

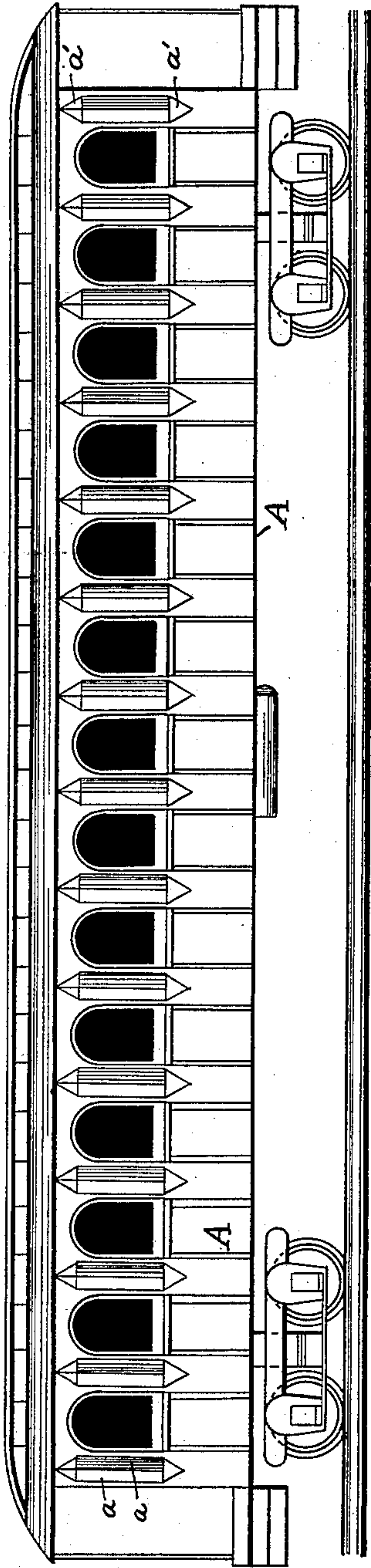
(No Model.)

H. W. FOX.  
DUST EXCLUDER.

No. 318,176.

Patented May 19, 1885.

Fig. 1.



WITNESSES:

Wilem Ringle.

William Boyden.

Fig. 4.

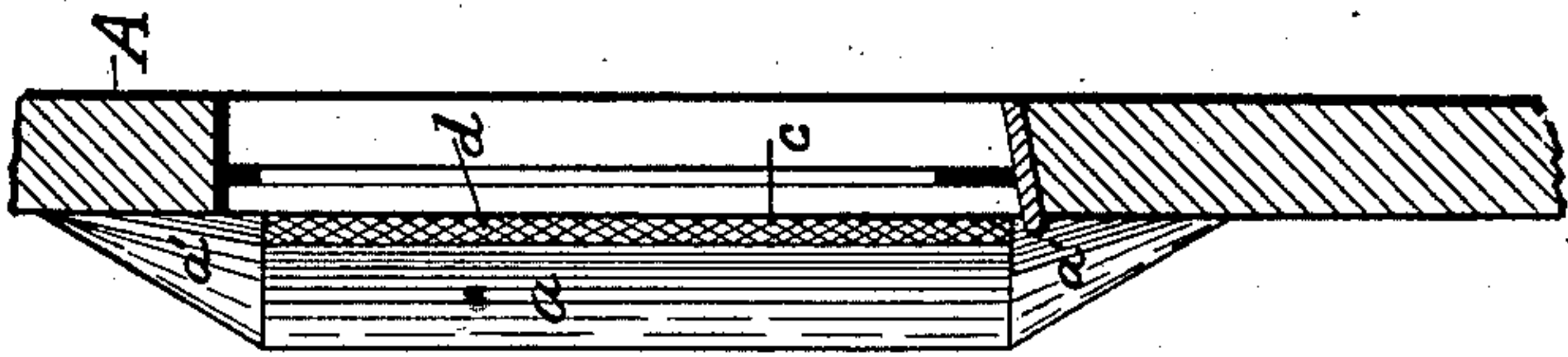


Fig. 2.

