June 1, 1926. 1,587,299

S. GROSSMAN

BOOKKEEPING APPLIANCE

Filed March 11, 1925

Fig. 1.

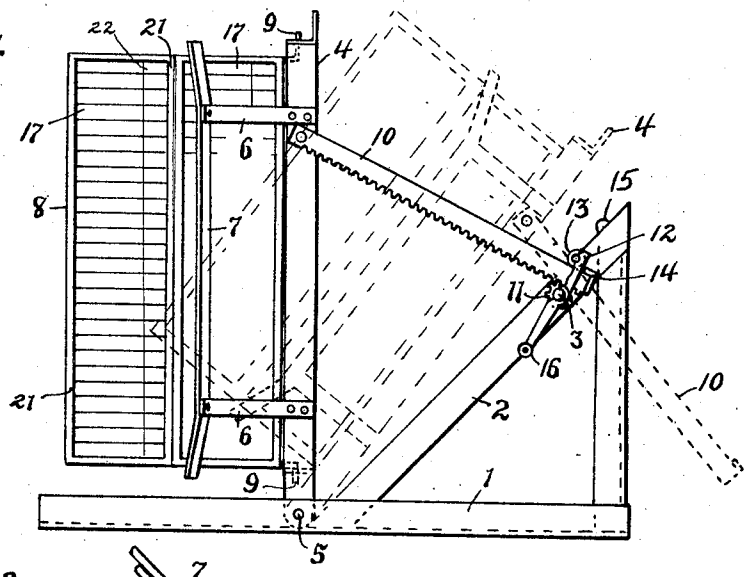


Fig. 2.

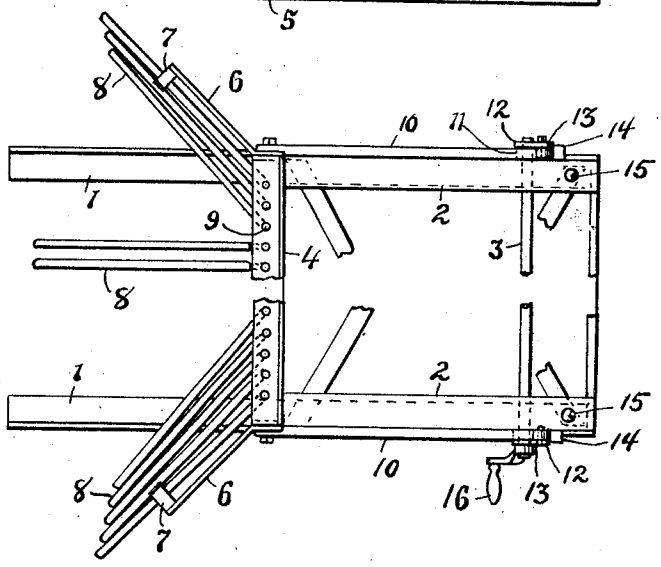


Fig. 3.

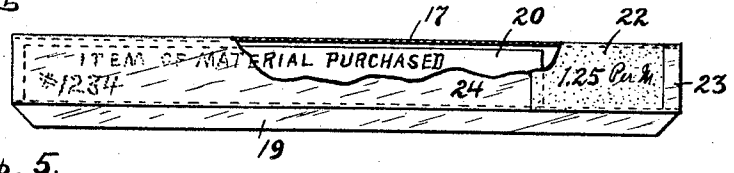


Fig. 4.

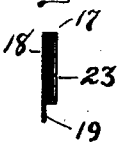
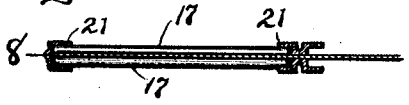


Fig. 5.



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BY

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UNITED STATES PATENT OFFICE.

SAMUEL GROSSMAN, OF FORT WAYNE, INDIANA.

BOOKKEEPING APPLIANCE.

Application filed March 11, 1925. Serial No. 14,649.

This invention relates to improvements in bookkeeping appliances and the object thereof is to provide a holder for a multiplicity of removable record slips disposed in series and arranged in panels that may be swung as the leaves of a book, and including a mounting for the swinging panels, which mounting includes a tilting frame and mechanism for its operation whereby the panels may be sustained so as to swing upon vertical axes, or, upon slanting axes, accordingly as the frame is positioned. Another object of the improvement is to provide an adjustable support for a group of record holding panels, so arranged as to hold the panels in such position that they will swing upon the vertical axes, or, upon inclined axes accordingly as the support is adjusted; and a further object is to facilitate manipulation of the removable record slips in an appliance of its class, and also to render convenient for the operator to apply and remove inscriptions upon the record holders.

These objects are accomplished by the construction illustrated in the accompanying drawings, in which:—

Fig. 1 is a side elevation of an appliance embodying the invention;

Fig. 2 is a plan view projected from Fig. 1, a portion being broken away;

Fig. 3 is a front view of one of the removable record slip holders containing a record slip, a portion of the holder being cut away.

Fig. 4 is an end view projected from Fig. 3; and

Fig. 5 is a fragmentary cross section of one of the swinging panels.

The characters appearing in the description refer to parts shown in the drawings and designated thereon by corresponding characters.

