July 6, 1948. A. T. FISHER 2,444,501

CLOSURE FASTENER

Filed Oct. 2, 1944

Fig. 1.

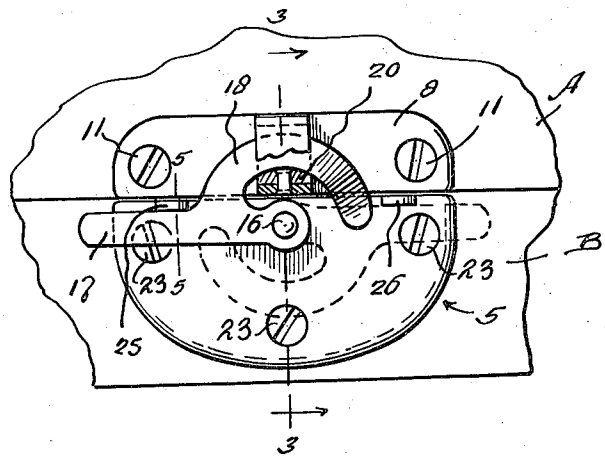


Fig. 2.

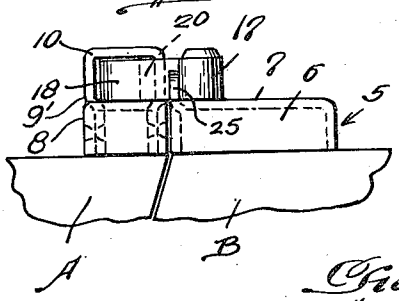


Fig. 3.

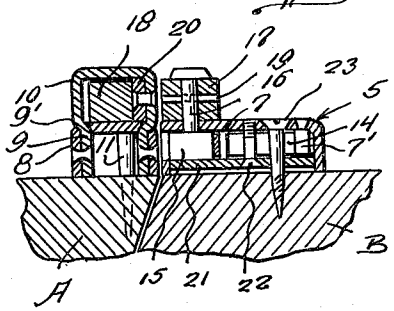


Fig. 4.

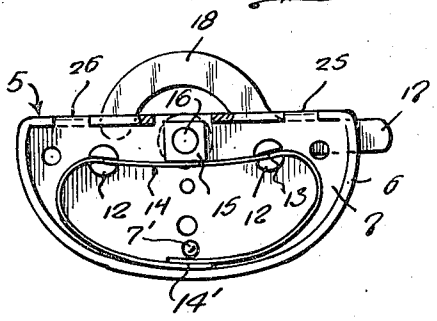
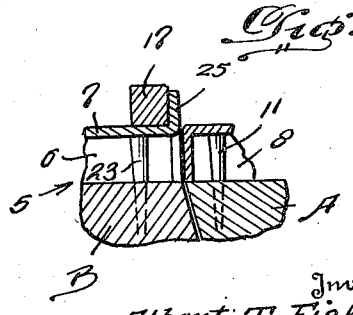


Fig. 5.



Inventor
Albert T. Fisher.

By McMorrow & Berman
Attorneys

Patented July 6, 1948

2,444,501

UNITED STATES PATENT OFFICE

2,444,501

CLOSURE FASTENER

Albert T. Fisher, Hartford, Conn.

Application October 2, 1944, Serial No. 556,823

3 Claims. (Cl. 292—340)

1

This invention relates to new and useful improvements in fasteners and more particularly to a fastener which is not restricted only to use on slide sashes but is also usable on double windows, side hinged windows and various other type windows and other closures.

An important object of the invention is to provide a fastener which while being easy to operate from the inside of the building is very difficult to reach and operate from the outside without first breaking the closure.

Another important object of the invention is to provide a fastener which cannot become unfastened due to vibration over a period of time such as will frequently occur with the common cam type fasteners now in general use.

Still another important object of the invention is to provide a fastener which is constructed with utmost strength and durability.

Other objects and advantages of the invention shall become apparent to the reader of the following description.

In the drawings:

Figure 1 is a fragmentary top plan view showing the fastener with a portion broken away and installed on a pair of window sashes.

Figure 2 is a side elevational view of the fastener installed on a pair of window sashes.

Figure 3 is a fragmentary vertical sectional view taken on line 3—3 of Figure 1.

Figure 4 is a bottom plan view of one of the sections of the fastener with a portion in section.

Figure 5 is an enlarged fragmentary detailed sectional view taken on line 5—5 of Figure 1.

