

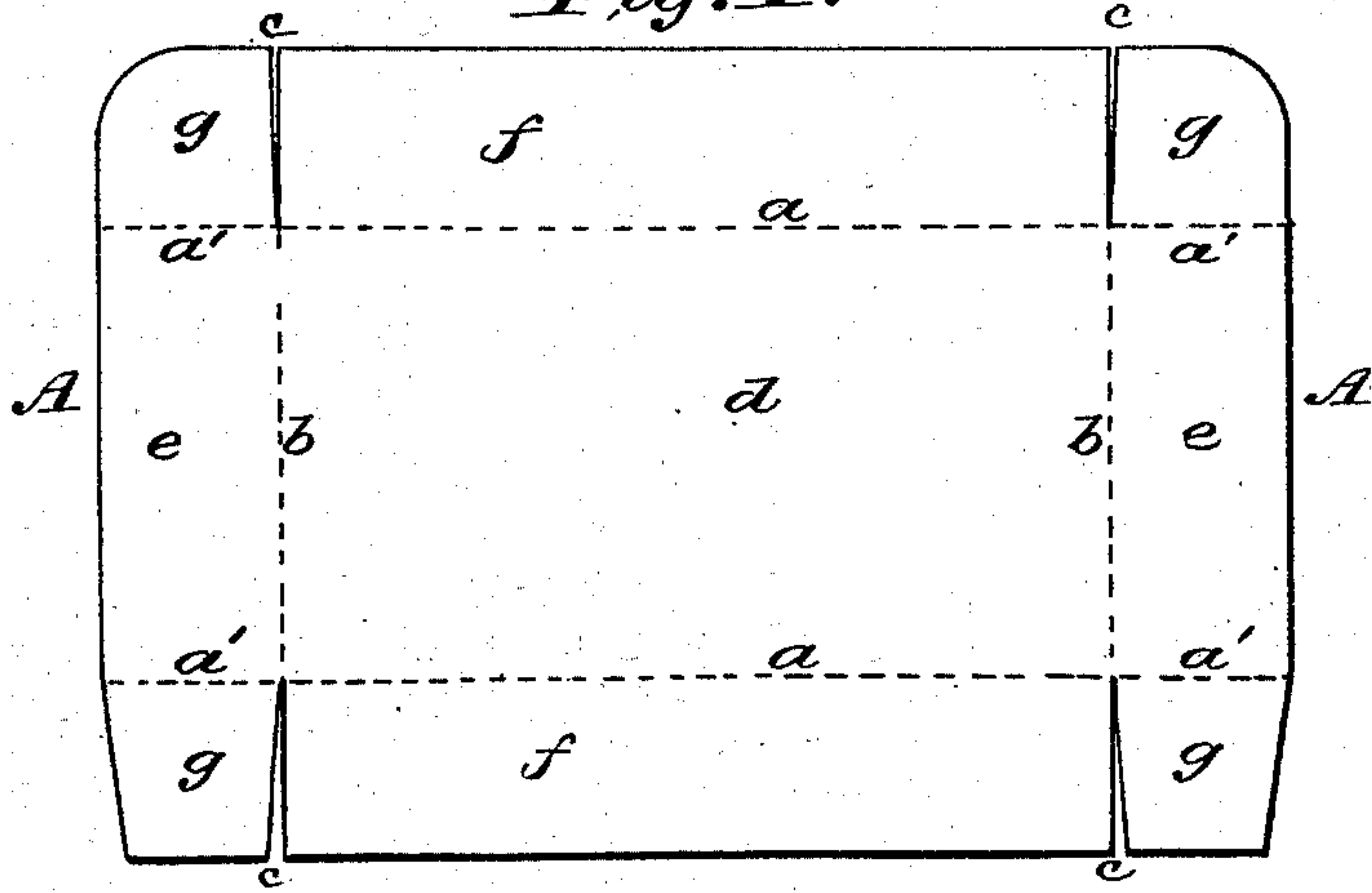
(No Model.)

