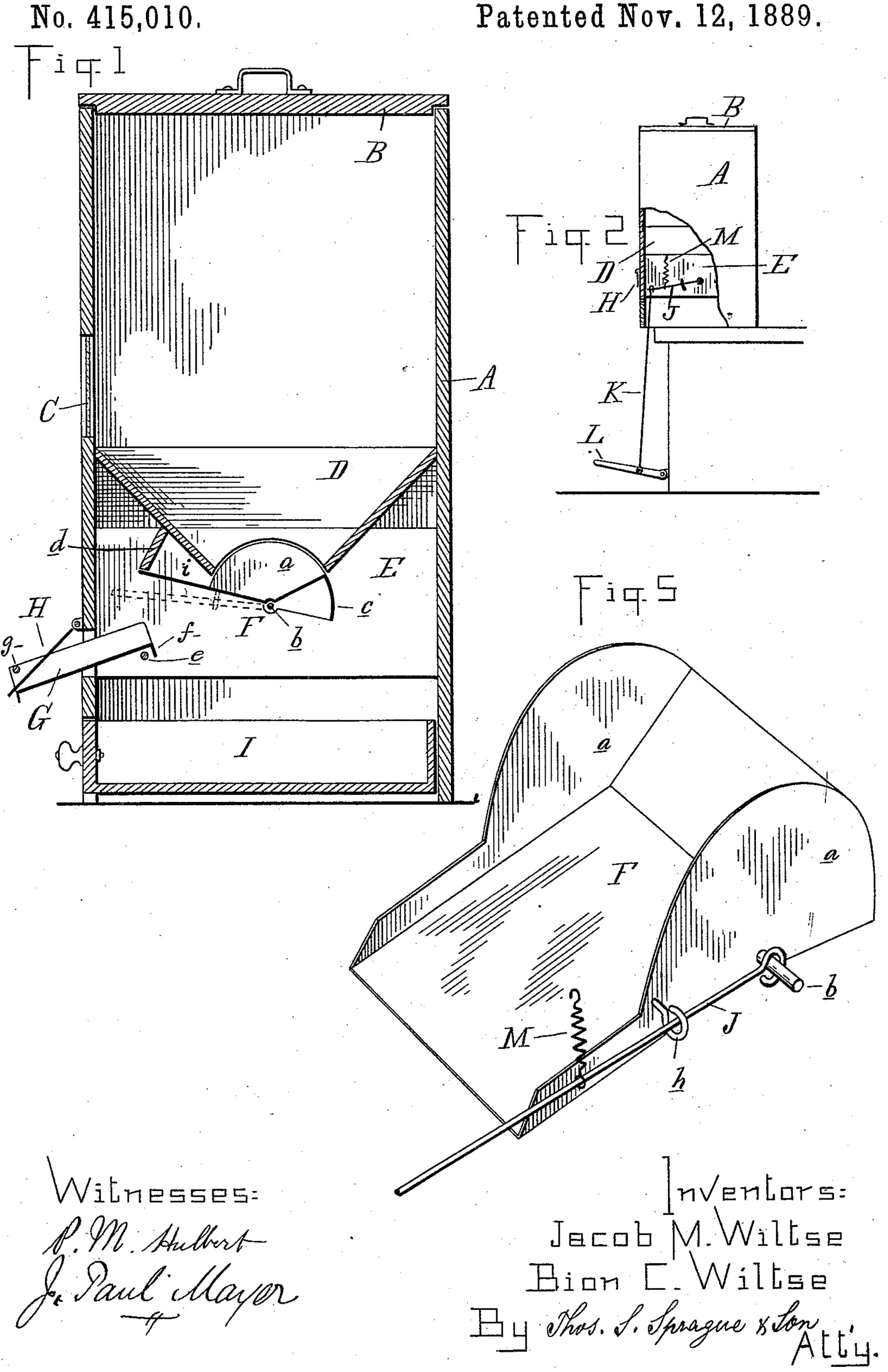
J. M. & B. C. WILTSE.

BOX FOR RETAILERS' USE.

