

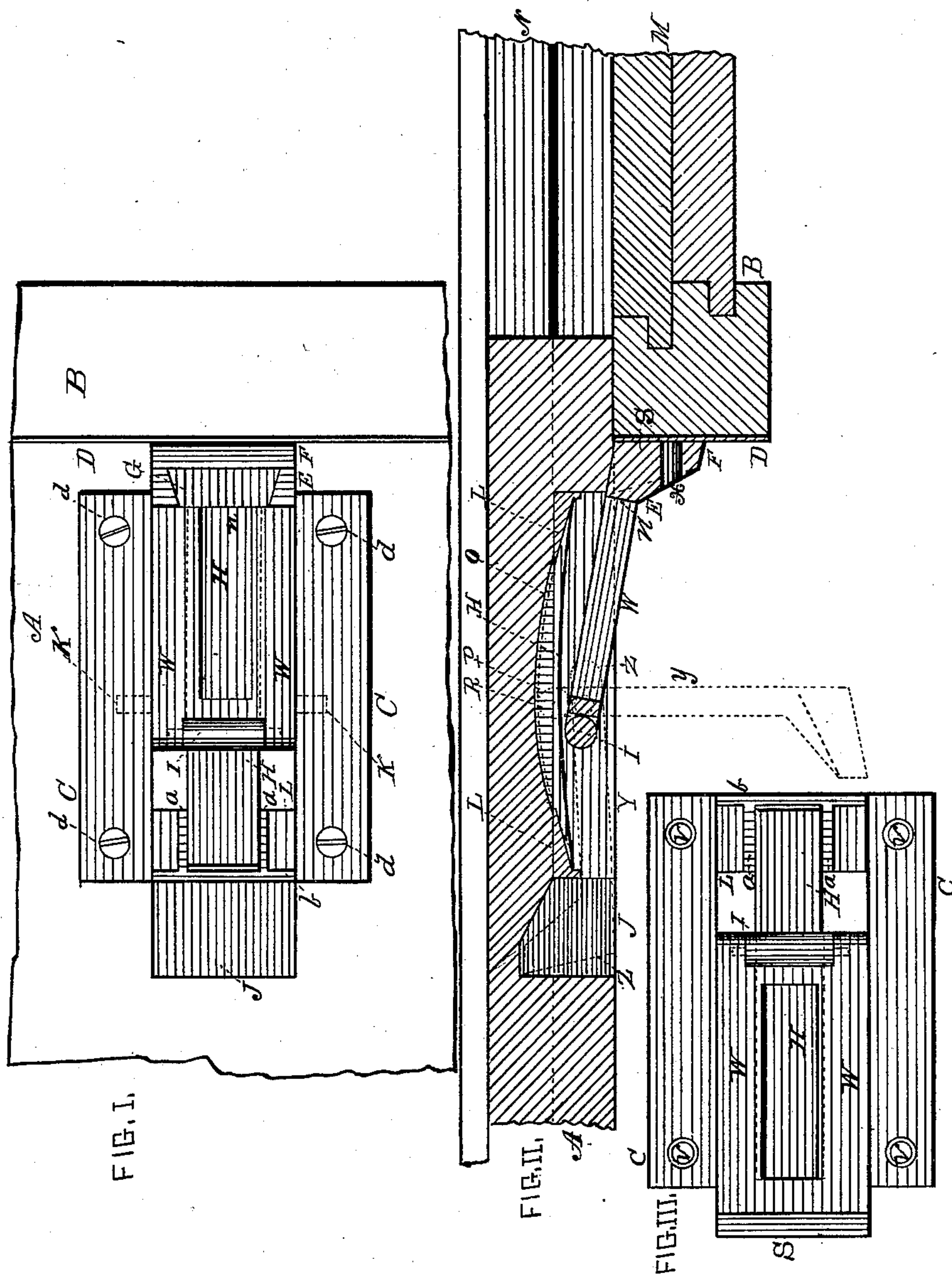
(No Model.)

J. H. FISHER.

CAR DOOR LOCK.

No. 279,732.

Patented June 19, 1883.