The invention comprises a base preferably formed of a pair of bars 1 spaced apart, each having at its rear portion an upwardly extending bracket 2 fixed thereon and in which is supported a transversely disposed drive shaft 3. A supporting frame 4, of rectangular form, is pivoted at its lower end between the bars 1 upon corresponding bolts 5, located ahead of the bracket 2. Each side of the frame has fixed thereon a pair of outwardly inclined arms 6 which have attached at their outer ends a rail 7 constituting a rest.

A series of panels 8 have hinged support in the frame 4, each frame being of usual construction and having a trunnion 9 at its top and bottom adjacent its rear portion upon which the panel has support in the frame so as to swing laterally. The panels are spaced apart at the points of their supported connection in the frame so that the panels may be turned freely from right to left and vice-versa, as the leaves of a book, limited by the rest at each side of the frame with which the outermost panel at each end of the series has direct contact.

At each side of the supporting frame 4 is pivoted, to its upper portion, a rack bar 10 that extends rearwardly from the frame over the drive shaft 3, and has engagement with a corresponding pinion 11 on the shaft. A swinging arm 12 is mounted on the shaft adjacent the outer face of each rack bar and has thereon a roller 13 that overhangs the corresponding upper edge of the rack bar and prevents the rack bar from disengagement with the pinion with which it is engaged. Upon the rear end of each rack bar is a fixed lug 14 that has engagement with the corresponding arm 12 and limits the forward movement of the rack bar when the swinging frame reaches its upright position. Each bracket 2 has at its upper end a buffer 15 against which the supporting frame 4 rests when in its inclined position.

The drive shaft 3 has upon one end thereof a crank 16 which actuates the supporting frame 4 through the medium of the shaft, the pinions thereon and the rack bar.

In each panel 8 is held in vertical series numerous removable record slip holders 17, each consisting of a flat tube 18 with a downwardly projecting lip 19 along its lower rear edge. The holder is formed of a transparent celluloid sheet, the tube being open at each end through which may be inserted a record slip 20 upon which is printed or inscribed an entry to be viewed through the transparent front of the tube. The tubes are removably positioned in connection with the panel by inserting their ends behind the corresponding strips 21 on the panel, the tube being sufficiently flexible as to admit of its being bowed during the inserting operations.

When in place in the panel the tubes rest in successive order, one upon another, each with its lip 19 along its lower edge extending back of the upper edge of the preceding holder.

An especial feature in connection with

the record holder is an inscription patch 22 that is applied to each tube on its front face 23 and which covers one end portion thereof, the other portion 24 of the front of the tube being left intact and transparent. The patch is formed by "frosting" the outer front surface of the tube by the application thereto of a suitable silicate in any well known manner which has the effect of whitening and roughing the surface of the tube so that erasable inscriptions may be made thereon with a pencil.

When utilizing the invention, as in making references only to the records held in the various panels, the supporting frame 4 is preferably positioned upright so that the panels swing upon vertical axes. When thus held, the panels may be swung apart with but slight exertion upon the part of the operator so that any of the records may be located and observed expeditiously. When it becomes desirable to part the series of panels, as the leaves of a book, and to sustain any of the particular panels in exposed position, the supporting frame 4 is tilted backwardly upon the bracket by manipulating the crank.

When the frame is thus positioned the panels swing upon inclined axes and tend to remain in position with one or the other of their sides exposed to view accordingly as they are turned, and also, extended in a receding plane which is more convenient to the operator in applying inscriptions upon the record holders than when vertically held. Also, instead of swinging freely, the panels tend to remain stationary when the frame is inclined which facilitates manipulation of the record slip holders, as in removing and replacing the tubes in the panels.

What I claim is:—

1. In an appliance of the class described, a base member including a bracket thereon; a supporting frame having pivotal connection at its lower end on the base member and having limited backward swinging movement; an outwardly extending rest in fixed relation with each side of the supporting frame; a series of record holding panels vertically disposed, each having pivotal support at its inner edge in said frame, the swinging movement of said panels being limited by said rests; a rack bar pivoted to each side of the supporting frame near the top thereof; a crank operated drive shaft in the bracket and having fixed thereon a pair of pinions that have engagement respectively with said rack bars, an arm adjacent each of said rack bars having a roller bearing upon the upper edge of the rack bar for preventing the rack bar from disengagement with its pinion; and a stop on each rack bar engageable with the corresponding arm for limiting the forward movement of the rack bar.

2. In an appliance of the class described, a pivotally supported frame having limited swinging movement and including means for sustaining the frame in vertical and inclined positions; a mechanism for removing the frame from one position to the other; a series of record holding panels positioned in the frame in spaced relation with each other and being hinged separately therein so as to permit free swinging lateral movement thereof when the frame is in either vertical or inclined position; and a rest at each side of the frame operable to limit the outward swinging movement of the panel adjacent thereto.

3. In an appliance of the class described, an adjustable supporting frame; and a series of record holding panels spaced apart and separately hinged so that when the frame is in vertical position said panels will have free swinging lateral movement and when the frame is tilted said panels will lie inert in corresponding inclined planes and be movable upon their hinges so as to lie inert in corresponding oppositely inclined planes.

In testimony whereof I affix my signature.

SAMUEL GROSSMAN.