J. FELBEL.

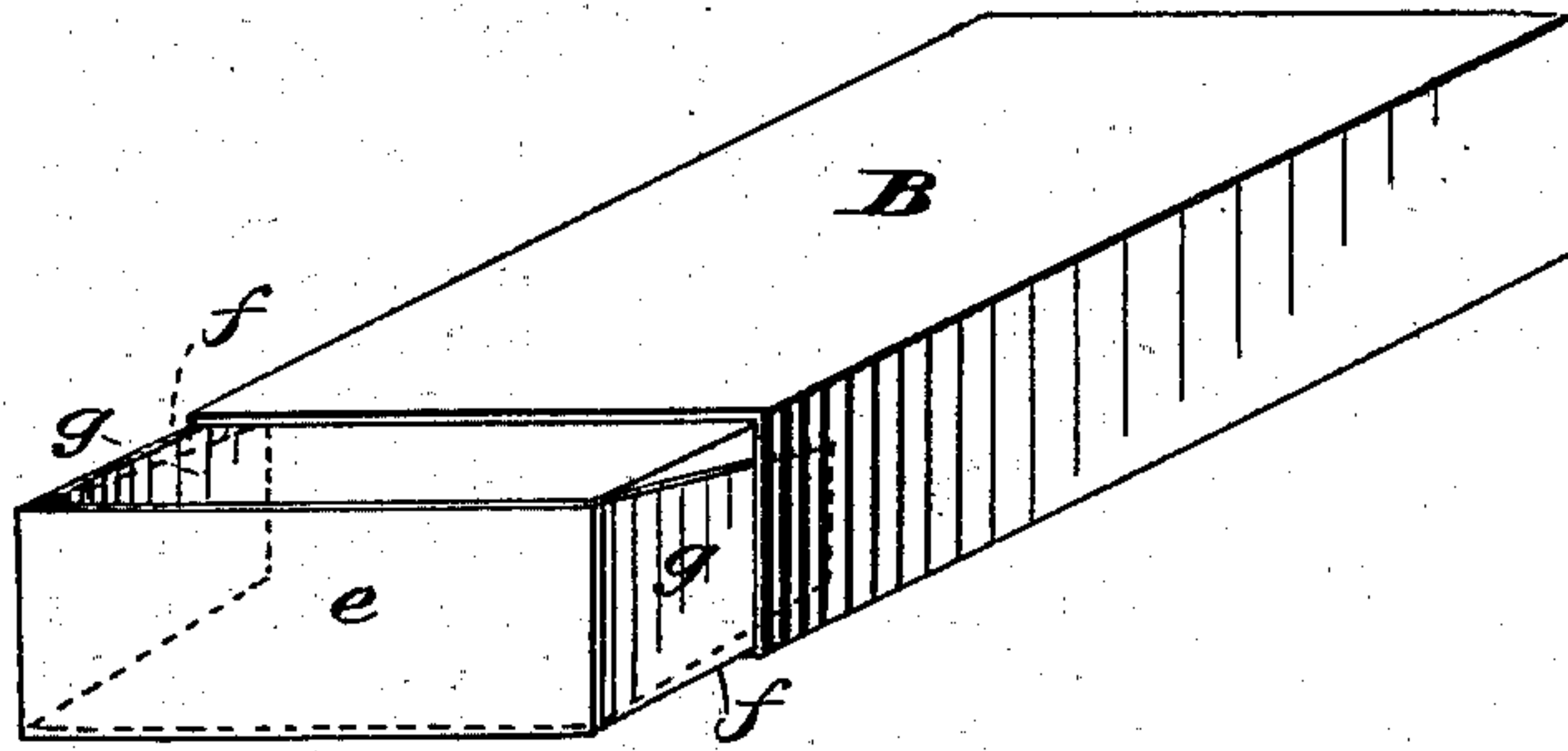
PAPER BOX.

No. 278,526.

