

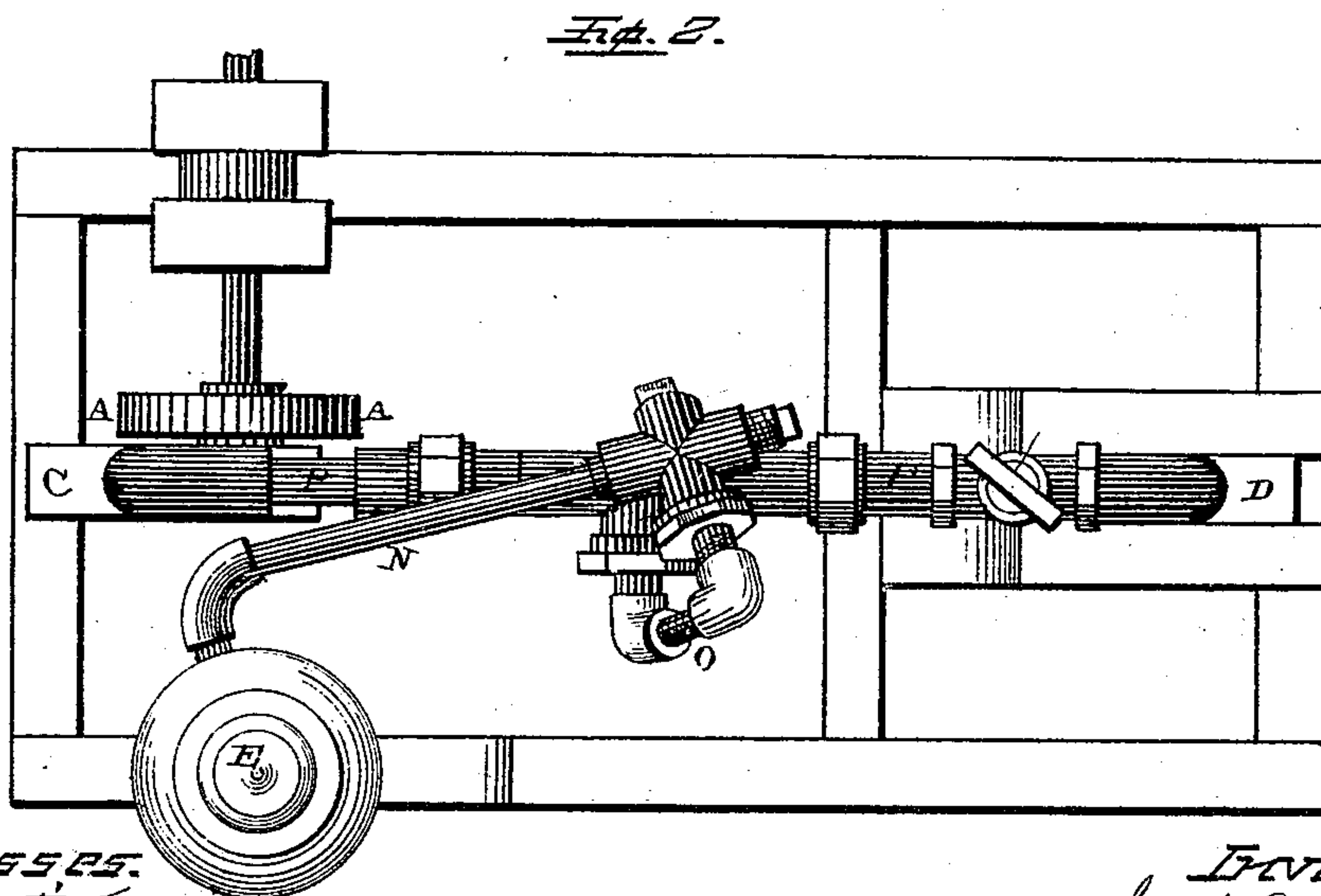
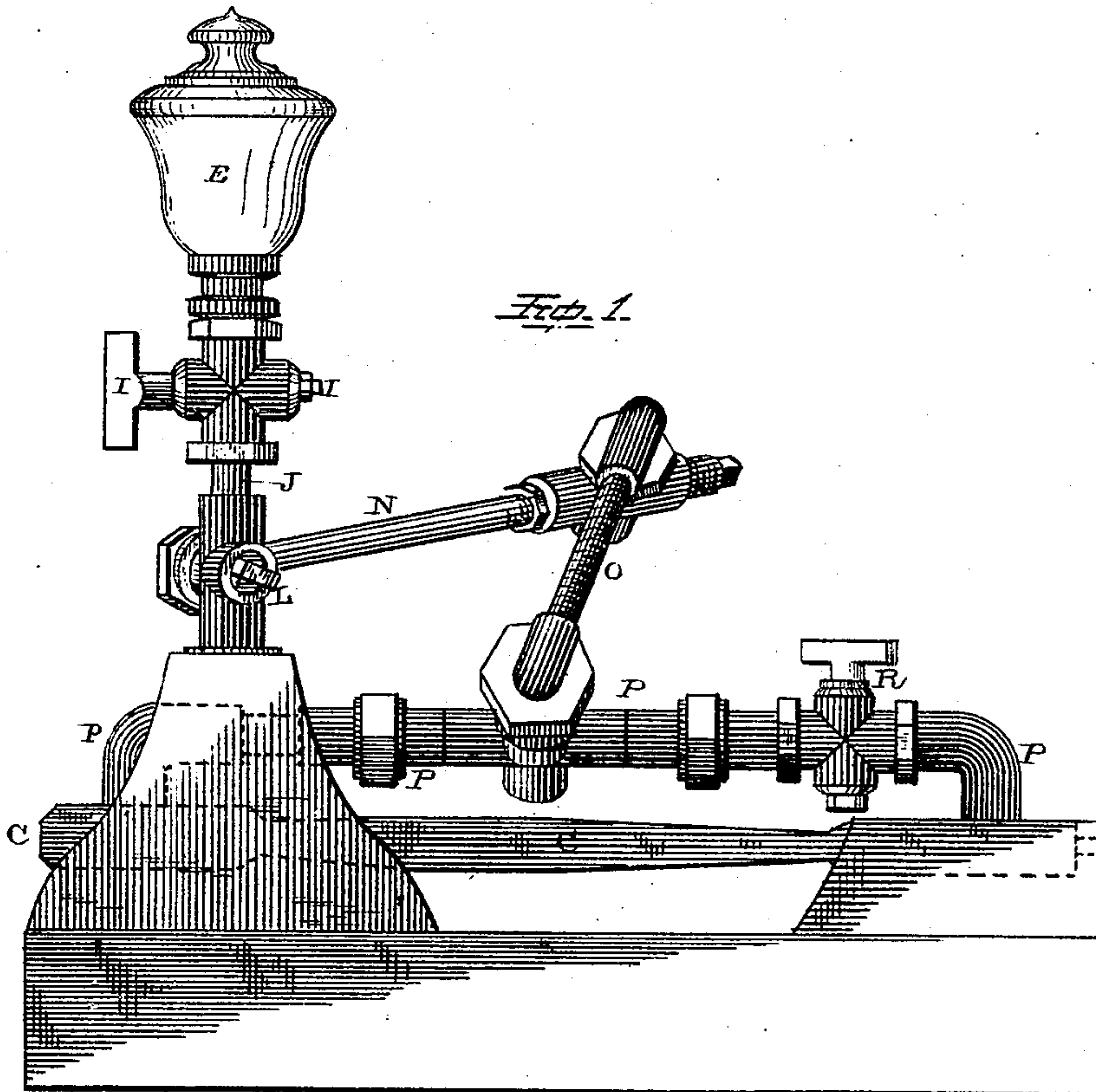
(No Model.)

