

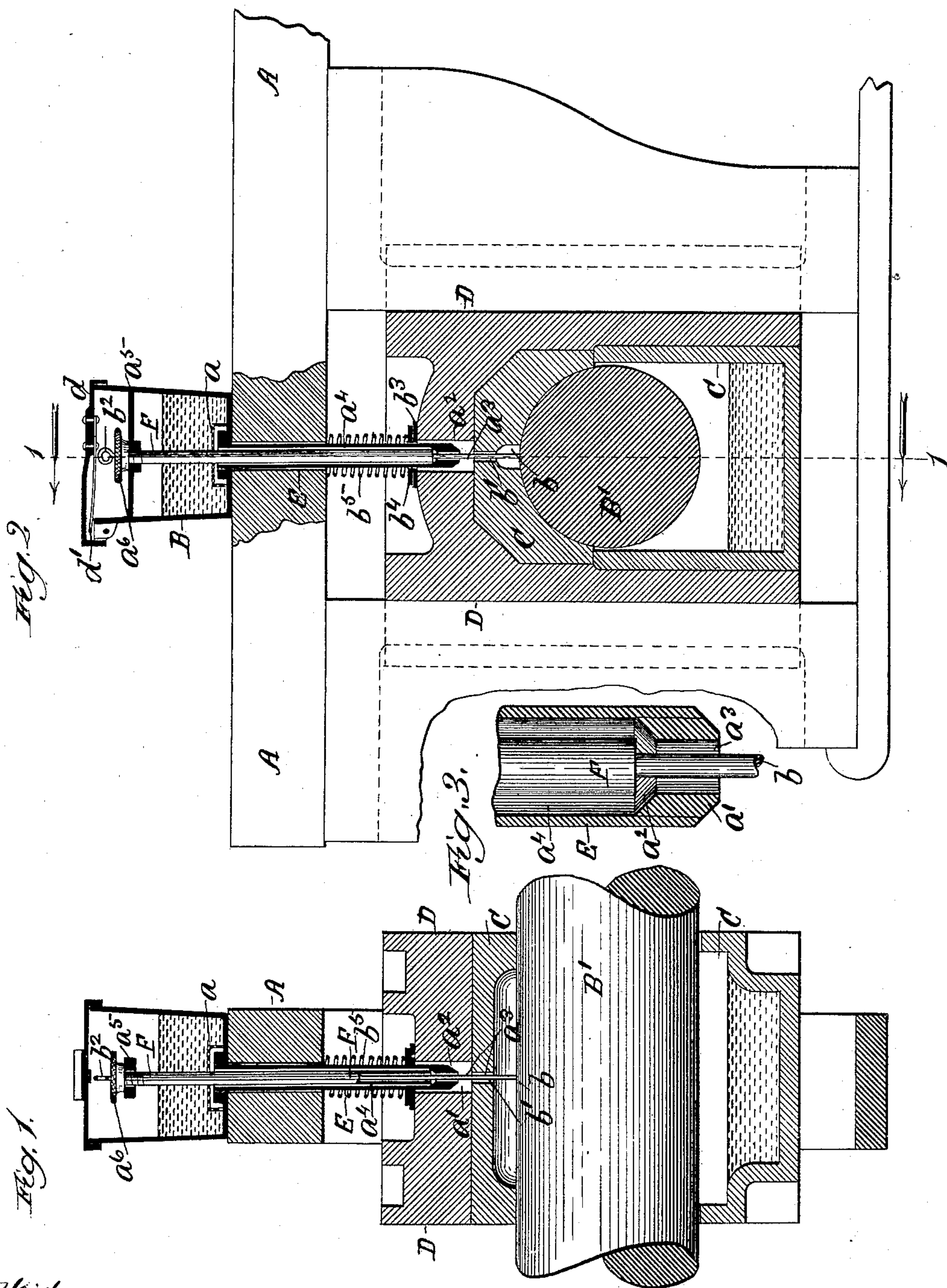
(No Model.)

T. J. ROGERS.

OILING DEVICE FOR LOCOMOTIVE AXLES.

No. 401,517.

