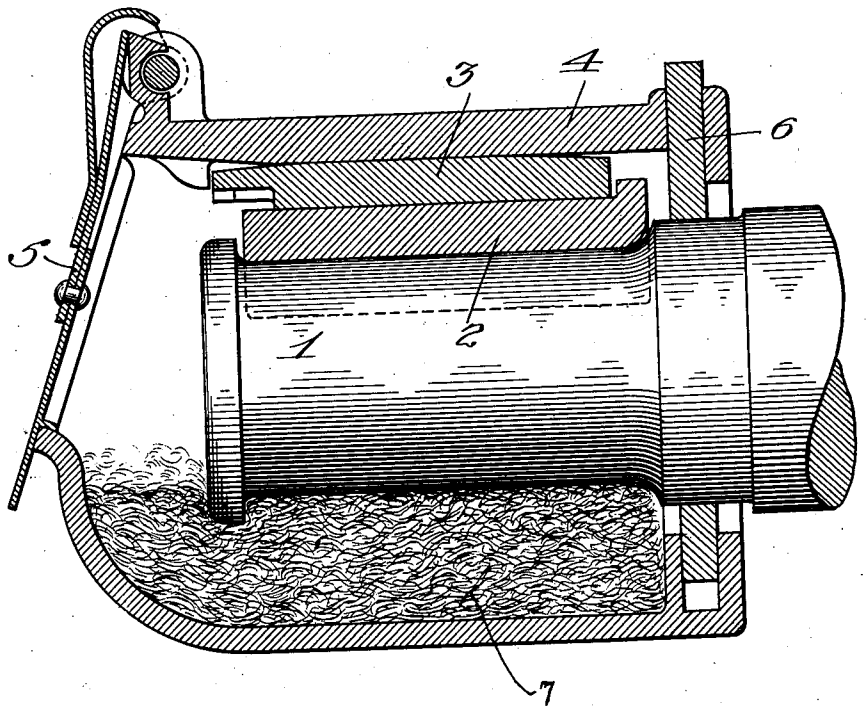
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PACKING FOR JOURNAL BEARINGS

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PACKING FOR JOURNAL BEARINGS.

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The present invention relates to improvements in the art of lubrication, and more particularly the lubrication of hot bearings, for example, the overheated bearings of railroad car trucks, commonly known as hot boxes. It will be fully understood from the following description, illustrated by the accompanying drawing, in which a section of a railway car truck journal box in which the invention may be practiced is illustrated.

In accordance with the present invention, the lubricant employed for the bearing is distributed to it by means of a filling having as a base metallic fiber or wool, for example, steel wool, Monel wool, copper wool, or the like. The metallic wool or fiber is thoroughly saturated with the lubricant to be used, which may be, for example, a cylinder oil, and is inserted in the journal box in the manner hitherto customary in the use of the usual filling or packing waste which is largely wool. Additional lubricant may be supplied as required. The metallic wool or fiber distributes the lubricant evenly upon the bearing and can withstand high temperatures, such as those occurring in a hot box, without impairing its efficiency, and without igniting, as is the case with the customary packing or filling.

It has been found that the capillarity and distributing qualities of the metallic wool or fiber and the adherence of oil thereto can be materially improved by forming upon the surfaces of the particles or fibers a thin film or coating, of the nature of a sulfide. This film or coating of sulfide upon the metallic wool may suitably be provided by immersing the steel wool in a bath of hydrogen sulfide solution or solution of an alkali metal sulfide or preferably by heating the steel wool or other metallic wool in a fat or oil with which 5 to 25% of sulfur has previously been combined by heating to a temperature of 430° or higher, as described in my co-pending application Serial No. 542,493, filed of even date herewith. The metallic wool is preferably immersed in an oil-sulfur lubricant of the character therein described and heated for the formation of the sulfide film.

The metallic wool, preferably coated with a sulfide film, may be used to replace the filling or packing in journal boxes in ordinary operation, or may be used, if desired, only for emergency operation in the case of hot boxes and the like. In the latter case it is preferably used with a special lubricant having a relatively high viscosity at the high temperatures then prevailing in the journal box, for example, the linseed oil-sulfur lubricant described in my co-pending application above referred to. The metallic wool either with or without the sulfide coating may likewise be mixed with packing waste of the type ordinarily used as a filling or packing and materially increases the resiliency of the packing and prevents clogging.

In the accompanying drawing, the use of the metallic wool as a filling or packing is illustrated in connection with a standard construction of journal box. The numeral 1 indicates a journal of a truck, the numeral 2 the bearing of the usual bearing metal and the numeral 3 the key for holding it in position in the box 4. The usual lid 5 and dust guard 6 are provided. The metallic wool 7 which may be sulfide coated, if desired, provides a filling for the lower portion of the journal box and is saturated with the lubricant to be used before it is inserted in the box, additional lubricant being afterwards added.

I claim:

1. As a packing for journal bearings, a mass of metallic wool, the fibers of which are coated with a sulfide film.

2. As a packing for journal bearings, a mass of steel wool, the fibers of which are coated with a sulfide film.

3. As a packing for journal bearings, a mass of steel wool, the fibers of which are coated with a sulfide film, intermingled with packing waste.

4. In a journal box, a bearing adapted to receive a rotating journal, and a mass of sulfide coated metallic wool within said journal box adapted to contact with said journal and distribute lubricant thereover.

5. In a journal box, a bearing adapted to receive a rotating journal, and a mass of sulfide coated steel wool within said journal box adapted to contact with said journal and distribute lubricant thereover.

6. In a journal box, a bearing adapted to receive a rotating journal, and a mass of sulfide coated steel wool intermingled with packing waste within said journal box

adapted to contact with said journal and distribute lubricant thereover.

7. In a journal box, a bearing adapted to receive a rotating journal, and means for supplying lubricant thereto, said means including a mass of sulfide coated metallic wool within the journal box.

8. In a journal box, a bearing adapted to receive a rotating journal, and means for supplying lubricant thereto, said means including a mass of sulfide coated steel wool within the journal box.

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