

(No Model.)

F. W. MIX.  
LOCK.

No. 524,643.

Patented Aug. 14, 1894.

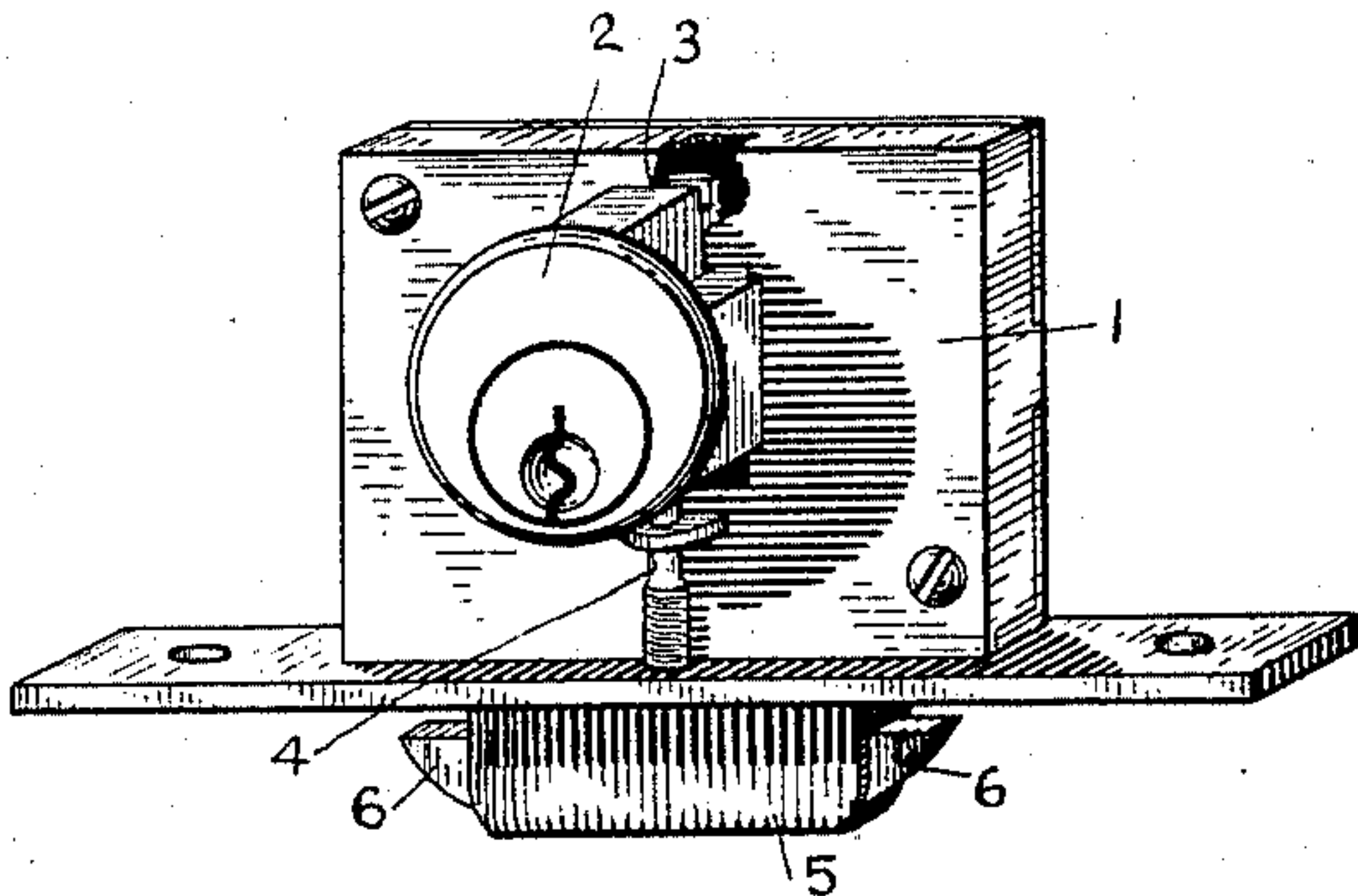


FIG. 1.

