

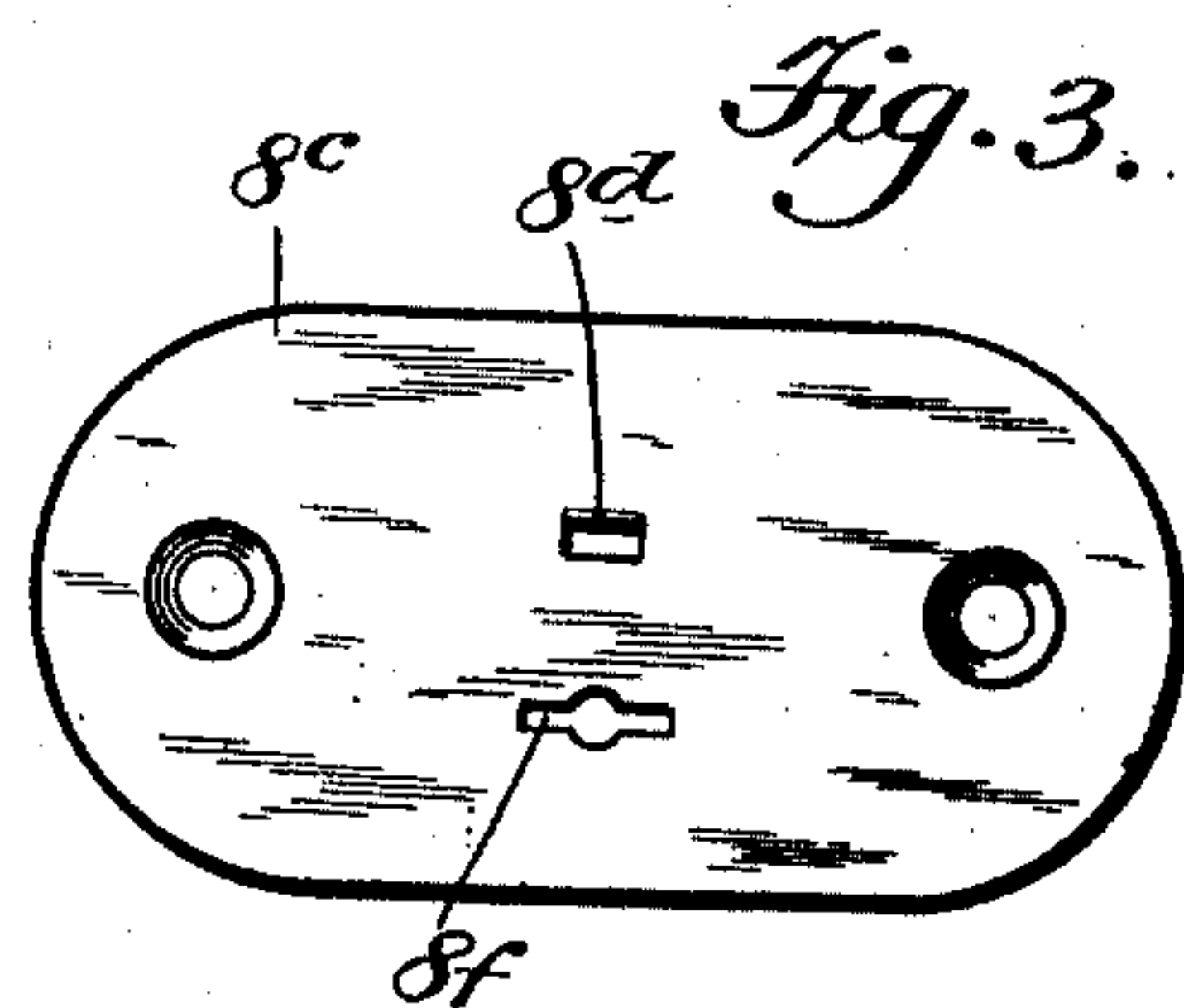
