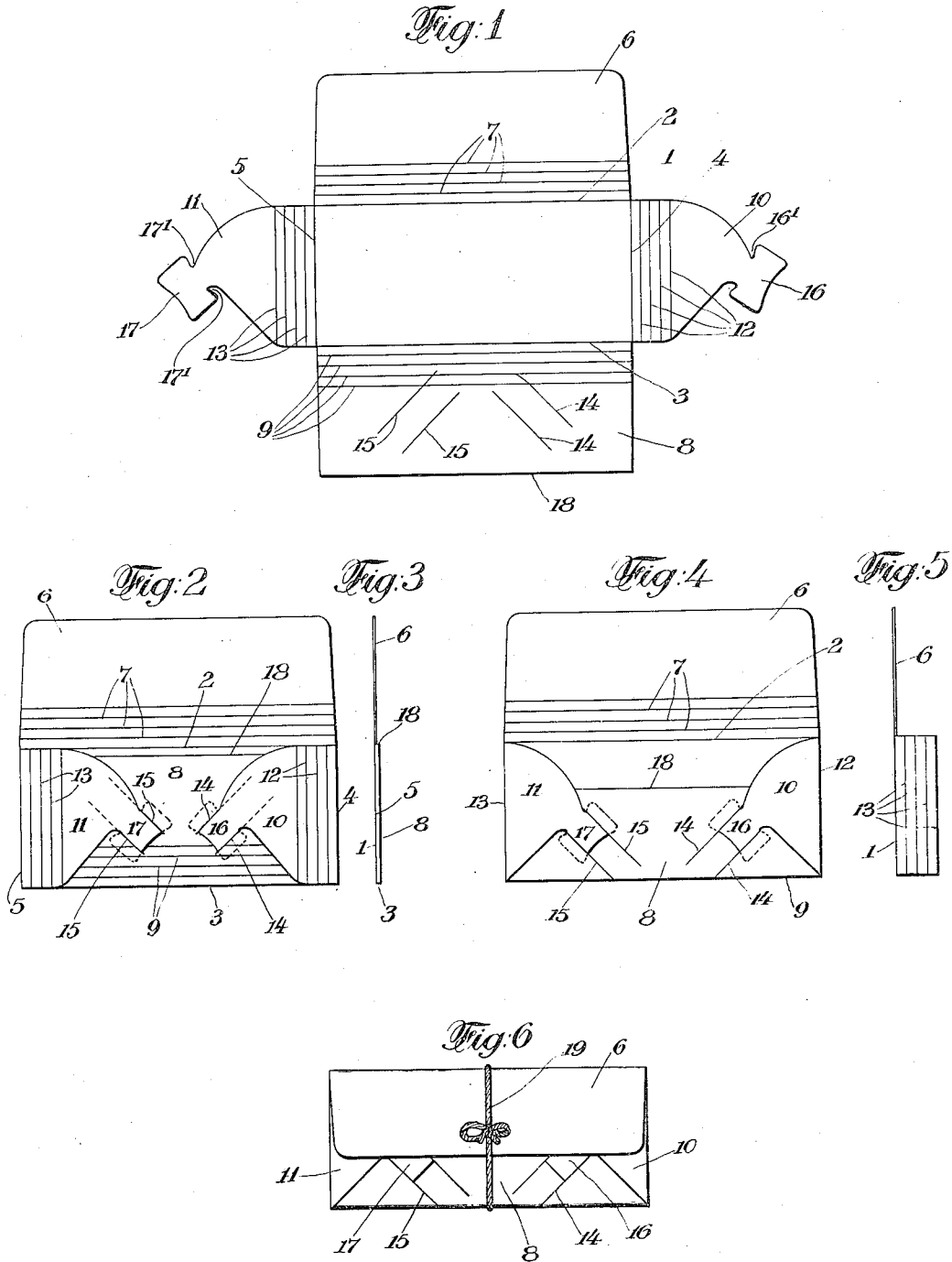


M. J. SHAFER.
 REVERSIBLE AND EXPANDING ENVELOP.
 APPLICATION FILED SEPT. 20, 1909.

1,042,488.

Patented Oct. 29, 1912.



Witnesses:
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UNITED STATES PATENT OFFICE.

MORTON J. SHAFFER, OF NEW YORK, N. Y.

REVERSIBLE AND EXPANDING ENVELOP.

1,042,488.

Specification of Letters Patent.

Patented Oct. 29, 1912.

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To all whom it may concern:

Be it known that I, MORTON J. SHAFFER, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Reversible and Expanding Envelops, of which the following is a specification.

My invention relates to improvements in reversible and expanding envelopes.

A general object of my invention is to provide an envelop of the class described which may be readily stamped out of a sheet of cardboard or other suitable material and which when formed results in a comparatively rigid envelop which is not liable to become undone and yet which may be readily expanded or contracted.

In carrying out my invention I preferably stamp the envelop in the form of a single piece from a sheet of suitable material and then form the same by providing line marks or line indentations on each of the flaps, upon which marks the flaps are bent to form the side, top and bottom containing walls. Further I provide end flaps which are maintained in constant interlocking and sliding engagement with the bottom flap by means of suitable integral tongues or ears.

Further objects, features and advantages will more clearly appear from the detailed description given below taken in connection with the accompanying drawing which forms a part of this specification.

