2 Sheets--Sheet 1.

C. PAGE.

Adjustable Car Window Stops.

No. 141,165. Patented July 22, 1873.

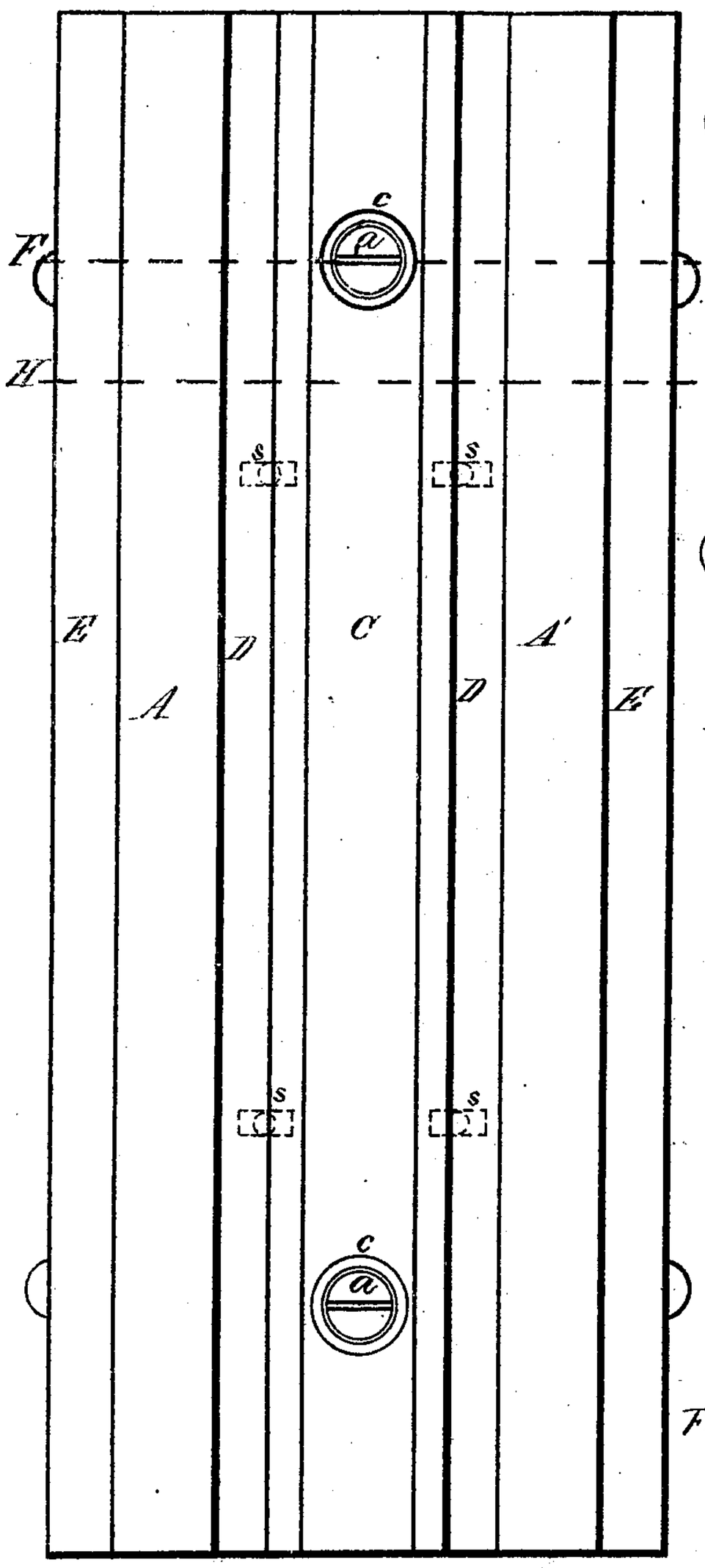

Fig 1

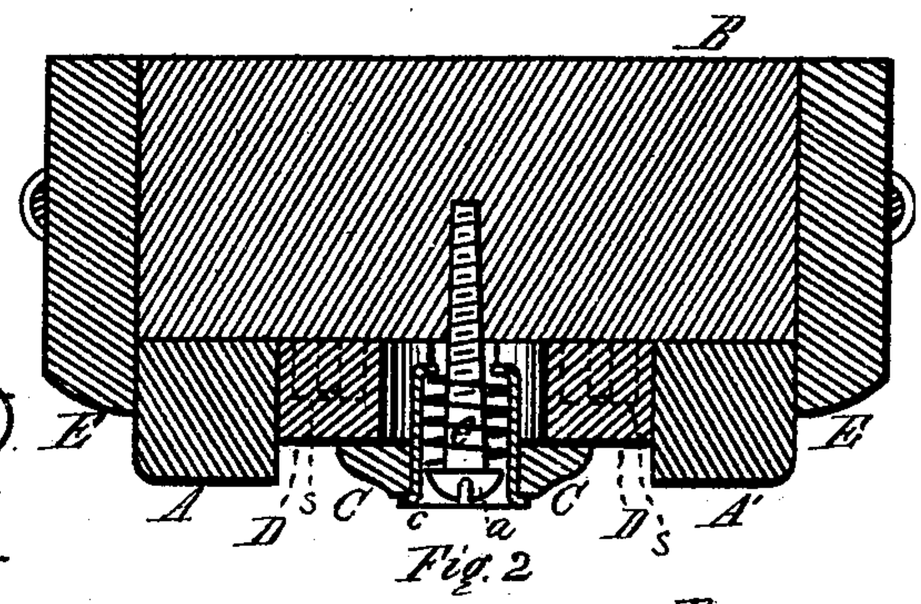

Fig. 2

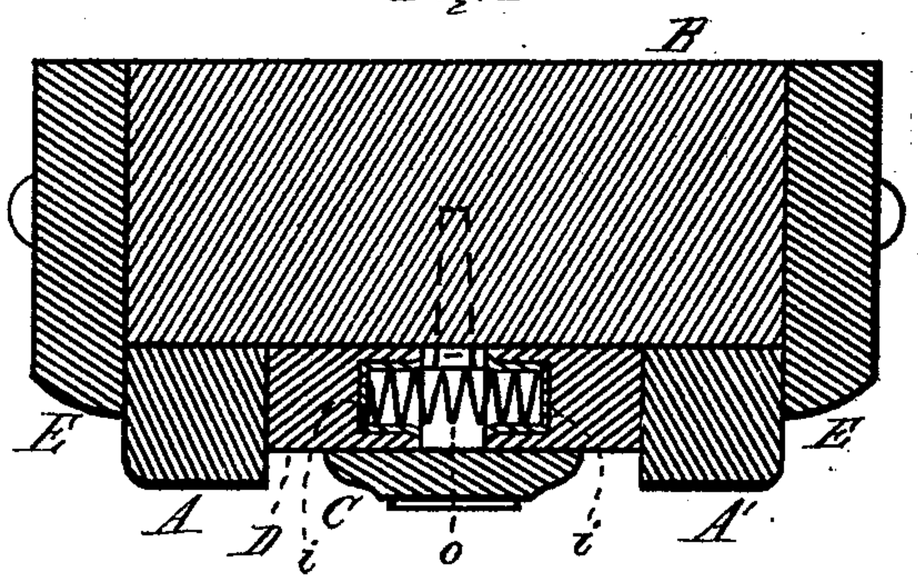

Fig. 3

Witnesses
C. E. Buckland.
John P. Wall

Inventor,
Charles Page.
By T. A. Curtis.
his atty.

2 Sheets--Sheet 2.

C. PAGE.

Adjustable Car Window Stops.

No. 141,165. Patented July 22, 1873.

