

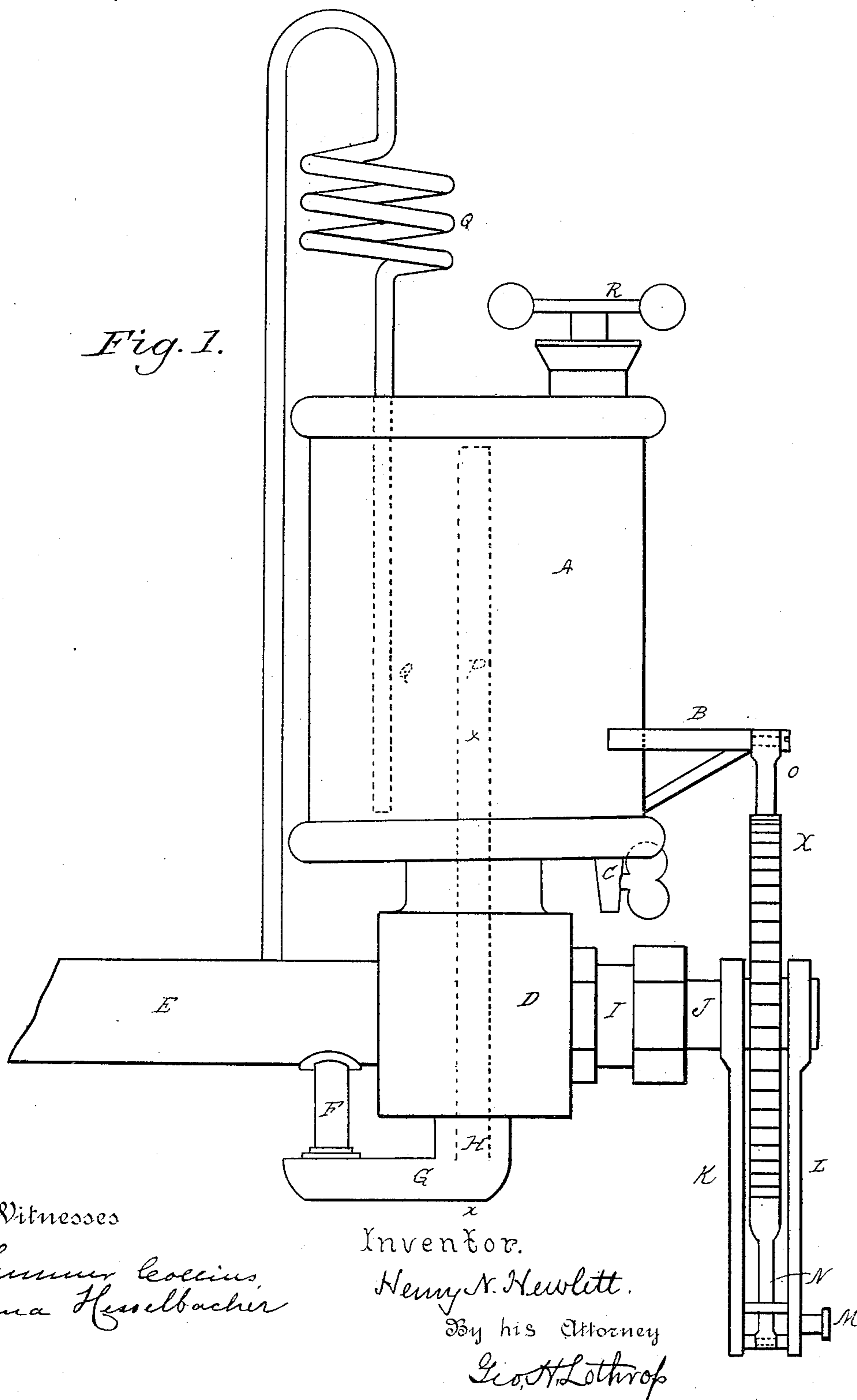
(No Model.)

2 Sheets—Sheet 1.

H. N. HEWLETT.
LUBRICATOR.

No. 377,253.

Patented Jan. 31, 1888.



