D. H. HAYDEN.

Dust and Cinder Arrester.

No. 229,125. Patented June 22, 1880.

Fig. 1.

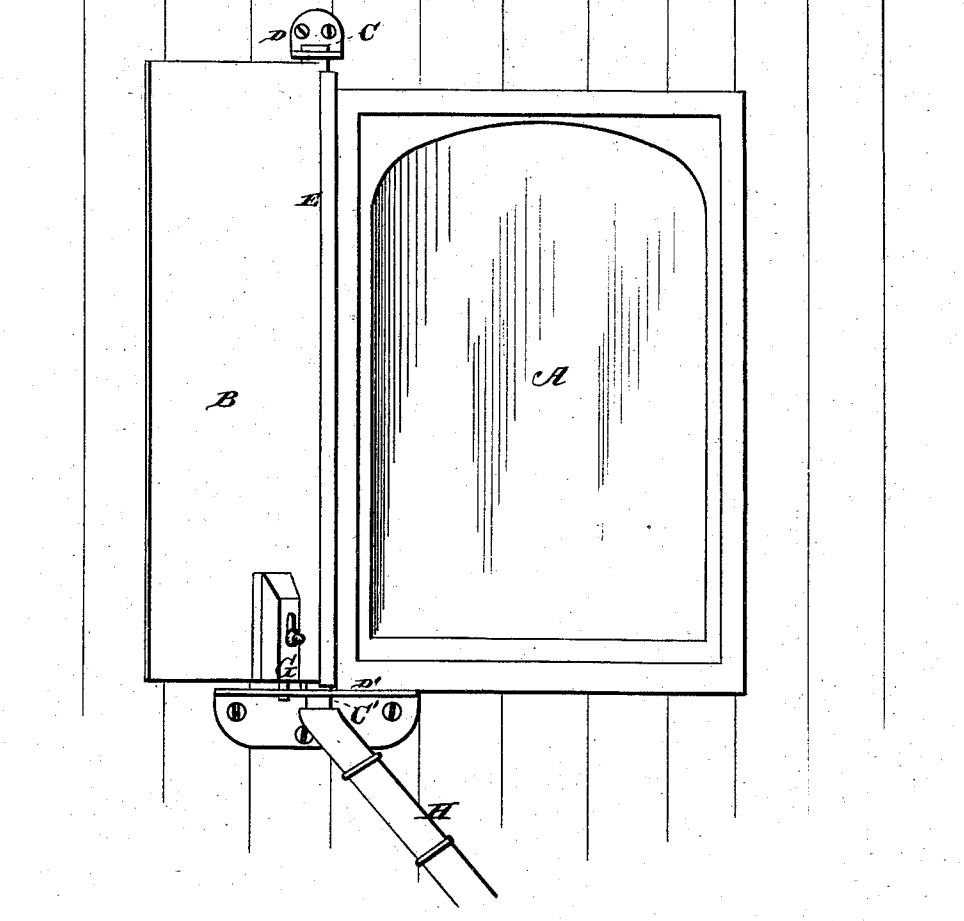
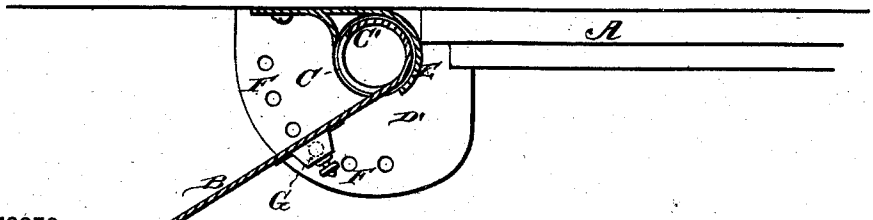


Fig. 2.



WITNESSES

Robert Ewalt

Chas. L. Page

INVENTOR

Daniel H. Hayden

Gilmore, Smith & Co.

ATTORNEYS

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DANIEL H. HAYDEN, OF ADA, OHIO.

DUST AND CINDER ARRESTER.

SPECIFICATION forming part of Letters Patent No. 229,125, dated June 22, 1880.

Application filed November 22, 1879.

