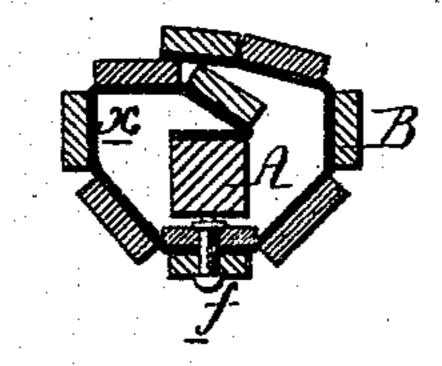
H. S. HALE. Car-Window Shields.

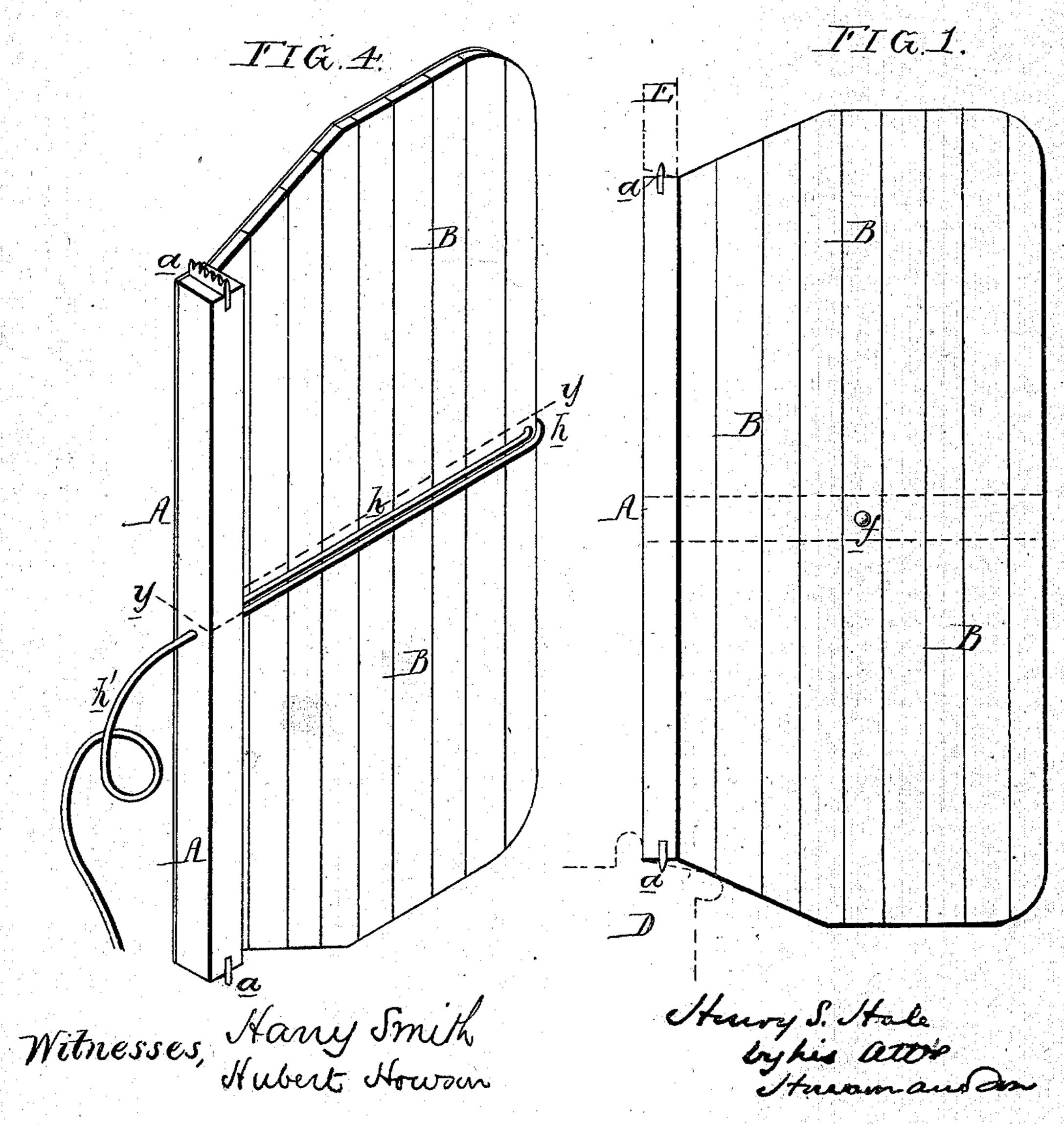
No. 146,066.

Patented Dec. 30, 1873.



IIa.2.





UNITED STATES PATENT OFFICE.

HENRY S. HALE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CAR-WINDOW SHIELDS.

Specification forming part of Letters Patent No. 146,066, dated December 30, 1873; application filed August 15, 1873.

To all whom it may concern:

Be it known that I, Henry S. Hale, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improved Car-Window Shield, of which the following is a

specification:

The object of my invention is a car-window shield which can be readily folded up in a narrow compass, and as readily unfolded, and so adapted to the window of the car that it will prevent sparks from interfering with the comfort of the passenger seated near the window; and this object I attain by the combination of a bar, A, to be fitted between the sill and sash of the window, with a number of wooden slats, B, (shown in an unfolded condition in the side view, Figure 1, of the accompanying drawing,) the said bar and slats being so united to a flexible backing that the whole can be folded up, as shown in the sectional plan view, Fig. 2. The bar A is provided, both at its upper and lower end, with a plate, a, having sharp-pointed teeth, which will penetrate the under side of the sash E (shown by dotted lines) and the top of the sill D, (also indicated by broken lines,) the bar being effectually confined between and prevented from turning on the said sash and sill. Both the bar and slats are cemented or otherwise secured to a backing of suitable fabric, (represented in the sectional plans, Figs. 2 and 3, by the thick black line x,) so that the shield can be folded up in one direction only. When folded out, as shown in Fig. 3, it may be maintained in this position by a cross-bar, e, hinged by a central

pin, f, to one of the slats, and, when in this rigid state, the shield can be readily secured to the window by placing the lower end of the bar A on the sill and forcing the sash onto the top of the bar, the shield projecting from the car and occupying such a position as to prevent the sparks from entering the window. When the shield has to be folded up, all that is necessary is to turn the bar e to a position parallel with the slats, when the latter may be coiled up, as in Fig. 2, tied with a string, and packed away in the passenger's valise. In place of the bar e, an elastic cord, h, (shown in the perspective view, Fig. 4,) may extend from the outermost slat to the bar A, the tendency of the cord being to maintain the shield in its unfolded condition. A portion, h', of the same cord may be used for wrapping round the shield when it is folded up. If desired, the shield may be divided into two sections, as, for instance, on the dotted line y, Fig. 4, the two sections being fitted together in any suitable manner.

I claim as my invention—

A window-shield for railroad-cars, consisting of the bar A, adapted to the window-slats B, and elastic backing x, all combined substantially in the manner described.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

HENRY S. HALE.

Witnesses:

HARRY SMITH, HUBERT HOWSON.