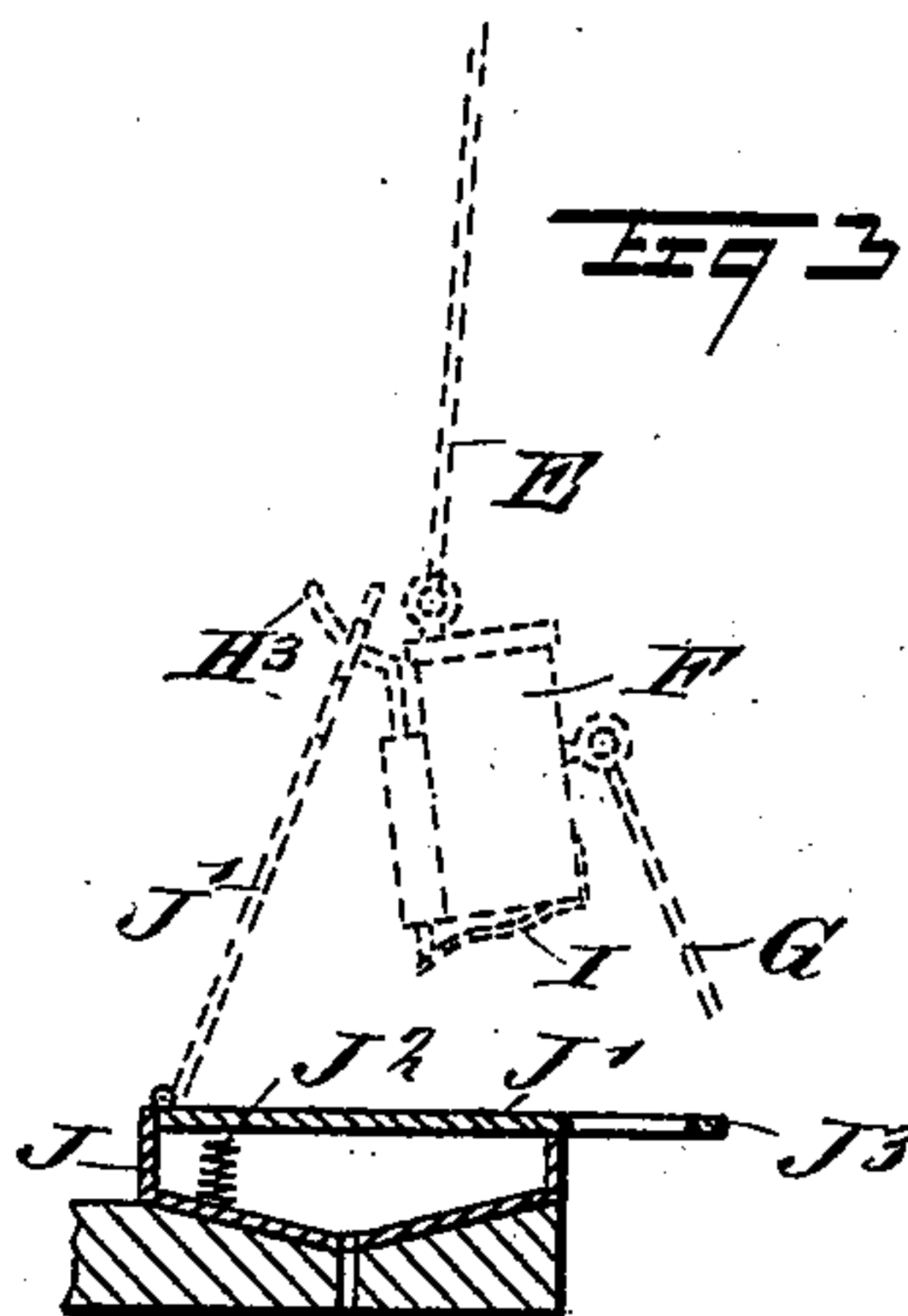
