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PAPER HOLDER FOR THE USE OF THE BLIND.
APPLICATION FILED MAY 4, 1918.

1,293,023.

Patented Feb. 4, 1919.

Fig. 1.

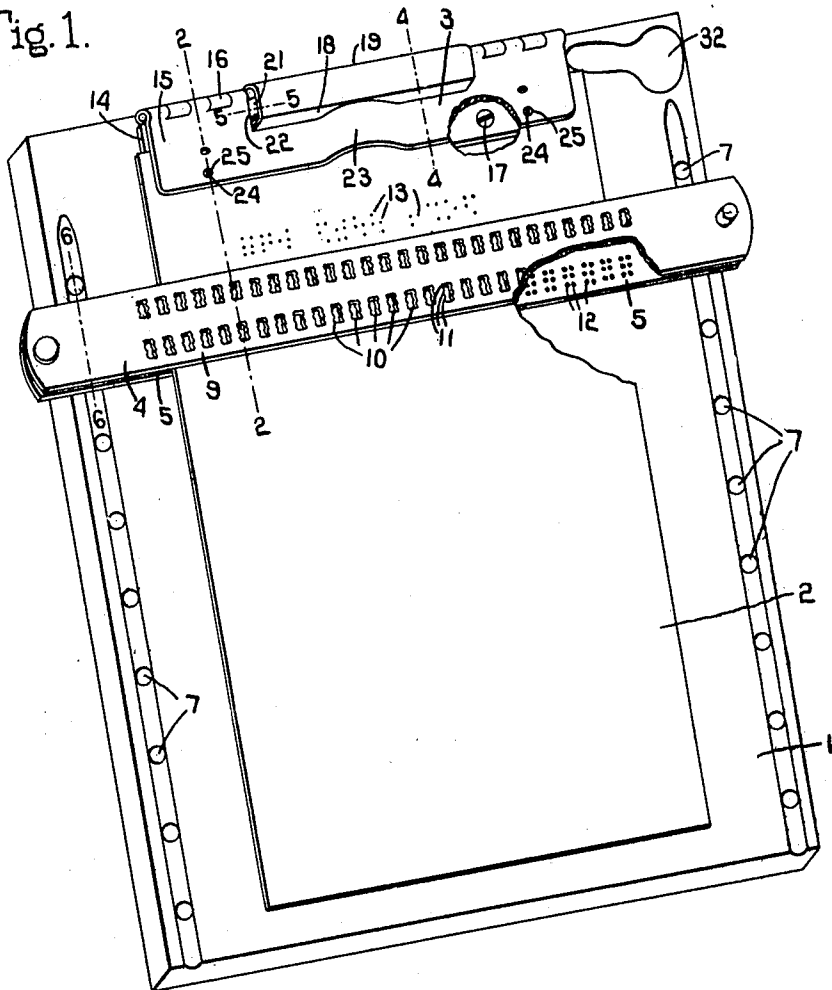


Fig. 4.

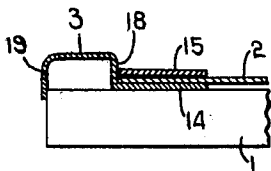


Fig. 2.

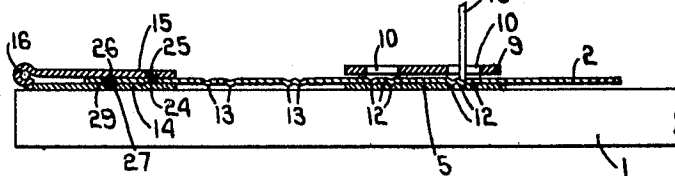


Fig. 5.

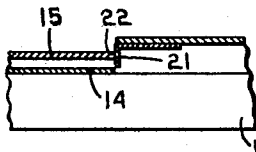


Fig. 3.

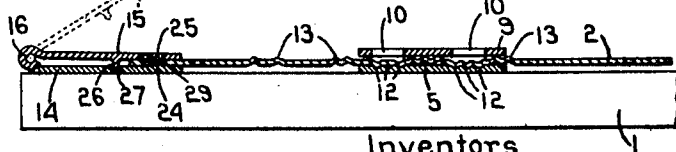
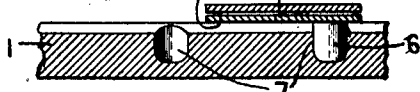


Fig. 6.



