

(No Model.)

R. CHANDLER.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 275,018.

Patented Apr. 3, 1883.

FIG. 1.

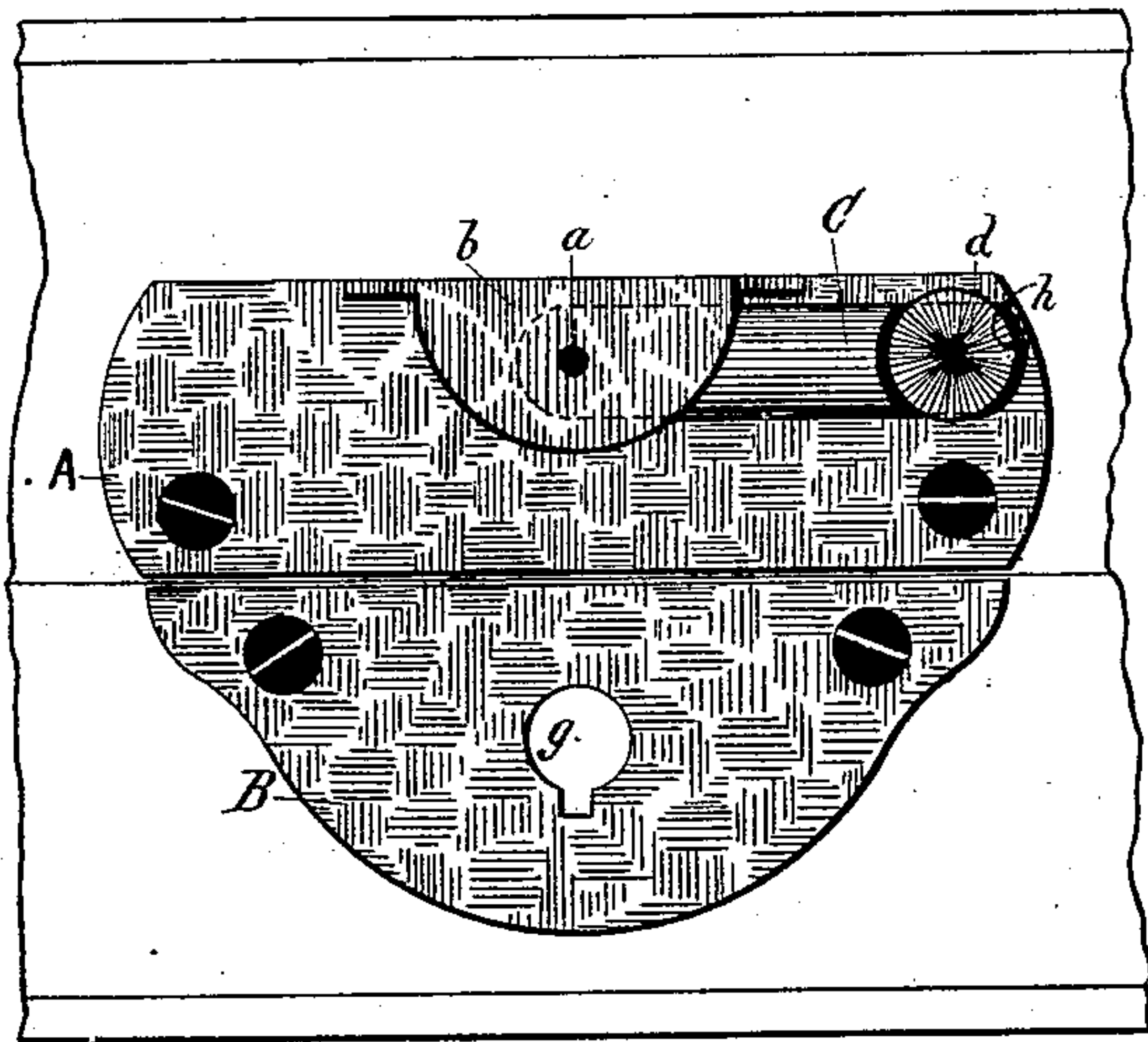


FIG. 2.

