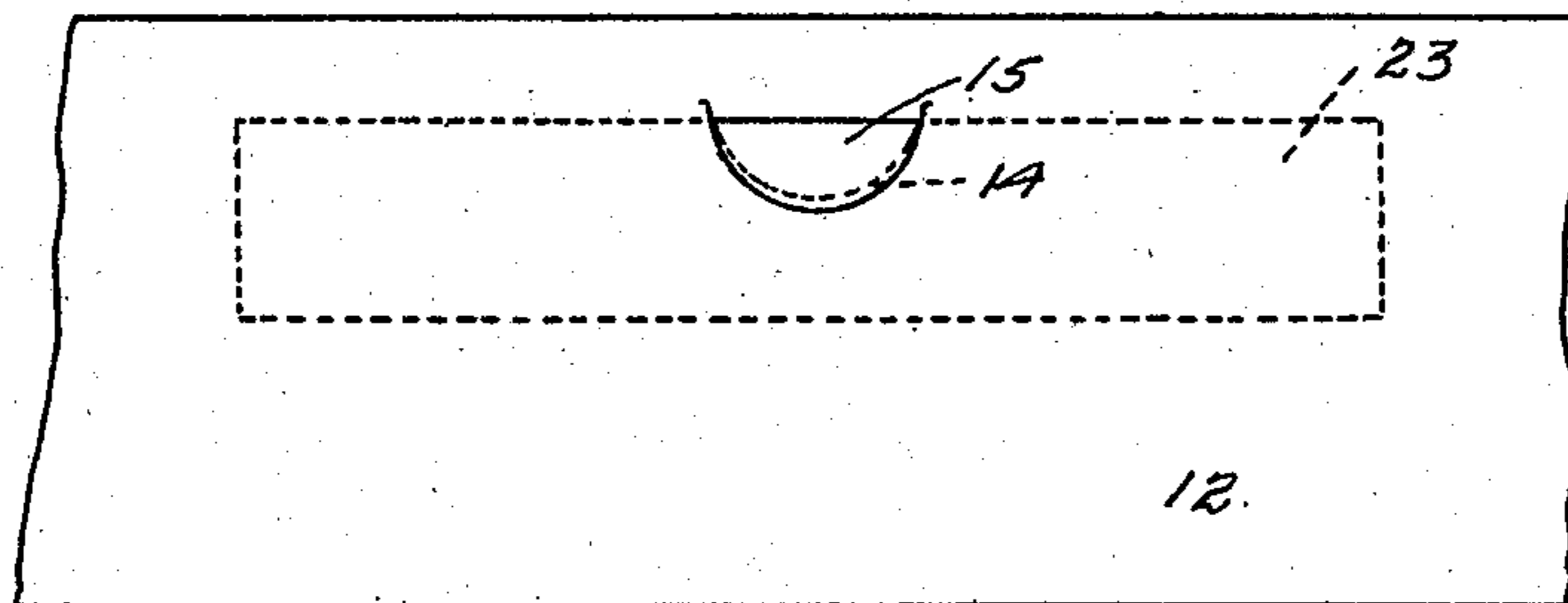


FIG 3

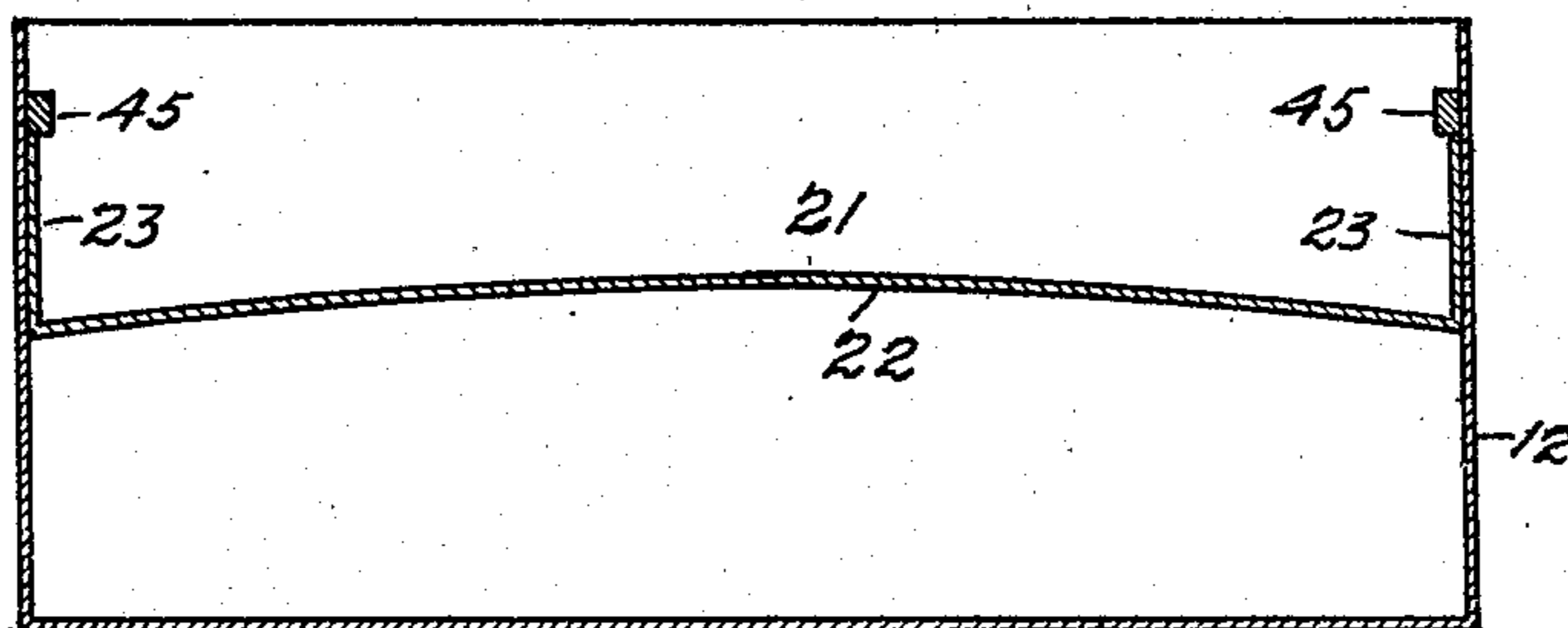


FIG 4

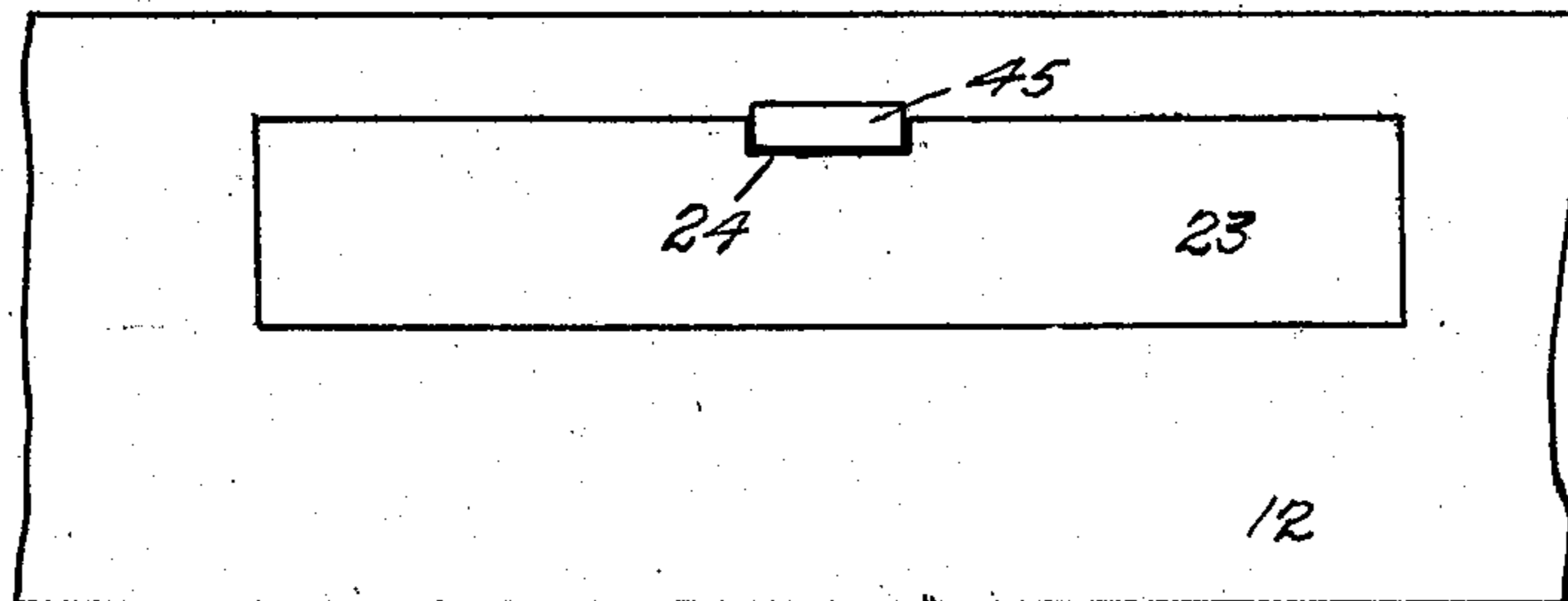


