

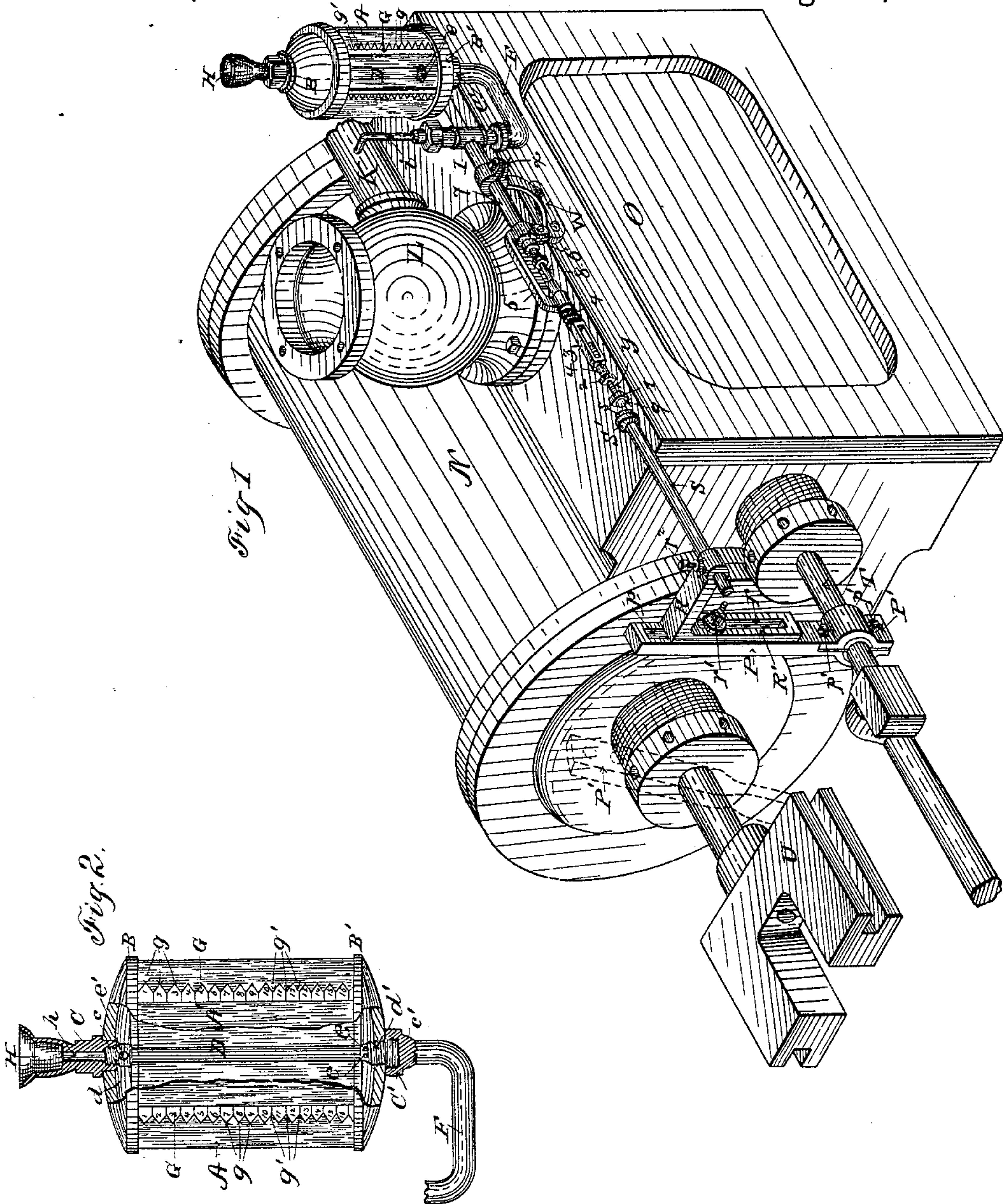
(No Model.)

F. JARECKI.

LUBRICATOR.

No. 283,399.

Patented Aug. 21, 1883.



Witnesses

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UNITED STATES PATENT OFFICE.

FRIDERICH JARECKI, OF ERIE, PENNSYLVANIA.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 283,399, dated August 21, 1883.

Application filed October 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRIDERICH JARECKI, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Lubricating Devices for Steam-Engines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention consists in providing certain improvements on the lubricator shown in Letters Patent No. 259,022, issued to me June 6, 1882. These improvements relate to the construction of the oil cup or reservoir, and to the means for operating the pump by which the oil is drawn from the reservoir and injected into the steam-chamber. The construction of the pump and the operation of the same is not changed in this construction.

In the drawings, Figure 1 is a perspective view of a steam-engine cylinder and steam-chest, and shows my invention in place thereon. Fig. 2 is an elevation view of the oil-reservoir, with the central part in vertical section.

