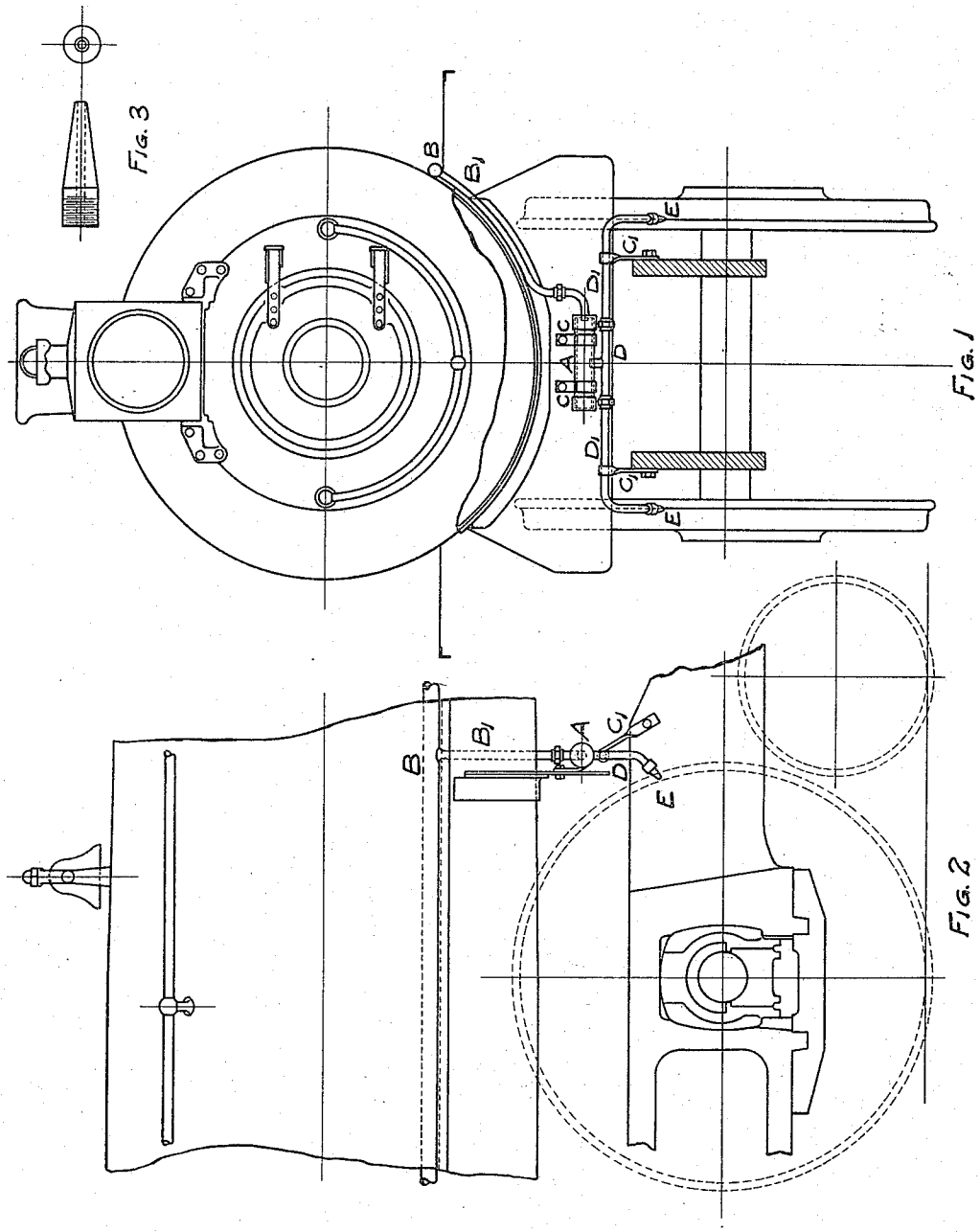
J. CROUCH & F. S. ROBBINS.

WHEEL FLANGE LUBRICATING DEVICE.

APPLICATION FILED JAN. 7, 1915.

1,160,385. Patented Nov. 16, 1915.



WITNESSES

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JOHN CROUCH, OF WILMERDING, AND FRANK S. ROBBINS, OF EDGEWOOD, PENNSYLVANIA.

WHEEL-FLANGE-LUBRICATING DEVICE.

1,160,385. Specification of Letters Patent. Patented Nov. 16, 1915.

Application filed January 7, 1915. Serial No. 1,017.

To all whom it may concern:

Be it known that we, JOHN CROUCH, a citizen of the United States, residing at Wilmerding, in the county of Allegheny and State of Pennsylvania, and FRANK S. ROBBINS, a citizen of the United States, residing at Edgewood, in the county of Allegheny and State of Pennsylvania, have invented a Wheel-Flange-Lubricating Device, of which the following is a specification.

Our invention relates to an automatic device for lubricating wheel flanges of railway locomotives or cars by using oil and water of condensation in the waste of exhaust steam of a steam cylinder. We attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a vertical section of the entire machine, showing the possible location on a steam locomotive, and Fig. 2 a side view of the same machine, and Fig. 3 a view of the nozzle.

Similar letters refer to similar parts throughout both views.

The condensing chamber "A" is supported or held in place by clamps "C C", which are attached to some permanent part of the locomotive or car. The pipe "B" is the exhaust pipe from the steam cylinder which may carry the entire exhaust of said cylinder or a part of same. The pipe "B^1" shows a suitable connection into the exhaust pipe "B" and leads into condensing chamber of the condensing receptacle "A". The branch outlet pipe or T-fitting "D" emerges from the cylinder "A" and is arranged as shown on the drawing in Fig. 1. These pipes enter into condensing chamber "A" with sufficient distance to gather the oil which floats upon the condensed water; this being expelled by a steam pressure which enters through the pipes "B" and "B^1". The distributer pipes "D^1" are connected into "D" and are extended to some suitable location on the flange of the wheel. These are supported and held in position by the clamp "C^1". At the extreme end of the distributer pipes "D^1", discharge nozzles "E" are applied, detail of same being shown in Fig. 3.

We are aware that prior to our invention, wheel flanges of locomotive and car wheels have been lubricated by the oil contained in the exhaust steam from the steam cylinder, but we know of no arrangement whereby a condensing chamber is used in order to condense nearly or all of the steam before it passes out of the nozzles to the flanges. This is of particular merit on account of eliminating the escape of all steam vapor, which otherwise might obscure the vision of the engineman.

We claim—

1. In a lubricating device for wheel flanges, the combination with an exhaust pipe from the steam cylinder, of a condensing receptacle, a branch pipe fitting projecting into the receptacle to take off the accumulation of lubricant, and oppositely disposed distributer pipes connected with said branch fitting and having discharge nozzles.

2. In a lubricating device for wheel flanges, the combination with an exhaust pipe from a steam cylinder, of a single condensing receptacle, a T-fitting having one end projecting into the receptacle to take off the accumulation of lubricant, and oppositely disposed distributer pipes connected with the other ends of said T-fitting and having discharge nozzles.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."