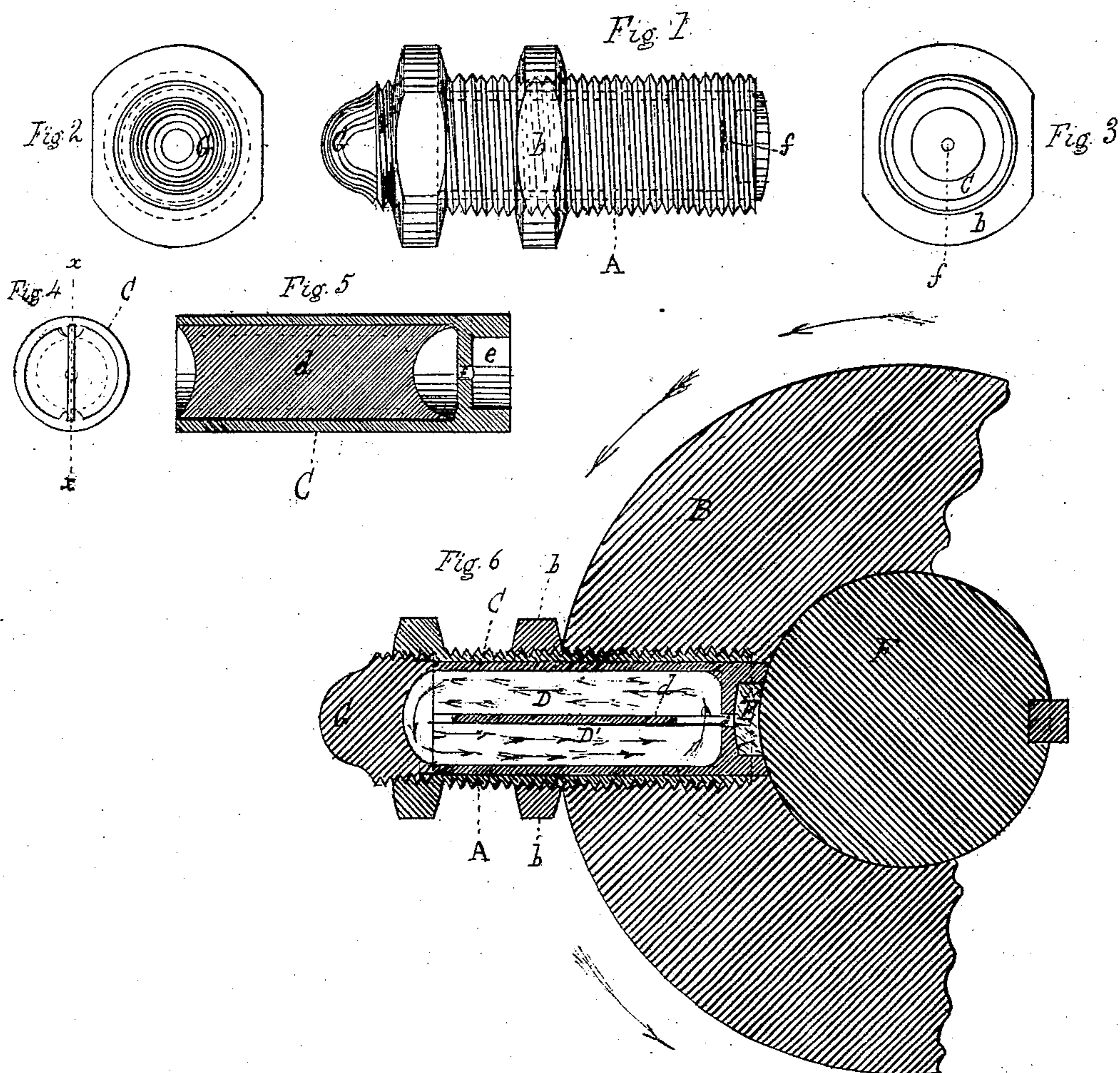


WENDELL & TASKER.

