

No. 773,986.

PATENTED NOV. 1, 1904.

R. L. RILEY.
COMBINED STOP AND LOCK FOR WINDOW SASHES.

APPLICATION FILED APR. 25, 1903.

NO MODEL.

Fig. 1.

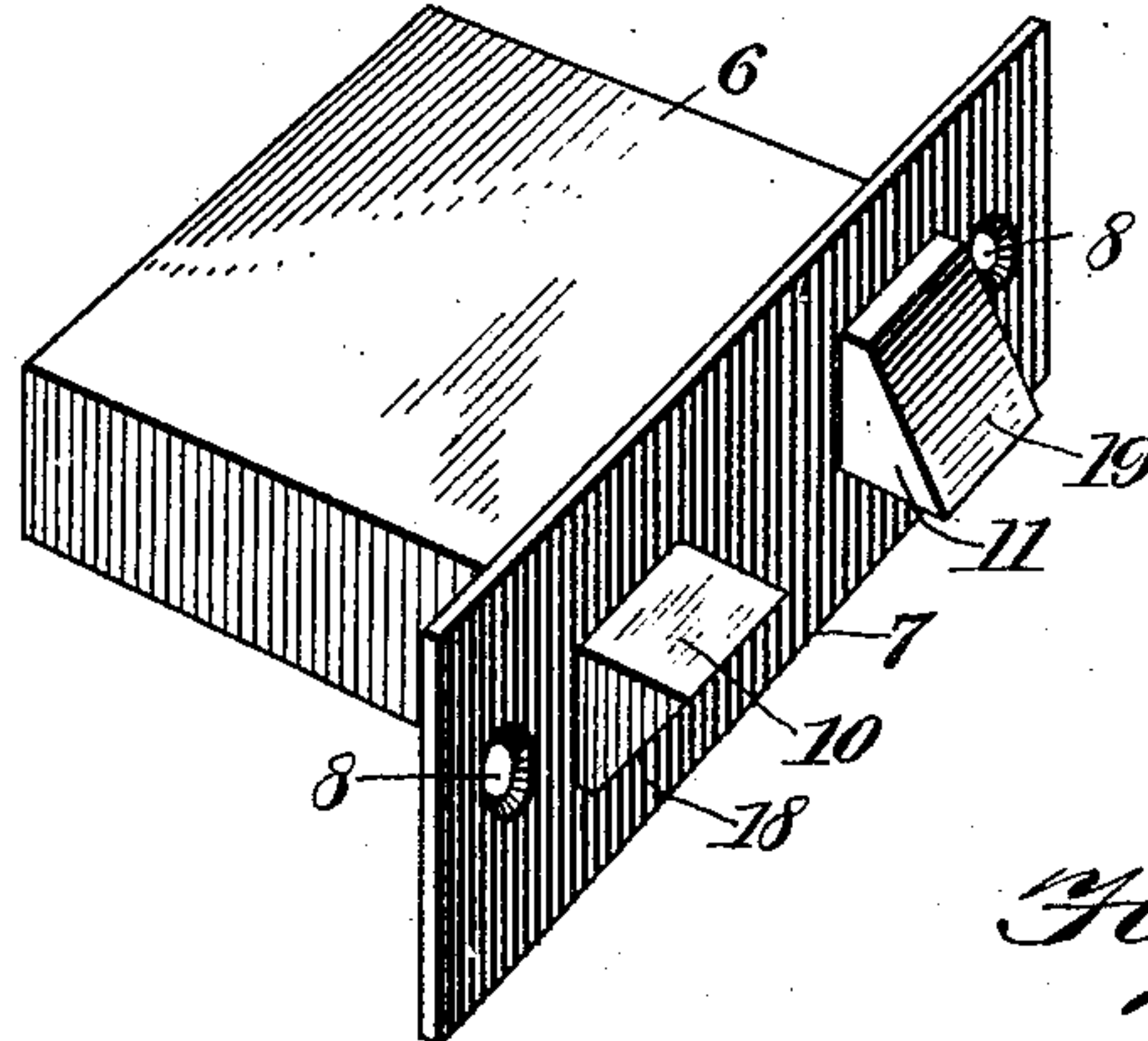


Fig. 2.

