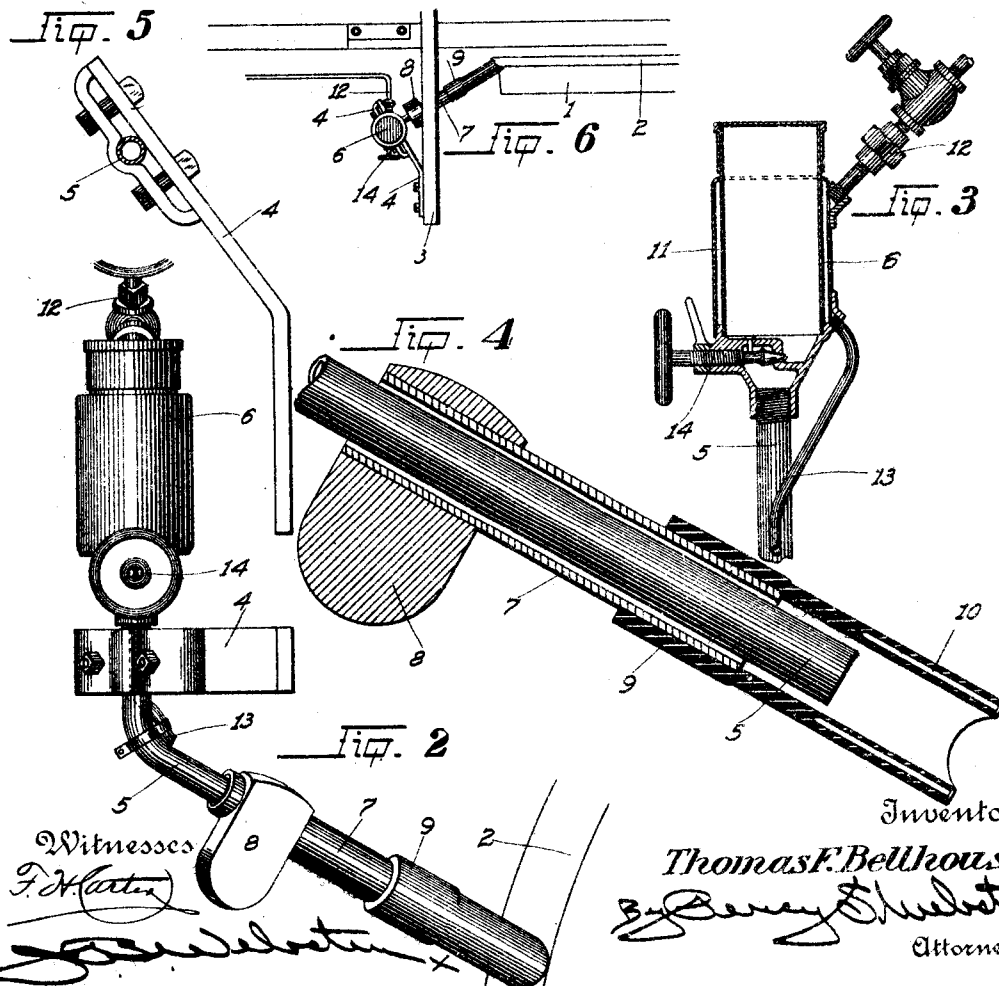
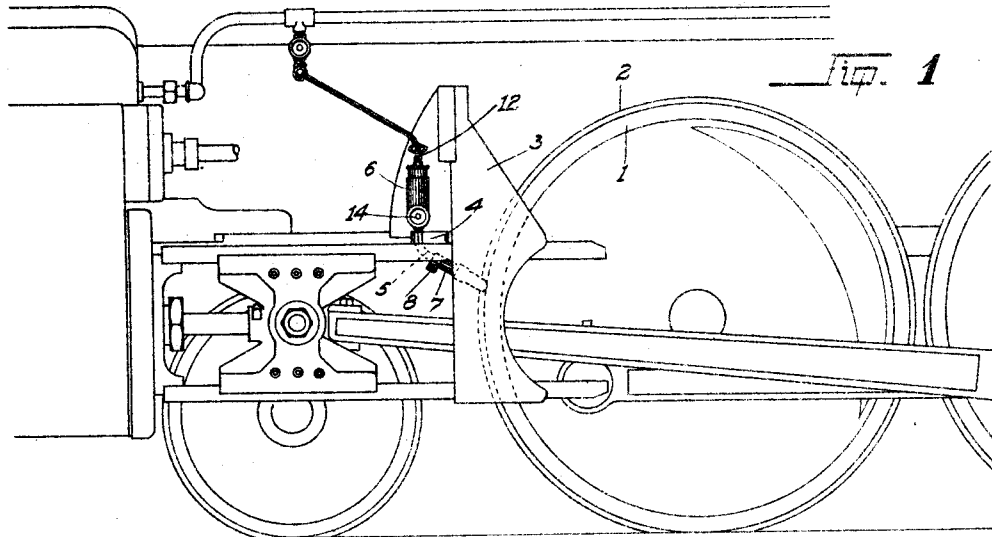


T. F. BELLHOUSE.
FLANGE LUBRICATOR.
APPLICATION FILED DEC. 23, 1906

1,059,021.