2 Sheets—Sheet 1.

S. ZIMMERMAN.
LUBRICATOR.

No. 250,623.

Patented Dec. 6, 1881.



WITNESSES.
Wm. H. Mortimer,
W. H. Kern

INVENTOR
Saml. Zimmerman,
per
F. W. Lehmann, atty

(No Model.)

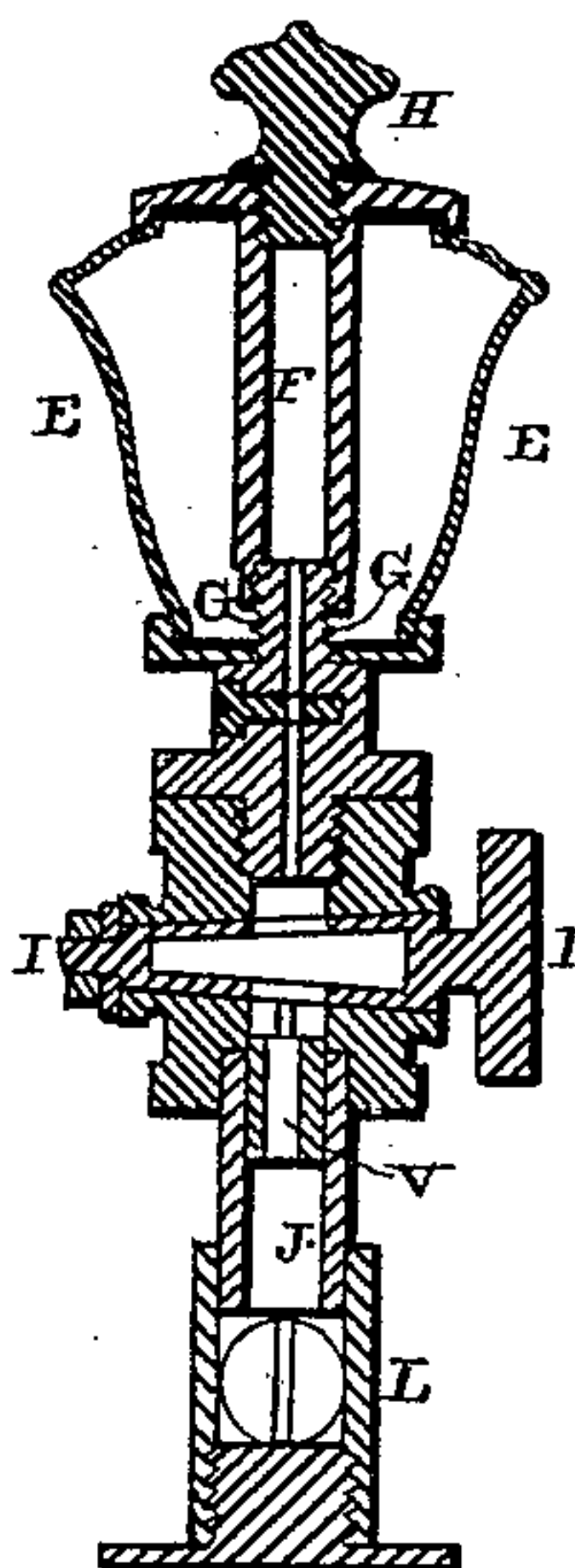
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Fig. 3.



