

(No Model.)

G. W. PERRY.  
GRAIN CAR DOOR.

No. 509,941.

Patented Dec. 5, 1893.

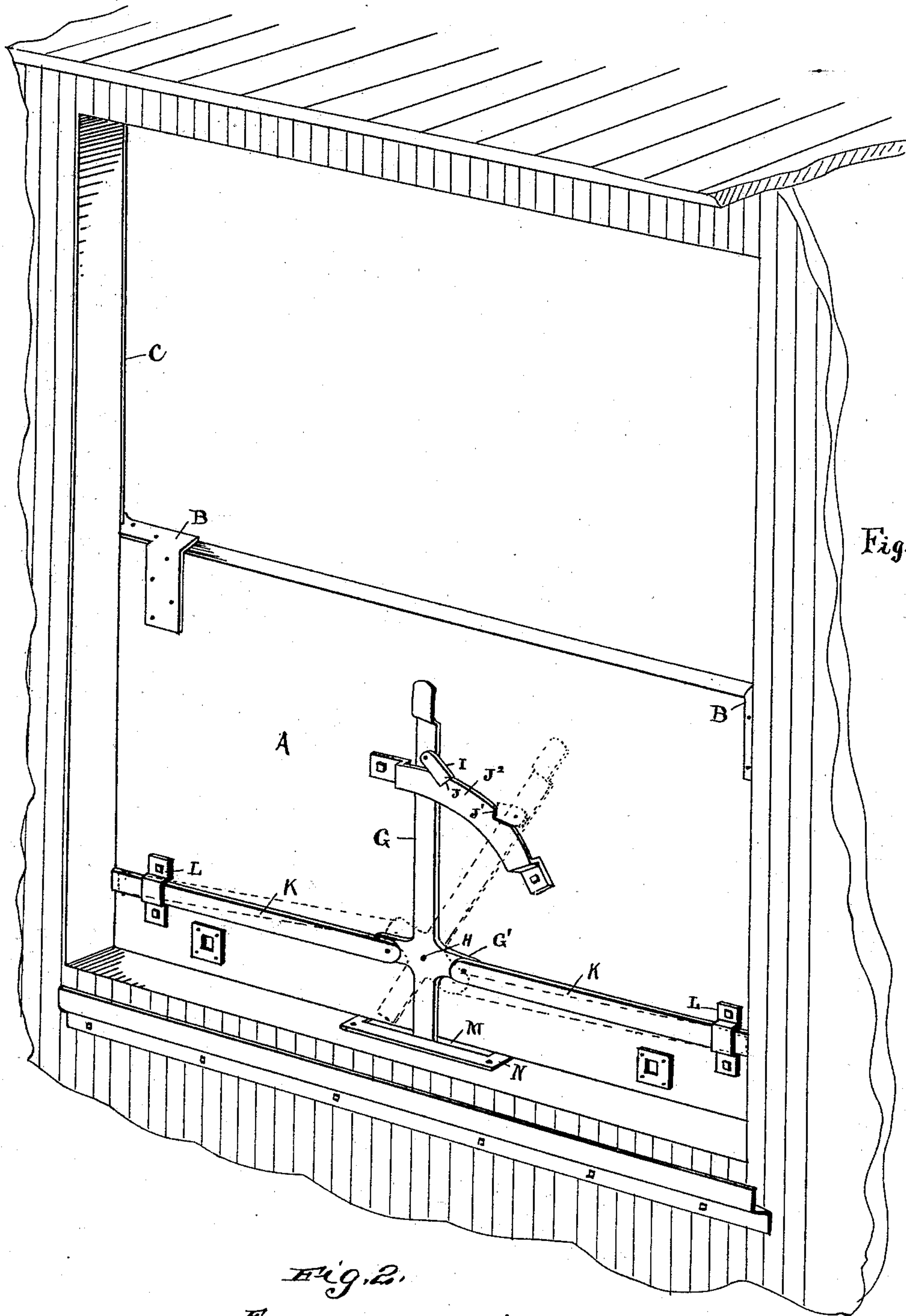
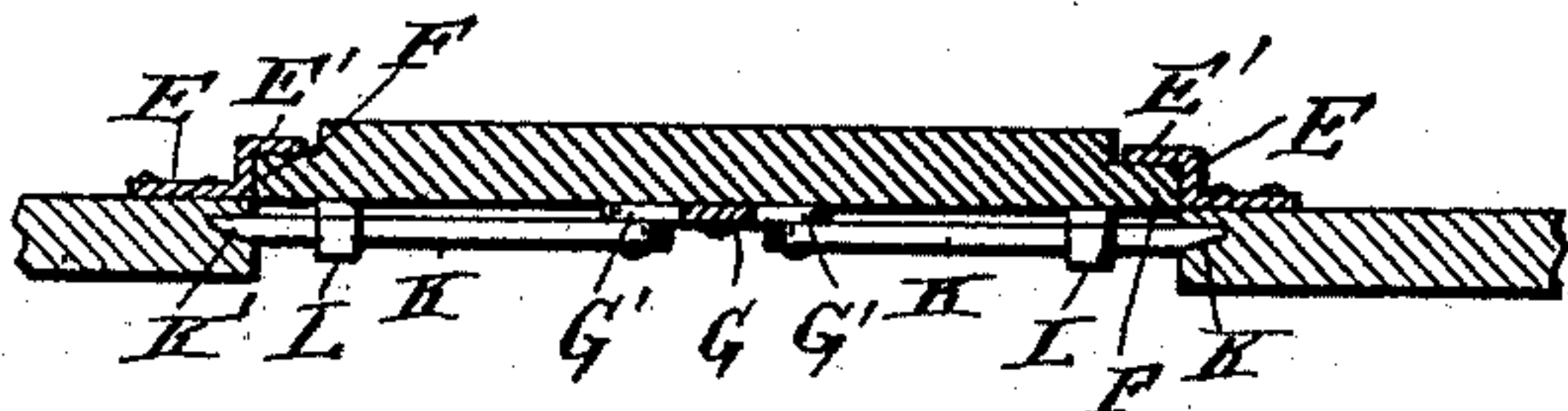