FIG 5

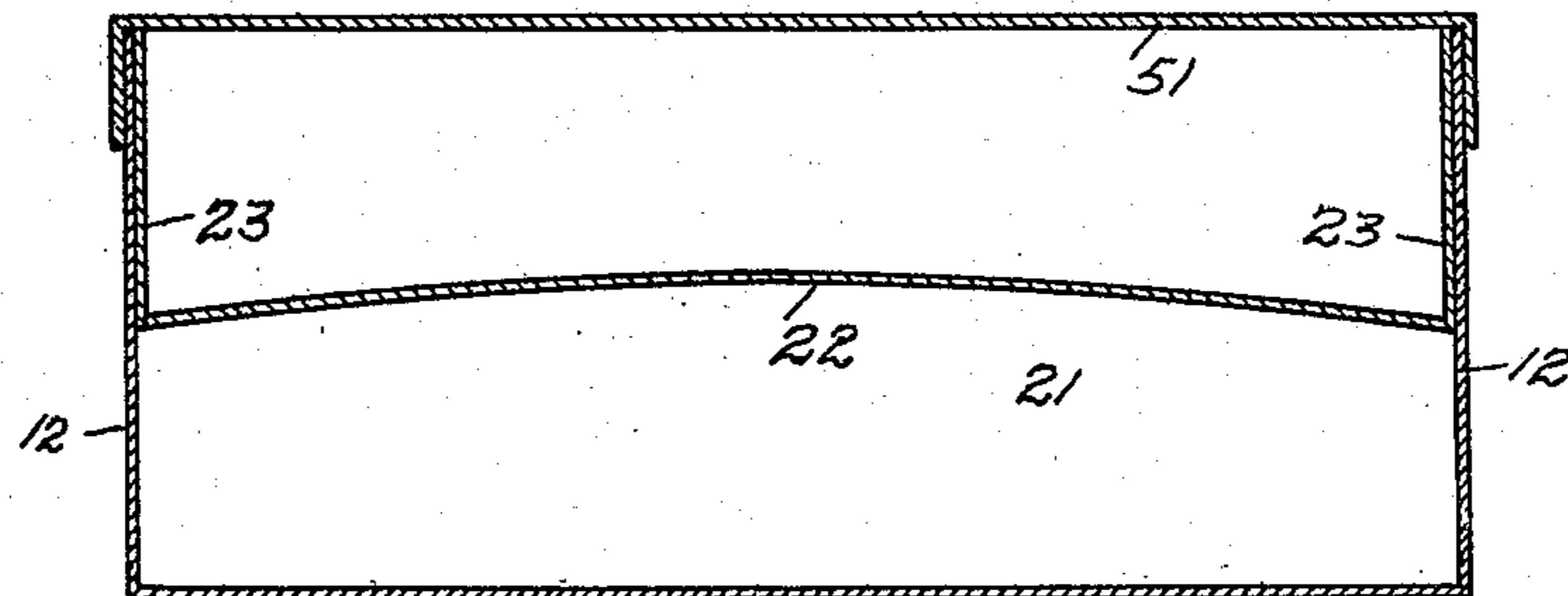


FIG 6

WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES K. P. PINE AND AUGUSTUS H. TAFT, OF TROY, NEW YORK, ASSIGNORS TO UNITED SHIRT AND COLLAR COMPANY, A CORPORATION OF NEW YORK.

