Oct. 24, 1939. S. M. ABBOTT 2,177,348

BOOKMARKER

Filed Oct. 11, 1937

Fig. 1.

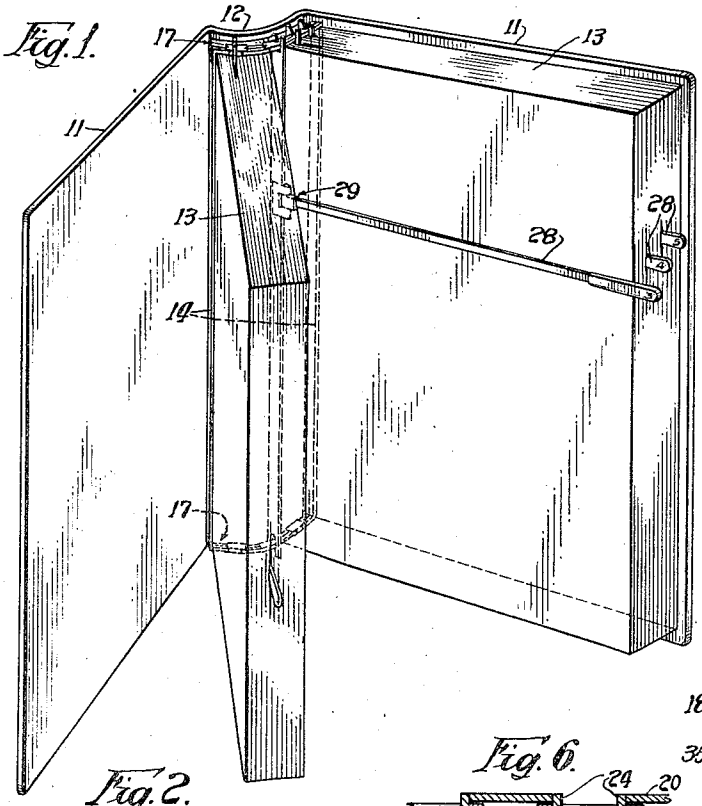


Fig. 4.

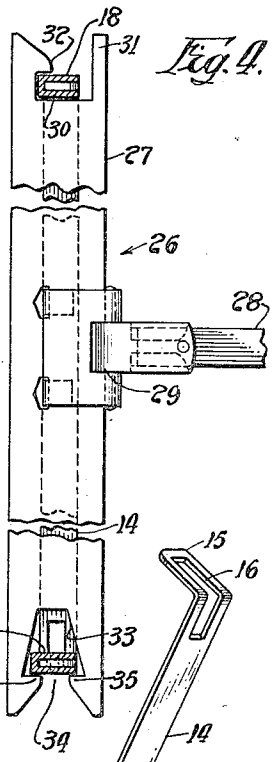


Fig. 2.

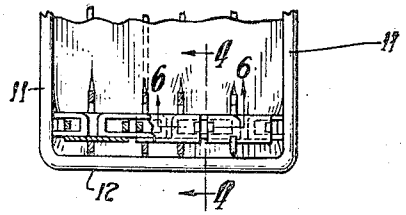


Fig. 6.

Fig. 5.

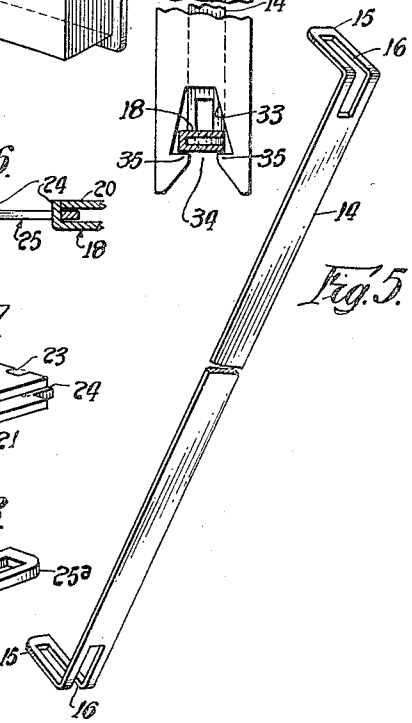


Fig. 7.

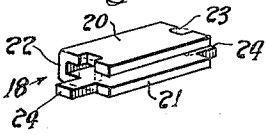


Fig. 3.