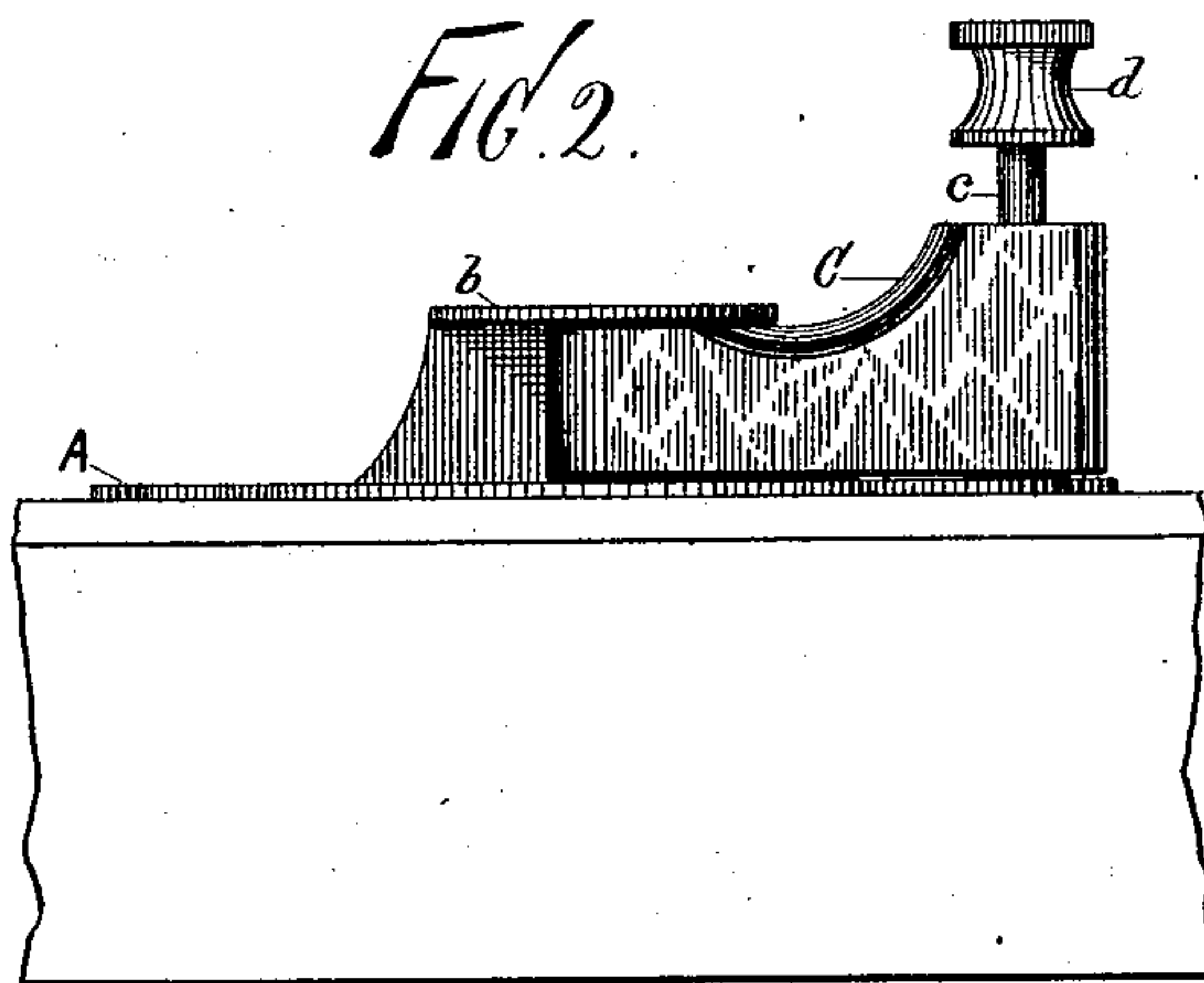


FIG. 3.