WITNESSES
Samuel Strat Jr
Adolf Heller

INVENTOR
Joseph Hyde Fisher.
By *G. L. Chapin.* ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH H. FISHER, OF DEERFIELD, ILLINOIS.

CAR-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 279,732, dated June 19, 1883.

Application filed February 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HYDE FISHER, of Deerfield, in the county of Lake and State of Illinois, have invented new and useful Improvements in Car-Door Locks, of which the following is a specification, reference being had to the accompanying drawings, illustrating the improvement, in which—

Figure I is a broken face view of the inside of a car-door and door-post with my improved lock attached to the door and in position to lock the same; Fig. II, a horizontal section of the devices shown at Fig. I, and in addition thereto the lower door-guide and a portion of the side of the car; Fig. III, an elevation of the lock detached from the door and the lock-lever turned back, as when the door is unlocked and free to slide open.

The present invention relates to locking car-doors at the insides of freight-cars.

The nature of the invention, in brief, consists in what I term a "lock-lever" so pivoted to a metal frame that where it is swung in one direction one end will project above the frame and butt against the door-post, and thus hold the door fast, and so that where it is turned in the opposite direction the projecting end will fall into a recess and lie below or even with the inner surface of the door, and not interfere with the opening thereof. One form of so holding the lock-lever sufficiently rigid in the aforementioned positions consists of a spring whose ends are supported by the ends of the frame, so as to bear against the inner end of the lock-lever, the pivots of the lever acting as fulcrums, as the whole is hereinafter fully described and shown.

A represents a broken elevation of the inside of the door of a freight-car, and Ba broken elevation of the door-post, as shown at Fig. I, the same parts being shown at Fig. II in a horizontal section. The door is constructed to slide to the right when being opened, and to pass no farther to the left than to bring the end S against the door-post B, as shown at Figs. I and II.

C C represent the face-plate of the lock-frame, and L L the ends, which connect with the inwardly-projecting ribs Y, cast solid to the face-plate C C.

The lock-lever consists of bars W W and an enlarged head part, S F, the latter, as a matter of convenience, being beveled at E to save iron. A hole, *x*, is made through the head, that a seal or other device may be applied to show whether the lock has been tampered with. On the sides of the bars W W, a sufficient distance from the inner end of the lock-lever to form a fulcrum with reference to the spring H, are formed pivots, (shown by dotted lines K K,) which have bearings in the sides Y of the frame.

On the ends L L of the frame are formed spring-seats *a a b*, to support the spring H and prevent it from getting out of place by the action of the end of the lock-lever. I use this form of spring in preference to other forms of springs to hold the lock-lever in position, it being much simpler and cheaper. Other springs, however, may be substituted. Anti-friction roller I is pivoted to the inner end of the lock-lever to insure the easier working of the parts; but it is not necessary for any other purpose. The device is operative without it.

Between the head S F, the bars W W, and the roller I is formed a slot, *n*. This is that the finger may be put through it to lift the lock-lever and change its position. Any other finger-hold on the lock-lever would be an equivalent therefor.

It is proper to state that the lock is adapted to locking other doors than those of cars.

The dotted lines *z*, Fig. II, represent the position of the lock-lever, the same as at Fig. III, and the dotted lines *y* show the position of the lever when one-half turned, and P the position of the spring at that time. R O show how the door is recessed out to give space for the spring to work. *v*, Fig. III, shows the screw-holes through which screws *d*, Fig. I, are put to hold the face-plate of the frame to the door.

Having thus described my invention and the method of operating the same, I claim and desire to secure by Letters Patent—

A car-door lock consisting of a face-plate, C C, formed with inwardly-projecting ribs Y Y, and end pieces, L L, the latter formed with spring-seats *a a b*, in combination with a spring, H, bearing on the seats, and a lock-lever con-

sisting of bars W W and enlarged head S
F and pivots K K, the latter projecting out
from near the inner end of the lock-lever and
entering bearings in the ribs Y Y, to form a
5 pivot-fulcrum for the lock-lever to be turned
on, so as to bring the head S F against the car-
door, and to bring it back out of the way of

the moving door and be held in both positions
by the spring H, substantially as specified and
shown.

JOSEPH HYDE FISHER.

Witnesses:

G. L. CHAPIN,
J. S. HUEY.