Dec. 19, 1950 D. S. KUDRIKOFF 2,534,456

SELF-CLOSING BOOKRACK

Filed Feb. 6, 1948

Fig. 1

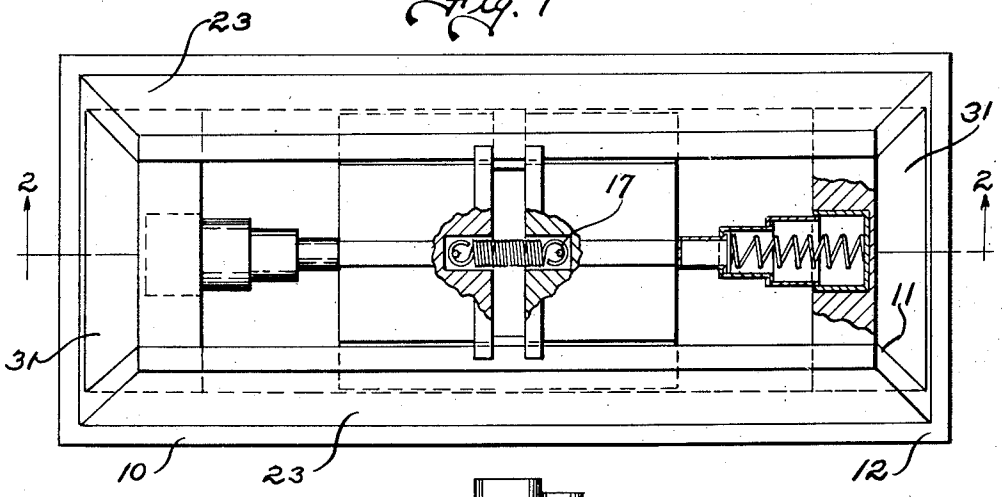


Fig. 2

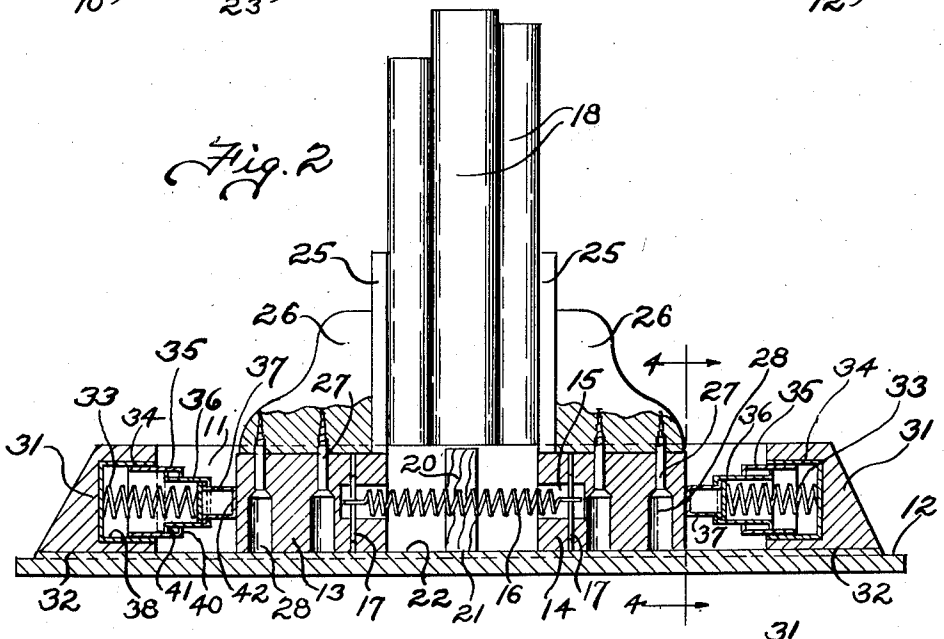


Fig. 3

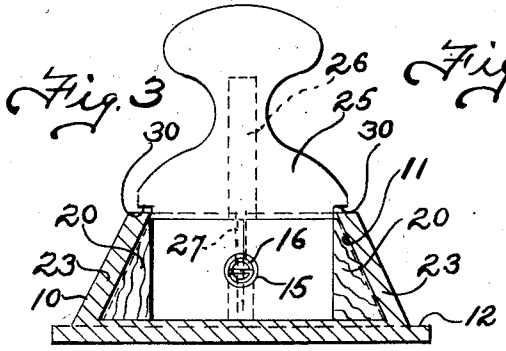
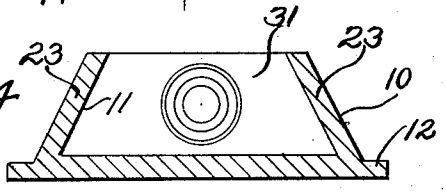


Fig. 4



INVENTOR.

Dimitry S. Kudrikoff.

BY

McMorrow, Berman & Davidson

ATTORNEYS

Patented Dec. 19, 1950 2,534,456

UNITED STATES PATENT OFFICE

2,534,456

SELF-CLOSING BOOKRACK

Dimitry Stephan Kudrikoff, Scranton, Pa.

Application February 6, 1948, Serial No. 6,585

3 Claims. (Cl. 211—43)

1

This invention relates to self-closing book racks.

An object of the invention is the provision of a book rack in which an elongated base member has a dovetail slot running longitudinally thereof with spaced book ends rising above the base member and mounted on slides that are dovetailed in the slot in the base, a spring connecting the opposed faces of the slides together and cooperating with compression springs pressing on the outer faces of the slides to move the slides and attached book ends towards the center of the base member.

A further object of the invention is the provision of a book rack in which book ends slidable in an elongated base member are urged constantly and uniformly towards the center of the base member so that when a book is removed from the rack the book ends will be moved automatically toward each other for repositioning the books remaining in the rack and to close the vacant space caused by the removal of said book, the book ends being mounted on slides dovetailed in an elongated groove in the base member, a stop being mounted midway between the ends of the base member for aiding in centering the book ends on the base.

