

G. Hagenmeyer,

Lubricator.

N^o 53,973.

Patented Apr. 17, 1866.

Fig: 1.

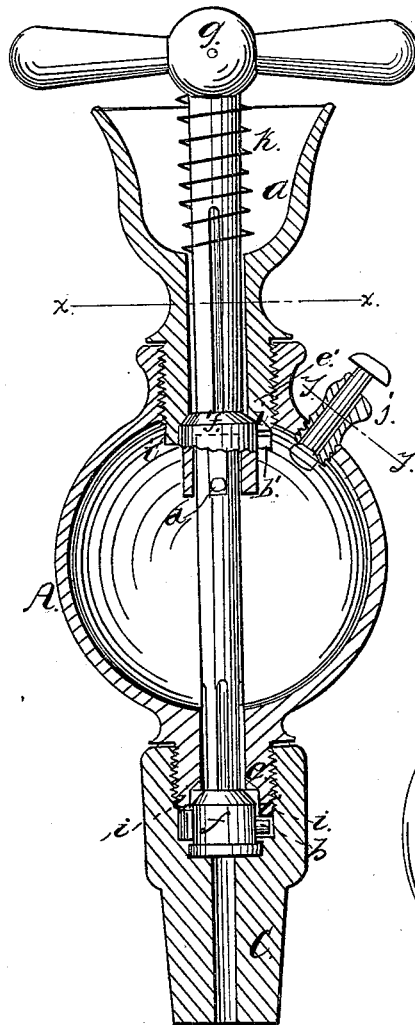


Fig: 2.



Fig: 3. Fig: 4.

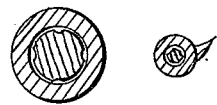
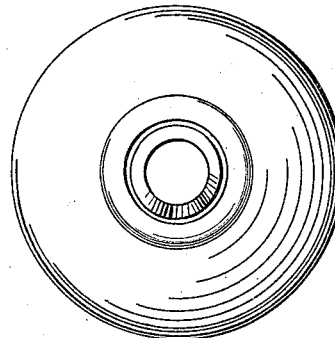


Fig: 5.



Witnesses:

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Atty's

UNITED STATES PATENT OFFICE.

GEBHARD HAGENMEYER, OF BIG RIVER, CALIFORNIA.

IMPROVEMENT IN GREASE-CUPS.

Specification forming part of Letters Patent No. 53,973, dated April 17, 1866.

To all whom it may concern:

Be it known that I, GEBHARD HAGENMEYER, of Big River, in the county of Mendocino and State of California, have invented a new and Improved Grease-Cup; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical section of this invention. Fig. 2 is a partial side elevation of the same. Fig. 3 is a transverse section of the same, taken in the plane indicated by the line *x x*, Fig. 1. Fig. 4 is a similar section in the line *y y*, Fig. 1. Fig. 5 is an end view of one of the valve-seats.

Similar letters of reference indicate like parts.

This invention relates to an oil or grease cup, which is provided with two cone-valves, the stems of which are connected so that they are compelled to turn together, but free to move a short distance toward or from each other. These valves close into corresponding seats, and from their peripheries project studs, which work against circular inclined or spiral planes surrounding the seats, and arranged so that the highest part of one of these spiral planes is in line with the lowest part of the other, in such a manner that when the valves are subjected to the action of a suitable gearing, which has a tendency to keep the same closed, by turning the valves one will open when the other closes, and vice versa, and the globe of the grease-cup is alternately brought in connection with the supply-cup and then with the steam-chest or other part to be lubricated.

A represents my grease-cup, which is constructed in the usual form or shape, and composed of the supply-cup *a* and the globe *b*, which is fitted into the stem or shank *c*, that is intended to screw into the part to be lubricated. This grease-cup is provided with two valves, *f* *f'*, and the upper end of the stem of the valve *f* is fitted into a socket in the bottom end of the valve *f'*, and a pin, *d*, forms the connection between the two valves. This pin passes through the socket of the valve *f'*, and through a slot in the stem of the valve *f*, so that the two valves are compelled to turn together, but

free to rise and fall a short distance, one independent of the other. The stem of the valve *f'* extends up through the supply-cup *a*, and it bears a handle, *g*, by means of which the valves can be turned in either direction, and a spring, *k*, has a tendency to force the valves up, the valve *f* being closed by the pressure of the steam. The valve *f'* closes into a seat, *e'*, on the bottom end of the screw-shank of the supply-cup, and the valve *f* into a seat, *e*, at the bottom end of the screw-shank of the globe *b*, and both these seats are surrounded by circular inclined or spiral planes *i* *i'*, and pins *h* *h'*, projecting from the peripheries of the valves, bear against these spiral planes. Said spiral planes are so situated that the highest part of the plane *i'* is opposite the lowest part of the plane *i*, and vice versa.

The operation is as follows: When the handle *g* is turned either way one-half turn the pin *h* will first descend the spiral plane *i*, and the pressure of the steam closes the valve *f*, cutting off the communication between the reservoir and steam-chest. The pin *h'* will then ascend the spiral plane *i'*, forcing the valve *f'* off from its seat and opening communication between the supply-cup and the globe. When the globe is full the handle *g* is turned again one-half turn either way, the pin *h'* descends the spiral plane *i'*, allowing the valve *f'* to close by the action of the spring *k*, and the pin *h* ascends the spiral plane *i*, forcing the valve *f* off from its seat and opening communication between the globe and the steam-chest or other part to be lubricated. A suitable vent-valve, *j*, on the side of the globe permits the steam from the interior of said globe to escape when the valve *f* is closed and the valve *f'* opened. This vent-valve is made to open and close automatically, or it can be operated by hand.

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

The valves *f* *f'*, spiral planes *i* *i'*, and pins *h* *h'*, in combination with the supply-cup *a* and globe *b*, of a grease-cup, constructed and operating substantially as and for the purpose described.

GEBHARD HAGENMEYER.

Witnesses:

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