The reservoir consists of a glass body, A, with metal cover and bottom B B', which are held together by a central stem or post, D, and a nut, C. (See Fig. 2.) The lower end of the post D is provided with a screw-thread, c' , by which it is connected with the pipe F, and a screw-thread, d' , which screws into the bottom B'. The post D is tubular at its lower end, from which tube are openings $e e$ into the reservoir. The upper end of the post is also tubular, and opens through a hole, e' , into the reservoir. The nut C is tubular, and is finished on top with a cup, H, which serves as a funnel for filling the reservoir. The nut also serves to clamp the cover and bottom B B' firmly upon the glass cylinder A, and proper packing or joints being provided, the reservoir will be so tight as to hold oil.

On the outside of the cylinder A, between the parts B B', are gage-bars G, which are put in place when the parts of the reservoir are put together. These gage-bars are notched and numbered. The inner angles, $g' g'$, of these notches represent ounces (fluid) of capacity of the reservoir, and the outer angles, $g g$, will then represent half-ounces. These

gages are so numbered as to show the consumption of oil, and, together with the means provided for regulating the consumption, constitute an essential feature of my invention. There are two of these gage-bars, simply for convenience. More could be used, or only one, if desired.

In the patent above referred to the piston of the oil-pump is worked by a lever connected with some of the working parts of the engine. In this construction now shown the pump-piston 8 is provided with a spring, 4, which will move it out after it has been pushed in. The spring shown is a coil-spring; but other forms may be used. The means for moving the oil-pump piston in are as follows: Clamped or otherwise fastened on the valve-stem T is a standard or arm, P, or, if wanted, this may be on the piston-stem or cross-head, as shown by dotted lines; but in most cases it will be found preferable to put it on the valve-stem. Attached to this standard through the medium of the arm R, or some similar device, is a ram, S, or tappet-rod having a head, S'. The device by which this tappet is connected with the standard P will vary in form and style according to the arrangement of parts of the engine and the relative position of the pump; but the essential feature will be that they will hold the tappet or ram S, so that as the engine moves it will cause the tappet to strike upon and push in the pump-piston. The head of the piston is provided with a screw or extension bolt, y , having a buffer-head, 1; or this may be on the ram in place of being on the piston. Its purpose is to regulate or adjust the length of the stroke of the piston 8.

In order to prevent noise a rubber buffer, 9, is put in the head of the bolt y ; or it may be put in the head of the tappet S. The arm R, which holds the tappet, is made adjustable by a bolt and clamp-nut, r' , and a slot, R', and the length of the tappet can be adjusted by a screw, r'' , so that the tappet can be made to hit fairly on the head 1 of the piston and move it in the proper distance, and the variations of stroke which may be wanted can be effected by adjusting the bolt y . So it will be seen that the oil-pump piston is driven in by a tappet or ram connected with the moving parts of the engine, and it is driven out by the reaction of the spring 4.

The lubricator is supported on the side of the steam-chest by a bracket, W, which has a clamp, *x*, formed on its outer end, for the purpose of grasping and holding the cylinder of the pump 7. The bracket being distinct from the pump, it can be attached to it from either side, and in this way will serve as well on right or left engines.

What I claim as new is—

10 1. The combination, in a lubricating apparatus, of the transparent cylinder A, having the top and bottom held in place by means substantially as described, and gage-bars held in place by said top and bottom, for the purpose set forth.

15 2. In a lubricating apparatus, substantially as shown, the combination of a graduated oil-reservoir with a pump for drawing the oil from said reservoir, and having adjustable parts, substantially as shown, to register with the graduated parts on the reservoir, whereby the length of its piston-stroke can be regulated so as to regulate the amount of oil it will pump at each stroke, whereby the rate of consumption of oil can be observed and regulated.

25 3. In a lubricating apparatus substantially as shown, an oil-reservoir having combined therein, as shown, the following elements: the

cylinder A, top and bottom B B', post D, with screw-threads *c'*, *d'*, and *d*, and having tubular ends with openings *e e'*, and the tubular nut C, with cup H thereon.

4. In a lubricating apparatus substantially as shown, the combination, with the oil-pump, of the spring 4, applied to the piston of said pump in a manner as shown, to move it out, an adjusting-screw, *y*, with buffer-head 1, by which the length of the stem of said pump-piston can be adjusted, a tappet bar or ram, S, and standard P, connected with the moving parts of said engine, and provided with devices, substantially as shown, for holding and adjusting said tappet-bar.

5. In a lubricating device for engines, a bracket, W, attached to said engine for supporting the pump-barrel, and having a clamp, *x*, with jaws projecting outwardly, for embracing the pump-barrel of said lubricating device, for the purpose set forth.

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

FRIDERICH JARECKI.

Witnesses:

JNO. K. HALLOCK,
ROBT. H. PORTER.