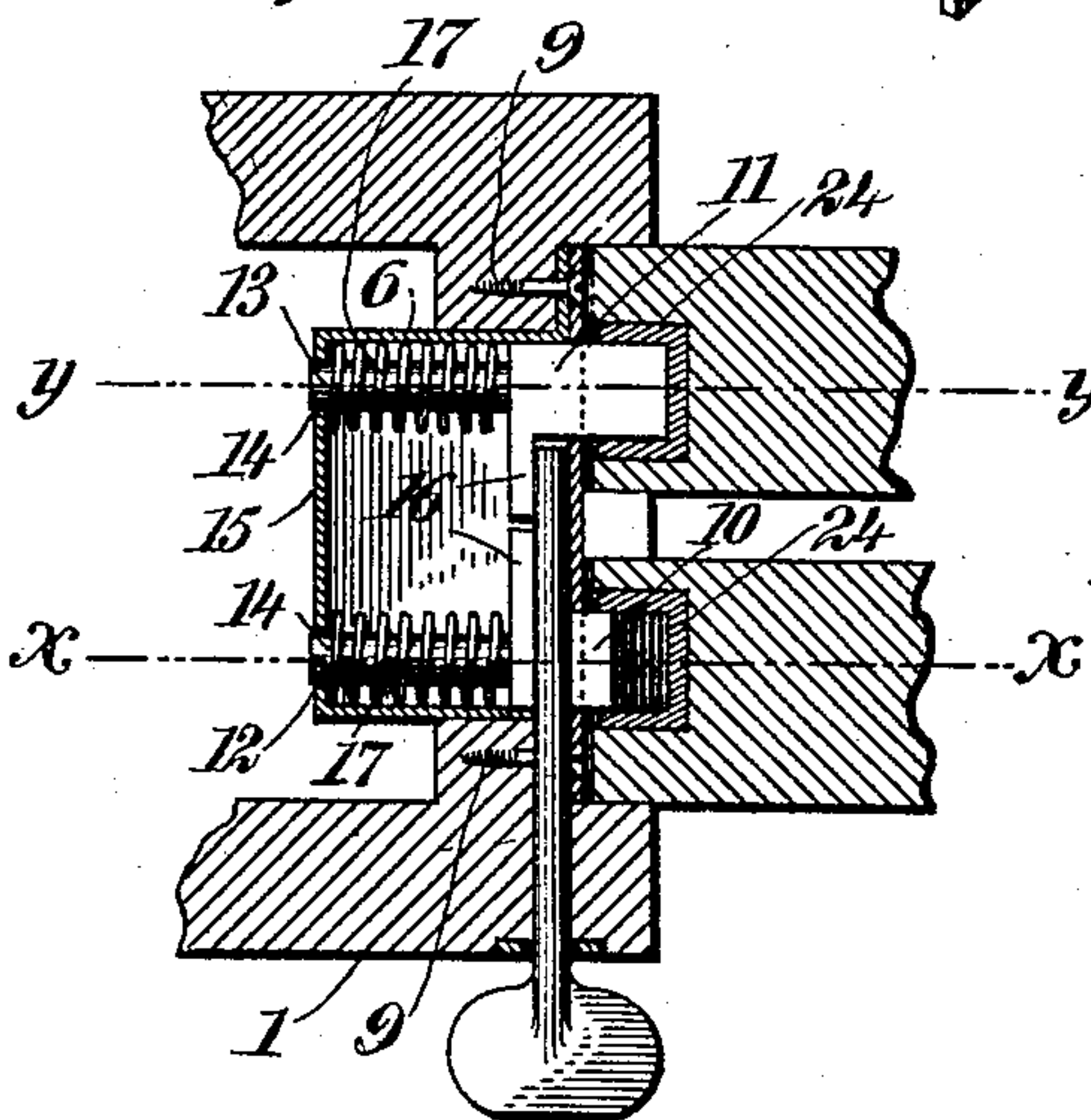


Fig. 3.