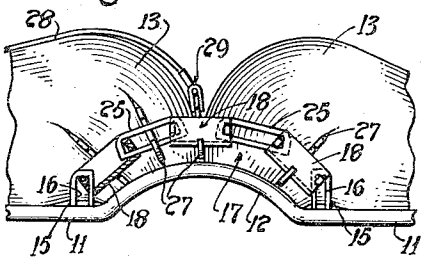


Fig. 8.

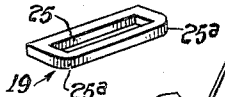
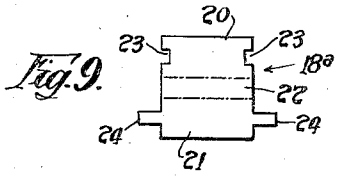


Fig. 9.



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BOOKMARKER

Scott M. Abbott, Chicago, Ill.

Application October 11, 1937, Serial No. 168,366

7 Claims. (Cl. 116—119)

This invention relates to improvements in bookmarkers and it consists of the matters hereinafter described and more particularly pointed out in the appended claims. The bookmarkers with which the present invention is more particularly concerned, are of the kind shown in my prior Patent No. 1,380,031 granted May 31, 1921.

One of the objects of the present invention is to provide a bookmarker of this kind, which is of a more simple and durable construction and which has no parts projecting beyond the ends of the back of the book to which the marker units are applied.

Another object of the invention is to provide a marker of this kind in which use is made of all metal extensible and contractible members for detachable engagement by the marker units and which members are so formed as to be flexible only in one direction at a right angle to their length so that the marker units, when once in place, cannot shift lengthwise of the leaves of the book.

A further object of the invention is to provide a marker of this kind wherein the use of rubber bands is eliminated and the life of the marker is materially increased without the necessity of replacing parts thereof.

The above mentioned objects of the invention, as well as others, together with the several advantages thereof will more fully appear as the specification proceeds.

In the drawing:

Fig. 1 is a perspective view of the improved marker in position upon an associated book, the latter being shown in an open condition better to illustrate the invention.

Fig. 2 is a view in elevation of a portion of one end of the book at the back thereof, illustrating the contracted position of the parts of the improved marker when the book is in a closed condition.

Fig. 3 is a view similar to Fig. 2 illustrating the extended position of the parts when the book is in an open condition.

Fig. 4 is a sectional view on an enlarged scale through a part of the improved bookmarker, as taken on the line 4—4 of Fig. 2.

Fig. 5 is a perspective view of a certain back bar forming a part of the improved bookmarker and which will be more fully referred to later.

Fig. 6 is a detail longitudinal sectional view on an enlarged scale through a portion of one of the extensible and contractible members of the bookmarker, the plane of the section being taken on the line 6—6 of Fig. 2.

Fig. 7 is a perspective view of one of the parts shown in Fig. 6.

Fig. 8 is a perspective view of another of the parts shown in Fig. 6.

Fig. 9 is a view of the blank or stamping from which the part shown in Fig. 7 is made.

Referring now in detail to that embodiment of the invention illustrated in the accompanying drawing, and especially to Fig. 1 thereof, 10 indicates a conventional book as a whole and which comprises covers 11—11 connected together by the flexible back 12 to which the body, comprising the group of leaves 13, is secured in any well known manner. Usually in conventional books, the leaves are of lesser dimensions than the covers so that when the book is closed, a short space is present between the edges of the leaves and the edges of the cover.

The improved marker includes a pair of thin flat back bars 14 each adapted to be disposed between one cover and the adjacent leaf of the group, at the back thereof where the hinged connection between the body and the back and cover is afforded. Each bar, which is made of a relatively thin narrow strip of metal, as shown in Fig. 5, is of a length approximating the length of the leaves, and is formed with right angled end extensions 15 in each of which is a longitudinal slot 16. The same ends of both bars are connected together by an extensible and contractible member 17 which is capable of flexing only in one direction at a right angle to the plane of said member.

Each member 17 is made up from a plurality of interconnected alternate and intermediate link like elements 18 and 19 respectively. One of the former appears in perspective in Fig. 7 and one of the latter appears in perspective in Fig. 8, both elements preferably being made of metal. The link like element 18 which is of a U shaped cross section is made from a blank 18a as appears in Fig. 9 to provide the opposed walls 20—21 and the curved connecting intermediate wall portion 22. The wall 20 has a pair of aligned recesses 23 in its ends and the wall 21 has a pair of aligned extensions 24 at its ends, which when bent upwardly at a right angle, engage in the recesses 23 in the other wall. Each element 19 is made of a metal stock, the same as the back bars 14, to fit in between the walls 20—21 of the member 18. The element 19 which is substantially the same in length as the element 18, is formed with a longitudinal slot 25

of a width to permit the extensions 24 of the member 18 to pass freely therethrough. Opposite longitudinal corners 25a along one edge of each link element, are rounded off as appears in Fig. 8.