To all whom it may concern:

Be it known that I, DANIEL H. HAYDEN, of Ada, in the county of Hardin and State of Ohio, have invented certain new and useful Improvements in Dust and Cinder Arresters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a car-window, showing my device applied; and Fig. 2 is a detail view of my dust and cinder arrester.

The nature of my present invention relates to dust and cinder arresters for car-windows; and it consists in securing a hinged shield alongside of the window at a proper angle for arresting dust and cinders by means of a spring-latch arranged to engage in a line of stops formed in or on a bracket which is fastened upon the side of a car; also, in forming the shield with a hollow pintle made half-cylindrical, or open a portion of its length, so as to constitute a gutter for collecting the dust and cinders; also, in the combination of the shield with its hollow pintle and a grooved or semi-cylindrical guard-plate for arresting the passage of dust and cinders between the pintle and the side of the car; also, in the combination, with the shield and its hollow pintle, of a spout arranged to receive the dust and cinders from the lower end of the pintle, all as hereinafter more fully described, and particularly pointed out in the claims.

Referring by letter to the drawings, A designates the car-window, and B a plate or shield which is hinged alongside of the same for the purpose of arresting dust and cinders while the car is in motion. In practice I propose employing two of these shields—one at each side of the window—so as to prevent the passage of dust and cinders into the window, no matter from which end the car is drawn.

The shield is formed with a hollow pintle, C, which is open along a portion of its length, so as to constitute a semi-cylindrical gutter, C′, for catching the cinders which are deflected by the shield while the car is in motion. The ends of this hollow pintle turn in brackets D D′, which are secured upon the side of the car, while the open portion of the pintle, which is intermediate of its ends, turns in a grooved or semi-cylindrical guard-plate, E, which is fastened to the car between the two brackets. This arrangement of the plate E effectually prevents the passage of dust or cinders between the shield and the car, and it also provides for a suitable bed for the half-cylindrical body of the pintle to work in.

The plate of the lower bracket, D′, which projects outwardly from the side of the car, is considerably larger than the plate of the upper bracket, D, and it is formed with a series of holes, F, into which a spring-latch, G, upon the shield is dropped, so as to secure the shield at the proper angle relatively to the window, in order to guard against the passage of dust and cinders into the same.

Connecting with the lower end of the pintle is an inclined spout, H, which is secured by suitable straps alongside of the car. This spout receives the dust and cinders which are deflected by the shield into the hollow pintle, and conveys the same to a point near the bottom of the car, so that there will be no liability of its being blown into the car-window. The spring-latch which secures the hinged shield or deflector in position is arranged within a suitable casing, and is upon the side of the shield next to the window, so that it may be readily reached by a passenger within the car.

It will be readily seen that, instead of forming a series of holes in the lower bracket for the latch to drop in, a curved rack-bar would subserve the same purpose.

I am aware that, broadly considered, a deflecting-plate hinged alongside of a car-window for the purpose of arresting dust and cinders is not new; hence

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

1. The hinged shield or deflector B, arranged alongside of a car-window and provided with a latch, G, in combination with the bracket D′, having a series of stops for engaging the latch of the deflector, substantially as herein shown and set forth, and for the purpose specified.

2. The shield or deflector B, hinged along-

side of a car-window and formed with a hollow pintle, C, open along a portion of its length, so as to provide a gutter, C′, for catching the dust and cinders which are deflected by the said shield, substantially as shown and set forth.

3. The dust and cinder deflecting plate B, with its hollow pintle C C′, in combination with the grooved or semi-cylindrical guard-plate E, arranged so as to partially encircle the pintle, substantially as herein shown and set forth, and for the purposes specified.

4. The hinged deflector B, provided with a hollow pintle, C C′, in combination with the spout H, connecting with the lower end of the pintle for the purpose of conducting the dust and cinders below the level of the car-window, substantially as herein shown and set forth.

5. The deflector B, provided with a hollow pintle, C C′, pivoted in the brackets D D′, and the latch G, arranged upon the deflector and adapted to engage with stops upon or in the lower bracket, D′, substantially as herein shown and set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DANIEL H. HAYDEN.

Witnesses:
ELIJAH H. CHARLES,
ALBERT B. CHARLES.