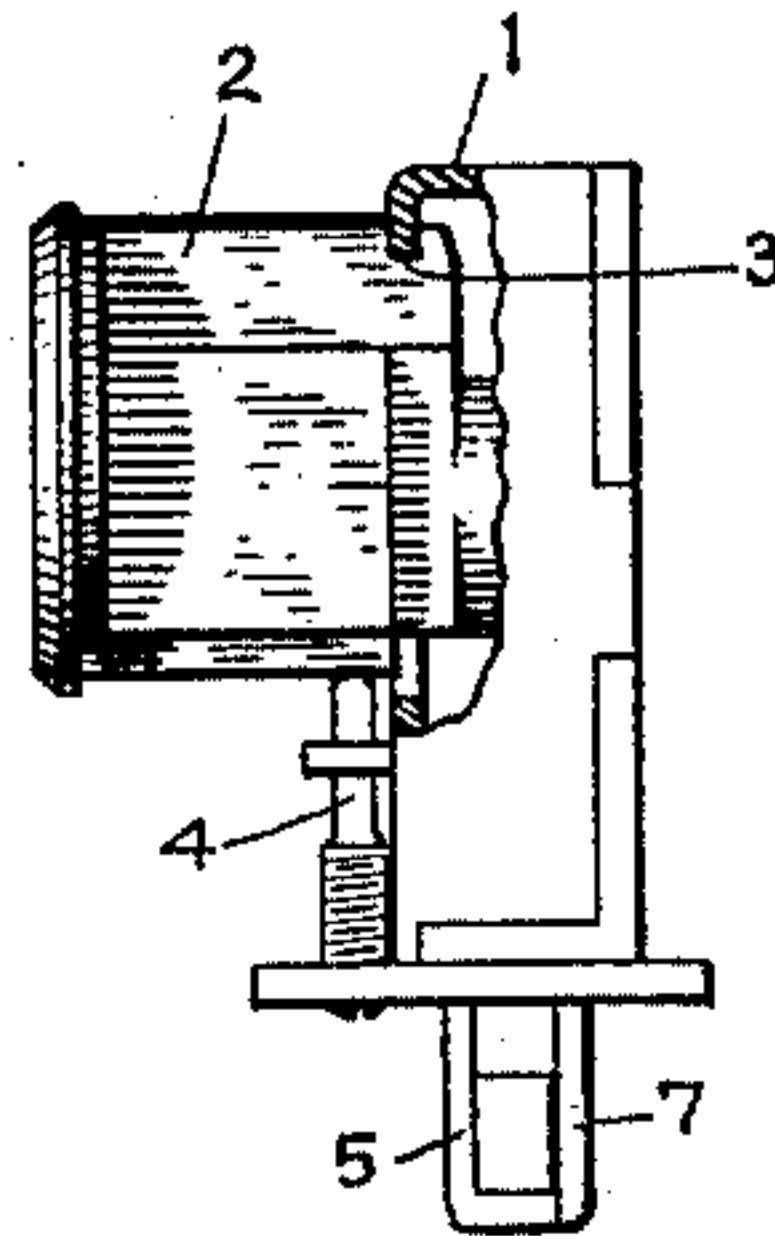


FIG. 2.

