

SMITH A. SKINNER.

Improvement in Oil-Hole Covers for Journals.

No. 124,092.

Patented Feb. 27, 1872.

Fig. 1.

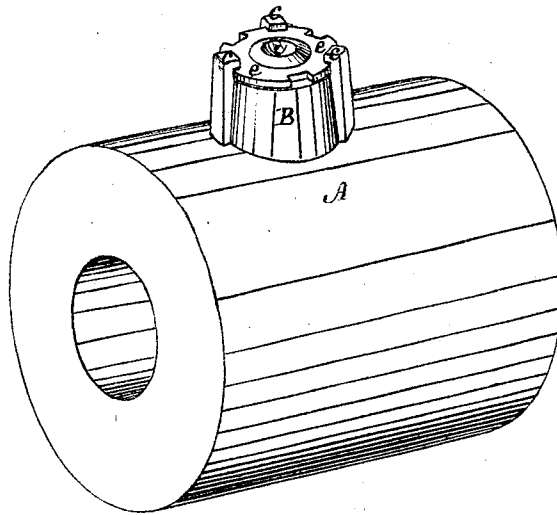


Fig. 2.

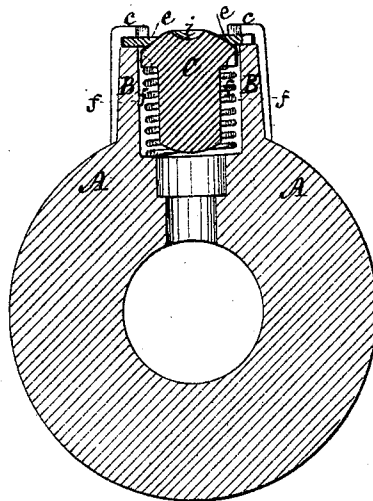
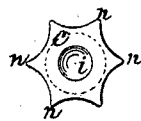


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

SMITH A. SKINNER, OF HOOSICK FALLS, NEW YORK.

IMPROVEMENT IN OIL-HOLE COVERS FOR JOURNALS.

Specification forming part of Letters Patent No. 124,092, dated February 27, 1872.

To all whom it may concern:

Be it known that I, SMITH A. SKINNER, of Hoosick Falls, in the county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Oil-Holes and their Covers for Oiling Journals, &c.; and that the following is a full, clear, and exact description of the same reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents in perspective the oil-hole and cover, as applied to a box or bearing, so as to oil a shaft or journal supported therein. Fig. 2 represents a section through the same. Fig. 3 represents the upper end of the plug, which plays in the oil-hole, and closes its top or opening.

Spring plugs have heretofore been used in oil-holes for opening or closing the avenue through which the oil is allowed to flow from the oil-can to the shaft or journal to be oiled. But from their mode of construction there are several objections to them, which I have devised means of obviating: first, they were not accessible enough; second, they would jam or stick in the oil passage; and, third, they would gather and allow dirt, grit, seeds, &c., to pass in through the oil-passage, and down to the shaft or journal-bearings. These objections I have entirely obviated; and my invention consists in a peculiarly shaped plug, which is free to move up and down in the oil-passage without binding, or getting out of position, which completely closes the opening to the oil-passage, and which so far from collecting and allowing dust, grit, &c., to enter the oil-hole, actually sheds it, or allows it to drop off, said plug having a convex instead of a concave top, and yet easily forced down by the nozzle of the oil-can to allow the oil to flow in.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawing.

A represents a box, bearing, or hub, in which a shaft or journal is supported and turns. On this box, bearing, or hub, is an elevated portion, B, through which and through the box or hub A, there is an opening extending to the bearing surface, to admit oil from the exterior to flow through. The elevated portion B has lugs, projections, or hooks *c c c*, connected to it, under which a notched plate, *e*, is held. Under the plate *e* a plug, C, is held,

there being a coiled spring, *f*, around the shank of said plug to force it up against the under side of said plate, and against an opening in the plate which the head of the plug closes.

The head of the plug is made rounding or conical, and the under side of the plate *e*, is dressed off so as to allow the head to fit up closely against it, and against the edges of the opening through it, and make a snug joint. The highest portion of the head projects through the opening in the plate *e*, and extends somewhat above said plate, and in the apex of the head there is a countersink or recess, *i*, in or on which the nozzle of the oil-can is placed, and by pressing upon said head it sinks and opens up the oil-way through which the oil from the can flowing over said head finds its way down to the shaft or journal bearing.

The head of the plug is scalloped at its edges, as seen in Fig. 3, so that the points *n*, may bear against the walls of the chamber in which said plug works, to prevent it from skewing, twisting, or jamming therein, while the oil is free to flow through the scalloped openings *o o*.

By this construction of plug-head and plate *e*, it will be seen, on reference to Figs. 1 and 2, that all grit, dust, seeds, &c., that may drop on the plug-head will roll or drop off, so that when it is pressed down to disclose the oil-opening there will be no such injurious material there to drop into said opening and mingle with the oil.

When the plate *e* is turned until its notches come opposite to the hooks or catches *c*, the spring *f* will raise up said plate and also the plug, and disconnect them from the hub, bearing, or box, when the whole interior of the oil-way is exposed, and may be readily cleansed or the parts repaired and replaced in a moment's time.

Having thus fully described my invention, what I claim, is—

The combination of the conical-headed and scalloped spring-plug C, and the undercut plate or disk *e*, when arranged to operate as an oil-hole cover, as herein described and represented.

SMITH A. SKINNER.

Witnesses:

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J. M. FRANKLIN.