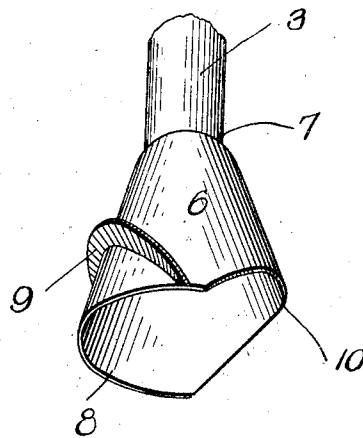
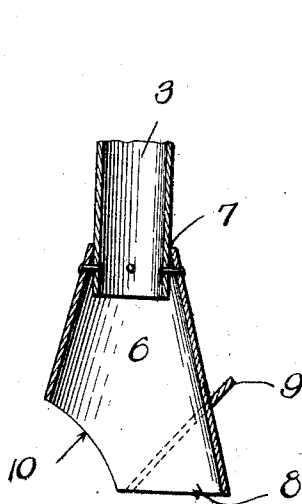
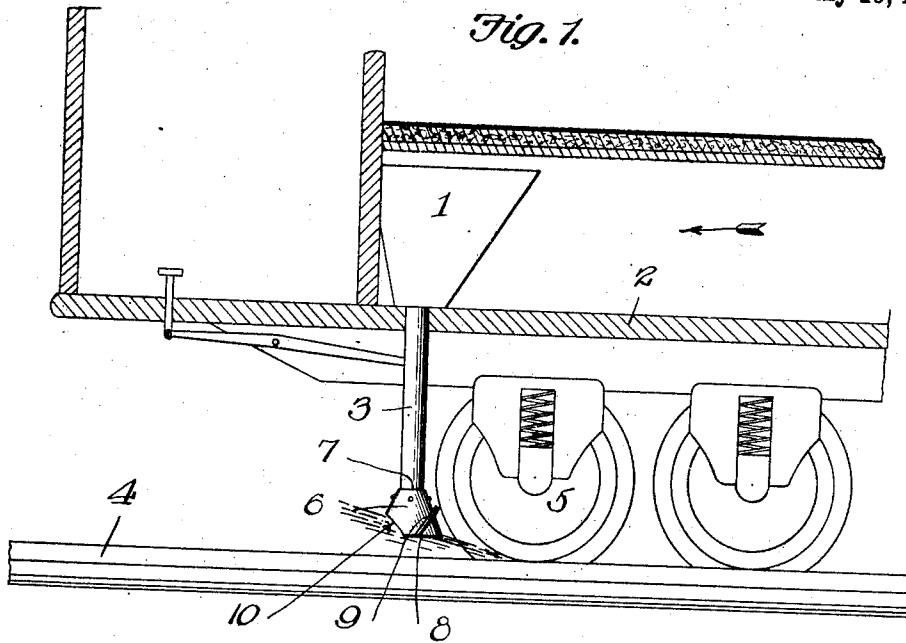


B. C. LORING.
ICE PROTECTOR FOR SAND SPOUTS.
APPLICATION FILED MAR. 1, 1910.

964,985.

Patented July 19, 1910.



Witnesses
C. C. Richardson.
Harry M. Test.

Inventor
Benjamin C. Loring,
By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN C. LORING, OF EDGEWOOD, RHODE ISLAND, ASSIGNOR TO JAMES TILLINGHAST, OF PROVIDENCE, RHODE ISLAND.

ICE-PROTECTOR FOR SAND-SPOUTS.

964,985.

Specification of Letters Patent.

Patented July 19, 1910.

Application filed March 1, 1910. Serial No. 546,648.

To all whom it may concern:

Be it known that I, BENJAMIN C. LORING, a citizen of the United States, residing at Edgewood, in the town of Cranston, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Ice-Protectors for Sand-Spouts, of which the following is a specification.

10 This invention relates to improvements in track sanding devices, and has for one of its objects to provide a device of this character which is applied to the lower end of sand pipes adjacent the track and which will deflect water, which splashes on the spout, to the sides of the track.

Another object of the invention is to provide a device which is attached to the lower end of a sand spout and with such form as to prevent water splashing up into the spout when the car is going in a backward direction.

These and other objects, which will hereinafter appear as the description proceeds, may be attained by the construction shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a portion of the car having a sanding device carried thereon, the spout of which has my improvement applied. Fig. 2 is a vertical section through the sand spout and attachment, and Fig. 3 is a perspective view of a portion of the sand spout and my device applied.

35 Referring particularly to the drawings, 1 represents the sand box located on the floor 2 of the car, and 3 the sand spout which projects downwardly from the box 1 to a point adjacent the track 4 and slightly in advance of the front wheel 5 of the car.

To the lower end of the spout 3 is attached a device which is the subject matter of the present invention. The attachment comprises a hollow truncated cone shaped metallic member 6, which is open at both ends at 7 and 8. The pipe 3 is passed through the opening 7 and projects a slight distance within the member 6, and is secured to said member 6 in any suitable manner. To the outer face of the member 6, and on the side adjacent the wheel 5, is an arch shaped rib 9, which forms a gutter between it and the body of the member 6 which catches the

water splashed from the wheel 5 onto the pipe 3 and the member 6, and deflects the same to both sides of the rail. From this it will be seen that the lower end of the sand spout is fully protected within the member 6 from collecting water around its lower end which would freeze and in time choke up the end of the pipe and prevent effective operation of the sanding device.

The water which is thrown onto the pipe runs down until it strikes the rib 9 from whence it runs off on to the side, and should the water collect in any great quantity there, or be cold enough to freeze, it would not affect the sand pipe in any way. This refers to the movement of the car in the direction of the arrow, or in other words its forward movement. When the car is moved backwardly, or in the opposite direction, the water will be thrown from below and up into the sand spout. To prevent this I have cut away a portion of the member 6, as indicated at 10, so that water splashing upwardly will be thrown through this cut away portion and not have chance to collect in the member 6. This is illustrated in the drawings.

From the foregoing it will readily be seen that I have provided a simple and inexpensive attachment for sanding spouts for track sanding devices, and one which will effectively transfer any water which might collect on the pipe to the sides of the track, and further to provide for the prevention of water being splashed up into the mouth of the sand pipe.

Having thus described the invention what I claim as new, is:—

In a track sanding device, the combination with a sand pipe, of an attachment therefor comprising a hollow cone-shaped member having one side cut away on a line diagonal to the vertical axis of the cone, and a substantially crescent shaped flange secured to the opposite side of the cone and arranged at substantial right angles to the line of the cut away portion.

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

BENJAMIN C. LORING.

Witnesses:

JOHN E. BOLAN,
R. J. MACNAIR.