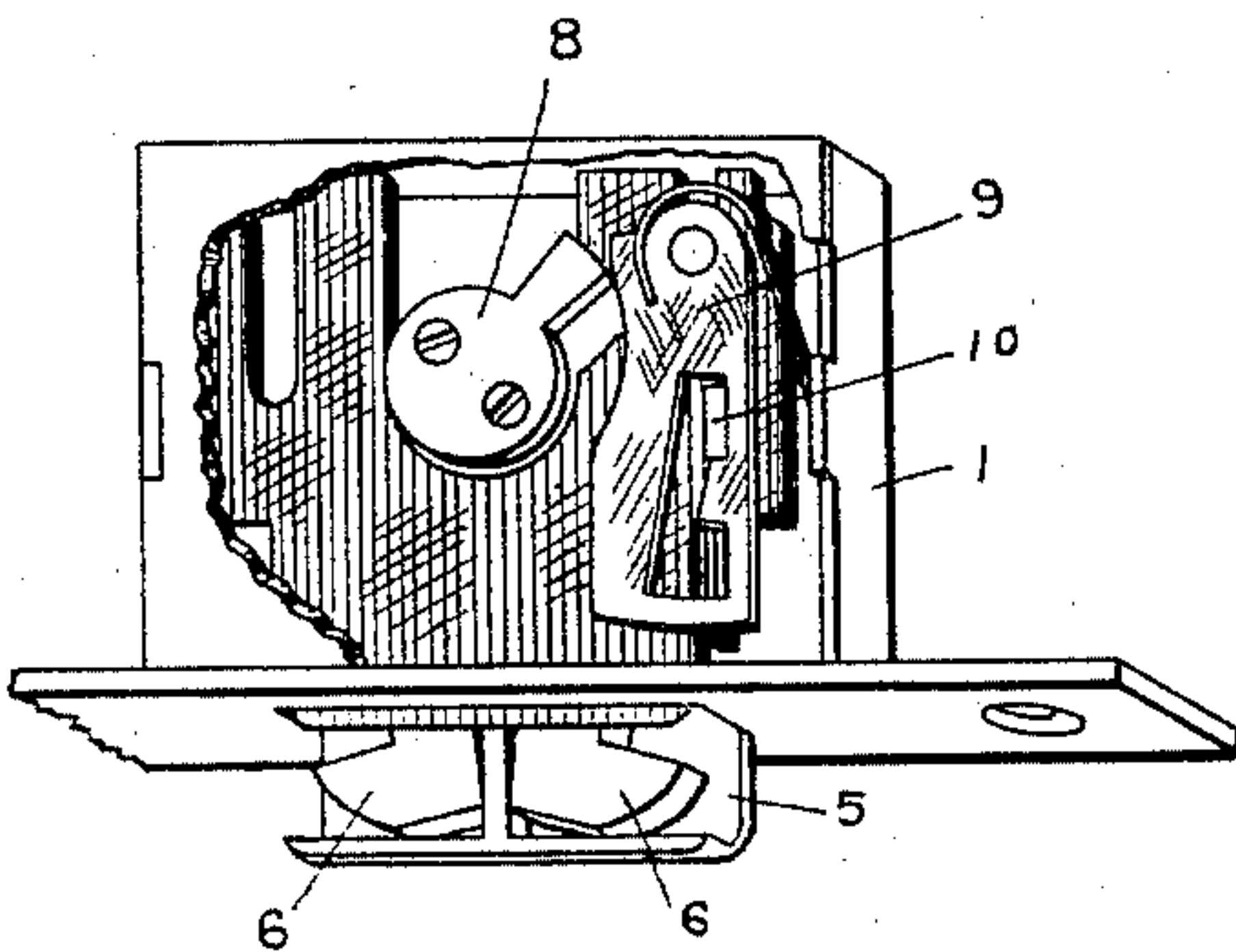


FIG. 3.

