

S. R. Morris,

Oiler for Loose Pulleys.

No. 113199.

Patented Mar. 28. 1871.

Fig. 1.

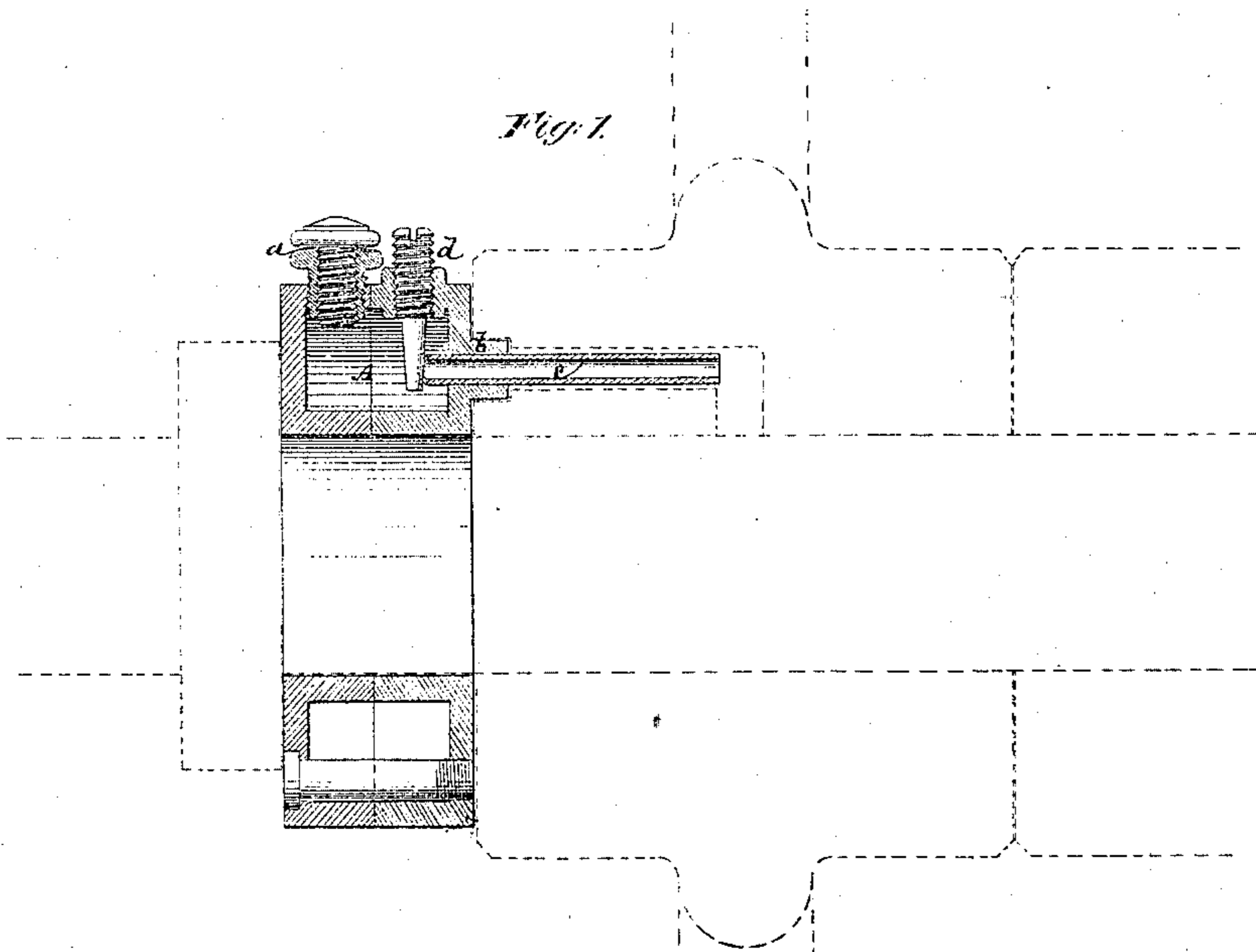
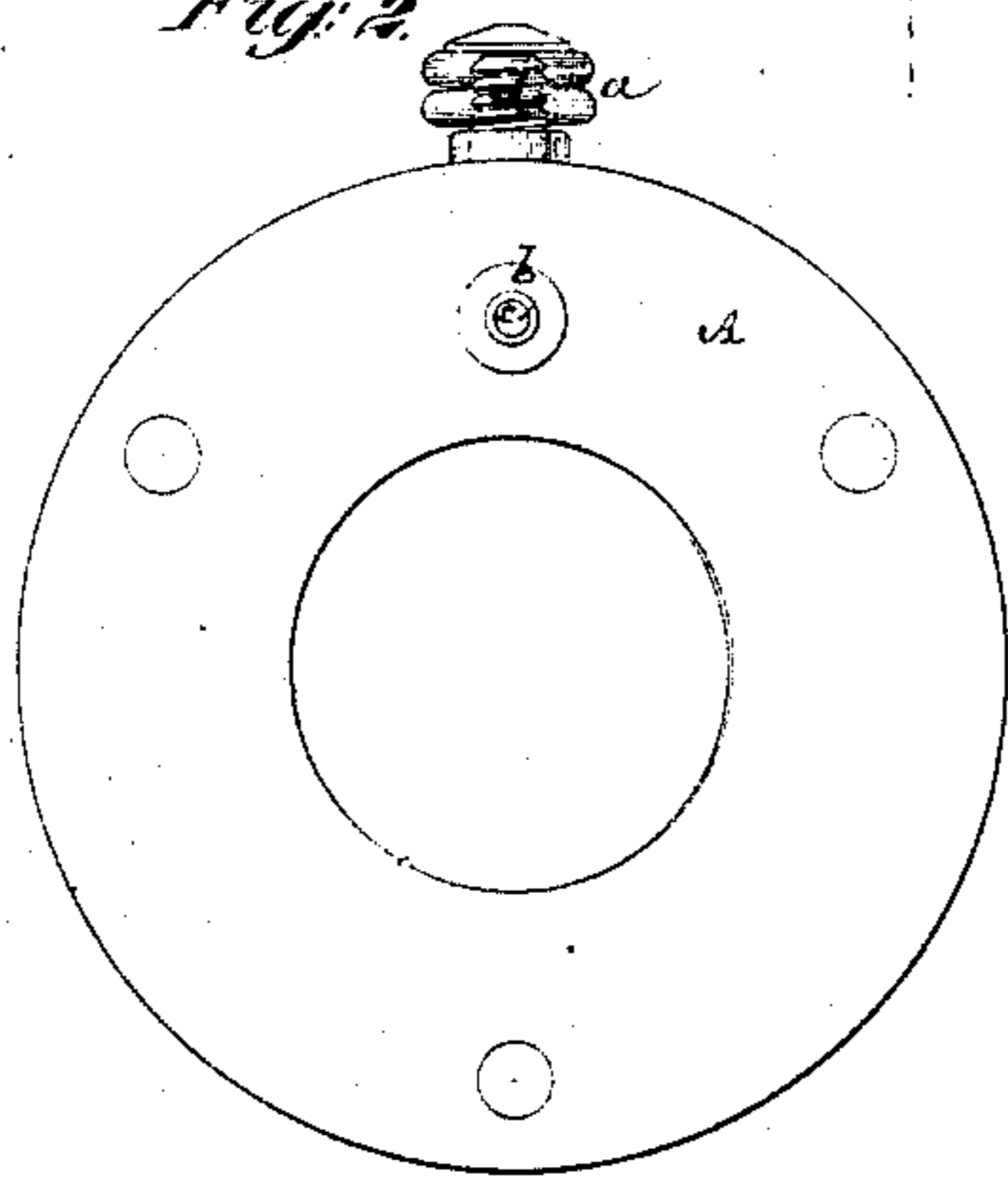


