

J. A. POMEROY.  
FIRE-SCREEN.

No. 177,353.

Patented May 16, 1876.

Fig. 1.

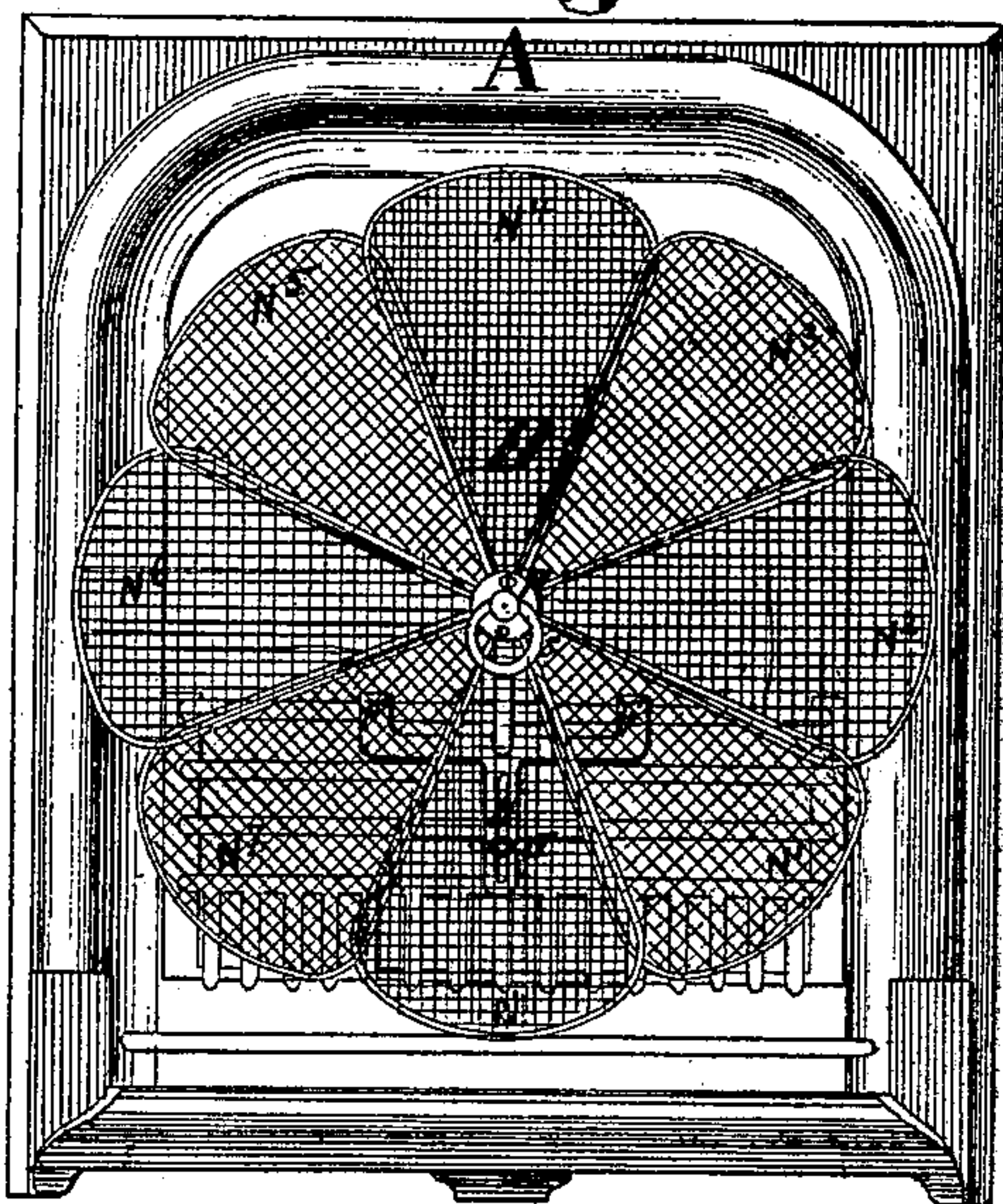


Fig. 2.

