

No. 640,057.

Patented Dec. 26, 1899.

T. A. WESTON.
SHUTTER STAY.

(Application filed Sept. 10, 1898.)

(No Model.)

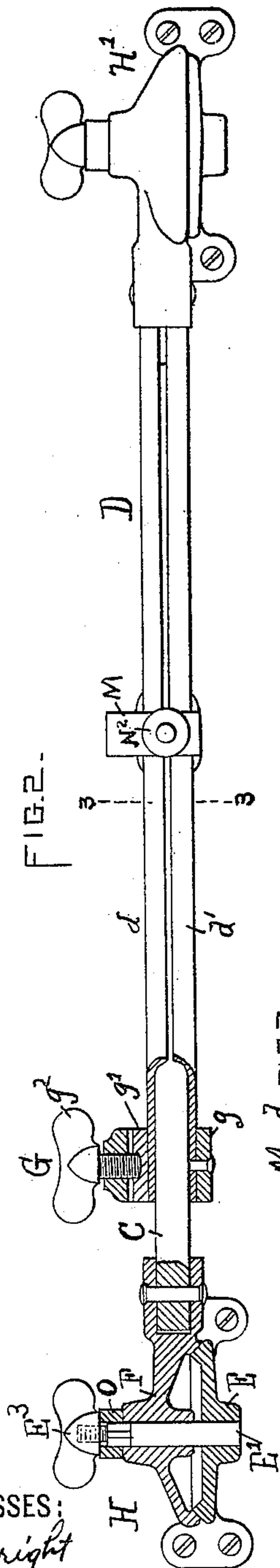


FIG. 2.

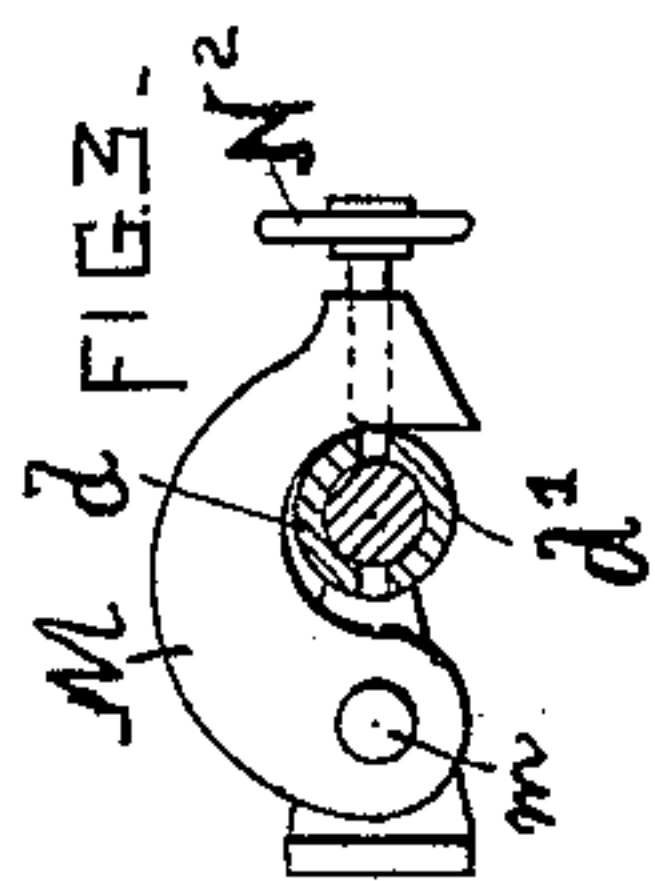
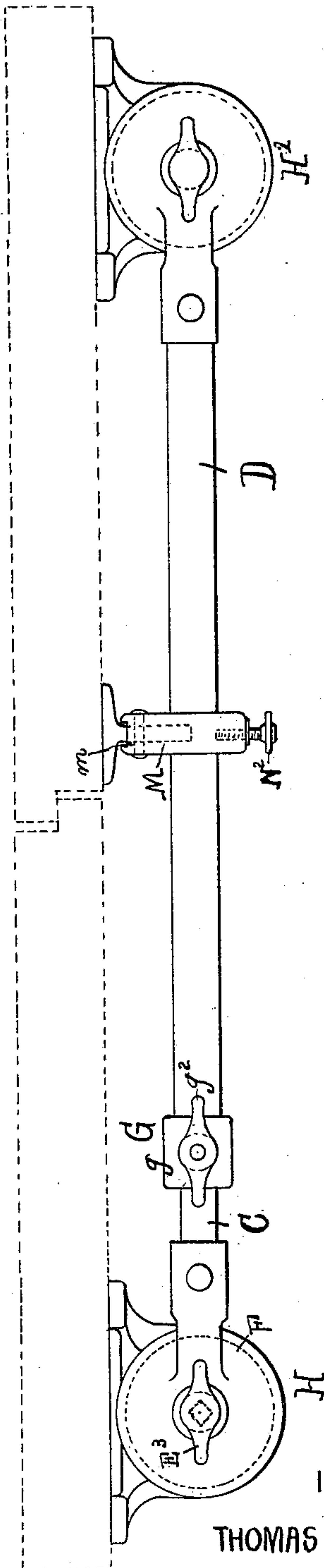