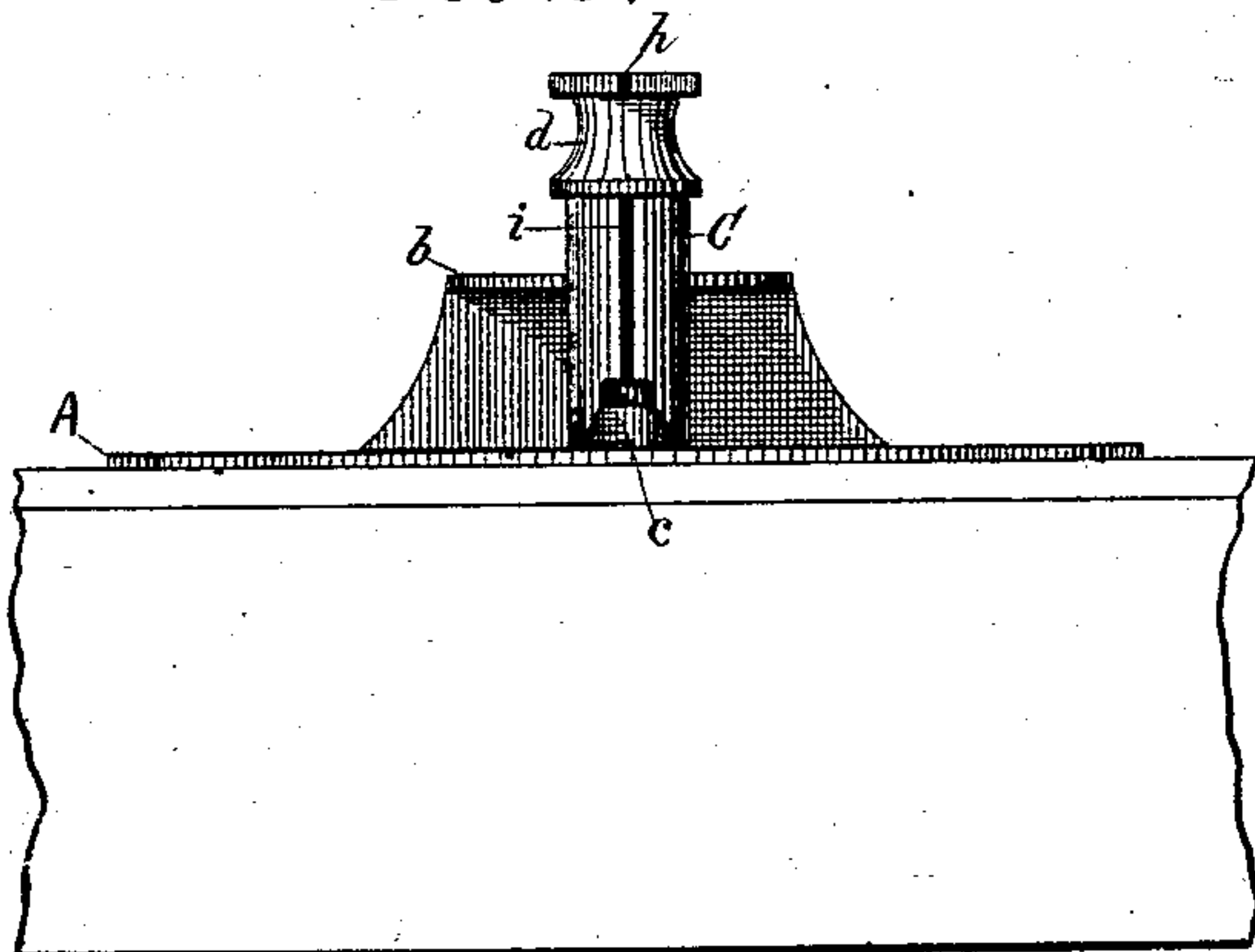


FIG. 4.