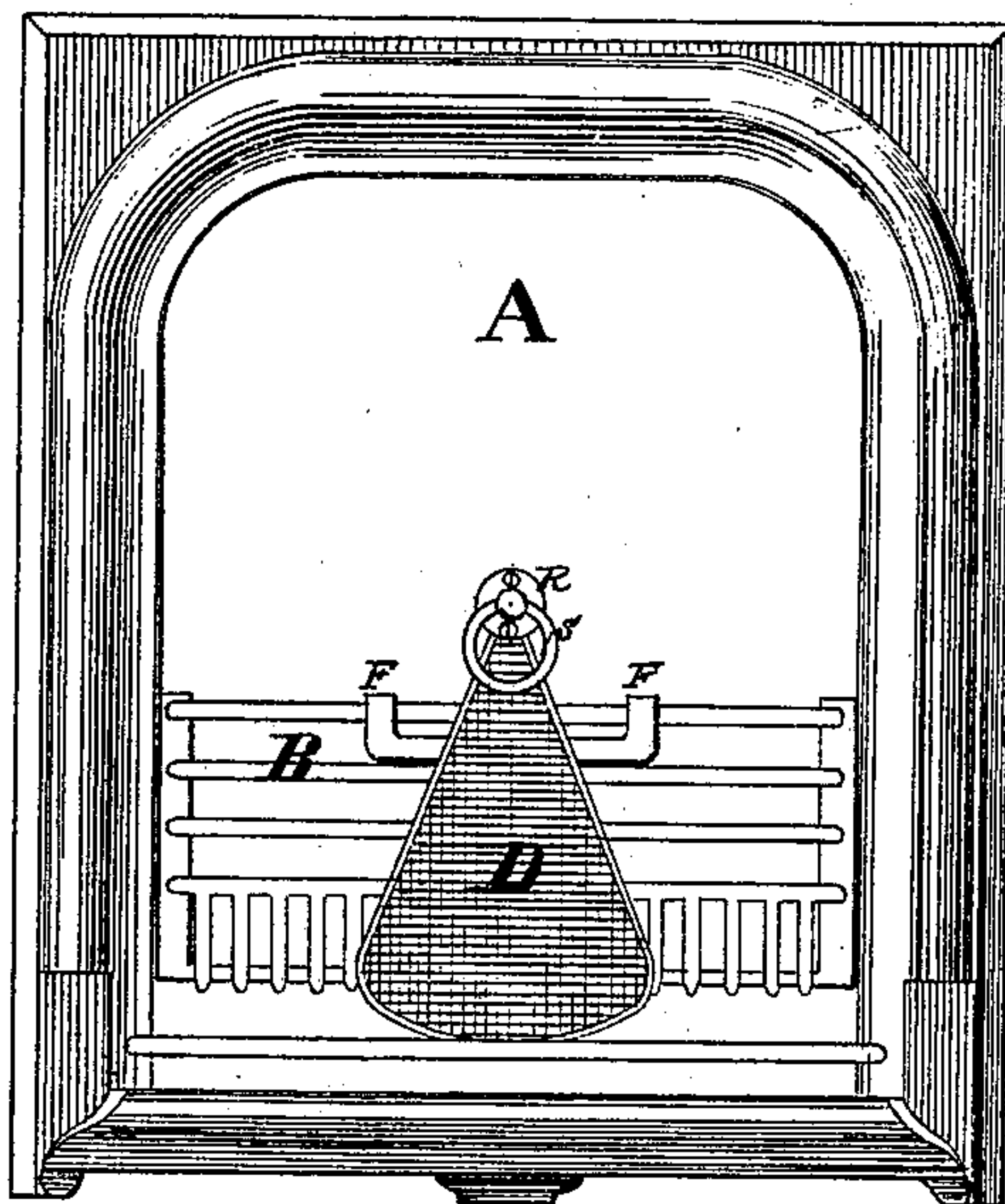


Fig. 3.

