

(No Model.)

H. S. MUNSON.

PAPER BOX.

No. 306,509.

Patented Oct. 14, 1884.

Fig. 1.

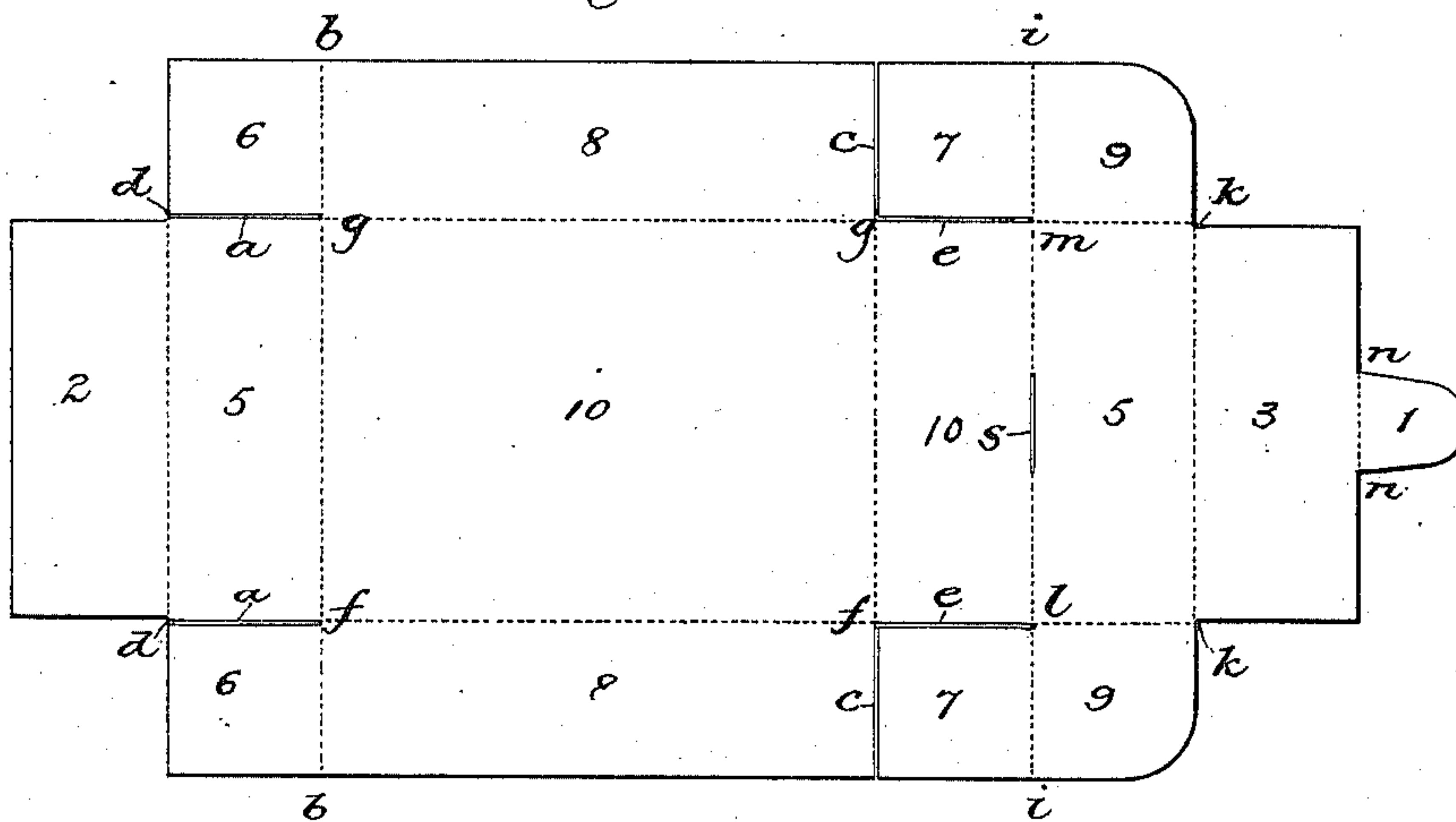


Fig. 2.

