

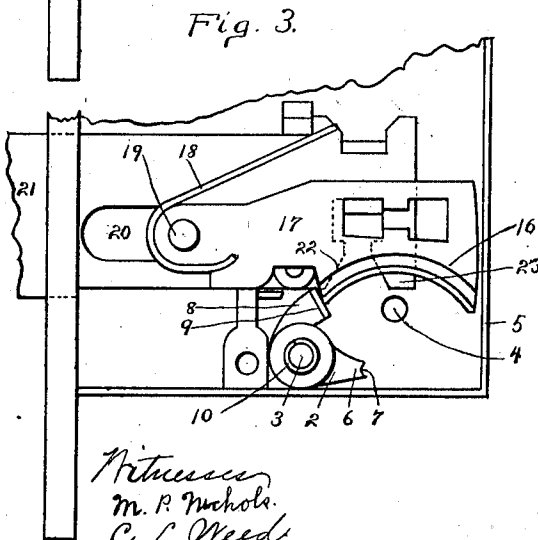
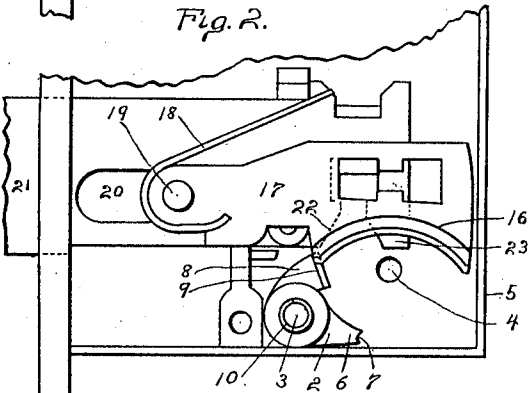
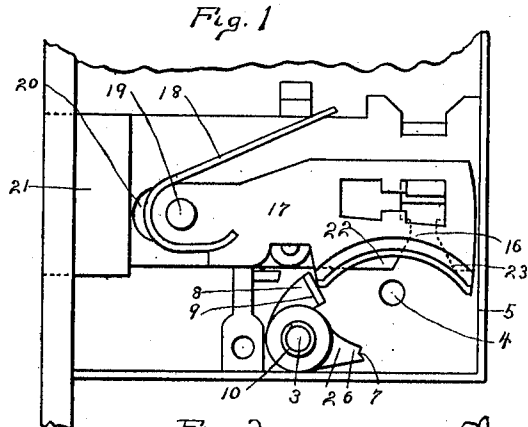
W. E. SPARKS & H. G. COLLINS.

HOTEL LOCK.

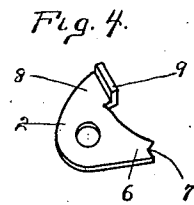
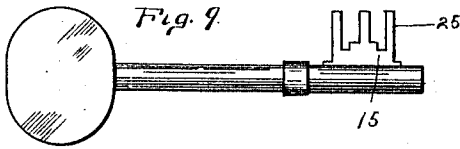
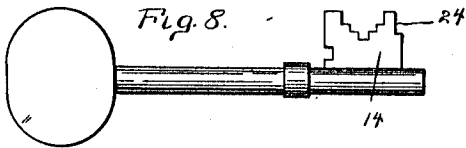
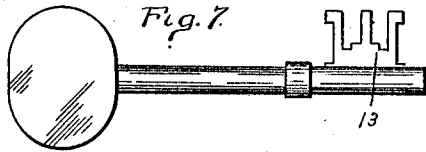
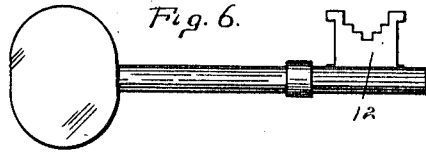
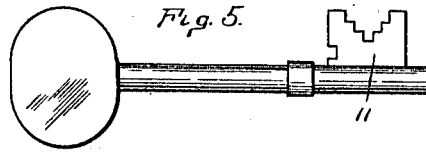
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1,003,818.

Patented Sept. 19, 1911.



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UNITED STATES PATENT OFFICE.

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HOTEL-LOCK.

1,003,818.

Specification of Letters Patent.

Patented Sept. 19, 1911.

Application filed April 15, 1911. Serial No. 621,356.

To all whom it may concern:

Be it known that we, WILLIAM E. SPARKS and HERBERT G. COLLINS, citizens of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Hotel-Locks; and we do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a broken view in elevation of a lock constructed in accordance with our invention with its cover removed and its bolt retracted, and its safety-dog in the position in which it is always left when the bolt is retracted. Fig. 2 a corresponding view with the bolt in its locked position and the safety-dog in the clearance position in which it is left when the bolt is locked by any key except the salesman's key or the proprietor's key. Fig. 3 a corresponding view showing the bolt in its locked position and the safety-dog in its obstructing position in which it is left by the locking of the bolt by means of the salesman's key or the proprietor's key. Fig. 4 a detached view of the locking-dog. Fig. 5 a plan view of the guest's key. Fig. 6 a corresponding view of the maid's key. Fig. 7 a corresponding view of the housekeeper's key. Fig. 8 a corresponding view of the salesman's key. Fig. 9 a corresponding view of the proprietor's key.

