

No. 752,018.

PATENTED FEB. 9, 1904.

S. STEWART.
CHECK LOCK.

APPLICATION FILED MAR. 3, 1903.

NO MODEL.

Fig. 1.

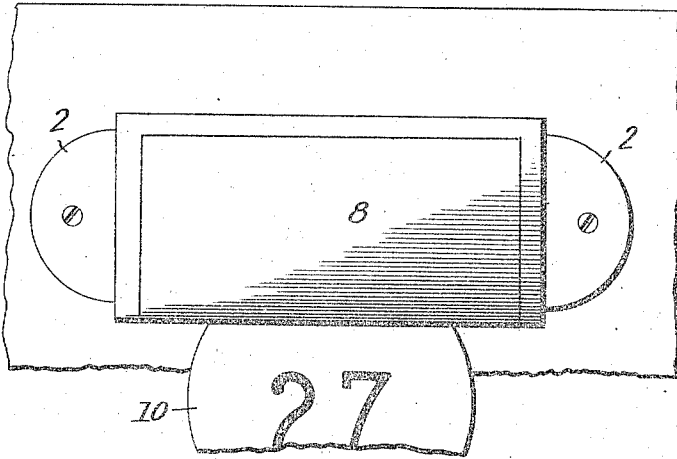


Fig. 2.

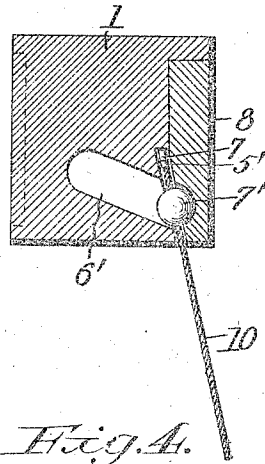


Fig. 3.

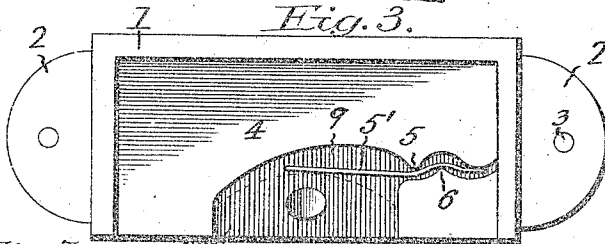


Fig. 4.

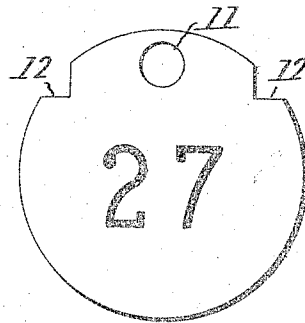


Fig. 5.

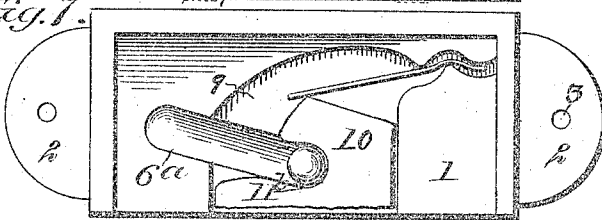


Fig. 5.

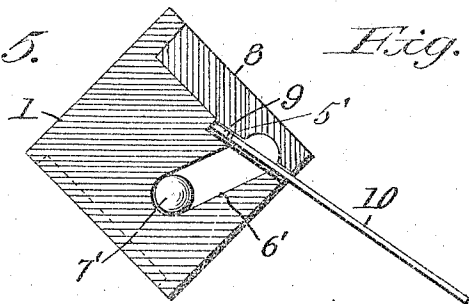
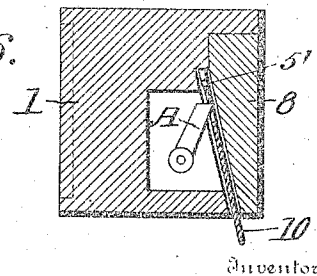


Fig. 6.



Inventor

Witnesses

E. M. Walker
Frank E. Raff

By

Scott Stewart
Frank Appleson

Attorney

UNITED STATES PATENT OFFICE.

SCOTT STEWART, OF RIVESVILLE, WEST VIRGINIA.

CHECK-LOCK.

SPECIFICATION forming part of Letters Patent No. 752,018, dated February 9, 1904.

Application filed March 3, 1903. Serial No. 145,899. (No model.)

To all whom it may concern:

Be it known that I, SCOTT STEWART, a citizen of the United States of America, residing at Rivesville, in the county of Marion and State of West Virginia, have invented certain new and useful Improvements in Check-Locks, of which the following is a specification.

This invention relates to locks; and it is particularly designed for use in retaining and releasing miners' checks on mine-cars.

The object of the invention is to produce a lock which will retain a check against removal until the car is dumped or until the body of the car is tilted to the position it assumes when discharging its contents.

Furthermore, the object of the invention is to produce means for preventing the displacement of the locking means except through manipulation of the check to release the locking means.

Furthermore, the object of the invention is to produce a check and a lock for retaining the check against displacement except when the car is in position to deposit its load, thus preventing the interchanging of checks or the fraudulent marking of a car in transit from the miner of the contents of the car to the recorder.