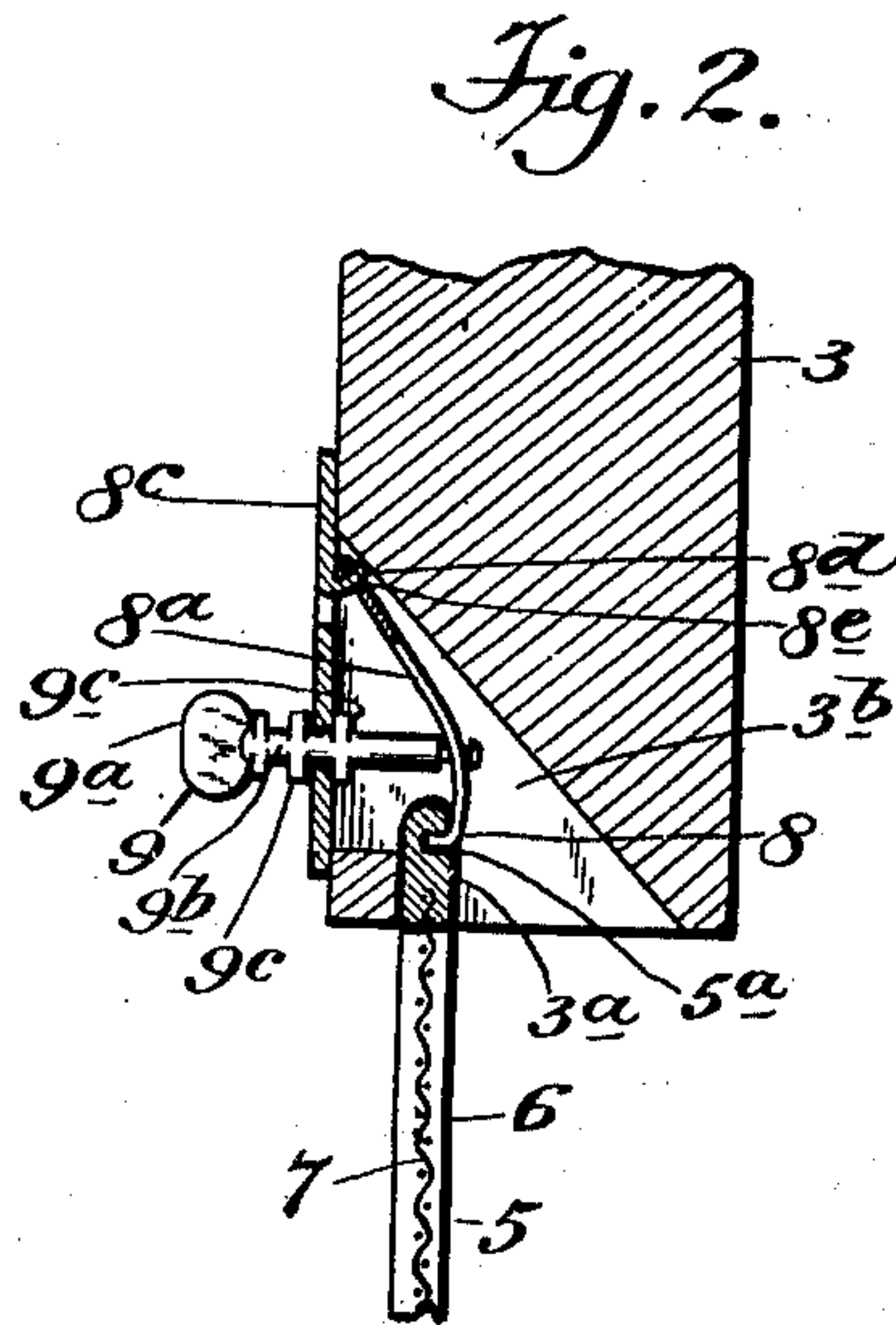