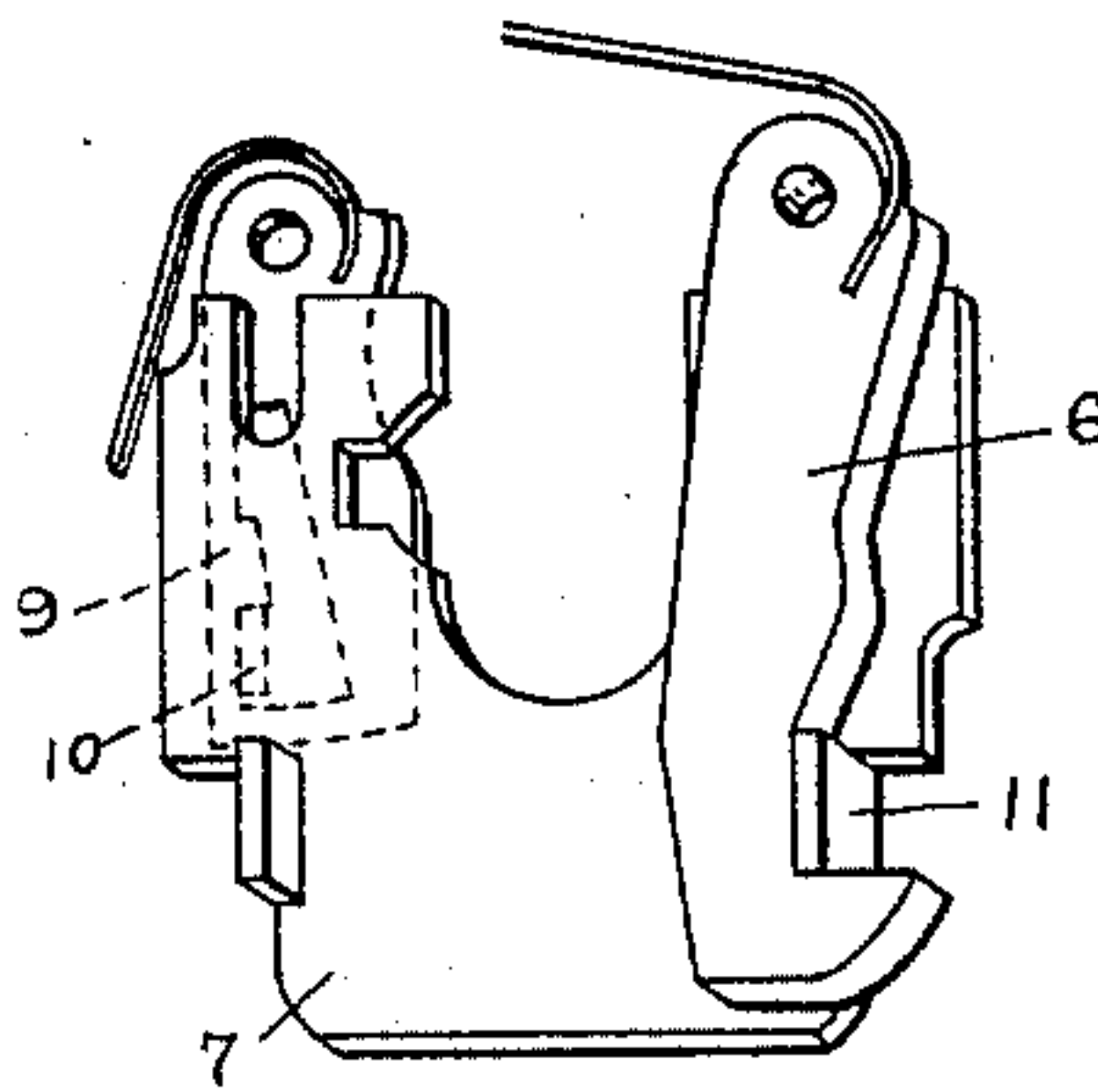


FIG. 4.

