

W. H. WALKER.
MINE CAR APPLIANCE.
APPLICATION FILED MAY 24, 1912.

1,064,795.

Patented June 17, 1913.

Fig. 1.

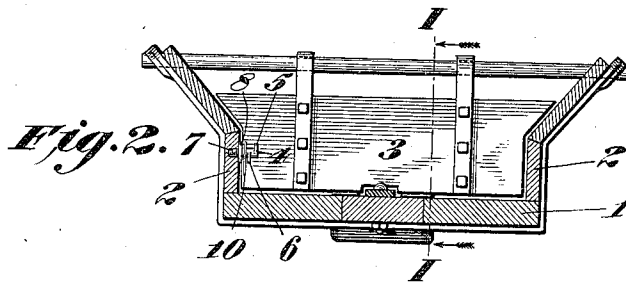
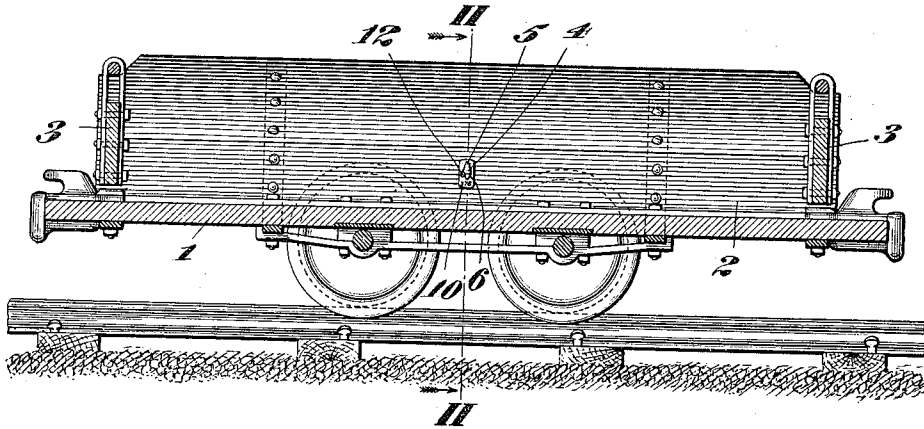


Fig. 3.

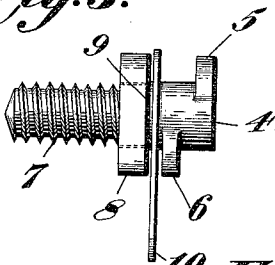


Fig. 4.

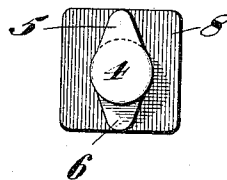


Fig. 5.

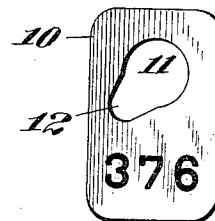
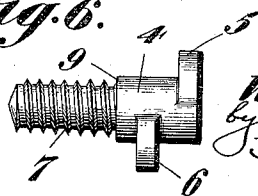


Fig. 6.



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UNITED STATES PATENT OFFICE

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MINE-CAR APPLIANCE.

1,064,795.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. WALKER, a citizen of the United States, residing in the city of Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Mine-Car Appliances; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists generally of an appliance for transportation cars and is particularly adapted for use in connection with cars used for the conveyance of coal, ore, or other material from the mines or other sources.

Although my appliance is of quite general use, I will, for the purpose of simplicity, confine my description and illustration to its use in connection with mine cars for transporting coal from within mines to coal tipples, thence to be loaded into other cars for further transportation or to be disposed of otherwise as customary.

It has heretofore been the practice of coal miners to use rude sheet metal checks of tinned or galvanized steel or iron, on which their identifying number is crudely marked by prick-punching, stamping, or otherwise. Either before or after the miner loads the coal which he has won at the working face, he hangs the rude check previously described, on an ordinary nail driven into the wooden side of the car, and in due course the car of coal is transported through the mine and out to the weigh scales which are generally located on a tipple or trestle outside of the mine. The car is weighed and contents are then dumped into a large railroad car, coal bin or disposed of otherwise. The weigh-master then records the net weight of the coal contained in the mine car and takes the rude numbered check from the nail on which the miner has put it and gives credit for the weight of coal to the miner represented by the check, the reason for this being that each miner is paid a certain amount per ton of coal mined by him. These rude checks and ordinary nails are troublesome and become displaced through accident or design of unauthorized persons, or lost, owing to the insecure fastening, and to overcome these difficulties, I have devised

the appliance herein described, comprising a substantial hook and check secured to the inside of the car.

My check hook has preferably a substantially cylindrical body portion provided with a screw thread on one end, or other means for securing it to the car, and the other end is provided with two projections extending therefrom at substantially right angles to the axis and in opposite directions therefrom, and these projections are also located a slight distance apart longitudinally of the axis. In order to make this hook more secure, I may provide it with a metal washer which is passed over the screw threaded end and forms an abutment against which the body portion of the hook may be screwed tightly. This washer, however, is not an essential and the hook may be used without it as hereinafter described. The screw threaded portion of the hook is inserted into and screwed fast in a hole in the wooden side of the car on the inside thereof and preferably on the surface which is normally vertical. I also provide a substantial numbered check to correspond with the identifying number of each miner, which check is preferably rectangular and is provided with a hole near one end, part of which is cylindrical, but has a diagonally extending slotted portion extending therefrom, the opening thereby somewhat resembling a key-hole. Each miner is provided with a quantity of these checks, each bearing his identifying mark or number. An empty mine car is set in place in the miner's room or entry and before loading coal therein, the miner hangs his check on the hook which is inside of the car, to accomplish which, he has to slip it on over the first projection of the hook, while the bottom of the check is diagonally upward, and then the check is given a half turn in either direction and is slipped over the other projection until it hangs from the body of the hook. After this is done, the coal is loaded into the car, which prevents loss of or tampering with the check in transit and the check cannot be obtained until after the coal is dumped out of the car at the tipple, whereupon the weigh-master takes the check off the hook in a manner the reverse of that which the miner used in putting it on.

