

(No Model.)

O. F. GOODWIN.

SMOKE, DUST, OR CINDER GUARD FOR USE ON RAILWAY TRAINS.

No. 498,166.

Patented May 23, 1893.

Fig. 1.

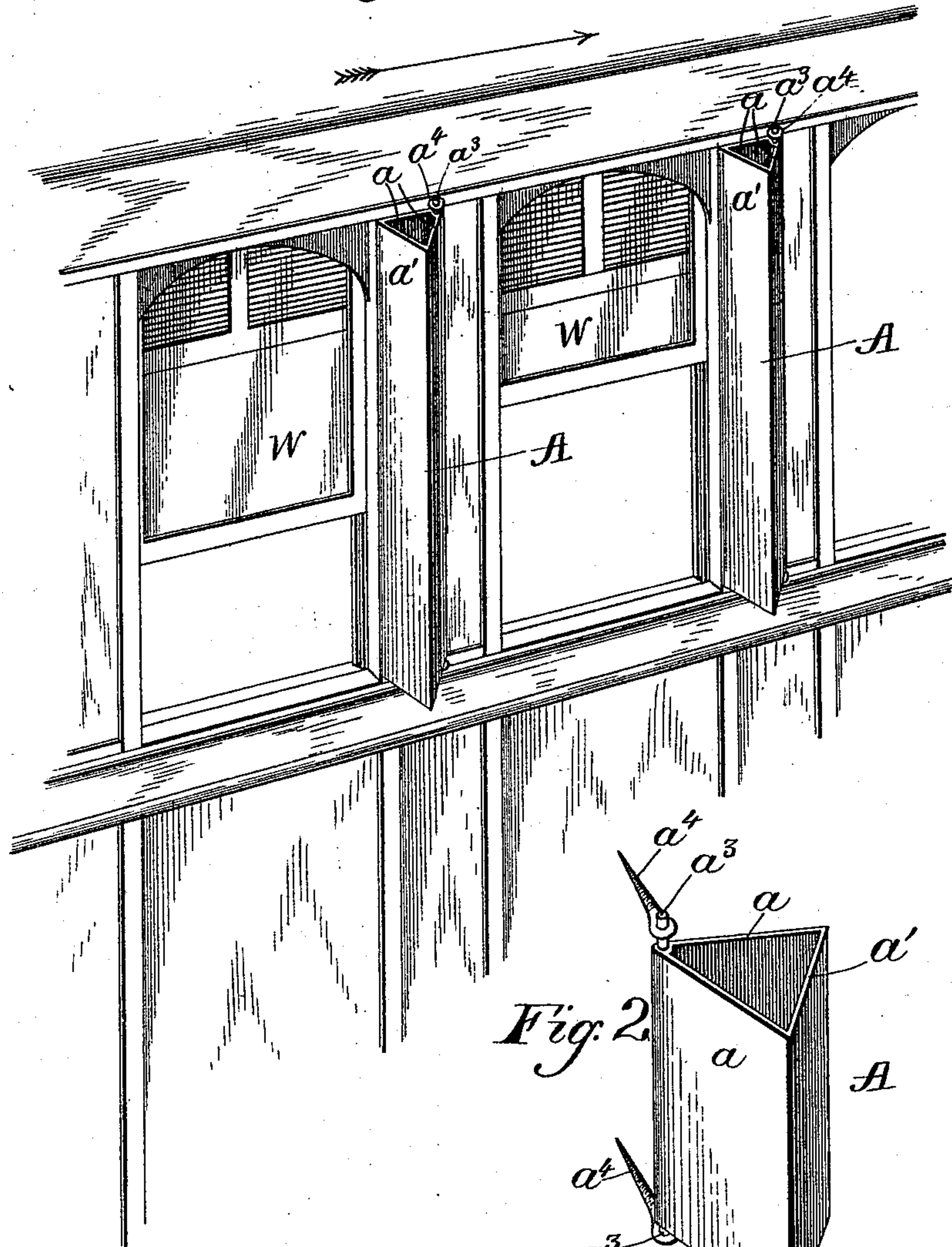


Fig. 2.