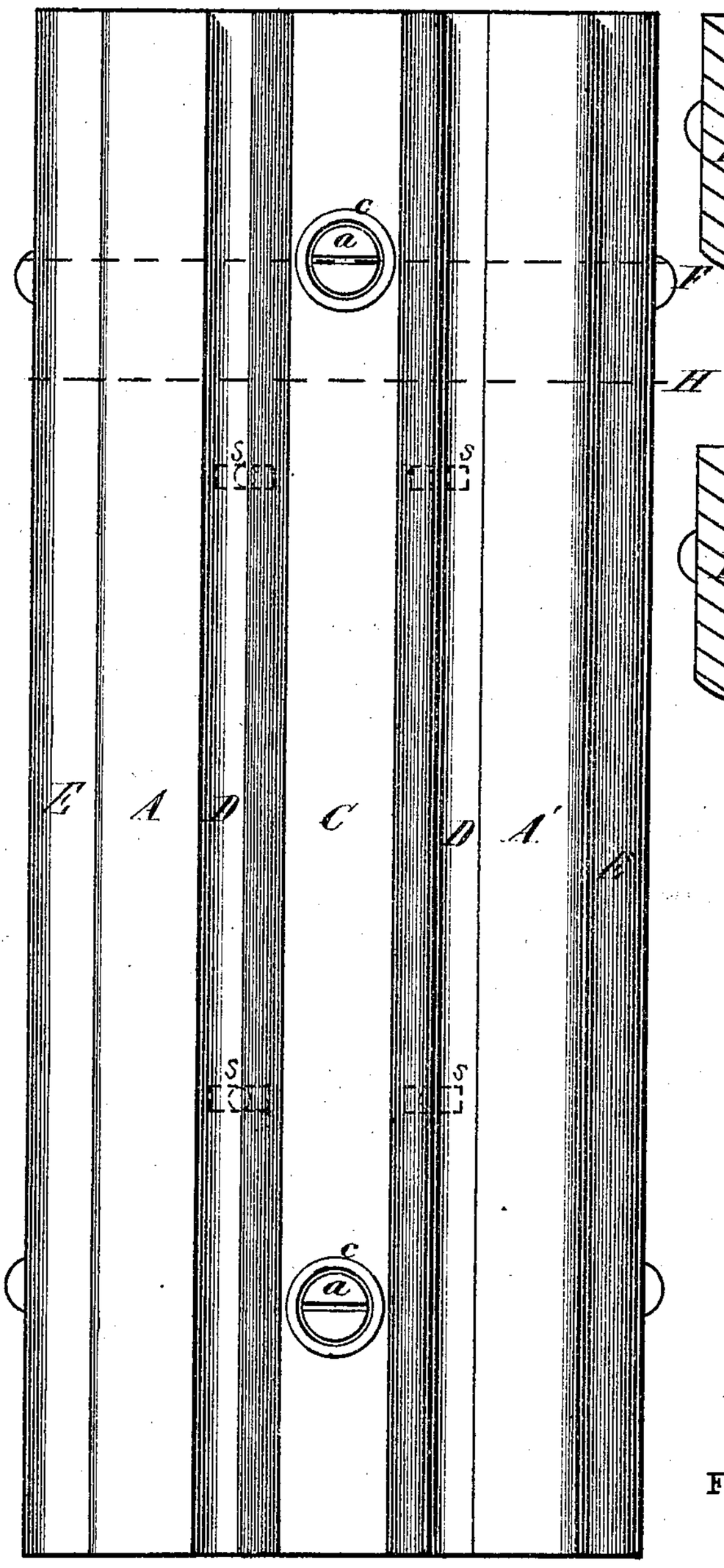

FIG. 1

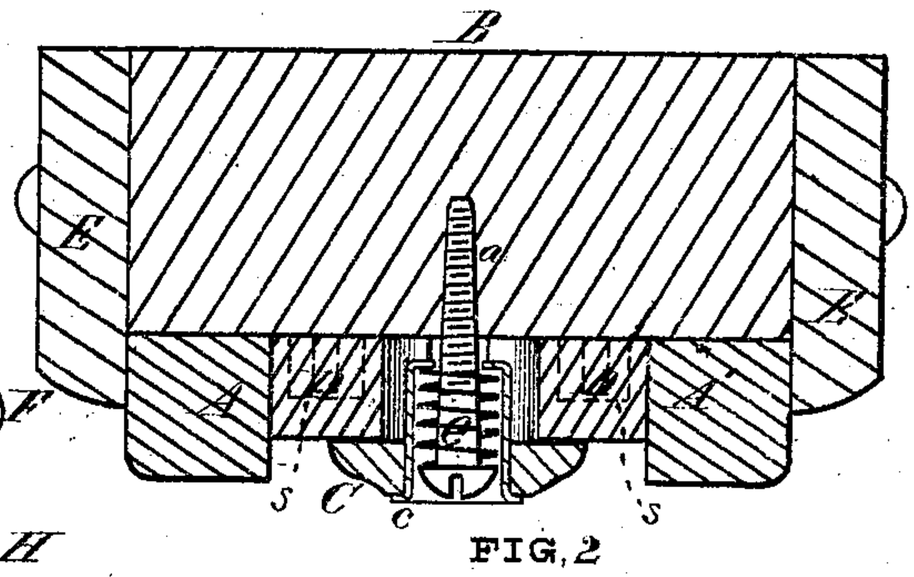

FIG. 2

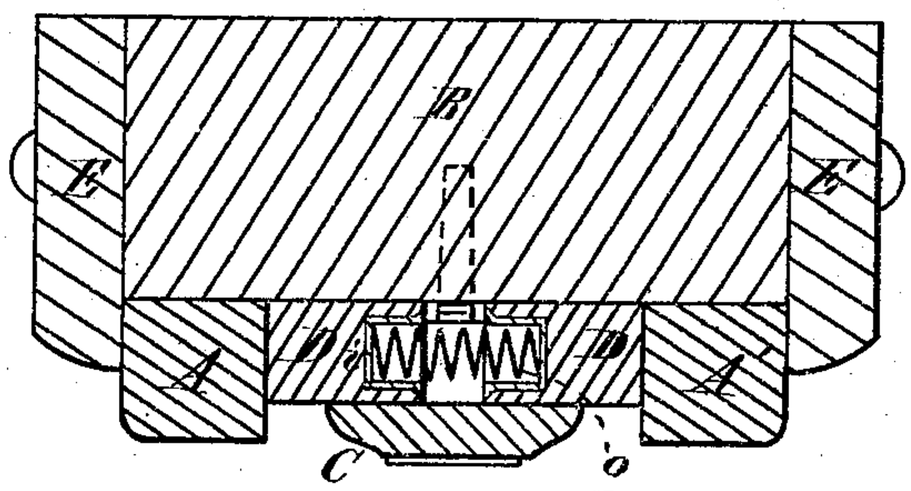

FIG. 3

Witnesses,
C. E. Howard
M. L. Boynton

Inventor,
Charles Page.
By F. A. Curtis. his Atty.

UNITED STATES PATENT OFFICE.

CHARLES PAGE, OF MERIDEN, CONNECTICUT.

IMPROVEMENT IN ADJUSTABLE CAR-WINDOW STOPS.

Specification forming part of Letters Patent No. **141,165**, dated July 22, 1873; application filed May 20, 1872.

To all whom it may concern:

Be it known that I, CHARLES PAGE, of Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Adjustable Car-Window Stop; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a front view of my invention as applied to a car-window. Fig. 2 is a horizontal section through line F of Fig. 1, and Fig. 3 is a horizontal section through line H of Fig. 1.