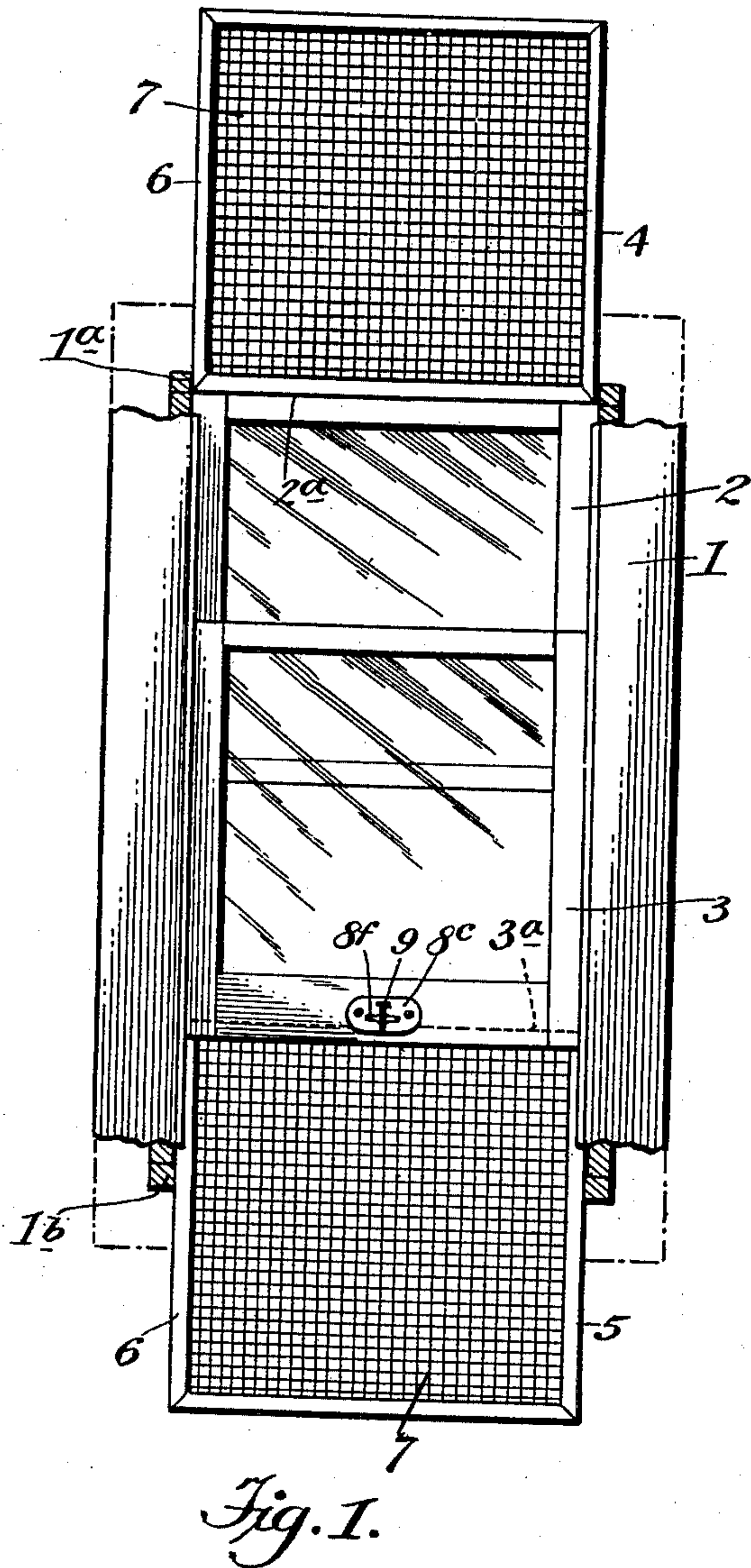
No. 718,978.

