(No Model.)

T. B. ASHFORD.

INDICATOR LOCK.

No. 307,254. Patented Oct. 28, 1884.

Fig. 1.

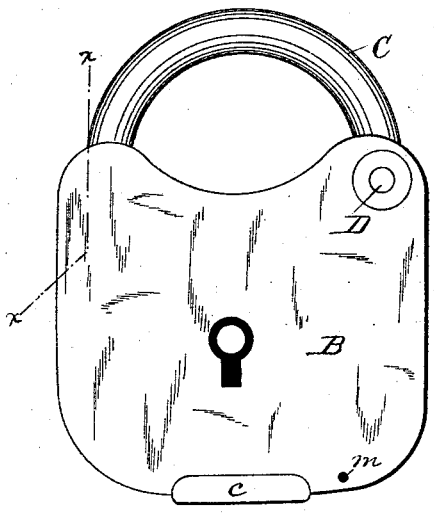


Fig. 2.

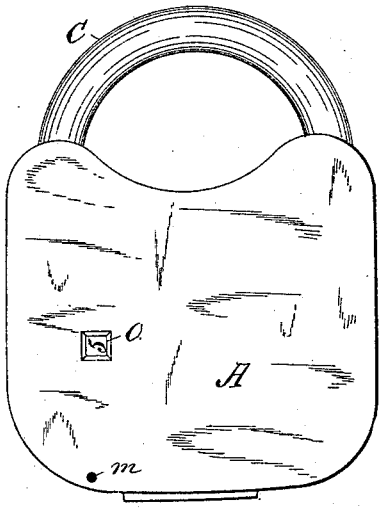


Fig. 3.

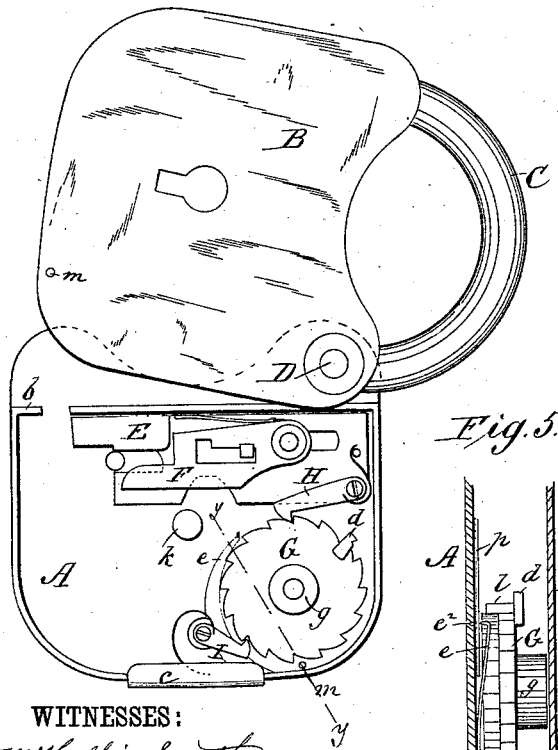


Fig. 4.

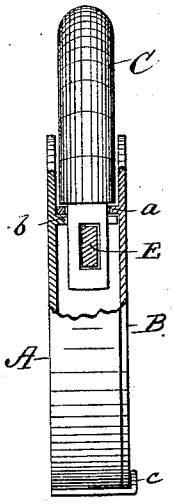
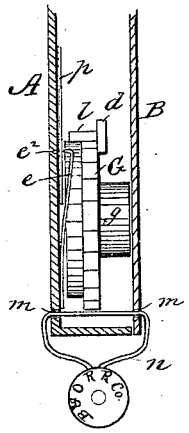


Fig. 5.



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THOMAS BUTLER ASHFORD, OF CLINTON, NORTH CAROLINA, ASSIGNOR TO BIAS UNDERWOOD, OF SAME PLACE.

INDICATOR-LOCK.

SPECIFICATION forming part of Letters Patent No. 307,254, dated October 28, 1884.

Application filed June 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. ASHFORD, of Clinton, in the county of Sampson and State of North Carolina, have invented certain new and useful Improvements in Indicator-Locks, of which the following is a description.