FIG. 3.

FIG. 1.



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THOMAS A. WESTON, OF ARDEN, NORTH CAROLINA.

SHUTTER-STAY.

SPECIFICATION forming part of Letters Patent No. 640,057, dated December 26, 1899.

Application filed September 10, 1898. Serial No. 690,621. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. WESTON, a citizen of the United States of America, residing in Arden, county of Buncombe, State of North Carolina, have invented an Improved Shutter-Stay, of which the following is a specification.

The object of my invention is to construct a simple but strong, reliable, and secure fastener for retaining window-shutters and the like structures at any desired position, open or closed.

In the accompanying drawings, Figure 1 is a plan view of my improved shutter-stay, showing its application to a pair of shutters, which are indicated by dotted lines. Fig. 2 is a side elevation of the same with the parts in section; and Fig. 3 is a cross-sectional view on the line 3 3, Fig. 2.

My improved stay or connector belongs to a well-known class wherein the stay consists of two members sliding upon each other or united telescopically, each outer end thereof being pivotally attached to a metal bracket affixed to one of the shutters near its inner edge or hinged side. The whole constitutes what may be termed a "straight-line" shutter-stay. Many prior devices of this class made no attempt to "bow" the shutters, but only to hold them wide open or close shut. Others had notches at the shutter-brackets to lock the shutters and bow them, but quite loosely, and at a very few positions only. None in this class of straight-line sliding stays or connectors attempted to lock the shutters frictionally at every position possible nor with perfect rigidity, so as not to "chatter" or shake in the wind. By means of my invention there is no position possible to either shutter in which both shutters of a pair cannot be instantly and rigidly secured by means of the one single connector-stay, and there is no window to the shutters of which it is not applicable. The ordinary bay-window having shutters which open and touch back to back leave no space between for the affixing of any shutter-fixtures at all projecting outwardly therefrom, so that even the familiar spring-catch which hooks to the wall is precluded. The latter is also precluded by the fact that there is no wall-face to hook to with

shutters which back against each other when open.

By my invention the shutters of bay-windows, as all others likewise, are secured at once rigidly in any position, precluding all creaking or chattering noise sure to occur during wind-storms and inseparable from all easy-fitting fixtures.

