

No. 835,700.

PATENTED NOV. 13, 1906.

C. A. BROWN.

STENCIL FOR AUTOMATIC MAILING MACHINES.

APPLICATION FILED JUNE 23, 1906.

Fig. 1.

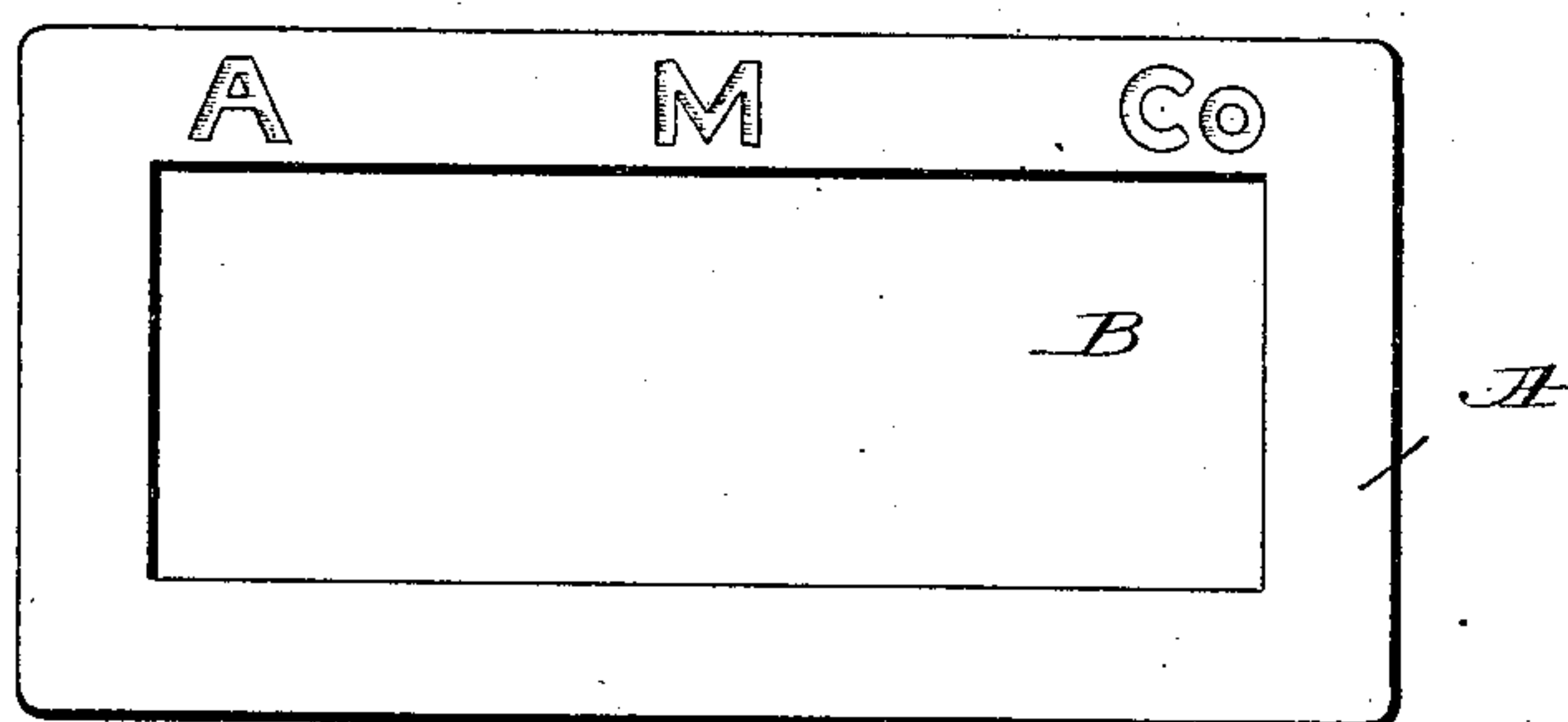


Fig. 2.

