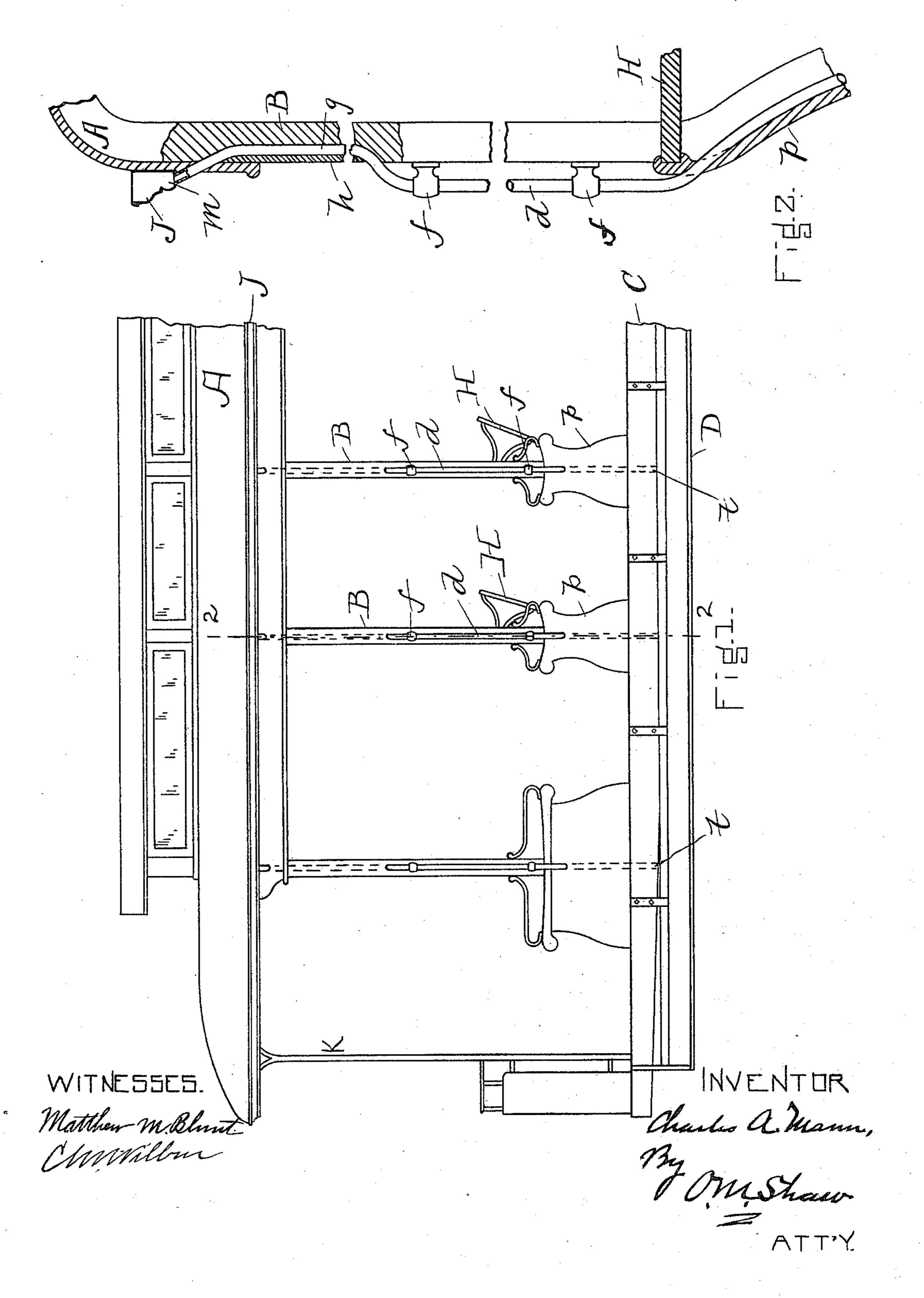
C. A. MANN. MEANS FOR DRAINING CAR ROOFS.

No. 600,881.

Patented Mar. 22, 1898.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES A. MANN, OF BANGOR, MAINE.

MEANS FOR DRAINING CAR-ROOFS.

SPECIFICATION forming part of Letters Patent No. 600,881, dated March 22, 1898.

Application filed November 29, 1897. Serial No. 660,028. (No model.)

To all whom it may concern:

Be it known that I, Charles A. Mann, of Bangor, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Means for Draining Car-Roofs, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a street-rail-way car provided with my improvement, and Fig. 2 a vertical section taken on line 2 2 in

15 Fig. 1.

Like letters of reference indicate corresponding parts in both figures of the drawings.

In that class of street-railway cars commonly known as "open" cars much annoyance to passengers is caused by the dripping of water from the roof. The sides of such cars are normally open and at best can only be closed by curtains or shades of textile material, which soon becomes saturated by the rain-water thrown against them by the oscillations of the vehicle. The roof usually overlaps its supports, and were it not for this dripping very little annoyance would be experienced from this cause. My invention is designed especially to overcome these and other objections by supplying means whereby the car's roof may be drained.

The nature and operation of the improvement will be readily understood by those conversant with such matters from the following

explanation:

In the drawings, A represents the roof of a car of this class constructed in the ordinary manner. B represents the stanchions or up
ights supporting the roof from the sills C, and D the run-board, these parts being all of the ordinary form and arrangement.

It is customary to supply these cars with a vertical handle d, secured in lugs f on each upright B in position to assist the passenger in mounting between the seats H from the vane-board D. These handles are ordinarily tubular.

Around the edge of the roof A, in position 5° suitable for receiving the drainings there-

from, I mount a metallic gutter J. Each tubular handle d is extended upward and preferably countersunk into the upright B, as at g in Fig. 2, and covered by a filler-piece h, and has its upper end connected with and opening into the gutter J at m. The handle is also extended downward and, preferably passing through the seat-support p, opens through the bottom of the car behind the sills C at t, thus forming a series of drains for the gutter J. 60

As will be readily understood, rain falling onto the roof will run into the gutter and will be carried therefrom through the hollow vertical handles and drain under the car. By this means many of the objectionable features 65 attendant the use of open cars in stormy weather are removed in a manner that will be obvious without a more explicit description.

It will be seen that, arranged as above de-70 scribed, only the ordinary handle d is exposed to view and the general appearance of the car is not changed.

I am aware that it is not new to drain a roof, even of vehicles; but in my device I present 75 a means whereby more than one function is imparted. The tubular handles now common on cars of this class are utilized and the roof drained into and through them. By this means no unusual appearance is imparted to 80 the car.

Having thus described my invention, what I claim is—

1. In a railway-car a gutter arranged to receive water shed from the car-roof in combination with a roof-support; a tubular handle secured to said support, said handle being elongated to open into and drain said gutter substantially in the manner specified.

2. In a car the combination of the roof, A, 90 stanchions, B, seats, H, and floor-sills, C, with the gutter, J, on said roof, the tubular handles, d, mounted on said stanchions and elongated to connect with said gutter and discharge below said sills.

CHARLES A. MANN.

Witnesses:

CHAS. C. HOYT, EDWARD H. HARDEN.