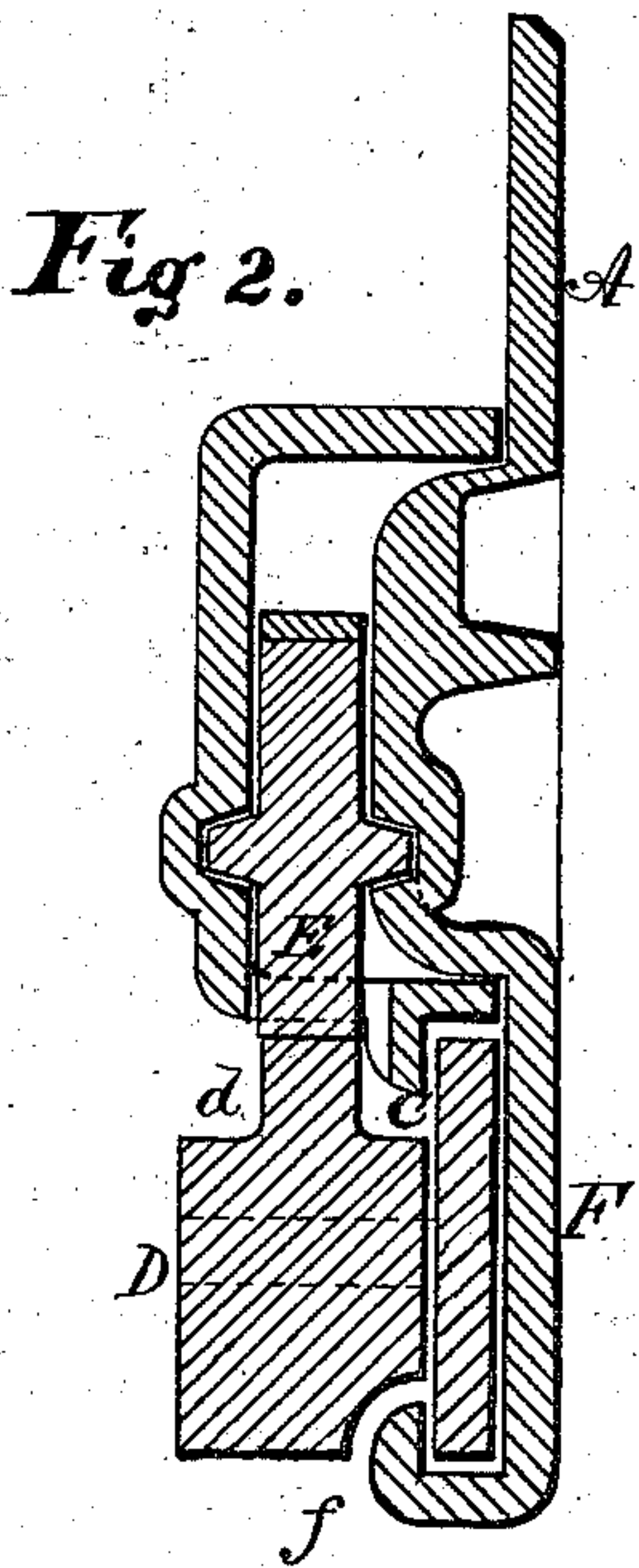
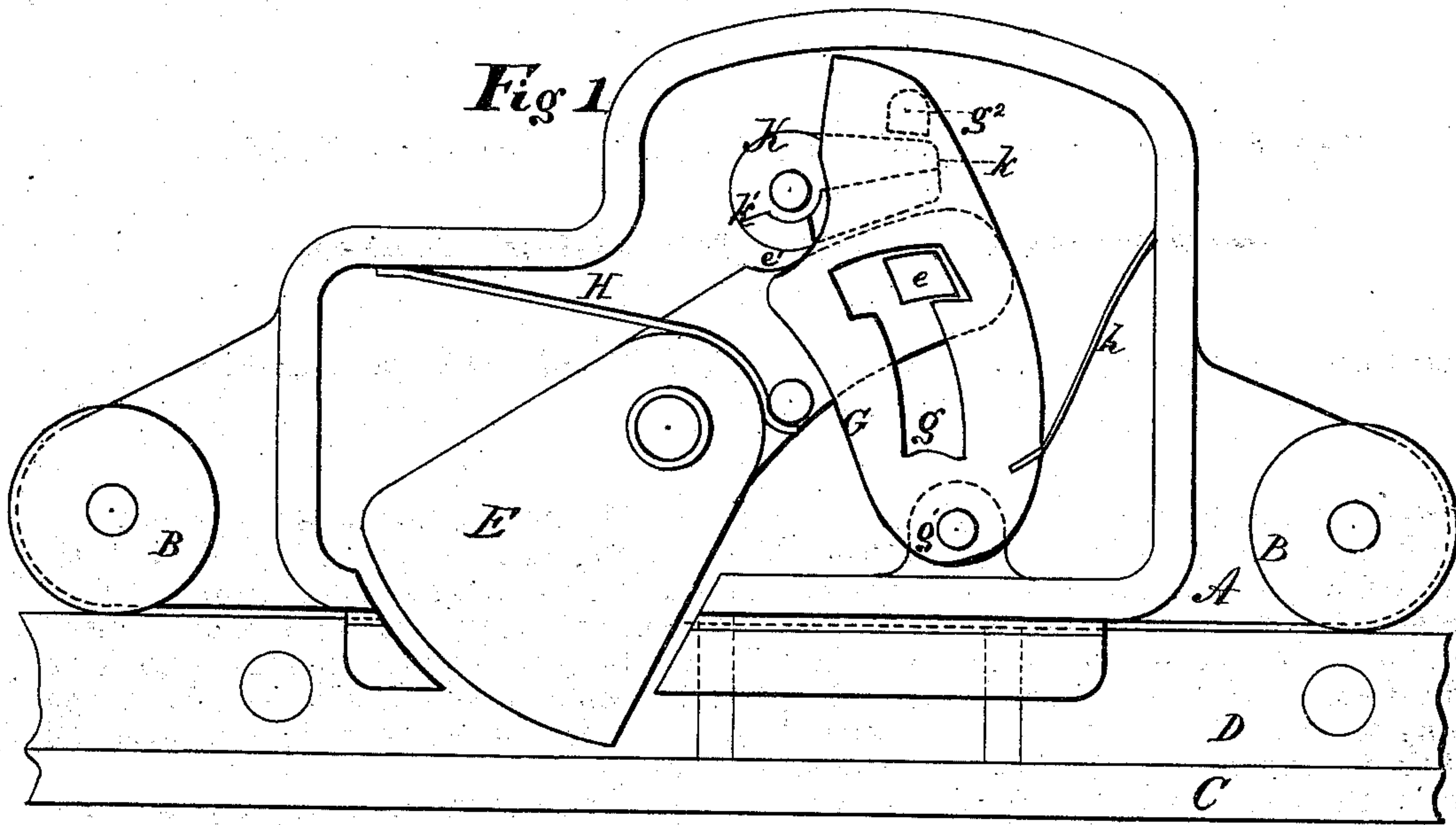