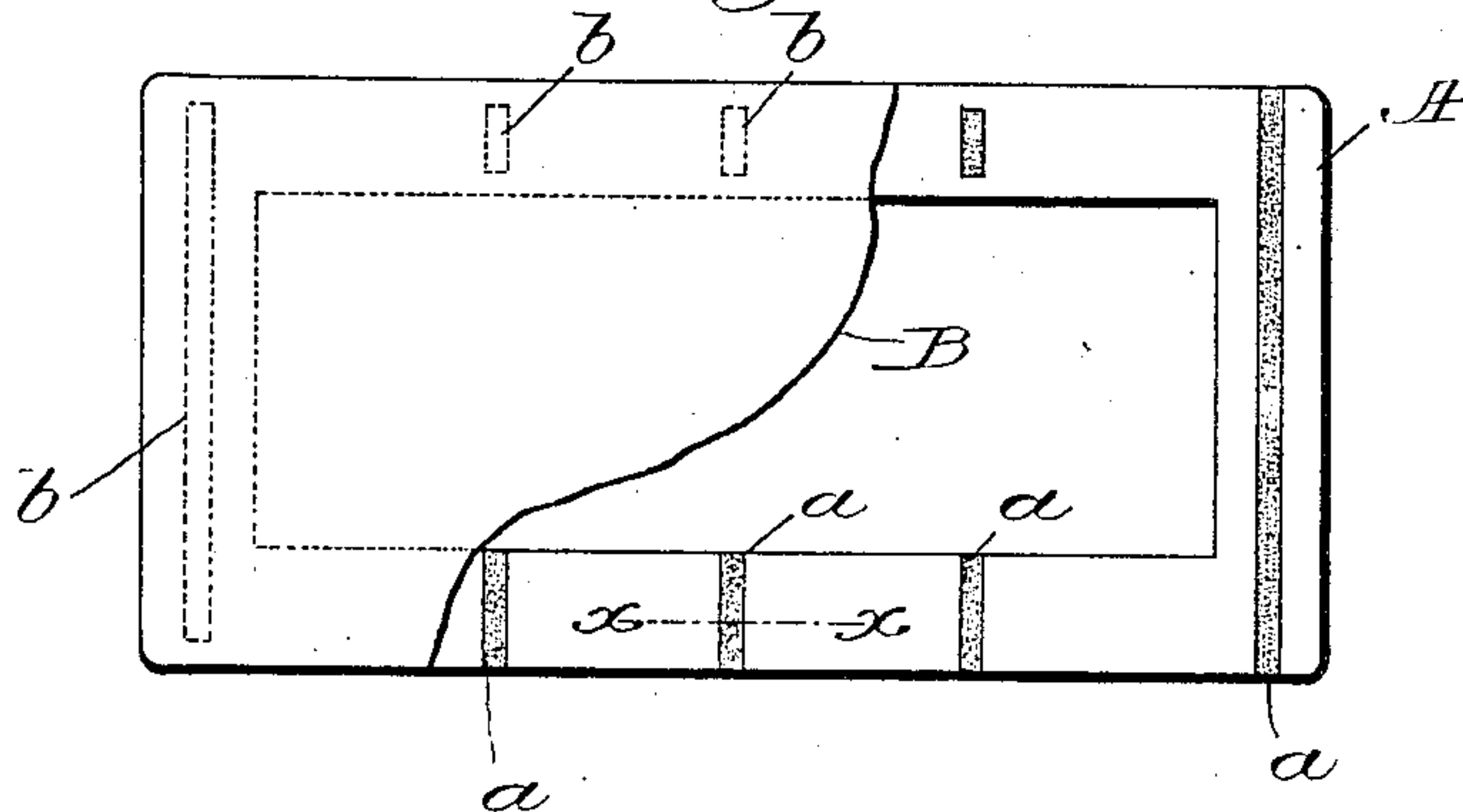


Fig. 3.



Witnesses:

Fred. S. Grunhof
Wm. L. Friary.

Inventor.
Charles A. Brown,
by Lowry & Gregory
attys.

UNITED STATES PATENT OFFICE.

CHARLES ALVA BROWN, OF SALEM, MASSACHUSETTS.

STENCIL FOR AUTOMATIC MAILING-MACHINES.

No. 835,700.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed June 23, 1906. Serial No. 323,001.

To all whom it may concern:

Be it known that I, CHARLES ALVA BROWN, a citizen of the United States, and a resident of Salem, in the county of Essex and State of Massachusetts, have invented an Improvement in Stencils for Automatic Mailing-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to the construction of what are known as "stencils" for use in automatic mailing-machines and similar devices. Such a stencil is commonly constructed of a substantially rectangular framework of paper-board or similar material and a backing-sheet of parchment or paper. The sheet of parchment or paper is perforated with the desired legend, such as an address, and is fastened to the paper-board frame by being pasted or gummed thereto. These stencils are usually furnished and also preserved in boxes containing a definite number—for example, five hundred. In use in an automatic mailing-machine the stencils are fed through the machine, and the feeding and controlling devices are such that it is essential that they should be of a uniform gage or thickness.

It has been found that in the manufacture of the stencils the stripes or spots of adhesive material uniting the central sheet and the paper-board frame are of material thickness and not only produce a variation in the thickness or gage of the stencil itself, but also since the stripes or spots of paste are not of the same thickness produce stencils which vary as between themselves in the thickness or gage. A given-sized box, therefore, is found to hold a varying number of stencils, and thus there is no uniformity in the number of stencils sold or stored in a given-sized box. Again, it is found that owing to this variation in thickness or gage the stencils when fed through the automatic mailing-machine are not properly handled and crowd past one another, delaying the operation of the machine.

It is the object of this invention to remedy these difficulties and produce stencils of uniform and accurate gage or thickness.