Fig. 2.



Witnesses:

Fred. Hayner
R. W. H. H. H.

Stephen R. Morris

United States Patent Office.

STEPHEN R. NORRIS, OF NEW YORK, N. Y.

Letters Patent No. 113,199, dated March 28, 1871.

IMPROVEMENT IN OILERS FOR LOOSE-PULLEYS.

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

To all whom it may concern:

Be it known that I, STEPHEN R. NORRIS, of the city, county, and State of New York, have invented a new and useful improvement in Oil-Cups for Loose-Pulleys and other revolving bodies or devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a sectional view of my improved oil-cup as applied to a loose-pulley, and

Figure 2 a face or end view of the same.

Similar letters of reference indicate corresponding parts.

My improvement is more especially designed for the lubrication of loose-pulleys, and the invention consists in a cup constructed to freely surround the shaft on which the pulley rotates, and connected in concentric relation with the pulley, by which it is driven, and which it serves to lubricate, by means of a suitable pipe or outlet within the nave of the pulley, whereby, among other advantages, said cup is free from destroying or interfering with the balance of the pulley. Also, the invention includes a regulating-valve for controlling the discharge, in combination with the cup constructed as described.

Referring to the accompanying drawing—

A represents an oil-cup of cylindrical form, made in halves, secured or bolted together, for the convenience of structure, and designed to loosely or freely fit the shaft on which the loose-pulley that it serves to lubricate is arranged, said cup lying up against the one side or end of the nave of said pulley, and between it and a collar on the shaft. Thus constructed and arranged, the oil-cup is made to occupy a concentric relation with the pulley, so that in rotating there-with it does not destroy or impair its balance, as oil-

cups arranged to form radial projections from the naves of such pulleys do.

Lubricating material is supplied to said cup by a screw-cap or nozzle, *a*, and the discharge is effected by centrifugal motion, as the cup is rotated along with the pulley, through a side orifice or teat, *b*, or tube, *c*, fitted therethrough, and arranged to project into the nave of the pulley and form communication with a passage which conducts to the pulley's bearing on its shaft.

The teat *b*, by its projection into the nave of the pulley, also serves as a driver for the rotation of the cup by the pulley.

Such mode of supplying the oil is at once certain and effective, and the quantity discharged is or may be regulated by a screw-plug or valve, *d*, projected through the periphery of the cup, and made to control the inlet or mouth of the discharge-tube.

An oil-cup constructed as described may be readily applied to any pulley, is perfectly secure against spilling, is rapidly fitted to and removed from its place, free from all liability to accidental detachment, and operates most satisfactorily to effect perfect lubrication, without, as before observed, destroying the hang or balance of the pulley.

What is here claimed, and desired to be secured by Letters Patent, is

The combination of the driving-teat *b*, discharge-tube *c*, and screw-regulating plug or valve *d*, with the annular oil-cup *A*, all arranged and operating essentially as shown and described.

STEPHEN R. NORRIS.

Witnesses:

FRED. HAYNES,
HENRY PALMER.