(No Model.)

G. F. GMINDER.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 420,298. Patented Jan. 28, 1890.

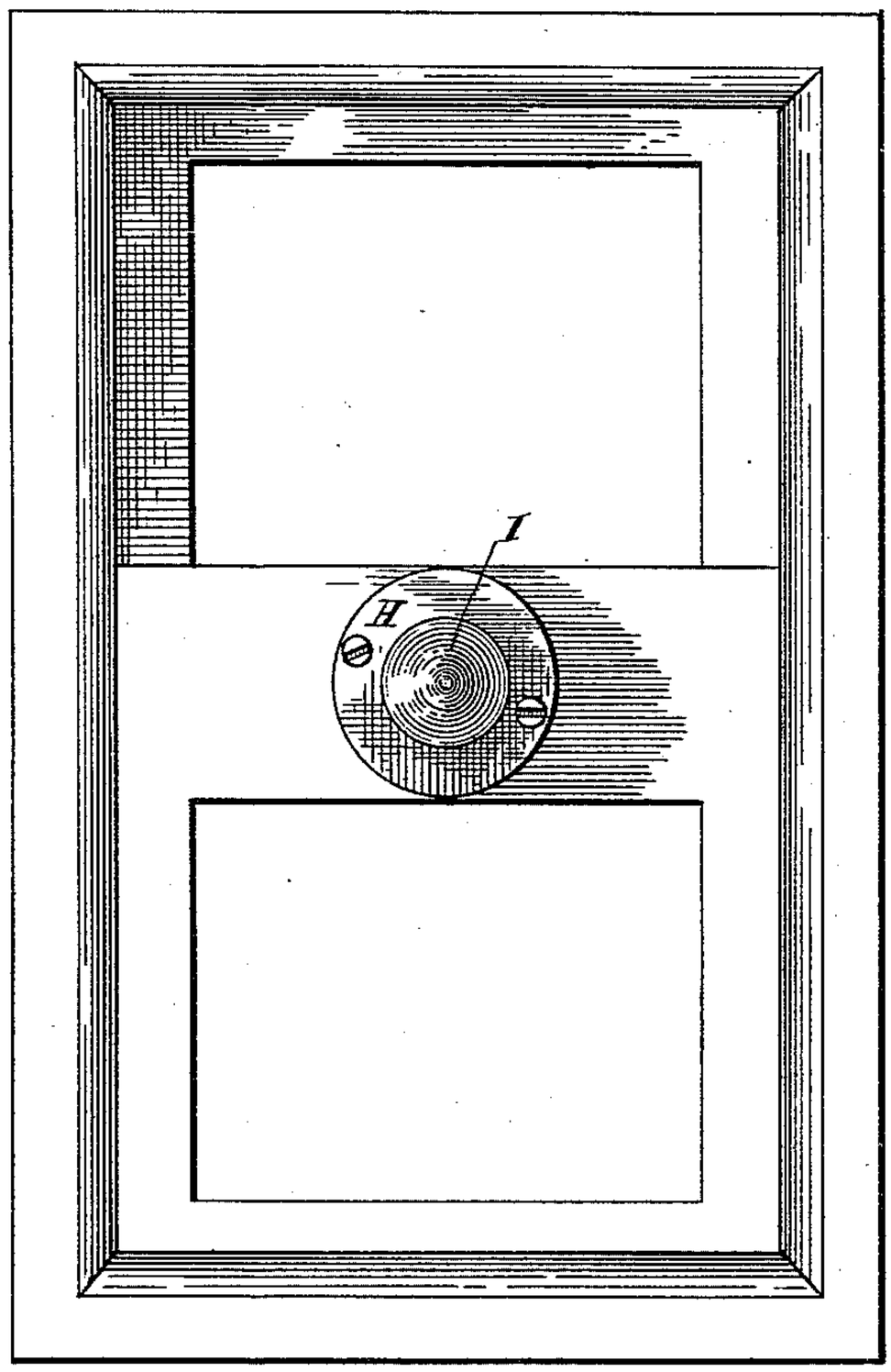

Fig 1

