No. 728,093. PATENTED MAY 12, 1903.

R. ELLINGSON.

SCREEN OR STORM WINDOW ATTACHMENT.

APPLICATION FILED NOV. 22, 1902.

NO MODEL.

Fig. 2.

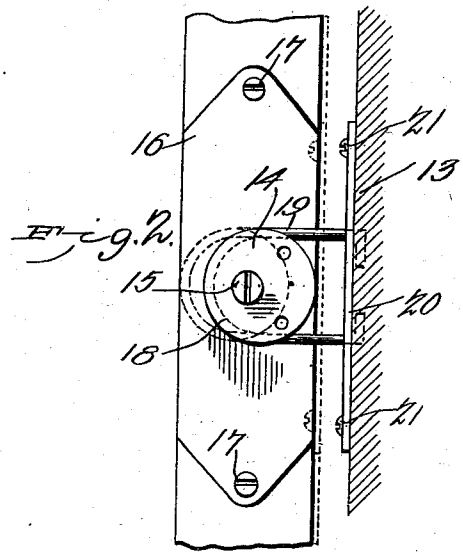


Fig. 1.

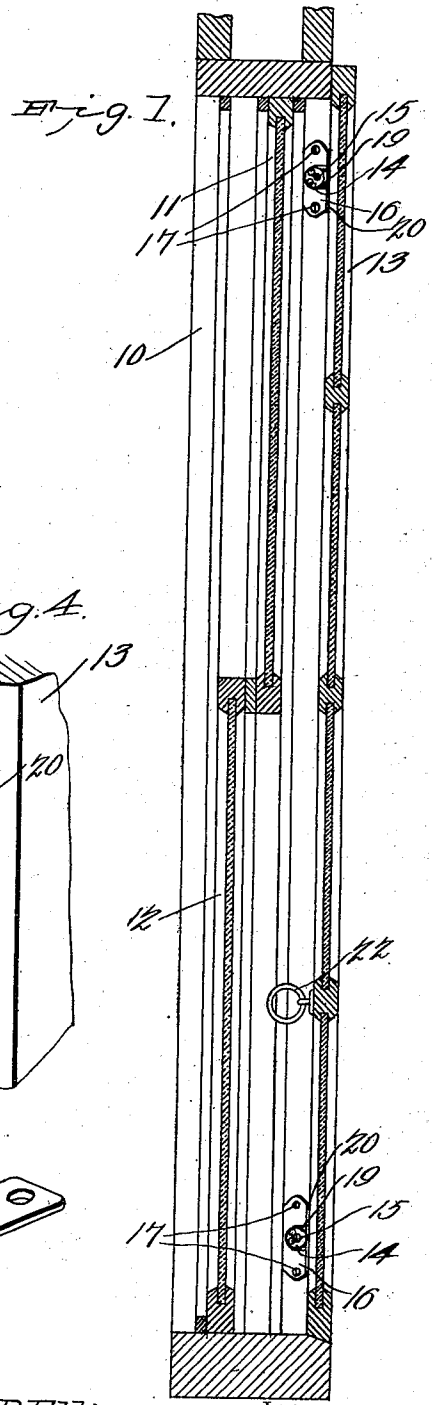


Fig. 3.

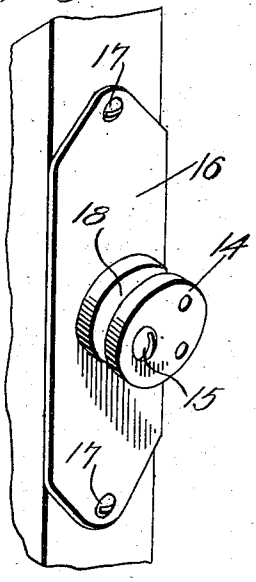


Fig. 4.

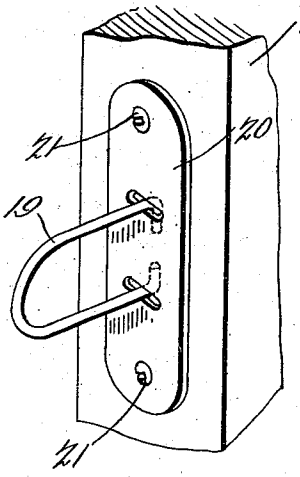
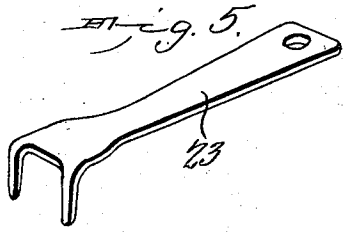


Fig. 5.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 728,093. Patented May 12, 1903.

UNITED STATES PATENT OFFICE.

RICHARD ELLINGSON, OF RADCLIFFE, IOWA.

SCREEN OR STORM-WINDOW ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 728,093, dated May 12, 1903.

Application filed November 22, 1902. Serial No. 132,465. (No model.)

To all whom it may concern:

Be it known that I, RICHARD ELLINGSON, a citizen of the United States, residing at Radcliffe, in the county of Hardin and State of Iowa, have invented a new and useful Screen and Storm-Window Attachment, of which the following is a specification.