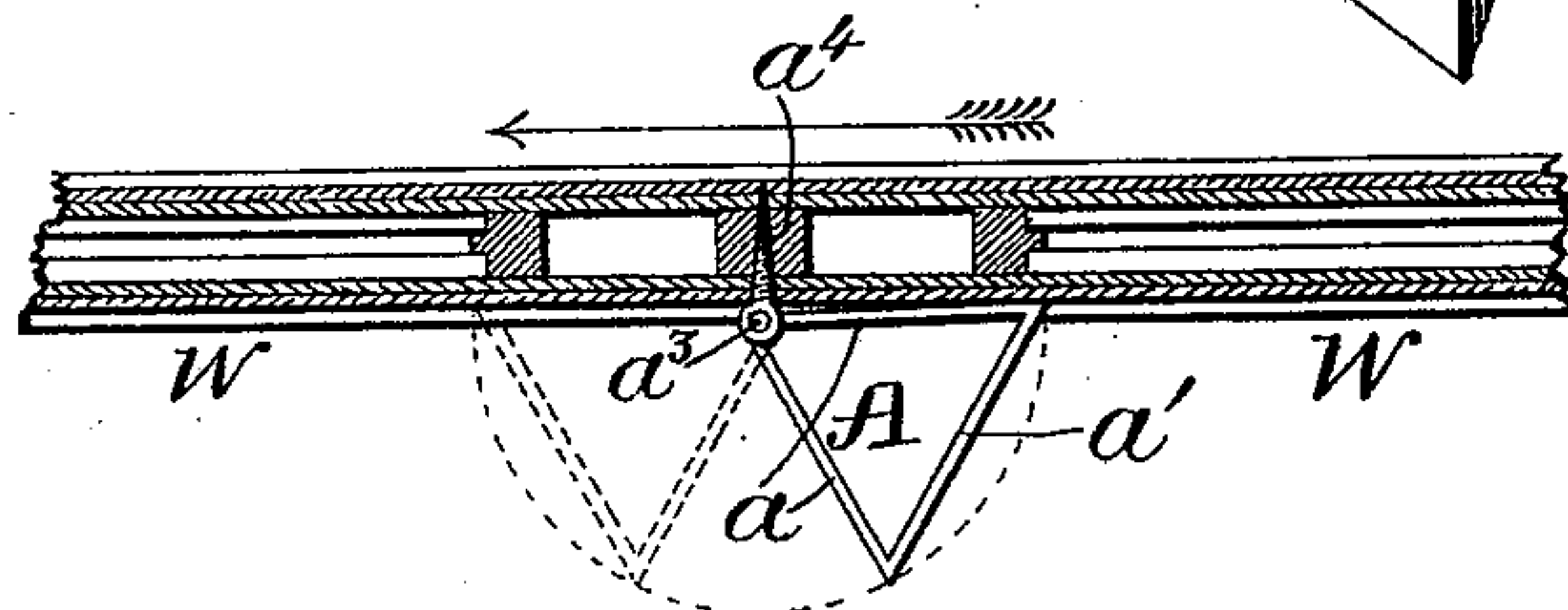
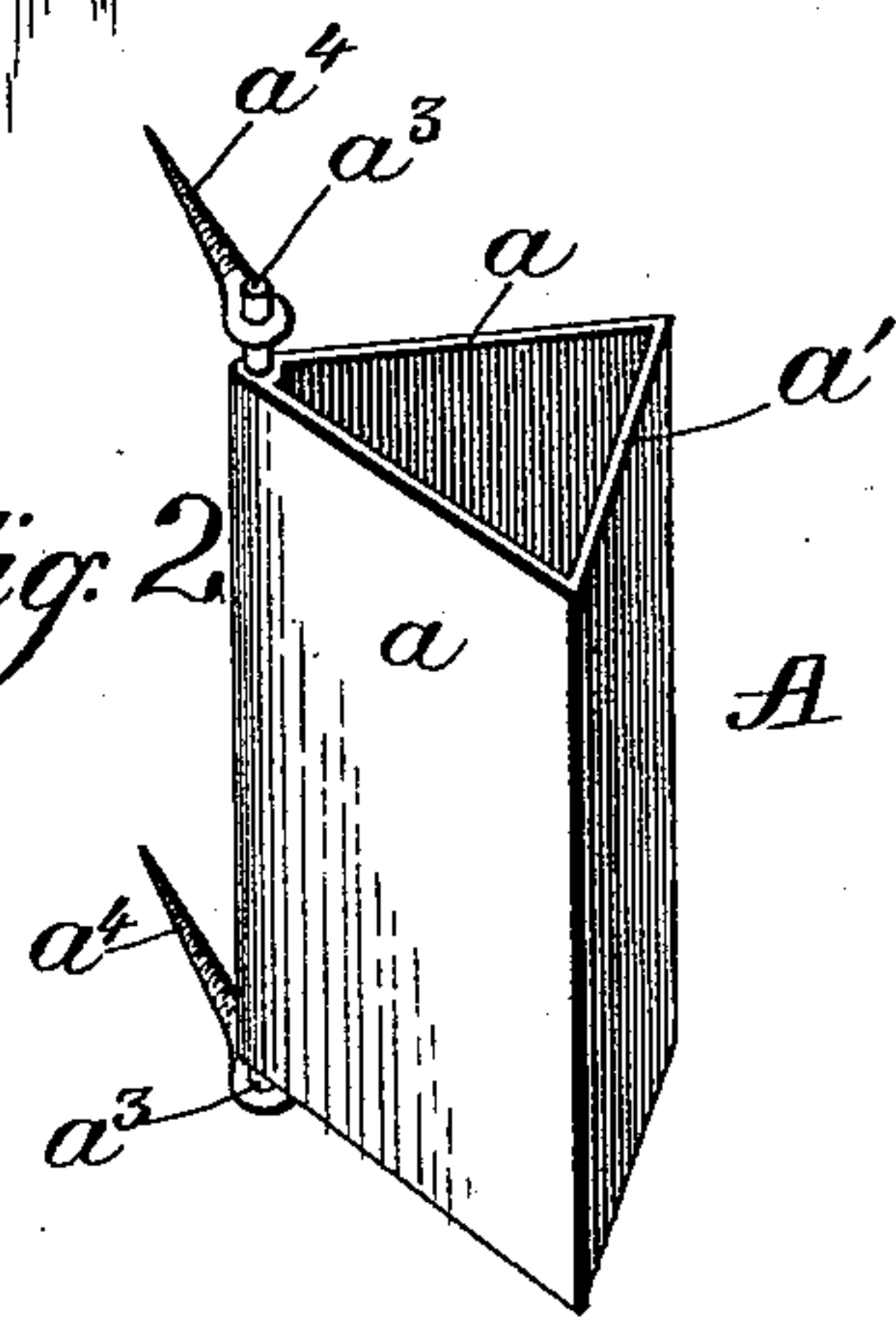