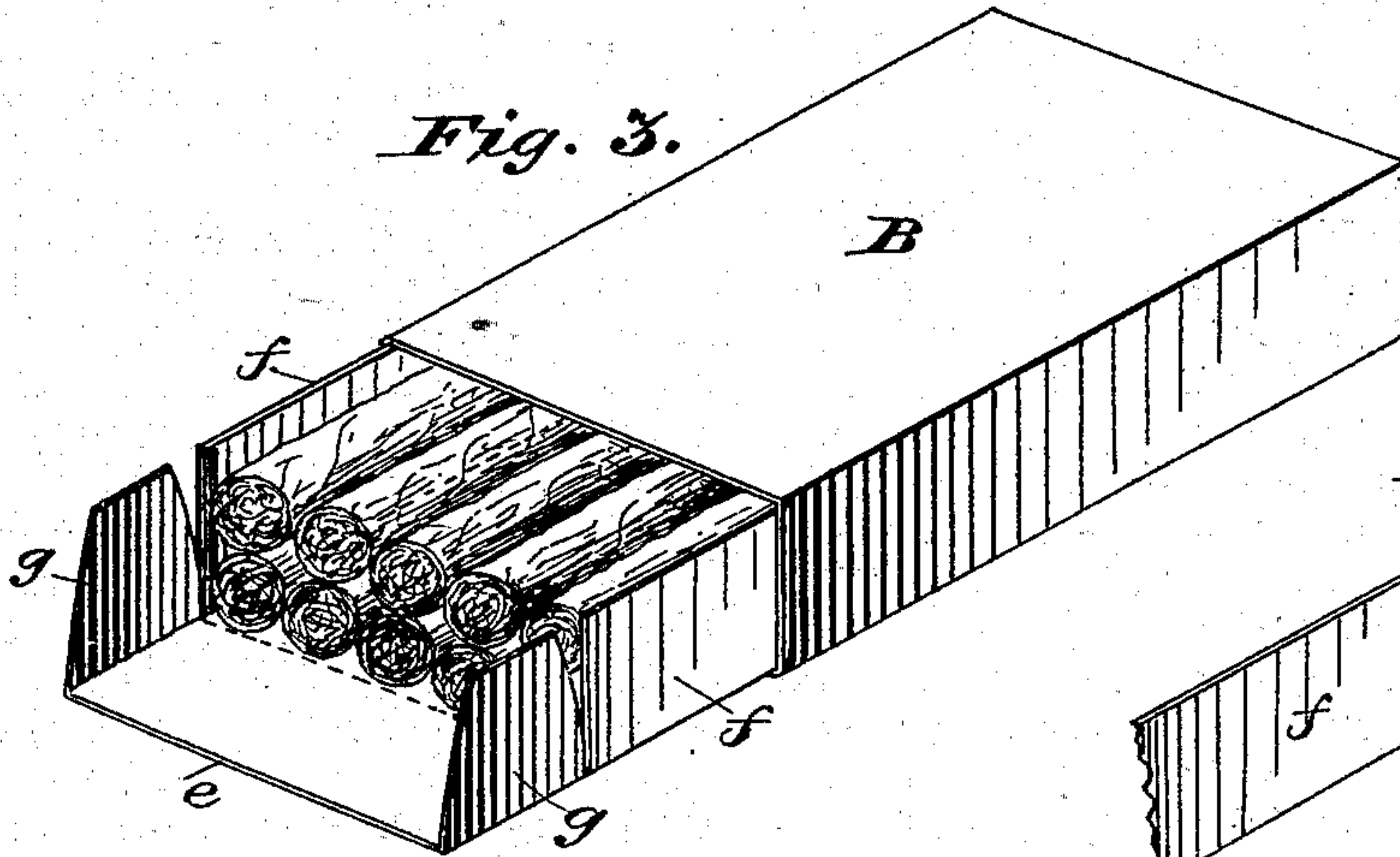
*Fig. 1.* Patented May 29, 1883.