## RETAINER FOR BOXES.

No. 923,885.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed October 20, 1908. Serial No. 458,643.

*To all whom it may concern:*

Be it known that we, JAMES K. P. PINE and AUGUSTUS H. TAFT, citizens of the United States, and residents of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Improvement in Retainers for Boxes, of which the following is a specification.

Our invention relates to retainers adapted to be used in boxes of pasteboard or other material for pressing down and holding in position the articles packed therein. Its use is to prevent such articles from being displaced, soiled or rumpled while in transit or handling. While it may be used to protect articles of many different sorts, we will show it, for example, as employed to hold in place laundried shirts.

In the drawings of the particular examples chosen to illustrate our invention, Figure 1 represents in perspective a shirt box, without its cover, provided with one form of our retaining device; Fig. 2 is a vertical transverse section taken at the mid-length of Fig. 1; Fig. 3 is a partial side elevation of the same box; Fig. 4 is a view like that of Fig. 2, showing a modification; Fig. 5 is a partial interior side view of the box and retainer, showing a further modification; Fig. 6 is a transverse vertical section of the box, covered, showing a still further modification of the invention.

Referring to Figs. 1, 2 and 3 of the drawings, 11 designates a box having sides 12 and ends 13. In each side 12 is cut a U-shaped slot or incision 14, forming a lug 15, which is pressed slightly inward. 21 designates a retainer, which, as here shown, consists of a bottom portion 22 of a width approximately that of the box 11, so as to fit therein, its length being substantially less than that of the box; and two opposite side portions 23 extending upwardly and adapted to detachable engagement beneath the lugs 15, as shown in Fig. 1. Obviously, both the box and the retainer may advantageously be made of straw-board or like material.

The operation of the device will be understood from an inspection of the drawings. The shirts 31 are folded, as is customary, with their neckbands and cuffs so placed as to come adjacent the ends of the box. It is important, not only that the shirts should be prevented from shifting about in the box, but also that these bands and cuffs should not be crushed or rumpled. The retainer 21 is

therefore made much shorter than the box 11 and is placed about midway thereof, so as to bear upon the bosoms only of the shirts. It will be seen that the side portions 23 of the retainer, which is pressed upward by the resiliency of the shirts, engage with a wedging action beneath the lugs 15, which therefore tend to hold the retainer from longitudinal movement. Obviously, a slight downward pressure serves to disengage the retainer from the lugs whenever desirable.

In the example of our invention shown in Fig. 4, all the parts are as above described, except that lugs 45 glued or otherwise secured to the sides 12 of the box are substituted for the integral incised lugs 15 of the former construction. Plainly the operation of the device is unchanged except that the upward pressure of the shirts or other articles is relied on to prevent the longitudinal movement of the retainer.

The device of Fig. 5 is like that of Fig. 4, except that the sides 23 of the retainer are provided with notches 24, whereby the retainer may be positively engaged as against longitudinal movement with the lugs 45.

In the form of our device shown in Fig. 6, the sides 12 of the box are unprovided with lugs of any sort, the cover 51 of the box being depended on to hold the retainer 21 in its operative position. Where the box covers are quite tightly fitted, or where the boxes are corded for shipment, this form would be reasonably practicable.

It is obvious that many mechanical changes may be made in the form etc. of our device without departing from the spirit of our invention. Thus, the shape as well as the relative dimensions of the box may be varied to conform to the articles to be packed therein, while the form and relative size of the retainer may be equally non-essential. We however prefer the form of retainer shown for various reasons; first, any additional parts would be useless; and second, while it is the flat portion alone that presses upon the articles and serves to hold them in position, the integral sides whether upwardly or downwardly extending act to stiffen the device so as to prevent its buckling, and in the forms of construction of Figs. 1, 2, 3, and 5, have the added function of holding it against longitudinal movement. Again, while we have shown a single pair of lugs and these located at the mid-length of

the box, it is clear that the number or position of such lugs is immaterial.

