Aug. 26, 1941. H. LUCAS ET AL 2,253,858

AUTOMATIC PAGE-TURNING BLOCK

Filed Feb. 3, 1939

Fig. 1.

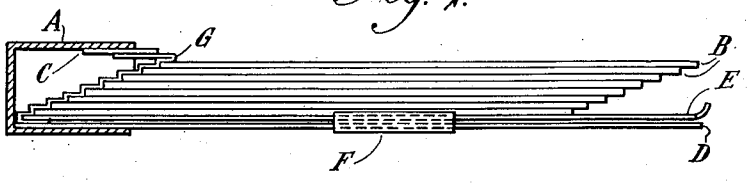


Fig. 2.

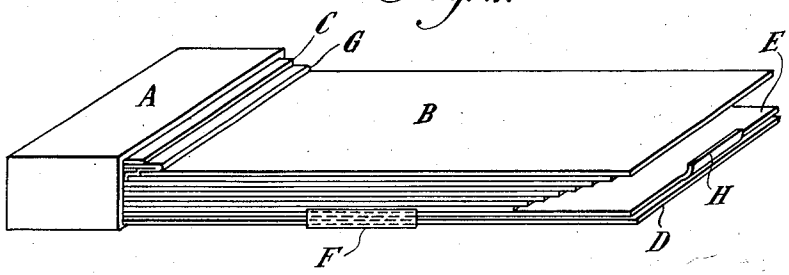
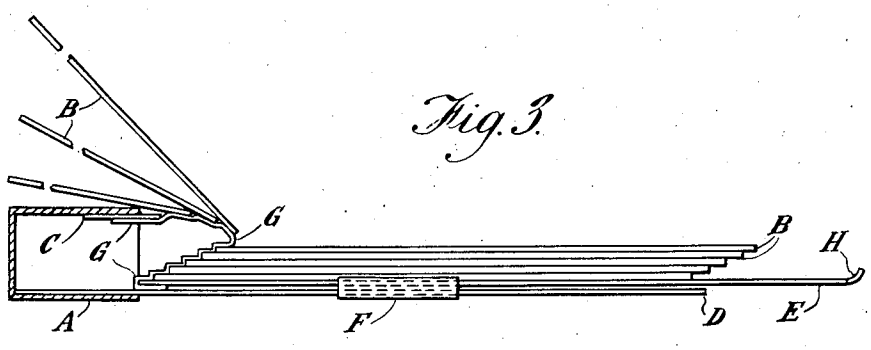


Fig. 3.



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AUTOMATIC PAGE-TURNING BLOCK

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Application February 3, 1939, Serial No. 254,348
In Germany July 10, 1937

1 Claim. (Cl. 281—1)

This invention relates to automatic page-turning blocks, that is to say to blocks comprising a number of superposed sheets or leaves which may be caused by a lengthwise movement of the block along a carrier or support to turnover, one by one, so as to expose the upper leaf surfaces, successively in order that they may be viewed or be used for writing, reading and the like purposes.

According to the invention the sheets or leaves which constitute the block are arranged in a lengthwise staggered superposition, that is to say, each leaf or sheet is laterally displaced with respect to the next following sheet, so that the marginal surface portions of each individual sheet are left exposed and are not covered by the superposed sheet or sheets. These marginal surface portions which form the back of the block are connected by a flexible tape or band which firmly adheres to the said marginal surface portions, being for example glued thereto, and which constitutes at the respective sheet edges fulcrums or hinges around which the said sheets are rocked, when the block is moved in a lengthwise direction.

The tape-covered oblique back of the block is normally housed within a laterally open pocket or container, the bottom wall of which is provided with an extension which supports the block and along which it can be moved, and the top wall of which is permanently connected with the upper end of the flexible tape or band. The arrangement is such that an endwise pull is exerted on the block the sheet connecting link tape subjects the sheets successively to a lever action, whereby they are turned over in a block opening or closing sense, depending upon the block being moved away from or towards the back receiving pocket.

The pocket which receives the back of the movable block may be provided with a hinged flap or the like which forms with the block supporting base plate some kind of a book cover, the back of which is formed by the block back receiving pocket and which imparts to the article an artistic or pleasant appearance.

In the drawing which illustrates, by way of example a preferred embodiment of the invention,

Fig. 1 is a side view, partly in section, of the block in its partly turned-over condition.

Fig. 2 is a perspective view of the block in its condition of closure.

Fig. 3 is a view similar to Fig. 1 when the block has been partly opened.

The block comprises a plurality of superposed sheets B laterally displaced with relation to each other, as illustrated, so that each sheet is provided at its inner end with a transverse marginal portion which is not covered by the sheet or sheets overlying it. To these free marginal top surfaces is glued or otherwise permanently attached a pliable strip or tape G, for example of linen or other suitable fabric. The free upper end of this strip is, in the embodiment illustrated doubled and fixed to the lower face of a transverse cardboard or the like strip C which is attached in any suitable way to the lower face of the top wall of a box like laterally open pocket A, beyond which it extends laterally, as shown in Fig. 2, so as to form an extension of the said top wall.

The outer or transverse edge of strip C is located substantially above the outer tape covered marginal surface portion of the top sheet, so that the oblique block back, constituted by the exposed marginal portions and the pliable tape is concealed within the pocket, when the block is in its closed condition (Fig. 1) whereas the main body portion of the block extends outwardly beyond the said pocket.

The other or lower end of the strip G is attached to the free edge portion of a base sheet E of stiff cardboard or the like. The outer end of the base sheet E is provided at its centre with a projecting extension or handle H, affording a grip for the fingers when the block is to be used, that is to say when the sheet E is to be moved inwardly or outwardly with relation to the pocket A, as will be described hereinafter.

The block base E is slidably guided upon a bottom portion or block support D which is provided with lateral guiding loops F, and to which the box or pocket A is permanently attached F. The contacting surfaces of the base sheet E, of the bottom portion D and of the loops F are preferably provided with a special antifriction coating.

If the base sheet E is drawn outwardly relatively to the pocket A by means of handle H, the sheets are turned over successively by the lever action to which their inner ends are subjected by the tape G, (Fig. 3) and this turning over movement is imparted to the uppermost sheet of the block immediately the outward movement of the latter begins. When the base sheet E is pushed back into the pocket A, the reverse operation takes place, so that the sheets will finally re-assume their superposed, laterally displaced positions.

The block sheets are preferably all of the same size, so that the front edges are likewise relatively displaced, the front edges of the lower sheets receding with relation to those of the upper sheets.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:

An automatic page turning block, comprising a plurality of stiff sheets of like size stacked in stagger formation, the rear margin of each but the top sheet protruding to the back from under the overlying sheet, a pocket having a bottom, rear and top wall, said top wall extending short of the back edge of the top sheet of said plurality of sheets, when said plurality of sheets is inserted in said stacked stagger formation into said pocket and the rear edge of the bottom sheet of said plurality of sheets substantially abuts against said rear wall, a flexible tape extended over and attached upon the protruding rear margins of said sheets and upon a corresponding rear margin of the top one of said plurality of stiff sheets and folded back from the rear margin of the top sheet onto and attached upon said top wall, so that said sheets will be successively swung up, when said stacked plurality of sheets is pulled out from said pocket, and a guide means extending from said bottom wall and confining the bottom one of said plurality of sheets bottomwise and transversely, when said plurality of sheets is pulled out from said pocket.

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