Finally, the object of the invention is to produce a device of the character noted which will possess advantages in points of simplicity, utility, strength, and durability and proving at the same time comparatively inexpensive.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a view in elevation of a portion of a mining-car with the invention applied. Fig. 2 is a transverse sectional view of the lock. Fig. 3 is an elevation with the face-plate removed. Fig. 4 is an elevation of a

check. Fig. 5 is a sectional view centrally of Fig. 1. Figs. 6 and 7 illustrate modified constructions.

In the drawings, 1 indicates the casing of the lock, which is rectangular in shape and provided with extending flanges 2 at each end, said flanges having screw-holes 3, by which the lock is secured to a car by means of screws. Interiorly the casing I provide a boss 4, formed integral with the casing and having lugs 5 and 6. The casing has a slot 9, in which a spring 5' is secured by the lugs on the boss 4. Extending from the face of the casing on an incline I provide a hole 6', forming a way in which a ball 7' is seated and permitted to travel from the front to the rear by the changing position of the lock, as in dumping the car. A face-plate is provided and secured on the casing in any suitable manner, and the slot 9 is formed between the face-plate and the casing. The slot is of such length as to permit the insertion of a segment of a check, the said check 10 having a hole 11 of such diameter as to receive the retaining-ball 7', heretofore described. The inner surface of the plate is recessed to form a seat for the ball when in position to retain the check against displacement. The check 10 has shoulders 12 at each side which will contact with the lower edge of the casing when the check is inserted, thus limiting its upward movement against the action of the spring. The spring bears directly against the edge of the check, and the check in turn bears against the locking-ball with sufficient tension to prevent the accidental displacement of the ball by reason of vibration of the car, since the center of gravity of the ball is beyond the edge of the check. It will be observed that the inclination of the way to the seat for the check causes the ball to lie in the lower end of the way when the car to which the lock is applied is in an approximately horizontal position, and the said ball is not free to travel when the car is dumped until the tension of the spring has been removed by pressing the check upward.

In the modification shown in Fig. 6 a gravity-detent A is shown which holds the check against displacement when the car is in a hori-

zontal position and which swings back out of engagement with the check when the car is tilted, as in dumping.

In Fig. 7 I provide a check having a recess 11^b at one edge to receive the ball, and the ball-way 6^a is extended longitudinally of the casing instead of transversely. This form is designed to be attached to the side of a car instead of the rear thereof, as is the case with the first-described form. The check used in this form of my invention may be used with either form of casing or lock, since the recess in this case may receive the ball exactly as does the hole 11 in the former case when used with the form of casing shown in Figs. 3 and 5.

In the modification the check is spring-pressed, as heretofore described, and the mode of operation is substantially the same.

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

1. A check-holder comprising a case having a slot for the insertion of the stem of a check and having an inclined passage intersecting said slot, and a locking device mounted to move in said inclined passage and acted upon by gravitative force for positive movement in each direction either to engage with or release said check, substantially as described.

2. In a lock for a miner's car-check, a ball, a casing having a recess therein and provided with an inclined aperture in which the ball can travel, a face-plate for the casing, a check locked in the casing by the ball and means for securing the casing to the body of a mine-car.

3. In a lock of the character described, a casing having a recess therein and provided with an inclined aperture, lugs in the casing, a ball adapted to travel in the inclined aperture of the casing, a check having shoulders and provided with means to permit the ball to support the check, a spring having one end secured by the lugs and its opposite end bearing against the inserted edge of the check whereby the ball is prevented from accidental displacement by the vibrations of the car and means for securing the lock to the body of the car as and for the purpose specified.

4. In a lock for a miner's check, a casing having a recess and provided with an inclined aperture, a ball adapted to travel in the inclined aperture of the casing, a face-plate having a recess registering with the inclined aperture of the casing whereby the ball is permitted to engage the check, lugs formed integral with the casing, a spring having one end secured by the lugs and its opposite end bearing against the inserted edge of the check whereby the check is prevented from accidental displacement substantially as described.

5. In a check-holder, a case provided with a slot for reception of the stem of the check, and having an inclined passage intersecting with an edge portion of the slot and of greater width, and a locking device movable in the inclined passage by gravitative action and having its end portions extended beyond opposite sides of said slot to make positive engagement with the case, substantially as described.

6. In a check-holder, a case provided with an intersecting slot and inclined passage, a locking device movable in said inclined passage in each direction by gravitative force, a check having a stem to enter said slot and provided with a notch for reception of the locking device, and a spring for exerting an outward or downward pressure upon the lock, substantially as described.

7. In combination, a case provided with a slot and intersecting inclined passage, a locking device movable in said inclined passage in each direction by gravitative force, and a check having a stem adapted to be inserted into the aforesaid slot and having a notch provided at its upper edge with a pendent portion to overhang the locking device and prevent casual disengagement thereof from the stem, substantially as set forth.

In testimony whereof I affix my signature, in the presence of two witnesses, this 6th day of February, 1903.

SCOTT STEWART.

Witnesses:

CURT MORRIS,
HARRY SATTERFIELD.