

(No Model.)

J. McCAFFREY.

Device for Lubricating Loose Pulleys.

No. 235,094.

Patented Dec. 7, 1880.

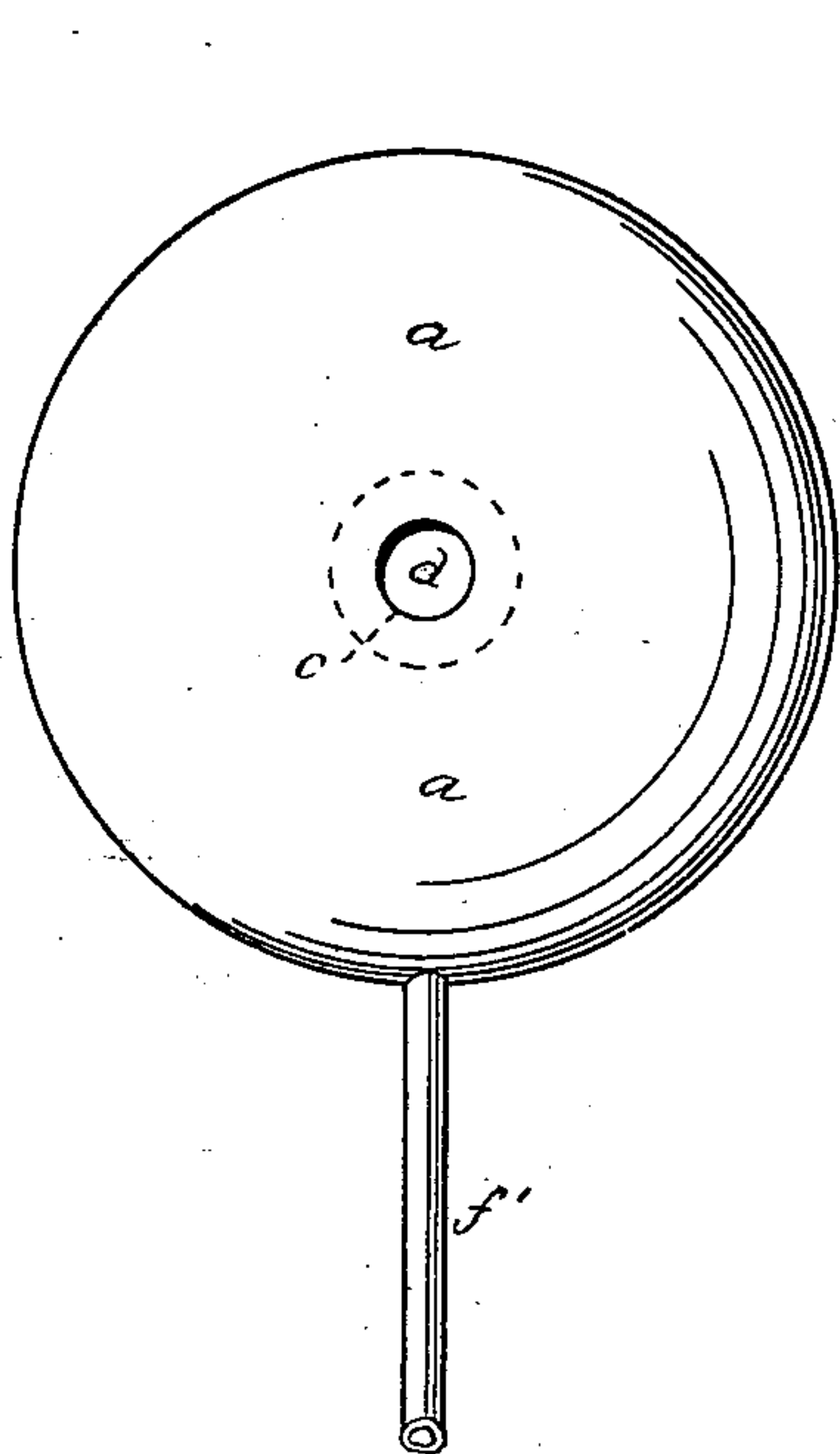


Fig. 1.

