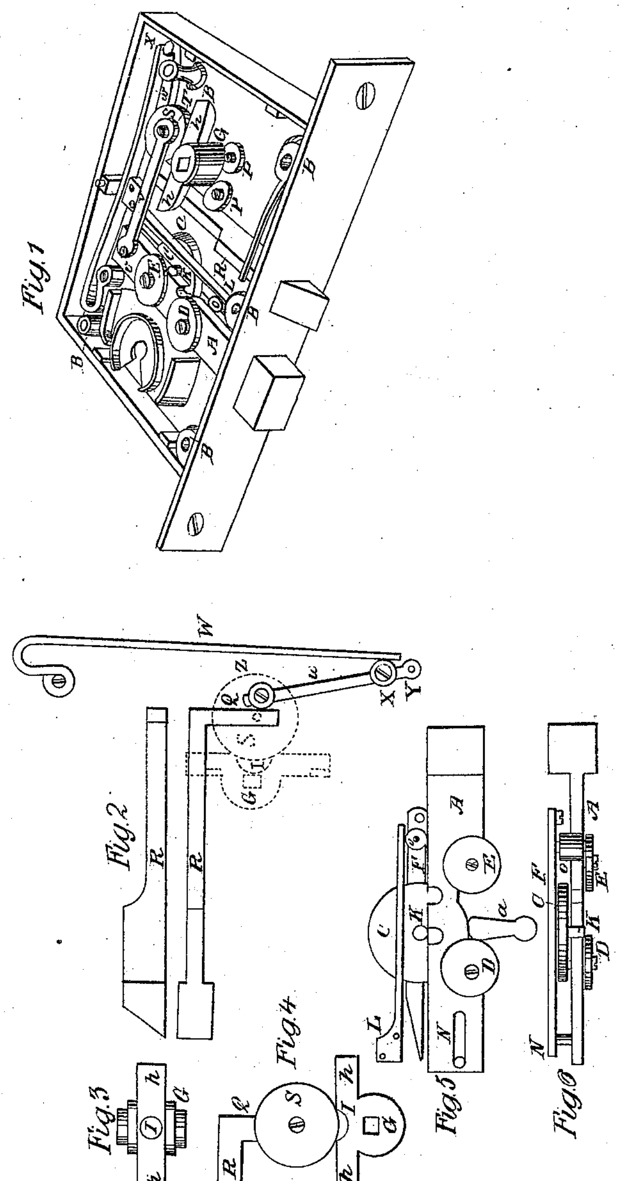
T. Whitehouse,

Lock.

No. 377. Patented Sep. 8, 1837.



Witnesses

John Bazight[?]

A. Richardson[?]

Inventor

Turner Whitehouse

UNITED STATES PATENT OFFICE.

TURNER WHITEHOUSE, OF BOSTON, MASSACHUSETTS.

CONSTRUCTION OF DOOR-LOCKS.

Specification of Letters Patent No. 377, dated September 8, 1837.

To all whom it may concern:

Be it known that I, TURNER WHITEHOUSE, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Mode of Preventing Friction and Wear in Door-Locks, called "Turner Whitehouse's Improved Door-Lock," of which the following is a true and exact description.

The nature of my invention consists in adapting certain parts of the common lock for the reception of friction wheels, and for the application of the same, which I apply in the following manner. Having made the box in the common form and placed therein the wards and key fitted to them, I proceed to form and adapt the lock-bolt. This I form by making the shaft, about one fourth as thick as its head, which slides through the front plate, by taking off a part of the shaft on each, side; but more from the under side than from the upper side; as may be seen, marked, A, in Plate 1, Figures 5 and 6. Also Plate 2, Fig. 1. Thus I furnish a space between the shaft of the lock-bolt and the under plate of the lock for the reception of the dog F, and its friction wheel, C, which I swivel on the dog, by the pin, K; and in such a position that the key, *a*, may play against its periphery, while raising the dog to unfix the lock bolt, instead of rubbing against the dog itself. (Vide P. 1, Figs. 5 and 6.) I also furnish another space between the upper side of the shaft of the lock bolt and the upper lock plate, for the purpose of accommodating two friction wheels, (marked D, and E,) which I swivel on the upper side of the shaft of the lock-bolt, in such a position as that the key plays between them, alternately escaping the periphery of the other while locking or unlocking; and therefore moves with much more freedom and ease than when it rubs against the lock bolt itself. (Vide P. 1, Fig. 5, and P. 2 Fig. 1.)

I make a mortise either through or a part way through the shaft of the lock bolt, near to the end, and longitudinally fitted to slide on a short stud standing fast and perpendicularly in the lock plate. (Marked N. P. 1, Figs. 5 and 6.) In the edge of the shaft of the lockbolt I cut two nitches, a little deeper than a half round, whose distance from each other is equal to the distance the lock bolt slides in locking and unlocking. These nitches alternately receive the neck of the pin, K, fixing the lock bolt whether locked or unlocked. (Vide P. 1, F. 5.) After the dog has been raised (as in Fig. 5,) it is forced down again by a longitudinal spring, (marked L.) This spring acts on the periphery of the friction wheel, O, as in Figs. 5 and 6. There are two more friction wheels (P, P,) so adapted as to free the tumbler G, from friction. (Vide P. 2, Fig. 1.)

The latch bolt, R, is made narrower at that part where the appendage of the tumbler plays over it, and is bent at right angles, forming a foot, Q, about an inch long, and slides on the lower plate of the lock, directly behind the tumbler; and its shaft is parallel with the shaft of the lock bolt. There is a friction wheel, S, swiveled upon the foot of the latch bolt in such a manner that its periphery bears against the center of the appendages of the tumbler. The face of the appendages is excavated. This excavation is marked, *i;* it is for the friction wheel to rest in, and affords two bearings for it. (Vide Plates 1 and 2, Figs. 2, 3, and 4.) This friction wheel, S, revolves on the pin, T, on the neck of which is swiveled one end of a small connecting arm V,—the other end of which arm is swiveled on another pin, U, fixed in the shaft of the lock bolt near the back end. (Vide P. 2, Fig. 1.) Because the end of the lock bolt slides steadily on the above mentioned pin, or stud, N, the arm V affords a guide for the direction of the back end of the latch bolt. (Vide P. 2 Fig. 1 and P. 1 F. 2 dotted lines.)

The latch bolt is forced out through the face of the lock by the spring, W, which acts against the friction wheel, X, swiveled near the end of the short arm, little *w*. This arm is swiveled on a pin a little back of the friction wheel, thence extending forward to the foot of the latch bolt, it receives the friction wheel, Z, which plays against the foot of the latch bolt and forces it out. (Vide P. 1, Fig. 2.)

What I claim as my invention and improvement, and desire to secure by Letters Patent, is—

The application of the several friction

wheels, and the adaptation of the various parts of the lock for the reception of the friction wheels as represented in my drawings, and referred to in my specification.

In testimony that the above is a true specification of my invention and improvement, I here unto subscribe my name in the presence of the witnesses whose names are hereunto subscribed, on the 21st day of Augt. A. D. 1837.

TURNER WHITEHOUSE.

Witnesses:

AUGUSTUS PEABODY,

JOHN DWIGHT.