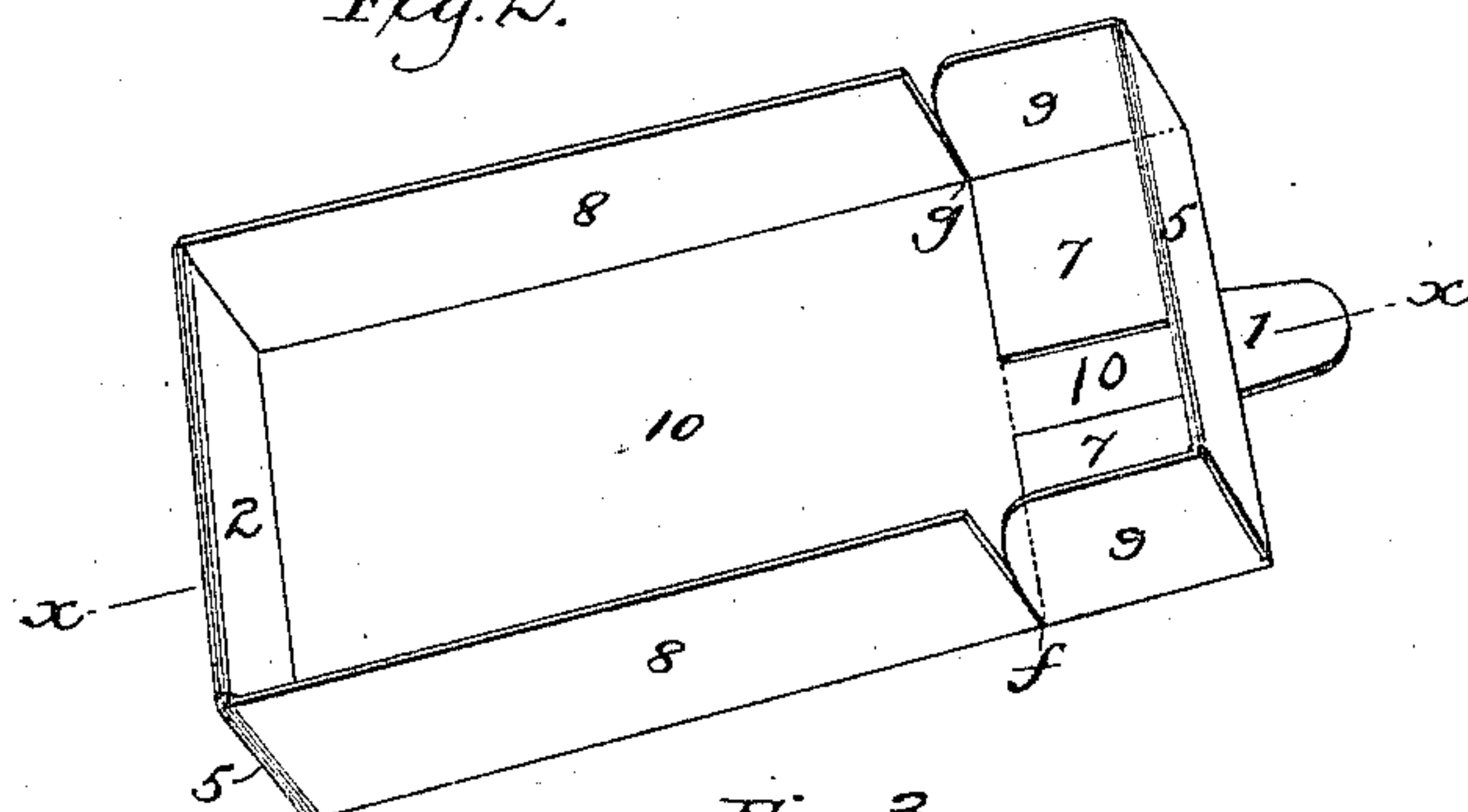


Fig. 3.