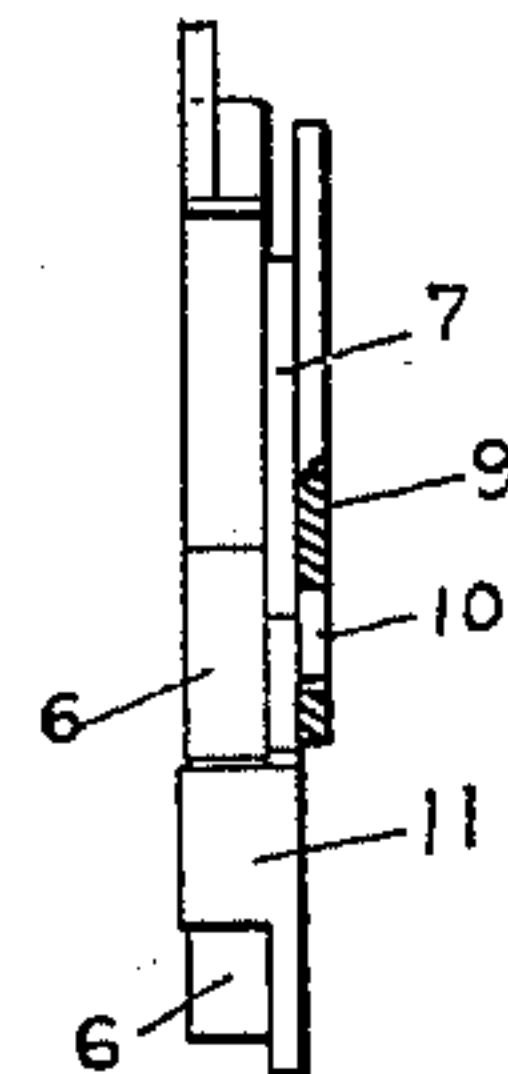


FIG. 5.

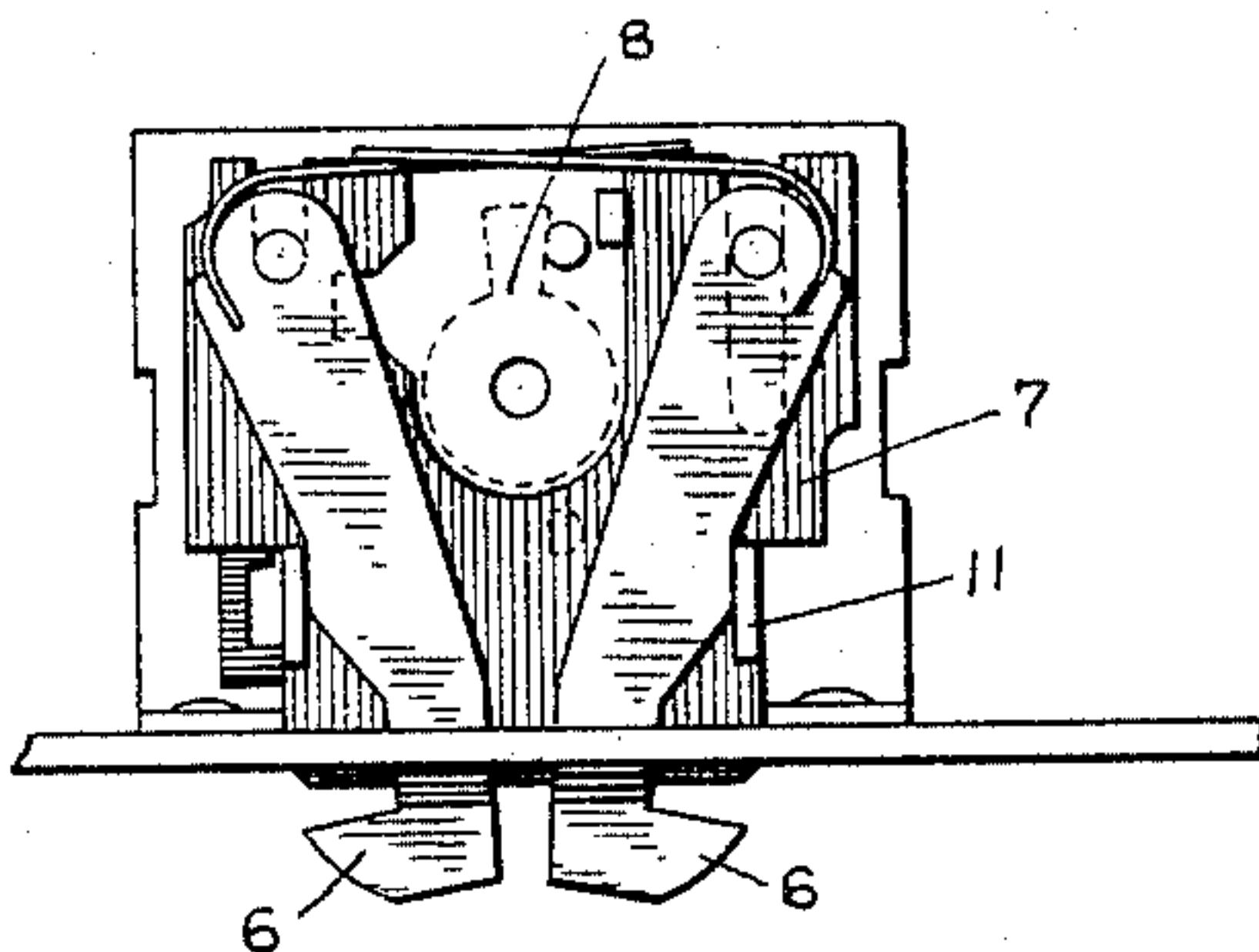


FIG. 6.