My invention relates to the construction of a car-window, whereby the stops which separate the sash and the blind are made adjustable, and automatically press against the same with any desired degree of force, and the joints are made tight to exclude the dust and cold air, and whereby friction is created, so that both the sash and the blind may be retained thereby at any desired elevation; and it consists of a cap arranged with the stops, and with springs and fastenings, upon each side the window, as will be fully hereinafter explained.

That others skilled in the art may be able to make and use my invention, I will proceed to describe its construction and operation.

In the drawings, B represents the frame of a car-window, to which are secured the stops E, one on each side; and placed against the front face of the frame are the two strips D, each of which has a sufficient number of recesses or cavities made therein, each recess in one strip being opposite a recess in the other strip; and a spiral spring, *o*, is placed in each set of recesses, one end of the spring resting in one recess, and the other end in the opposite recess, these recesses operating merely to keep the springs in place. A cap, C, of sufficient width to cover the space between the strips D, and also to cover a portion of each strip, is secured to the frame as follows: A hole is made through the cap, into which is placed a cup, *c*, having a hole through the bottom of sufficient diameter that the thread of the screw *a* may pass through freely; and a spring, *e*, is placed upon the screw *a*, and the screw is then inserted into the cup *c*, the threaded end passing through the hole in the bottom, and is turned into the frame B, as shown in Fig. 2, one end of the spring bearing against the head of the screw *a*, and the other end against the bottom of the cup *c*. As the cup has a rim upon the outer end, which fits against the face of the cap C, the cap is thus held firmly against the strips D, the cap having a sufficient number of cups *c* and screws *a* for that purpose, two or three being, perhaps, quite sufficient in each side of an ordinary car-window, although more may be used, if desirable, the number required being dependent on the size of the window, the weight of the sash, and the amount of pressure required. As shown in the drawings, small metallic cups, *i*, are inserted in the strips D to receive the ends of the springs *o*, as the strips might, perhaps, operate with somewhat more freedom, and yet they might operate sufficiently well if the springs rested in holes made in the wood with no cups inserted.

Instead of having cavities or recesses to receive the ends of the springs, small pins might project from the edges of the strips, one opposite the other, into each end of the spring, the spring resting upon these pins as supports, as the whole object of the cups or cavities is to keep the springs in their proper position.

To further assist in keeping the strips D in their proper position, holes or slots are made in the back side of said strips, as shown in dotted lines at *s*, into which project pins which are secured in the frame B.

The operation of my invention is as follows: All the parts being in place, the strips D are forced apart by the action of the springs *o* and against the pieces A and A′, which represent the sides of the window sash and blind, and forcing those also against the stops E. The screws *a* are turned into the frame B sufficiently hard to keep the strips D up in place against said frame, and the side movement of the strips D may be regulated, in a measure, so as to get more or less pressure against the pieces A and A′, by turning in said screws *a* more or less, as the case may be.

As thus confined between the stops E and the strips D, the sash and blind cannot rattle

or jar by the movement of the car; and, if raised, the window A or blind A′ will remain at the point to which it is raised by the pressure of the strip D against it; and, if the woodwork of the window or its trimmings should become swollen by damp weather or other cause, the strip D will adjust itself automatically against the window-sash A and blind A′, as this arrangement is calculated to operate against both pieces, A and A′, at one and the same time, so that both the window-sash and the blind are operated upon together and alike, the tightening of one also tightening the other. There will, then, be no necessity for any sash locks or bolts upon either the window-sash or the blind, a small knob upon each being quite sufficient.

It is evident that, instead of the spiral springs, as shown in Fig. 2, a bent spring may be used; or pieces of rubber might be used, as it is not essential what the particular form or kind of spring is used to force the two strips D apart, the object of the invention being to force both strips D apart—one against the window A, and the other against the blind A′.

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

The elastic or movable cap C, in combination with the elastic or movable strips D, the whole forming a self-adjusting or automatic car-window stop device, substantially as described.

CHARLES PAGE.

Witnesses:
JOHN Q. THAYER,
ORVILLE H. PLATT.