Patented Apr. 16, 1889.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS J. ROGERS, OF CHICAGO, ILLINOIS.

OILING DEVICE FOR LOCOMOTIVE-AXLES.

SPECIFICATION forming part of Letters Patent No. 401,517, dated April 16, 1889.

Application filed February 2, 1889. Serial No. 298,469. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. ROGERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in an Oiling Device for Locomotive-Axles, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of this invention is to provide a means for affording the axle-journals of locomotives a continuous lubrication.

The axle-bearings of locomotives are not conveniently accessible, and it is often a very difficult matter to keep them properly lubricated, especially in frosty weather, and at the same time exclude the dirt, dust, and cinders.

Figure 1 is a vertical longitudinal section in plane 1, Fig. 2; Fig. 2, a vertical transverse section; and Fig. 3 is an enlarged broken-away detail of construction.

Referring to the drawings, A represents the frame; B, the oil-cup; B', the axle; C, the brass bearing-cap; C', the oil-cellar, and D the inclosing-box.

The oil-cup B is rigidly mounted on the frame and provided on the inside bottom with the straining-surface a , through which the oil passes into the conducting-tube E, leading to the axle-journal. The lower end of this tube rests on the brass and has the plug a' inserted therein. This plug has the concave seat a^2 and the reduced central oil-aperture, a^3 . This tube will be of a sufficient size to form something of an oil-reservoir, so as to insure a continuous feed. A second tube, F, starts from the inside of the oil-cup, near the top above the oil-line, and extends down on the inside of the oil-tube E, leaving an annular space, a^4 , for the passage of the oil. The upper end of the tube F is threaded in the bridge a^5 , arranged inside of the oil-cup, as shown, and provided with the milled hand-grasp a^6 , whereby the tube F may be raised or lowered with reference to the concave or conical seat a^2 and the oil-passage enlarged or diminished in regulating the feed. A copper wire, b , is inserted inside of the

tube F, the lower end passing down through the oil-hole b' in the brass and resting on the axle. The upper end of this wire terminates in the loop b^3 , so that the same may be conveniently withdrawn or worked up and down, when necessary, in freeing the oil-passage. The concave surface of the plug a^2 guides the wire through the contracted oil-passage. This wire will conduct sufficient heat from the axle to thin and keep the oil in a flowing condition, and may also be used to keep the passage clear. The warmed air also passes up through the tube inclosing the wire, prevents the congealing of the oil, and insures a continuous feed. An elastic washer, b^3 , encircles the tube a' and rests on top of the box D, for the purpose of covering the oil-passage and excluding foreign matter. A metallic washer, b^4 , rests on top of the elastic washer, both being retained in place by means of the spiral spring b^5 , inclosing the tube F. The lower end of this spring rests upon the washers, the opposite end bearing against the under side of the frame.

Access is had to the oil-cup by raising the hinged spring-cap d , which is kept tightly and automatically closed by the spring d' .

The construction of the parts about the axle is such that it has always been a more or less difficult matter to properly lubricate the axle-bearings from the top, both on account of the distance from the cup to the bearing and the thick quality of the oil generally used for this purpose. In frosty weather it has been almost impossible to keep anything like a continuous feed with the usual appliance. By this improved arrangement a continuous and uniform feed can be maintained, and the dirt, dust, and cinders entirely excluded.

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

1. The combination, with the axle-frame, of an oil-cup rigidly mounted thereon, an oil-conducting tube leading from the bottom of the cup to and resting on the brass, a second tube starting from the inside of said cup at a point above the oil-line and extending down inside of and stopping short of the lower end of the oil-tube, the plug inserted in the lower

end of said oil-tube and provided with a concave seat and a contracted oil-passage, and the wire inserted in the inner tube and having the lower end resting on the axle, substantially as and for the purpose set forth.

5 2. The combination, with the oil-cup, of the bridge arranged inside thereof, the adjustable tube having a threaded engagement with said bridge and extending down inside of the oil-

conducting tube, and the wire inserted in the adjustable tube and having the lower end resting on the axle, the upper end projecting above said tube inside of the cup, substantially as and for the purpose set forth.

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