

W. A. VIETOR.

SPOOL.

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1,011,532.

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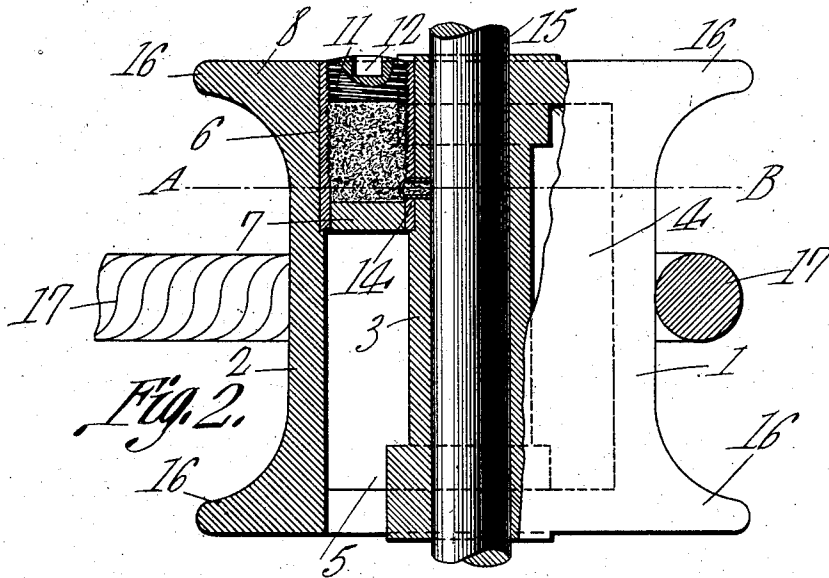


Fig. 2.

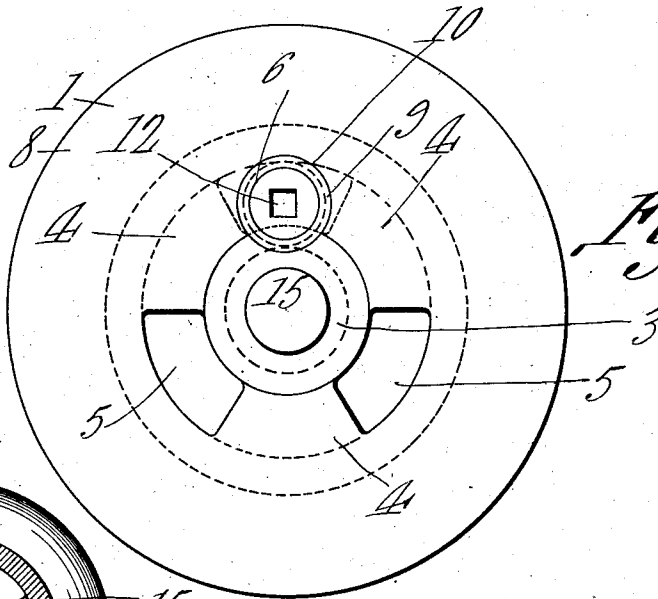


Fig. 1.

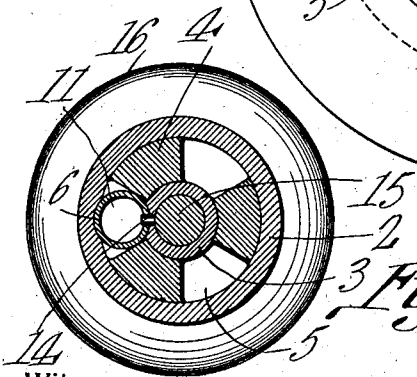


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM A. VIETOR, OF EUREKA, CALIFORNIA.

SPOOL.

1,011,532.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM A. VIETOR, a citizen of the United States, residing at Eureka, in the county of Humboldt and State of California, have invented a new and useful Spool, of which the following is a specification.