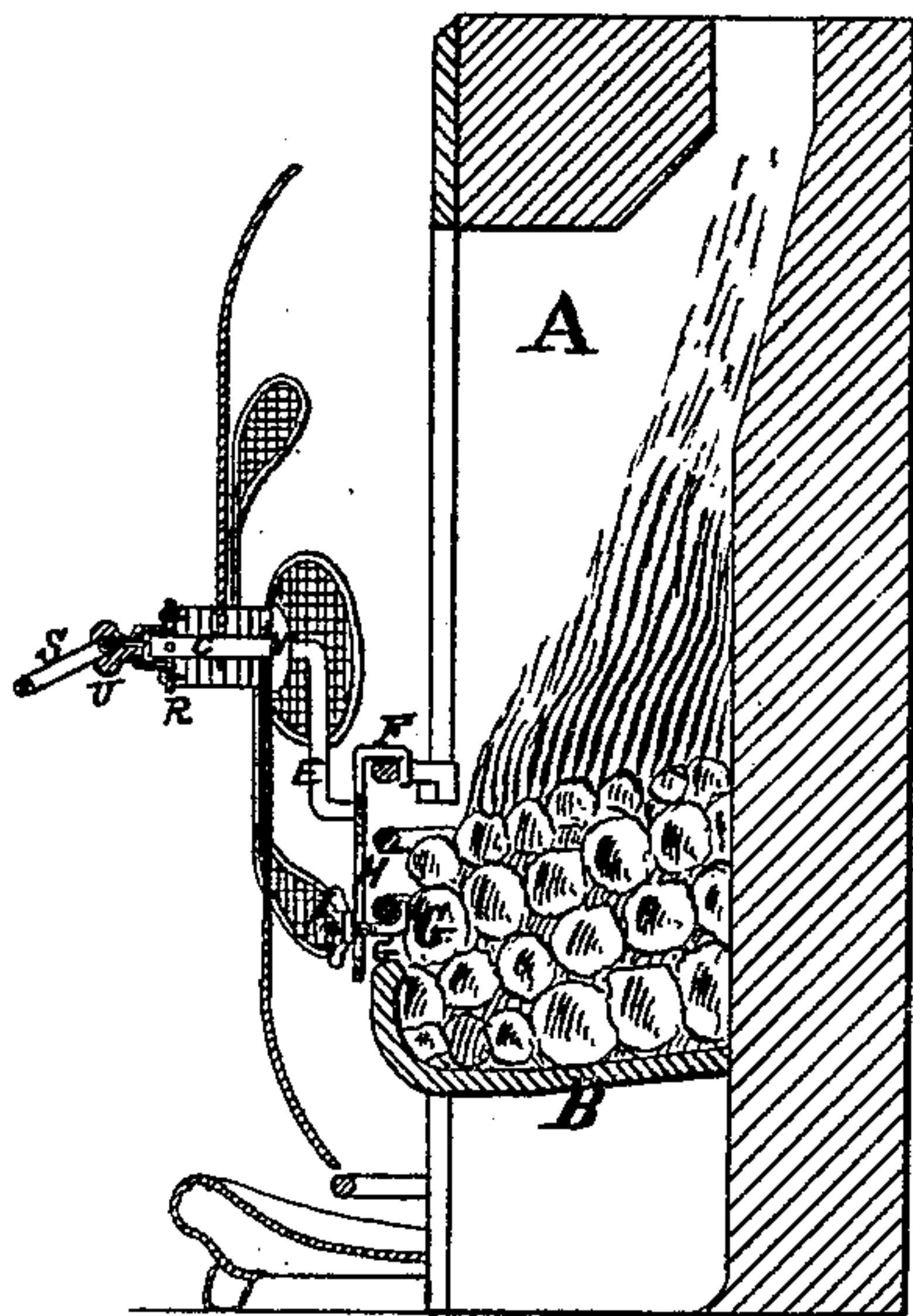


Fig. 4.