PATENTED JAN. 27, 1903.

J. D. CAMPBELL.
SCREEN.

APPLICATION FILED FEB. 18, 1902.

NO MODEL.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN D. CAMPBELL, OF NEWTON, NEW JERSEY, ASSIGNOR TO HIMSELF,
AND WALTON C. WHITTINGHAM, OF MILBURN, NEW JERSEY.

SCREEN.

SPECIFICATION forming part of Letters Patent No. 718,978, dated January 27, 1903.

Application filed February 18, 1902. Serial No. 94,586. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. CAMPBELL, a citizen of the United States, residing at Newton, in the county of Sussex and State of New Jersey, have invented certain new and useful Improvements in Screens, of which the following is a specification.

This invention relates to screens, and particularly to screens for windows and like openings, and has for its object to provide a device of the class described which will possess points of advantage in simplicity, inexpensiveness, convenience, effectiveness, and general efficiency.

Another object of the invention is to provide a device of the class described which is carried by the window-sash and permits the adjustment of the sash as desired.

Another object of the invention is to provide a device of the class described which will be out of sight when the sash is closed, but in position to be brought into operative position when the sash is raised or lowered.

In the drawings, Figure 1 is a front elevation of a window embodying my improvements, partly in section and partly broken away. Fig. 2 is an enlarged detail view of part of the lower sash and screen, showing fastening device partly broken away and partly in section. Fig. 3 is an enlarged front elevation of part of the fastening device.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to the drawings, 1 designates a window-frame, and 2 and 3 designate, respectively, the upper and lower sashes of such window. The window-frame 1 and window-sashes 2 and 3 may be of the ordinary construction. Screens 4 and 5 of any suitable construction are provided, respectively, for the upper and lower parts of the window. Preferably the screens 4 and 5 have metallic frames 6, which fit in the channels in the window-frame in which the sashes slide and are covered with wire-cloth 7 of suitable mesh. The screen 4 is adapted when the upper sash 2 is lowered to fill the opening in the window-frame 1 above such lowered sash and prevent the entrance through the window of objectional objects. The screen 4 rests upon the

top 2^a of the upper sash 2 and is supported thereby. As the upper sash 2 is lowered the screen 4 follows it down by gravity, and as the upper sash is raised it carries the screen 4 up with it, the stud 1^a at the top of the window-frame 1 being cut away to permit the passage of the screen. The lower sash 3 is grooved, as at 3^a, to receive the upper part of the frame of the screen 5 and provided with means of attachment to the screen 5. In one form of such means the upper part of the frame of the screen 5 is provided with a longitudinal slot 5^a, intermediate its ends, and the lower part of the sash 3 provided with a fastening device 8, which is adapted to engage said slot 5^a, and consists of a spring-tongue 8^a, secured in a recess 3^b in the lower part of the sash 3, and a key 9 for operating said tongue 8^a. The recess 3^b has an inclined rear wall to permit a limited amount of backward and forward play of said tongue 8^a. A suitable escutcheon 8^c is provided to close the front opening of the recess 3^b and to carry the tongue 8^a. The escutcheon 8^c has a stamped-out and turned-back portion 8^d, upon which the spring-tongue 8^a is hung by means of a slot 8^e in the upper portion of the spring-tongue 8^a. The escutcheon 8^c is also provided with an elongated slot 8^f below the stamped-out portion 8^d, which has an enlarged central portion. A key 9, having a suitable head 9^a to form a handle for raising the sash 3 and a rounded body portion 9^b, projects through the slot 8^f and has its inner end suitably secured in the tongue 8^a, herein shown as swiveled. The body portion 9^b of the key 9 is provided with wings 9^c, between which the edges of the slot 8^f rest when the key 9 is in its inner or outer position or when the tongue 8^a is in operative or inoperative position. No claim is made in this application for this fastening device, as it will be made the subject of a future application. The screen 5 when attached to the sash 3 will be raised and lowered with the sash 3, the stud 1^b at the bottom of the window-frame 1 being cut away similarly to that at the top.

The operation and advantages of my invention will be readily understood and appreciated. The screen 4 is inserted and slid up

and the upper sash 2 inserted below it and the batten replaced. Similarly the screen 5 is inserted and the sash 3 placed above it, the key 9 being turned and drawn outward and again turned, whereby when the screen 5 and sash 3 come together the tongue 8^a will enter the slot 5^a and fasten the screen 5 and sash 3 together and the batten replaced. The parts being now all in place, it is only necessary to raise and lower the sashes 2 and 3 in the ordinary manner to operate the screens 4 and 5. If desired, means may be provided for holding the screen 4 even when the sash 2 is lowered, and it is only necessary to turn the key 9 and press it in to release the screen 5, when the sash 3 may be raised without the screw 5 following.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claims.

Having thus described my invention, I

claim and desire to secure by Letters Patent—

1. The combination with the lower sash of a window, having a groove along the under side of its bottom rail, and a central recess extending from the base to the inner side of said bottom rail, of a screen below the sash, fitting said groove, a spring-tongue supported at one end within said recess and bent at its free end to engage the screen, and a key for operating the spring-tongue.

2. The combination with the upper sash of a window of a screen supported thereon, and movable therewith, a lower sash grooved along the under side of its bottom rail, and having a central recess with a rear inclined wall, a screen below said lower sash fitting said groove, an escutcheon closing said recess, and formed with a key-opening, a spring secured at its upper end to the escutcheon, and hooked at its lower end to engage the screen, and a key extending through the escutcheon and swiveled to the spring.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

JOHN D. CAMPBELL.

Witnesses:

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ISRAEL L. HALLOCK.