Pulley Lubricator.

No. 102,739.

Patented May 3, 1870.



Witnesses

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ISAAC P. WENDELL AND STEPHEN P. M. TASKER, OF PHILADELPHIA,
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Letters Patent No. 102,739, dated May 3, 1870.

IMPROVEMENT IN LUBRICATOR FOR LOOSE PULLEYS.

The Schedule referred to in these Letters Patent and making part of the same

We, ISAAC P. WENDELL and STEPHEN P. M. TASKER, of the city of Philadelphia and State of Pennsylvania, have invented a certain Improvement in Lubricating Loose-Pulleys, of which the following is a specification.

The nature of our invention consists of an oil-chamber in an adjustable tube arranged in the hub of the pulley at radii therewith, and having its inner end curved to fit the shaft on which the pulley is situated, there being a packing of fibrous or porous material in the end of the tube which also fits the shaft, and there being also an adjustable screw-plug, which is screwed down on the outer end of the tube, to hold it in position, with its curved end slightly touching the shaft.

The oil-chamber is divided in the middle by means of a deflecting-plate, curved at each end, so as to form an opening at each end of the tube for the passage of the oil within the same, by which means there is a circuit given to the oil as the shaft revolves, so as to prevent the collection of the oil at the outer end of the chamber by centrifugal force, and thus to admit of the oil passing through the packing for the lubrication of the shaft, as hereinafter described.

To enable others skilled in the art to which our improvement appertains to make and use our invention, we will now give a detailed description thereof.

In the accompanying drawings, which make a part of this specification—

Figure 1 is a side view of the screw-plug A and tube C.

Figures 2 and 3 are end views of the same.

Figure 4 is an end view of the tube C.

Figure 5 is a vertical section at the line *x x* of fig. 4.

Figure 6 is a cross-section of the shaft F, a portion of the hub B, and longitudinal section through the plug A, and tube C.

Like letters in all the figures indicate the same parts.

A is a plug, having a thread, *a*, to provide for screwing it fast into the hub B of a loose pulley.

b is a jam-nut, for securing it firmly in place.

C is a tube, having an oil-chamber, divided into two parts, D D', by the plate *d*, which is curved out at each end for the passage of the oil to form a circuit through the parts D and D'.

The tube C is provided with a packing, E, of fibrous or porous material in the recess *e*, which is shown fully in fig. 5, in which the packing is left out.

There is a central hole, *f*, through which the oil passes to keep up the supply as it oozes through the packing.

The tube is curved at its inner end to fit the shaft F, and is adjusted by means of the central screw G, in the outer end.

If the oil-chamber were not divided, the centrifugal force would send the oil to the outer end of the tube C, where it would remain and prevent the lubrication of the shaft. But, in consequence of the oil-chamber being constructed as described, as the shaft F, with the pulley, turns in the direction of the arrow, the oil is thrown outward through the channel D of the chamber, until it reaches the outer end, where it passes through the opening at the end of the plate *d*, which is favored by the curved form of the end of the adjusting-plug G, and is turned, by its force, inward through the channel D' to the inner end of the chamber, and thence passes through the open end of the plate *d*, and so on, keeping up the circuit. The oil is thereby prevented gathering and remaining at the outer end of the chamber, and is thus caused to come into contact with the packing E, through which it oozes and keeps up a constant and regular lubrication.

We design to sometimes dispense with the screw-plug A, and insert the tube C in the hub B, the hub being tapped to receive the central adjusting-screw G.

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

The tube C, constructed with a bisected oil-chamber, D D' and having a packing, E, in its inner end, and combined with the hub B, with or without the screw-plug A, the tube being adjustable to the shaft by means of the central screw G, the whole being constructed and arranged substantially as described.

In testimony that the above is our invention, we have hereunto set our hands and affixed our seals this 3d day of March, 1870.

ISAAC P. WENDELL. [L. S.]

STEPHEN P. M. TASKER. [L. S.]

Witnesses:

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