I. H. PALMER.

DEVICES FOR OILING WIND-MILLS.

No. 195,157. Patented Sept. 11, 1877.

Fig 1.

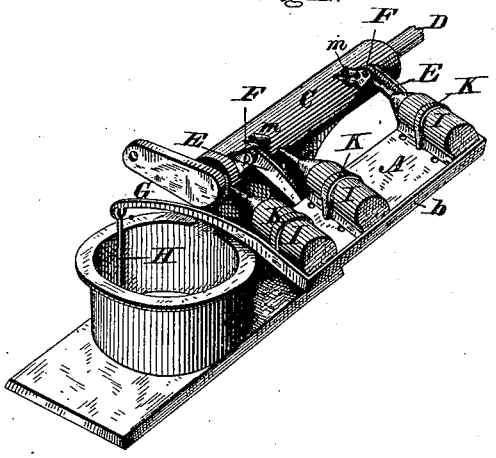
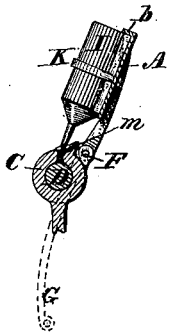


Fig 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ISAAC H. PALMER, OF LODI, WISCONSIN.

IMPROVEMENT IN DEVICES FOR OILING WINDMILLS.

Specification forming part of Letters Patent No. 195,157, dated September 11, 1877; application filed August 7, 1877.

To all whom it may concern:

Be it known that I, ISAAC H. PALMER, of Lodi, in the county of Columbia and State of Wisconsin, have invented a new and Improved Device for Oiling Windmills; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved oiling apparatus applied to the bearings of the wheel-shaft, and turned down so as to hold the oil-cans out of use; and Fig. 2 is a transverse sectional view, showing the oil-cans turned up in the act of oiling.

My invention has for its object to provide means for oiling, from the ground, the bearings of windmill shafts, cranks, and other elevated parts, for the purpose of avoiding the danger and delay incident to climbing the windmill-tower for the accomplishment of this work, as at present practiced.

To this end the invention consists, first, in the combination of an oiling attachment with the wind-wheel shaft or bearings, adapted to be operated, from the ground or from a point below the top of the mill, by a cord or rod; and, secondly, in a platform carrying one or more oil-cans, and so connected to the wind-wheel shaft or its bearings that it can be tipped up to discharge the oil from the cans into the bearings or onto the shaft when the operating cord or rod is pulled.

In the accompanying drawings, A represents a platform or long narrow table having a flange, *b*, along one edge, and attached in a horizontal position to the bearings C of a wind-wheel shaft, D, by means of bands or clasps E embracing such bearings. The clasps are hinged to the platform, as shown at F, so as to turn freely, and the end of the platform is provided with a laterally-projecting arm, G, which extends out over the vertical axis of the mill, and from the end of the projecting arm is suspended a cord or rod, H, reaching through the mill to the ground, or to a platform on the tower of the mill, above the reach of persons who are not allowed to operate it.

I I are the oil-cans, of ordinary construction, mounted upon the platform, with their bottoms resting against the flange *b*, and their discharge-nozzles over the oil-holes *m* in the shaft-bearings. They are held upon the platform by any suitable means, in this case such means consisting of metal strips K, which are secured to the platform so as to form loops, as shown.

When it is desired to oil the shaft, crank, or other bearing, the operator pulls upon the cord E, which swings up the platform so as to invert the oil-cans, as shown in Fig. 2, and allow the requisite flow of oil therefrom into the oil-holes *m*, when he releases the cord, and the weight of the platform and cans causes the former to turn down to its first position.

The oil-holes *m* should preferably be made with tunnel-shaped mouths, the better to receive and direct the oil; but this is not absolutely necessary.

The platform or rack may be made of any length desired, and may carry a few or many oil-cans, according to the number of points to be oiled.

I do not confine myself to the precise construction of the apparatus shown in the drawings, as that may be varied in many ways to adapt it to different forms of mills, shafts, and mill-heads; but the essential principle, and

What I claim as my invention, is—

1. An oiling attachment for windmills adapted to be operated, from the ground or from a platform at or near the base of the tower, to oil the bearings of the windmill-shaft, substantially as described.

2. A tilting platform carrying one or more oil-cans, combined with the shaft of a wind-wheel or with the bearings of said shaft, and provided with a pendent cord or rod by which the platform can be tilted from the ground to discharge oil from the cans onto the shaft, substantially as described, for the purpose specified.

3. The platform or rack A, carrying one or more oil-cans, hinged to the wind-wheel shaft or its bearings, and provided with a projecting arm, G, to which the operating-cord E is attached, substantially as described.

4. The tilting platform combined with the shaft or crank of the wind-wheel or with its bearings, and operated from the ground to apply the open nozzles of the oil-cans on the platform to the oil-holes *m* in the shaft-bearings, substantially as described, for the purpose specified.

Witnesses: ISAAC H. PALMER.

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