(No Model.)

H. A. & A. A. SMITH.

BOX.

No. 290,130. Patented Dec. 11, 1883.

FIG. 1.

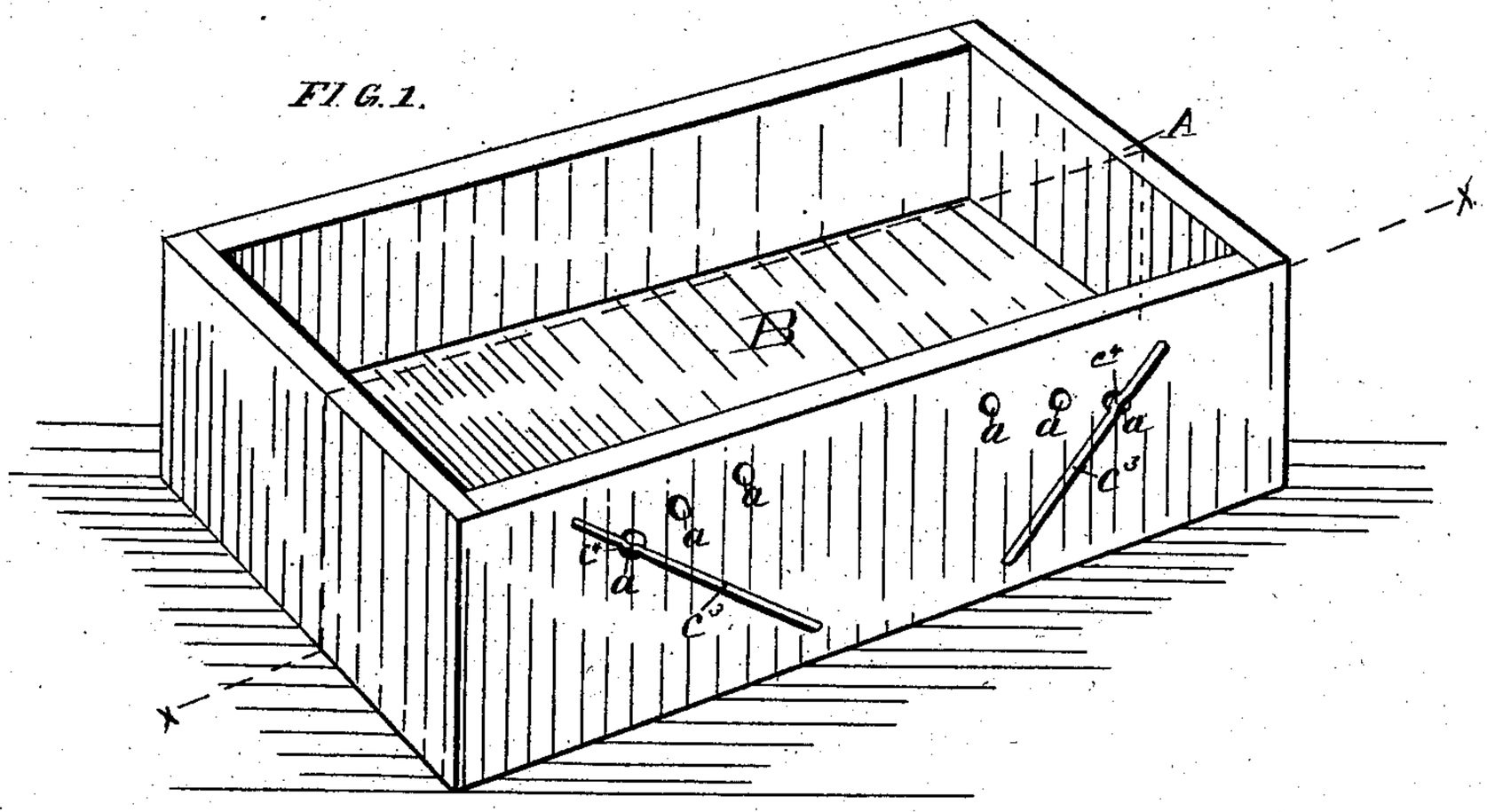


FIG. 2.

