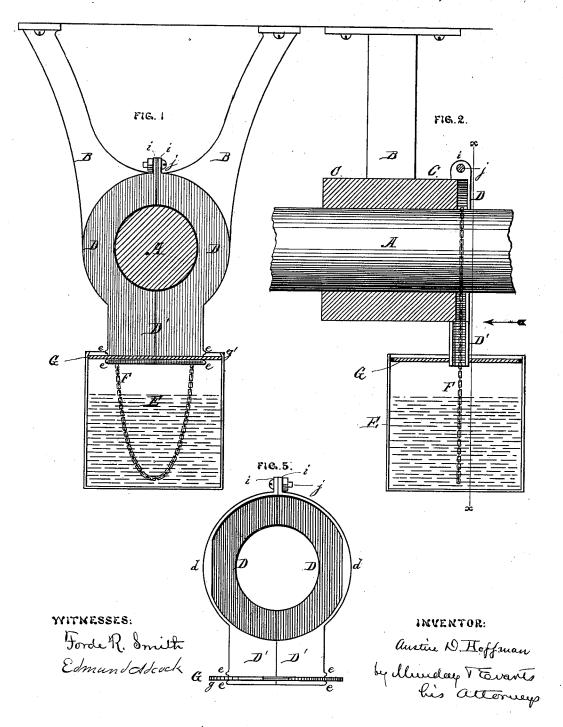
A. D. HOFFMAN. Lubricator for Shafting.

No. 200,395.

Patented Feb. 19, 1878.



## UNITED STATES PATENT OFFICE.

AUSTIN D. HOFFMAN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM A. AMBERG, OF SAME PLACE.

## IMPROVEMENT IN LUBRICATORS FOR SHAFTING.

Specification forming part of Letters Patent No. 200,395, dated February 19, 1878; application filed January 23, 1878.

To all whom it may concern:

Be it known that I, Austin D. Hoffman, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Lubricators for Shafting, of which

the following is a specification:

This invention relates to a device for lubricating the hangers of shafting; and it consists of an annular chamber made in two portions, so that it may be applied to the end of the hub of the hanger without taking down the shafting. This chamber incloses an endless tape or chain, which hangs upon the shaft and dips at its lower loop into a body of oil contained in a receptacle suspended below.

In the accompanying drawing, which forms a part of this specification, Figure 1 is an end view of the hanger, shaft, and lubricator. Fig. 2 is a section of the same. Fig. 3 is a view of the halved chamber removed, the view being taken from the side opposite to that shown in

Fig. 1.

Like letters indicate like parts wherever

used in the several figures.

The letter A upon the drawing denotes the shaft. B is the hanger. C C are the cylindrical hubs of the hanger, which project, as hangers are usually made, a slight distance from the uprights at each side, affording a convenient place to attach this lubricating device. D D are two halves of an annular chambershell, which, when applied to the hub and shaft, form, in conjunction therewith, an inclosed annular space surrounding the shaft at the end of the hub. At the under side of this shell is the vertical square tube D', by which the shell communicates with and sustains the oil-reservoir E. An endless chain, F, resting upon the shaft within the shell, extends down through the tube into the oil-reservoir. The motion of the shaft causes this chain to carry oil constantly to the bearing.

In order that the shell may be more securely held upon the hub, I form upon the inner edge projections d, one at each side, which set into corresponding notches in the sides of the hub; or, in lieu of such projections, set-screws may be employed to bear against the hub or set

into cavities in the same. The lower end of the tube has a double shoulder, e e, at each side, and the upper part of each half of the shell is provided with a lug, i, through which a bolt, j, may be passed. A disk, G, which forms the top of the oil-reservoir, is slotted to receive the lower end of the tube, which is inserted in the slot, while the halves of the shell are separate, in such manner that the ends of the slot will rest between the shoulders e e. The upper ends of the halves being brought together and bolted, the two halves are thus held together by the single bolt and the disk. The disk is notched in two places at its periphery with notches, one of which is shown at  $g_{i}$ , and at corresponding points the upper edge of the oil-receptacle is bent inward, as at g'. The reservoir is united to the disk, when required, by means of these lugs g' and the notches g, the reservoir being passed to place by inserting the lugs through the notches, and then slightly turning, as will be understood.

From the peculiar construction it will be understood that, by having various-sized shells to suit various-sized hubs, I am able to apply this device to any of the ordinary hangers now in use, and to do so without taking down either

shafting or hangers.

I claim as new-

1. The lubricating apparatus to be used in conjunction with the hub of a shaft-hanger, and consisting of the divided shell, constructed to form, in connection with the hub and shaft, an annular chamber at the end of the hub to inclose the lubricating-band, substantially as specified.

2. The combination of the divided shell, the tube, the disk, and the oil-reservoir and chain,

substantially as specified.

3. The combination of the divided shell, the tube, the slotted disk, and the bolt at the top of the shell uniting the two halves, substantially as specified.

AUSTIN D. HOFFMAN.

Witnesses:

EDW. S. EVARTS, WM. A. AMBERG.