

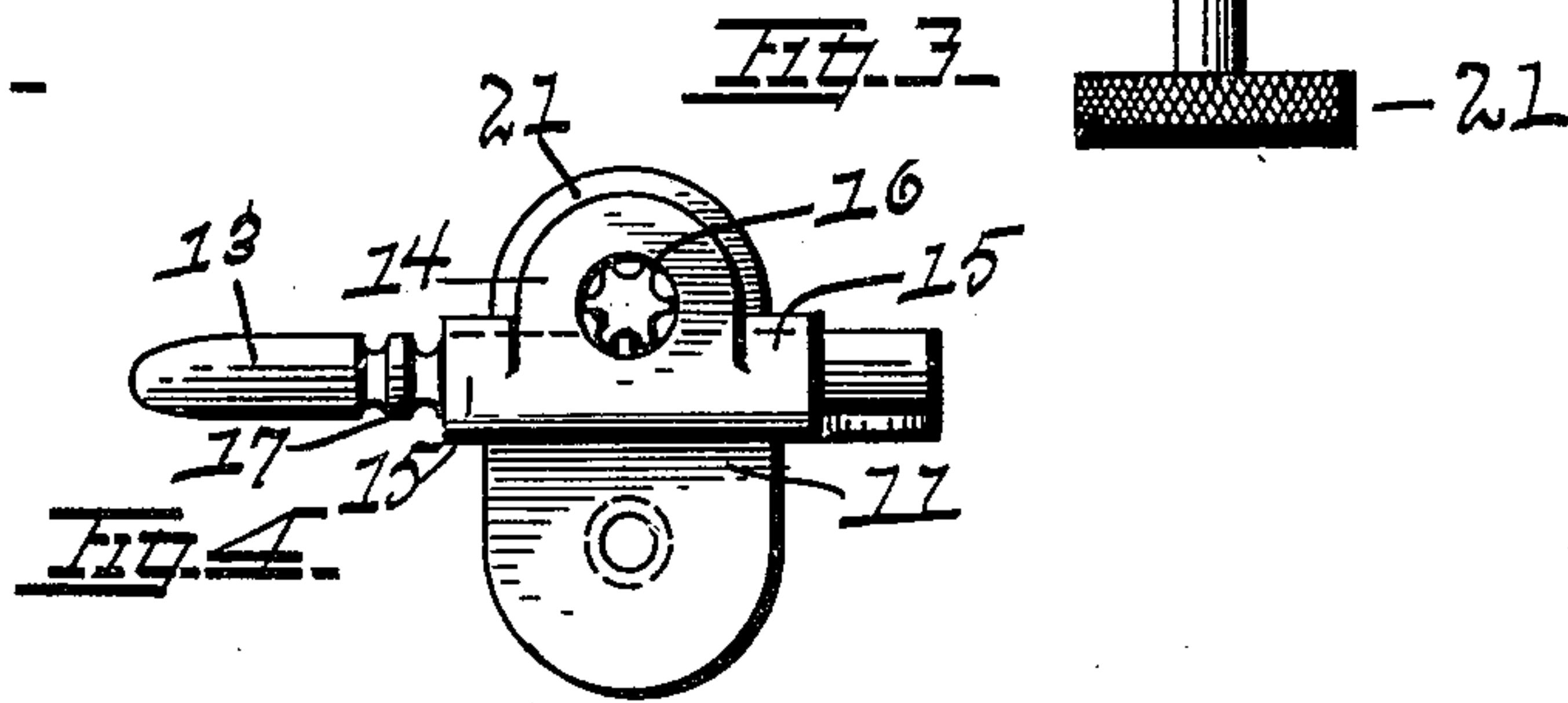