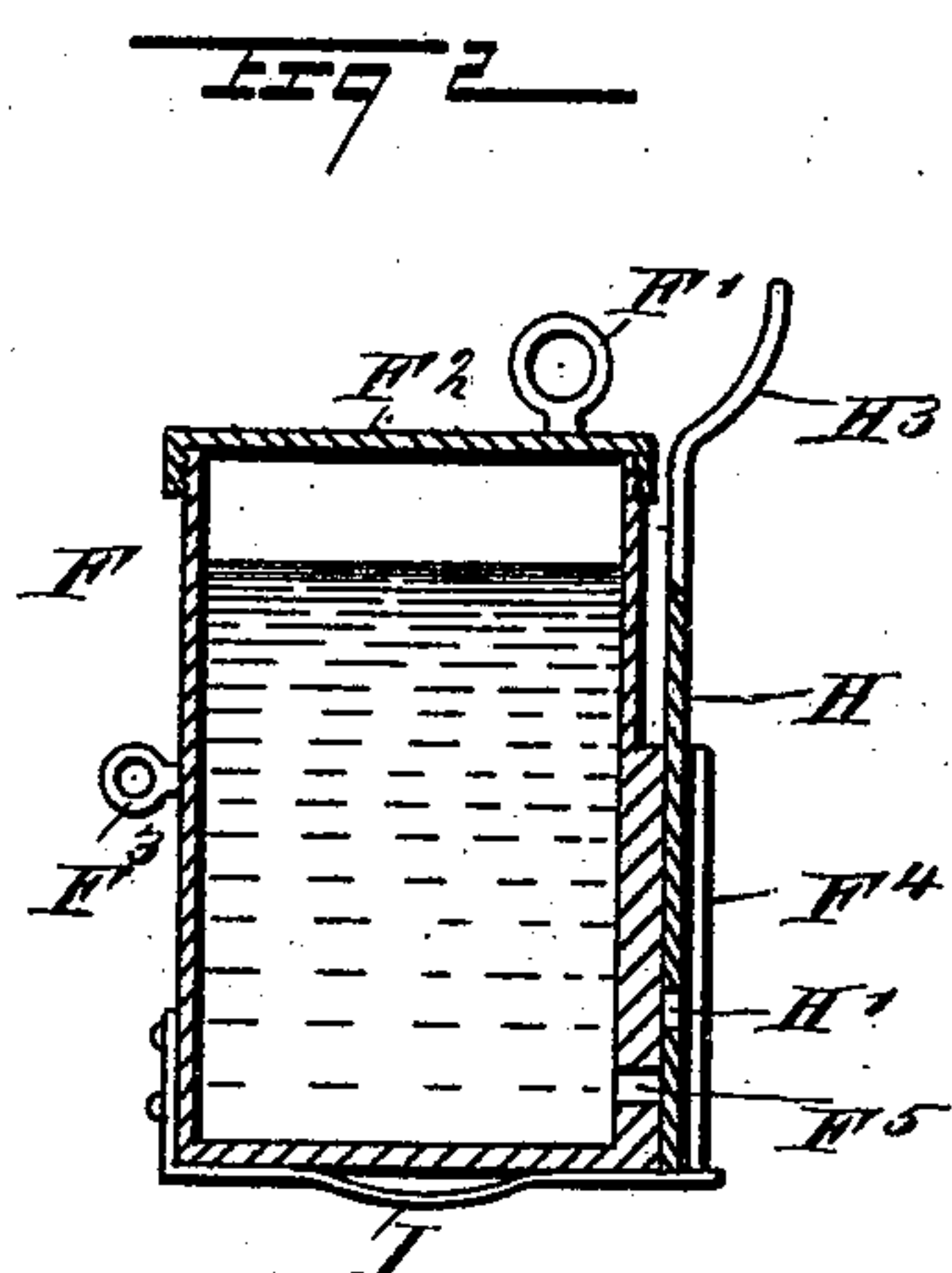
