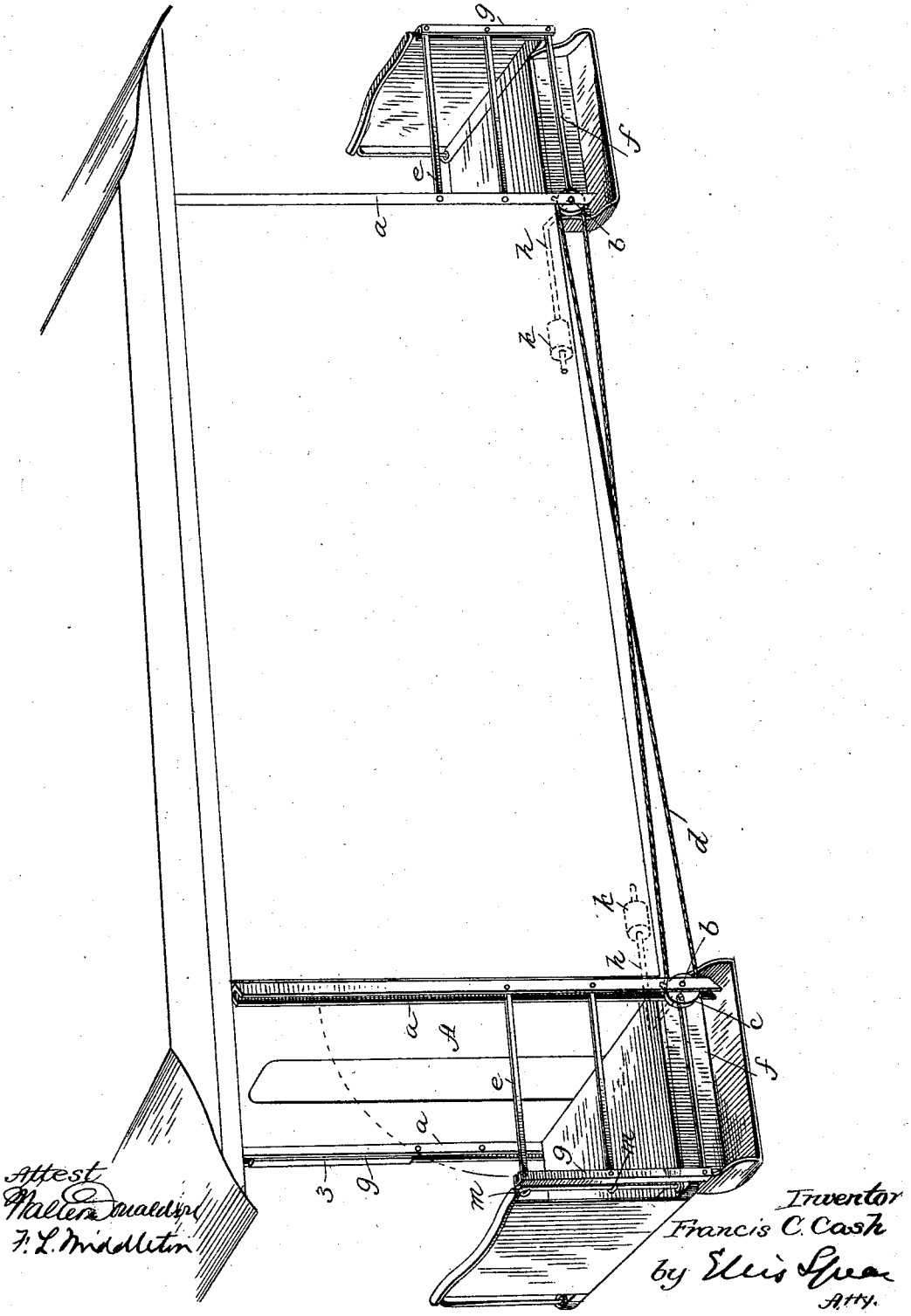
(No Model.)

F. C. CASH.

RAILWAY CAR GATE.

No. 456,017. Patented July 14, 1891.



UNITED STATES PATENT OFFICE.

FRANCIS C. CASH, OF LYNN, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO JOHN C. LEWIS AND CHARLES B. LORD, BOTH OF SAME PLACE.

RAILWAY-CAR GATE.

SPECIFICATION forming part of Letters Patent No. 456,017, dated July 14, 1891.

Application filed March 23, 1891. Serial No. 386,080. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS C. CASH, a citizen of the United States of America, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Railway-Gates, of which the following is a specification.

My invention is intended for the platforms of railway-cars, either street-cars or general passenger-cars on steam-railways. It is an improvement upon the class of gates heretofore known for this purpose, and my object is to provide a simple, inexpensive, easily operated, durable, and safe gate, capable of operation at either end of the car, but limited in its operation to each car, and adapted to obstruct the exit of the passengers until the arrival of the proper time for them to leave the car.

The invention consists in details of construction of the gates and in their arrangement in pairs, including a connection of the pairs, all as hereinafter described.

My said invention is illustrated in the accompanying drawing, which is a perspective view of the same in place.

In this drawing the body of the car is shown at A, and upon each end, just outside of the steps, is fixed in vertical position a channel-bar *a*. At the foot of this channel-bar in suitable bearings is located a short shaft *b*. The channel-bar is fixed to the end of the car. On the outer end of the shaft is a pulley *c*. These parts, as described, are in duplicate, one at each end of the car, and the pulleys are connected by a cord *d*, running over the grooved peripheries of the pulleys and crossed to give the same simultaneous movement to both gates. The gate consists of pivoted bars *e f*. The upper bars *e* are pivoted at one end in the bottom of the groove of the channel-bars *a*. The lower bar *f* is fixed at one end to the pulley *c*. The outer ends of these bars *e* and *f* are fixed in the bottom of channel-bars *g*, which form the outer post of the gate-frames. The bars *e f* are fitted to lie in the grooves of the channel-bars when the gate is closed, so that it forms when closed simply a compact case concealing the cross-bars and in appearance resembling a post or case affixed to the end of the car. On the inner end of the pulley *c* or to its shaft is fixed an arm *h*, on the outer end of which is a weight *k*. The arm is bent inwardly and the weight is arranged to hold the gates in a folded position, as shown at 3. When it is desired to close the passage to the car, the brakeman or other attendant pulls down the gate and fastens the bar *g* by a suitable hook or lock *m* to the guard-frame on the end of the platform. The same action draws down the gate at the other end simultaneously.

Instead of the weight I may use a coiled spring, which may be located by the side of the pulley *c*, one end being attached to a pulley and the other to some fixed part of the car-body.

I claim as my invention—

1. A safety-gate for cars, consisting of a channel-bar *a*, fixed to the car, bars pivoted in the channel, and a channel-bar *g*, pivoted to the outer end of the bars connecting said channel-bars, the said connecting-bars being arranged to fit into the grooves of the channel-bars, and the gate, being also combined with means for holding it in a closed position, substantially as described.

2. In combination with the gates having channel-bars *a* and *g* and the bars *e* and *f*, the pulleys *c*, and cord *d*, connecting said pulleys, substantially as described.

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

FRANCIS C. CASH.

Witnesses:

C. H. WELCH,

JOHN MCCUE.