As herein shown, the extensible and contractible members 17 are each made up from three alternate members 18 and two intermediate members 19, with the ends of the members 19 engaged in the ends of adjacent members 18 and with the extensions 15 of the back bars engaged in the endmost members 18. When said parts are assembled together, those edges of the members 19 having the rounded corners before mentioned, are associated with the open sides of the members 18 and the extensions 24 extend through not only the slots 25 of the members 19 but also through the slots 16 in the extensions of the back bars. This construction provides an open frame to encompass the book body as formed by the leaves 13 adjacent the back 12, with the members 17—17 extending across the ends of the frame. With such a frame arranged as described, the members 17 are capable of an extension and contraction and may flex in the plane of the end edges of the leaves only but not in the direction of the length of said leaves. Thus, said members 17 contract or shorten for the closing of the book, as appears in Fig. 2 and extend or lengthen for the opening of the book and at the same time take on a curvature corresponding to that of the back of the book when the book is open as appears in Fig. 3.

Associated with the leaves of the book for marking certain leaves for an easy finding thereof is one or more marker units 26, one of which appears on a relatively large scale in Fig. 4. Each unit includes a bar 27 and a line or passage marking bar or arm 28 arranged at a right angle to the bar 27. The inner end of the arm 28 has a hinged connection 29 with the bar 27 and the outer end carries suitable indicia as appears in Fig. 1 for the purpose of indicating the sequence in which portions of the reading matter of the book are to be located. Both the bar 27 and the arm 28 are made of relatively thin flat, flexible metal strips, which when flexed in one direction or the other and then released, instantly return to normal position.

Each unit bar is formed at that end associated with the top ends of the leaves with a substantially bayonet notch including a portion 30 extending transversely of the bar and a longitudinal portion 31 arranged adjacent that edge of the unit bar to which the arm 28 is attached or hingedly connected. This leaves a hook like shoulder 32 overhanging a part of the transverse recess portion 30. In the other end of the unit bar 27 is formed a recess 33 of a width to receive either an element 18 or 19. This recess is formed with a restricted mouth 34 that opens through the end of the bar, thus defining a pair of opposed hook-like shoulders 35 at the junction of the recess and its mouth. The mouth 34 is of a width less than the width of either of the members 18 or 19 but is of a width somewhat greater than the thickness of the member 18.

The frame as afforded by the two back bars 14 and the two members 17 is of such dimension as to fit snugly upon the group of leaves 13 at the back thereof. When in place, as shown in Fig. 1, the marker units 26 may be applied. When this is to be done, the hook is opened at the desired leaves and the bar 27 taken in hand and arranged to stand in a plane perpendicular to the open book, with that end of the bar having the recess 33 therein pointing downward. The mouth 34 of said recess is then moved downwardly to straddle the elements 18 or 19 making up the bottom end member 17, the said element or elements passing freely through said mouth, into the recess 33. The bar 27 is then swung downwardly into the crevice between the two leaves of the book, at which time the elements 18 or 19 stand crosswise of the mouth 34 behind the shoulders 35 of the bar in a manner which precludes disengagement between the said member 17 and the bar 27.

The top end of the bar 27 is then flexed laterally so as to present the recess portion 31 to the top member 17 so that said top member 17 may pass through said recess portion 31 into the transverse recess portion 30 into a position behind the shoulder 32 all as best appears in Fig. 4. This bar 27 as a whole is detachably locked in place with respect to the elements 18 and 19 of both members 17—17 in a manner preventing easy accidental displacement.

The units 26 are made of a very thin strip of clock spring steel so that a great number thereof may be accommodated in the book without causing a bulging thereof when the book is closed. When the book is closed, the members 17 are considerably contracted, the elements 19 sliding endwise into the members 18 as appears in Fig. 2. When the book is open, the elements 18 and 19 of the members 17—17 expand lengthwise and due to the connection between said members as afforded by the extensions 24, the members flex in the plane of the edges of their associated elements 18 and 19 to take on the curved shape of the back 12 of the book as appears in Fig. 3. When the members 17 are in their curved extended condition, the edges of the elements 19 opposite those curved at the ends, engage against the end corners of the curved walls 22 of the alternate members as best appears in Fig. 3. This gives rigidity to the members 17 when the book is open.

