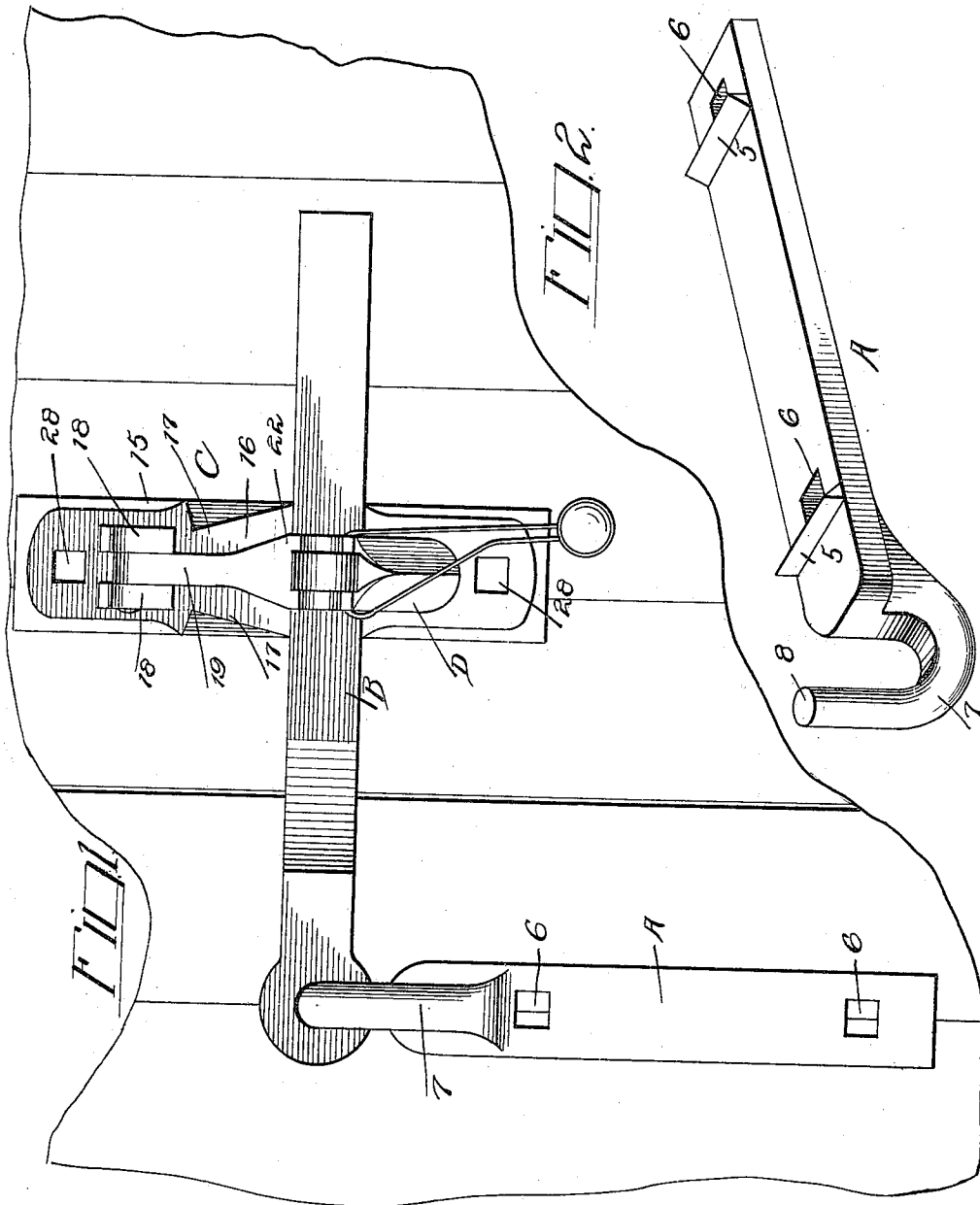


2 SHEETS--SHEET 1.



Witnesses

Wm Smith.
Wm Ragger.