In the drawing, Figure 1 represents my improved envelop opened up as stamped from the material from which it is made. Fig. 2 is a front view of the envelop when formed, but in a collapsed condition. Fig. 3 is an edge view of the envelop as shown in Fig. 2. Fig. 4 is a front view of the envelop in an expanded condition. Fig. 5 is an edge view of the envelop as shown in Fig. 4. Fig. 6 is a front view of the envelop in an expanded condition with the top flap closing the envelop and suitably tied down.

Referring to Fig. 1, the blank as stamped from suitable material consists of a main retaining wall or back 1, having a top edge 2, a bottom edge 3 and end edges 4 and 5. Integrally attached to the front edge 2 is a top flap 6 marked or indented with lines 7 upon which the flap 6 may be bent in order to form the top retaining wall. Integrally attached to the bottom edge 3 is a bottom flap 8 provided with line marks 9 along which

the lower flap may be bent to form the bottom retaining wall. Integrally attached to the end edges 4 and 5 are end flaps 10 and 11 provided with line marks or indentations 12 and 13 respectively, along which these flaps may be bent to form the end retaining walls of the envelop. The lower flap 8 is provided with slits 14, 14 and 15, 15, arranged diagonally with respect to the edges thereof and the end flaps 10 and 11 are provided with tongues or ears 16 and 17 respectively. The outer edge of flap 8 is indicated by 18.

In forming the envelop the lower flap 8 is bent upwardly along the line 3 and then the end flaps 10 and 11 are bent inwardly along the lines 4 and 5 and the ears 16 and 17 are arranged within the slits 14, 14, and 15, 15, respectively, so that the end flaps 10 and 11 are maintained in constant interlocking but sliding engagement with the bottom flap 8. This is clearly shown in Figs. 2 and 3.

When it is desired to expand the envelop so that a larger space is provided therein for contents it is only necessary to force the flap 8 downwardly, thereby bending the same on one of the lines or creases 9, 9. This forces the end flaps 10 and 11 downwardly bending the same on lines or creases 12 and 13 corresponding thereto. In Fig. 4 the envelop is shown thus expanded to its full extent, and in making this change the ears 16 and 17 have been pulled from the lower ends of the slits 14 and 15 to the upper ends of said slits, as will be clearly seen from a comparison of Figs. 2 and 4. The expansion of the envelop will also be clearly seen in Fig. 5. In expanding the envelop the edge 18 is also forced downwardly as clearly shown in Fig. 4. The cut-away portions 16' and 17' between the ears 16 and 17 and the main parts of the end flaps 10 and 11, project inwardly toward the ends of said ears or tongues so that as the envelop is expanded the shape of the cutaway portions 16' and 17' prevents the tongues or ears from becoming disengaged from the slits 14 and 15.

The envelop, as completely expanded and tied, is clearly shown in Fig. 6, in which the top flap 6 is bent over along one of the lines 7 corresponding to the amount of expansion of the envelop and the same is tied down by a suitable cord 19.

From the above it will be clear that I have provided an envelop which may be very cheaply, quickly and efficiently manufac-

tured by stamping a single blank from a sheet of suitable material, and an envelop which when formed is extremely rigid and firm and not liable to come apart yet at the same time the envelop may be readily expanded to accommodate any suitable amount of contents.

The envelop may be reversed by merely bending the flaps 6, 8, 10 and 11 toward the opposite side of the main retaining wall or back 1.

It will be apparent that many changes may be made in my improved envelop without departing from the spirit and scope of my invention. Therefore, I do not desire to be limited to the exact details shown, but

Having fully and clearly described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a device of the class described, a main retaining wall and a bottom flap and end flaps all integral with said wall, said end flaps being provided with integral tongues, said bottom flap being provided with two straight diagonal slits at each end thereof for engagement with said tongues so that the end flaps are arranged to be maintained in constant interlocking and sliding engagement with the bottom flap, said tongues being provided with recesses 16', 17', projecting inwardly toward the ends of said tongues to prevent the tongues from becoming disengaged, and said end and bottom flaps being creased so as to be bent on various lines as the device is expanded.

2. In a device of the class described, a main retaining wall and a bottom flap and end flaps all integral with said wall, said end flaps being provided with integral tongues, said bottom flap being provided

with two straight diagonal slits at each end thereof for engagement with said tongues so that the end flaps are arranged to be maintained in constant interlocking and sliding engagement with the bottom flaps, and said end and bottom flaps being creased so as to be bent on various lines as the device is expanded.

3. In a device of the class described, a main retaining wall, a bottom flap and end flaps, and means for providing a sliding connection between the bottom flap and each end flap, said means comprising two substantially straight diagonal slits in one, and means in the other for engagement in said slits, so that the end flap is maintained in constant interlocking and sliding engagement with the bottom flap; said end and bottom flaps being creased so as to be bent on various lines as the device is expanded.

4. In a device of the class described a main retaining wall, a bottom flap and end flaps, and means for providing a slidable connection between the bottom flap and each end flap, said means comprising a tongue on one, and two substantially straight diagonal slits in the other for engagement with the tongue so that the end flap is maintained in constant interlocking and sliding engagement with the bottom flap, and said end and bottom flaps being creased so as to be bent on various lines as the device is expanded.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

MORTON J. SHAFFER.

Witnesses:

GORHAM CROSBY,
EDWIN SEGER.