This invention may be employed for securing closures of different forms and constructions—such as box-covers, some forms of doors and casements, storm-sash, screens, and the like—but is more particularly applicable to securing storm-sash and screens to window-frames.

The object of the invention is to produce a simply-constructed and easily-operated device whereby a closure of any kind may be readily secured and forcibly clamped to the body of the structure; and the invention consists in an eccentric rotatively supported upon one part of the structure and a loop mounted to swing upon the other part of the structure transversely of the eccentric to permit the eccentric to be inclosed thereby, the eccentric adapted to be rotated within the loop to forcibly draw the two parts of the structure into engagement and firmly lock them together.

The invention further consists in certain novel features of the construction, as hereinafter shown and described, and specified in the claim.

For the purpose of illustration the invention is shown applied to an ordinary storm-sash structure, in which corresponding parts are designated by like characters in all the figures.

Figure 1 represents a longitudinal sectional elevation of a conventional window-frame and its sash with a storm-sash in position thereon and the improved devices applied thereto. Fig. 2 is an enlarged detail of the improved device. Fig. 3 is an enlarged perspective view of the eccentric portion of the device. Fig. 4 is a perspective view of the swinging loop portion of the device. Fig. 5 is a perspective view of the implement employed for actuating the eccentric.

The stationary portion of the structure to which the device is applied is represented at 10, consisting, for the purpose of illustration, of a window-frame with the sash represented at 11 12 in position therein, and the movable portion of the structure is represented by a conventional storm-sash, (indicated at 13.)

The improved device consists in an eccentric 14, rotatively mounted, as by a stud 15, upon a plate 16, the latter secured, as by screws 17, to the structure 10, the eccentric having a circumferential groove 18, as shown, the eccentric and its connections forming one part of the improved device. The other part of the improved device consists in a loop 19, connected to swing transversely of the eccentric upon the movable structure 13, so that the loop may be moved to one side while passing the eccentric and then swung over opposite the groove 18, so that when the eccentric is rotated the structure 13 will be drawn forcibly into engagement with the structure 10.

The loop 19 is formed in substantially U shape, with the ends of the leg members movably engaging a supporting-plate 20 upon the structure 13, the plate 20 secured in place, as by screws 21 or other suitable means. The ends of the leg members of the loop 19 will preferably be turned off at right angles thereto, as indicated by dotted lines in Fig. 4, and project in the rear of the plate, so that while free to swing to a certain extent relative to the plate the loop will be held against withdrawal from engagement with said plate by the turned-off ends, as will be obvious.

The loop 19 will be located directly opposite the eccentric, so that when swung to one side the loop will pass the eccentric and be in position to be engaged with the walls of the groove 18 when the loop is returned to its normal position. By this means the portion 13 of the structure may be moved to and from the portion 10 in straight lines and will not require to be moved laterally relative to the eccentric and the portion 10 to enable the loop to be engaged with the eccentric, as it would if the loop were a fixture relative to the part 13. This is a very important feature of the invention and enables the sash 13 to be first placed in the exact position which it is desired it shall occupy before the loops are engaged with the eccentrics, and the same is true when the device is employed as a means for securing box-covers and for other similar purposes.

When employed upon storm-sash, the sash

will be provided with one or more supporting-links 22, by which they may be supported temporarily while being placed in position and before the improved device is connected in place.

When applied to storm-sash, the sash may be placed in position from inside the room and without the necessity for employing ladders or other outside means for supporting the operator while attaching the sash, as the storm-sash may be passed through the window and located in position by the operator from within the room and held in place by the links or other supports 22 while the loops are being placed over the eccentrics and the eccentrics rotated to lock the storm-sash in place. This is also a very important advantage of this structure, as it enables storm-sash to be placed upon buildings very readily and quickly and without danger to the operator.

The device may be formed of any desired size to adapt it to any desired structure and may be employed for any purpose to which it is adapted, and I reserve the right to thus employ the device for the various purposes for which it is adapted.

Any suitable means may be employed for forcibly rotating the eccentrics 14, but preferably a key-wrench 23, as illustrated in Fig. 5, will be employed, adapted to engage spaced apertures in the eccentric; but I do not wish to be limited to any specific means for actuating the eccentric.

When employed upon storm-sash, some means, such as the key-wrench or other implement detachable from the eccentric, should be employed, as the narrow space in which the eccentric will be located when employed in structures of this character would prevent the employment of any permanent projecting operating means. By this simple means the closure may be drawn with great force into engagement with the body of the structure and the two parts very tightly and quickly locked together and will be found very convenient and useful for the purposes designated.

The device may be manufactured very cheaply and applied by persons not otherwise skilled.

Having thus described the invention, what is claimed is—

In a device of the class described, a supporting frame or casing, a closure movably disposed relative to said frame or casing, a peripherally-grooved button eccentrically and rotatively disposed upon said frame or casing, a plate attached to said closure and having spaced sockets, a substantially U-shaped loop having its terminals bent laterally to movably engage said sockets to permit said loop to swing transversely and permit the eccentrically-mounted button to be inclosed thereby, and detachable means for rotating the button within the loop to forcibly draw the closure into engagement with the frame or casing.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

RICHARD ELLINGSON.

Witnesses:
MAUD CAMMACK,
C. E. MYERS.