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CASEMENT WINDOW STABILIZER

Filed Nov. 17, 1959

Fig. 1

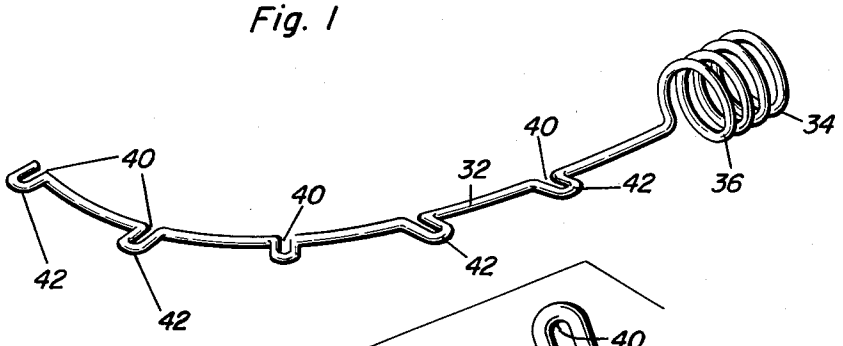
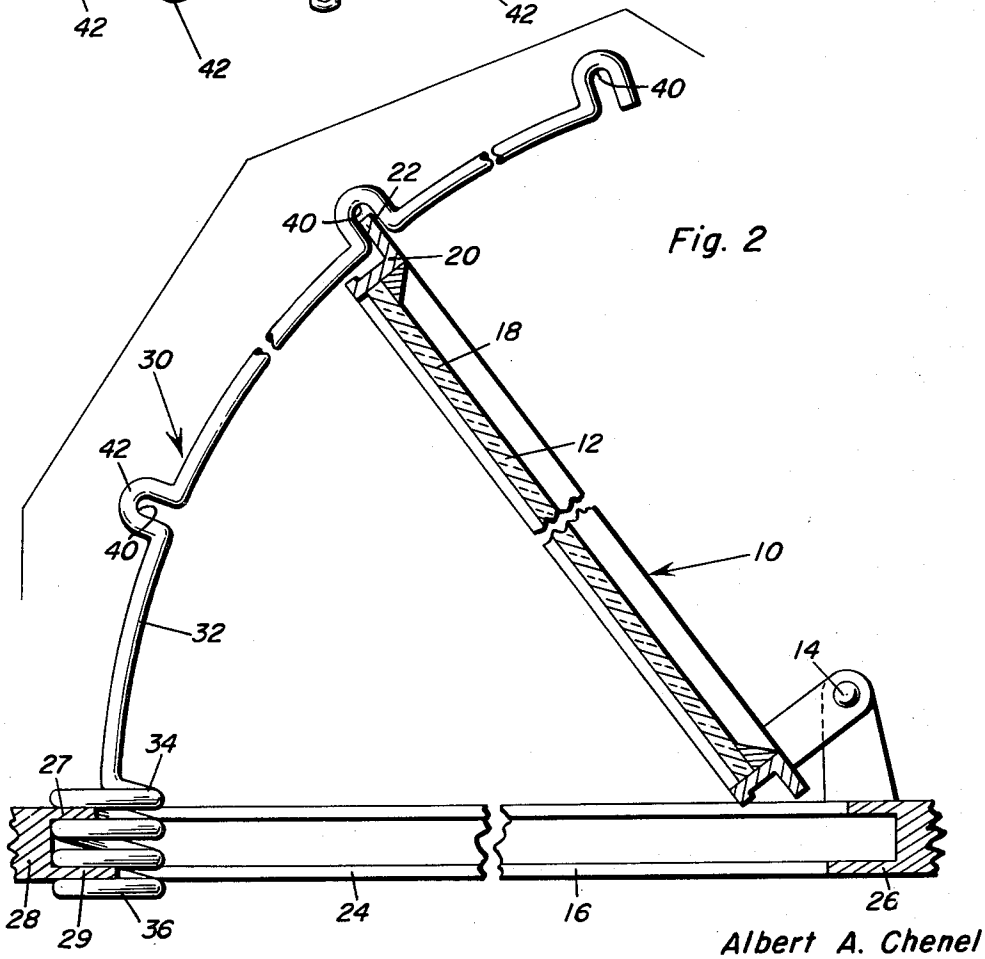


Fig. 2



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CASEMENT WINDOW STABILIZER

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This invention relates to a device for stabilizing casement windows.

An object of the invention is to provide a device to hold a casement window open at various positions.

Another object of the invention is to provide an attachment for a casement window assembly for retaining the window in a selected open position effectively and easily. The attachment may be used in addition to or in lieu of other devices for achieving the same results, for instance the conventional operating mechanisms of casement windows, regardless of the type of conventional operating mechanisms.