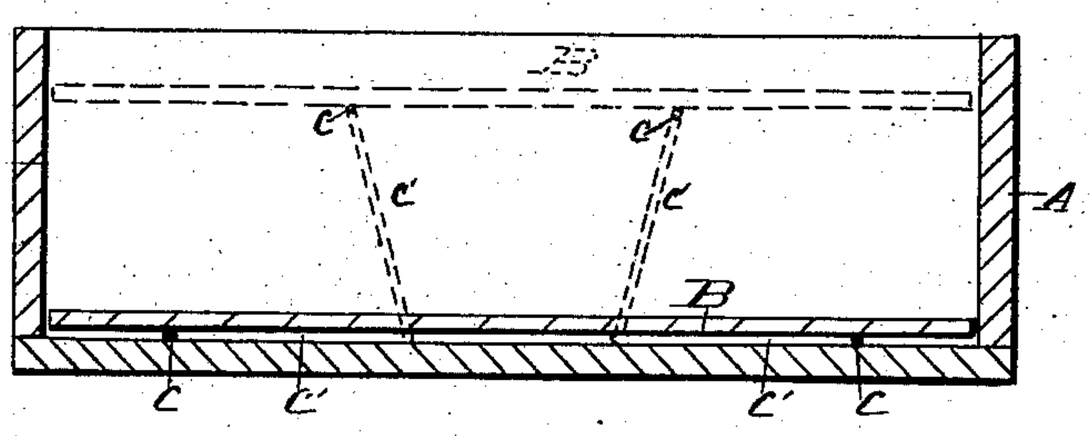
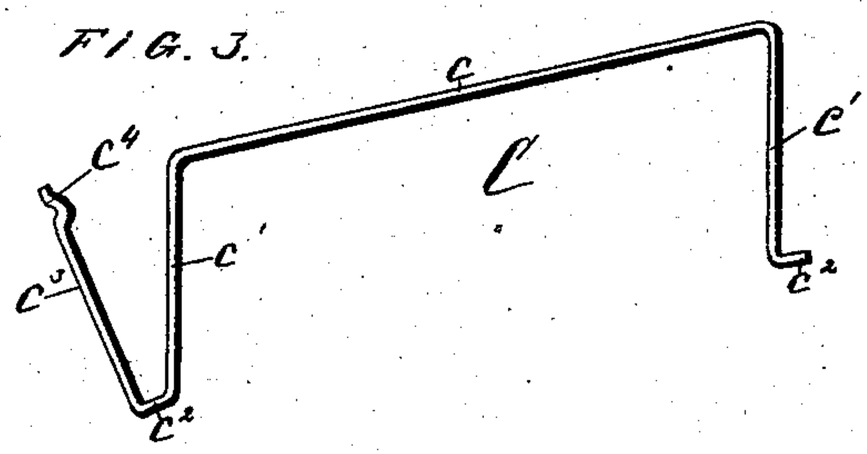


FIG. 3.



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H. ADALBERT SMITH AND ALLAN A. SMITH, OF OMAHA, NEBRASKA.

BOX.

SPECIFICATION forming part of Letters Patent No. 290,130, dated December 11, 1883.

Application filed June 27, 1883. (No model.)

To all whom it may concern:

Be it known that we, H. ADALBERT SMITH and ALLAN A. SMITH, citizens of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Boxes, which are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view of an open box with our improvement embodied; Fig. 2, a section of the same taken on the line *x x*, Fig. 1; and Fig. 3, a perspective view of one of the lifting devices detached.

Our invention relates to an improvement in boxes, whereby, as the contents are gradually removed from the top, the remaining portion may be raised for the purpose of displaying the contents always at the top of the box or for any other purpose.

The invention consists in providing the box with a loose diaphragm or false bottom, and with levers whereby this piece may be raised at will and held at any point desired in the box.

We will proceed to describe in detail the construction and operation of our invention as we have carried it out in one way, and will then point out definitely in the claims the special improvements which we believe to be new and wish to protect by Letters Patent.