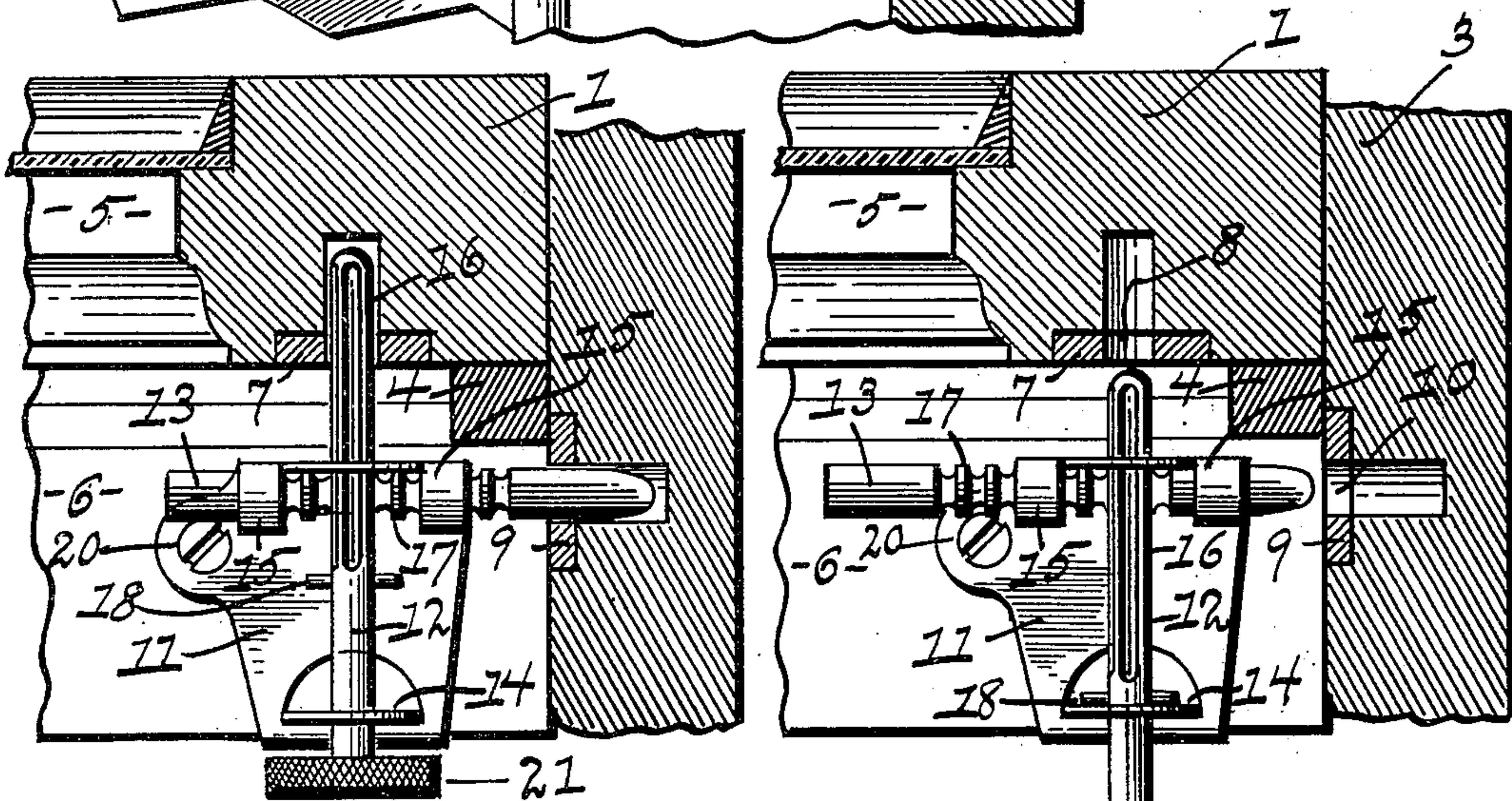
