

(No Model.)

H. C. HART & T. A. BISSELL.  
Transom Ventilator.

No. 237,973.

Patented Feb. 22, 1881.

Fig. 1.

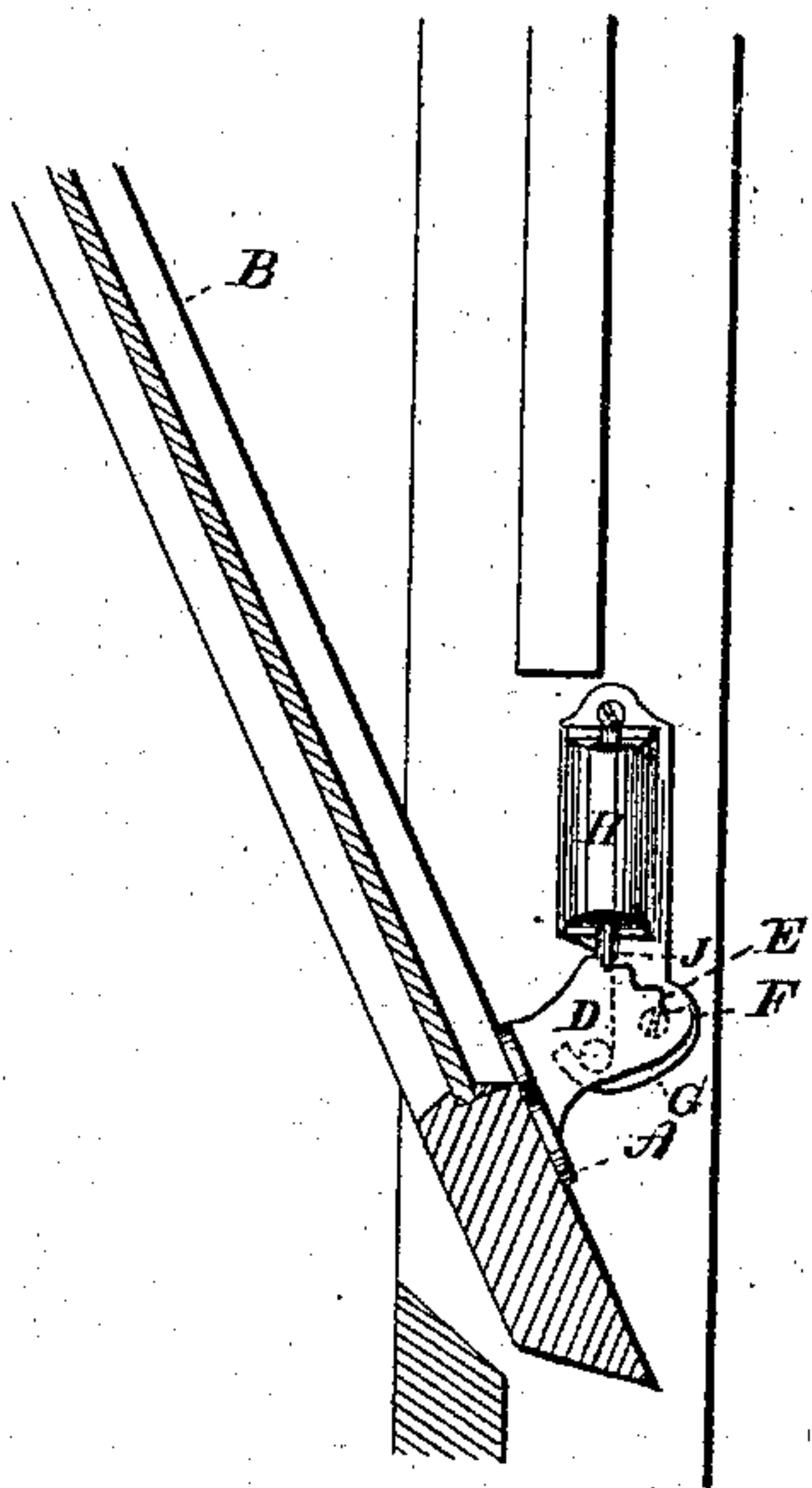


Fig. 3.