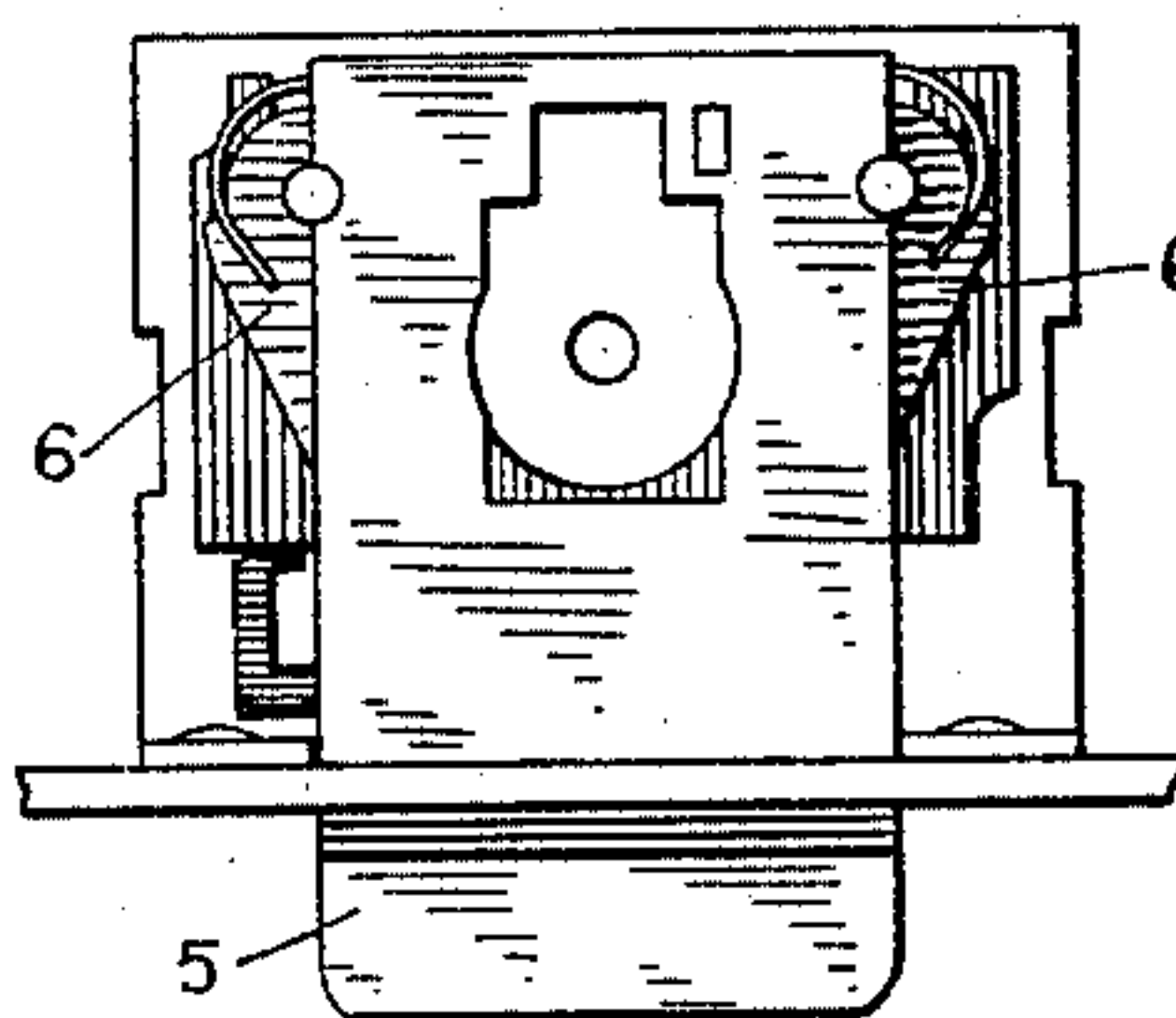


FIG. 7.