By way of explanation, it may be stated that in hauling logs from the forest where they are cut, to the landings where they are loaded upon cars for transportation to the mills where they are sawed into lumber, a wire cable is employed, the cable being wound upon the drum of an engine. The roads over which the logs are hauled, are as a rule very crooked, and it is necessary to place spools along all the curves of the road, over which spools the wire cable which draws the logs, travels, so as to lead the logs fairly along the road, around the curves therein. The load on these road spools is very heavy, and the necessity of lubrication is great. The method of applying oil to the bearings of the road spools from a can, by hand, is not satisfactory, and the expedient of boring a hole in the journal of the spool is expensive in manufacture. The ordinary press feed cup cannot be used, since the cable is likely to jump from the spools, and cut and tear away anything projecting above the flange of the spool.

It is the object of this invention to provide a spool having a lubricator thoroughly efficient to reduce the friction incident to the rotation of the spool, the construction, however, being such, that no part of the lubricating mechanism will be injured, should the cable which is passed about the spool, jump therefrom.

Another object of the invention is to provide a lubricator which may be cast into the spool, no machine work upon the lubricator being necessary, subsequent to the casting of the spool.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings,—Figure 1 shows the in-

vention in end elevation; Fig. 2 is a side elevation, wherein certain elements are sectionally shown; and Fig. 3 is a transverse section upon the line A—B of Fig. 2.

The spool is denoted generally by the numeral 1, the same comprising a drum 2 and a bearing 3, connected by longitudinally extended ribs 4, there being openings 5 between the ribs. In one of these openings 5, is mounted a tube 6, the inner end of which is closed by a plug 7 firmly seated in the tube. The outer end of the tube 6 is flush with one end wall 8 of the drum, the end wall 8 preferably inclosing the tube 6 closely, as indicated at 9 in Fig. 1. The adjacent faces of the drum 2 and the bearing 3 are recessed longitudinally, as shown at 10, to receive the tube 6. In its interior, the tube 6 is threaded adjacent its outer end, to receive a screw plug 11, having a polygonal opening 12 in its end, adapted to be engaged by a wrench or a key, to rotate the plug 11 in the tube 6. Intermediate its ends, and relatively near to the fixed plug 7, a pipe 14 extends transversely through the side wall of the tube 6, and through the side wall of the bearing 3, the construction being such that, although the pipe 14 is completely housed within the contour of the walls of the tube 6 and of the bearing 3, the pipe forms a communication between the tube and the bearing, so that when the plug 11 is rotated, the lubricant will be forced out of the tube 6, through the pipe 14, and into the interior of the bearing 3. The bearing of course carries the spindle 15 upon which the spool 1 is journaled for rotation, and about the spool, intermediate its flanges 16, a cable 17 is passed. It will be seen that the tube 6 and the pipe 14 are separate elements from the drum 1, the construction being such that the lubricator is a separate element from the drum 1, the spool in the ordinary process of manufacture, being cast about the lubricator.

The tube 6 is ordinarily filled with a relatively stiff lubricant, which will melt and flow through the pipe 14, as soon as the bearing 3 becomes heated to any appreciable extent. Obviously, by inserting a wrench or key into the opening 12 in the plug 11, the latter may be advanced, forcing the lubricant into the interior of the bearing 3. As clearly shown in Fig. 2, no part of the tube 6 or of the plug 11, projects beyond the end

wall 8 of the spool, and should the cable 17 slip from the drum 2, the lubricator will be in no wise injured.

Having thus described the invention,
5 what is claimed is:—

10 In a device of the class described, a sheave comprising a drum, a central bearing spaced from the drum, and ribs uniting the drum with the bearing; the adjacent faces of the drum and the bearing having circular longitudinal recesses; a section of pipe mounted in the recesses; a closure plug in the inner end of the pipe; movable means in the outer end of the pipe for advancing a lubricant in

the pipe; and an auxiliary pipe extended 15 through the bearing, and forming a communication between the interior of the bearing and the interior of the first named pipe, the pipes being separate elements from the sheave. 20

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM A. VIETOR.

Witnesses:

J. H. HUNTER,

W. B. RIGBY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