Witnesses.

William H. Mortimer,
Wm. H. Kern

Inventor

Saml. Zimmerman
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UNITED STATES PATENT OFFICE.

SAMUEL ZIMMERMAN, OF SEDALIA, MISSOURI.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 250,623, dated December 6, 1881.

Application filed October 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL ZIMMERMAN, of Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Automatic Lubricators; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in automatic lubricators; and it consists in the combination of a raised stationary oil-cup, a loose horizontal pipe, a vertical pipe, which connects the horizontal pipe with the pipe which extends along upon the top of the connecting-rod, suitable regulating-cocks placed in the pipes, whereby the crank-shaft or wrist-pin and the cross-head are automatically oiled while the machine is in motion.

The object of my invention is to produce a connection between a raised oil-cup and the bearings at the wrist-pin or crank and at the cross-head, so that these parts will be kept automatically oiled all the time, and that from a single source.

Figure 1 is a side elevation of my invention complete. Fig. 2 is a plan view of the same, and Fig. 3 a vertical sectional view of the oil-cup and its vertical connections.

A represents the crank-shaft or driving-wheel of the engine, and which is connected by the pitman C with the slide-head D in the usual manner. I do not lay claim to any particular construction of these parts of the engine, because they may be varied at will.

To one side of the engine, upon a suitable raised support, is placed the oil-cup E, which may either be of the construction here shown or any other that may be preferred. In this instance the glass bowl is clamped upon its base by means of the hollow rod F, which screws upon the threaded pipe G, which projects above the top of the base, as shown. This hollow rod F has a suitable flange or collar formed upon its upper end, which catches upon the top of the bowl, and has an opening through its top, which is closed by a screw-plug, H. Just below this oil-cup is placed

the regulating-cock I, by means of which the flow of oil from the cup may be regulated at will. A glass tube, J, is inserted between the cock at the base of the oil-cup and the joint L, and this glass tube has a small tube, V, inserted at the bottom end of the stop-cock, and which extends about half-way down the center of the glass tube. Through this small tube the oil flows and can be seen to drop from the lower end of the small tube, and thus show to the engineer how fast the oil is being fed.

Loosely connected by any movable well-known joint to the joint L is the horizontal feed-pipe N, and this pipe N is connected by a movable joint with the vertical pipe O. The lower end of this vertical pipe is connected by another loose joint with the pipe P, which extends along from the top of the connecting-rod from one end to the other. One end of this connecting-rod P extends to the wrist-pin or crank, while the other end extends to the cross-head, and through these pipes the oil flows from the raised oil-cup to lubricate these two moving parts. As the oil, owing to the movement of the machinery, is much more liable to flow to the cross-head than to the wrist-pin or crank, a cock, R, is inserted in the pipe P, so as to regulate the flow of oil to this end of the pipe.

While the engine is in operation the vertical and the horizontal pipe have a free movement of their own, and which movement corresponds to the movement imparted to the pipe P by the pitman. While the engine is in full motion the oil flows from the oil-cup through the horizontal and vertical pipes into the pipe P, and it is then fed to the two bearings. By means of this construction the machine can be kept constantly lubricated by a single cup, and that without the necessity of ever having to stop the machine for the purpose of filling the oil-cups.

Having thus described my invention, I claim—

1. In a lubricator, the combination of an elevated oil-cup, suitable connecting-pipes, and a pipe which extends the full length of the pitman, whereby the bearing at each end of the pitman is kept constantly lubricated, substantially as shown.

2. The combination of the raised oil-cup E,
a regulating-cock, I, a movable horizontal pipe,
N, that is loosely connected to the joint L, a
vertical pipe, O, that is loosely connected at
5 one end to the horizontal pipe, and at the other
end to the pipe P, which extends from one
end of the pitman to the other and feeds the
oil to both of the bearings, substantially as set
forth.

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

SAMUEL ZIMMERMAN.

Witnesses:

A. P. MOREY,
J. W. CONNER.