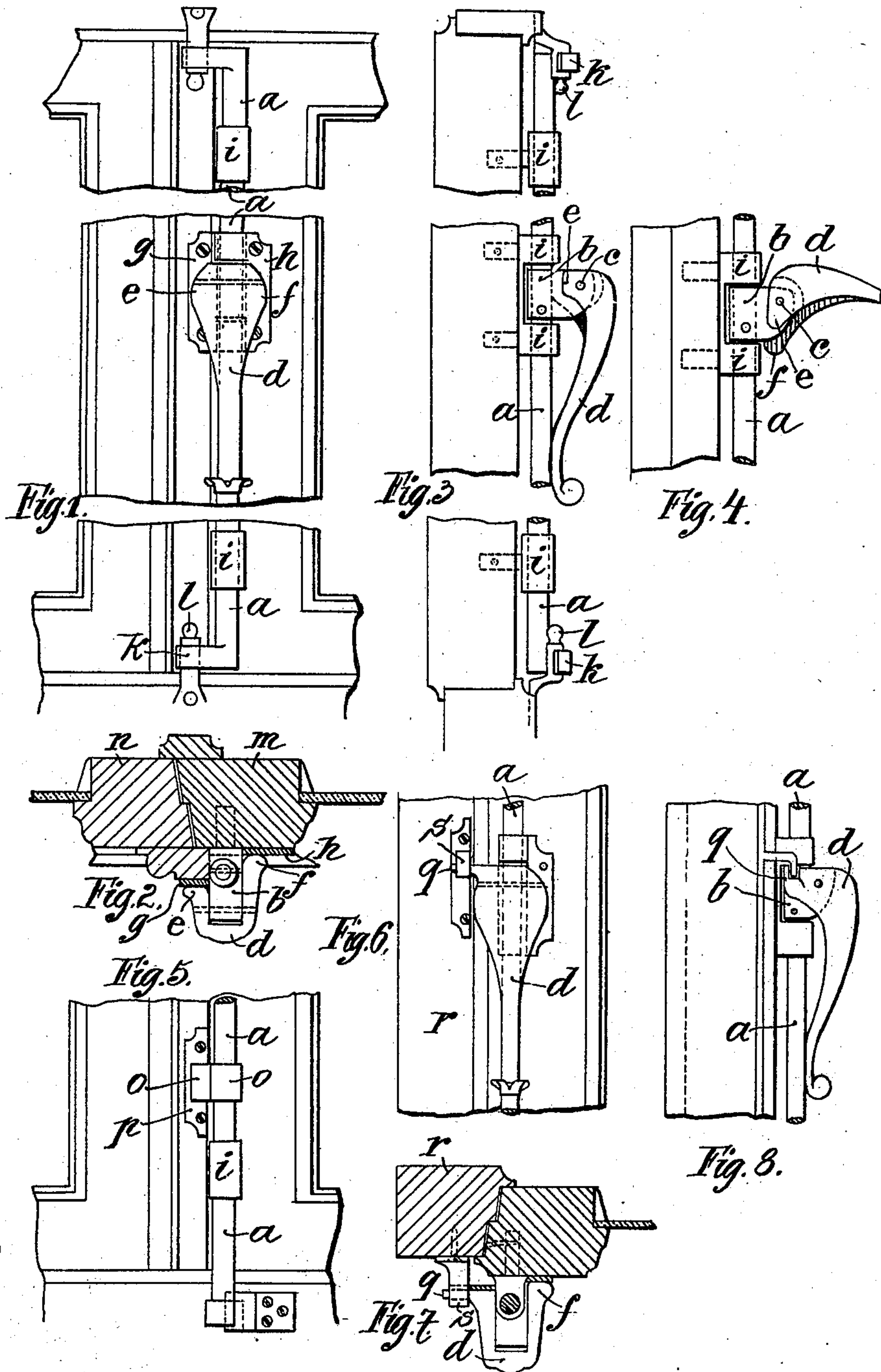


No. 695,620.

Patented Mar. 18, 1902.

J. MEIER.
ESPAGNOLETTE LOCK.
(Application filed May 17, 1901.)

(No Model.)



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ESPAÑOLETTE-LOCK.

SPECIFICATION forming part of Letters Patent No. 695,620, dated March 18, 1902.