The essential feature of our invention lies in making the retainer of substantially less length than that of the box in which it is placed, so that it presses only on the middle portion of the shirts or like articles therein and does not crush the bands or cuffs, which are at the ends of the box.

What we claim is:

1. In combination, a box; and a detachable retainer formed from a blank of strawboard or like material and including a flat portion and two opposite side portions integral therewith and bent at an angle thereto, said retainer being of a length substantially less than that of said box and of a width approximately equal to that of said box; said box being provided with means for securing said retainer with its flat portion in a plane substantially below that of the cover of said box.

2. In combination, a box; and a detachable retainer formed from a blank of strawboard or like material and including a flat portion and two opposite side portions integral therewith and bent at an angle thereto, said retainer being of a length substantially less than that of said box and of a width approximately equal to that of said box; said box being provided with means on its opposite sides for securing said retainer with its flat portion in a plane substantially below that of the cover of said box.

3. In combination, a box provided with inwardly projecting lugs on its opposite sides; and a detachable retainer formed from an integral blank of strawboard or like material and including a flat portion and two opposite side portions bent at an angle thereto, said retainer being of a length substantially less than that of said box and of a width approximately equal to that of said box, whereby it is adapted to engage beneath said lugs, substantially for the purposes set forth.

4. In combination, a box provided with inwardly projecting lugs on its opposite sides; and a detachable retainer formed from an integral blank of strawboard or like material and including a flat portion and two opposite side portions bent at an angle thereto, said retainer being of a length substantially less than that of said box and of a width approximately equal to that of said box, said side portions being notched for engagement with said lugs, substantially for the purposes set forth.

5. In combination, a box provided with inwardly projecting lugs on its opposite sides; and a detachable retainer formed from a substantially rectangular blank of strawboard or like material and including a bottom portion and two opposite upwardly extending side portions integral with said bottom portion, said side portions being adapted

to engage beneath said lugs, substantially for the purposes set forth.

6. In combination, a box provided with inwardly projecting lugs on its opposite sides; and a detachable retainer formed from a substantially rectangular blank of strawboard or like material and the length of which is substantially less than that of said box and the width of which is approximately equal to that of said box, said retainer including a bottom portion and two opposite upwardly extending side portions integral with said bottom portion, said side portions being adapted to engage beneath said lugs, substantially for the purposes set forth.

7. In combination, a box provided with inwardly projecting lugs on its opposite sides; and a detachable retainer including a bottom portion and two opposite upwardly extending side portions, said side portions being notched for engagement with said lugs, substantially for the purposes set forth.

8. In combination, a box provided with integral incised inwardly projecting lugs on its opposite sides; and an integral detachable retainer including a bottom portion and two opposite upwardly extending side portions, said side portions being adapted to engage beneath said lugs and to be thereby restrained from longitudinal movement, substantially for the purposes set forth.

9. A box provided with means for detachably securing therein a retainer and for restraining said retainer from longitudinal movement, said means being located at opposite sides of said box and below their upper edges; in combination with a retainer of a length substantially less than that of said box and of a width approximately equal to that of said box, said retainer consisting of a flat portion and two opposite side portions integral therewith and bent at an angle thereto substantially for the purposes set forth.

10. In combination, a box; a detachable retainer of a length substantially less than that of said box, said retainer consisting of a flat portion and two opposite side portions integral therewith and bent at an angle thereto; and means on the sides of said box for restraining said retainer from longitudinal movement, substantially for the purposes set forth.

11. In combination, a box provided with inwardly projecting lugs on its opposite sides; and a detachable retainer the length of which is substantially less than that of said box and the width of which is approximately equal to that of said box, said retainer including a flat portion and two opposite side portions bent at an angle with said flat portion, said lugs being adapted to engage with said retainer so as to restrain it from longitudinal movement.

12. In combination, a box provided with inwardly projecting lugs on its opposite

sides; and a detachable retainer the length of which is substantially less than that of said box and the width of which is approximately equal to that of said box, said retainer including a bottom portion and two opposite  
5 upwardly extending side portions, said lugs being adapted to engage with said retainer

so as to restrain it from longitudinal movement.

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