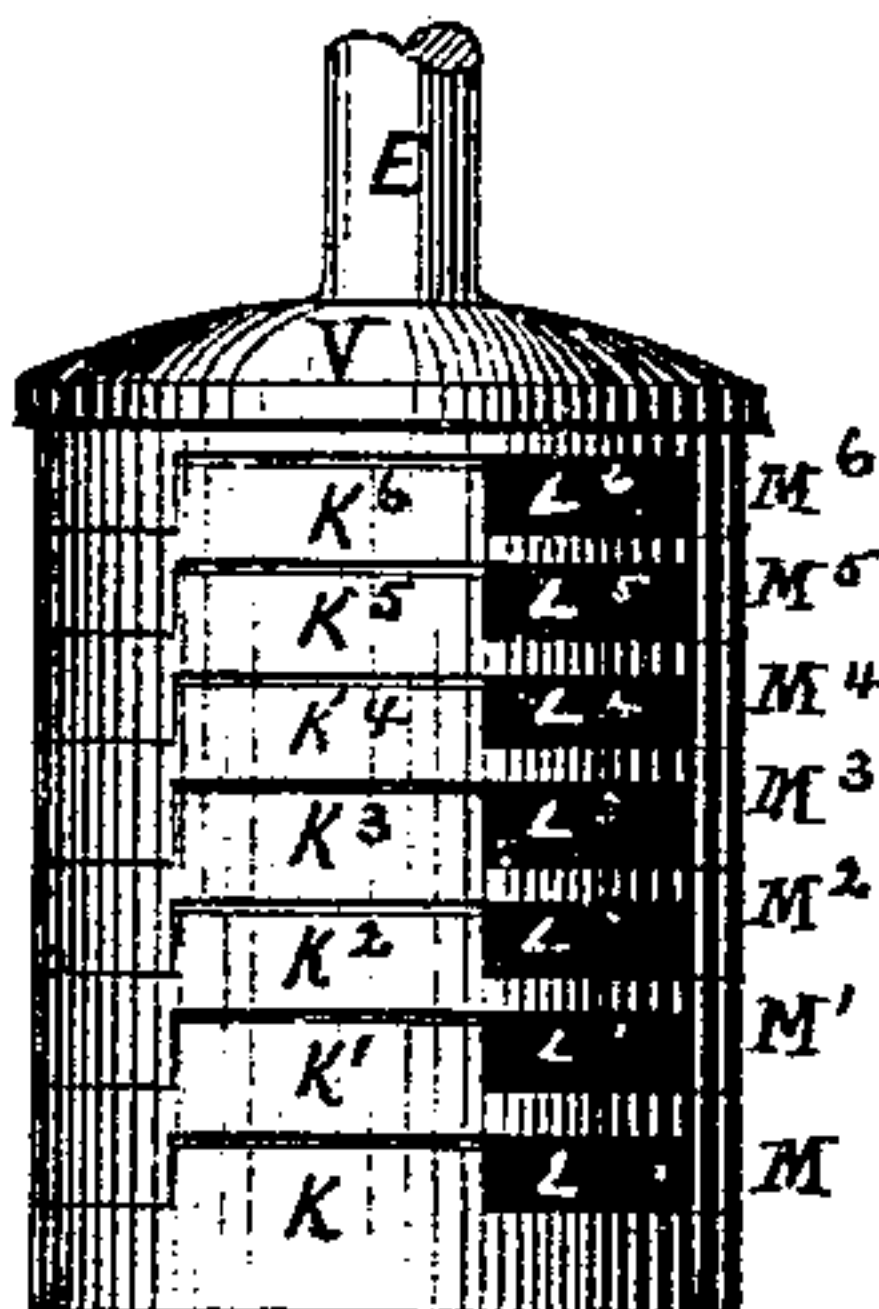


Fig. 5.

