No. 697,436. Patented Apr. 15, 1902.

F. J. BETTS.

SLIDE OPENING.

(Application filed Aug. 15, 1901.)

(No Model.)

Fig 1

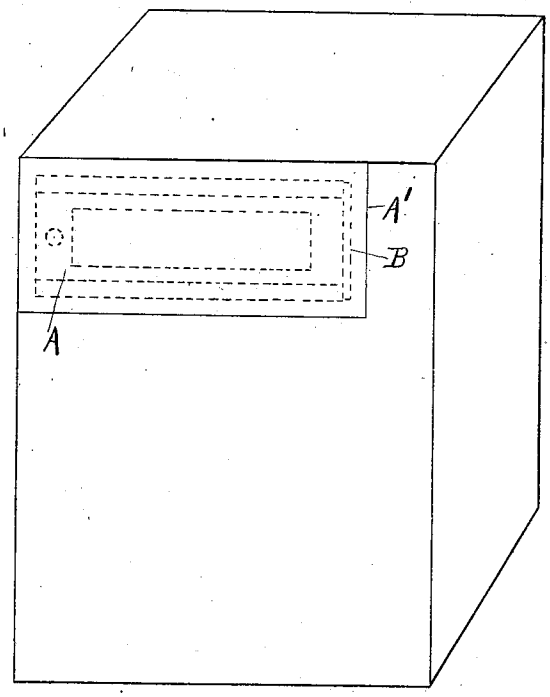


Fig 2

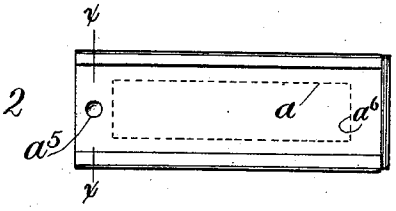


Fig 3

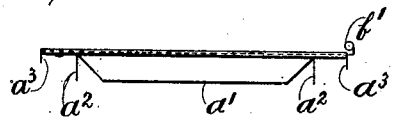


Fig 4

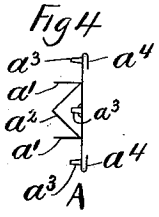


Fig 5

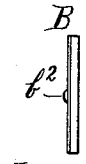


Fig 6

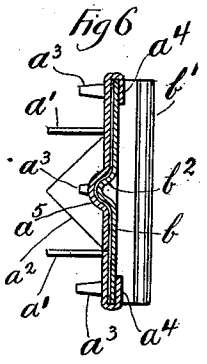
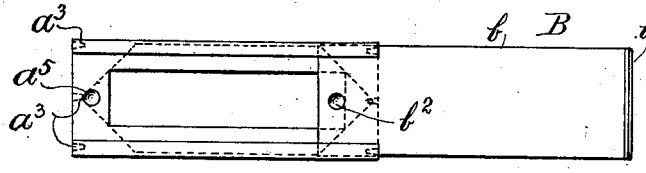


Fig 7



Witnesses
C. A. Harris
William P. Francel

Inventor
Frank. J. Betts
By his Attorney
A. A. de Bomeville

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK J. BETTS, OF EAST ORANGE, NEW JERSEY, ASSIGNOR OF ONE-HALF TO CHARLES C. COPELAND, OF SOUTH ORANGE, NEW JERSEY.

SLIDE-OPENING.

SPECIFICATION forming part of Letters Patent No. 697,436, dated April 15, 1902.

Application filed August 15, 1901. Serial No. 72,165. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. BETTS, a citizen of the United States, and a resident of East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Slide-Openings, of which the following is a specification.

This invention relates to slide-openings; and its object is the production of a slide-opening of simple construction which can easily be applied to boxes, especially cardboard boxes, and other receptacles which are not to be broken to empty them of their contents, and it secures a sealed slide-opening for the receptacle to which it is applied. I prefer making the slide of metal, although other materials can be employed.

By means of my invention food, chemicals, and various materials are insured from adulteration, deterioration, and contamination with vermin, &c., and for domestic purposes obtains receptacles devoid of difficult means to open the same.

Figure 1 shows the slide-opening attached to a box. Fig. 2 represents a top view of the slide-opening with its slide closed. Fig. 3 is an elevation of Fig. 2. Fig. 4 shows an end view of the frame for the slide. Fig. 5 represents an end view of the slide. Fig. 6 is a section on the line $x\ x$ of Fig. 2 on an enlarged scale. Fig. 7 shows a plan of the slide-opening with its slide open.

This invention consists of a frame A, with an opening a, lugs a' a^2 a^3, a depression a^5, and lips a^4, which latter constitute guides. The lugs a' to a^3 extend from the frame to clamp it to a box or receptacle, and in Figs. 3, 4, and 6 they are shown before being bent, and in Fig. 7 they are represented bent in operative position to secure the device to a receptacle.

A slide B, with a depression b^2, actuates in the lips a^4. It is turned up on one end, as b', which constitutes a handle.

When the slide B covers the opening a, the depression b^2 is engaged with the depression a^5 of the frame A, securely locking the slide in place, and when the valve is opened the depression b^2 impinges against the edge a^6 of the frame, thereby constituting a stop for the valve.

After the slide-opening has been secured in position on a receptacle with its slide closed I generally cover the whole mechanism with a piece of paper A′ or other material, and thereby secure a perfectly sealed receptacle, or the paper may be secured over the slide-opening on the inside of the box. When the contents of the box or receptacle are to be used, the said seal is broken and the slide opened by bearing on the handle b'.

I prefer placing the slide-opening on one of the sides of the receptacle and near one of the corners thereof, which will allow an easy outflow of its contents and the total emptying of the box.

This invention is especially applicable for boxes, parcels, &c., that are sealed before their contents are used, and the slide-opening is then applied before the receptacle is filled and sealed. The construction shown of the lugs are such as to easily apply the device to the said receptacle over an opening in the said receptacle of approximately the same size as the opening in the frame.

Having described my invention, I desire to secure by United States Letters Patent and claim—

1. A slide-opening comprising, a frame, a depression in the frame, lugs extending from the frame, guides on the frame, a slide actuating in the said guides, a depression in the slide engaging the depression in the frame and an edge thereof.

2. A receptacle, an opening in the receptacle, a cover closing the said opening on a side, a frame and lugs thereon bent over the edges of the opening in the receptacle, a depression in the frame, a slide, a depression in the slide engaging the depression in the frame and an edge thereof.

3. A receptacle, an opening in the receptacle, a frame with lugs extending from its four inner edges, and other lugs extending from the frame, the lugs at the inner edges bent over the edges of the opening in the re-

ceptacle, and the other lugs piercing the said receptacle, a depression in the frame, a slide actuating over the frame, a depression in the slide engaging the depression in the frame and an edge thereof, a cover inclosing the slide and frame with the receptacle.

Signed at New York, in the county of New York and State of New York, this 10th day of August, A. D. 1901.

FRANK J. BETTS. [L. S.]

Witnesses:
WALTER PIERSON,
WILLIAM P. FRANCL.