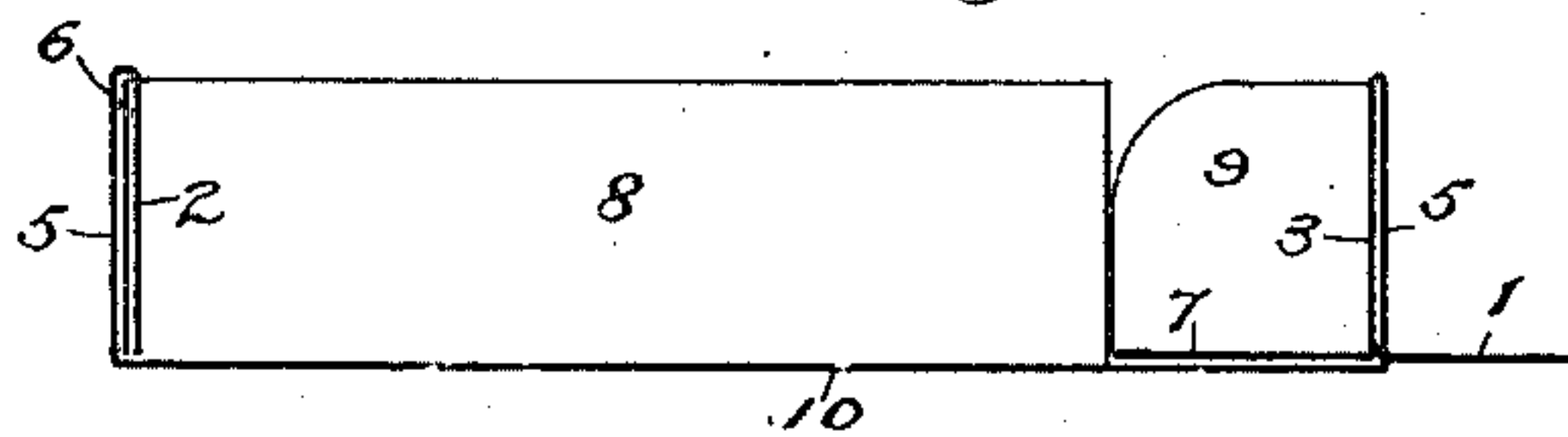
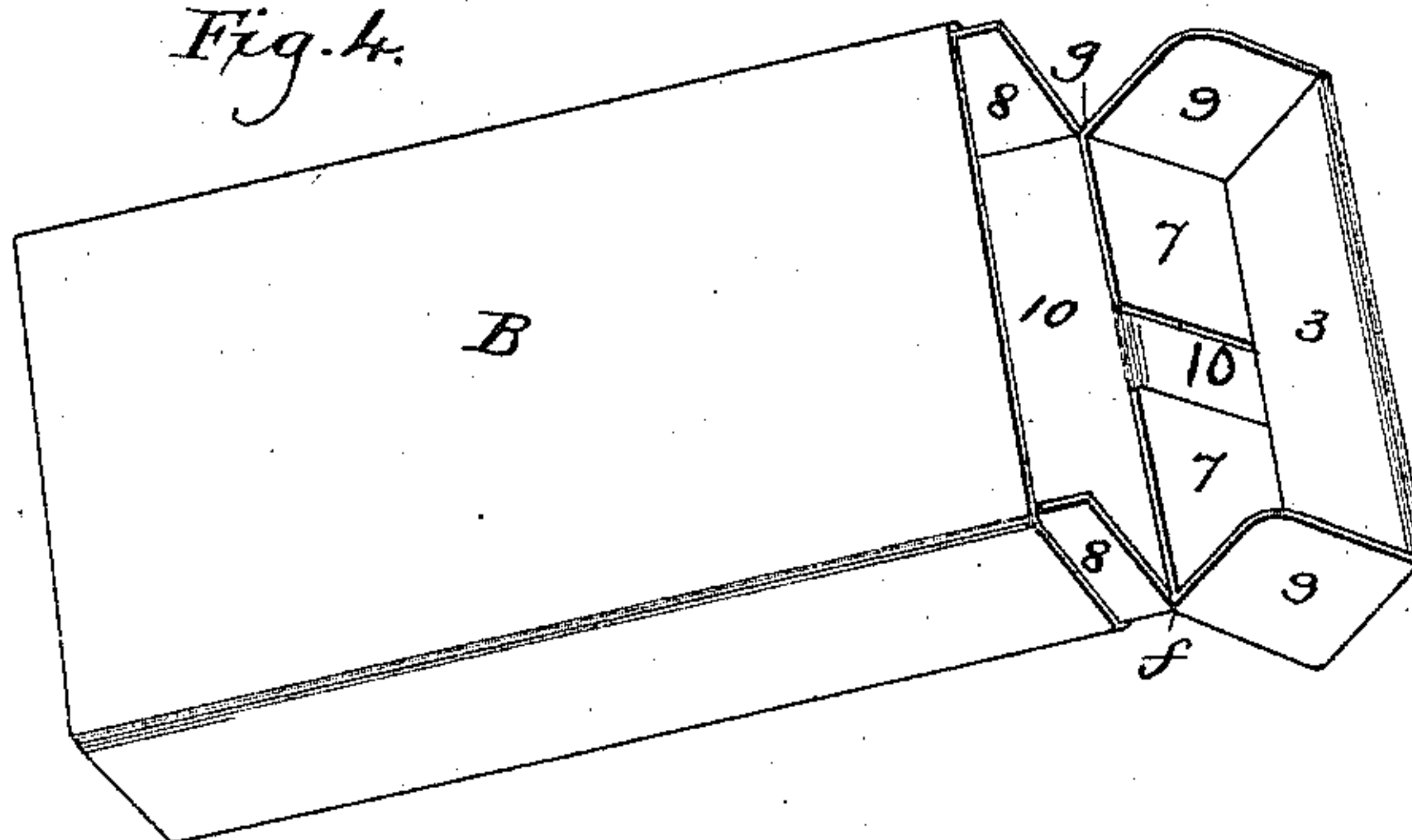


Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

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PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 306,509, dated October 14, 1884.

Application filed July 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, HARVEY S. MUNSON, a citizen of the United States, residing in the city of New Haven, county of New Haven, and State of Connecticut, have invented certain new and useful Improvements in Paper Boxes, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

10 This invention relates to the class of boxes which are known as "slide-boxes"—that is to say, those boxes which consist of a tubular cover or casing open at one or both of its ends and a tray or body which is open at its top and
15 is adapted to slide into and be closed by said casing. The boxes of this class possess many desirable characteristics, and have gone into very extensive use as receptacles for cigarettes, cheroots, matches, papers of powder, and
20 other similar articles which it is desirable to remove from the package one by one as they are used. When a box of this description is used as a receptacle for such articles, it becomes necessary to open and close the box
25 many times before the contents are exhausted, and this necessity for frequent opening and closing makes it highly desirable that the box should be so constructed that the contents can be readily removed without entirely with-
30 drawing the tray from the cover.

It is the object of the present invention to provide means by which this result can be attained; and to that end the invention consists in certain peculiarities of construction both in the sliding tray or body and in the blank from
35 which it is formed, all of which will be hereinafter fully explained, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of the blank from which the sliding tray or body is made. Fig. 2 is a perspective view of the tray removed from the tubular cover. Fig. 3 is a longitudinal section of the same, taken upon the line *x x* of Fig. 2; and Fig. 4 is a perspective view of the complete box, showing the tray partially with-
45 drawn.

Referring to Fig. 1 it will be seen that the sliding tray or cover is made from a single
50 blank or sheet, which is of substantially rectangular form, and is provided at its opposite

ends with flaps 2 3, one of which flaps is also provided with a tongue, 1, the purpose of which will presently appear. The blank thus formed is provided with two cuts, *a*, which
55 extend inward from the base of the flap 2, so as to form the end portion, 5, and corner flaps, 6, with two cuts, *c*, which extend inward from its opposite sides, so as to form the side portions, 8, and with two cuts, *e*, which extend
60 from the inner ends of the cuts *c* to the end of the tray, so as to form the two flaps 7, the purpose of which will presently appear. The blank is also creased, scored, or indented upon the lines *b b*, *i i*, *f f*, *g g*, *d d*, *k k*, *l k*, *m k*,
65 *n n*, and *f g*, so as to define the lines of fold between the bottom portion, 10, and the side and end portions, 5 8, between the end portions, 5, and the end flaps, 2 3, between the corner portions, 9, and the end portion, 5, and
70 flaps 7, between the side portions, 8, and the corner flaps, 6, and between the end flap, 3, and the tongue 1, and also to form a hinge across the bottom portion, 10, at the ends of the side portions, 8.