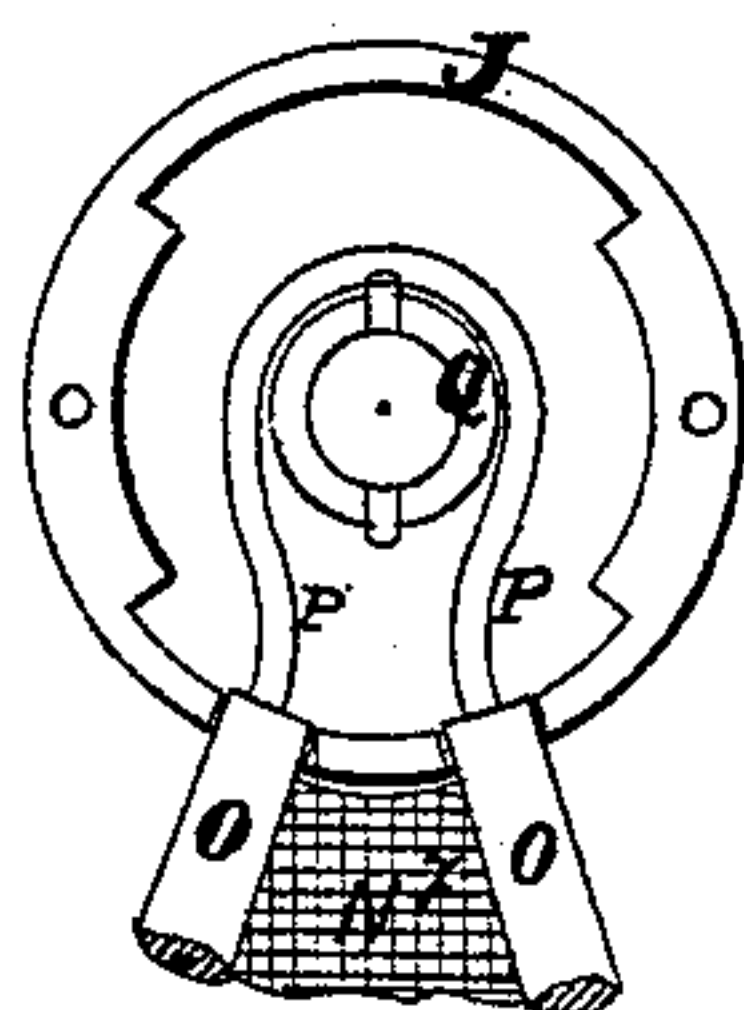
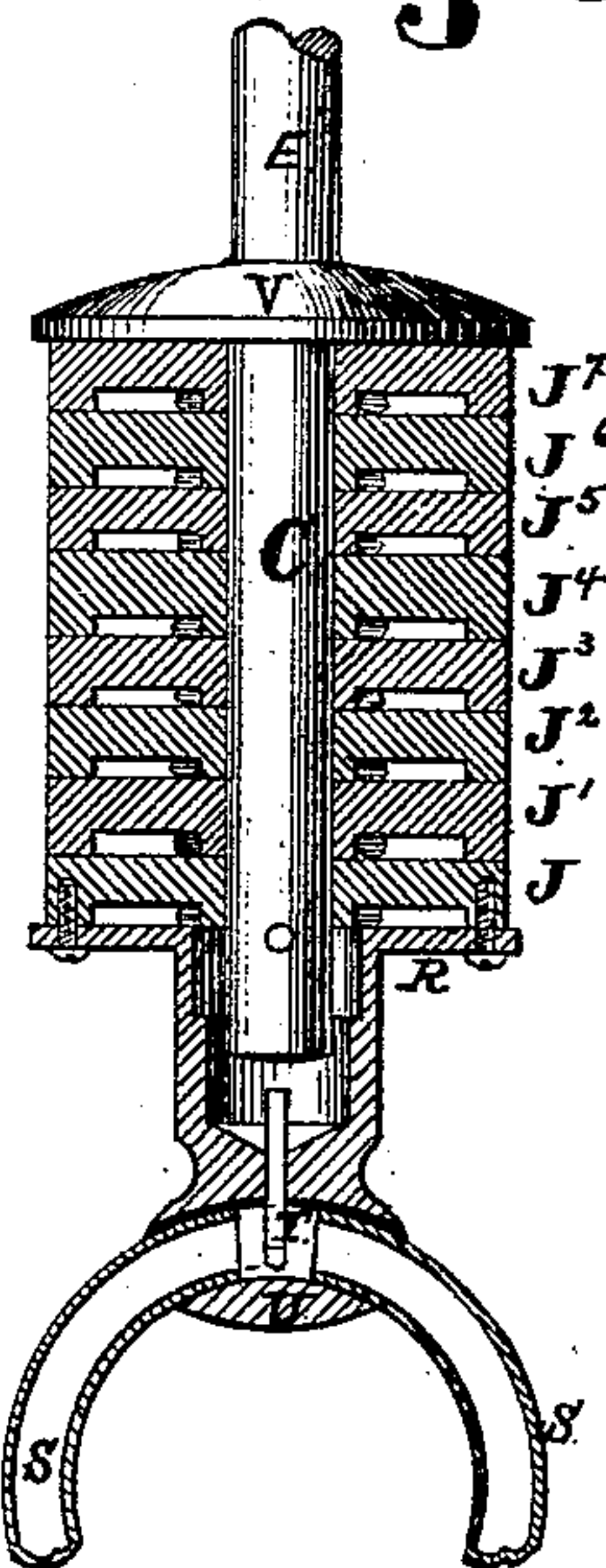


Fig. 6

Attest,  
Chas. Gessert.  
Chas Crapsey

Inventor.

John A. Pomroy  
by  
Henry Miller and  
att'y.



# UNITED STATES PATENT OFFICE.

JOHN A. POMEROY, OF CINCINNATI, OHIO.