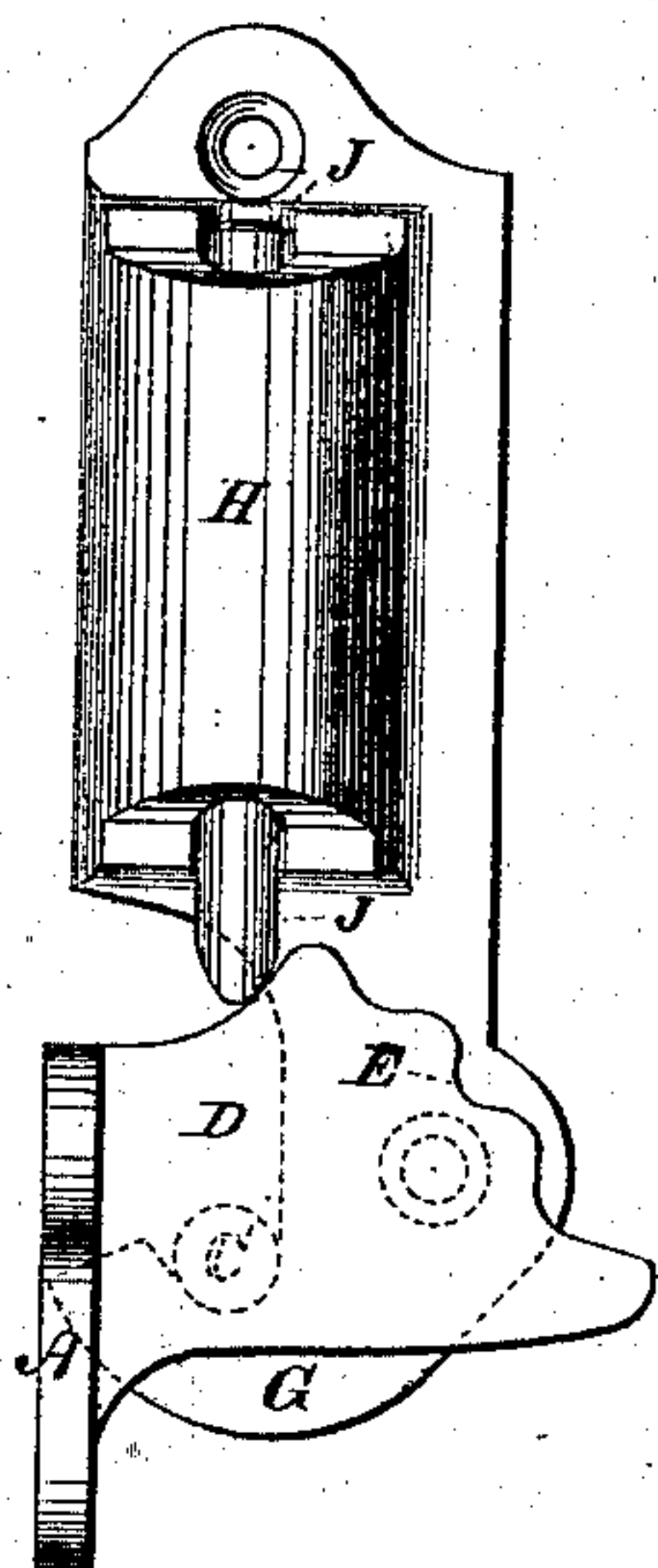


Fig. 4.