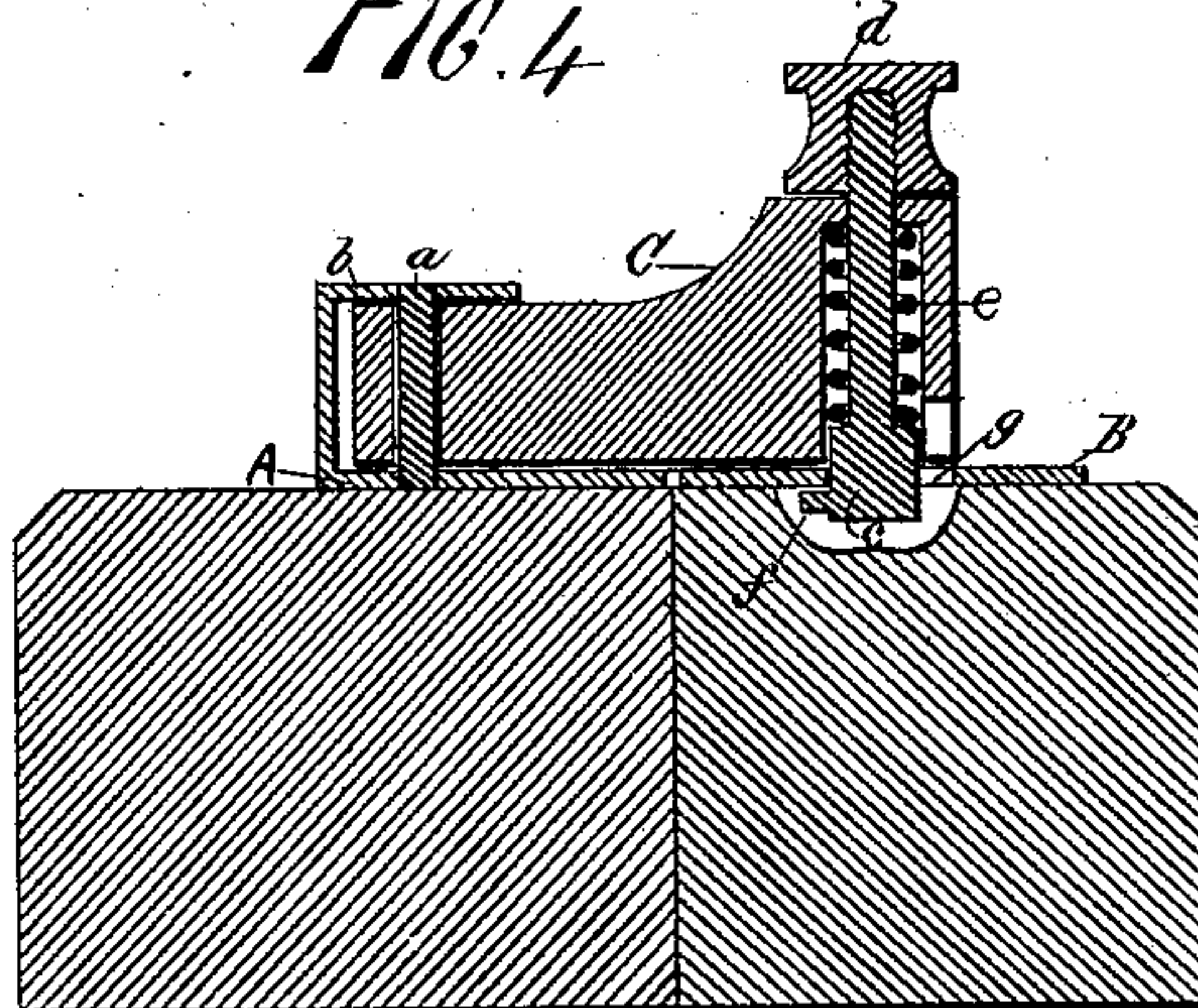
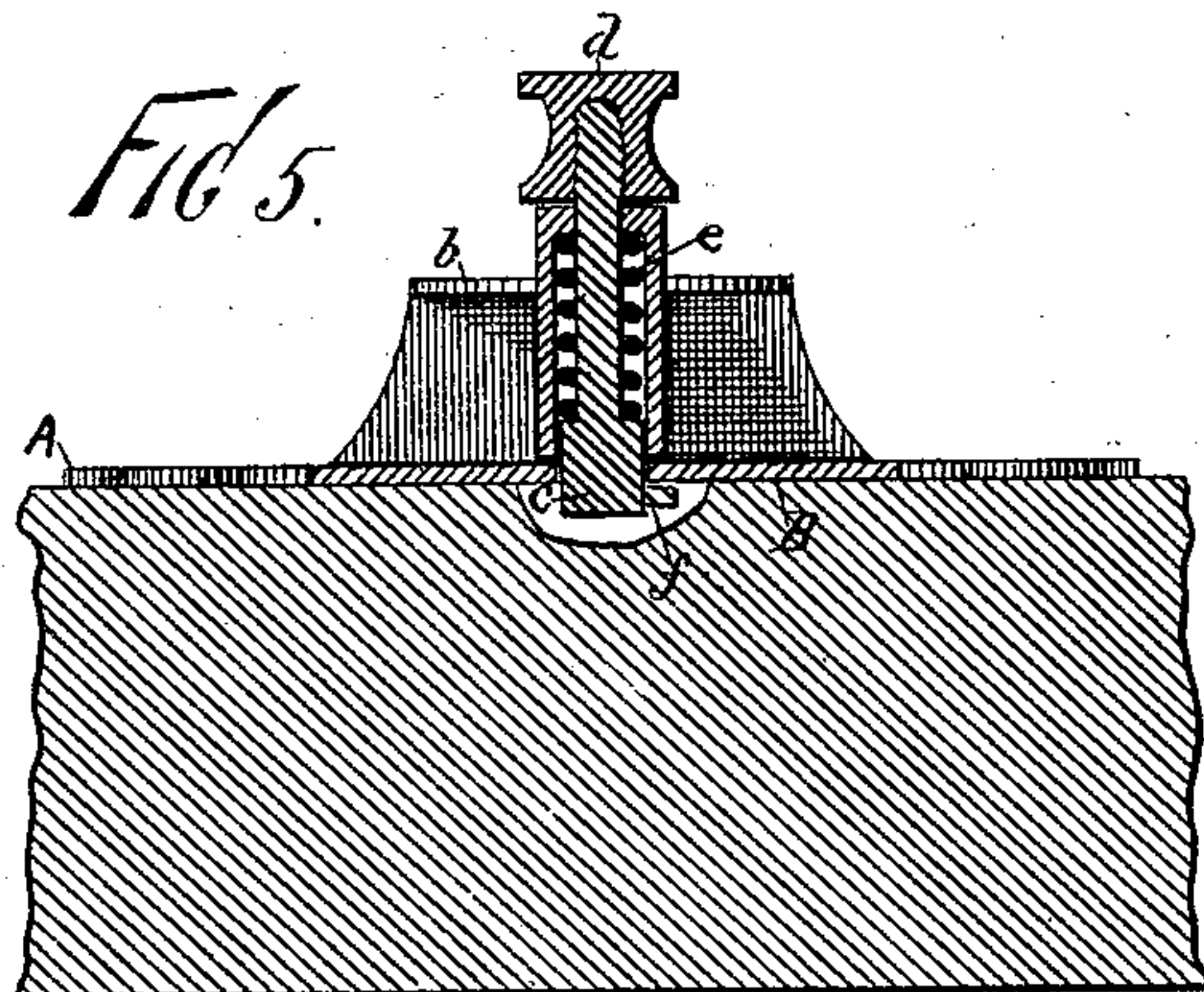