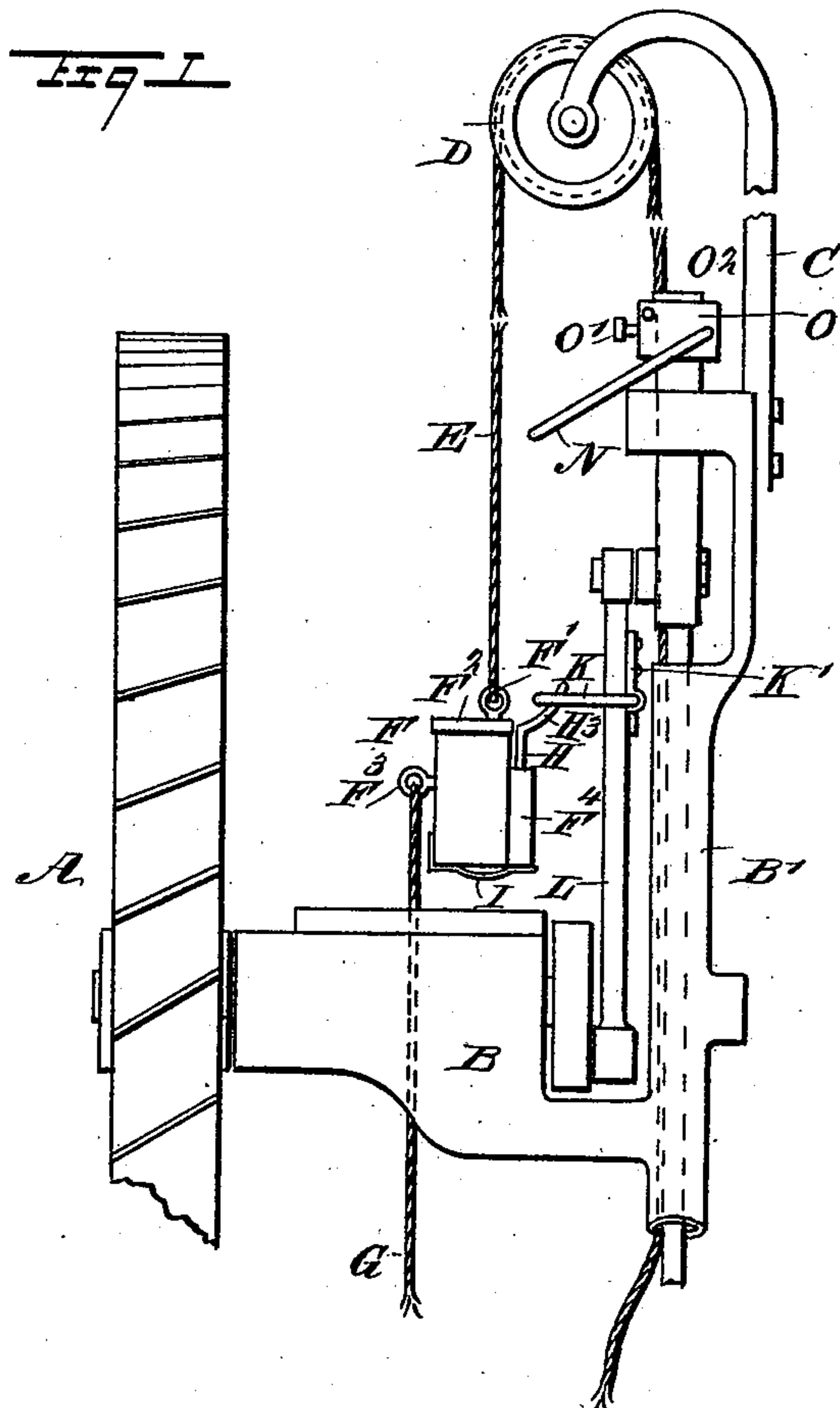