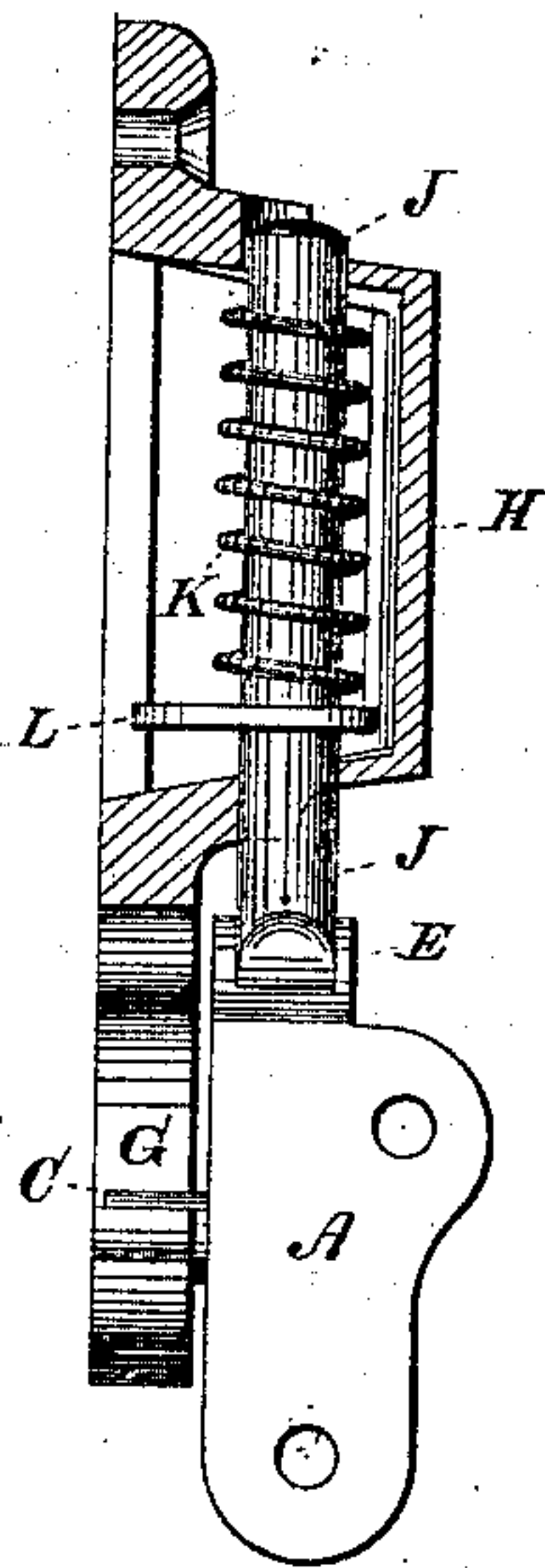


Fig. 2.