The invention consists in the novel construction, arrangement and combinations of parts hereinafter more particularly described and claimed.

In the drawings:

Figure 1 is a plan view of my book rack with parts broken away,

Figure 2 is a vertical section taken along the line 2—2 of Figure 1,

Figure 3 is a transverse vertical section through the center of the book rack, and

Figure 4 is a transverse vertical section taken along the line 4—4 of Figure 2.

Referring more particularly to the drawings 10 designates an elongated rectangular base member having a longitudinal undercut groove 11. The side walls and end walls of the base member rising from a peripheral flange 12 are beveled.

Slides 13 and 14 are identical in construction and are dovetailed in the undercut groove 11 in the base. The cross-sectional area of the slides is slightly less than the cross-sectional area of the groove 11 so that said slides may move freely in said groove. Each inner end of the slides is provided with a pocket 15 to receive an end of a coil spring 16. Each end of the spring is provided with an eye to receive a pin 17 forced through a vertical passage in the slides 13 and

2

14. It will be noted from Figure 2 that the upper faces of the slides are disposed slightly below the horizontal plane passing through the top of the base member so that books 18 resting on the top of said base will not interfere with the free movement of the slides. The spring 16 tends at all times to pull the slides towards each other.

Stops 20 are secured at 21 to the bottom 22 of the base member 10. The stops are triangular shaped so that they will fit neatly into the inclined side walls 23 of the groove 11 (Figure 3). These stops are located midway between the opposite ends of the groove 11 for aiding in maintaining the books centered as will be explained presently.