Application filed May 17, 1901. Serial No. 60,751. (No model.)

To all whom it may concern:

Be it known that I, JOHANN MEIER, a subject of the Emperor of Germany, residing at 33 Kleine Helle, Bremen, German Empire, have invented a new and useful Espagnolette-Lock, of which the following is a specification.

The present invention relates to espagnolette-locks for windows; and it consists of a new and improved window-lock which is adaptable both for use on single and double swinging window-sashes.

Espagnolette-locks provided with an actuating-handle midway the frame and clamping-hooks locking above and below the sash are known to the art; but the following invention provides means for locking tightly both above and below and simultaneously midway the sash and also at any desired point or points in the frame, and, further, the means so employed when locked automatically hold themselves in the locked position, thus firmly holding the sash in position.

In the accompanying drawings, in which similar letters of reference refer throughout to similar parts, Figure 1 illustrates a partial front view of a window the sashes of which are provided with a lock embracing the present invention in a closed position. Fig. 2 is a horizontal sectional view of Fig. 1. Fig. 3 is a side elevation of Fig. 1. Fig. 4 represents in side view the lock when open. Fig. 5 illustrates a modification. Figs. 6 and 7 are front and cross-section views, respectively, of a modified lock closed as used with single-sash windows. Fig. 8 is a side view of Fig. 6.

In the construction of my invention I employ the usual Spanish sash bolt or rod *a*, which is rotatably journaled vertically in suitable eyes or bearings *i i*, mounted on one of the sashes and adjacent to the adjacent sash when the window is closed. Said rod *a* is bent right-angulary near its upper and lower ends and has hooks *k k* formed on its ends so bent. Studs *l l*, mounted on the frame of the window, are so arranged that when said sashes are closed and rod *a* rotated the hooked ends *k k* of the latter engage said studs, and thus firmly lock the sashes at their upper and lower ends in the well-known manner. Mounted firmly on rod *a* and preferably near the center of the sash is a collar *b*, provided

with a perforated shoulder, through which latter a pin *c* is driven. Pin *c* forms a pivot or pintle for a handle or lever *d*. (See Figs. 1 and 4.) Said lever is split or forked, so that its prongs ride on either side of said shoulder. These prongs or noses *e* and *f* are eccentrically formed and of different lengths (see Fig. 2) and when lever *d* is pushed downwardly into a locked position engage plates *g* and *h*, respectively, fastened on the sashes *n* and *m*. It is obvious that when the lever is so snapped to that nose *f*, riding behind rod *a*, prevents the rotating of the latter until the lever is again properly raised. It is further obvious that the said noses press firmly against the sashes and hold the latter substantially locked. If desired, any suitable number of collars may be mounted on the rod *a*, together with suitable plates *p* on the other sash, so that, especially if the window-sash in question be of extraordinary dimensions, firm locking devices are hereby provided at any desired interval. (See Fig. 5.)

The lock described is equally applicable for single-sash swinging windows; but for sake of brevity I have shown a modified form in connection with such a window, as illustrated in Figs. 6 to 8, inclusive. Here it will be seen that lever *d* is provided on one side with a nose *q*, which is adapted to be swung from below up under and engage a hook *s*, fastened to the frame *r*. This form is also equally applicable to double-sash windows.

The operation of the lock is obvious. Lever *d* is swung upwardly, carrying its cam-formed noses *e* and *f* free of their plates and the sashes, so that rod *a* can be turned. The sashes are closed and rod *a* thus rotated, when its hooks *k k* engage the studs *l l*. The lever is then snapped down and cams *e* and *f* forced into contact with the sashes, whence the window is locked at top, bottom, and centrally in a firm and substantial manner.

Having now described my invention, what I claim as new, and desire to protect by Letters Patent, is—

In an espagnolette-lock for windows the combination of a vertical, rotatable locking-rod, bearings on the window-sash for said rod, hooks on said rod at each end thereof, studs on said window adapted to engage said hooks,

a collar on said rod, a lever or handle pivoted to said collar so as to allow a free vertical swinging motion, plates on said sashes adjacent to said collar, cam-like noses of different
5 length eccentrically acting against said plates, when said lever, in the locking position of said rod, is swung downwardly thereby pressing

the sashes tightly against each other, substantially as described.

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