My improved shutter-stay comprises two sliding members or rods C and D, which at their outer ends are pivoted to the respective shutter-brackets E and H, and the connection between the two sliding members is such that there will be direct frictional action between them. One of these members C may be a plain metal rod or tube which slides within the outer member D. This latter is shown as consisting of two trough-shaped strips of metal *d* and *d'*, forming, in effect, a split tube capable of having its two parts sprung toward each other in order to grasp frictionally the inner member C. To secure these two parts frictionally to each other, I provide a clamp G and secure it, as shown in Fig. 2, to the outer end of the split tube D. This clamp consists of a clamp-ring *g*, embracing the split tube and having a small clamping-block *g'*, carried at the end of an adjusting-screw *g*².

The stay member C is riveted or otherwise secured at its outer end to a frictional clutching-disk F', centered upon the pin or pivot E', fixed in the disk-like bracket E, against which works the disk F. The contact-faces of the friction-disk F and bracket E are preferably conical, as illustrated in Fig. 2, in order to furnish greater frictional adhesion than flat surfaces under pressure from the winged nut E³ on the upper threaded end of the pin E'. The conical clutching-surfaces also when compressed center themselves upon each other, thus precluding any lateral motion or shaking by the wind, such as might occur when centered simply on the bracket-pivot, upon which the centering is necessarily a free one to admit of easy motion. The upper part of the pivot or pin E' below the threaded end is made of square or other polygonal section to receive a collar O of corresponding internal section, so as to prevent the winged nut E³ from being unscrewed by the swinging of the shutter.

The outer end of the member D of the shutter-stay is riveted or otherwise secured to a frictional clutching-disk H', corresponding in all substantial respects to the frictional disk F just described for the member C.

A retaining-hook M, pivoted to the overlappingshutter of a pair at *m*, may be dropped over the two members of the shutter-stay, as illustrated in Figs. 2 and 3, when the shutters are closed, and by turning the thumb-screw N² the fastening of the shutters in the closed position may be completed with or without the operation of the frictional clamp G before referred to.

When the securing-hook M is thrown up and the sliding members freed from the clamp G, the shutters may be opened, and when thrown wide open the two parts of the stay C D are extended on each other to their full length. The shutters and stay may then be frictionally locked in that position by the clamp G alone. To set the shutters in any intermediate position or bow them the two parts of the stay must be slid upon each other to the required position and fixed in that position by the clamp G. Then the winged nuts E³ are to be screwed down to frictionally lock the clutching-disks. Each of the clutching-disks E and H' suffices to lock its own respective shutter in position, or, in fact, the pair; but when the connector-stay also is made rigid by the clamp G the combined frictional grip of both stay-clutches then becomes effective against any movement of either shutter in the wind, for the reason that any angular movement in one clutch then involves simultaneous movement in the other. The shutters may thus be quickly secured at any desired position or goal, and each shutter can be set firmly at any point without regard to the position of the other shutter.

It will be understood that my invention

may be applied to other uses, such as to secure French windows, folding screens, and other like swinging pivotal constructions requiring adjustment in position.

I claim as my invention—

1. The combination of a pair of brackets, constructed to be secured to the sides of a pair of shutters and having frictional disks thereon, with the straight-line sliding or telescoped shutter-stay provided at opposite ends with friction-disks fitted to the friction-disks on the brackets, and means whereby said friction-disks may be compressed upon each other, substantially as described.

2. A straight-line sliding or telescoped shutter-stay provided at one end with a conical self-centering frictional clutching device and a coacting frictional device upon the shutter-bracket.

3. A shutter-stay consisting of two members, one sliding within the other, the outer one being split and adapted to clamp the inner one, in combination with a clamping device therefor, substantially as described.

4. A sliding or telescoped shutter-stay provided with a clamping-hook M and its adjusting-screw N², substantially as described.

5. A sliding or telescoped shutter-stay provided at opposite ends with frictional clutching parts E H', coacting frictional parts upon the shutter-brackets, a compressing-piece E³ and a collar O to prevent accidental release of the parts compressed, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS A. WESTON.

Witnesses:

HUBERT HOWSON,
F. WARREN WRIGHT.