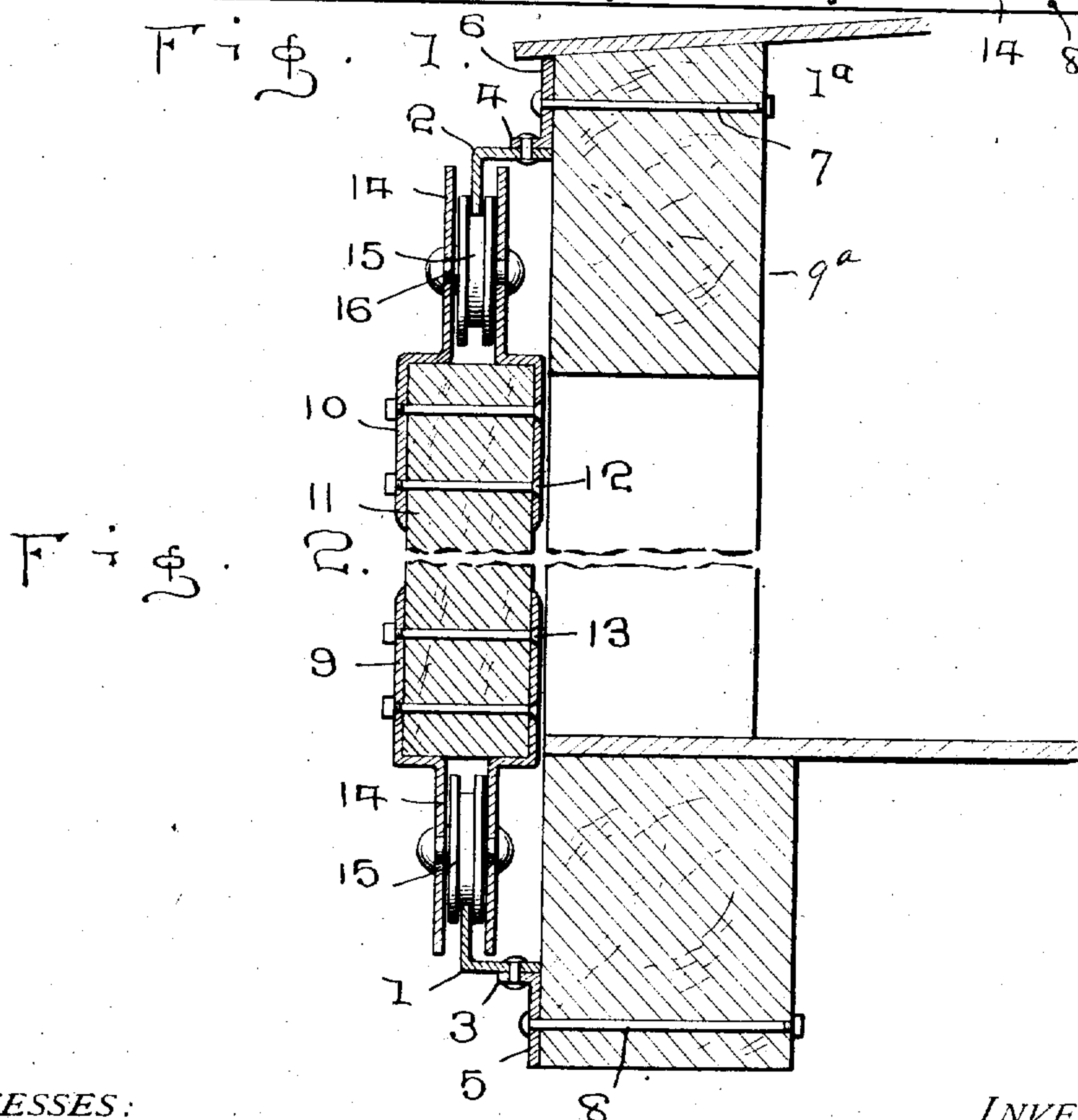
