

(No Model.)

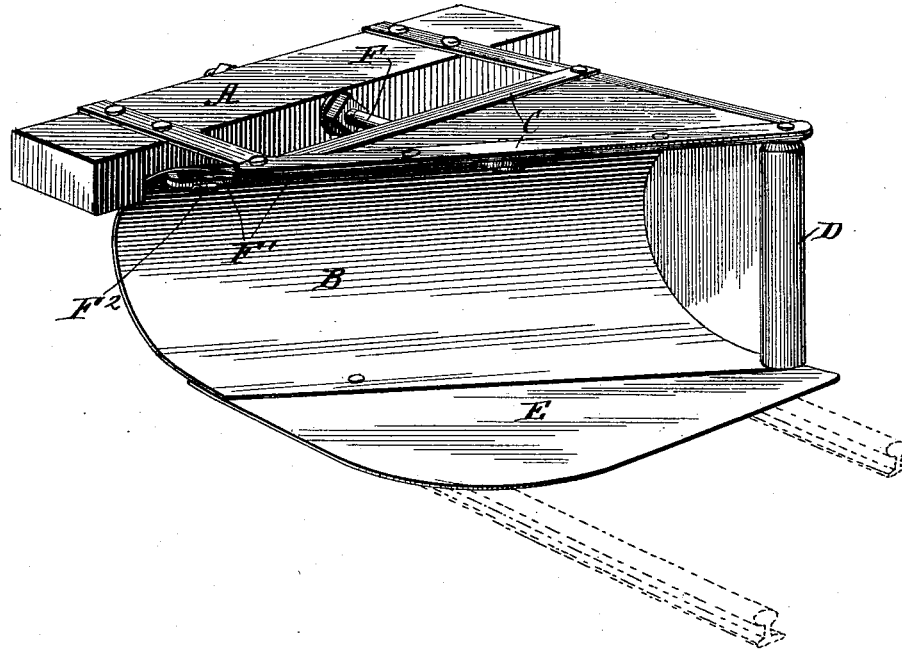
F. F. MORTIMER & J. P. COFFIN.

LOCOMOTIVE ENGINE PILOT.

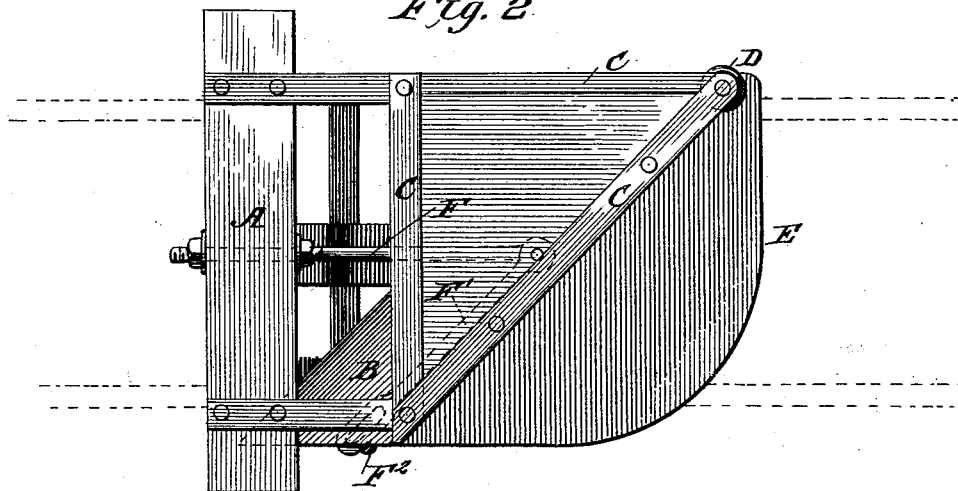
No. 489,320.

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*Fig. 1.*



*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

FURMAN F. MORTIMER AND JOHN P. COFFIN, OF FLORENCE, SOUTH CAROLINA.

## LOCOMOTIVE-ENGINE PILOT.

SPECIFICATION forming part of Letters Patent No. 489,320, dated January 3, 1893.

Application filed August 30, 1892. Serial No. 444,537. (No model.)

*To all whom it may concern:*

Be it known that we, FURMAN F. MORTIMER and JOHN P. COFFIN, of Florence, in the county of Florence and State of South Carolina, have  
5 invented a new and useful Improvement in Locomotive-Engine Pilots, of which the following is a specification.

The object of our invention is to provide an improved pilot for locomotive engines which  
10 shall throw objects off the track and entirely away from the rails, without liability to be run over by the wheels or derailing the cars, and with the least danger of mutilating and killing living things, and which shall also  
15 throw the objects off to one side exclusively, without throwing them upon the adjacent track where double tracks are used.

To these ends it consists in the peculiar construction of a chute shaped pilot arranged diagonally to the track and provided at its extreme forward end with a vertically arranged roller as will be hereinafter fully described.

Figure 1 is a perspective and Fig. 2 a plan view of the pilot.

25 In the drawings A represents the front cross beam of the truck to which the pilot is strongly attached and by which it is supported. To this beam is attached by suitable braces a frame C of a triangular shape, along whose  
30 front side diagonally to the tracks is arranged a trough shaped chute B of a semi-circular shape in transverse section with its concaved side to the front and extending across both the rails of the track. At its forward edge  
35 there is journaled a vertical roller D to prevent cutting any object that may strike the edge, and to permit said object to readily roll off to one side or the other. The lower edge of the trough shaped chute is also extended  
40 forwardly in horizontal position along the ground in the form of a lip E which causes the pilot to easily take up and lift an object into the trough of the chute. With this construction of the pilot it will be seen that all  
45 objects are caught and delivered to one side of the track and with a chute action that discharges them clear of the rails and wheels, and with as little damage to or mutilation of the object as could be expected.

To the cross beam A there is strongly attached a draft bar F which extends through  
50 the chute at the middle line near the top, and is adapted to connect with a link bar F' for coupling onto other engines or cars. This coupling link is housed under the over hanging top edge of the chute, and is retained and supported by a hook or clamp F<sup>2</sup>. 55

If desired the pilot may be used as a snow plow, in light falls of snow, and where many trains are run it will keep the track clear  
60 without special use of a snow plow. Should the fall of snow be very heavy and the pilot get clogged steam pipes may be arranged to heat the sheet metal of the chute so as to cause the pilot to clear itself. If desired the  
65 chute of the pilot may be made of wooden slats or bars with a metal apron arranged in front of it. The apron or face plate of the chute may also be made spring seated to break the blow or impact of objects against the  
70 same.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A locomotive engine pilot consisting of  
75 beam A with triangular frame C strongly braced to the same and carrying a diagonally arranged chute B with vertical roller D at its front end substantially as shown and described. 80

2. A locomotive engine pilot consisting of beam A with triangular frame C, chute B attached to the forward edge of the same in diagonal position with vertical roller D on its front end and lip E along the lower edge substantially as shown and described. 85

3. The combination with the beam A and the diagonally arranged chute B; of the draft bar secured to beam A and extending through the chute, and the link F' arranged to be  
90 folded under the overhanging edge of the chute substantially as shown and described.

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Witnesses:

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