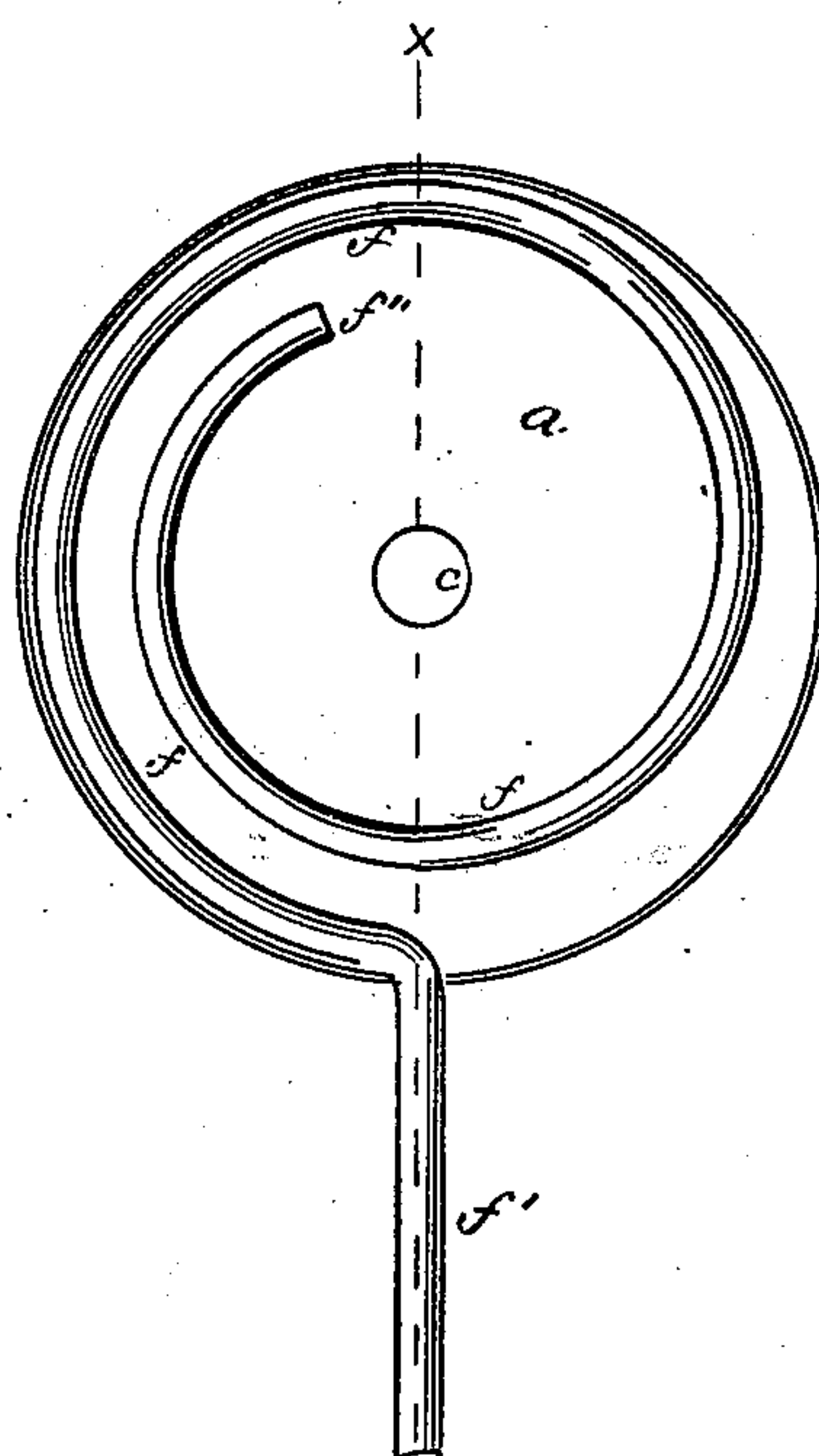


Fig. 2.

