

May 15, 1934.

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1,958,940

ELECTROMAGNETIC LOCK

Filed Jan. 18, 1934

2 Sheets-Sheet 1

Fig. 1.

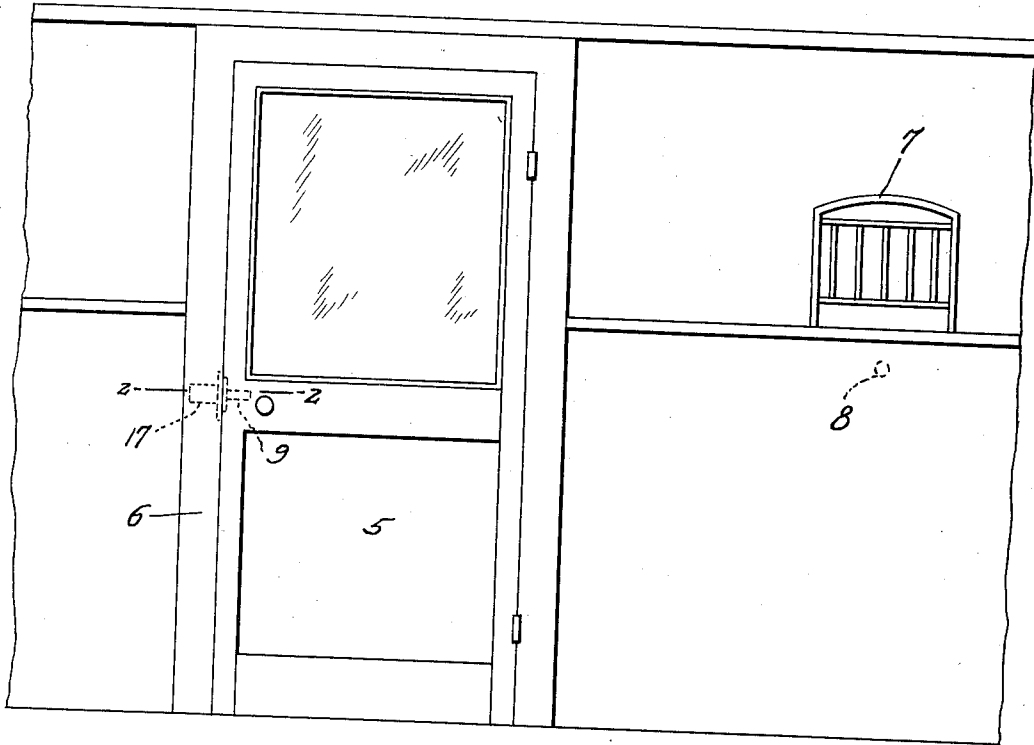


Fig. 6.

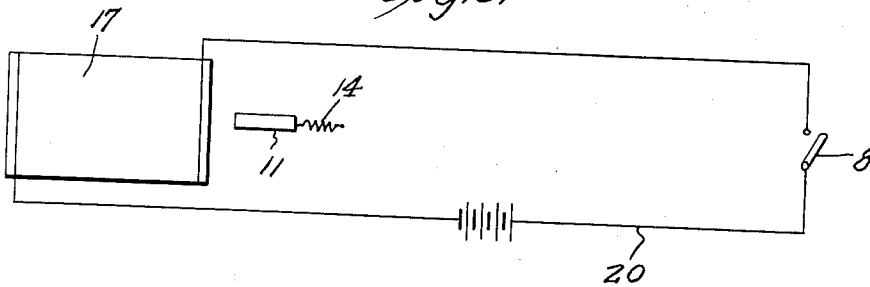
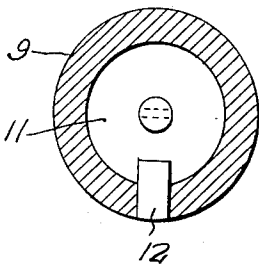


Fig. 5.