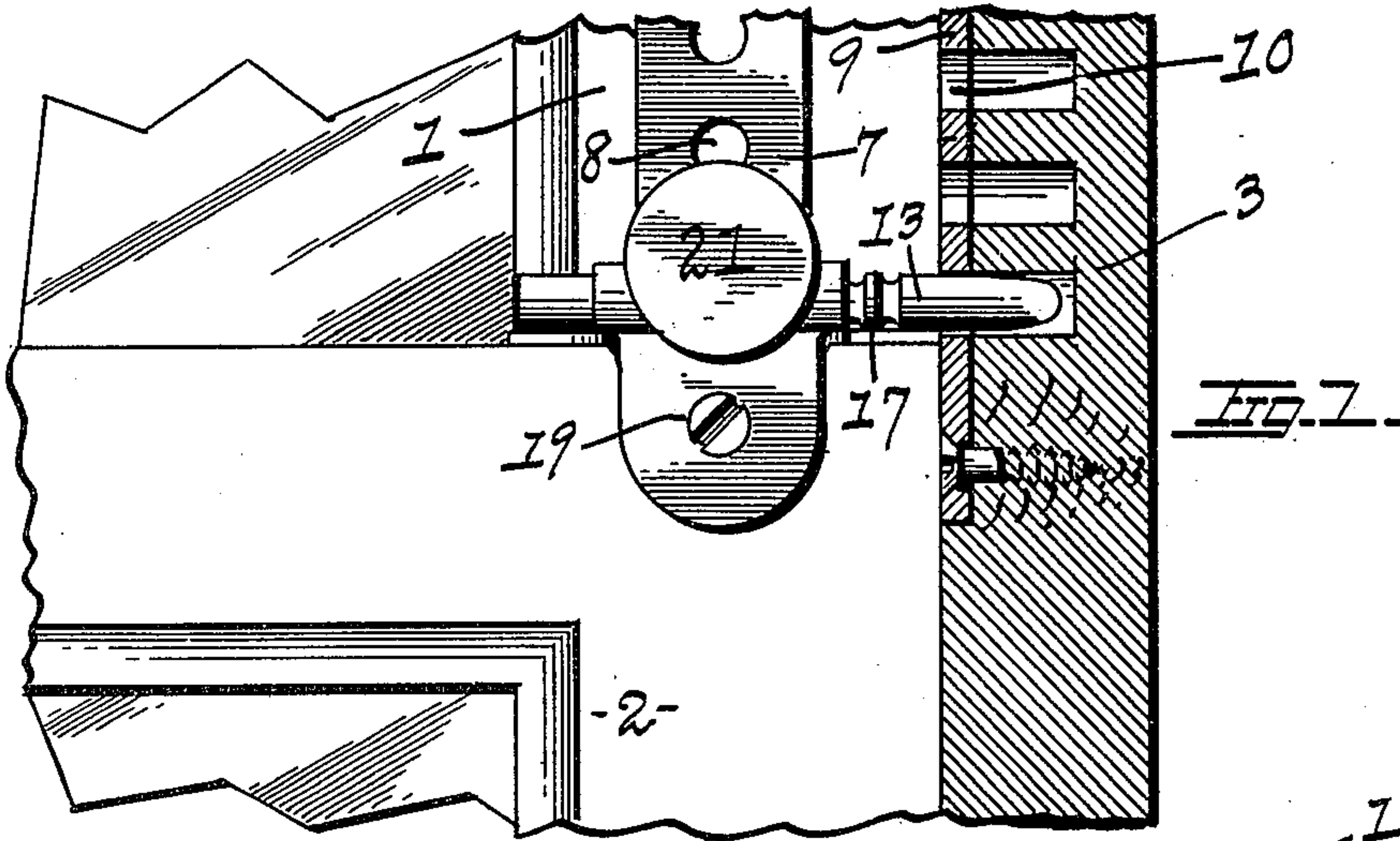
No. 654,141.