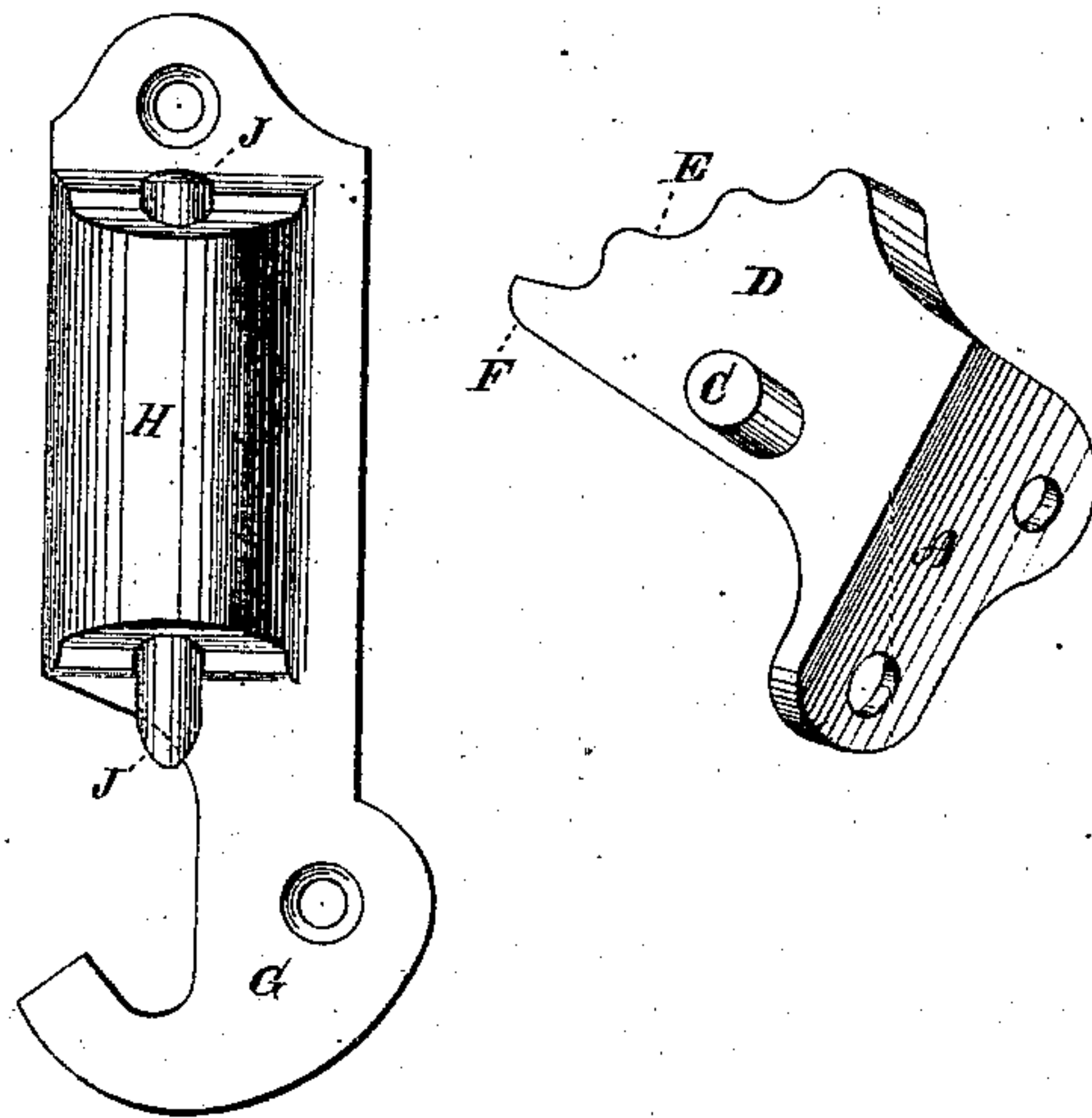
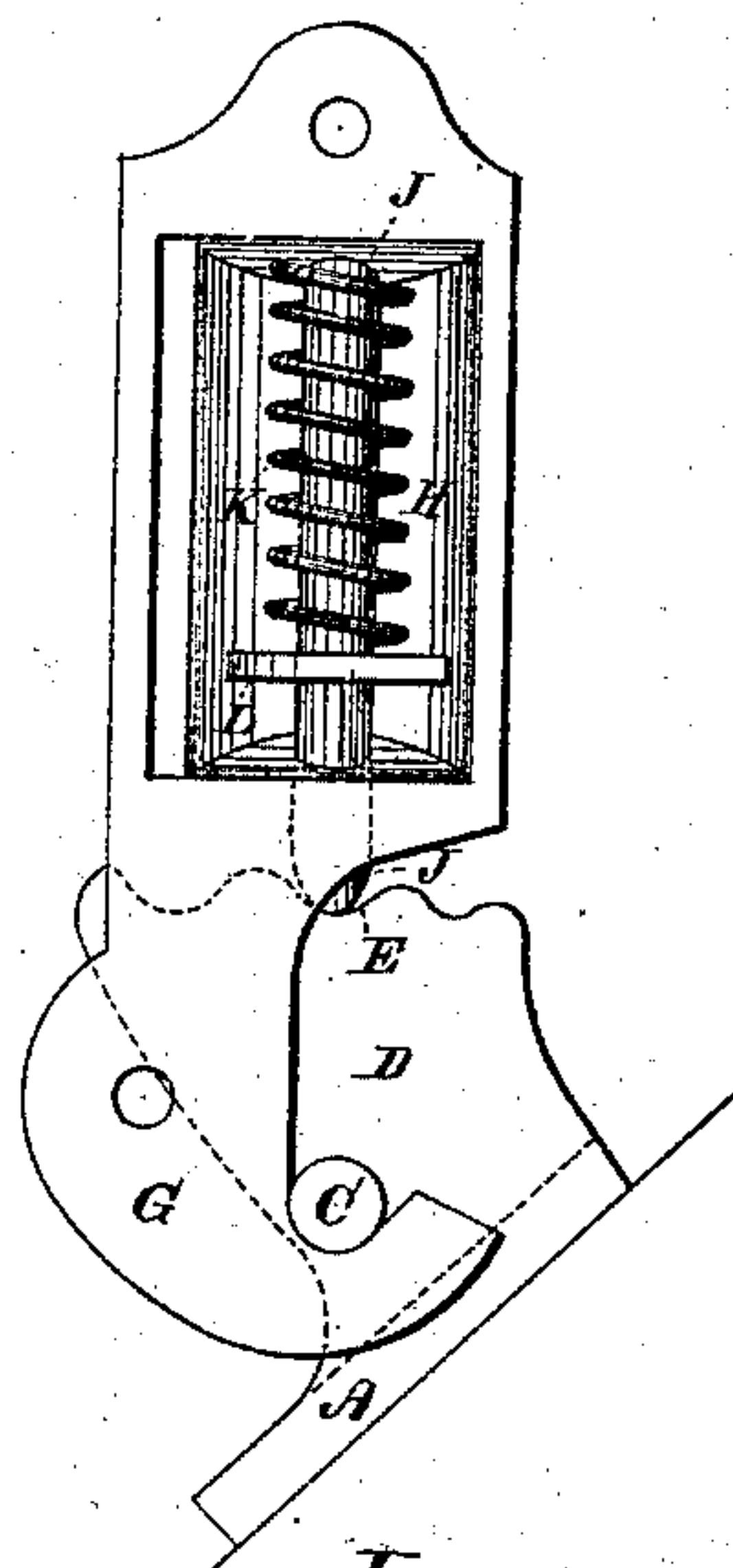