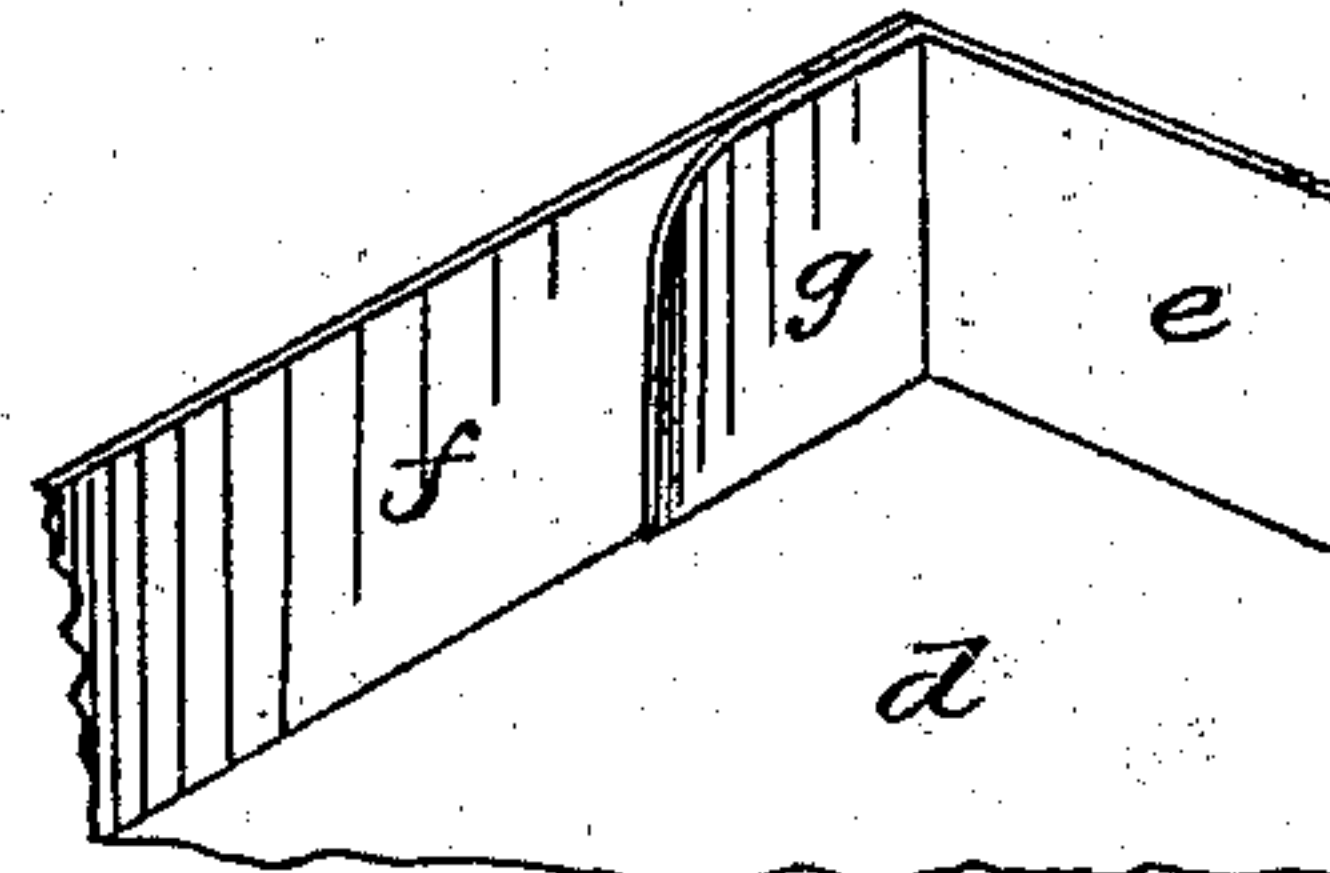
*Fig. 2.*



*Fig. 3.*



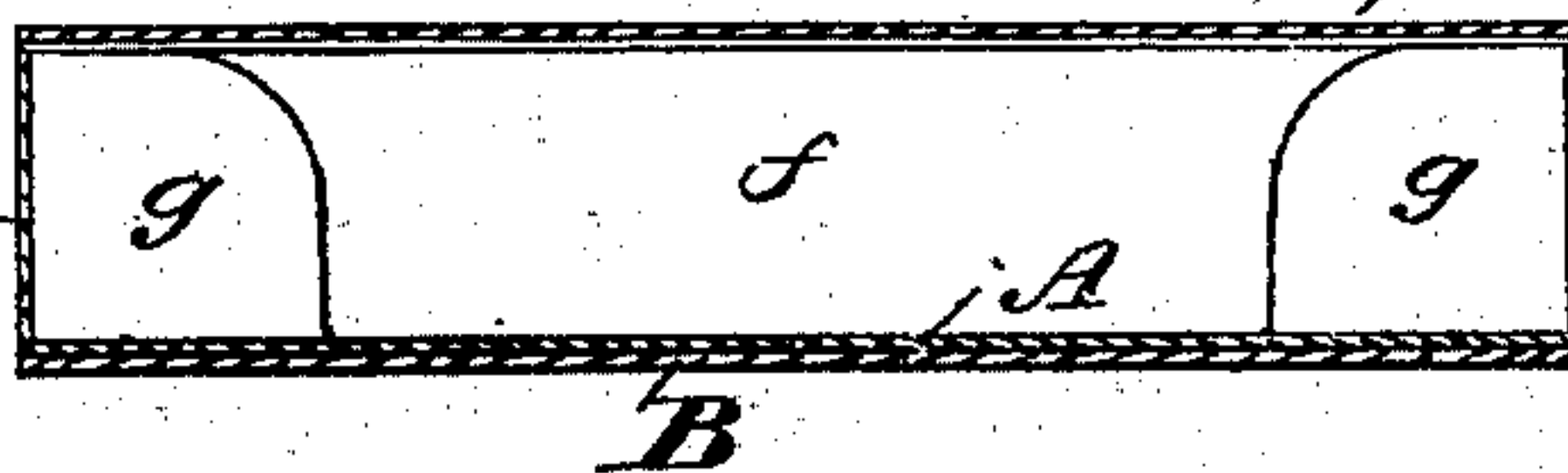
*Fig. 5.*



Witnesses:

J. C. Brecht  
Louis Prince

*Fig. 4.*



Inventor:

Jacob Felbel



# UNITED STATES PATENT OFFICE.

JACOB FELBEL, OF NEW YORK, N. Y.

## PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 278,526, dated May 29, 1883.

Application filed February 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB FELBEL, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Paper Boxes; 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 relates to an improvement in that kind of boxes known as "sliding boxes"—that is to say, a box composed of two separate parts, one a tubular casing or cover and the other a receptacle or tray adapted to receive and hold the article or articles, and be slid into or contained within the tubular casing.

Previous to my invention it has been customary to make the tray portion of such a box with the end and side pieces joined together, to also make trays with the ends and sides detached or separated by cutting, and to provide each end piece with a prolongation, which when the tray was slipped into the casing would also enter and rest underneath and parallel with the top thereof and over the articles in the tray, and serve to hold the end from falling down, and to also make trays with the ends and sides joined, but to cut the sides diagonally near the end, so that when the tray was pushed out of the tubular cover beyond the points at which the slits or cuts in the side pieces occurred the end and part of the bottom of the box or tray could be depressed or pulled down to facilitate the extraction of the contents of the receptacle; but to all such constructions of boxes there exists, I believe, some objection, either as to being difficult and expensive of manufacture, or as to being inconvenient to transport and store, or as to being unsuitable for the purpose of packing, containing, and extracting tobacco cigarettes of the kind known in the market as "Hall's Between the Acts," for which purpose my invention has been especially designed.

My invention has for its further objects to provide a sliding box which shall be easy and economic of manufacture, most convenient of packing for shipment and storage, and yet be

