C. T. Gibson,

Padlock.

No. 101,607. Patented Apr. 5. 1870.

Fig. 1

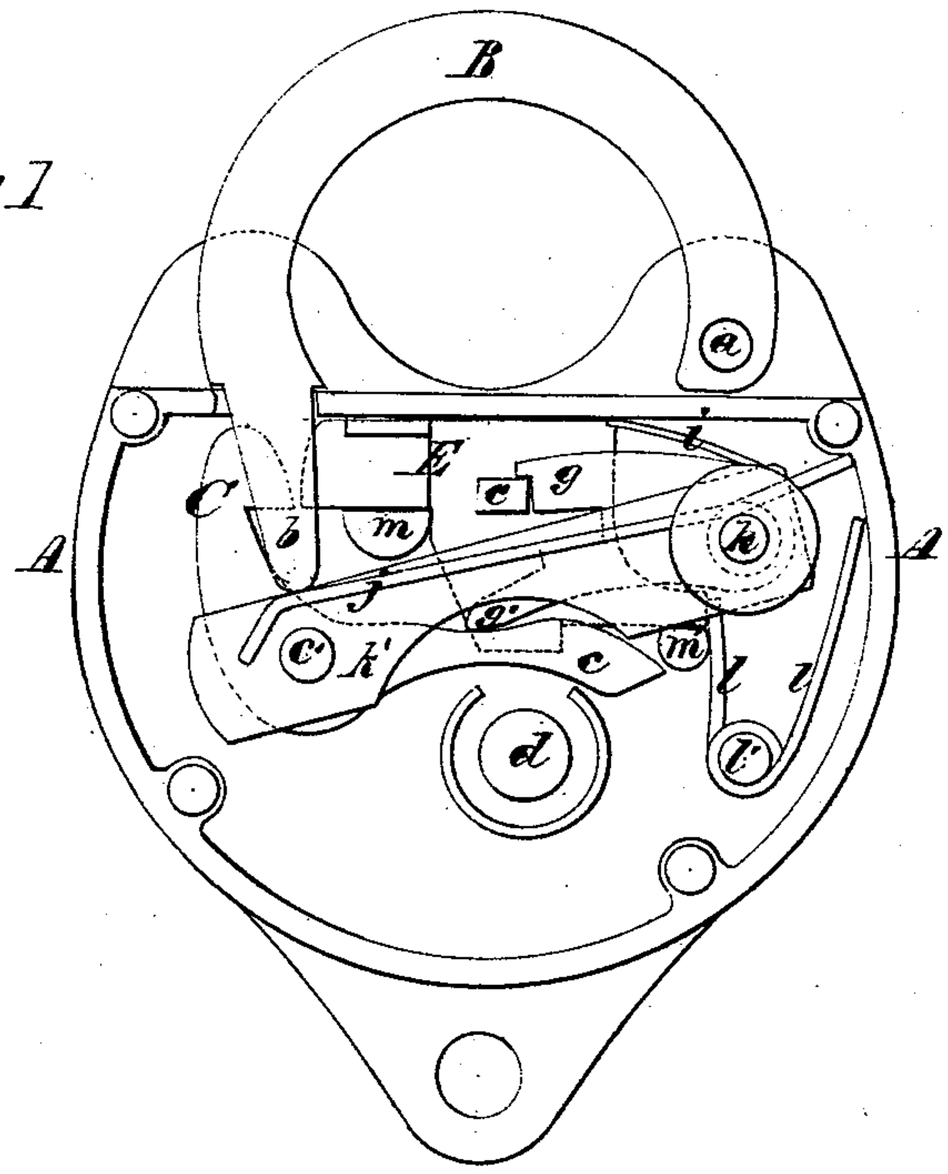
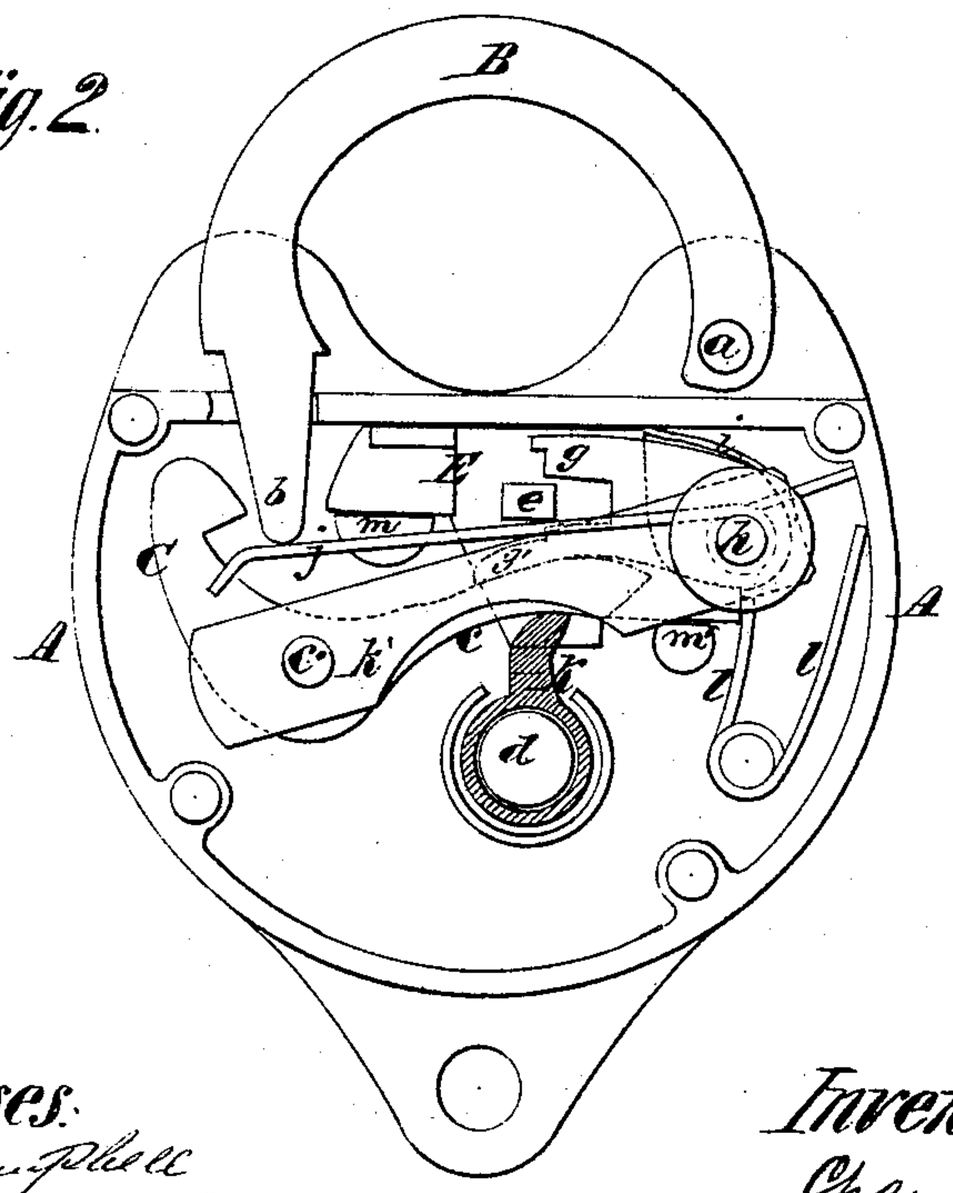