In the drawings, A represents a box of any ordinary form and construction, the one shown in the drawings being simply for the purpose of illustration, and not intended to represent any particular box, as our invention is not limited to any particular box. A false bottom or diaphragm, B, is cut from stiff paper-board, or any other suitable material, of such size as to easily fit the interior of the box. This is laid at the bottom of the box before filling, and obviously as the contents of the box are partially removed from the top, if the loose bottom is raised, the remaining contents will be elevated in the box. In order to accomplish this result in a practical way, we provide a lifting device or lever, C, made of wire or other suitable material, bent into the form as shown in Fig. 3 of the drawings. The main portion *c* of this lifting-lever may be straight or crooked and about equal to the interior width of the box. At each end the wire is bent at right angles, this portion forming arms *c'*, more or less in length than the depth of the box. At the extremities of these arms the wire is bent outward at about right angles to form journals c^2, on which the lifter may be turned, and from one of these the wire is bent backward again at right angles to form an arm or handle, c^3, which may be either parallel with the arm *c'* at that end, or arranged at an angle thereto, as shown in the drawings, the latter arrangement being preferable. This device is applied to the box, so that the body will extend across it, the two journal parts being received in notches in the lower part of the box side end, or in some other way suitably mounted, so that the devices may turn on them. The handle c^3 is on the outside or inside of the box at one side or end thereof, as shown in Fig. 1 of the drawings, and obviously, as this part is vibrated back and forth, the device will be turned on its journals, and the main body thereby turned up or down, according to the direction in which the handle is turned. The lifting device is put in the box before the false bottom, and turned so as to lie flat on the bottom of the box, as shown in the full lines in Figs. 1 and 2 of the drawings. The movable false bottom B is then laid on the lifters, and the box filled with whatever it is intended to contain. Evidently by turning up the lifters by means of the handles outside of the box the false bottom will be elevated, as shown in the dotted lines in Fig. 2 of the drawings, and of course the contents of the box be raised with the false bottom.

Any suitable device may be employed for fastening the handles in any desired position, so that the lifters and the false bottom may be held at any desired plane of adjustment. We have shown in the drawings a simple way of doing this, which consists in making series of notches or depressions *a* on the side of the box, arranged on the arc of a circle, and near the outer end of the handle there is a slight bend inward, which provides a small projection, c^4, adapted to enter the notches and hold the device in any position to which it is adjusted. It will be seen, therefore, that the false bottom may be raised with the contents thereon from the outside or inside of the box, and secured at any height from the bottom of the box.

This improvement is especially adapted to cigar, cracker, and other boxes in which the contents are removed gradually from the top, and it is desirable to expose the remaining contents at the top of the box. As applied to cigar-boxes, it is obvious that as one layer is used the false bottom may be raised, so as to bring the next layer to the top, and so on, until all the cigars are used up. We do not, however, confine ourselves to the application of our improvement to cigar-boxes, for there are many kinds in which the improvement can be applied.

In sample-boxes of various kinds it will be found useful, and it is useful not only for the purpose of exposing the contents continually at the top of the box, but also for the purpose of securely retaining the contents of the box for transportation when only partially filled, for it will be seen that the false bottom when raised sufficiently high will hold the contents between it and the box-cover.

In the drawings the box is shown open; but of course it will be understood that a cover of any kind adapted to the form and intended use of the box will be applied whenever required.

We wish it understood that we claim our invention applied not only to boxes, but to any containing-receptacle to which it may be applicable.

Having thus described our invention, what we claim as new, and wish to protect by Letters Patent, is—

1. The box, in combination with a loose false bottom, B, and the bent lifting device C, substantially as and for the purpose set forth.

2. The box, in combination with a loose false bottom, B, and the lifting devices C, bent as described, and provided with an arm or handles, c^3, arranged on the outside or inside of the box or containing-receptacle, substantially as and for the purposes set forth.

3. The box A, in combination with a loose false bottom, B, the lifting devices C, provided with the handles c^3, arranged on the outside or inside of a box or receptacle, and means whereby the said handles may be secured in any position of adjustment, substantially as and for the purposes set forth.

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