

No. 645,610.

Patented Mar. 20, 1900.

W. H. TAYLOR.
LOCK AND LATCH.

(Application filed Jan. 15, 1900.)

(No Model.)

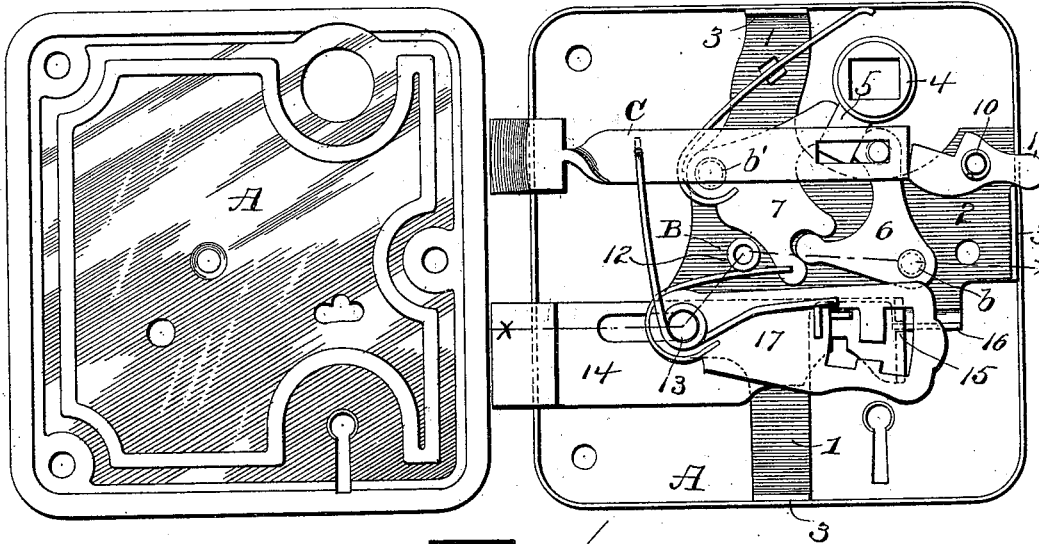


FIG. 1.

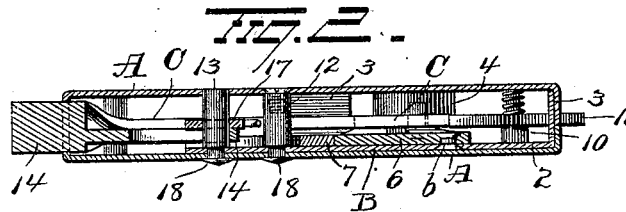


FIG. 2.

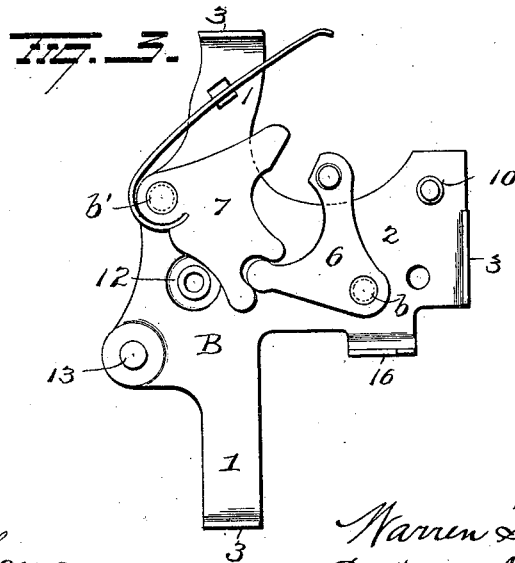


FIG. 3.

WITNESSES

E. D. Nottingham.
G. J. Downing.

INVENTOR

Warren H. Taylor
By H. A. Seymour
Attorney.

UNITED STATES PATENT OFFICE.

WARREN H. TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE
YALE & TOWNE MANUFACTURING COMPANY, OF SAME PLACE.

LOCK AND LATCH.

SPECIFICATION forming part of Letters Patent No. 645,610, dated March 20, 1900.

Application filed January 15, 1900. Serial No. 1,537. (No model.)

To all whom it may concern:

Be it known that I, WARREN H. TAYLOR, of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and
5 useful Improvements in Locks and Latches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use
10 the same.

My invention relates to an improvement in locks and latches.

