

G. W. BIRMINGHAM.
 Device for Regulating Car-Ventilators.
 No. 165,469. Patented July 13, 1875.

Fig: 1.

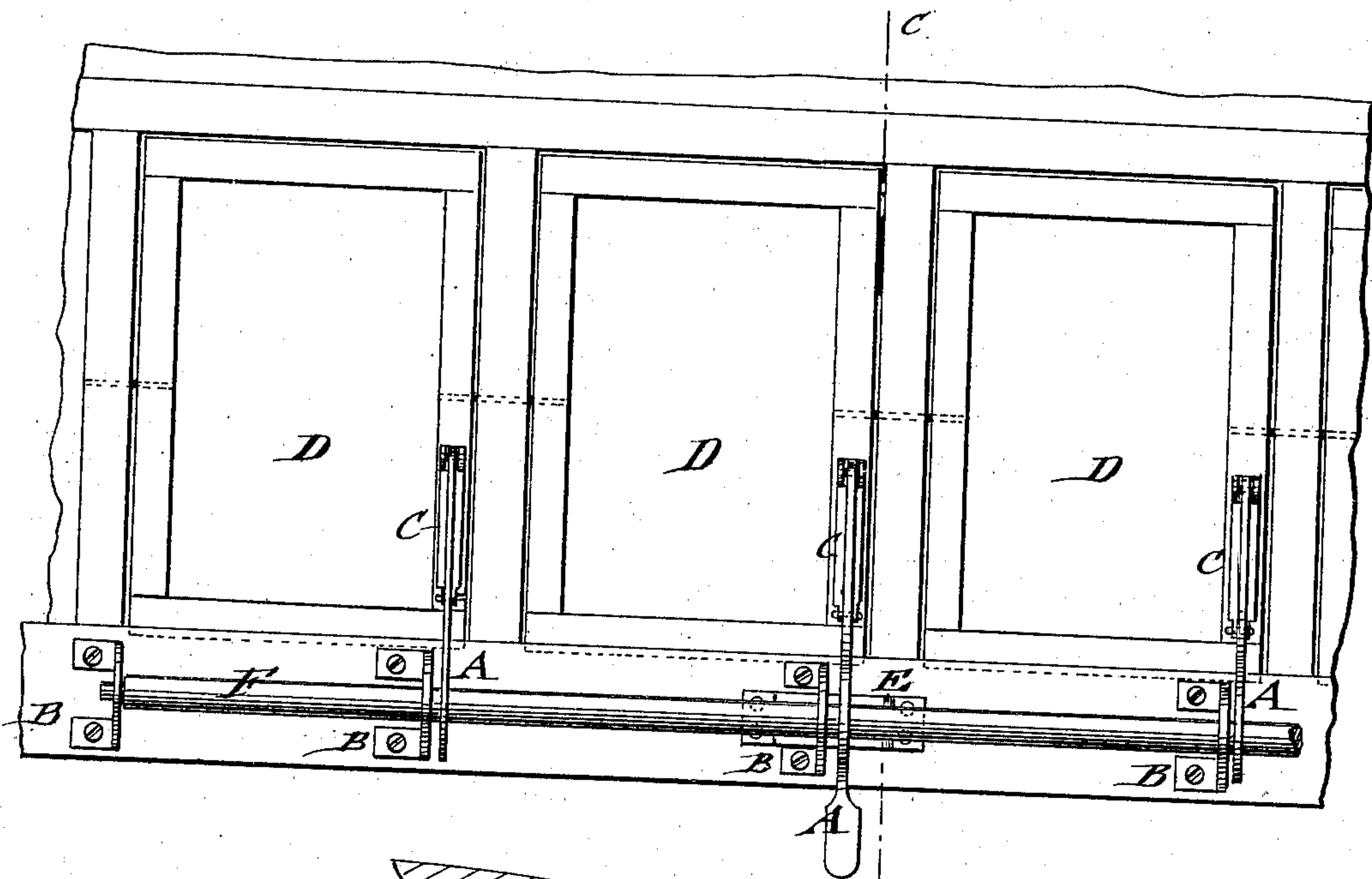
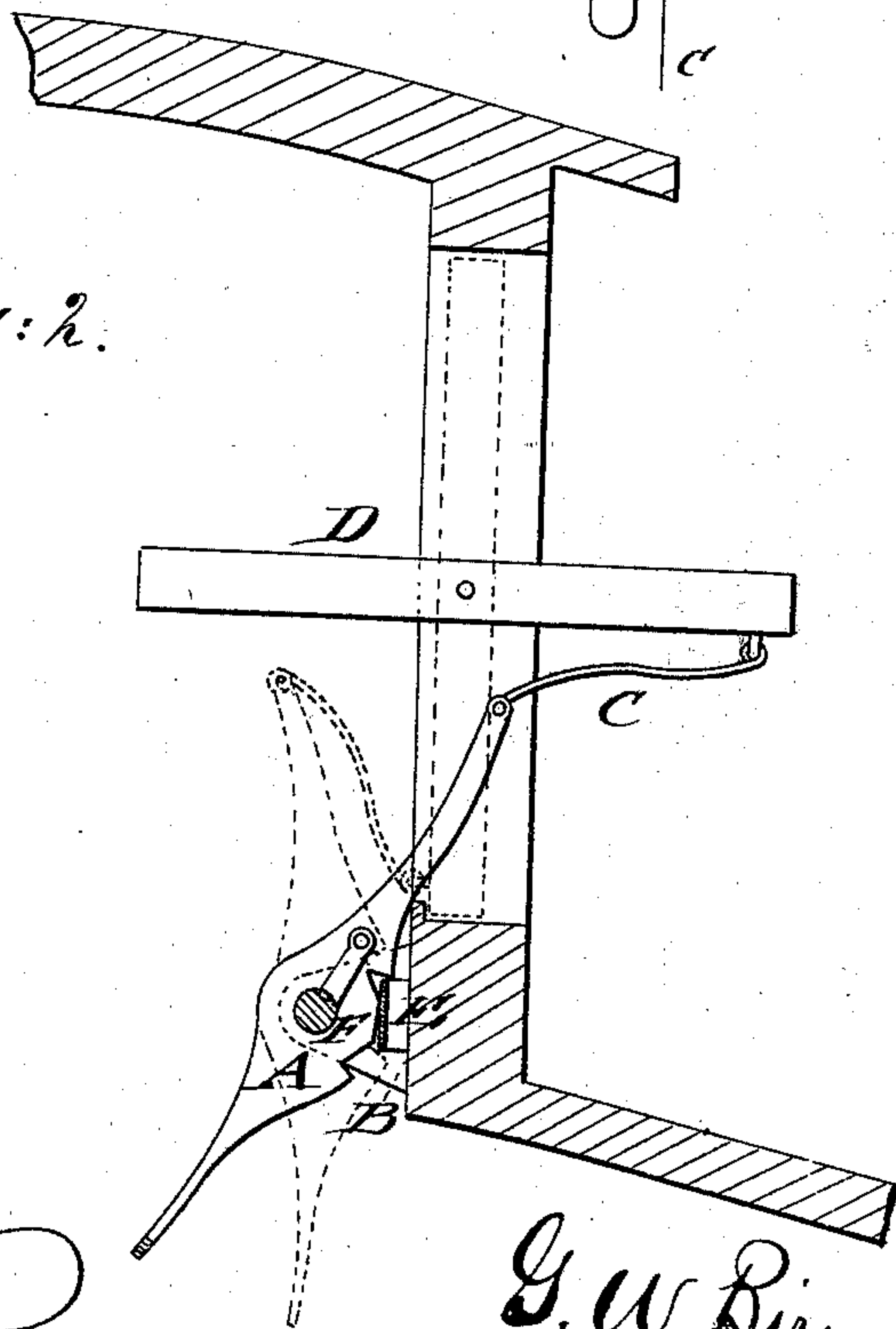