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UNITED STATES PATENT OFFICE.

FRANK C. BRYAN, OF NEWTON, AND CARL M. ANDERSON, OF BOSTON, MASSACHUSETTS,
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PAPER-HOLDER FOR THE USE OF THE BLIND.

1,293,023.

Specification of Letters Patent.

Patented Feb. 4, 1919.

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To all whom it may concern:

Be it known that we, FRANK C. BRYAN, a citizen of the United States, residing at Newton, county of Middlesex, State of Massachusetts, and CARL M. ANDERSON, a citizen of the United States, residing at Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Paper-Holders for the Use of the Blind, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to a device to be used by the blind for holding a sheet of paper while groups of embossed dots are formed therein to represent different characters, and the object of the invention is to provide a novel device of this character which will securely hold the paper while it is being used, which is constructed so that a blind person can very readily insert the paper into the holder in proper position, which permits the use of both sides of the paper, and which has other advantages, all as will be more fully hereinafter set forth.

In order to give an understanding of our invention, we have illustrated in the drawings a selected embodiment thereof which will now be described, after which the novel features thereof will be pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a device embodying our invention; Figs. 2 and 3 are sections on the line 2—2, Fig. 1;

Fig. 4 is a section on the line 4—4, Fig. 1;

Fig. 5 is a section on the line 5—5, Fig. 1;

Fig. 6 is a section on the line 6—6, Fig. 1.

The device comprises a board 1 adapted to form a support for a sheet of paper 2, said board being provided with a clip shown generally at 3, which will be hereinafter described, for holding the sheet of paper in proper position on the board.

The board is shown as having associated therewith a guiding member indicated generally at 4 and which extends transversely across the board and is constructed to guide a blind person in forming in the paper 2 groups of embossed dots indicating different

characters. This guiding member is of the construction usually employed for this purpose and comprises a base strip 5 which is provided with positioning pins or projections 6 that are adapted to set into any one of the apertures 7 formed in the board, and an upper guiding strip 9 which is pivotally connected at one end to the base strip 5 and is provided with two rows of apertures 10, each having a plurality of notches 11 at each edge thereof. The base strip 5 is provided with indentations or pits 12 in line with the notches. The sheet of paper 2 is situated between the two strips 5 and 9, and the groups of embossed dots which indicate different characters are formed therein by means of a stylus 13, the latter being inserted through the apertures 10 in line with the notches 11. This operation indents the paper in such a way as to form embossed or raised dots 13 on the underside of the paper where the paper is pressed into the indentations or pits 12.

Different combinations of dots can be made by using different combinations of the notches 11 in each aperture 10, and these various combinations are used to indicate different characters. A blind person can by the sense of feeling make different combinations of dots in the paper through each aperture 10, and when the paper is removed the dots 13 on the back of the paper can be read by the sense of touch by any blind person. This form of guiding member and method of embossing paper is one which is now commonly used by blind people.

The guiding member herein shown has two rows of apertures 10 so that two lines of characters can be embossed on the paper without shifting the position of the guiding member, and when any two lines have been embossed, then the guiding member may be shifted into the next lower apertures 7, thus bringing a fresh portion of the paper between the two elements of the guiding member.

The clip 3 which we have provided for holding the paper 2 while it is thus being embossed comprises two leaves 14 and 15 pivotally connected together at 16. The leaf 14 is fixedly secured to the board 1 at the

upper edge in some suitable way as by means of screws 17. Said leaf is formed with a positioning shoulder 18 against which the top edge of the paper 2 may be positioned 5 when the paper is being placed in the holder. This positioning shoulder may be made in any suitable way, but will preferably be formed by slitting the leaf 14 and bending the portion between the slits upwardly to 10 form the shoulder 18, said portion then being bent horizontally and the edge being bent downwardly, as at 19. A housing is thus formed, one side 18 of which constitutes the positioning shoulder for the sheet 15 of paper. The upper leaf 15 is provided with an opening 20 to receive the housing when the leaves are closed together. Situated within the housing is a spring 21 which projects slightly beyond one end thereof and 20 which engages the edge 22 of the opening 20 as the leaves are closed together, said spring operating to frictionally hold the leaves in their closed relation while permitting the upper leaf 15 to be separated from 25 the lower leaf in order to insert a sheet of paper between the leaves or remove one therefrom. The upper leaf 15 is bent upwardly, as shown at 23, to provide a portion which may be grasped by the thumb and finger when it is desired to raise the 30 upper leaf.