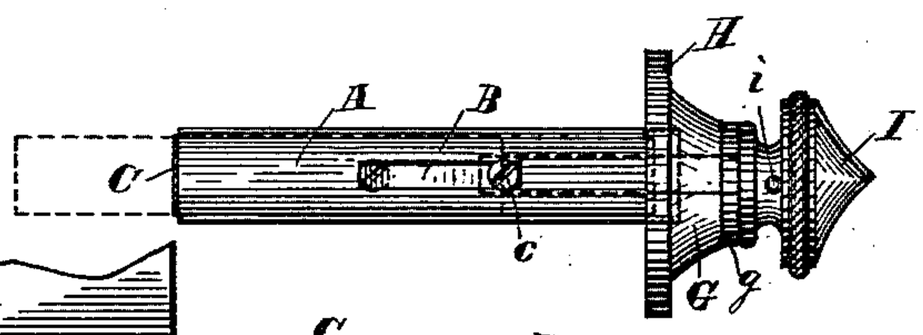

Fig 2

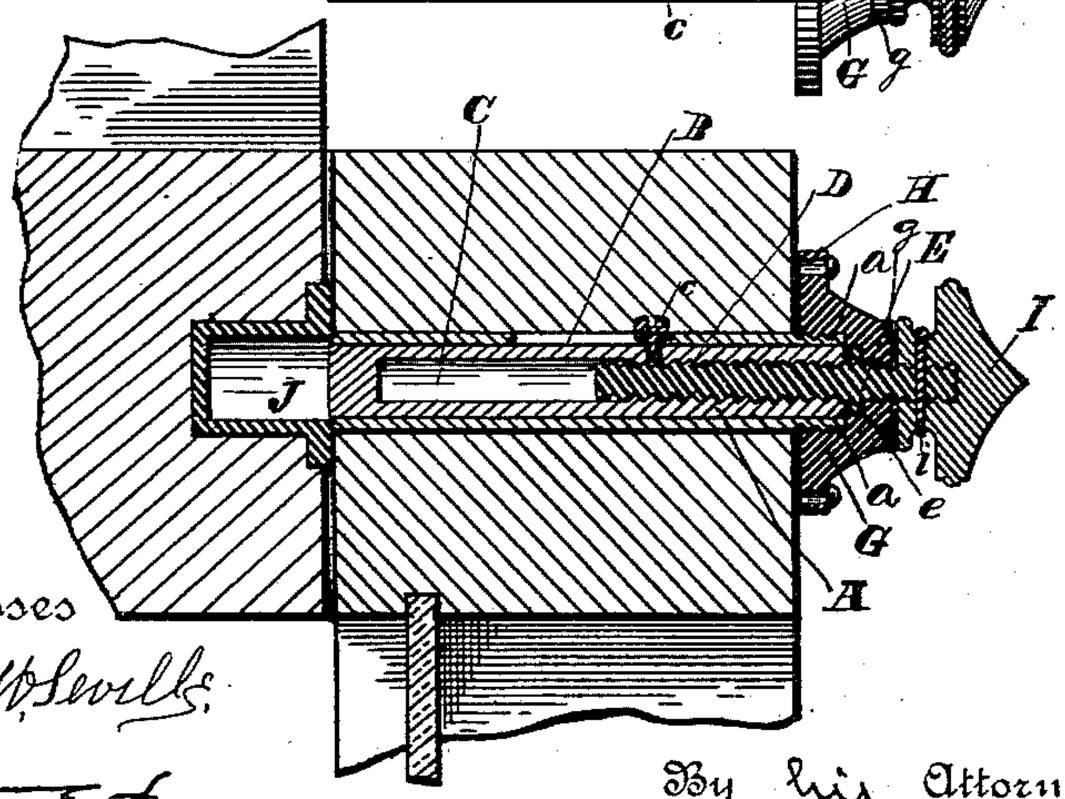

Fig 3

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE F. GMINDER, OF NEW YORK, N. Y.

FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 420,298, dated January 28, 1890.

Application filed November 21, 1889. Serial No. 331,107. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. GMINDER, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Window-Sash Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a view illustrating my improved lock applied to a window-sash. Fig. 2 is a view of the lock detached, showing the bolt extended in dotted lines. Fig. 3 is a longitudinal sectional view through the lock as applied to window-sashes.

This invention is an improvement in locks especially designed for the meeting-rails of window-sashes; and its object is to provide a lock the main parts of which will be concealed and its working or operative parts inclosed; and the invention consists in the novel construction and combination of parts hereinafter clearly described and claimed.

Referring to the drawings by letters, A designates a metallic tube, screw-threaded exteriorly at one end, as at *a*, open at both ends, and having a short narrow longitudinal slot B about midway of its length.

C designates a bolt nearly equal in length to and fitting easily within tube A, and prevented from turning in the tube by a pin or screw *c*, which is secured to the bolt and projects into slot B of the tube. Thus the bolt is confined to the tube, but has a certain amount of longitudinal play therein, regulated by the length of slot B, so that the bolt can be projected partly from or drawn entirely within the tube. The end of the bolt adjoining the threaded end of the tube is centrally bored and internally screw-threaded, as indicated at D, and this bore is engaged by a revoluble screw-rod E, which projects beyond the tube and has an annular flange *e* near its outer end.

G designates a collar slipped over the outer end of rod E and the flange thereon, which abuts against the contracted end or inwardly-projecting flange *g* of the collar, and the collar is threaded interiorly at its inner end to engage the threads of the tube A, as shown, and when the collar is thus connected to the tube rod E is confined therein and cannot move outwardly. The screw-threaded end of the collar has an outwardly-projecting wide flange H, provided with openings for the passage of screws or other fastening devices.

I designates a metallic head slipped on the end of rod E and exterior to the collar, against which it bears on the side of flange *g* opposite flange *e* of the rod, and said head is firmly attached to rod E by a pin *i*, as indicated, so that the rod can be turned thereby. The head has its periphery milled or otherwise formed so that it can be readily turned by hand. The rod E is thus confined to tube A in such manner that while it can be rotated freely it has no longitudinal movement at all. Hence, if this rod is turned, its threads, engaging the threaded bore of bolt C, will cause the latter to move inward or outward, according to the direction of rotation of rod E, since the bolt cannot rotate, as described.

As applied to meeting-rails of sashes, as indicated in Fig. 1, the rail of the lower or inner sash is bored horizontally and transversely to receive the tube A, which is set in this bore and confined therein by screws or pins passing through flange H, as indicated, which flange fits neatly against the face of the sash-rail. The adjoining rail of the opposite sash is provided with a recess or socket J, located at such point that when the bolt C is projected from the tube it will engage this socket J, and thus prevent vertical or lateral movement of the sashes in relation to each other, effectually locking the sashes together.

The lock can be employed as a sash fastener or holder by securing it in one of the vertical rails of the sash, as is evident. In such case the frame or sash-guides should be provided with sockets at proper points for engagement by the bolt C, or where the sashes are light the bolt C could be forcibly seated against the face of the sash or frame by manipulating the rod E, as is obvious.

Having described my invention, I claim—

1. The combination of the tube and the bolt therein, having a screw-threaded bore, with a screw-threaded rod engaging the bore of said bolt and projecting from the tube and having

an annular flange, a collar slipped over said rod and secured to one end of the tube and confining the rod therein by its flange, and the head secured to the end of the rod and bearing against said collar, substantially as and for the purpose specified.

2. The combination of the tube having a central longitudinal slot, a bolt in said tube having a pin engaging said slot, and also having a screw-threaded bore, and a screw-threaded rod engaging said bore and having a head on its outer end, with a collar loosely connected to said rod and fixedly connected to the tube, so as to confine the rod thereto, but permit rotation of the rod by the head, for the purpose and substantially as specified.

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

GEORGE F. GMINDER.

Witnesses:
A. E. DOWELL,
P. Z. BROOKS.