Fig: 2.



WITNESSES:

Chas. Nida.
A. J. Perry

INVENTOR:

G. W. Birmingham
 BY *Mumf*
 ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. BIRMINGHAM, OF NEW YORK, N. Y.

IMPROVEMENT IN DEVICES FOR REGULATING CAR-VENTILATORS.

Specification forming part of Letters Patent No. **165,469**, dated July 13, 1875; application filed June 12, 1875.

To all whom it may concern :

Be it known that I, GEORGE W. BIRMINGHAM, of the city, county, and State of New York, have invented a new and Improved Device for Regulating Car-Ventilators, of which the following is the specification :

In the accompanying drawing, Figure 1 represents a front elevation of car-ventilators with my improved regulating device attached, and Fig. 2 is a vertical transverse section of the same on line *c c*, Fig. 1, showing regulating device from the side.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described in connection with drawing, and then pointed out in the claim.

In the drawing, A represents the operating lever of my improved device for regulating car and other ventilators, which lever is fulcrumed to a supporting bearing or bracket, B, and operated by a thumb-handle at one end. The opposite arm is jointed by a pivoted link, C, to the ventilator D, that swings in the usual manner on side pivots in the frame of the car or other place. The central part of lever A bears against a brake-spring, E, attached to the ventilator-frame, and is held by the friction of the same firmly in any position, retaining thereby also the ventilator, as indi-

cated in Fig. 2. Projecting shoulders of the central part of lever define the extreme open or closed position of the ventilator. The pivot or shaft F, to which the regulating-lever is attached, may be extended along a number of ventilators when they are arranged in proximity to each other, and provided with as many levers A as there are ventilators. The levers are keyed to the shaft, linked to the ventilators, and jointly governed by the spring-acted lever, so that the whole set of ventilators may be opened, closed, or set to any suitable angle by one operation only. All rattling, shaking, and swinging of the ventilators by the motion of the car are avoided, and a neat and simple regulating attachment for the same provided.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of lever A pivoted to bracket, and having projecting shoulders, the pivoted link C, and the brake-spring E, all arranged on the inside of car, as and for the purpose specified.

GEORGE W. BIRMINGHAM.

Witnesses :

PAUL GOEPEL,

G. W. BIRMINGHAM, Jr.