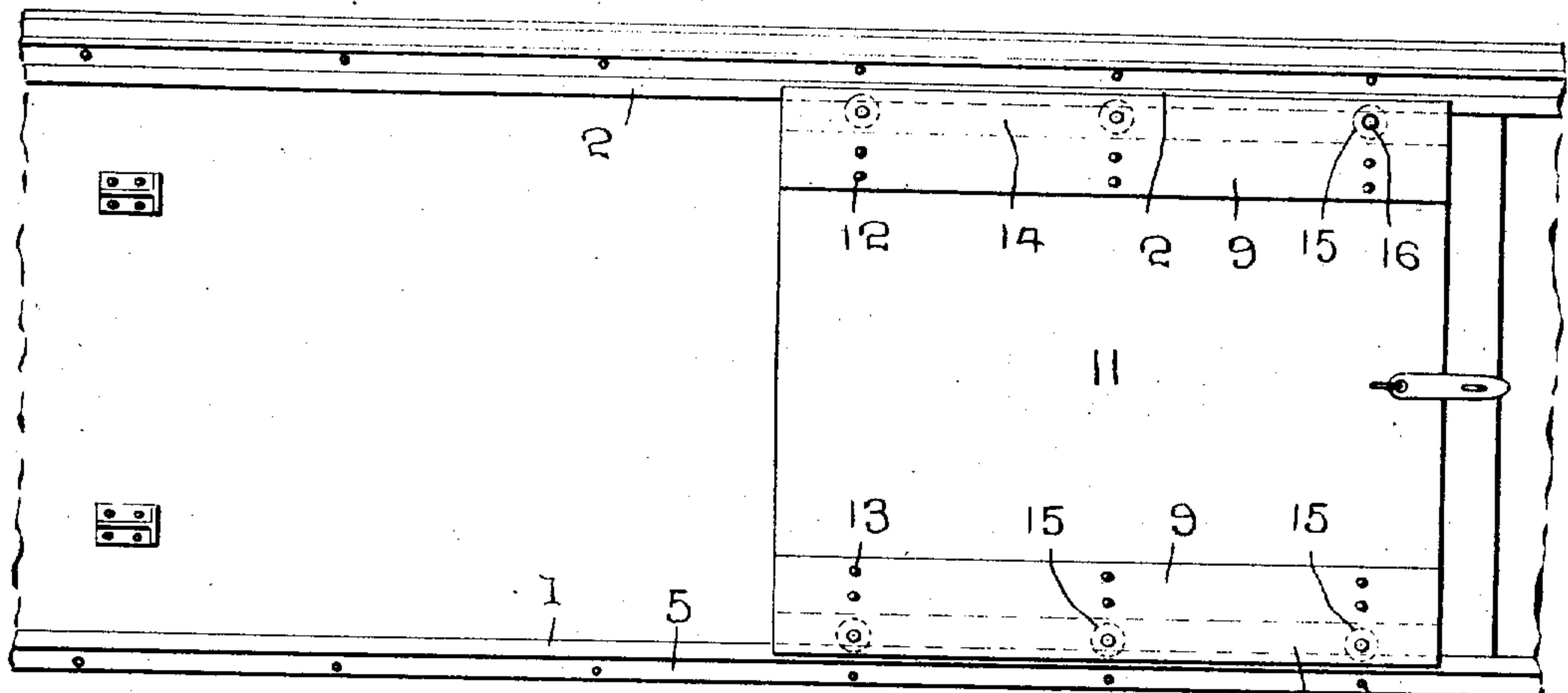