Fig. 2.



Witnesses:
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CHARLES T. GIBSON, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF AND SAMUEL E. KIRK, OF SAME PLACE.

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IMPROVEMENT IN PADLOCKS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, CHARLES T. GIBSON, of the city and county of Baltimore, in the State of Maryland, have invented a new and improved Padlock; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a view of the interior of the lock, as seen by removing its face-plate, showing the link or shackle locked in its place.

Figure 2 is a similar view of the same parts, showing the link or shackle unlocked and in the act of springing open.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to that class of padlocks which are especially designed for use on railroad freight-cars; and to this end are constructed with locking devices, which will prevent the bolts from being driven back by the application of violent blows upon the lock-case.

The object of my invention is to apply a locking device to the bolt of a padlock which will positively lock the bolt forward, and which will admit of being made so strong that it cannot be broken or displaced by violent blows upon the lock-case, but can be easily moved out of the way by the key adapted for moving said bolt, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawing—

A represents the case or frame of the padlock; and

B, the link or shackle, which may be constructed in the usual well-known manner.

The shackle is pivoted at *a* between the external ears of the lock-case, and it is constructed with a slotted entering portion, *b*, for receiving a sliding bolt, E, and the hooked end of a pivoted dog, C, as shown in fig. 1.

The hooked locking-dog C is pivoted to the fixed stud *c'*, and constructed with a tail extension, *c*, which curves over the key-stud *d*, so as to be acted upon by the bit of the key K, and lifted, as shown in fig. 2, in which latter position the hooked end of this dog will release the free end of the shackle.

The bolt E, which has a beveled nose, that will cause it to spring back when the nose *b* of the shackle is pressed upon it, is acted upon from behind by a spring, *l*, that is coiled around the fixed stud *l'*, which spring will force this bolt forward and hold its shouldered portion against the flattened stud *m*, which is just below the upper or entering portion of the bolt, as shown in the two figures in the annexed drawings.

The studs *m m'* and the top portion of the case A guide and keep the bolt E in place, but allow it to be readily moved endwise away from the nose of the shackle by the use of the key K.

On the rear portion of the bolt E a boss, *e*, is formed, which will engage with the free notched end of the pawl or locking-piece *g*, when this bolt is allowed to spring forward, as shown in fig. 1.

The pawl *g* is pivoted to a fixed stud, *h*, and acted upon by a spring, *i*, which spring acts upon the upper end of the lock-case A, and forces the free end of the pawl down to its place in rear of the boss *e*, and holds it there, as shown in fig. 1.

The pawl *g* is constructed with a tail-piece, *g'*, which is held on the curved tail-piece *c* of the hooked dog C by the spring *i*, thereby allowing this spring *i* to operate, through the medium of the pawl, upon the said dog, to keep its hooked end in place for receiving the nose *b* of the shackle B and assisting in locking this shackle.

The guard-strip *k'*, which is fastened by means of studs *c'* and *h* over the parts C *g*, keeps these parts in place for operation.

The spring *j*, which is fastened to the stud *h*, at one end operates against the nose *b* of the shackle B, to throw it open when released from the bolt and the dog-hook.

It will be seen from the above description that I employ but three movable pieces, excepting the springs, to effect the locking of the shackle and the locking of the bolt; and when the shackle is locked, by simply pressing its nose against the dog-hook and bolt until they engage with it, the pawl *g* will by its spring *i* be moved behind the boss *e* on the bolt and there remain until lifted out of the way by the application to the lock of the proper key.

When the key *k* is inserted into the lock and turned, it will press upward the tail *c* of the dog, and disengage the hooked end of this dog from the shackle; at the same time the pawl *g* will be raised free from the boss *e*.

The next movement of the key will then move back the bolt E and release the shackle, which latter will be thrown open by the spring *j*.

When the key is removed, the dog, the pawl, and the bolt will be forced to the positions shown in fig. 1.

It is obvious that the bolt E cannot be forced back when locked by the pawl *g*, by the application of blows upon the lock-case.

I do not claim, broadly, the idea of locking a spring padlock-bolt, as others have done this before me, but such locks have been found to be too weak, on account of the great number of parts required in

their cases, to answer the purpose for which they are chiefly required, and being so complex, such locks frequently become deranged and broken.

Having described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The tail-extension *c*, formed on the hooked locking-dog C, arranged beneath a pawl, *g*, which is adapted for locking the bolt E in a forward position, substantially as described.

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Witnesses:

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