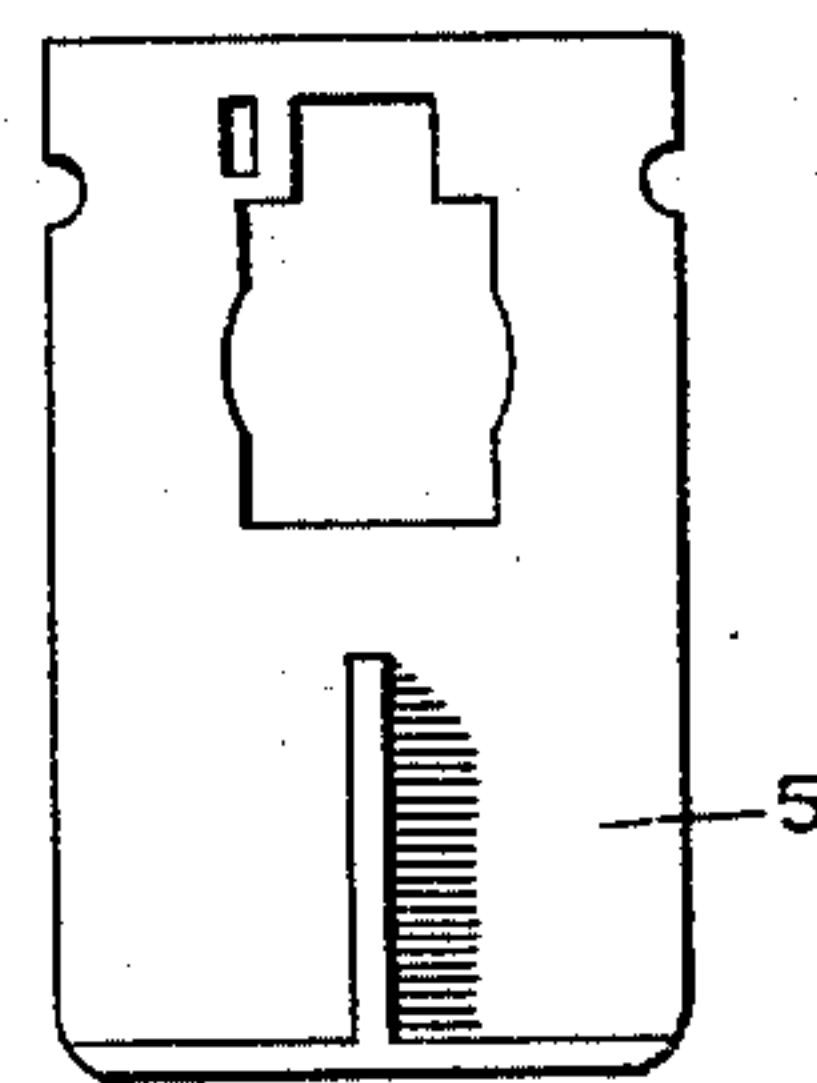


FIG. 8.

WITNESSES

Chas. A. Berry  
Geo. E. Cruise

INVENTOR

Frank W. Mix.

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# UNITED STATES PATENT OFFICE.

FRANK W. MIX, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE & TOWNE MANUFACTURING COMPANY, OF SAME PLACE.

## LOCK.

SPECIFICATION forming part of Letters Patent No. 524,643, dated August 14, 1894.

Application filed January 3, 1894. Serial No. 495,543. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK W. MIX, a citizen of the United States, residing at Stamford, county of Fairfield, State of Connecticut, have  
5 invented certain new and useful Improvements in Locks, of which the following is a specification.

My invention relates to cabinet locks, and particularly to using in connection with said  
10 locks an independent tumbler case, with which I combine certain other new and useful features.

