

No. 850,840.

PATENTED APR. 16, 1907.

J. E. LEDFORD.
SAFETY LOCK.

APPLICATION FILED JUNE 22, 1906.

Fig. 1

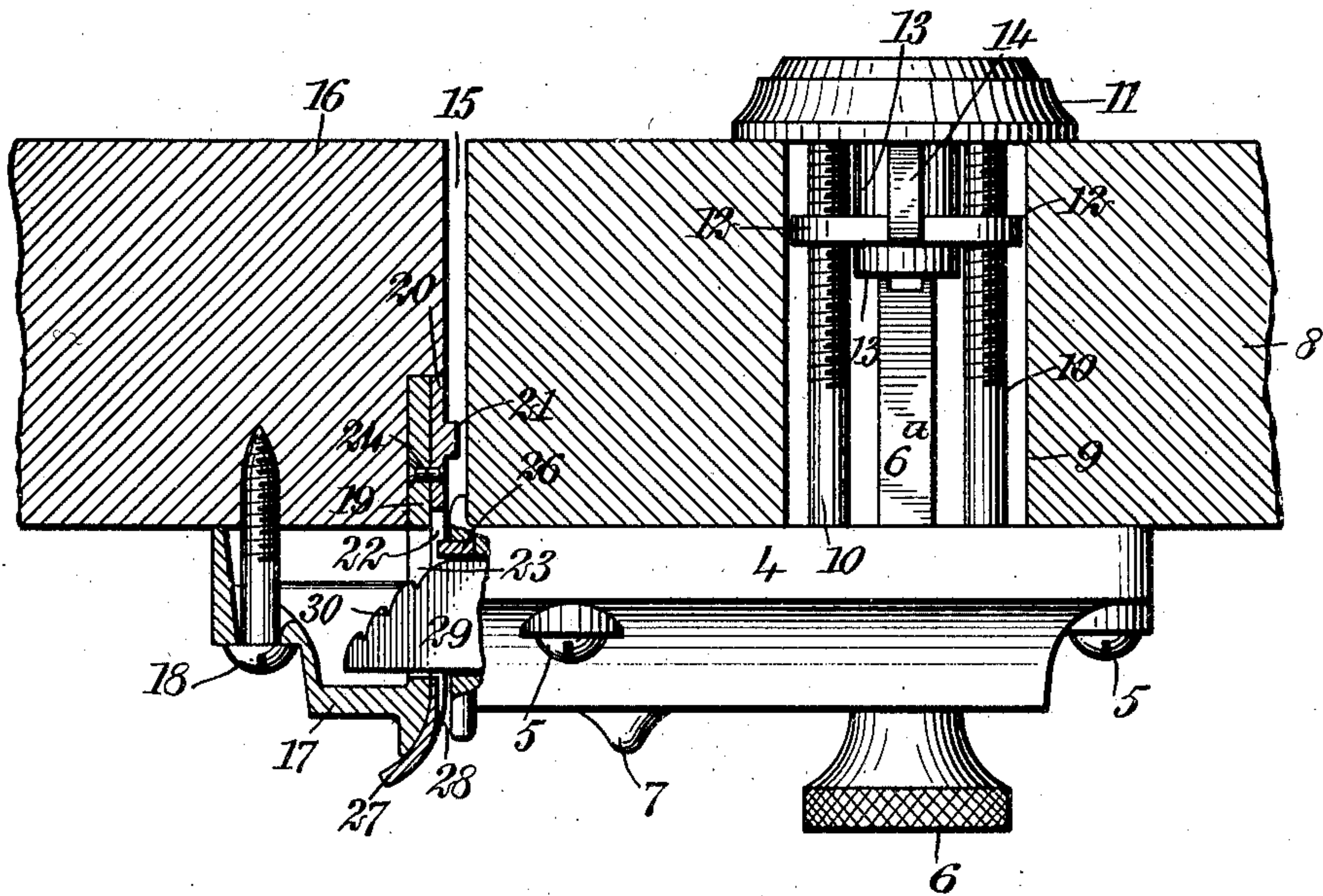


Fig. 2

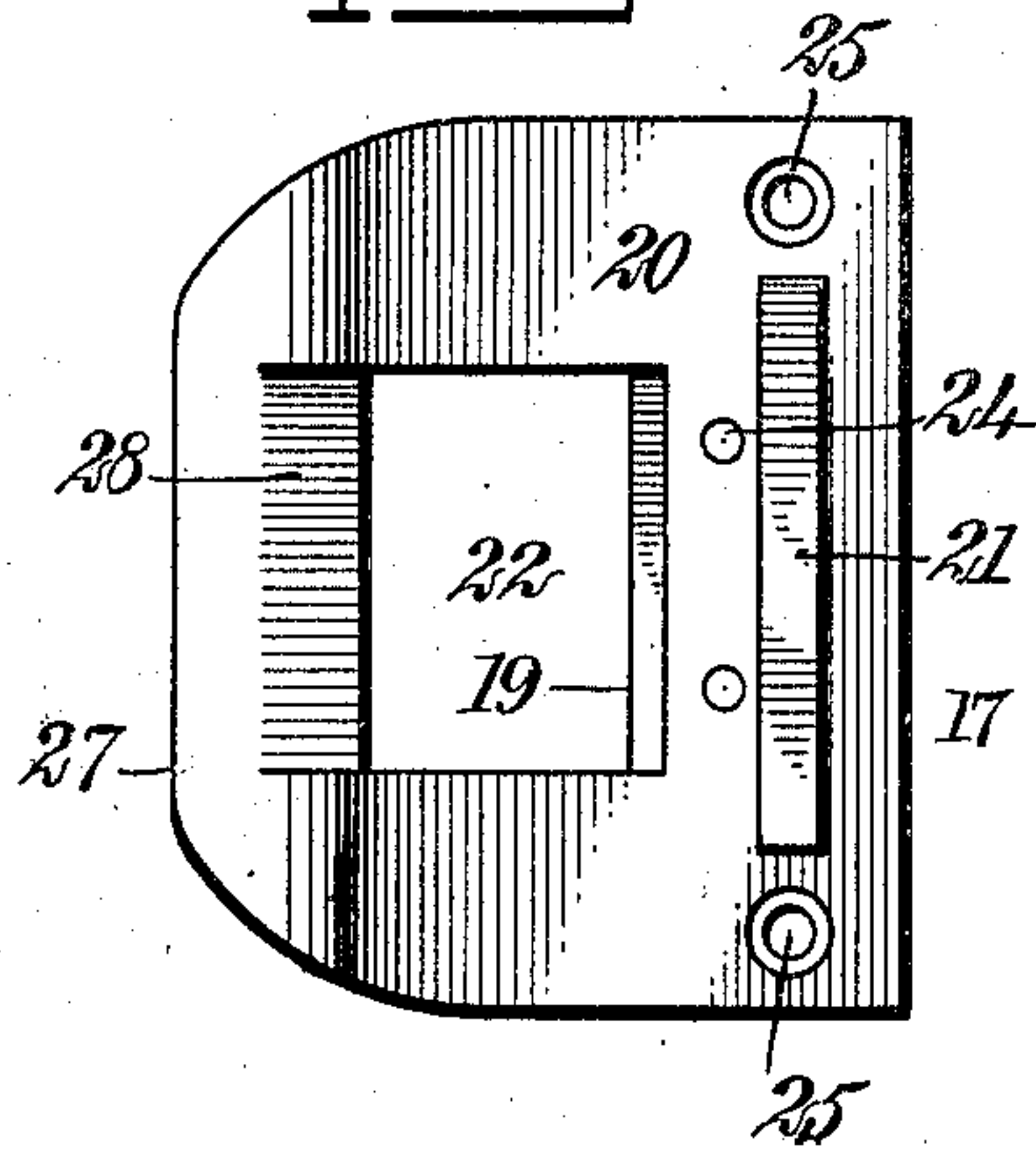
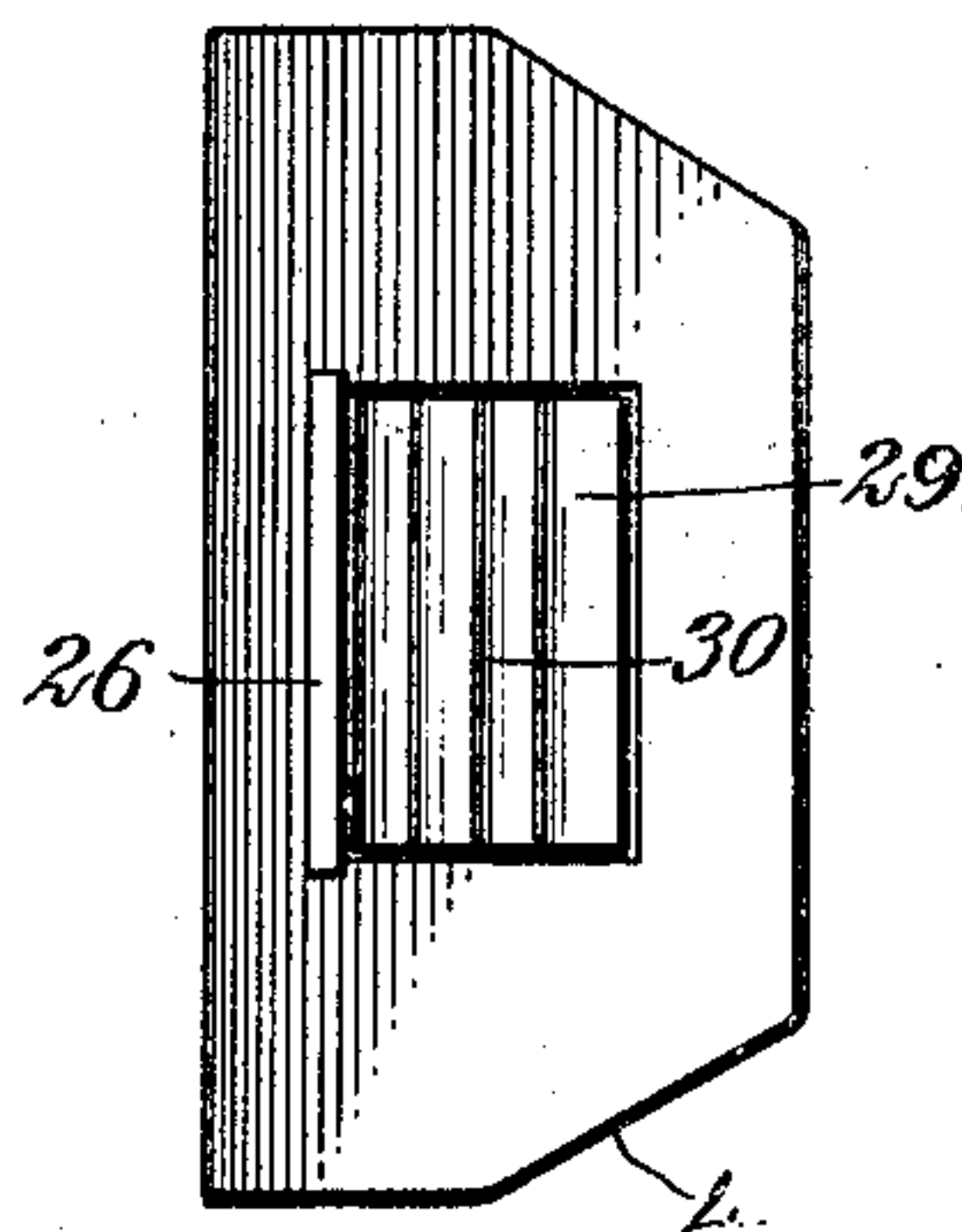