Patented July 24, 1900.

H. E. DOREN.
SASH LOCK.

(Application filed Mar. 14, 1900.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY E. DOREN, OF TOLEDO, OHIO.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 654,141, dated July 24, 1900.

Application filed March 14, 1900. Serial No. 8,572. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. DOREN, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Sash-Locks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention has reference to a sash-lock which is capable of locking both the lower and the upper sash at any point desired. By means of my invention the lower sash can be raised and locked to permit air to enter at the bottom of a window or the upper sash can be lowered and locked to permit foul air to escape. If it is desirable, the lower sash can be raised and the upper sash lowered and locked in this position to permit a constant circulation of air.

My invention is especially adapted for attachment to the windows of bed-rooms and rooms in which the sick are confined to permit systematic ventilation and at the same time insuring perfect safety by preventing burglars and other persons from entering through a window, thereby adding greatly to the comfort and peace of mind of the occupant of a room.

A further object in carrying out my invention is to provide a sash-lock which shall be simple in construction, requiring when assembled but few parts, and therefore capable of being manufactured at a minimum of expense.

In carrying out my invention I employ certain novel features of construction and the details of parts hereinafter shown and described, and pointed out in the claims.

In the drawings, Figure 1 shows my sash-lock in front elevation as applied to a window. The jamb and the perforated strip which is attached thereto are shown in section. Fig. 2 shows my invention in plan view attached to the lower sash and in locking position with the jamb and the upper sash. Fig. 3 is a similar view showing the parts in un-

locked position. Fig. 4 is a rear elevation of my sash-lock removed from the window.

Referring to the parts, 1 is the stile of the upper sash, 2 the stile of the lower sash, 3 the jamb, and 4 the parting-strip, of an ordinary window. Likewise 5 is the meeting-rail of the upper sash, and 6 the meeting-rail of the lower sash. To the stile 1 of the upper sash is secured a metal strip 7, formed with equidistant perforations 8. Plate 7 may be as long as desired and may be even extended the entire length of the stile. In like manner there is secured to the jamb 3 a metal strip 9, having equidistant perforations 10.

My lock proper comprises a base 11, a sliding bolt 12, and a bolt 13, operating in adirection transverse to the bolt 12. The base 11 is constructed of sheet metal and is formed with upwardly-turned ears 14, having suitable perforations to serve as bearings for the sliding bolt 12. In like manner integral with the base are formed circular members 15 to serve as bearing for the bolt 13. Bolt 12 is formed of a round rod and has impressed on its surface longitudinal grooves forming gear-teeth 16. Bolt 13 is also formed of a round rod and has impressed upon its surface annular grooves forming teeth 17, constituting a rack which engages with the sliding bolt 12. 18 is a transverse pin in the bolt 12 to prevent its entire withdrawal from the base. The base 11 is secured to the lower sash by means of screws 19 and 20.

By constructing the sliding bolt 12 with longitudinal grooves its withdrawal out of locking engagement is permitted, as shown in Fig. 3. Bolt 13 is withdrawn from locking engagement with the jamb by manually rotating bolt 12 by means of the knurl 21 on the end thereof. The annular grooves on the bolt 13 are only formed intermediate thereof, so that the movement thereof endwise is limited. In assembling the parts the bolt 13 is first inserted. Then the bolt 12 is inserted to engage the bolt 13. The transverse pin 18 is then placed in position through the bolt 12 and the parts are locked together.

From the foregoing description it is evident that I provide an inexpensive, efficient, and easily-applied device free from springs

and other parts liable to breakage for locking a window in any position which it may be made to assume. I have described perforated plates to be attached to the jamb and also
5 the stile of the upper sash. I wish it understood that these are not essential parts of my invention, as they may be entirely dispensed with, if necessary, in which event I form equidistant holes in the stile and the jamb.

10 Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a sash-lock, the base constructed of sheet metal, having the upwardly-turned
15 ears forming bearings for a sliding bolt, and circular members forming bearings for a bolt extending in transverse direction to the sliding bolt; a sliding bolt formed with longitudinal grooves, adapted to enter recesses in
20 the sash, and a bolt arranged transverse in direction to the sliding bolt, and formed with

annular grooves constituting a rack, to be engaged by the sliding bolt, substantially as set forth.

2. In a sash-lock, the base formed with
25 guides for a sliding bolt, and with guides for a bolt extending in transverse direction to the sliding bolt; a sliding bolt formed with longitudinal grooves and adapted to enter recesses in the sash, and a bolt formed with an-
30 nular grooves, adapted to be actuated by rotating the sliding bolt, and a pin inserted transversely in the sliding bolt to prevent its withdrawal from the base, substantially as
35 set forth.

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

HENRY E. DOREN.

Witnesses:

CARL H. KELLER,
J. W. COUDIN.