(No Model.)

W. A. SEIBEL.
LUBRICATOR.

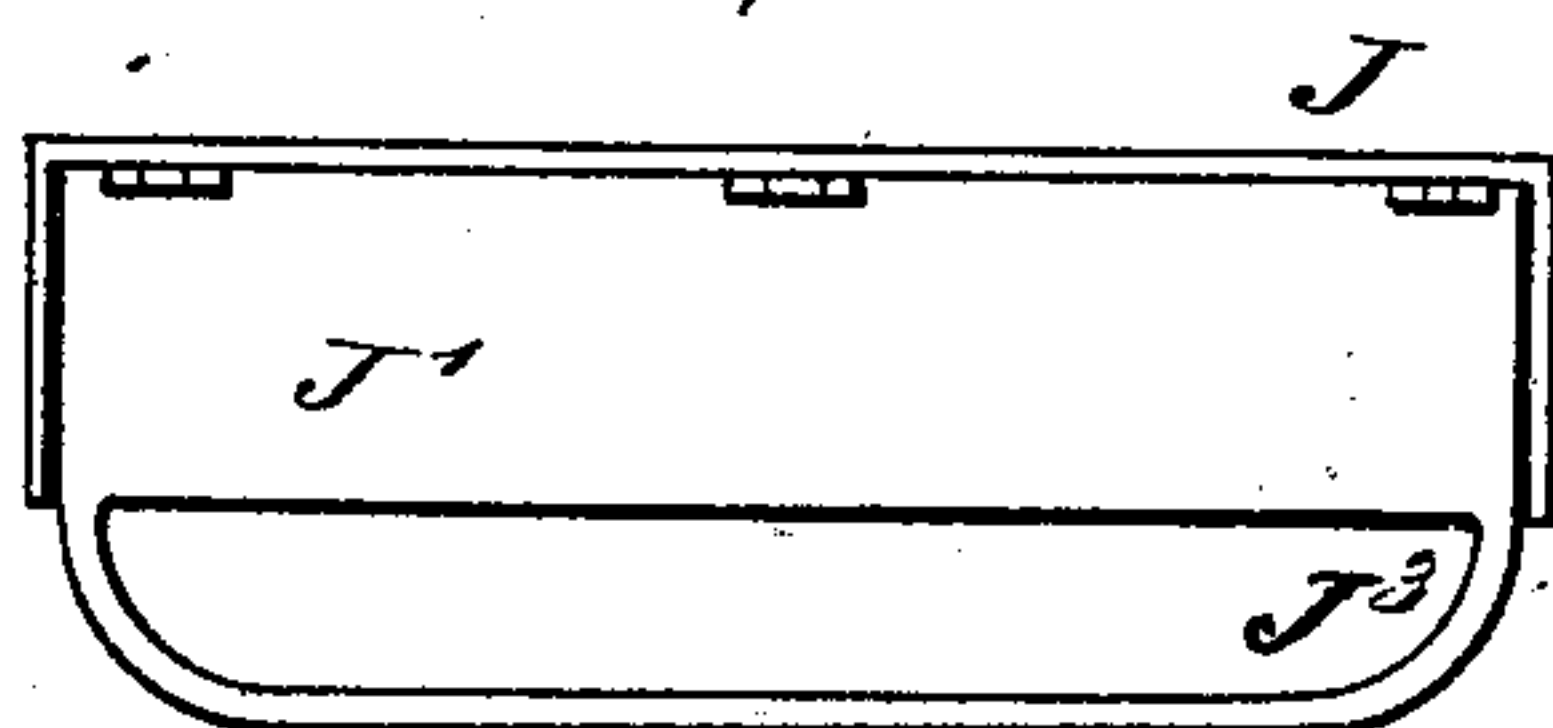
No. 519,394.

Patented May 8, 1894.



WITNESSES:

H. Walker
E. M. Clark



INVENTOR

W. A. Seibel
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM AUGUST SEIBEL, OF INDEPENDENCE, IOWA.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 519,394, dated May 8, 1894.

Application filed July 12, 1893. Serial No. 480,224. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM AUGUST SEIBEL, of Independence, in the county of Buchanan and State of Iowa, have invented a new and Improved Lubricator, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved lubricator, which is simple and durable in construction, very effective in operation, and more especially designed for conveniently lubricating various parts of elevated machinery such as windmills, the lubricator being arranged to lubricate the several parts from the ground, so as to avoid the danger incident to the operator climbing the framework or towers supporting the elevated machine.

The invention consists of certain parts and details, and combinations of the same, as will be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement as applied. Fig. 2 is an enlarged sectional side elevation of the oil can. Fig. 3 is a transverse section of the lubricating box for the main driving shaft of the machine; and Fig. 4 is a plan view of the same.

The improved lubricator, as shown in the drawings, is applied to a windmill A, of any approved construction and mounted on a frame B, supported on the usual tower or other suitable framework. The frame B is provided with the vertically-disposed tube B', forming a guideway for the pump rod, and on the upper end of the said tube is secured a bracket C in which is hung on a swivel a pulley D, over which passes a rope E, extending at one side of the pulley down through the tube B' to the ground, the other end of the rope being connected with the eye F' of an oil can F. The pulley D is covered to prevent the rope from slipping off. The end of the rope E at the ground is fastened in place by a weight when not in use.