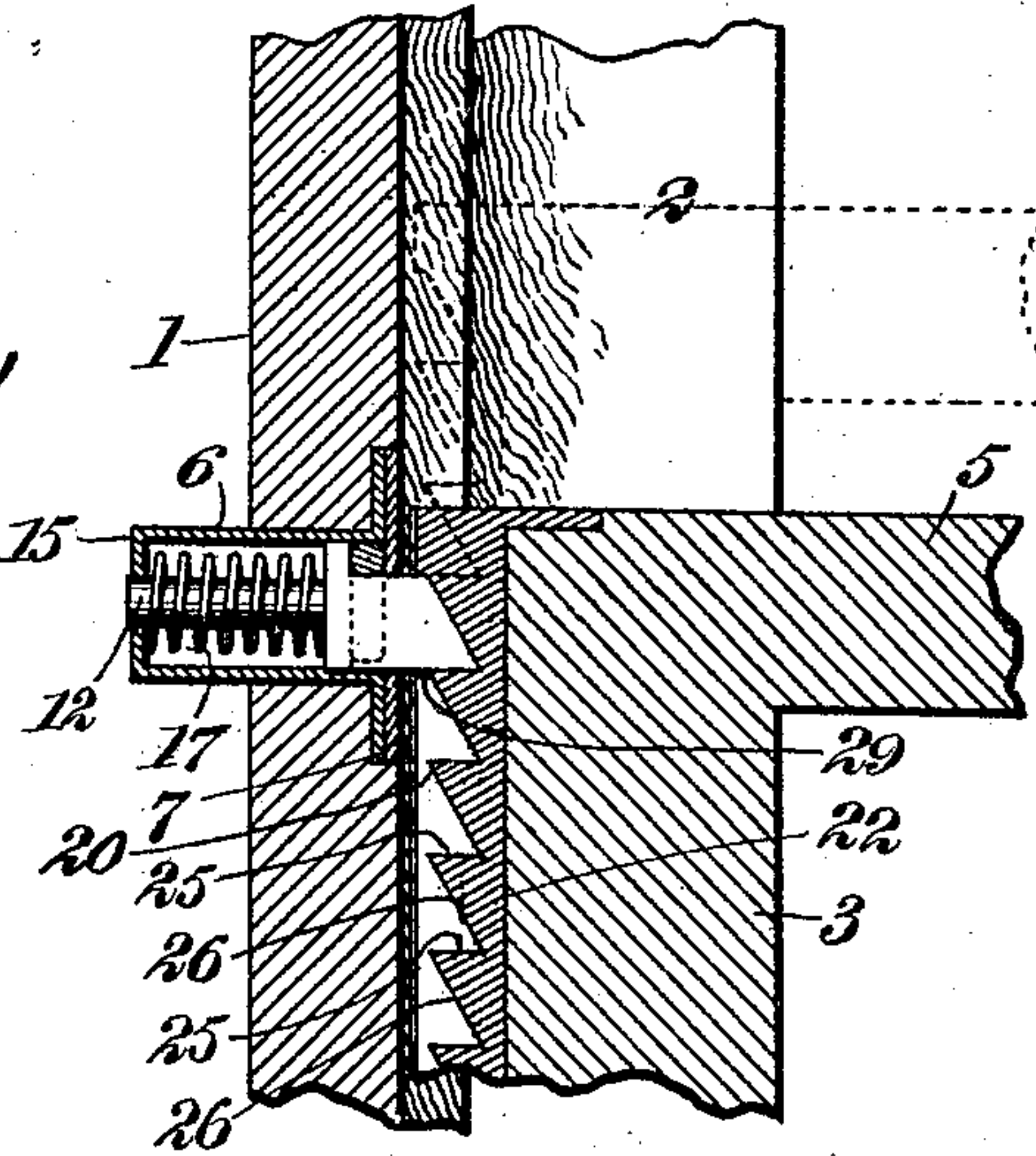


Fig. 4.