FIG. 5.



Witnesses.
John Buckler,
F. W. Hamaford.

Ralph Chandler,
Inventor.
By Wm. Osgood,
Attorney.

UNITED STATES PATENT OFFICE.

RALPH CHANDLER, OF THE UNITED STATES NAVY.

FASTENER FOR MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 275,018, dated April 3, 1883.

Application filed October 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, RALPH CHANDLER, an officer of the United States Navy, stationed at Boston, county of Suffolk, and State of Massachusetts, have invented certain new and useful Improvements in Window-Sash Fasteners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My improvements have relation to that class of devices employed upon the meeting-rails of window-sashes for the purpose of holding the two rails together, (when the window is closed,) in order to prevent rattling or jarring of the sashes, as well as to prevent either sash from being elevated or lowered or the window from being opened. These devices are ordinarily called "window-sash fasteners," and sometimes simply "sash-locks."

The object of my invention is to produce a strong and durable window-sash fastener which may be applied upon any of the ordinary forms of sashes, which will be secure against being unlocked or loosened from the exterior of the window, and which shall be simple and inexpensive to make, not liable to get out of order or to be damaged by ordinary usage, and capable of easy and ready manipulation upon the inner side of the window.

To accomplish this my improvements involve certain novel and useful arrangements or combinations of parts and peculiarities of construction, all of which will be herein first fully described, and then pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of my improved device shown in unlocked position, and Fig. 2 an elevation thereof in like position. Fig. 3 is a front elevation; Fig. 4, a longitudinal section; and Fig. 5, a cross-section upon a plane passing through the locking stud or bolt, the device being shown in locked position.

In all these figures like letters of reference, wherever they occur, indicate corresponding parts.

A is the main plate, usually applied upon the lower rail of the upper sash, and B the locking-plate, usually applied upon the upper rail of the lower sash.

C is the locking-lever, hinged upon plate A

so as to sweep across or parallel with the face of said plate, the hinge being formed by the pin or rivet *a*, passing through a perforation in the inner end of lever C and secured in plate A, and in an overhanging lip, *b*, cast or otherwise formed with this plate. This permits the required sweeping movement of lever C in either direction, makes a secure foundation for the inner end of said lever, and prevents it from being swung back too far. The free end of lever C is socketed, substantially as shown, and carries the locking-bolt *c*, of which the finger piece or knob *d* extends above the swinging lever. The lower end of bolt *c* is suitably enlarged to form a bearing for the spring *e*, the latter surrounding the stem or shank of the bolt and abutting against the under side of the top of the socket, tending always to force the end of the locking-bolt downwardly, or into its locking position. Upon the lower end of bolt *c* is a pin, *f*, intended to engage with or bear against the under side of the locking-plate B when suitably located and turned.