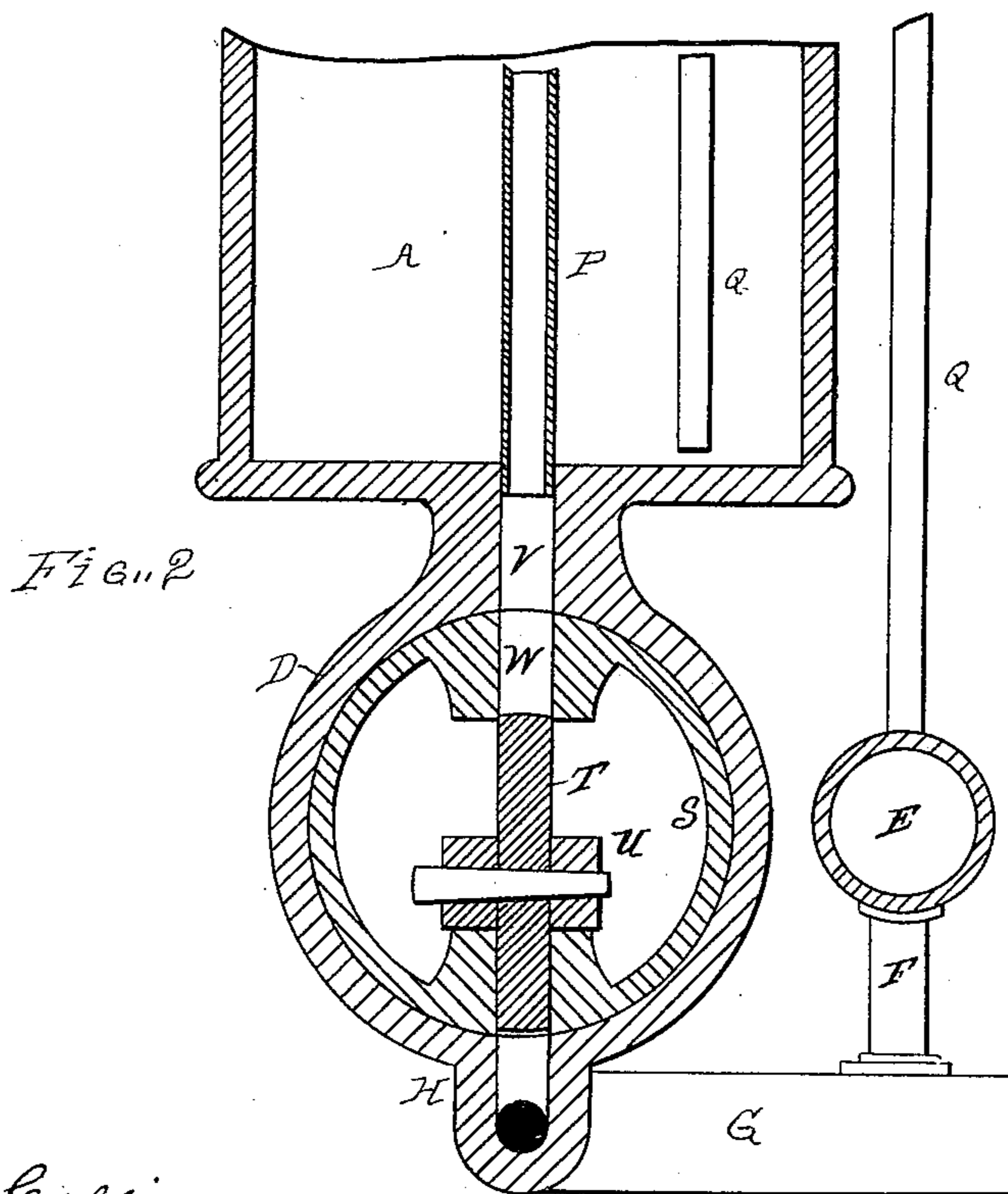
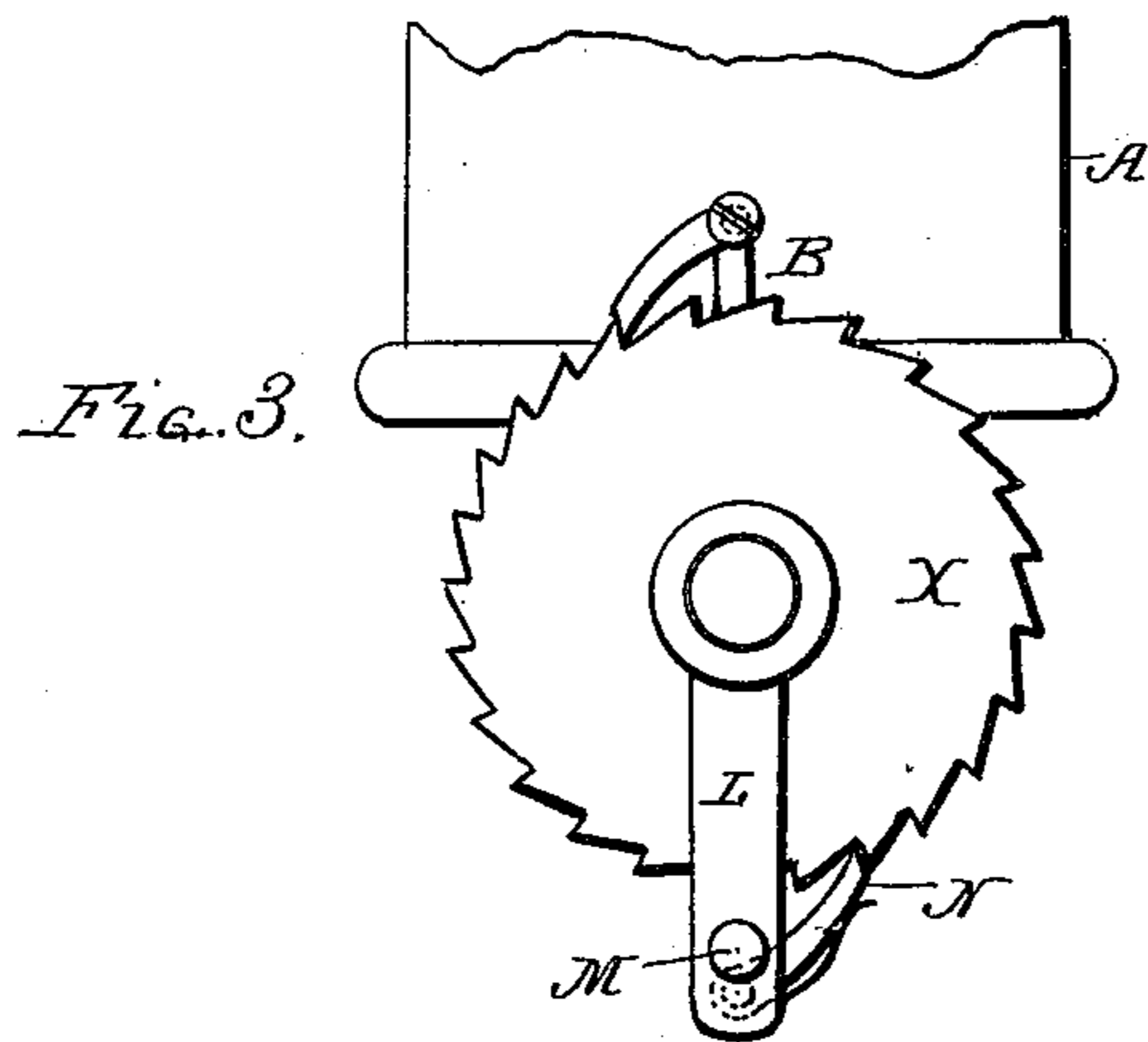
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2 Sheets—Sheet 2.