Fig. 2.

Witnesses —

A. Keithley.

B. Johnson



Inventor  
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# UNITED STATES PATENT OFFICE.

GEORGE W. PERRY, OF PEORIA, ILLINOIS.

## GRAIN CAR-DOOR.

SPECIFICATION forming part of Letters Patent No. 509,941, dated December 5, 1893.

Application filed January 28, 1893. Serial No. 460,059. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. PERRY, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Grain Car-Doors; 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.

This invention relates to improvements in locks for grain doors for railway cars.

The object of the invention is to provide a lock for grain doors which shall be easy of operation, simple and durable.

The invention is clearly set out in the annexed drawings in which—

Figure 1 represents perspective view of the outside of the door showing position of the lock. Fig. 2 is a plan view of the door, in part section, showing the lock.

In the following description, letters of reference correspond with letters on the drawings.

The grain door is indicated by the letter A and shown in place within a car in the Fig. 1. The door may be held in place within a car by proper guides for doors of this class.

G represents an upright lever having its fulcrum at a point H on a pivot. A short extension of arm G' made integral with the said lever on either side of said pivot H pivotally supports one end of a locking-bar K which slides horizontally in a bracket L bolted to the door. The free outer end of each of the rods K is adapted to enter indentations in the door jamb and these ends are made wedge shaped so that on entering these indentations the door is forced back against the slides or guides of the door as shown in Fig. 2 in which K' represents the wedge ends of the said rods K. The lever G is of sufficient length below the pivot H to enter a slot M in a keeper N secured to the floor of the car.

A latch I is pivoted to the lever G, which engages with notches J and J' in a sector J<sup>2</sup>, so that in either position the lever may be thrown, the latch will fall into one or the other of the notches and there lock the lever until the latch is released.

The operation of the invention is as follows: When the door is locked as shown in Fig. 1 and it is desired to unlock it, all that is necessary, is to raise and throw the latch I to the opposite side and then throw the lever G to the right until the latch drops into the notch J' as indicated by dotted lines in Fig. 1. This operation draws the bars K K from their indentations in the jamb of the door and raises the lower end of the lever out of the slot M, and as the door is then free, all but the loose hangings by which the door is hung, said door may be opened.

I claim—

In a grain-door, the locking mechanism, comprising the upright pivoted lever G having its fulcrum located at a point below the middle of the length of said lever, and on the door, at a point equi-distant from either end and near the lower edge thereof, said lever having the lower depending portion below the fulcrum, the arms or extensions G' on either side of the fulcrum and made integral with said lever, the horizontal locking arms K K having one end pivotally connected to the said arms G', the brackets L forming guides for said locking bars K, the sector J<sup>2</sup>, and the latch I pivoted to said lever G and all working together in the manner and for the purposes herein set forth and described.

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

GEO. W. PERRY.

Witnesses:

A. KEITHLEY,  
C. JOHNSON.