Heretofore in locks and latches the stationary and pivoted parts of the working mechanism have been secured directly to the lock-
15 casing. Such a construction is not only unnecessarily expensive, but in locks wherein the casings are made of wrought or sheet metal stamped into shape the character of the
20 casing frequently precludes the possibility of securing the necessary stability and strength to the posts or other supports carrying the working mechanism.

The object of my invention is therefore to
25 provide means whereby the several parts of the working mechanism of a lock or latch may be assembled and secured in their proper relative positions and subsequently secured within the casing.

30 With this end in view my invention consists of a spider or framework secured to the lock or latch casing and carrying the working mechanism of the lock or latch.

My invention further consists in the parts
35 and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a lock, one face of the casing being removed. Fig. 2 is a sectional view on the
40 line *x x* of Fig. 1, and Fig. 3 is a detached view of the spider.

A represents a casing, which in the present instance is shown made in halves, the two sections being struck up from sheet or wrought
45 metal, and B represents the inner frame or spider, which carries the working parts of the lock or latch. This spider B is somewhat of the shape of a T, two of the arms or members 1 thereof extending from the top of the casing to the bottom, approximately in the center
50 thereof, while the third arm 2 extends rear-

wardly to the rear end of the casing, the three arms being bent outwardly at their ends, as shown at 3, to form guides and supports for the other section of the casing and operate to
55 hold the two sections in perfect alinement.

While I do not limit myself to any particular construction or arrangement of working parts of a latch or lock, I have for the purpose of illustration shown my improvement in connection with the latch-and-bolt mechanism described in my Patent No. 611,155, granted
60 September 20, 1898. The lock-hub 4 bears at its ends in the lock-casing in the usual manner, and the latch-operating arm 5 thereof
65 rests between the bell-crank levers 6 and 7, which latter are permanently pivoted at *b b'* to the spider B. One of these levers engages the tail of the latch-bolt C, while the lower ends of the said levers intermesh, so as to im-
70 part simultaneous and equal movement to both levers and movement to the latch-bolt upon imparting movement to either lever from the lock-hub.

Pivotaly mounted on a stud 10, carried by
75 the spider B, in rear of lever 6, is a dead-locking catch 11, which latter is adapted to be moved to dead-lock the latch-bolt C.

Permanently secured to the spider B are the posts 12 and 13. The post 12 has a female-
80 threaded hole therein for the reception of the screw which holds the two sides of the casing together, while the post 13 passes through an elongated slot in the dead-bolt 14 and supports and assists in guiding same and also
85 carries the tumbler or tumblers. These two studs pass through the spider, and their shorter ends form two rivets 18, which pass through the side of the casing to which the spider is attached and are upset, thus perma-
90 nently securing the spider and the working parts carried thereby firmly in place. The rear end of the dead-bolt 14 is bent at right angles, and the flange thus formed is provided with a slot 15, which embraces a right-
95 angle lip 16, formed on the spider B, and this lip, together with the post 13 and casing, hold the bolt 14 in its proper position and guide it in its movement. The tumbler or tumblers 17, as the case may be, are mounted on the
100 post 13 and operate in the usual manner to lock the bolt in its two positions.

With my improvement all the parts which are ordinarily fixed or riveted to the lock-casing are secured to the spider, and hence the assembling of the parts, excepting the bolts and tumblers, which rest loosely in place, is done before the spider is secured in place. While I have described the spider as being riveted to the casing, I do not care to limit myself to such feature, as it may be found in actual practice that the spider can be supported in position simply by the engagement of the ends of the arms or members thereof with the lock-casing.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding my invention, and hence I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described; but,

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

1. The combination with a casing of a spider or skeleton frame bearing at intervals against the edges of the casing and provided with bent ends forming guides and abutments for the removable section of the casing.

2. The combination with a casing, of a spider or frame located within the casing, posts rigidly secured to the spider and riveted to the casing, the said spider or frame adapted to carry the working mechanism of the lock or latch.

3. The combination with a casing, of a spider or frame located within the casing and carrying the working mechanism of the lock or latch, the said spider or frame having bent ends which form guides and supports for the removable section of the casing.

4. The combination with a casing, of a spider or frame riveted to the casing and carrying the working mechanism of the lock or latch.

5. The combination with a stamped or struck-up casing, of a spider or frame riveted thereto and carrying the working mechanism of the lock or latch.

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

WARREN H. TAYLOR.

Witnesses:

SCHUYLER MERRITT,
W. S. ABEL.