Fig. 3.

Witnesses

Rey C. Bowen
John C. Wilson.

Inventor

Otis F. Goodwin

By Whitman & Wilkinson,

Attorneys.

UNITED STATES PATENT OFFICE.

OTIS F. GOODWIN, OF ADEL, GEORGIA.

SMOKE, DUST, OR CINDER GUARD FOR USE ON RAILWAY-TRAINS.

SPECIFICATION forming part of Letters Patent No. 498,166, dated May 23, 1893.

Application filed June 14, 1892. Serial No. 436,694. (No model.)

To all whom it may concern:

Be it known that I, OTIS F. GOODWIN, a citizen of the United States, residing at Adel, in the county of Berrien and State of Georgia, have invented certain new and useful Improvements in Smoke, Dust, or Cinder Guards for use on Railway-Trains; and I 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.

My invention relates to improvements in devices for keeping the smoke, dust and cinders, out of the windows of railway cars in motion, and it consists of certain novel features to be hereinafter described and claimed.

Reference is had to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 represents a perspective view of a portion of the side of a car fitted with the improved dust and cinder protector. Fig. 2 represents a perspective view of the cinder guard detached from the car. Fig. 3 represents a section through the car windows, and illustrates the operation of the device shown in Figs. 1 and 2.

The triangular prism A, having like faces a and rear face a' is pivoted on a shaft a^3 at an angle between the said faces, which is rounded somewhat, and the said shaft fits in eye-bolts a^4 secured to the side of the car midway between the windows W, as shown in Fig. 1. When the car is going in one direction, as indicated by the arrow in Fig. 1, the draft striking the forward side of the pivoted prism, will throw it to the rear, where it will form an efficient guard for the window just behind it. Should the car be moved in the

reverse direction, the pivoted prism will swing over to the position shown in dotted lines in Fig. 3; and thus it will be seen that at all times it will be just in front of a window relative to the direction of the train.

The inclined faces of the cinder guard here-in described will deflect the solid particles, such as dust, cinders, &c., away from the window, while the air will eddy in the windows. At the same time the inclined face a will not cause any great resistance due to the pressure of the atmosphere, such as is experienced by cinder guards placed at right angles to the motion of the car.

It will be obvious that it will be immaterial in which direction the car be moving.

By making the cinder guards easily removable, as shown, they may be easily replaced whenever they become injured in any way, and may be conveniently applied to such cars as are not provided with them.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a dust or cinder guard for use on railway trains, the combination with the hollow triangular box A^2 having symmetrical inclined faces a of the shaft a^4 secured at the angle between said faces, and the eyebolts a^5 placed midway between the windows of the car for securing said shaft to said car, substantially as and for the purposes described.

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

OTIS F. GOODWIN.

Witnesses:

A. BENNETT.

WM. MCQUEEN.