W. R. KILNER.  
 CAR DOOR HANGER.  
 APPLICATION FILED JAN. 19, 1909.

952,120.

Patented Mar. 15, 1910.



WITNESSES:

*Thomas Riley*  
*M. A. Newcomb*

INVENTOR  
 W. R. Kilner  
 BY *W. J. Fitzgerald*

Attorneys

# UNITED STATES PATENT OFFICE.

WILLIAM R. KILNER, OF GREENFIELD, PENNSYLVANIA.

## CAR-DOOR HANGER.

952,120.

Specification of Letters Patent.

Patented Mar. 15, 1910.

Application filed January 19, 1909. Serial No. 473,094.

*To all whom it may concern:*

Be it known that I, WILLIAM R. KILNER, a citizen of the United States, residing at Greenville, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Car-Door Hangers; 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 relates to new and useful improvements in car door hangers, and it has for its object to provide for the ready hanging and supporting of the door in position in a simple and effective manner.

It also has for its object to prevent a binding action of the door, as it is moved from and to its closed and open position, and which has heretofore been a great source of annoyance and requiring considerable effort and outlay of strength to overcome in opening and closing the door.

It also has in view to reduce the friction and impinging action between the parts in contact to the minimum, thus providing for facilitating and expediting the opening and closing operation of the movable part or door.

Other objects and advantages will be hereinafter referred to and the feature of the invention consists in the combination and arrangement of parts, including their construction, substantially as later described and particularly pointed out by the claim.

In the accompanying drawings which are made a part of this application, Figure 1 is a broken side elevation of a car, preferably of the freight type, with my invention applied thereto, and, Fig. 2 is a vertical section of the same, produced through the door and its hangers, disclosing the pulley members and bearings thereof in edge elevation.

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

In carrying out my invention, I employ, preferably, angle iron rails 1 and 2, arranged with their vertical portions in alinement, said rails being riveted or bolted to the horizontal or outstanding portions or flanges 3

and 4 of plate members 5 and 6, respectively, bolted laterally to the car 9<sup>a</sup> at its upper and lower edges, preferably as at 7 and 8.

Upper and lower pairs of brackets 9 and 10 are bolted to the car door 11, at its top and bottom edges, preferably by means of bolts 12 and 13 passing through each of said pairs of said brackets, respectively, said brackets being each of angular outline to receive the corner edges of the door at the top and bottom thereof and having an upstanding or vertical extension 14, at the inner edge of its horizontal portion, each extension thus forming opposed or parallel bearings, between which is hung a pulley 15, the axis 16 thereof being received in openings or apertures in said bearings and suitably headed for retention therein.

The pulleys 15, it will be noted, are adapted to receive the vertical arms or rails proper of the rail members 1 and 2 between their flanges, and upon which said pulleys travel in opening and closing the door, thus providing for facility and ready movement of the door in performing such operation, and whereby any binding or undue impinging action between said rail members and pulleys will be obviated, regardless of wear and length of service of these parts, as is apparent. Also, it will be noted that by employing the rollers or pulleys at the top and bottom of the door, in connection with rails therefor, the door is sensitively balanced in position and thus rendered more ready of manipulation or movement in effecting the opening and closing operation thereof, as is obvious.

I claim:

The combination with a car and its door, of brackets secured to said door and arranged in pairs, said brackets being of general right-angled outline, the horizontal arms thereof being applied to the top and bottom edges of the door, and having vertical extensions at their inner ends, said vertical extensions being spaced apart and arranged in parallel planes, said brackets adapted to be applied to the corner edges of said door, the vertical arms of said brackets adapted to be applied laterally to the sides of said door, wheels mounted between said vertical extensions, right-angled rails having their vertical portions received between said ver-



tical extensions to provide guides and supporting bearings for said wheels, and plates secured to said car and having outstanding flanges at their inner ends adapted to be secured to the horizontal portions of said right-angled rails.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

WILLIAM R. KILNER.

Witnesses:

THOMAS P. MULQUEEN,  
JOHN C. ECKLEY.

Correction in Letters Patent No. 952,120.

It is hereby certified that the residence of the patentee in Letters Patent No. 952,120, granted March 15, 1910, upon the application of William R. Kilner, for an improvement in "Car-Door Hangers," in the grant and the heading to the printed specification, was erroneously written and printed "Greenfield, Pennsylvania," whereas it should have been written and printed *Greenville, Pennsylvania*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 19th day of April, A. D., 1910.

[SEAL.]

C. C. BILLINGS,

*Acting Commissioner of Patents.*

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