July 19, 1927. 1,636,495

O. WIDMAIER

ENVELOPE BLANK AND METHOD OF MAKING SAME

Filed May 19, 1925

Fig. 1.

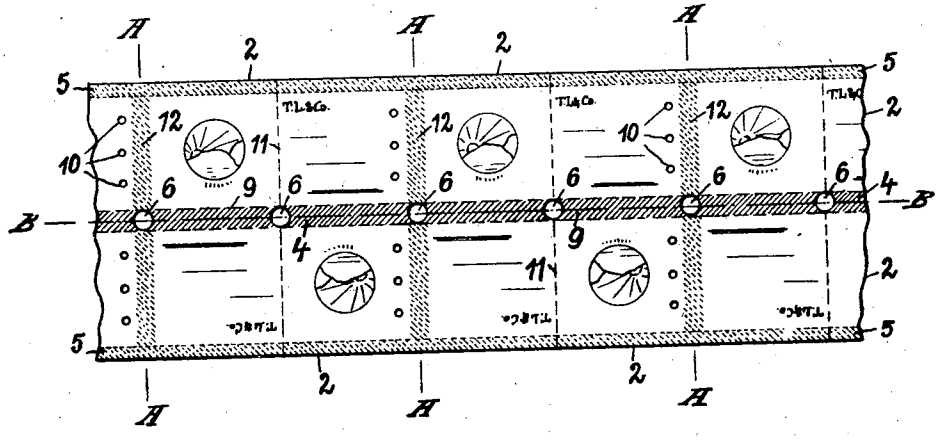


Fig. 2.

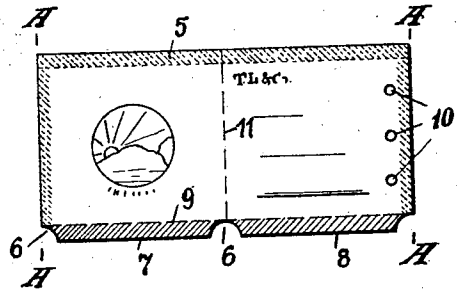
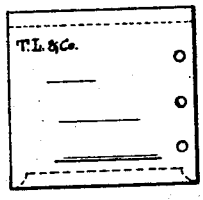


Fig. 3.



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UNITED STATES PATENT OFFICE.

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ENVELOPE BLANK AND METHOD OF MAKING SAME.

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My invention relates to blanks for envelopes and more especially to a method in which the blanks are cut from a web of paper. It is an object of my invention to feed such web through a sealing machine in such manner that the several blanks are always in the correct position with regard to the operating elements of the machine.

To this end I punch transverse rows of holes in the web at predetermined points which can be engaged by nippers forming part of the sealing machine so that the web is fed the exact distance required. In a preferred form of my invention I divide the web longitudinally, cutting the blanks from the two halves of the web, and I form holes along the line of division, thereby obtaining blanks with indentures at two corners and at the end of the folding line, whereby two closing flaps are formed.

In the drawings affixed to this specification and forming part thereof I have illustrated the preferred move of carrying out my invention.

In the drawings

Fig. 1 is a plan view of part of a web, while

Fig. 2 shows an envelope blank detached from the web and

Fig. 3 shows a finished envelope.

Referring to the drawings, the web shown in Fig. 1 is subdivided into two parallel strips along the line B—B by means of a suitable cutter (not shown). Each strip is again subdivided into a plurality of blanks 2, 2 by transverse cuts extending on the lines A—A. It will be understood that any number of strips and blanks may be cut from a web, and it will also be understood that instead of cutting the strips from the web and the blanks from the strips, the web and the strips might be provided with suitable indents or perforations along which the strips or blanks can be separated by pulling them apart.

The web which is taken from a reel (not shown) may be provided with printed or other matter, such as a trade-mark, the address of the sender, line marks for the address of the receiver and the like.

After these impressions have been made, the web is caused to pass through a punching machine (not shown) which produces holes 6, 6 along the line B—B, and perforations 10, 10 along the lines A—A. The perforations 10 are adapted to be engaged by the nippers of the sealing machine. At the same time, if desired, perforations of a finer pitch or indents or the like may be produced along the lines B—B and A—A, if the blanks shall be separated by pulling them apart. If they shall be separated by cutting, such perforations can obviously be dispensed with. Preferably the blanks are also slightly creased or perforated along the lines 9, 9 in parallel to the line B—B, and at right angles to these lines, as shown at 11. As appears from the drawing, each blank 2 comprises a complete hole 6 at the centre and one half of a circular hole 6 at each end, the other halves of these holes belonging to the adjacent blanks. It will further appear that the lines A—A pass through the centre of the end holes, and the lines 11, 11 pass through the centre of the central hole.

After the web has been punched, perforated or indented as described, adhesive is applied to the upper face of the web along the line B—B at 4 and to the lower face of the web along the lines A—A at 12, 12 and along the edges of the web at 5, 5. Finally, the web is separated along the line B—B and wound on a reel from which each strip separately or both strips together are taken to a sealing machine. In this machine the blanks 2 are separated along the lines A—A as shown in Fig. 2, the adhesive strips are moistened, the flaps 7 and 8 adjacent the holes 6, 6 are folded over to the inside along the lines 9, 9 and the envelope is folded along the line 11, 11.

The finished envelope is shown in Fig. 3. It appears from this figure, that the folded-over flaps 7, 8 meet on the inside of the envelope and the adhesive strips 12 and 5 meet also so that the envelope is closed.

The means and mechanisms by which the web is converted into blanks and by which these blanks are sealed, do not form part of the present invention, and are therefore not shown and described.

It will be understood, that any of the operations described and which are not vital for the present method, may also be dispensed with, for instance the printing of the blanks.

The punching from the holes 6 which are of a comparatively large diameter, may be used as seals.

I wish it to be understood that I do not desire to be limited to the exact details of

construction shown and described for obvious modifications will occur to a person skilled in the art.

I claim:

1. The method of making envelope blanks from a web of paper, comprising punching transverse rows of feeding holes in the web at predetermined points for the attack of feeding grippers, each row comprising only a few holes evenly distributed in spaced relation across the width of the web, and cutting the web on lines parallel to and spaced from said rows.

2. The method of making envelope blanks from a web of paper having double the width of an envelope blank, comprising punching transverse rows of feeding holes in the web at predetermined points for the attack of feeding grippers each row comprising only a few holes in spaced relation arranged in line in two groups, punching along the longitudinal middle line of the web holes spaced the length of a blank and cutting the web on lines parallel to and spaced from said rows.

3. The method of making envelope blanks from a web of paper having double the width of an envelope blank, comprising punching transverse rows of feeding holes in the web at predetermined points for the attack of feeding grippers each row comprising only a few holes in spaced relation arranged in line in two groups, punching along the longitudinal middle line of the web holes spaced half the length of a blank and cutting the web on lines parallel to and spaced from said rows.

4. The method of making envelope blanks from a web of paper having double the width of an envelope blank, comprising punching transverse rows of feeding holes in the web at predetermined points for the attack of feeding grippers each row comprising only a few holes in spaced relation arranged in line in two groups, punching along the middle line of the web holes spaced the length of a blank cutting the web on the middle line and cutting the web on lines parallel to and spaced from said rows and separating said blanks from said web.

5. As a new article of manufacture, an envelope blank of oblong rectangular shape having three small indentures, one at each end and one in the middle of one of its longitudinal edges, and two holes in spaced relation near one transversal edge.

In testimony whereof I affix my signature.

OTTO WIDMAIER.