The oil can F is provided with a screw cap F², carrying the said eye F' and which, when removed, permits of filling the can with the necessary lubricant. On one side of the can

F is secured a second eye F³, connected with a rope G, extending to the ground and serving as a guide rope to move the oil can in contact with the proper part of the machine to be lubricated, as hereinafter more fully described. On the oil can F is also arranged a guideway F⁴, in which is fitted to slide a slide valve H, provided with an aperture H' adapted to register with a discharge opening F⁵, arranged in the side of the oil can F, as plainly shown in Fig. 2. The openings F⁵ and H' are normally out of register owing to the action of a spring I secured on the oil can and pressing on the said slide valve H.

On the upper end of the slide valve H is arranged an arm H³, adapted to engage an obstruction or other device arranged on the part of the machine to be lubricated, so that the said slide is caused to move downward to bring its opening H' in register with the discharge opening F⁵ to permit oil to flow out of the can onto the part to be lubricated. If, for instance, the main driving shaft is to be lubricated, the oil box J thereof, as illustrated in Figs. 3 and 4, is provided with a hinged lid J' held closed by a spring J². On the free end of the lid J' is arranged or formed a loop J³, adapted to be engaged by the arm H³ of the slide valve H, so that the operator on pulling on the downwardly-extending part of the rope E causes the said lid J' to open, as indicated in dotted lines in Fig. 3, and on a further pull of the said rope causes a downward sliding of the slide H as the loop J³ presses on the arm H³. As soon as the slide valve moves downward and its opening H' registers with the opening F⁵ in the oil can F, then the oil flows out of the can into the box J to lubricate the main shaft.

It is understood that the operator, by the use of the guide rope G, can readily move the oil can F so as to cause its arm H³ to engage the loop J³ of the lid J' to open the latter and then to cause the slide valve H to open the opening F⁵, as above described. After oil has been discharged into the box J, the operator lowers the can F by pulling on the guide rope G and slackening the rope E. The lid J' then closes by the action of the spring J².

When it is desired to oil the pitman L, I employ a loop K, hinged on a bracket K' attached to the said pitman L, as illustrated in

Fig. 1. The operator manipulates the oil can F by the use of the guide rope G and lifting rope E, to engage the arm H³ with the said loop K so as to actuate the slide valve H as above described in reference to the oil box J. In a similar manner, the bearing for the pump rod can be lubricated by the use of a loop N, pivoted on a sleeve O, secured by a set screw O' to the head of the pump rod; see Fig. 1. The operator likewise manipulates the oil can F by the use of the ropes E and G to engage the arm H³ with the loop, to open the slide valve to permit the oil to flow out of the can onto the adjacent part of the machine. Other suitable devices may be arranged on the working parts of the machine to be lubricated so that the slide valve H is opened by coming in contact with the said devices as above described. When not in use the oil can is removed and in its place is used a bar of wood long enough to keep the end of the rope from falling upon the upper platform. The rope does not become entangled in the mill as it turns about. Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a lubricator, the combination with a projection on the part to be lubricated, of a suspended oil can having an oil discharge opening in one side, a sliding and spring pressed valve on the exterior of the can and provided with an opening adapted to register with the discharge opening of the can, and with an outwardly projecting arm, and means for manipulating the can to cause the arm of its valve to engage the said projection, substantially as described.
2. In a lubricator, the combination with a projection on the part to be lubricated, of a suspended oil can having an oil discharge

opening in one side and provided with a guide way on its exterior, a valve fitted to slide in the guide way and provided with an opening at its lower end and with an outwardly and upwardly projecting arm at its upper end, a spring secured to the bottom of the can and having its free end engaging the lower end of the slide valve, and means for manipulating the oil can to bring the arm of its valve into engagement with the said projection, substantially as described.

3. In a lubricator, the combination with the machinery to be lubricated provided with movable projections and with a bracket carrying a pulley, of an oil can having an opening in one side and provided with a spring pressed slide valve having an arm adapted to engage the movable projections, a lifting rope secured to the top of the can and passing over the pulley, and a guide rope secured to the side of the can, substantially as herein shown and described.

4. In a lubricator, the combination with an oil box provided with a hinged and spring actuated lid having a projection at its free end, of an oil can having an opening in one side and provided with a spring pressed slide valve having an opening in one end and an outwardly projecting arm at its other end adapted to engage the projection of the oil box lid, a lifting rope secured to the top of the can passed over a pulley above the oil box and extending down within reach of the operator, and a guide rope secured to one side of the can, substantially as and for the purpose set forth.

WILLIAM AUGUST SEIBEL.

Witnesses:

M. W. HARMON,
D. S. DEERING.