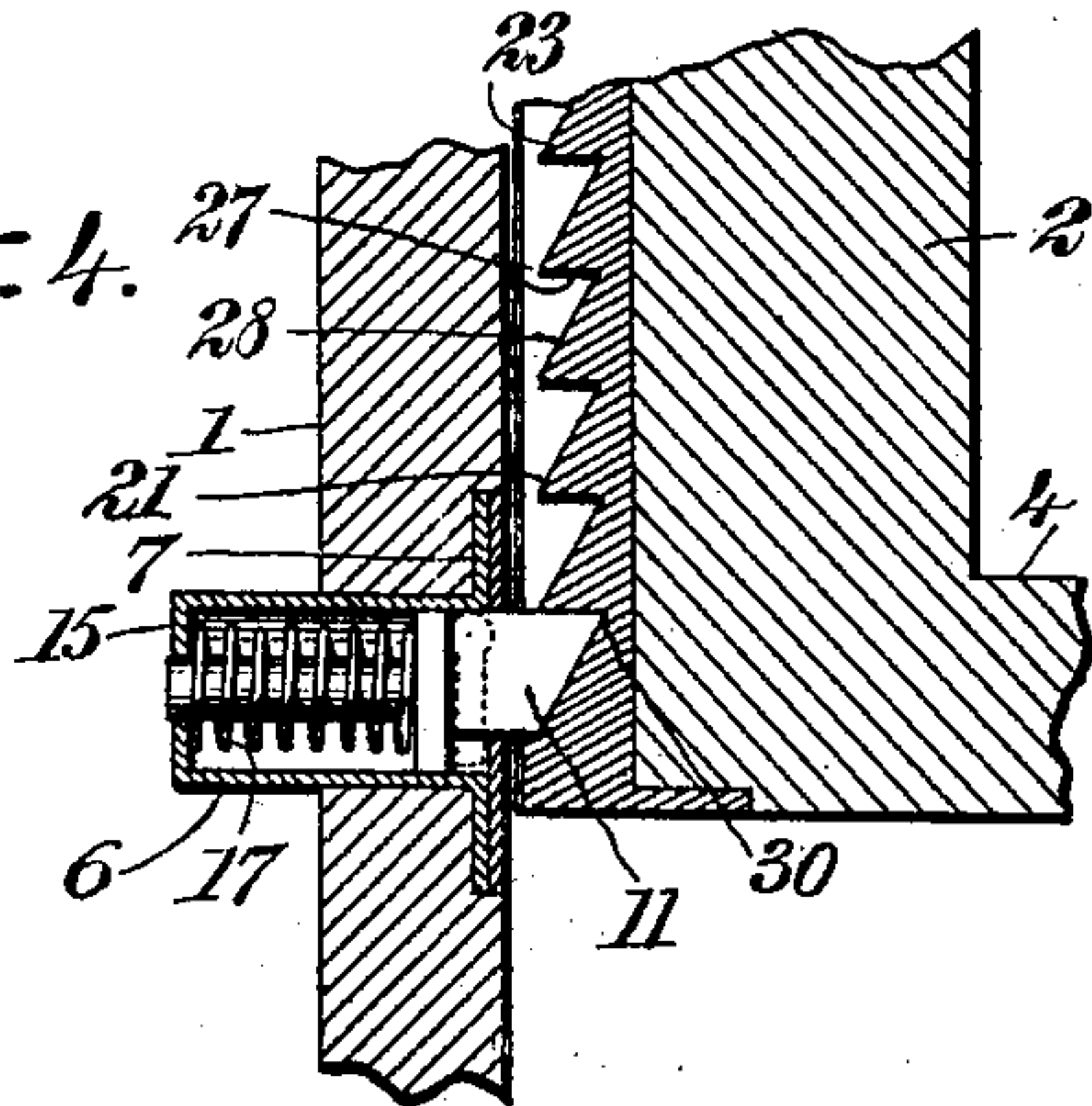
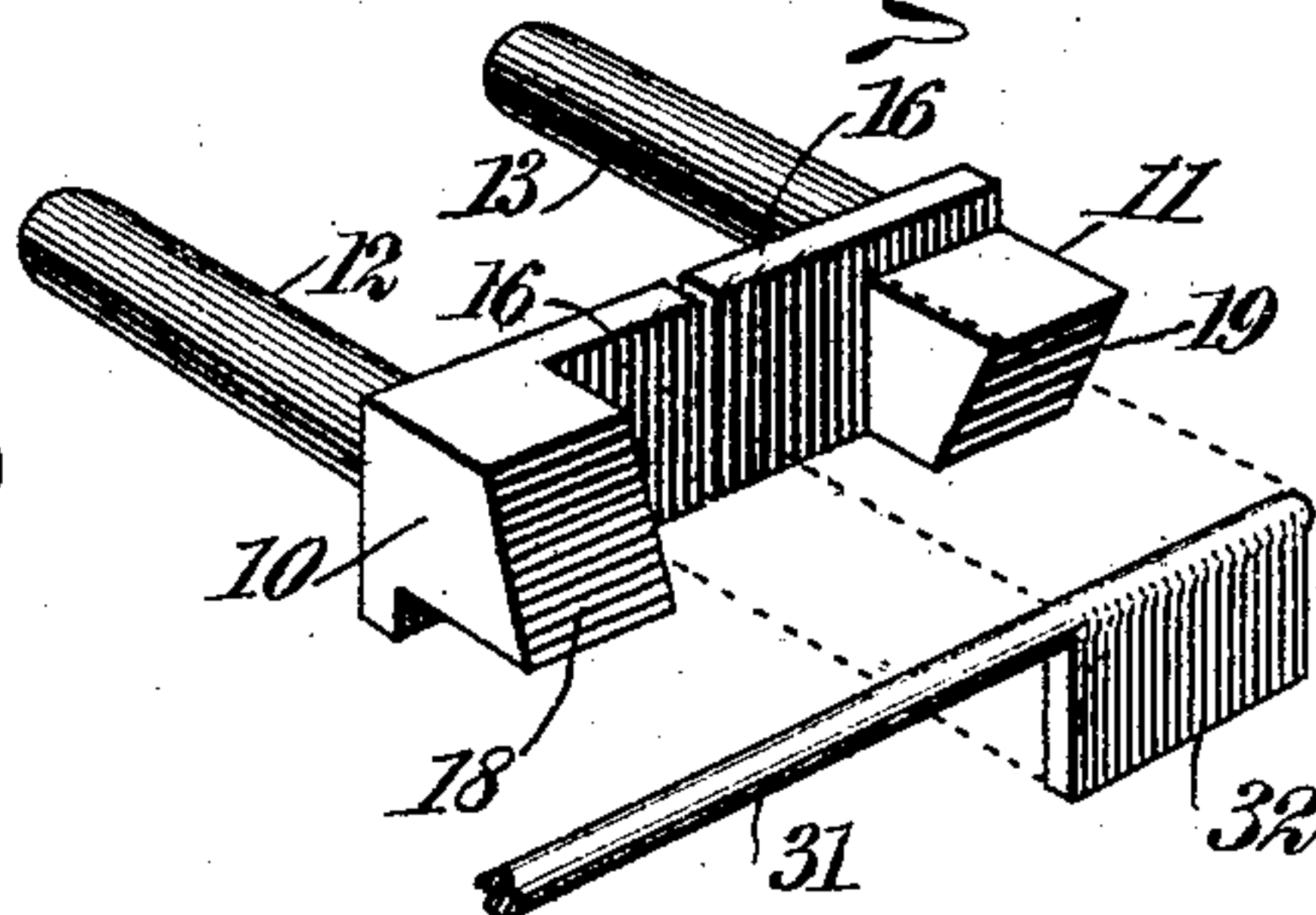


