

(No Model.)

A. TAPLIN.

FRICTION PULLEY FOR LAMPS.

No. 335,654.

Patented Feb. 9, 1886.

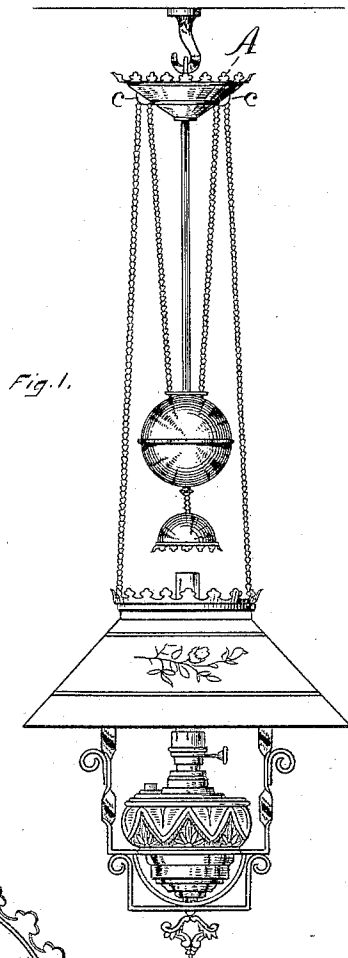


Fig. 1.

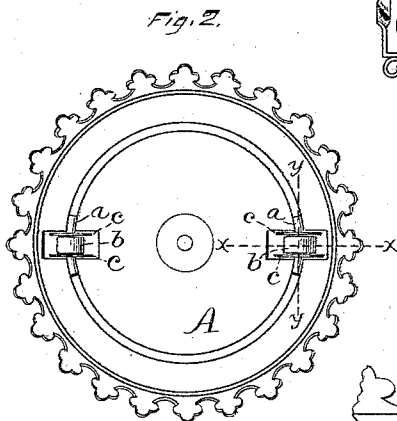


Fig. 2.

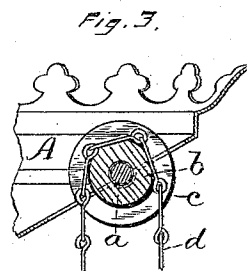


Fig. 3.

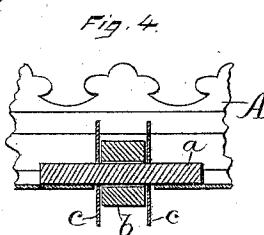


Fig. 4.

WITNESSES.

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FRICTION-PULLEY FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 335,654, dated February 9, 1886.

Application filed October 8, 1885. Serial No. 179,319. (No model.)

To all whom it may concern:

Be it known that I, ALVIN TAPLIN, a citizen of the United States, residing at Forestville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Friction-Pulleys for Lamp-Chains, of which the following is a specification.

My invention relates to that class of hanging lamps which have suspension-chains passing over pulleys secured in a suitable frame, by which frame the complete lamp is suspended.

The main object of my invention is to produce a simple pulley for lamp-chains, the use of which will enable the lamp to vary considerably in weight—as by the addition of pendants or removing the lamp cup—without causing the lamp-frame to either rise or fall.

In the accompanying drawings, Figure 1 is a side elevation of one kind of lamp that belongs to that class to which my improvement relates. Fig. 2 is a plan view of the pulley-frame with my pulleys secured thereon. Fig. 3 is a vertical section of a portion of said frame, together with one pulley, on line *x x* of Fig. 2, and in connection therewith a portion of one chain is shown in position over the pulley; and Fig. 4 is a like view thereof, less the chain, on line *y y* of Fig. 2.

The pulley-frame A and axle or pin *a* are of ordinary construction, the same being secured together by solder or otherwise, so that the axle cannot rotate.

I form my pulley of a body portion, *b*, and two flanges, *c c*. The body portion is made of elastic material—as, for instance, rubber, or, more properly, an ordinary compound of rubber and other material. The flanges *c c* are of metal, and I prefer to form them separately from the body of the pulley, and merely slip them and the body portion *b* upon the stationary axle in proper position, as shown, before said axle is secured to the pulley-frame, and without otherwise securing them together.

In use the chains *d*, Fig. 3, are passed over the periphery of the elastic pulley-body and between the flanges.

I have found that in a lamp so hung with

elastic pulleys having the proper degree of elasticity—neither too hard nor too soft—the chains will embed themselves somewhat into the surface of said pulleys, while the elastic body of the pulley bears directly upon the non-rotating axle, whereby a sufficient resistance is offered to the movement of the chains and pulleys to enable me to use lamps in connection with a given size of weight, with or without pendants or jewels, and when the lamp-cup is removed for filling there is no danger of the frame or support for the cup being pulled up by the weight. At the same time the lamp is easily raised and lowered to different heights.

I am aware that an English patent shows and describes a friction-pulley consisting of a metallic body having integral side flanges and an elastic tire placed over the body of the pulley between said flanges, and the same is hereby disclaimed. My pulley differs therefrom by having the body of the pulley elastic, instead of merely an elastic tire. By this difference I bring the elastic periphery of the pulley much nearer the axle, so that it increases the resistance against rotation, and, furthermore, I utilize the elasticity of the pulley-body both from the axle-bearing surface and from the periphery. My pulley also differs in construction, whereby it is much more simple and inexpensive.

I claim as my invention—

1. In a hanging lamp, the combination of the pulley-frame, the non-rotating axles secured thereto, elastic pulleys having their elastic bodies bearing directly upon said axles, and chains running over the peripheries of said elastic pulleys, substantially as described, and for the purpose specified.

2. In a hanging lamp, the combination of the pulley-frame, the axles *a a*, secured thereon, and the pulleys, each consisting of an elastic body and two metal flanges slipped loosely upon said axles, all substantially as described, and for the purpose specified.

ALVIN TAPLIN.

Witnesses:

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