simple and easy of use; and to these ends and objects my invention consists in a sliding box the end or ends of the tray of which is or are held in vertical position by loose tongues or flaps which lie parallel with the sides of the cover, and which end or ends is or are adapted to be brought substantially in line with the bottom of the tray when the latter is pushed part way out of the cover, to facilitate the extraction of the contents of the tray, all as will be hereinafter more fully explained.

In the accompanying drawings, Figure 1 is a plan view of a paper or pasteboard blank cut, slitted, and scored or pierced, ready to be folded up and inserted within an ordinary tubular casing or cover. Fig. 2 is a perspective view of the blank shown at Fig. 1, folded up or formed into a tray or receptacle and pushed part way into a common tubular casing. Fig. 3 is a similar view, showing the tray filled with cigarettes and one end thereof turned down to a horizontal position. Fig. 4 is a longitudinal section of a box made according to a modification of my invention, and Fig. 5 is a perspective view of a portion of the tray of such modified box.

In the several figures of the drawings the same parts will be found designated by the same letters of reference.

A, Fig. 1, is the preferred form of blank for making rectangular trays, and is creased, scored, or pierced along the dotted lines *a a* and *a' a'*, and also along the dotted lines *b b*, and is cut or slitted transversely along the full lines *c c* from its edges until the longitudinal dotted lines *a a'* are met, as plainly shown. When a tray or receptacle is made up from a blank of this form, *d* will be the bottom thereof, *e e* the ends, *f f* the sides, and *g g g g* retaining tongues, tabs, or flaps, whose functions have already been described, but which will be hereinafter again referred to in connection with a further description of my invention, as illustrated in the other views. To form from this blank A, cut and scored as shown, a box or tray like that seen at Fig. 2, I proceed as follows, viz: I fold or turn on the dotted lines *a a* and *b b* the parts marked *e* and *f* at right angles to the part marked *d*, and thus form the bottom, the two ends, and the two sides of a tray. At this stage of the operation of forming the tray the tabs *g g g g* will be in line with the ends of