The lower leaf is provided with two paper-retaining spurs 24 which are adapted to be received in apertures 25 formed in the 35 upper leaf 15 and the upper leaf is provided with two paper-retaining spurs 26 adapted to be received in apertures 27 formed in the lower leaf, said spurs penetrating the sheet of paper 2 when the latter is clamped between them and thus securely holding it in 40 position.

In order to place a sheet of paper in the holder the upper leaf is opened away from the lower leaf and a piece of paper is placed 45 in position with one edge against the shoulder 18, after which the upper leaf is closed down against the lower leaf. The shoulder 18 operates to position the paper squarely on the board 1 and the closing of the leaves 50 causes the spurs 24 and 26 to penetrate the paper and thus securely anchor it in position.

The distance in a direction vertically of the board between the spurs 24 on the lower 55 leaf and the spurs 26 on the upper leaf is equal to half the distance between the rows of apertures 10, and the purpose of this arrangement is to enable both sides of the paper to be used. When the sheet of paper is 60 first placed in the holder, the upper edge of the paper is positioned against the shoulder 18, and when the desired information is placed on the paper in characters constituted by groups of dots, such characters will 65 be in lines extending across the paper which

are separated by a distance equal to the distance between the rows of apertures 10. After one side of the paper has been thus embossed, the sheet of paper may be removed and placed on the board in reverse 70 position, that is, with the side which was formerly the under side of the sheet now on top. In replacing the sheet of paper on the board in this reverse position, the apertures 29 therein formed by the spurs 26 will be 75 inserted over the spurs 24 which brings the sheet in a lower position on the board than that previously occupied. The amount which the sheet is thus lowered on the board is equal to half the space between the rows 80 of apertures 10 so that in the new position of the sheet the apertures 10 will overlie the space in the sheet between the rows of dots. A new series of groups of indentations can thus be formed in the sheet which will produce protuberances or dots on that side of 85 the sheet which was formerly the top of the sheet, and as these new rows of dots are formed between the first rows, the presence of the dots first made do not interfere 90 at all with those made after the sheet has been reversed. It is thus possible to use both sides of the sheet.

The board 1 is shown as provided with a pocket or recess 32 in which the stylus 13 95 may be placed when it is not being used.

The form or clip herein shown has the advantage that it presents nothing to interfere with making dots on the top line of the paper.

We claim:

1. In a paper holder, the combination with a board, of a guide member adapted to be located in different positions thereon and provided with rows of character-forming 105 apertures, each constructed to guide a stylus in embossing a sheet of paper, and a paper-holding clip secured to the board and comprising two leaves hinged together and between which the paper is held, each leaf having spurs extending therefrom which are 110 adapted to enter apertures in the other leaf, the spurs on one leaf being situated a distance from those on the other leaf equal to half the distance between the rows of apertures in the guide member. 115

2. In a paper holder, the combination with a board, of a leaf member fixed thereto and having a portion bent up therefrom to form a spring housing, one edge of said portion 120 constituting a sheet-positioning shoulder, a second leaf member hinged to the first leaf member, and a resilient member situated within said housing and adapted to engage the first leaf member when it is in closed 125 relation thereby to frictionally hold it closed.

3. In a paper holder, the combination with a board, of a leaf member fixed thereto and having a portion bent upwardly therefrom 130

to form a housing and to constitute a sheet-
positioning shoulder, a second leaf hinged
to the first leaf and provided with an open-
ing to receive the housing when the leaves
5 are in closed relation, and a resilient mem-
ber within the housing and adapted to en-
gage the edge of the opening when the

leaves are closed thereby to frictionally hold
said leaves in their closed relation.

In testimony whereof, we have signed our 10
names to this specification.

FRANK C. BRYAN.
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