Figure 1 is a front view, and Fig. 2 a rear view, of the lock. Fig. 3 is an interior view from the front with the face-plate turned back on its pivot. Fig. 4 is an edge view in section through the line *x x* of Fig. 1. Fig. 5 is a sectional view of the case through the line *y y* of Fig. 3.

My invention relates to that class of locks known as "indicator-locks," the object being to prevent the lock from being opened and then closed again by an unauthorized person, to which end an indicator-wheel is set to show a different number each time the lock is opened, and which change in the numbers, showing through an opening in the lock, gives proof of the surreptitious opening of the lock.

My invention consists in the peculiar construction and arrangement of the parts of the lock, as hereinafter fully described.

In the drawings, A represents the case of the lock, which may be of any desirable form, and B is the face-plate, which is connected to the lock-case, as follows: The bolt which secures the shackle-bar C also passes through and forms a hinge or pivotal joint for the face-plate at D. Then at the lower portion of the lock-case is attached an upwardly-projecting flange or lip, *c*, beneath which the lower edge of the face-plate B passes when closed down over the lock-case. Then to hold the face-plate down to this position said face-plate is provided at the point where the shackle-bar enters the case with a perforated flange, *a*, resting upon flange *b* outside the case, through which flange *a* the shackle-bar passes, and through the slot in which shackle-bar the bolt E passes, and by which construction the face-plate is firmly held to the case of the lock whenever the latter is locked or closed, and thus the bolt holds the shackle-bar, and the shackle-bar holds the face-plate against being pulled out or turned on its pivot.

The tumbler F and bolt E of the lock are of the usual pattern, and are operated by a barrel-key fitting upon the key-pin *k*. To the bolt, however, is pivoted a spring-pawl, H, which engages with the ratchet-wheel G, and which ratchet-wheel is provided also with a spring-detent, I; so that as the bolt moves back in unlocking the shackle-bar this spring-pawl catches into the teeth of the ratchet-wheel and turns the latter the distance of one tooth. Then as the bolt moves back to lock the shackle-bar the detent I holds the ratchet-wheel while the pawl H is moving back to secure a new position on the wheel. On the back side of the ratchet-wheel G there is a series of figures arranged in a circular row, which series of figures show one by one through an opening, *o*, in the back of the case, as in Fig. 2, and which figure changes with each movement of the ratchet-wheel until a complete revolution has been made. Now, to prevent the lock from being repeatedly locked and unlocked until a complete revolution has been made, and then reset upon the same number, a projection, *d*, is attached to the ratchet-wheel, and I form holes *m m* through the face-plate and case, and through them is placed the shackle-wire *n* of a metallic seal. Now, when the projection *d* comes around to the shackle-wire of the seal, the latter acts as a stop to prevent any further progress without breaking the wire. This seal may be put in place by the railroad company, and kept there until the ratchet-wheel, by successive legitimate openings and closings, has shown all its numbers, and then a new seal is to be put in place. As a still further precaution, I place a spring, *e*, against the back of the case, which spring has one or more sharp points adapted to enter a hole, e^2, in the case, and over which hole is placed a piece of paper, *e*. Then on the ratchet-wheel is arranged a lug, *l*, and when the ratchet-wheel makes a complete revolution the lug *l* presses upon the spring *e* and forces the points of the latter through a piece of paper, *p*, thus leaving evidence of the complete revolution of the wheel, so that even if the wheel be reset on the same number the surreptitious opening of the lock can be detected.

To hold the ratchet-wheel against the back of the case, a washer, *g*, rests between it and the face-plate.

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

1. The combination of the lock-case having flange *c*, the shackle-bar C, the face-plate B, hinged upon the fulcrum-pin of the shackle-bar, and having a perforated flange, *a*, outside of the case, and the bolt adapted to lock the shackle-bar and hold the face-plate, as described.

2. The combination, with the lock-case having opening *o* and the bolt, of a pawl attached to the bolt, a ratchet-wheel, G, having lug *l*, and provided with numbers on its rear side, and the spring *e*, having a point adapted to be engaged by the lug *l*, as and for the purpose described.

3. The combination, with the ratchet-wheel of an indicator-lock, having a projection extending beyond its periphery, of a case having openings *m m*, and a wire seal arranged in said holes to be struck by said projection and limit the movement of the wheel to one revolution, as described.

THOMAS BUTLER ASHFORD.

Witnesses:
B. F. BOYKIN,
G. H. MOSELEY.