the box and projecting beyond the sides thereof for their full lengths. I then turn these tabs or tongues on the dotted lines *a' a' a' a'* at right angles to the ends of the receptacle and lay them in line with and against sides thereof, and thus complete the tray. If found more convenient or desirable, the tongues *g g* may be turned at the same time that the sides *ff* are turned or folded up, so that when the ends are brought up to a vertical position the flaps attached thereto will come to their proper places parallel with and against the sides of the tray, which position is clearly shown at Fig. 2. These tongues I prefer to place exteriorly of the sides of the tray for these reasons: First, the material of which paper boxes are ordinarily made being of a somewhat springy nature, these free tongues, when inserted within the tubular cover B, will have a tendency to spring outward from their hinge-lines, and will thus bear or press harder against the inner faces of the sides of the casing or tube, and this outward pressure of the tabs, it will be understood, will be augmented by any tendency of the sides of the tray to spring outward by reason of fitting snugly and having been slid into the case while slightly pressed toward each other by the fingers of the user of the box; and, secondly, by bringing these tongues on the outside of the side pieces of the tray the ends and corners thereof are greatly strengthened and better adapted to receive the pressure or force necessary to push the box into and out of its casing, because any such force will meet a resistance in the ends of the upright side pieces of the tray. Although I prefer to make the tabs tapering or curved in form, so that they will more readily enter between the sides of the tray and the sides of the cover, it is a feature not essential to my invention, as I have found rectangular tabs to answer well enough in practice.

It will be seen that a box made according to my invention can be expeditiously and cheaply manufactured, since there is no waste of material in cutting out the blank, nor expense nor time consumed in cementing or securing together the sides and ends of the tray, as heretofore.

The blanks A may be packed flat in packages for shipment and storage, and the tubular cases may be likewise treated when made of Manila paper, or other suitable fibrous material, as well understood by those familiar with the manufacture and use of sliding paper boxes.

It will also be seen that to form a box from a blank and tubular cover such as shown is an extremely simple matter, and requires but a moment's work. I should first form the tray, (either partially or wholly,) and put one end thereof a short distance into the casing B, then place therein whatever I desire to have the box hold, and, after having raised the end piece, push the tray all the way into the tube, guid-

ing the ends of the outer tongues as they pass by the edges of the casing.

My box has this great advantage: In order to get at the contents thereof it is only necessary to project the tray a distance equal to or just in excess of the length of the tabs or tongues, since when the tongues are withdrawn from the casing the end piece of the tray may be turned down at the hinge-line *a* about in line with the bottom thereof, and the tongues brought in line with the sides of the tray, and the contents of the same may be dumped or thrown forward by the hand into a position to be easily and handily grasped for extraction. This feature is illustrated at Fig. 3, where I have shown the box as if containing cigarettes or cigars, which merchandise my box is particularly well adapted to contain, as by the presence and use of the falling end piece the cigarettes may be easily extracted without danger of being broken.

My invention may be embodied in a box in which the end pieces are made of double thickness to secure rigidity and strength, as well as in a tray or box having only one end piece provided with tongues, and adapted to operate as described heretofore.

I presume it is now almost unnecessary for me to state that when the tray is contained wholly within the cover the tongues lie parallel with the sides thereof and hold the two parts relatively together, and the end or ends of the tray from protruding or springing out.

In lieu of placing the tongues exteriorly of the tray, they may be put inside thereof, as shown in Figs. 4 and 5, and when the tray is shoved within the cover the tongues will nicely hold the end pieces in vertical position.

Having now so fully described my invention that those skilled in the art can make and use a box containing the same, what I claim as new, and desire to secure by Letters Patent, is—

1. A sliding box the tray portion of which has a hinged end that is held in place by tongues which enter vertically within the cover, and that is adapted to be turned down substantially in line with the bottom of the tray, as and for the purposes set forth.

2. A sliding box comprising an outer casing and an inner tray, the latter provided with flaps or tabs which lie parallel with and between the sides of the tray and the sides of the casing to hold the box and the tray relatively together and the hinged end or ends of the tray upright, and to also strengthen the end or ends and corners of the tray so as to better resist a pressure thereon to push it out of its surrounding tube, as explained.

In testimony whereof I have hereunto set my hand this 7th day of February, 1883.

JACOB FELBEL.

In presence of—

F. O. McCLEARY,  
F. L. BROWNE.