Fig. 2



WITNESSES

WITNESSES
J. A. Prophy
Walton Harrison

INVENTOR

John E. Ledford

BY *Munro*

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN EDWARD LEDFORD, OF BUTTE, MONTANA, ASSIGNOR OF FIFTY ONE-HUNDREDTHS TO HIMSELF, TWENTY-FIVE ONE-HUNDREDTHS TO GEORGE OMER; TWELVE AND ONE-HALF ONE-HUNDREDTHS TO SAMUEL WALLEN, AND TWELVE AND ONE-HALF ONE-HUNDREDTHS TO THOMAS R. CARSON, OF BUTTE, MONTANA.

SAFETY-LOCK.

No. 850,840.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed June 22, 1906. Serial No. 322,855.

To all whom it may concern:

Be it known that I, JOHN EDWARD LEDFORD, a citizen of the United States, and a resident of Butte, in the county of Silverbow and State of Montana, have invented a new and Improved Safety-Lock, of which the following is a full, clear, and exact description.

My invention relates to locks—such, for instance, as are used upon doors, windows, and analogous closure members—my more particular object being to provide a lock with means for preventing its being picked or actuated surreptitiously.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a fragmentary horizontal section through a door and jamb equipped with my improved safety-lock. Fig. 2 is a side elevation of the outer facing-plate for the latch-socket and showing the safety-bar or projection; and Fig. 3 is a fragmentary side elevation showing the bolt projecting from the lock-casing and showing the safety-bar or projecting member used for the purpose of preventing the lock from being picked.