Book ends 25 are mounted vertically on the tops of the slides 13 and 14 with the inner faces thereof in line with the inner or opposed faces of said slides. A bracket 26 is secured at right angles to each book end in any approved manner. Screws 27 received by countersunk pockets 28 in the slides secure the brackets and likewise the book ends to said slides. The book ends being cut from a flat piece of wood or other suitable materials may assume various decorative forms. It will be noted from Figure 3 that the bottoms of the book ends are cut-away at 30 where they extend over the upper edges of the inclined side walls 23 so that the slides 13 and 14 may move freely in the slot 11 without frictional engagement between the book ends and the said side walls.

The outer ends of the slot 11 are closed by stop blocks 31 after the slides 13 and 14 have been positioned within said slot. These blocks have substantially the same cross-sectional area and shape of the slot 11 and are fitted neatly therein. Nails or screws 32 are employed for securing the blocks to the base member 10 with the inner ends of the blocks being spaced from the outer ends of the associated slides 13 and 14.

A plurality of telescoping barrels are disposed between the outer end of each slide and the inner end of each stop block 31 for housing a compression spring 33. An end barrel 34 of greater diameter than the other barrels 35, 36 and 37 has a closed end seated in a pocket 38 in the stop block. The barrels successively fit into each other. Barrels 35 and 36 have respective cooperating flanges 40 and 41 to prevent separation of said barrels. The barrels 36 and 37 have similarly arranged flanges to prevent separation of said barrels. Each barrel 37 has a closed end 42 engaging the outer end of a slide. The compression springs 33 within the telescoping bar-

rels extend said barrels and force the slides toward the center stops 20 while the spring 16 pulls the slides toward each other.

The operation of my device is as follows: When books are placed between the book ends 25 after said ends have been spread apart and released, the compression springs 33 acting in conjunction with the weaker spring 16 will cause the book ends to adjust themselves so that the books will be disposed at opposite sides of the center stops 20 with one book located over said stops. If a book is withdrawn from the rack the positions of the book ends will be adjusted automatically by the springs 16 and 33.

The lower ends of the books will be supported by the upper edges of the side flanges 23 so that no weight will be placed on the slides. Thus said slides will move freely at all times in the longitudinal groove 11 in the base member 10.

What I claim:

1. A book rack comprising an elongated base member provided with an under cut longitudinal groove, a pair of spaced slides dovetailed in the groove, a spring connecting the inner ends of the slides together, a closure for each end of the groove, a compression spring between each closure and the adjacent end of a slide, a stop on the base located midway between the ends of the groove and between the slides, a book end rising from the inner end of each slide, a reinforcing means connecting each book end to the top of a slide, the top edges of the side walls of the groove being in a horizontal plane disposed above a plane passing through the tops of the slides and forming a support for books, said springs tending at all times to urge the slides and attached book ends towards each other.

2. A book rack comprising an elongated base, a pair of slides positioned in end to end spaced relation with respect to each other and mounted on said base for sliding movement relative to each other, resilient means interposed between the facing ends of said slides and fixedly secured thereto for normally urging said slides toward each other, means interposed between the facing ends of said slides for limiting the movement of said slides toward each other, a book end carried by each of said slides, and a resilient means positioned adjacent each end of said base and having an end fixedly secured to the latter and having the other end bearing against the other end of the slide adjacent thereto for urging the slides and book ends toward each other.

3. A book rack comprising an elongated base, a pair of slides positioned in end to end spaced relation with respect to each other and mounted on said base for sliding movement relative to each other, resilient means interposed between the facing ends of said slides and fixedly secured thereto for normally urging said slides toward each other, a book end carried by each of said slides, and a resilient means positioned adjacent each end of said base and having an end fixedly secured to the latter and having the other end bearing against the other end of the slide adjacent thereto for urging the slides and book ends toward each other.

DIMITRY STEPHAN KUDRIKOFF.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,237,101	Ryan	Aug. 14, 1917
1,271,508	Hall	July 2, 1918
2,032,086	Golden et al.	Feb. 25, 1936
2,140,656	Smith	Dec. 20, 1938