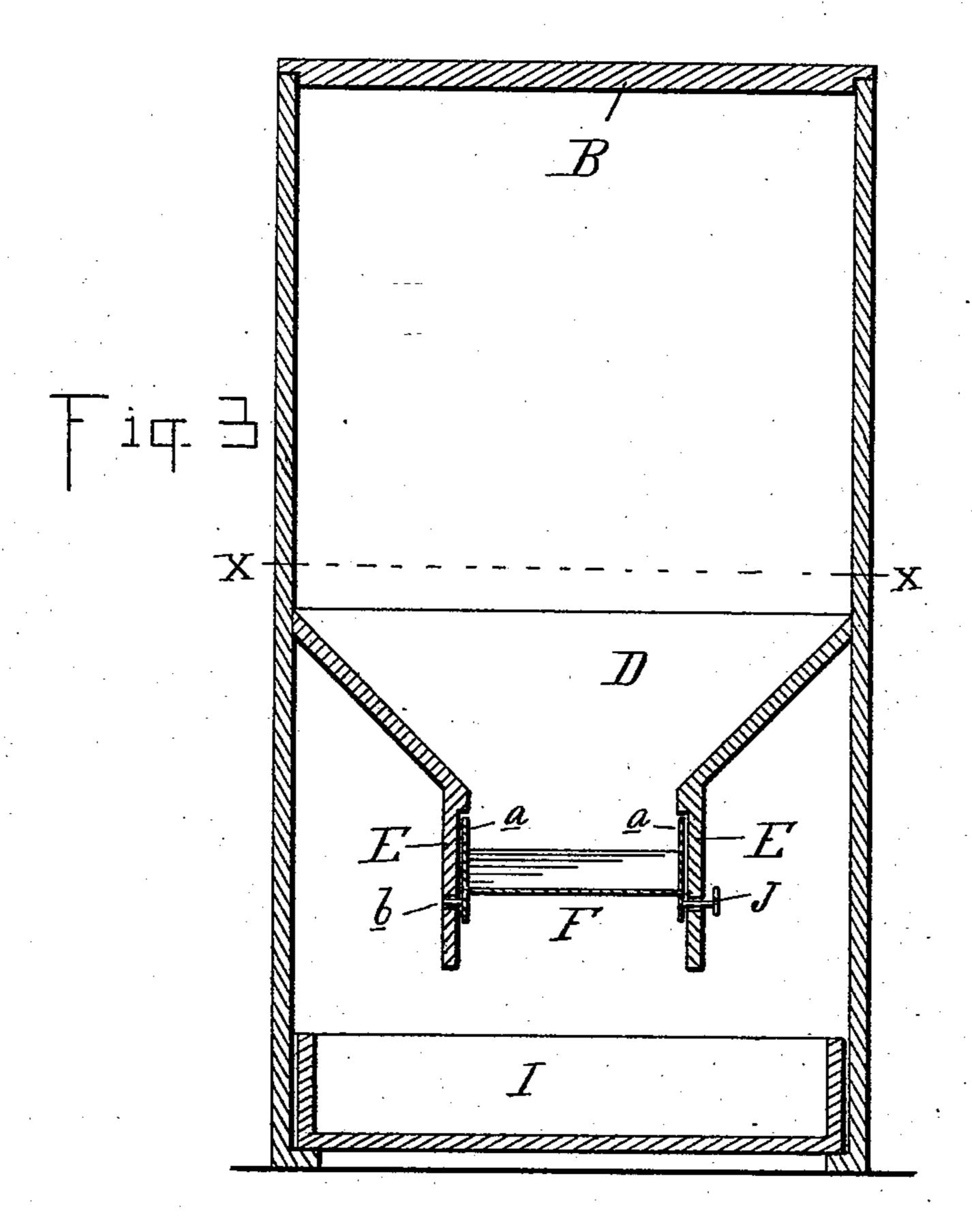
Patented Nov. 12, 1889.