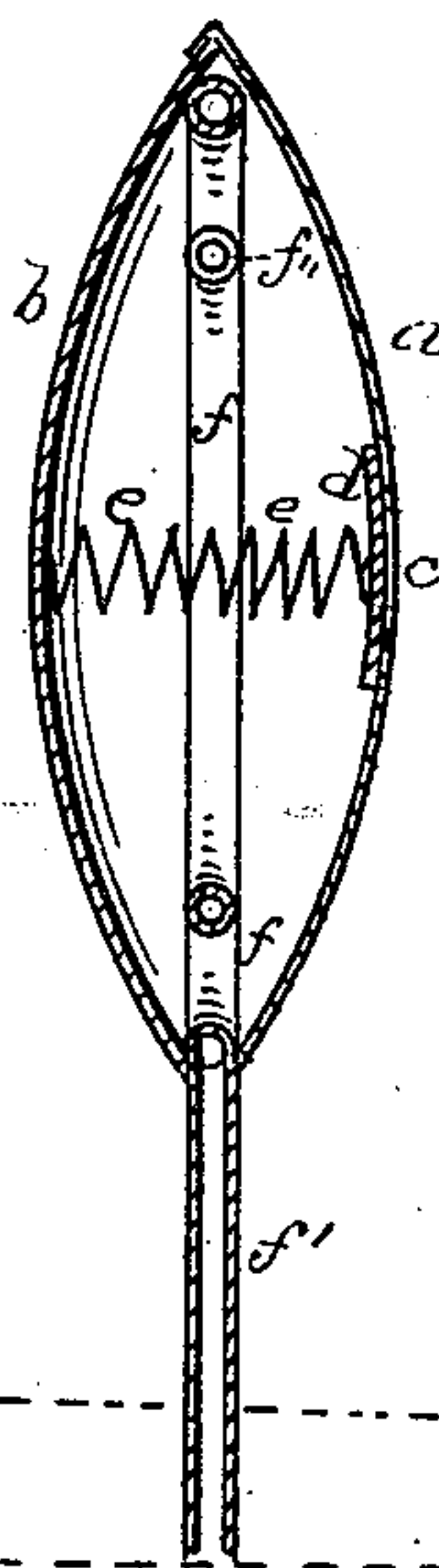


Fig. 3.

WITNESSES

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INVENTOR

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JOHN McCAFFREY, OF LAWRENCE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO CHARLES H. SMITH, OF SAME PLACE.

DEVICE FOR LUBRICATING LOOSE PULLEYS.

SPECIFICATION forming part of Letters Patent No. 235,094, dated December 7, 1880.

Application filed May 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN McCAFFREY, of Lawrence, in the county of Essex and State of Massachusetts, have invented a new and
5 Improved Device for Lubricating Loose Pulleys, of which the following is a specification.

This is a device consisting of an oil can or vessel of the shape and construction below described, containing a coil of pipe extending
10 partially or entirely around the chamber in the vessel, and connecting with the oil-hole in the hub of a loose pulley. The entire device is to be secured to and hence revolve with the pulley. The centrifugal force drives the oil
15 into the pipe and thence to the pulley, automatically oiling the shaft.

The nature of the invention in detail is described below.

In the accompanying drawings, in which
20 similar letters of reference indicate like parts, Figure 1 is a front elevation of my device. Fig. 2 is a front elevation with the rear plate removed. Fig. 3 is a vertical section on line xy , Fig. 2, broken lines showing the hub of a
25 loose pulley and the shaft upon which it turns.

a is a round front metallic plate, and b a similar rear one. These plates are soldered together or otherwise attached at their edges, thus forming a convex oil-vessel. The front
30 plate, a , is provided with a hole, c , which is kept closed by a button, d , which is pressed against the edges of the opening by the spiral spring e , secured to said button and to the rear plate, b , as shown in Fig. 3.

f is a coil of pipe extending around the edge of the vessel and out through the lower portion, the outer portion, f' , being adapted to be placed in the oil-hole of the hub of a loose pulley. This pipe may consist of but half a
40 coil or a number of coils, as desired.

The part f' of the pipe having been inserted

in the oil-hole of the hub of a loose pulley, and the device having been securely fastened to the pulley in such a position that the entrance f'' of the pipe faces the direction of
45 the revolution of the pulley, the button d is pressed in by the nose of the feeding oil-can and the device half filled with oil. When the pulley revolves the oil is driven to the outer portion of the vessel by centrifugal force and
50 forced into the mouth f'' of the pipe f by the revolution of the pulley, thence down through the connecting part f' into the oil-hole of the hub and to the shaft. Thus a perfect self-acting oiling device is produced, the only out-
55 let being the part f' .

In practice it is found to oil sufficiently for any speed, and yet not overoil at slow speed. All waste and drip are done away with. The oil will not flow while the device is at a stand-
60 still, no matter in what position it may have stopped, and is all ready to perform its work when the pulley starts. The button being always closed except when the vessel is being
65 filled, no dust can enter the oiler.

A coil of pipe can be filled with oil and will do its work as an oiler without the use of the vessel $a b$; but it is considered desirable to place the pipe in a closed vessel, as shown.

Having thus fully described my invention, 70 what I claim, and desire to secure by Letters Patent, is—

The herein-described device for lubricating loose pulleys, consisting of the vessel or box
75 $a b$, provided with the spring e , button d , and hole c , and the pipe $f f'$, all constructed and arranged substantially as and for the purpose specified.

JOHN McCAFFREY.

Witnesses:

E. T. BURLEY,
C. F. SARGENT.