Referring to the drawings wherein like numerals designate like parts, it can be seen that reference character A denotes the lower portion of an upper slidable window sash, while reference character B denotes the upper portion of a lower slidable window sash. The improved fastener is generally referred to by the numeral 5 and is made up of two sections, one being the fastener element section and the other the keeper section. The fastener element section of the fastener which is shown inverted in Figure 4 consists of a shallow shell having an arcuate side wall 6 and a top 7, the straight side of which opposes one side of an elongated shell 8 of about the same height as the shell shown in Figure 4, but formed with transversely opposed central openings for receiving the depending tail portions 9 of a keeper loop 10, rising above the shell 8. The shell 8 has a top wall formed with openings through which screws 11 are disposed and driven downwardly into the sash A.

2

As shown more clearly in Figures 2 and 3, the tail or leg portions 9 of the upright holding member 10 of the keeper section are offset inwardly toward each other and then extend downwardly in parallel relation, thus producing shoulders 9' to seat firmly on the edge portions of said central openings in the shell 8 when said tail or leg portions 9 are inserted and riveted in place.

Reverting again to the section of the fastener shown in Figure 4, it can be seen that a pair of studs 12, 12 depend from the bottom side of the top wall 7 and are bifurcated, as at 13, to receive intermediate portions of an elongated and looped split spring 14 which is disposed in the ovate form shown in Figure 4 with its meeting end portions overlapping, as at 14', and secured between a fixed stud 7' on the top wall 7 and an opposed side wall portion of the latch element 5 (see Figure 4).

A square member 15 is carried by and fixedly on the lower end of a vertical shaft 16 which rises through a bearing aperture in the top 7, this shaft extending upwardly through and secured fixedly to the inner end of an arm 17, the arm 17 having a semi-circular shaped latch member 18 projecting from the intermediate portion thereof and extending to a point beyond the inner end of the arm 17. A transverse pin 19 is disposed through the inner end of the arm 17 and shaft 16 so that these parts turn together.

An arcuate faced bearing plate 20 is provided on the inner side of the keeper loop 10 and against this rides the arcuate inner side of the latch member 18.

As can be seen in Figure 3, the latch element section of the fastener has a bottom plate 21 secured to the top 7 by screws 22. This bottom plate 21 serves to hold the spring 14 intact. Screws 23 are disposed downwardly through the top 7 and plate 21 and are driven into the sash B.

It can now be seen, that when the arm 17 is moved to the position shown in Figure 1, the latch member 18 will be disposed through the keeper loop 10 and snugly against the bearing plate 20, as one flat side of the square member 15 bears against the intermediate portion of the spring 14, thus preventing return of the arm 17 and its latch member 18.

By exerting force on the arm 17, the arm 17 can be rotated against the compression of the spring 14 to withdraw the latch member 18 from the keeper 10 and when moved to the dotted line position shown in Figure 1 will remain in that position due to the engagement of the opposite side of the square element 15 against the spring 14.

It is preferable that the top 7 have a pair of upstanding stop lugs 25, 26 against which the arm 17 can abut when in latched or unlatched position.

While the foregoing description sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:

1. A closure fastener of the class described, comprising a keeper element section including a base plate portion, an upstanding holding member having opposite leg portions arranged on said keeper section and adapted for engagement by a substantially arcuate swingable catch member on a separate but cooperative latch section, said upstanding holding member of the keeper section being formed with a substantally rectangular looped catch-receiving portion, the opposite leg portions of said holding member being seatingly inserted through slots provided therefor in the base plate portion of said keeper section and secured to the inner faces of the adjacent opposed side wall portions of the section.

2. A closure fastener of the class described and as set forth in claim 1, wherein the side wall portion of the looped part of the holding member of the keeper section adjacent the companion latch element is provided on its inner face with an arcuate-faced bearing plate to receive the catch member of the latch section in slidable engagement therewith.

3. A closure fastener of the class described and as set forth in claim 1, wherein the leg portions of the upstanding holding member are parallel with each other and offset inwardly toward each other from the operative looped portion of the member so as to form shouldered seating and supporting portions where said leg portions merge with the adjacent side wall portions of the rectangularly looped portion of the member, and an arcuate-faced plate secured on the inner face of the side wall portion of the looped part of the member which is adjacent the companion latch section so as to receive in slidable holding engagement therewith the substantially arcuate catch member of the latch section.

ALBERT T. FISHER.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,122,026	O'Rourke	Dec. 22, 1914
1,257,051	Thomas et al.	Feb. 19, 1918
1,338,250	Parkes	Apr. 27, 1920
1,535,226	Jackson	Apr. 28, 1925
2,226,072	Polick	Dec. 24, 1940