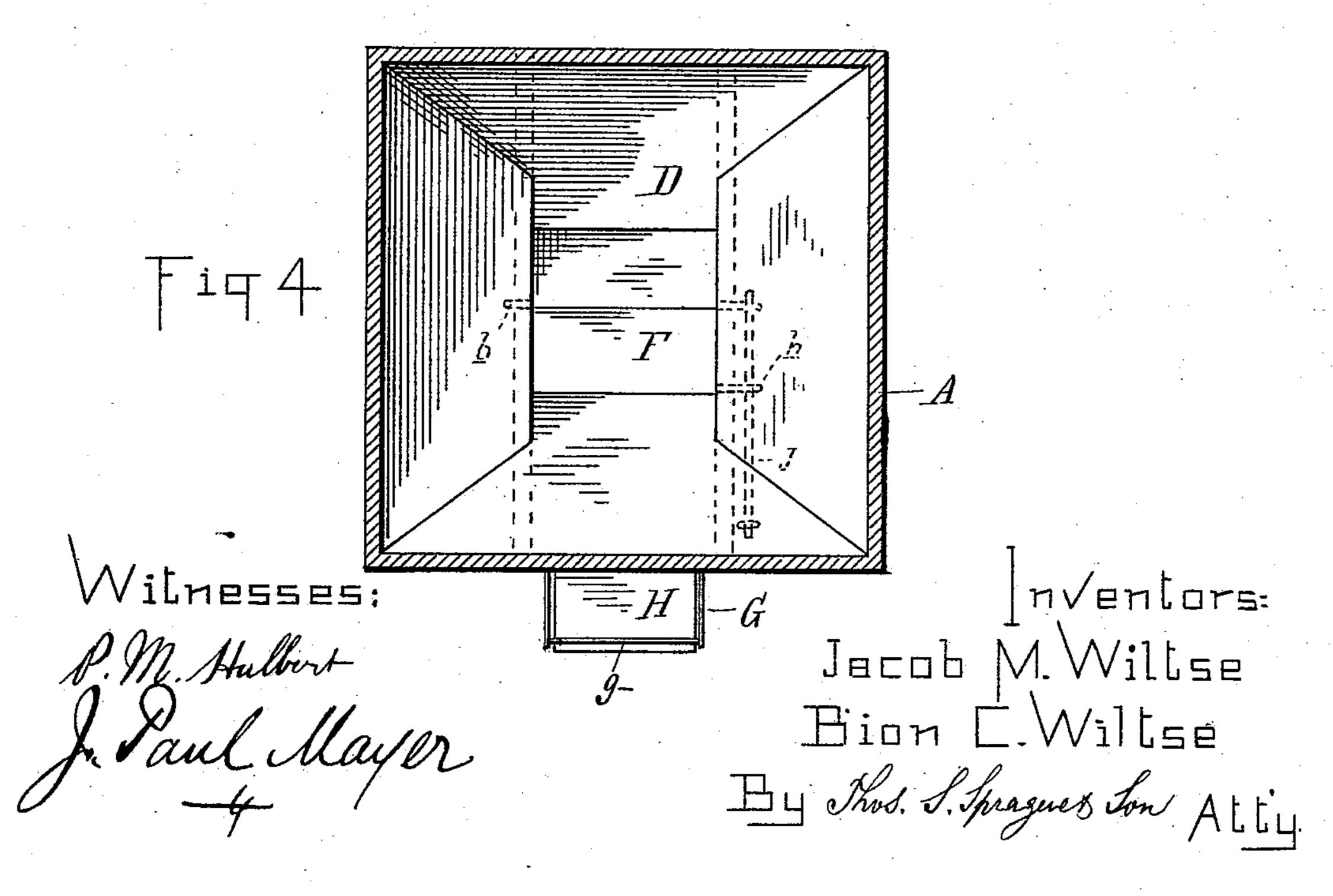


J. M. & B. C. WILTSE. BOX FOR RETAILERS' USE.

No. 415,010.

Patented Nov. 12, 1889.





United States Patent Office.

JACOB M. WILTSE AND BION C. WILTSE, OF ASHLEY, MICHIGAN.

BOX FOR RETAILERS' USE.

SPECIFICATION forming part of Letters Patent No. 415,010, dated November 12, 1889.

Application filed April 29, 1889. Serial No. 309,087. (No model.)

To all whom it may concern:

Be it known that we, JACOB M. WILTSE and BION C. WILTSE, citizens of the United States, residing at Ashley, in the county of Gratiot 5 and State of Michigan, have invented certain new and useful Improvements in Boxes for Retailers' Use, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in retail boxes for crackers, rice, and other merchandise liable to loss by breakage in handling—as, for instance, in the retail stores, where such articles are sold in 15 small quantities; and to this end my invention consists in the improved construction and arrangement of the parts, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

20 Figure 1 is a vertical central section through our improved retailing-box. Fig. 2 is a diagram side elevation thereof, with the side of the box partly broken away and showing the device arranged as for operation on the coun-25 ter. Fig. 3 is a vertical central section through our device, taken at right angles to Fig. 1. Fig. 4 is a horizontal plan below the plane on line X X in Fig. 3, and Fig. 5 is a detached perspective view of the tilting spout in the 30 bottom of the box.

A is a receptacle or box provided with the cover B, and preferably with the window C in the front end near the bottom thereof.

D is a hopper-like contraction near the

35 lower end of the box.

E are two division-walls secured in the box below the hopper and projecting partly within said hopper to form the lower ends of the two opposite sides of said hopper parallel to 40 each other.