Patented Apr. 15, 1913.



Witnesses

F. Martin

Thomas F. Bellhouse

Inventor

Thomas F. Bellhouse

Barney Schubert
Attorney

UNITED STATES PATENT OFFICE.

THOMAS F. BELLHOUSE, OF SACRAMENTO, CALIFORNIA, ASSIGNOR OF ONE-FOURTH TO MICHAEL FASSBENDER AND ONE-FOURTH TO L. S. PRATT, BOTH OF SACRAMENTO, CALIFORNIA.

FLANGE-LUBRICATOR.

1,059,021.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed December 23, 1908. Serial No. 468,915.

To all whom it may concern:

Be it known that I, THOMAS F. BELLHOUSE, a citizen of the United States, residing at Sacramento, in the county of Sacramento, State of California, have invented certain new and useful Improvements in Flange-Lubricators; and I do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in locomotives and particularly to a means for lubricating the flanges of the drive wheels or other vehicle wheels to prevent the wearing of such flanges and of the rails against which such flanges bear, the object of the invention being to produce an automatic lubricator for the purpose which will automatically discharge the lubricant upon the flange directly and will not permit any of it to flow or splash upon the tread of the wheels which of course would lessen their tractive power and thus cause the lubricator to do more harm than good.

A further object of the invention is to produce a simple and inexpensive and easily operated device for the purpose.

These objects I accomplish by means of an oil cup, means for heating such cup, a discharge pipe leading from said cup, a weighted sleeve slidable on said pipe, a flexible hose on said sleeve and having its end bearing directly against the flange of the wheel such flexible hose having a metallic fiber formed in its end to avoid unnecessary wear by friction. The flexible member is held in close contact with the flange by the weighted sleeve and its flexibility permits it to maintain such close contact without breaking or becoming unnecessarily worn. I also employ such other and further construction and relative arrangement of parts as will more fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a side view of a drive wheel of a locomotive showing my improved lubricator connected therewith. Fig. 2 is a side

elevation of the lubricator. Fig. 3 is a sectional view of the oil cup. Fig. 4 is a fragmentary view of the discharge pipe showing the weighted sleeve and flexible hose in section. Fig. 5 is a top plan view of the supporting bracket for the lubricator. Fig. 6 is a top plan view of the lubricator showing its connection with the flange.

Referring now more particularly to the characters of reference on the drawings 1 designates one of the drive wheels of a locomotive and 2 the flange thereof.

3 is the guide yoke for the driving rods of the engine and on this is secured a bracket 4 to which bracket is bolted the discharge pipe 5 from an oil cup 6.

On the pipe 5 is a slidable sleeve 7 having a weight 8 at its upper end and on its lower end is secured a flexible hose 9 which hose bears directly and snugly against the flange 2 and is held in such direct and snug connection by the weight 8 influenced by gravity and thus no matter how much the member 9 wears it is maintained in its position against the flange thus permitting the flow of the oil from the cup 6 only upon the flange 2 and does not allow the oil to flow or splash on the tread of the wheel. The flexibility of the member 9 also aids in this function since it gives way before any undue friction which would wear or displace a rigid member.

To prevent undue wear of the member 9, metal fibers 10 such as nails or wires are woven or inserted into its lower end which of course resists the friction to a greater extent than would the flexible member alone.

To keep the lubricant in the cup 6 warm so that it will flow freely I provide a steam jacket 11 around such cup 6, such jacket being supplied with steam through a pipe 12 connecting with any suitable steam supply on the engine. From the jacket 11 a discharge pipe 13 discharges on the pipe 5 so that the hot water discharging therefrom also keeps the pipe 5 warm to keep the oil from freezing or stopping the flow in such pipe 5. The flow of the oil can be regulated by a valve 14.

From the foregoing description it will be readily seen that I have produced such a flange lubricator as substantially fulfils the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction

of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention.

5 Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:—

1. A flange lubricator comprising an oil cup, a discharge pipe thereon, a sleeve slid-
10 able on said discharge pipe, a flexible member on said sleeve and a metallic member disposed in said flexible member, as described.
2. A flange lubricator comprising an oil
15 cup, a discharge pipe therefrom, a steam jacket surrounding said oil cup and a discharge pipe from said steam jacket discharging upon the outer surface of said discharge pipe.
- 20 3. A flange lubricator comprising in com-

bination an oil cup, a discharge pipe therefrom, a telescopic member disposed on said discharge pipe, a steam jacket disposed around said oil cup, and a discharge pipe from said steam jacket upon said discharge 25 member.

4. In a lubricator the combination with a flanged wheel of a tubular part, a loose member carried by said tubular part, a flexible hose carried on the end of said loose 30 member and resting on the part of the wheel to be lubricated and means admitting oil into said tubular part and thence into said hose.

In testimony whereof I affix my signature 35 in presence of two witnesses.

THOMAS F. BELLHOUSE.

Witnesses:

JOSHUA B. WEBSTER,
FRANK H. CARTER.