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2 Sheets-Sheet 2

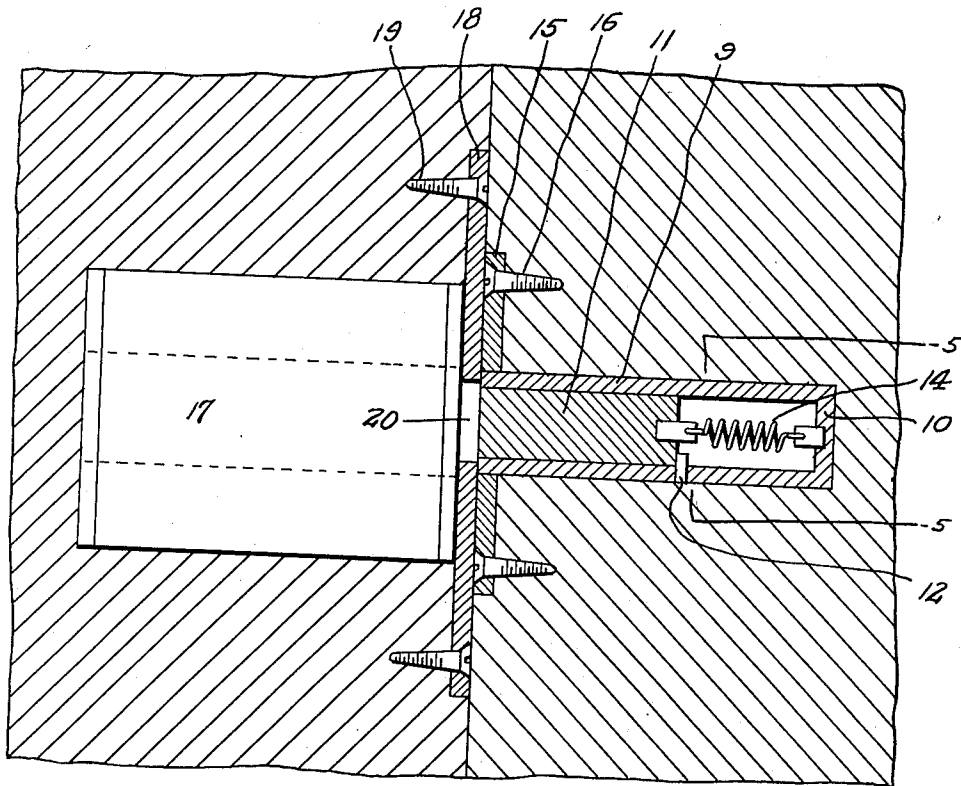


Fig. 2.

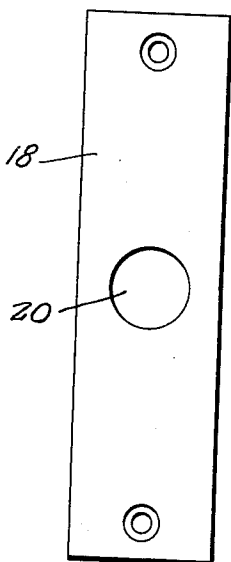


Fig. 3.

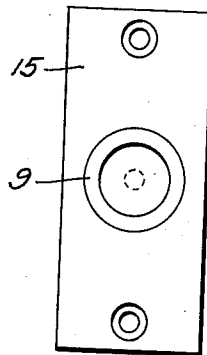


Fig. 4.

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1,958,940

ELECTROMAGNETIC LOCK

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Application January 18, 1934, Serial No. 707,180

1 Claim. (Cl. 70—50)

The present invention relates to an electro-magnetic lock and is designed for use in banks or the like and the main object of the invention is to provide means whereby a plurality of doors and the like may be locked by the actuating of a switch at a remote point such as teller cage in a bank and thereby prevent bank robberies and the like.

Another very important object of the invention resides in the provision of an electro-magnetic lock of this nature which is exceedingly simple in its construction, inexpensive to manufacture, thoroughly efficient and reliable in use and otherwise well adapted to the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description proceeds, the invention consists in certain novel features of construction, and in the combination and arrangement of parts as will hereinafter be more fully described and claimed.

In the drawings:

Figure 1 is a view showing a portion of a partition such as would be used in a bank illustrating the teller's cage and a door which may be locked by the actuation of a switch at the teller's cage.

Figure 2 is a sectional view taken substantially on the line 2—2 of Figure 1.

Figure 3 is a detail elevation of the plate on the door frame.

Figure 4 is a detail elevation of the plate on the door.

Figure 5 is a detail section taken substantially on the line 5—5 of Figure 2.

Figure 6 is a diagrammatic view of the lock.

Referring to the drawings in detail it will be seen that the numeral 5 denotes a door and the numeral 6 denotes a door frame. Numeral 7 denotes a teller's cage adjacent which is located a handy switch 8. In a recess provided in the free edge of the door 5 there is a cylinder 9 the inner end of which is closed as at 10 and the outer end of which is open. A bolt 11 is slidable in the cylinder 9 and the inward movement thereof is limited by means of a stop 12. A spring 14 is engaged with the wall 10 and the inner end of the bolt 11 and is tensioned to normally hold the bolt in unlocked position that is in abutment with the stop 12. A plate 15 has an opening receiving the outer end of the cylinder 9 and is mounted in the recess in the free end of the door being secured in place by screws 16.

In the door frame 6 opposite the cylinder 9 when the door is closed there is mounted in a recess an electro-magnet 17. A plate 18 is coun-

tersunk in the frame and fixed in place by means of screws 19 and has an opening 20 in registry with the cylinder 9 and in registry with the core of the electro-magnet 17. When the electro-magnet 17 is energized by closing the switch 8 through the circuit 20 the bolt 11 is drawn into the opening 20 thereby locking the door 5 as will be obvious.

It is thought that the construction, operation, utility and advantages of this invention will now be clearly understood without a more detailed description thereof.

The present embodiment of the invention has been described in considerable detail merely for the purposes of exemplification since in actual practice it attains the features of advantage enumerated as desirable in the statement of the invention and the above description.

It will be apparent that changes in the details of construction, and in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described my invention, what I claim as new is:

In combination with a door and its frame, a keeper plate carried by a side part of the frame and having a keeper hole therein, a cylinder carried by the door, a bolt slidably arranged in the cylinder and having its outer end adapted to enter the keeper opening when the bolt is projected, a spring in the cylinder having one end connected to the inner end of the bolt and its other end to the bottom of the cylinder for holding the bolt retracted, and an electro-magnet carried by the frame with its core having one end closing the inner end of the keeper hole, whereby when said electro-magnet is energized, the bolt will be partly drawn from the cylinder into the keeper hole.

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