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT L. RILEY, OF NEWBURGH, NEW YORK.

COMBINED STOP AND LOCK FOR WINDOW-SASHES.

SPECIFICATION forming part of Letters Patent No. 773,986, dated November 1, 1904.

Application filed April 25, 1903. Serial No. 154,261. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. RILEY, a citizen of the United States, and a resident of Newburgh, in the county of Orange and State of New York, have invented a new and Improved Combined Stop and Lock for Window-Sashes, of which the following is a full, clear, and exact description.

The invention relates to combined stops and locking devices for the upper and lower sashes of windows; and it consists, substantially, in the construction, organization, and combination of parts hereinafter particularly described and claimed.

In the cleansing or washing of the glass panes of window-sashes by housemaids and others it is desirable that the sash (either the upper or lower one) be brought to different positions of adjustment from time to time by which to enable such operation to be properly performed throughout the full extent of the surfaces to be cleansed, and various means have been hitherto devised for this purpose having different objects in view.

My improvements are of the class referred to; and the principal object of my invention is to provide a device of this kind which is effective and reliable in use, besides being cheap to manufacture, not liable to get out of order, and also possessing the capacity for long and repeated service.

The above and additional objects are attained by means substantially such as are illustrated in the accompanying drawings, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a view in perspective of the casing and bolt elements of the device. Fig. 2 is a horizontal sectional plan view in detail, showing my improvements as applied to one side of the frame and upper and lower sashes of a window. Fig. 3 is a vertical sectional view in detail on the line *xx* of Fig. 2, showing the lower sash of a window as locked in permanently-closed position by means of my improvements. Fig. 4 is a similar view on the line *yy* of Fig. 2, showing the parts of my improvements as engaged for securing the upper sash of a window in permanently-closed position; and Fig. 5 is a perspective view in

detail of the duplicate bolts and operating-key to show more clearly the construction and organization of these elements.

Before proceeding with a more detailed description it may be stated that in the embodiment of my improvements herein shown I preferably employ a double combined stop and locking device located in a mortise or recess therefor in one side of a window-frame and in line with the meeting-rails of the two sashes of the window, one of the duplicate bolts of the device engaging with means on the corresponding sash for preventing the sash from being opened without proper operation of said bolt.