Having thus given a general description of my invention, I will now, in order to

make the same more clear, refer to the accompanying sheet of drawings on which like numbers refer to like parts:—

Figure 1 is a longitudinal sectional elevation of a mine car showing my appliance attached to the inside thereof. Fig. 2 is a transverse vertical sectional elevation on the line II—II of Fig. 1. Fig. 3 is a side elevation of my improved appliance comprising a check-hook and check showing in this case, a washer of rectangular outline. Fig. 4 is a front elevation of the hook corresponding with the side elevation of Fig. 3. Fig. 5 is a front elevation of my improved check showing the number thereof and the cylindrical and slotted hole therein. Fig. 6 is a side elevation of my improved check-hook, which, as shown in this view, is used without any washer, but is provided with an abutment formed at the junction of the body and the screw threaded portion thereof.

Referring now to the characters of reference on the drawings:—1 represents the mine car generally, 2 the vertical sides thereof shown as timber; 3—3 are the end doors which are usually provided with latches (not shown in this case); 4 is the body portion of my improved check-hook comprising a bolt or pin of special form, 5 is the outer upper projection thereon, and 6 is the inner and lower projection, both of these projections being shown as formed integral with the body portion.

7 is the screw threaded portion which may either be adapted to be screwed into wood or metal, or, if desired, may be adapted to be riveted to the side of a metal car.

8 represents a washer which may be adapted to be slipped over the screw threaded portion and abut against the body portion of the check-hook and provide a bearing therefor against the car-side, if desired.

9 is a shoulder or abutment formed on the cylindrical body portion of the bolt or pin 4 at the junction of the integral threaded portion 7 therewith, this shoulder being adapted to abut either against the washer 8 or the car-side directly, in case the washer is not used.

10 represents my improved check, provided with a number legibly stamped thereon, as shown, indicated in this case as 376, and provided with a hole, part of which is of cylindrical outline, as shown at 11, with a slot 12 extending diagonally therefrom, thus somewhat resembling a key-hole.

The integral projections 5 and 6 in connection with the cylindrical body portion 4 of the check-hook are of approximately the same shape as the hole in the check, but slightly smaller, so that the check can be slipped over the same.

To put the check on the hook, it is held by its lower end in such a way that the opening therein will register with the body

portion 4 and the upper projection 5; the check is then slipped forward past the said upper projection, then turned about one hundred and eighty degrees, whereupon the hole in the check registers with the lower projection 6, after which it is again moved slightly in the direction of the axis of the hook and allowed to drop in its natural position with its lower end hanging downwardly. The check, in this position, cannot be displaced by the jolting of the car, nor by the tipping of the car when inclined longitudinally for the purpose of dumping it, but on account of this construction the check remains securely in place and after the coal is unloaded, the check is readily accessible to the weigh-master who removes it from the hook in a manner the reverse of that previously described for placing it on the hook. I also prefer to make the body of the hook, that is, from the shoulder 9 to the outer extremity of the body portion 4, as short as possible, while at the same time allowing reasonable clearances for the check, in order that the hook will not be broken or displaced by the lading of the car, nor from other causes.

It will thus be seen that my appliance is at once simple, convenient, and economical and forms a ready and sure means for accomplishing the purpose intended, namely, the correct recording of each carload of coal and to give credit where due.

I prefer to make my improved check-hook of drop forged steel or other metal and the check of stamped brass, but these may be made of any suitable material, if desired.

Although I have shown and described my improvements in considerable detail, I do not wish to be limited to the exact and specific details shown and described, but may use such substitutions, modifications or equivalents thereof, as are embraced within the scope of my invention, or as pointed out in the claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A mine car appliance comprising a bolt or pin having a cylindrical body portion, a pair of projections spaced apart longitudinally, located on opposite sides thereof, in combination with a check provided with a perforation substantially conforming to the cross sectional outline of said body portion and one of said projections.

2. A mine car appliance comprising a bolt or pin having a substantially cylindrical body portion, a pair of projections spaced apart longitudinally and located on opposite sides near one end thereof, in combination with a check provided with a perforation of approximately key-hole form, said key-hole being located diagonally near one end of the check and approximately conforming to

the cross sectional outline of the said body portion and one of the projections thereof.

3. An appliance of the character described comprising a bolt having a substantially cylindrical body portion, a pair of projections spaced apart longitudinally and located on opposite sides near one end thereof, the opposite end being provided with a screw thread adapted to secure the same in place, in combination with a check provided with a diagonally disposed perforation of

approximately key-hole form near one end thereof, said perforation conforming approximately to the cross sectional outline of said body portion and one of its said projections.

In testimony whereof, I hereto affix my signature in the presence of two witnesses.

WILLIAM H. WALKER.

Witnesses:

J. F. GROGAN,
ELMER SEAVEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."