I have in an application filed simultaneously herewith, shown an independent tumbler  
15 case in combination with a self-locking cabinet lock, and have in that application claimed such combination, but in this application I show a different combination of parts, which possesses certain advantages in security and  
20 method of operation.

The construction and operation of my improved lock will be readily understood by reference to the accompanying drawings, in which—

25 Figure 1 is a front elevation of the lock with the tumbler case in place. Fig. 2 is a side view, partly in section, showing the method of attaching the tumbler case to the lock case. Fig. 3 is a rear view, with the  
30 lock case cut away and showing the hook actuating slide and guard in the retracted position. Fig. 4 is a detached view showing the hook actuating slide and guard, with one hook only in the locked position, and showing  
35 also the tumbler which holds said slide in the locked position. Fig. 5 is a side view of the slide and hook, and of the tumbler, partly in section, showing the stump. Fig. 6 is a front view with the stationary guard removed. Fig. 7 is the same with the station-  
40 ary guard in place. Fig. 8 shows the reverse or rear of stationary guard.

1 is the cap of the lock case; 2 the tumbler case; 3 the groove which hooks into the cap  
45 of the lock case; 4 the setscrew which engages with the tumbler case and holds it in place; 5 the stationary guard and guide for the spring hooks or bolts 6, 6; 7 the combined bolt actuating slide and guard; 8 the cam on  
50 the rear of key plug; 9 the tumbler or tum-

blers which hold the bolt slide in the locked or unlocked position; 10 the stump or dog against which said tumbler or tumblers rest; 11 that part of the bolt slide which prevents  
55 access to the edges of the hooks or bolts.

The tumbler mechanism shown is the well-known Yale mechanism, but the form of mechanism is quite immaterial, as any preferred form may be used, and any style of  
60 tumbler case, or any desired mode of attaching it to the lock case. When the proper key is inserted, and the key plug revolved, the cam at the rear of the plug engages with the tumbler attached to the bolt slide, sets that  
65 tumbler, and the continued movement of the bolt slide, by means of the projection 11, above referred to, retracts the hooks when the lock is being unlocked, and permits them to move forward for locking when the key is turned in  
70 the proper direction.

It is evident that when the lock is locked the bolt actuating slide is deadlocked so that it cannot be pushed back by any instrument inserted between the lid and table of the  
75 desk, nor can access be had to the tumbler which so deadlocks it, except through the locking mechanism contained in the tumbler case; and further, by the construction of said slide the hook actuating piece 11 becomes  
80 also a guard for the edges of said locking hooks or bolts so that access to them for the purpose of pressing them back and unlocking them is prevented.

While I have shown a tumbler dogging the slide it is not an essential feature, because  
85 the cam on the end of the plug could be used for dogging said slide as has been commonly done in many well known forms of Yale locks and other well known locks. The only  
90 advantage of the tumbler is that it gives what is known as a livelier feeling to the lock when being operated.

Having thus described my invention, the following is what I claim as new therein and  
95 desire to secure by Letters Patent:

1. In a cabinet lock, the combination of the lock case, an independent tumbler case, a key  
plug carried by the tumbler case, a bolt-actuating slide, a tumbler or tumblers for dogging  
100 said slide, and means connected with the key

plug for setting the tumbler or tumblers and actuating said slide, substantially as described.

2. In a cabinet lock, the combination of the  
5 lock case, an independent tumbler case, a key plug carried by the tumbler case, spring-pressed hooks or bolts pivoted to the lock case, a stationary guard for said hooks, and  
10 a slide adapted to be actuated by the key plug in said tumbler case for operating said hooks or bolts, substantially as described.

3. In a lock, the combination of an independent tumbler case, spring pressed hooks or bolts, a hook actuating slide operatively

connected with said tumbler case, and which 15 actuates the hooks for unlocking, and guards their edges when locked, substantially as described.

4. In combination with a lock, a bolt actuating slide, adapted to be connected with and 20 operated by an independent key and tumbler mechanism, and in turn to actuate the hooks or dogs of the lock, substantially as described.

FRANK W. MIX.

Witnesses:

SCHUYLER MERRITT,  
GEO. E. WHITE.