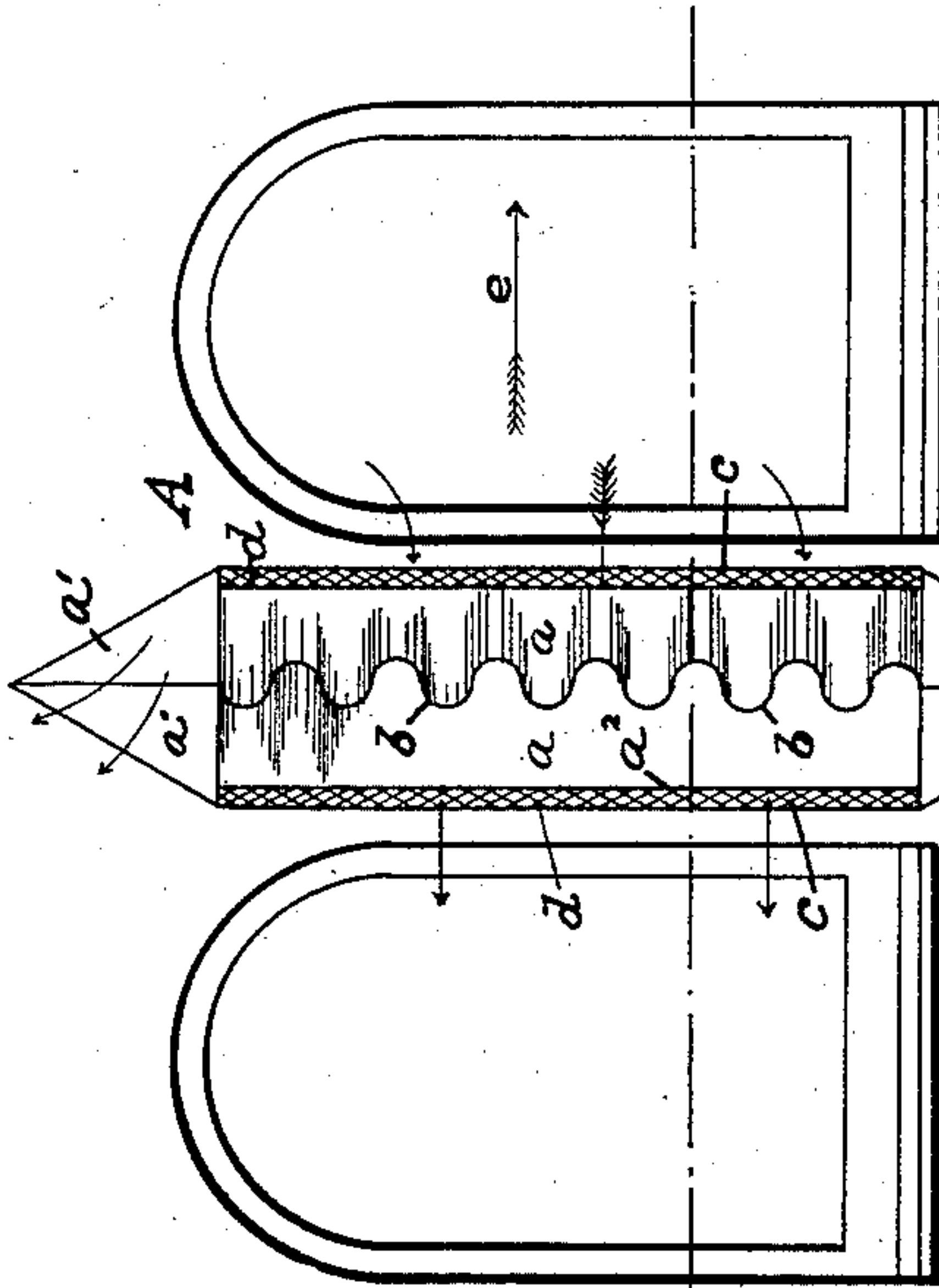
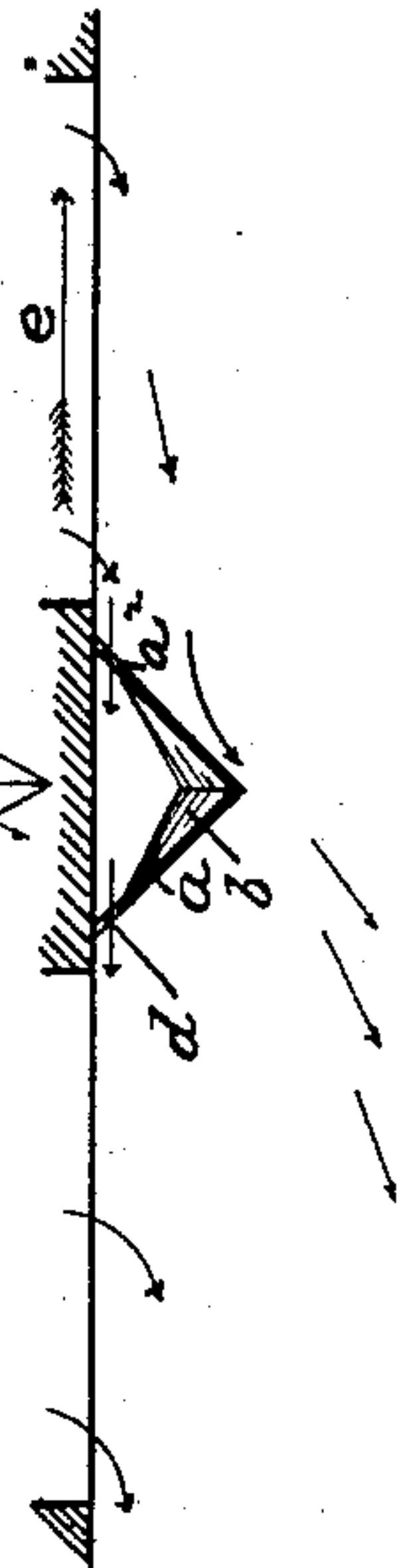