Inventor

William A. Siegfried

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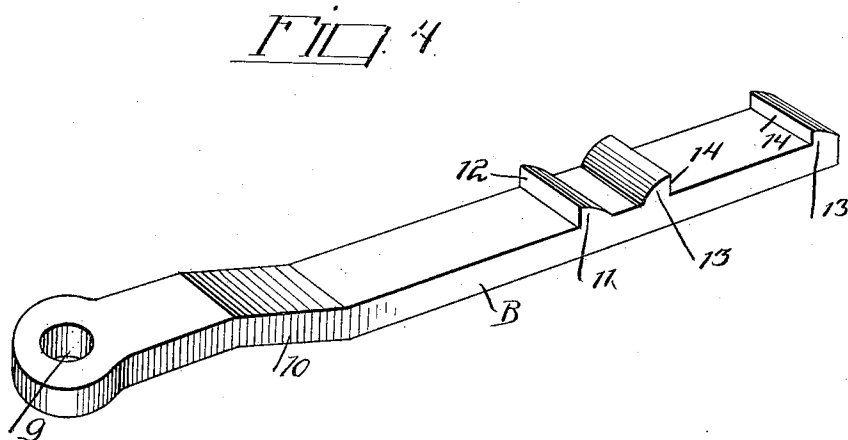
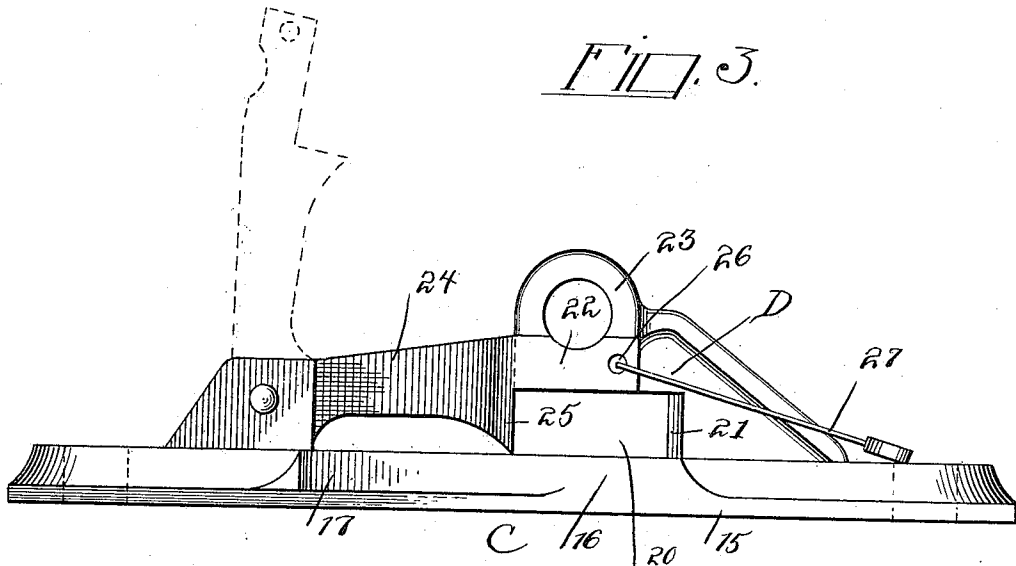
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CAR DOOR LOCK.
APPLICATION FILED OCT. 19, 1909.

962,395.

Patented June 21, 1910.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

WILLIAM A. SIEGFRIED, OF LEHIGHTON, PENNSYLVANIA.

CAR-DOOR LOCK.

962,395.

Specification of Letters Patent. Patented June 21, 1910.

Application filed October 19, 1909. Serial No. 523,387.

To all whom it may concern:

Be it known that I, WILLIAM A. SIEGFRIED, a citizen of the United States, residing at Lehighton, in the county of Carbon and State of Pennsylvania, have invented new and useful Improvements in Car-Door Locks, of which the following is a specification.

This invention relates to locks for doors of railroad freight cars and it has for its object to produce a simple and efficient locking device which may be installed at a moderate expense.

A further object of the invention is to provide a simple and improved locking device whereby the door may be securely locked while partly open to permit ventilation of the contents of the car without admitting depredators.

A still further object of the invention is to construct a simple and efficient locking device which instead of weakening will serve to brace and to reinforce the doors to which it is applied.

A still further object of the invention is to provide a simple and efficient locking device which will not be injuriously affected or its operation interfered with by snow and ice.

Still further objects of the invention are to simplify and improve the general construction and operation of a device of the character referred to.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention; it being however understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention, may be resorted to when desired.

In the drawings: Figure 1 is a view showing in elevation portions of a car frame and door equipped with the improved locking device. Fig. 2 is a perspective view showing

the staple part of the device in inverted position. Fig. 3 is a view in side elevation showing the latch part of the device. Fig. 4 is a perspective view showing the door hasp.

Corresponding parts in the several figures are denoted by like characters of reference.

The staple member of the improved device which is shown at A comprises an elongated bar provided upon its under surface with sharp edged lugs or projections 5—5 of approximately triangular cross section adjacent to which apertures 6 are formed for the passage of bolts or other fastening members. The plate or bar A is provided adjacent to one end with a hook-shaped extension 7 the nose of which 8 projects below the level of the under surface of the bar. It will be evident that when the said bar is mounted in position upon a car door and is drawn tight by the bolts or other fastening means, the lugs or projections 5 will enter into the wood and add to the simplicity of the fastening while the nose of the hook will likewise enter into the wood of the car door where a small recess or socket may previously be formed for its reception; the said hook, or the projecting portion thereof, will thus form an eye or staple that serves to hold the door hasp very securely in position.