The parts are so arranged that the marker units may be quickly removed in an inverse order to their application so that said units may be transferred to other positions between other leaves of the book. When in place in a book, there are no parts to project beyond the end edges of the covers, to catch on the clothing or to mar any furniture upon which the book may be placed. The members 17—17 cannot deteriorate and cannot be cut or otherwise damaged in the application or removal of the marker units so that they have long periods of usefulness.

While in describing the invention, I have referred in detail to the form, arrangement and construction of the various parts, the same is to be considered only in the illustrative sense so that I do not wish to be limited thereto except as may be specifically set forth in the appended claims.

I claim as my invention:

1. In a bookmarker, means adapted to be disposed at each end of the leaves of a book at the back thereof, each of said means comprising a plurality of link like members connected together for a limited relative endwise movement so as to be extensible and contractible and flexible only in one direction at an angle to its length, and means providing a pair of back bars arranged for engagement between said leaves of the book and the covers thereof at the back of the book, each back bar being formed at its ends with portions operatively connected to the ends of said first mentioned means so as to provide a relative move-

ment between said portions and said means in the direction of the length of said means.

2. In a bookmarker, means adapted to be disposed at one end of the leaves of a book at the back thereof, said means comprising a plurality of alternate and intermediate link like members, the intermediate members each comprising a strip having a longitudinal slot therein, the alternate members each being of a flat U-shape cross section to provide opposed side walls connected together along one margin but open along the other margin and between which side walls the ends of said intermediate members engage, and means secured to at least one of the side walls of the alternate members and engaged in the slots of the intermediate members to limit the relative longitudinal movement between said members in one direction.

3. In a bookmarker, means adapted to be disposed at one end of the leaves of a book at the back thereof, said means comprising a plurality of alternate and intermediate link like members, the intermediate members each comprising a strip having a longitudinal slot therein, the alternate members each being of a flat U-shape cross section to provide opposed side walls connected together along one margin but open along the other margin and between which side walls the ends of said intermediate members engage, at least one side wall of each alternate member having portions bent to engage in the slots in the intermediate members to limit the relative longitudinal movement between said members in one direction.

4. In a bookmarker, means adapted to be disposed at one end of the leaves of a book at the back thereof, said means comprising a plurality of alternate and intermediate link like members, the intermediate members each comprising a strip having a longitudinal slot therein, the alternate members each being of a flat U-shape cross section to provide opposed side walls connected together along one margin but open along the other margin and between which side walls the ends of said intermediate members engage, one side wall of each alternate member having portions bent to pass through the slots in the intermediate members and to engage in recesses in the other side wall of said alternate member to limit the relative longitudinal movement between said members in one direction.

5. In a bookmarker, a pair of means each adapted to be disposed at an associated end of the leaves of a book at the back thereof, each of said means being telescopically extensible and contractible and being flexible for a limited movement only in the plane of the ends of said leaves, a pair of back bars, arranged for engagement between said leaves of the book and the covers thereof at the back of the book but being unattached with respect to the covers, each back bar being formed at its ends with portions operatively connected to the ends of the first mentioned means so as to provide a relative movement between said portions and said means in the direction of the length of said means.

6. In a bookmarker, a plurality of means engaged between the covers and the leaves of the book at the back of the book and extending from the top to the bottom thereof, each of said means having end portions that extend transversely across the end edges of certain of said leaves of the book, and means at each end of the back for connecting the associated end portions of said first mentioned means together, said connecting means being telescopically extensible and contractible and flexible for a limited movement only in the plane of the end edges of said leaves.

7. In a bookmarker, extensible and contractible means adapted to be disposed at each end of the leaves of a book at the back thereof and comprising interconnected links having a predetermined width and thickness, with said width being greater than said thickness means for securing both of said first mentioned means in position with respect to said leaves, and a member adapted for engagement between desired leaves of the book and having a recess at each end that opens through the extremity thereof, each recess receiving one of the links of the associated first mentioned means crosswise therein, each recess being formed at a point between its ends, longitudinally of said member with at least one inwardly extending transverse shoulder which overhangs and confines the associated link therein.

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