Plate B is perforated, as at *g*, the opening corresponding in size and form to the lower end of the bolt with its projecting pin. From this construction it will be observed that when the locking-lever is brought around to the locking position the spring *e* will force the bolt *c* down through the perforation *g*. Then by turning the finger-piece slightly the pin *f* will be made to bear against the under side of the locking-plate B, (the material of the sash beneath the locking-plate being removed sufficiently to admit of the turning of the bolt.) The lever will then be locked in position, and cannot be disturbed until the locking-bolt is elevated, and this necessary elevation cannot take place until the bolt is first suitably turned to bring the pin *f* into proper relation with the corresponding notch in the opening *g*. To unlock this fastener from the exterior by insertion of an implement between the meeting-rails of the sash is practically impossible. With the pin *f* and the hinge *a b* the locking-lever is securely held at both ends, obviating any danger of damage to the lock from the exterior of the window. The wall of the socket in the locking-lever is notched, substantially as shown, to accommodate the pin upon the locking-bolt, so that when the bolt is raised and

the lever swung to one side the pin will always be in position to enter the opening for it in the locking-plate (under the action of the spring) as soon as the lever is brought around to the front, or to the locking position.

In order to lock the rails or sashes, it is only necessary to move the locking-lever around, and the bolt will be automatically forced down through the perforation provided for it as soon as it reaches the locking position. Then by simply turning the finger-piece the pin upon the bolt prevents the bolt from being raised. When locked the pin is out of sight, and to render it convenient and easy to turn the locking-bolt to a position in which it can be elevated I cut an indicator-notch on some convenient portion of the finger-piece *d*, as at *h*, and upon the lever *C* another notch, as at *i*, the two notches being so located that when they are brought in line with each other by turning the bolt the pin will be in a position to admit of the raising of the bolt. By this simple means the operator is enabled to quickly open the sash-lock from the interior. Instead of the notch *h*, I might employ a projecting feather or rib upon the finger-piece *d*, to be felt as well as seen, and this would operate as an equally effective indicator. When the locking-lever is turned, as in Figs. 1 and 2, the spring *e* forces the lower end of the bolt *c* down upon the top of plate *A*, creating sufficient friction to prevent the lever from being accidentally turned so as to interfere with the free movement of either sash.

The plate *B*, usually applied upon the lower sash, is smooth upon its upper surface, and may be let into the sash flush with the top of the rail thereof, so that when the lower sash is elevated to its extreme height and strikes the upper window-casing it will not mark or cut into the casing. The knob or finger-piece *d* is preferably screwed upon the shank of the locking-bolt, so that in case the spring should break the bolt can be removed and a new spring inserted by any one.

The device constructed and arranged sub-

stantially in accordance with the foregoing explanations will be found to admirably answer the purposes or objects of the invention as previously set forth. It is applicable on vertically or horizontally movable sashes, or upon hinged sashes, and in either case will be found desirable for the purposes intended.

Heretofore in this class of devices a sweep has been provided with a press-bolt, which does not form the double lock contemplated by my improvement; and, also, in another form the sweep has been locked against side movement, but not against an upward thrust. It will be observed that my invention guards against both of these movements, and this by a very simple arrangement of parts. The slot in the front wall of the sweep keeps the spring-bolt and its attached pin always in such position that they will engage with the slot in the sash-plate immediately upon being swung around.

I do not desire to be understood as making any claim to above-mentioned old forms; but,

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

The herein-described sash-fastener, composed of the locking-lever or sweep hinged upon one of the plates, and carrying the locking-bolt, with its projecting pin and operating-spring, and the smooth-faced locking-plate, perforated to admit the end of the locking-bolt and its projecting pin, the wall of the socket in the sweep being notched, as shown, to accommodate the pin, and the whole combined and arranged, as explained, to lock the sweep against lateral and upward thrusts, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

RALPH CHANDLER.

Witnesses:

FRANCIS SIMONDS,
JOHN F. FERGUSON.