Fig. 5.



Attest:

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# UNITED STATES PATENT OFFICE.

HENRY C. HART AND THOMAS A. BISSELL, OF DETROIT, MICHIGAN.

## TRANSOM-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 237,973, dated February 22, 1881.

Application filed November 9, 1880. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY C. HART and THOMAS A. BISSELL, citizens of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Ventilators; and we 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates more particularly to improvements in ventilators of railroad-cars in which a transom is pivoted in the center, or elsewhere, of the side rail of the sash; and the object of our invention is to provide an automatically-adjusting pivotal device which shall serve the double purpose of a pivot and catch to retain the transom in any one of several positions; and to this end our invention consists in providing the pivot with a serrated arm, and the pivot-seat with a spring-bolt case and spring-bolt for engaging the serrated arm, and in the special construction of parts, as will be hereinafter more fully described.

In the accompanying drawings, which form a part of this specification, Figure 1 shows a car-frame and ventilator-sash with our invention in use. Fig. 2 is a view showing the full size of our device with the pivot detached. Fig. 3 is a front view with the pivot in place. Fig. 4 is a side view with the spring-bolt case in vertical section. Fig. 5 is a back view of the entire device.

Similar letters refer to similar parts throughout the several views of the drawings.

A is the pivot-plate, attached to the rear or outside of the ventilator-sash B by any suitable means—preferably by two screws. The pivot-plate A is extended, with increasing breadth, a suitable distance to form the arm D, the end of which is serrated, as shown at E in drawings, and forms a curved line with the pivot as the center, with the exception of the last tooth, F, which is extended beyond the line to form a stop device when it reaches the bolt.

G is the plate containing the pivot-seat. This plate is attached to the frame or side of the car in a suitable position to receive the pivot C, and has an extension which forms the case H, for the reception of a bolt, I, and spring K.

The spring used in the device, as shown, is of the variety known as a "spiral;" but we do not confine ourselves to this form of spring, or to this peculiar-shaped shell for guiding and retaining the bolt; neither do we confine ourselves to a spring and bolt separately, as the two can be easily combined in one.

The bolt I extends through both ends of the case H, and has the end projecting toward the pivot-seat rounded and beveled to engage the serrated end of the arm D. This same end of the bolt I is provided, immediately within the end of the case, with a flange, L, which serves the triple purpose of a bearing for the spring, a limit to the movement of the bolt when released from engagement with the arm D, and, by its backward extension parallel with the sides of the case, prevents the turning of the bolt and holds the beveled end square for engagement with the arm D. The spiral spring surrounds the bolt, one end bearing upon the inside of the case and the other upon the flange L, and maintains a constant pressure, holding the bolt constantly against the arm D, and the pivot C against the plate G, so as to retain it constantly in place.

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

The combination of the pivot-plate A, having the serrated arm D, with the plate G, having a pivot-seat and a spring-catch, whereby the pivot is held to its place, and by the engagement of the catch with the serrated arm the ventilating-transom is held in any one of several positions, as required.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY C. HART.  
THOMAS A. BISSELL.

Witnesses:

JNO. G. RUMNEY,  
C. E. BENNETT.