The invention will appear from the accompanying specification and will be more particularly set forth in the appended claims.

The drawings represent a stencil of the ordinary form embodying the invention.

In the drawings, Figure 1 is a plan view of the upper or face side of the ordinary stencil, such as is used in an automatic mailing-machine; Fig. 2 is a rear or back view of the stencil with the stencil-sheet partly broken away; Fig. 3 is a cross-section of a portion of the stencil, taken on the line *x x* of Fig. 2.

The stencil is made up of two parts, the frame A being usually made of paper-board or similar material and usually in the rectangular form, such as illustrated. The stencil-sheet in which the legend, such as an address, is perforated is indicated at B and is usually made of parchment or a tough paper.

In this invention a series of depressions are formed in the back of the stencil-frame by compression, a suitable punch-die or rolling-die being employed for that purpose. These depressions preferably extend transversely of the stencil-frame and may extend where they occur throughout the entire width of the frame, so as to form depressed grooves, as it were, as indicated at *a a a*, or they may extend where they occur but partially through the width of the frame, so as to form depressed pockets *b b b*. The material of the frame is thus depressed at the points indicated below the rear surface to form the grooves or pockets, and the material forming the pockets is at the same time compressed or compacted together. These depressions are supplied with adhesive material in any suitable manner, as from the surfaces of disks or projections on a paste-roller. The adhesive material is thus received within the depressions, so that when the stencil-sheet is applied and pressed in place there will be no adhesive material to vary the thickness of the stencil as a whole. The compacted or compressed character of the material surrounding the depressions also controls and renders substantially uniform the degree of absorption of the paste or gum by the frame.

The paper-board or material forming the frame of the stencil and the parchment or paper forming the stencil-sheet can be obtained of substantially uniform thickness, so that when the two are compressed together with the paste applied in the compressed depressions described the result is that stencils are produced of a definite and uniform gage or thickness. The parts of the stencil are pressed together in any suitable manner, as by passing between pressure-rolls.

Stencils of this character preferably and usually carry on the face of the stencil an

identifying-legend of some kind—such, for example, as the name of the mailing-machine with which the stencils are used, or advertising matter—and heretofore the characters forming such a legend have been printed upon the face of the stencil. One feature of the present invention consists in forming such characters on the face of the stencil of depressions into the material of the stencil, thus carrying the characters below the surface and compacting the material of the stencil and increasing the compactness of the union between the parts of the stencil, and consequently the accuracy of the gage. Preferably the depression of the face of the stencil is done at the same time as the depression of the back of the stencil to form the depression for receiving the adhesive material, and in this manner the parts of the stencil are firmly compacted together, securing an accurate gage. In Fig. 1 the identifying-legend is indicated partially by the letters "A-M-Co.," and the characters may be placed entirely around the face of the frame or at such points as may be desired.

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

1. A stencil comprising a frame, a superimposed stencil-sheet, the said frame being compressed upon its back surface to form a depression, adhesive material located in said depression and serving to attach the stencil-sheet to the back of the frame without increasing the gage or thickness of the stencil.

2. A stencil comprising a frame, a superimposed stencil-sheet, the said frame being compressed at intervals upon its back surface to form depressions, adhesive material located in said depressions and serving to attach the stencil-sheet to the back of the frame without increasing the gage or thickness of the stencil.

3. A stencil comprising a frame, a superimposed stencil-sheet, the said frame being compressed at intervals upon its back surface to form depressed inclosed pockets, adhesive material located in said pockets and

serving to attach the stencil-sheet to the back of the frame without increasing the gage or thickness of the stencil.

4. A stencil comprising a frame, a superimposed stencil-sheet, the said frame being compressed upon its back surface to form a depression, adhesive material located in said depression and serving to attach the stencil-sheet to the back of the frame without increasing the gage or thickness of the stencil, a series of characters depressed into the front surface of the completed stencil serving to identify it and to increase the compactness of the union between the parts of the stencil and thus the accuracy of the gage.

5. A stencil comprising a frame, a superimposed stencil-sheet, the said frame being compressed at intervals upon its back surface to form depressions, adhesive material located in said depressions and serving to attach the stencil-sheet to the back of the frame without increasing the gage or thickness of the stencil, a series of characters depressed into the front surface of the completed stencil serving to identify it and to increase the compactness of the union between the parts of the stencil and thus the accuracy of the gage.

6. A stencil comprising a frame, a superimposed stencil-sheet, the said frame being compressed at intervals upon its back surface to form depressed inclosed pockets, adhesive material located in said pockets and serving to attach the stencil-sheet to the back of the frame without increasing the gage or thickness of the stencil, a series of characters depressed into the front surface of the completed stencil serving to identify it and to increase the compactness of the union between the parts of the stencil and thus the accuracy of the gage.

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

CHARLES ALVA BROWN.

Witnesses:

NATHAN HEARD,
MABEL PARTELOW.