The lock-casing is shown at 4 and is secured in position by the aid of screws 5. The knob is shown at 6, the key-bar at 6^a, and the safety-catch at 7. The door is shown at 8 and is provided with a slot 9, through which pass threaded bolts 10, these bolts engaging an escutcheon 11 and being further connected therewith by means of a yoke 12. The tumbler-barrel is shown at 13, and a rib 14 is connected integrally therewith and with the yoke 12. The jamb is shown at 16 and is separated from the door by the usual door-crack 15. The latch-socket is shown at 17 and is secured rigidly upon the jamb by means of a bolt 18. This latch-socket is provided with an inner facing 19, integral therewith, and with an outer facing 20, fitted directly over the inner facing and registering with the surface of the jamb. In other words, the inner facing 19 and outer facing 20 are sunken into the jamb to such an extent that the exposed surface of the outer

facing 20 comes flush with the edge of the jamb, as indicated in Fig. 1.

The outer facing 20 of the latch-socket is provided with a longitudinal head or projection 21 and with the usual socket or aperture 22. The inner facing 19 is provided with a slot 23, one boundary of which is slightly out of registry with the adjacent boundary of the slot 22. The inner facing 19 and outer facing 20 are connected together by rivets 24 and are provided with eyes 25 for receiving screws.

Connected rigidly with the casing 4 is a safety-bar 26, preferably secured thereto by soldering or fusing, and this bar projects into the slot 22, said bar also projecting a little way into the door-crack 15. The outer facing 20 is provided with a curved edge 27 and with a depression 28. The bolt is shown at 29, and while provided with a generally beveled surface this surface is broken up by corrugations 30, as indicated in Figs. 1 and 3.

The operation of my device is as follows: The bolt 29 having been pushed into the socket 17 and secured rigidly so as to prevent its withdrawal, the safety-bars 26 21 effectively prevent the entrance of a knife or other implement ordinarily used for the purpose of forcing the bolt 29 back into the casing 4. As will be observed in Fig. 1, if a case-knife is inserted through the door-crack 15 it cannot pass the safety-bar 21 or projection unless the knife is crowded closely against the adjacent edge of the door 8. In this event the knife cannot touch the latch 29, for the reason that it cannot pass the safety-bar 26. If owing to bad adjustment of the door upon its hinges or to displacement or bad positioning of the socket 27 it should happen that a knife or analogous implement could be inserted so as to make contact with the bolt 29, the corrugations 30 arrest further movement of the knife, and thus prevent the bolt from being pushed backward.

The great serious danger in using spring-locks is the fact that the bolt having, as ordinarily, a smooth beveled end can be pushed by merely the pressure of a knife or similar implement against its beveled end—that is to say, the beveled end acts somewhat upon

the principle of a cam and when pressed upon by the thrust of a knife may be forced back into the casing. It will also be noted that the safety-bar 26 protrudes into the slot 5 22, which serves as a receptacle for holding it and makes the path through which the knife might otherwise be inserted still more tortuous.

I do not limit myself to the exact construction shown nor to the particular combination of parts described.

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

15 1. A safety-lock, comprising a lock-casing adapted for attachment to the door, a latch-socket adapted for attachment to the face of the jamb, said socket having an inner facing and a superimposed outer facing registering 20 with the face of the edge of the jamb, said outer facing having a longitudinal rib for the purpose set forth, said facings being slotted, a safety-bar connected with the lock-casing and projecting slightly into the slots of the 25 facings, and having a portion projecting into the space between the door and the jamb, a bolt slidably mounted in the lock-casing and provided with a beveled end, said bevel facing the safety-bar and being corrugated for 30 the purpose set forth.

2. A safety-lock comprising a lock-casing for attachment to the door, a latch-socket for attachment to the face of the jamb, said socket having a slotted facing adapted to register with the face of the edge of the jamb, 35 said facing having a longitudinal rib on the outer surface thereof, a safety-bar connected with the lock-casing and projecting slightly into the slot of the facing, and a bolt slidably mounted in the lock and having a beveled 40 end, said beveled portion facing the safety-bar.

3. A safety-lock comprising a lock-casing for attachment to the door, a latch-socket for attachment to the face of the jamb, said 45 socket having a slotted facing adapted to register with the face of the edge of the jamb, a safety-bar connected with the lock-casing and projecting slightly into the slot of the facing, and having a portion adapted to project 50 between the door and the jamb, and a bolt slidably mounted in the lock-casing.

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

JOHN EDWARD LEDFORD.

Witnesses:

JESSE BRYAN ROOTE,
JOHN GRIEST BROWN.