The door hasp B consists of an elongated plate or bar having adjacent to one end an eye 9 engaging the hook 7; the bar B is formed with an intermediate offset portion whereby the outer end of said bar is offset in an outward direction so that the outer end of said bar will lie in a proper plane to engage the latch mechanism to be presently described. Said door hasp is provided upon its underside, intermediate the ends thereof with a transversely disposed stop member 11 having a vertical side wall 12 facing the supported end of the door hasp; the latter is provided at and near its free end with additional stop members 13 having side walls 14 facing in the direction of each other and at approximately right angles to the body of the door hasp.

The latch mechanism proper, shown at C comprises a base plate 15 having upon the face thereof, a boss or projection 16, the side walls of which have upwardly inclined or beveled portions 17. Adjacent to the upper

end of the boss 16 are formed lugs or projections 18 between which a lock hasp 19 is pivotally supported; a catch member D is formed adjacent to the lower end of the boss, said catch member being provided with a door hasp receiving recess 20, the bottom of which is beveled or tapered as shown at 21 from an intermediate point downwardly to its side edges. The free end of the lock hasp 19 is bifurcated as shown at 22 to straddle a terminal eye or keeper 23 formed upon the catch member D, and the said lock hasp is provided on its under side with a concaved recess 24 and with a sharp edged projection 25, the latter constituting a stop which by engagement with the base plate or with the boss or projection upon the latter serves to limit the movement of the lock hasp in the direction of the base plate. The stop 25 also serves to engage the upper edge of the door hasp when the latter is placed in engagement with the catch member. The eye or keeper may be utilized for the reception of a fastening member such as a pad lock which when placed in position will secure the lock hasp in engagement with the catch member; said lock hasp and catch member being also shown as provided with registering apertures 26 through which the wire 27 of an ordinary car seal may be passed when desired. The base member 15 of the latch device is provided adjacent to its ends with apertures 28 for the passage of fastening members such as bolts or the like whereby the latch device may be secured upon the car door frame or upon the car body in suitable position for operation.

From the foregoing description taken in connection with the drawings hereto annexed, the operation of this invention and its advantages will be readily understood by those skilled in the art to which it appertains. It will be readily seen that when the parts are mounted in proper relative position, the car door when closed, may be secured by placing the door hasp in engagement with the catch of the latching device in such a manner that the stop member 12 will abut upon the edge of the base plate or boss of the latching device distant from the door opening, after which the lock hasp may be placed in engagement with the catch and secured in any manner that may be preferred. It will be observed that when the door hasp is manipulated to place it in catch engaging position, the stop member 11 will first engage the beveled portion of one of the side walls of the boss 16 after which, by forcing the said door hasp "home", sufficient leverage will be exerted to effect a very tight closure of the door after which the part will be held against rattling and the strain and danger of displacement and breakage caused thereby. Another impor-

tant and valuable feature resides in the beveled conformation of the bottom of the door hasp receiving recess owing to which, if said recess should have become blocked by ice, or snow, a quick downward movement of the door hasp inevitably results in displacing said snow and ice instead of compressing it and leaving it to form an annoying obstruction. Furthermore, when the lock hasp is moved to an engaging position, any ice which may have become incrustated upon the face of the base bar will be broken by the sharp edge of the stop member 25 and will be displaced upwardly under the concavity or recess in the underside of the lock hasp from which it will readily escape to either side.

Should it be desired to leave the car door slightly open for ventilation, this may be accomplished by placing the stop members 13 in engagement with the sides of the boss 16 when the car door will obviously be secured in a slightly open position, the extent of the slot or opening being equal to the distance between the engaging side walls of the outermost stop member 13 and that of the stop member 11.

This improved locking device for car doors is not only simple in construction and easily operated, but it may be installed upon freight cars of present construction at a very moderate expense, and many of the objections and disadvantages of car door fastenings now in use are entirely overcome by this device. Shaking and rattling will be partially if not entirely prevented, and the damages due to this source will be avoided.

Having thus described the invention, what is claimed is—

1. In a device of the character described, a latch member having a catch and a pivotally supported lock hasp engaging said catch, in combination with a pivotally supported door hasp having projections to engage the side walls of the base of the latch member.

2. In a device of the character described, a latch member comprising a base plate, a boss upon said base plate having upwardly convergent side walls, a catch member, and a pivotally supported latch member engaging said catch member, in combination with a pivotally supported door hasp having a plurality of projections adapted for engagement with one of the convergent side walls of the boss.

3. In a device of the character described, a latch device comprising a base plate, a catch member, and a pivotally supported lock hasp for engagement with said catch member, the latter being provided with a beveled or inclined bottom wall, in combination with a pivotally supported door hasp for engagement with the catch member.

4. In a device of the character described,
a latch device comprising a base plate, a
catch member and a pivotally supported
lock hasp, the latter being provided with a
5 sharp edged projection and with a concav-
ity or recess upon its underside, in combi-
nation with a door hasp having projections
to engage the base plate, said door hasp be-

ing accommodated between the catch mem-
ber and the projection of the lock hasp. 19

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

WILLIAM A. SIEGFRIED.

Witnesses:

CHARLES A. HARDING,
VICTOR E. MILLER.