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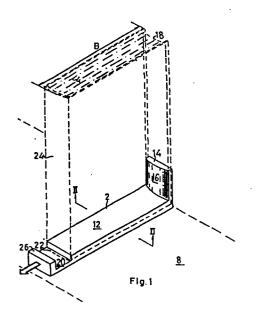
(54) Method and device for storage of books.

(5) A device for the storing on shelves, and the individual withdrawal therefrom, of books, comprising:

a substantially flat, strip-like body (2) having a bottom surface (6) and a top surface (12), the width of which body, over at least part of its height, at most equals the collective thickness of the leaves (4) of said book, and the height of which body exceeds the height (s) of the squares of said book:

a nose-like member (14) projecting from one end of said body (2) in a direction substantially perpendicular to said top surface, (12), and

a recessed portion (20) extending across said top surface (12) at a point close to the other end of said body (2), and having a depth at least equaling the height of said squares s.



Method and device for storage of books.

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The present invention relates to a device for the storing on shelves, and the individual withdrawal therefrom, of books, in particular of heavy, hard-cover volumes such as handbooks, reference works, encyclopaedias, and the like.

The manner in which such books are at present stored on, and pulled off, shelves is highly unsatisfactory from the point of view of the durability and integrity of these books and their bindings, for the following reasons.

The book cover ("case") is cut so as to project slightly beyond the edges of the leaves, these projections being known as "squares". When a book now rests on the shelf in the upright position, i.e., with the bottom edges of the covers touching the shelf, the entire mass of the leaves is suspended from the book spine, which also has to take up the considerable tilting moment produced by this mass. A book is thus under deformative strain even when merely resting in the upright position.

Pulling out a book from amongst a row of other, similarly sized books usually involves its tilting out of the vertical, accomplished by putting the index finger onto the top edge of the book, near the headband and, in fact, using the latter and/or the edge of the cover back as points of purchase. The book having thus been tilted, the thumb and middle finger are used to pull it free. All these manipulations, repeated again and again, cause considerable wear and tear, and reduce the useful span of these books.

It is an object of the present invention to remedy the abovedescribed situation and to provide a device that will protect a book both in its position of storage in the upright state on the shelf, and when being removed from the shelf for use.

This the invention achieves by providing a device for the storing on shelves, and the individual withdrawal therefrom, of books, comprising:

a substantially flat, strip-like body having a bottom surface and a top surface, the width of which body, over at least part of its height, at most equals the collective thickness of the leaves of said book, and the height of which body exceeds the height of the squares of said book;

a nose-like member projecting from one end of said body in a direction substantially perpendicular to said top surface, and

a recessed portion extending across said top surface at a point close to the other end of said body, and having a depth at least equaling the height of said squares.

With specific reference to the figures in detail, it is stressed that the particulars shown are by way of example and for purposes of illustrative discussion of the preferred embodiments of the present invention only and are presented in the cause of providing what is believed to be the most useful and readily understood description of the principles of the invention. In this regard, no attempt is made to show structural details of the invention in more detail than is necessary for a fundamental understanding of the invention, the description taken with the drawings making apparent to those skilled in the art how the several forms of the invention may be embodied in practice.

In the drawings:

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Fig. 1 is a perspective view of the device according to the invention, indicating also the position of a book on the device;

Fig. 2 is a view, in partial cross section along plane II-II, of the device of Fig. 1, and

Fig. 3 is a similar view of a different embodiment of the invention.

Referring now to the drawings, the device according to the invention is seen to consist of a flat, strip-like body 2 the width \underline{w} of which (Fig. 2) equals or is smaller than, the collective thickness of the leaves 4 of the book indicated by broken lines. It is also seen that the bottom surface 6 of the device rests on the shelf 8 and that the book is not supported in the conventional way on the lower edges of the cardboard covers 10, but on its leaves 4 which rest on the top surface 12 of the device. This is made possible by the fact that the height \underline{h} of the body 2 is larger than the height \underline{s} of the already mentioned "squares", i.e., the amount by which the covers 10 project beyond the leaves of the book. The total length of the body 2 is seen to exceed the overall width B of

the book.

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At one of its ends, the body 2 is provided with a nose-like member 14 projecting in a direction perpendicular with respect to the top surface 12. The inner face 16 of the member 14 is advantageously curved to fit the concavity of the fore edge 18 of the book.

Near the other end of the body 2 there is provided a recess 20 extending across the top surface 12. As can be seen, this recess is required to accommodate the bottom edge 22 of the cover back 24 as well as the tailband (not shown). Obviously, the depth of this recess must be not less than s, the height of the "squares".

The end of the body 2 constitutes a handling portion 26. Pulling at this portion in direction of arrow A will apply the nose-like member 14 against the fore edge 18 of the book and pull it out from the row of adjacent books. While the book is removed, the device advantageously remains on the shelf 8. After use, the book is again placed on the device and returned to the row.

While a device of a given size cannot, obviously, serve books of all sizes, judicious dimensioning of its main parameters such as width w, overall length, as well as width and position of the recess 20 should greatly reduce the number of different sizes required for a given library.

The device according to the invention can be made of any suitable material such as wood or plastic.

The handling portion 26 can of course be given any convenient shape, also other than shown.

Fig. 3 shows another embodiment of the device. Accordingly, the body 2 is of a stepped cross section, only the upper part being of the width w. The depth of the step is obviously in excess of s, the height of the "squares". Such a design might provide added stability.

It will be evident to those skilled in the art that the invention is not limited to the details of the foregoing illustrative embodiments and that the present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the

scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein.

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CLAIMS

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- 1. A device for the storing on shelves, and the individual withdrawal therefrom, of books, characterized by:
- a substantially flat, strip-like body (2) having a bottom surface (6) and a top surface (12), the width of which body, over at least part of its height, at most equals the collective thickness of the leaves (4) of said book, and the height of which body exceeds the height (s) of the squares of said book;
- a nose-like member (14) projecting from one end of said body

 (2) in a direction substantially perpendicular to said top surface,

 (12), and
 - a recessed portion (20) extending across said top surface (12) at a point close to the other end of said body (2), and having a depth at least equaling the height of said squares s.
 - 2. The device as claimed in claim 1, characterized in that the inside face (16) of said nose-like member (14) is convexly curved to substantially conform to the concavity of the fore edge of said book.
 - 3. The device as claimed in claim 1, characterized by means (26) for handling said device.
- 4. The device as claimed in claim 3, characterized in that said means (26) are located adjacent to said recess (20) at said other end of said body (2).