F is a tilting spout pivotally secured in the partitions E below the discharge-opening of the hopper. This spout is provided with the circular sides a concentric with the pivots 45 b, on which the spout tilts, and these circular sides are recessed into the partitions E.

c is a cylindrical apron on the back of the spout and formed concentric with the piv-

ots b.

d is a stop, against which the front of the spout is adapted to rest, said front end of the spout being extended beyond the discharge-

opening in the hopper into proximity with the front side of the box.

G is a sliding spout-section secured in an 55 aperture in the front wall of the box and resting with its rear end on the cross-bar e, which holds it in an inclined position, and with which the rear end of the spoutengages with the downwardly-projecting lip f, to prevent 60 the withdrawal of the spout.

H is a hinged cover on the discharge end of the sliding spout. This is hinged to the front side of the box, and is held in an inclined position by resting on the free end of 65 the spout, and a cross-bar g, passing through the front end of the spout, limits the play of the cover in relation to the spout.

I is a drawer in the bottom of the box.

J is a bar secured to the side of the tilting 70 spout, preferably on the outside of one of the partitions E, and to this end the bar is engaged upon one of the pivots b and passes through an eye h, which eye is secured to the side of the tilting spout and projects through 75 a slot in the partition E. To the free end of this bar is secured a connecting-rod K, the lower end of which connects with the footlever L, and a spring M, secured to the bar J, normally draws the tilting spout against the 80 stop d.

In practice, the parts being constructed and arranged as shown and described, they are intended to operate as follows: The box is placed near the edge of the counter for the 85 free play of the connecting-rod L through the bottom of the box. In the normal condition of the parts the tilting spout, being thrown against the stop d, closes the lower end of the box; but if the operator places his foot upon 90 the foot-lever L the discharge of the tilting spout is drawn out and the contents of the box can fall upon the tilting spout and slide down on an incline out of the sliding spout G out of the box, the cover H being adapted 95 to lift up sufficiently to let the contents pass out gradually, the incline of the parts being properly adjusted to allow of the material in the box sliding out by gravity, and if it should become choked the spout G may be 100 slightly tapped with the finger. After the necessary quantity is abstracted the operator releases the foot-lever, when the spring will draw the tilting spout back into its normal

position and cutting off the further supply. It will be seen that in this normal position the material is prevented from being wedged between the edges of the hopper and the tilting spout by projecting the stop d far enough to form with the tilting spout a throat i. The spout G may be pushed back into the box when it is not in use, and when thus pushed back the cover H will close the opening in the box, being carried back by the crossbar g.

It will be seen that by forming the lower end of the hopper D with the vertical walls upon two opposite sides the wedging of the contents upon the tilting spout is avoided, and by recessing the side a of the tilting spout into the partitions E the goods in the box cannot be damaged by the motion of the spout. The curved apron c in the back of the spout prevents the material from falling out at the back of the spout when it is drawn down.

What we claim as our invention is-

1. In a retail box for crackers, &c., the combination, with the box, of the hopper formed therein, the tilting spout operated by suitable connection from the outside and adapted to close and open an opening in the bottom of the hopper, and the inclined spout-section through the front side of the box and with which the tilting spout is adapted to connect,

2. In a retail box for crackers, &c., the combination of the box, the hopper formed therein, the tilting spout adapted to close and open an opening in the bottom of the hopper, the

substantially as described.

spring which normally holds the spout closed, the foot-lever with its connection to the said spout for tilting the same, and an inclined spout-section in the front side of the box, with 40 which the tilting spout is adapted to communicate, substantially as described.

3 In a retail box for crackers, &c., the combination of the box provided with the hopper D, the vertical cross-partitions E, extending into the hopper, the tilting spout F, secured below the bottom of the hopper and adapted to close and open the opening therein, the sliding spout G through the front of the box, and the hinged cover H, and the 50 foot-lever L, with its actuating-connection with the tilting spout, substantially as described.

4. In a retail box for crackers, &c., the combination of the box A, the vertical cross-partitions E, extending up into the lower end of 55 the hopper, and the tilting spout F, secured below the hopper and extending in proximity to a spout-section through the front wall of the box, said tilting spout being provided with the circular sides a, the cylindrical apron 60 c on its back, and the stop d, carried by the outer wall of the hopper and arranged to form with the tilting spout the discharge-throat i, substantially as described.

In testimony whereof we affix our signa- 65 tures, in presence of two witnesses, this 21st day of March, 1889.

JACOB M. WILTSE. BION C. WILTSE.

Witnesses:

J. F. GAULEY, GEO. DEBOLT.