## Locks for Sliding-Doors.

No. 154,462.

Patented Aug. 25, 1874.



Witnesses  
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 J. B. Connolly

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# UNITED STATES PATENT OFFICE.

DAVIS H. DOTTERER, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN LOCKS FOR SLIDING DOORS.

Specification forming part of Letters Patent No. 154,462, dated August 25, 1874; application filed May 13, 1874.

*To all whom it may concern:*

Be it known that I, DAVIS H. DOTTERER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improved Lock for Freight-Cars; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a front elevation with part of lock removed. Fig. 2 is a vertical transverse section.

This invention has reference to an improved method and means for locking or making fast in a partially-opened position the sliding doors of freight-cars and other similar structures. The invention consists in the novel construction of a combined lock and door-carriage adapted to lock upon the filling of a freight-car, and in the combination with the lock-filling and rail of a depending hook so constructed and arranged as to embrace the filling, all as hereinafter fully described, and set forth in the claims.

Referring to the accompanying drawing, A represents the wheeled door-carriage of a freight-car. B B are the rollers moving upon the rail C. D represents the filling usually interposed between the rail C and the sill of the car. This filling I form with a ridge, *d*, having notches or openings, into which the lower end of the latch E drops to lock the door when closed, or to fasten it in a partially-open position for purposes of ventilation. F shows an extension of the front plate of the lock, curved to form a hook, *f*, which embraces the rail C, preventing the door from being lifted therefrom. The latch E is provided with a stud, *e*, which moves in the T-slot *g* in the tumblers G, pivoted at *g*<sup>1</sup>, and having a bearing on the stud *g*<sup>2</sup>. H is a spring for forcing down the latch E, and *h* are springs for

forcing forward the tumblers G. K is a key-hub, having an arm, *k*, that moves upon the latch E, its end fitting in the corner *e'* of the latch when the lower end of the latch is raised, Fig. 1 in the drawings showing the latch down. *k'* is a shoulder or section of an annular flange, against which the ward of the key presses in unlocking.

The advantages of the foregoing construction are, briefly, as follows: By locking upon the filling instead of upon the rail the notching of the latter—upon which the rollers move, and which sustains the weight of the door—is avoided; besides, as the filling is behind the rail, it is not so ready of access and not so liable to be tampered with as the latter is. By the peculiar construction and combination of the latch, tumblers, and key-hub, the former may be securely fastened when raised as well as when lowered, and while it can only be opened or raised by a key adapted to the peculiar tumblers employed, it may be lowered or locked by a blank key of the requisite dimensions. The importance of this is, that a key which will lock the door of the car may be safely entrusted to the persons engaged in loading it, while quite a different key must be used to open it, this latter remaining in the custody of a trusted party alone.

What I claim is—

1. A combined lock and door-carriage, constructed and adapted to lock upon the filling of a freight-car.

2. The combination of the lock A, having a latch, E, engaging with the filling D, and the rail B, embraced by the hook *f*, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of May, 1874.

DAVIS H. DOTTERER.

Witnesses:

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