75 It is to be observed that the cuts and creases or scores just specified are so arranged that the parts 7 9 (not considering the rounded corners of the latter, which is not a material feature) are exactly square and of exactly the same size. 80 The blank is also provided upon the line *l m* with a short slit, *s*, which is of sufficient length to receive the tongue 1.

In forming the tray or body the blank is first folded upon the lines *f f* and *g g*, so as to
85 bring the side portions, 8, and the corner flaps, 6, up at right angles to the bottom portion, 10. The corner flaps, 6, are then folded inward upon the lines *b f* and *b g*, so as to lie along the line *f g*, after which the end portion, 5, is
90 folded up upon the line *f g*, and the end flap, 2, folded down upon the line *d d* so as to bring the flaps 6 between the portions 2 5, as shown at the left of Figs. 2 and 3. These parts are then secured in position by pasting, or by any
95 suitable means. The corner portions, 9, are then folded up upon the lines *l k* and *m k*, and the flaps 7 inward upon the lines *i l* and *i m*, so as to lie along the line *l m*, after which the end portion, 5, is folded up upon the line *l m*,
100 thereby laying the flaps 7 down onto the bottom 10 and bringing the corner portions, 9, into

line with the side portions, 8. The end flap, 3 is then folded down upon the line *k k*, and the tongue 1 inserted outward through the slit *s*, thus completing the tray or body, as shown in Fig. 2, and making it ready for insertion into the tubular cover B.

It will be observed that when the blank is folded in this manner the portions 9 are brought into the position originally occupied by the portions 7, and that by reason of these portions being of the same size and shape the portions 9 just join with the portions 8, and make the walls or sides of the tray of the same height throughout its entire length, and permit it to be readily slid into the tubular cover. The flaps 7 will be secured to the bottom 10 by paste or by other suitable means, and the flap 3 may also, if desired, be secured to the end portion; but the friction of the tongue 1 in the slit *s* will usually be sufficient to hold the flap 3 in place. The tubular cover B is made from a plain rectangular blank, which is simply creased and folded, and has its edges united so as to form the four-sided tube shown in Fig. 4.

When it is desired to gain access to the contents of the box, the projecting end of the tongue 1 will be grasped and the tray withdrawn from the cover a sufficient distance to permit the end of the tray to be turned down upon the line *f g*, as shown in Fig. 4. This will expose the end of the entire contents and permit a cigarette or other article to be readily removed from the box without further withdrawal of the tray. By then restoring the parts to the position shown in Fig. 2 the tray can be slid back into the cover, so as to entirely inclose and protect the contents.

The corners of the portions 9, which are next to the side portions, 8, will preferably be rounded, as shown in the present case; but this is not essential. They may be left abrupt, if preferred.

As shown in the present case, only one end of the tray is made to turn down to expose the contents. It is, however, to be understood that both ends may be made to turn down, if desired, so that access can be had to the con-

tents by withdrawing the tray from either end of the cover B.

When the tray is made to turn down at both ends, the cover B will of course be open at both ends; but when the tray is made to turn down at but one end the cover may be closed at the opposite end, if preferred.

By cutting the blank in the manner described, so as to provide the flaps 7, which can be turned in and secured to the bottom 10, that portion of the bottom which is turned down to expose the contents of the tray is greatly stiffened and the durability of the tray increased.

In conclusion, it is to be remarked that the tongue 1, although affording a convenient means for withdrawing the tray, may be omitted, if preferred, in which case the tray will be moved out of the cover by pressing upon its opposite end.

What I claim is—

1. The herein-described blank for forming the tray or body of a slide-box, the same being provided with the cuts *c e*, and creased or scored upon the lines *i i*, *l k*, *m k*, and *f g*, the lines *l k* and *m k* being equal in length to the cuts *c e*, substantially as described.

2. The herein-described tray or body for a slide-box, having the portions 9 folded upward and inward to complete the sides, and the flaps 7 secured to the bottom, said portions 7 and 9 being of the same size, substantially as described.

3. The herein-described tray or body for a slide-box, having its bottom creased or scored upon the line *f g*, and having the portions 9 folded upward and inward to complete the sides, and the flaps 7 secured to the bottom, said portions 7 and 9 being of the same size, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HARVEY S. MUNSON.

Witnesses:

EDWARD B. MUNSON,
EDSON S. BEACH.