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LUBRICATOR.

No. 377,253.

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Witnesses
Lester Collins,
Emma Herselbacher.

Inventor
Henry N. Hewlett.
By His Attorney
Geo. H. Lothrop.

UNITED STATES PATENT OFFICE.

HENRY N. HEWLETT, OF OSCODA, MICHIGAN.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 377,253, dated January 31, 1888.

Application filed August 23, 1887. Serial No. 247,668. (No model.)

To all whom it may concern:

Be it known that I, HENRY N. HEWLETT, of Oscoda, in the county of Iosco and State of Michigan, have invented a new and useful Improvement in Lubricators, of which the following is a specification.

My invention consists in an improvement in lubricators, hereinafter fully described, and is designed to obviate the necessity of using constricted passages or valves in hydrostatic lubricators to regulate the feed, thus avoiding the difficulty experienced with some lubricators through the clogging of the passages by dirt or impure oil.

Figure 1 is an elevation of the lubricator. Fig. 2 is a vertical section of a portion thereof, and Fig. 3 is a side elevation illustrating the ratchet-wheel.

E represents a portion of the steam-pipe.

A represents the body of the lubricator, which is usually cast, and which is provided at the top with a filling-plug, R, and at the bottom with a drain-cock, C.

Q represents a condensing-pipe which leads from the steam-pipe E through the top of the lubricator, and usually to a point near the bottom, as shown in dotted lines in Fig. 1.

D represents a hollow cylinder formed on the bottom of the body A of the lubricator, which is entirely closed at one end, and through the top of which is formed a passage, V, which communicates with the pipe P, which rises to the top of the body of the lubricator, and at its bottom has a passage, H, which communicates with pipes G F, which lead to the steam-pipe E.

S represents a valve adapted to fit and rotate in cylinder D, and which has a passage, W, formed through it, adapted to register with passages V H.

J represents a shaft secured to valve S, which projects through a stuffing-box, I, on the open end of the cylinder D, and X represents a ratchet-wheel secured to said shaft.

B represents a bracket on the body A of the lubricator, to which is pivoted a pawl, O, which engages with ratchet-wheel X and permits said wheel to turn only in one direction.

K L represent a frame loosely pivoted on shaft J and carrying a pawl, N, pivoted thereto, adapted to engage with ratchet-wheel X and

move said wheel when the frame is moved in one direction.

M represents a wrist-pin on frame K L, to be connected with some moving part of an engine. 55

T represents a piston fitting and moving in passage W, and made of such length, as shown in Fig. 2, that when it is at the end of its stroke in either direction it will be practically flush with the circumference of the valve S. 60

U represents a weight secured to piston T.

The operation of my invention is as follows: Water passing through pipe Q into the body A of the lubricator floats oil upward and forces it down through pipe P into passage V. 65

When valve S is in such a position that the passage W registers with passage V, as shown in Fig. 2, the passage W, above piston T, becomes filled with oil. As the valve is rotated

through the power applied to shaft J and ratchet-wheel X, that part of the passage W which is filled with oil is carried around until it registers with the passage H, (the flow of the oil through pipe P and passage V being

meantime suspended,) when the piston T, being then reversed, falls through the action of the weight U and the pressure of the oil on its end and drives into passage H the oil held in the valve. As the piston T falls, that part of the passage W above said piston is filled with 80

oil from the passage V, and this again carried around and forced into passage H, as before. The lubricator thus feeds a measured quantity of oil intermittently twice at each revolution of the valve S, and there are no funnels or 85

constricted passages to clog. From passage H the oil passes through a suitable pipe or pipes, G F, to the steam-pipe E, or to any other place which is to be lubricated, for it is evident that this lubricator may be used to oil 90

journals or other moving parts of machinery. By increasing or diminishing the throw of the frame K L in a manner well-known to mechanics the rapidity of the feed can be adjusted to suit the purpose to which the lubricator is 95

applied.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a lubricator, the combination, with the oil-pipe, of a cylinder connected with said oil-pipe, a rotary valve having an oil-passage therethrough within said cylinder, a weighted 100

piston in said valve, and mechanism for rotating said valve, substantially as shown and described.

2. In a lubricator, the combination, with
5 the oil-exit pipe P, of the cylinder D and shaft J, valve S, having an oil-passage, W, there-through, a weighted piston in said valve, and

the ratchet-wheel X, substantially as shown and described.

HY. N. HEWLETT.

Witnesses:

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