One of the problems encountered in the use of casement windows is glass breakage due to high winds which cause the casement window to slam to a closed or full open position. This difficulty is obviated by the invention and in a very simple way.

Briefly, the invention is embodied in a bracket with what are considered to be unique means to secure one end of the bracket to the casement window casing and with unique means to engage the edge of the window frame to hold the frame and consequently, the entire window panel in a selected open position.

An important feature of the invention is found in its simplicity of construction and in the comparative cheapness of production cost. It is made of a single piece of wire or of metallic stock of different cross-sectional shapes. One end of the main body of the device is formed with a plurality of coils, similar to a coil spring, and these grip an edge of the window frame either at the top, the bottom, or along one side thereof, preferably the latter. The main body has a number of pockets in it, and each establishes a separate station at which the window panel may be locked.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a device exemplifying the invention.

FIGURE 2 is a horizontal sectional view of a conventional casement window equipped with one of the locking devices.

In the accompanying drawings there is a conventional casement window **10** made of a window panel **12** connected by hinge **14** to window frame **16** at an edge thereof. The window panel is glazed as at **18** and has a window frame **20** provided with an outwardly extending flange **22**. This is conventional construction.

Window frame **16** is also conventional and therefore it includes a bottom rail or strip **24**, a parting strip **26** and a side **28**. In single window installations, parting strip **26** is merely a side identical to side **28**. Ordinarily, the conventional frame **16** is essentially a channel in section and therefore the illustration in FIGURE 2 follows such a pattern.

Device **30** is an attachment to be used in lieu of or in addition to the conventional operating mechanism for window panel **10**. The device very firmly and securely holds the window panel in a selected open position. It consists of a main body **32** and means **34** at one end thereof for gripping and holding side **28** of frame **16**. Main body **32** is made of an elongate elastic aind resilient member, for example metal which has a degree of resilience and elasticity. Means **34** consist of a plurality of coils **36** formed at one end of main body **32**. The coils are resilient and have an appearance of a conventional spring. Actually, they are the components of the spring and engage the flanges **27** and **29** of side **28**. The flanges of the channel-shaped side **28** are received between adjacent coils **36**, and the inherent resilience in the material from which the coils are made cause a frictional engagement to exist between the coils and the flanges **27** and **29** thereby supporting the main body **32** on the side **28**. For additional support, coils **36** may be used at the juncture of bottom **24** and side **28**. Further, it is to be noted at this point that although one device **30** is shown used with window **10**, two or more may be used without departing from the invention.

There are means in main body **32** along the length thereof for engaging flange **20** and thereby holding window panel **12** in a selected open position. These means consist of a number of spaced pockets **40** along the length of the main body **32**. Each pocket is formed by an essentially U-shaped portion **42** of the main body, and all the pockets open toward one side of the main body **32**. The inherent resilience of the main body enables it to be deflected outwardly i.e. away from flange **22** so that the window panel may be swung between the open and closed positions. However, when the desired opening is established, the main body **32** is released so that the inherent resilience and elasticity thereof causes it to spring back to its normal position at which flange **22** enters a selected pocket **40**. In the construction of device **30**, the main body which is made of spring steel or other suitable metal having the necessary degree of elasticity and resilience, is formed in an arc so that the pockets **40** will be presented to flange **22** properly at all stations between the fully opened and fully closed positions of the window panel.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A self-contained readily attachable and detachable stay for a casement window that is hingedly mounted in a window mounting frame comprising a longitudinally curved arm, said arm being flexibly resilient, means spaced along the length of said arm for engaging an edge portion of the window frame, and spring means connected with an end of said arm serving to mount said arm on the window mounting frame, said first named means including a plurality of keeper pockets with which a portion of one edge of the frame of said window is adapted to be received and held.

2. The structure defined in claim 1 and wherein said arm mounting means comprises a plurality of coils at one end of the arm and which are adapted to frictionally grip the window frame.

3. For use in temporarily retaining a hinged casement window ajar in respect to a relatively stationary mounting frame on which it is hingedly mounted; a readily applicable and removable stay comprising a springy steel rod arcuately bowed and having a curvature generally conformable to the arc of the path through which a free swinging marginal edge portion of the casement window is constrained to travel toward and from said mounting frame, said rod embodying an inward attaching and supporting end having spring coils adapted to resiliently and releasably grip existing flanges provided on a vertical

member of said mounting frame whereby to permit the rod to be supported in a plane at right angles to the verticality of the mounting frame, the outer free end and median portion of said rod having U-shaped bends defining selectively usable keeper pockets for removable reception and retention of a marginal flange provided on the window, the inherent resilient properties of the rod functioning to yieldingly urge the rod into retaining engagement.

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