Our invention relates to an improvement in hotel locks, and is particularly adapted to use in conjunction with that class of hotel locks operable by a guest's key, a maid's key or master key, a housekeeper's key or grand master key, and a proprietor's key or emergency key; the object of our invention being to provide such a lock with still another key which, for convenience, we shall call the salesman's key, since its purpose is to provide a salesman with a key by means of which he can lock his room door against every key which might otherwise be used for unlocking the door, except the proprietor's key. Our improvement, we may add, is applicable to locks not equipped with all of the keys enumerated but is especially adapted for use with such locks.

With these ends in view our invention

consists in a lock having certain details of construction and combination of parts as will be hereinafter described and pointed out in the claims.

In carrying out our invention as herein shown, we employ an oscillating safety-dog 2 mounted upon a stud 3 and located close to the keyway 4 in the lock-case 5, the said dog having a lower arm 6 formed with a notch 7, and with an upper arm 8 having a flange 9. A helical spring 10 encircling the stud 3, is provided for holding the dog in any of the positions into which it may be moved by the co-action of any of the keys with either of its arms.

As shown, the lock is provided with a guest's key 11, a maid's or master key 12, a housekeeper's or grand master key 13, a salesman's key 14, and a proprietor's or emergency key 15. All of these keys are constructed with particular reference to co-action with the key-sweeps 16 of a gang of pivotal tumblers 17 having springs 18 and swinging upon a stud 19 projecting through a clearance slot 20 in the sliding bolt 21, the talons 22 and 23 of which co-act with all of the keys. We do not, however, limit ourselves to constructing the bolt and tumbler mechanism of the lock as herein shown and described so long as the parts are adapted to permit the use of an oscillating safety-dog 2 located close to the keyway 4.

Under ordinary circumstances, the hotel guest is given the guest's key 11 which he uses as his room-key. The room door may then be opened in the usual manner by the maid's key 11, the housekeeper's key 12 and the proprietor's key 15. In case, however, the room is assigned to a salesman for his use as a display room as well as a bedroom, the rooming-clerk gives him the salesman's key 14 in place of the regular guest's key 11. Now when the salesman locks the room door on leaving the room with key 14, the same oscillates the dog 2 so as to lift the lower arm 6 thereof into a position in which it blocks the turning in the lock of the maid's key 12 or the housekeeper's key 13 so that the maid and the housekeeper are excluded from the room entirely as long as the salesman occupies it and uses the salesman's key 14. Under these circumstances, therefore, there can be no access to the room by any one other than the salesman himself holding key 14, and the pro-

prietor of the hotel holding the key 15 which is constructed so as not to be obstructed by the dog 2.

We may here add that while the salesman's key 14 will lock its particular lock against all other keys except the emergency key 15, the emergency key 15 will lock all of the locks in the hotel against any keys except the keys 14 of the respective locks.

To adapt the key 14 to co-act with the safety-dog 2, the key is formed with a clearance notch 24 which clears the lower arm 6 of the dog and so permits the key to co-act with the bolt and tumblers. To adapt the key 15 to clear the lower arm 6 of the safety-dog 2, it is formed with a long clearance notch 25, the same in character as the notch 24 but made longer so as to make it universal in its action upon other locks. In order that the upper arm 8 of the dog 2 may be engaged and the dog operated by the keys 14 and 15, notwithstanding their being cut away at the bottom as at 24 and 25, the said upper arm 8 is formed with a flange 9 which virtually doubles its thickness.

In the ordinary use of the lock by the keys 11, 12 and 13, the dog 2 is oscillated every time one of these keys is used, the key moving it in one direction by its upper arm 8 and in the opposite direction by its lower arm 6, so that although the lower arm 6 is moved into its obstructing position when the dog is operated by its arm 8, the lower arm 6 is afterward swung into its clearance position when the key operates upon it by the further movement of the key. The keys 14 and 15, however, on account of being notched at the bottom as at 24 and 25, co-act only with the flanged upper arm 8 of the dog which is thereby swung so as to bring its lower arm 6 into its obstructing position in which it is left because in the further movement of these keys, the lower arm 6 of the dog is cleared by the cutting away of the bottom of the keys which thus sweep over the said arm 6 and leave the dog in the position in which it was left after its operation by its flanged

upper arm 8. It will, of course, be understood that even although the lock is furnished with the dog 2, the same in no wise interferes with the ordinary use of the lock, but adapts the lock to be used in a special way by the assignment to a guest of a special salesman's key 14 instead of the ordinary guest's key 11.

We claim:—

1. In a lock, the combination with the bolt and keyway thereof, of an oscillating safety-dog located close to the said keyway and provided with two arms one or both of which are operated by the keys of the lock according to the bittings thereof, whereby the dog is left after the locking of the bolt in an obstructing or clearance position according as one or both arms of the dog are engaged and operated.

2. In a lock, the combination with the bolt and keyway thereof, of an oscillating safety-dog located adjacent to the said keyway and formed with an upper and a lower arm one or both of which are operated by the keys according to the bittings thereof, whereby the dog is moved and left in its clearance position by the co-action with it of keys which engage both of its arms but left in its obstructing position by keys bitted to co-act only with its upper arm.

3. In a lock, the combination with the bolt and keyway thereof, of a safety-dog located adjacent to the said keyway and having an upper and a lower arm of which the former has an outwardly turned flange for co-action with keys bitted to clear the lower arm, whereby the dog is left, upon the locking of the bolt, in a clearance or an obstructing position according as the keys co-act with both of its arms or only its upper arm respectively.

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

WILLIAM E. SPARKS.
HERBERT G. COLLINS.

Witnesses:

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MARJORY M. SAWIN.