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BELT DRESSING AND PRESERVATIVE COMPOSITIONS

Arthur G. Werner and Florence M. Werner, both of 2850 Jones Blvd., Easton, Pa.

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9 Claims. (Cl. 106—36)

This invention relates to new belt dressing and preservative compositions.

The object of this invention is to provide belt dressings which improve the grip or pull characteristics of the belt as it travels over wheels or rolls, markedly decreases wear of the belt, impart water resistance to belts of leather, and do not impair the cords of textile materials incorporated in belts of rubber.

Other objects and advantages will become obvious from the following detailed description.

Broadly speaking our belt dressing composition is an intimate mixture comprising degras, petroleum oil and rosin to which lamp black may optionally be added.

The proportions of the components are of critical importance and should be within the following ranges: degras—20 to 35 gallons, preferably 25 to 30; petroleum oil—2 to 5 gallons, preferably 3 to 4; and rosin—2 to 5 lbs., preferably 3 to 4. If desired to improve the body and for coloring, lampblack $\frac{1}{4}$ to 2 pounds, preferably $\frac{1}{4}$ to 1 pound, may be added.

The degras, which is sometimes referred to as wool grease, functions as a preservative for leather belts. In combination with the rosin, it also improves the non-slip or gripping characteristics of the belt of leather, rubber or other materials.

The petroleum oil is desirably a refined petroleum oil having a maximum viscosity of about 4000 Saybolt Seconds Universal at 100° F., such as summer or winter black oils. The petroleum oil aids in keeping the belt, particularly if of leather, loose and pliable and counteracts any tendency of the degras to become hard or stiff, particularly in cool weather. In combination with the degras and rosin, the petroleum oil aids in imparting the desired degree of nonslip characteristics and prevents excessive tackiness or grip.

The rosin functions primarily to impart the desired degree of tackiness to the surface of the belt so that it does not slip on contact with the pulley wheel.

The lampblack, if employed, imparts body and improved color to the dressing composition.

We have found the following composition particularly suitable for our purpose:

Degras	gal	25
Petroleum oil: Winter black oil (Ebony I—560 SSU at 100° F.) or		
Summer black oil (Ebony P—3000 SSU at 100° F.)	gal	3
Rosin	lbs	3½
Lampblack, if employed	lb	½

In preparing our belt dressing compositions, the degras, which generally has a solidification point of about 38-40° C., is heated to melt and liquefy it. The petroleum oil is then admixed with the liquefied degras. A lower viscosity oil, such as winter black oil, is preferably used in cool weather, while the higher viscosity oils, such as

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summer black oil can be employed during warm weather conditions. The rosin, and lampblack if used, is added and the mixture heated, preferably to boiling, with some stirring for about 10 or 15 minutes. After cooling, the composition is ready for application as a surface dressing for the belt.

The composition, when applied to leather, rubber and other belts, imparts excellent nonslip characteristics. It greatly minimizes wearing of the belt and with leather belts extends the life of the belt from two to three times beyond normal expectancy. The composition, furthermore, imparts a high degree of water resistance to the leather and does not impair or injure textile strands incorporated in rubber belts.

Although this invention has been described with reference to illustrative embodiments thereof, it will be apparent to those skilled in the art that it may be embodied in other forms but within the scope of the appended claims.

This application is a continuation in part of our prior application filed December 7, 1956, Serial No. 626,817, now abandoned.

We claim:

1. A belt dressing consisting essentially of about 20 to 35 gallons of degras, about 2 to 5 gallons of petroleum oil having a maximum viscosity of about 4000 Saybolt Seconds Universal at 100° F. and about 2 to 5 lbs. of rosin.
2. A belt dressing as defined in claim 1 which includes about $\frac{1}{4}$ to 2 lbs. of lampblack.
3. A belt dressing composition consisting essentially of about 25 to 30 gallons of degras, about 3 to 4 gallons of petroleum oil having a maximum viscosity of about 4000 Saybolt Seconds Universal at 100° F., and about 3 to 4 lbs. of rosin.
4. A belt dressing composition consisting essentially of about 25 to 30 gallons of degras, about 3 to 4 gallons of petroleum oil having a maximum viscosity of about 3000 Saybolt Seconds Universal at 100° F., said petroleum oil being of summer black petroleum oil, and about 3 to 4 lbs. of rosin.
5. A belt dressing composition consisting essentially of about 25 to 30 gallons of degras, about 3 to 4 gallons of petroleum oil having a maximum viscosity of about 560 Saybolt Seconds Universal at 100° F., said petroleum oil being of winter black oil, and about 3 to 4 lbs. of rosin.
6. A belt dressing composition consisting essentially of about 25 gallons of degras, about 3 gallons of petroleum oil having a viscosity of about 560 Saybolt Seconds Universal at 100° F., and about 3½ lbs. of rosin.
7. A belt dressing composition as defined in claim 6 containing about $\frac{1}{2}$ lb. of lampblack.
8. A belt dressing composition consisting essentially of about 25 gallons of degras, from 3 gallons of petroleum oil having a viscosity of about 3000 Saybolt Seconds Universal at 100° F., and about 3½ lbs. of rosin.
9. A belt dressing composition as defined in claim 8 containing about $\frac{1}{2}$ lb. of lampblack.

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