## IMPROVEMENT IN FIRE-SCREENS.

Specification forming part of Letters Patent No. 177,353, dated May 16, 1876; application filed November 4, 1875.

*To all whom it may concern:*

Be it known that I, JOHN A. POMEROY, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Fire-Screens, of which the following is a specification:

The object of my invention is to produce a convenient, serviceable, and ornamental fire-screen.

My invention consists in the arrangement of a convenient number of washers upon a pintle, and so constructed as to receive and control a corresponding number of wire-gauze vanes, that radiate from the center of said pintle, and form themselves, when expanded, into a complete and continuous screen, capable of being readily contracted in such a manner as to give free access to the fire-basket without removing the screen from the grate, the device for operating the screen being constructed with a hollow tube open at its ends for the reception of cool air, which will keep it cool enough to handle.

In the accompanying drawings, Figure 1 is an elevation of a fire-grate with my screen attached thereto, the screen being represented as expanded. Fig. 2 is an elevation of a fire-grate with the screen attached thereto, and the screen represented as contracted. Fig. 3 is a sectional elevation through a fire-grate, showing the manner of attaching the screen to the basket. Fig. 4 is a plan view of the washers and pintle, showing the washers as they appear when the screen is contracted. Fig. 5 is a section of the same. Fig. 6 is a face view of a washer, showing the manner of attaching the vane thereto.

A represents a mantel and grate, of which B is the basket. Connected to the pintle C at one end is a device for attaching the screen D to the basket B. A rod, E, which is part of the pintle C, drops a suitable distance below the said pintle, and is then formed into the shape of the letter T, with stationary hooks F F on the horizontal bar thereof, and an adjustable hook, G, on the vertical bar. The hooks F F rest on the top bar of the basket B, and the hook G is fixed to either of the other bars by means of the slot H and thumb-screw I. On the pintle C (as shown in Figs. 4 and 5) are mounted

eight washers, J J<sup>1</sup> J<sup>2</sup> J<sup>3</sup> J<sup>4</sup> J<sup>5</sup> J<sup>6</sup> J<sup>7</sup>, each one overlaying the one next to it in such a manner as to move over a distance of one-seventh of its circumference before coming in contact with and operating upon it, by means of the projections K K<sup>1</sup> K<sup>2</sup> K<sup>3</sup> K<sup>4</sup> K<sup>5</sup> K<sup>6</sup>, moving through spaces L L<sup>1</sup> L<sup>2</sup> L<sup>3</sup> L<sup>4</sup> L<sup>5</sup> L<sup>6</sup>, previous to acting upon the projections M M<sup>1</sup> M<sup>2</sup> M<sup>3</sup> M<sup>4</sup> M<sup>5</sup> M<sup>6</sup> on the washers next succeeding. Each of the wire-gauze vanes N N<sup>1</sup> N<sup>2</sup> N<sup>3</sup> N<sup>4</sup> N<sup>5</sup> N<sup>6</sup> N<sup>7</sup> are constructed with a hollow tube, O, of the required shape, to which the wire-gauze is attached. A wire rod, P, passes through the tube O and over the hub Q of the washer, to which it is attached, the ends of the tube O fitting into recesses in the rim of the washer, as shown in Fig. 6, by which means it is held in its relative position, and secured there by the washer next succeeding. To the washer J is rigidly fixed the device for operating the screen D, as follows: The collar R is firmly secured to the washer J. A hollow ring, S, open at its ends and held in position by the pin T, fits loosely into the socket U, which is a continuation of the collar R.

The ring S operating upon the collar R, which is connected to the washer J, controls the movements of the series of washers which act one upon the other until the washer J<sup>6</sup> comes in contact with the washer J<sup>7</sup> at the points K<sup>6</sup> and M<sup>6</sup>. The screen D is then expanded, as shown in Fig. 1, the washer J<sup>7</sup> being firmly secured to the collar V, which is part of the rod E. The screen D is then a fixture until the operation is reversed.

What I claim as new, and desire to secure by Letters Patent, is—

A sufficient number of vanes N to form, when expanded, a continuous screen, in combination with a corresponding number of washers J, mounted upon and oscillating on pintle C, fitted with collars R and V and ring S, in connection with some suitable device for attaching the same to a fire-grate, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 25th day of October, 1875.

JOHN A. POMEROY.

Witnesses:

JNO. S. MURPHY,  
HENRY MILLWARD.