The advantages of my device will be explained hereinafter, and while I have herein represented a certain preferred embodiment of my improvements it will be understood, of course, that I am not limited to the precise details thereof in practice, since immaterial changes therein may be resorted to coming within the scope of my invention.

Specific reference being had to the drawings by the designating characters thereon, 1 represents a part of an ordinary window-frame, 2 a portion of one of the stiles of the upper sash of the window, and 3 a portion of one of the stiles of the lower sash, the meeting-rails of the two sashes being designated as 4 and 5, respectively. Seated in a mortise or recess therefor formed in one side of the frame 1 in approximate alinement with the said meeting-rails of the sashes is a metal casing or housing 6, having a front plate 7, provided with suitable holes 8 for the passage of screws 9, by which the housing is secured in place, the said front plate being also formed with suitable rectangular openings for the protrusion there-through of the operative heads 10 and 11 of duplicate bolts 12 and 13, contained within the housing and having their inner ends guided in openings 14 therefor provided in the inner wall 15 of the housing. The said bolts and their heads are located apart for a suitable distance, as shown, and said heads are formed each with an inward laterally-extending wing or projection 16, the bolts each also being provided with a spring 17, exerting its pressure or tension between the inner side of the rear

wall 15 of the housing and the inner side of the corresponding bolt-head. These bolt-heads are reversely beveled or inclined on their outer faces, as indicated at 18 and 19, respectively, and it will be understood that the springs on the bolts normally maintain the said heads outwardly, as shown in Figs. 1 to 4, inclusive, by which to engage, respectively, the teeth 20 and 21 of the vertical ratchet-bars 22 and 23, located in vertical guides 24 therefor, seated in recesses on the outer face of the stiles of the lower and upper sashes, respectively, and correspondingly with the beveled face of the head 10 of the bolt 12 the teeth of the ratchet-bar 22 are formed each with a right-angled face 25 and an inwardly and downwardly beveled or inclined face 26, while the teeth of the ratchet-bar 23 are each formed with a right-angled face 27, but with an inwardly and upwardly inclined face 28. The said wings or projections 16 are of a width to bring the opposite or adjacent vertical edges thereof close together, as shown, so as to enable both bolts to be simultaneously operated by means of the specially-devised key presently referred to. Now, as will be seen, when the two sashes are closed they are locked at the points 29 and 30, respectively, and to enable the sashes to be opened it is first necessary to turn the bolts inwardly by means of a suitable key 31, having a lateral bit 32, which operates against the outer faces of the wings 16 of the bolt-heads, thereby moving said bolts against the action or pressure of the springs thereof, as is apparent. This key when turned so as to bring the bit thereof substantially horizontal serves to hold the bolts inwardly, and thus the sashes may be raised and lowered at will to any desired position, it being apparent that the said wings of the bolt-heads are for the coöperative action of said key. At the same time it will be understood that by again turning the key back to its former position the sashes will be engaged at intermediate points by engagement of the bolts with the ratchet-bars. When the sashes are closed and locked and it is desired to open them, a quarter-turn is given to the key in the proper direction,

whereupon the two bolts are drawn inwardly and both sashes thereby disengaged. By leaving the key in such position it is apparent that one or both sashes may be opened to any desired extent at will. By turning the key reversely during any intermediate position of the sashes the sashes will be caught and held by engagement of the bolts with the teeth of the ratchet-bars. The key is permanently located in the casing of the bolts, and it is thought the construction and operation of all the parts will now be fully understood, attention being called to the fact, however, that the bit 32 of said key is formed substantially oblong and rectangular and of a size practically equaling the combined dimensions of the outer faces of said wings 16, thus insuring easy and direct operation of the bolts.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a window, the combination with the frame and upper and lower sashes slidable therein, of a vertical ratchet-bar mounted upon the stile of each sash, a casing mounted in the window-frame substantially opposite the meeting-rails of the sashes when the window is closed, a pair of bolts arranged for horizontal sliding movement in said casing and having oppositely-disposed, inwardly-projecting wings and rearwardly-projecting shanks or stems extending through apertures provided at the back of the casing, springs coiled about said shanks or stems to hold said bolts normally in operative position, and a key pivotally mounted in the upper part of the casing and susceptible of a quarter-turn within the casing, said key having a bit disposed between the heads of the bolts and engaging the wings of the bolts, said bit serving when turned into horizontal position to hold the bolts in inoperative position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT L. RILEY.

Witnesses:

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