Fig. 3.



INVENTOR:

HENRY W. FOX.

By

C. A. Boyden.

Attorney.

# UNITED STATES PATENT OFFICE.

HENRY W. FOX, OF BALTIMORE, MARYLAND.

## DUST-EXCLUDER.

SPECIFICATION forming part of Letters Patent No. 318,176, dated May 19, 1885.

Application filed August 15, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY W. FOX, a citizen of the United States, residing at Baltimore, and State of Maryland, have invented certain new and useful Improvements in Dust-Excluders for Car-Windows, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in dust and cinder excluders for railroad-car windows, in which a current of air is directed over the windows and outward from the car. I attain these objects by the following mechanism, illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a complete car with my attachment placed thereon; Fig. 2, an enlarged detail view of my device placed between the windows; Fig. 3, a plan view of Fig. 2, showing currents of air; Fig. 4, vertical section of car-windows, with the deflector shown in full.

Similar letters refer to similar parts throughout the several views.

The letter A designates the car-body, to which my device is rigidly attached, and which consists of two corrugated surfaces,  $a a$ , placed at an angle to the side of the car-body and at right angles to each other, thus providing an angular projection from the car-body, which directs a current of air outward either way the car moves.

Between the plates  $a$  and the car-body is a space,  $d$ , which permits a portion of the current to pass through or backward to establish a current for the following window, and which is covered with a fine screen,  $e$ , thereby preventing the passage through the same of any cinders, &c. The corrugations  $b$  distribute any currents that may have an upward or downward direction, and which gradually diminish as they near the car, until they finally

vanish, leaving the edge  $a^2$  of the surface  $a$  straight, to receive the screen.

To the upper and lower ends of the device are attached angle-pieces  $a'$ , which throw that portion of the current above and below the windows up or down, thereby preventing it from interfering with the principal current, which passes over the windows. The car moves in the direction as shown by the arrow  $e$ , the other arrows showing the direction of the currents, which result in ventilating the car and excluding the dust, cinders, &c., therefrom.

Having fully described my invention, what I claim, and wish to secure by Letters Patent, is—

1. In a dust-excluder for railroad-cars, the combination of the car-body A, the surfaces  $a a$ , each placed at an angle to the side of the car-body and at a distance therefrom, and the end pieces,  $a'$ , which are attached to the ends of the pieces  $a$  and secured to the car-body, thereby forming the space  $d$ , as herein shown.

2. In a dust-excluder for railroad-cars, the combination of the car-body A, the surfaces  $a a$ , each placed at an angle to the side of the car-body, the end pieces,  $a'$ , secured to the pieces  $a a$  and to the car-body, and the screen  $e$ , the whole arranged as herein set forth.

3. In a dust-excluder for railroad-cars, the pieces  $a a$ , placed at an angle thereto, in combination with the pieces  $a'$ , which are placed at an angle to the plane of the surfaces  $a a$  and in such a position to the car-body that a current of air will be established upward from the windows, for the purpose as herein set forth.

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

HENRY W. FOX.

Witnesses:

G. A. BOYDEN,  
WM. B. NELSON.