

UNITED STATES PATENT OFFICE.

ELMER E. HAWES, OF PROVIDENCE, RHODE ISLAND.

CEMENT.

SPECIFICATION forming part of Letters Patent No. 501,937, dated July 25, 1893.

Application filed May 15, 1893. Serial No. 474,301. (No specimens.)

To all whom it may concern:

Be it known that I, ELMER E. HAWES, of Providence, Rhode Island, have invented certain new and useful Improvements in Cement, of which the following is a specification.

This invention relates to a cement for securing canvas coverings to pulleys, either of wood or iron.

In the use of belt pulleys, the belts frequently slip thereby causing loss of power and wear upon the belt; and to obviate this difficulty there has come into use as a means for preventing the slipping of the belt a pulley covering of canvas. This canvas covering enables the belt to be run without too great tension, prevents its slipping and obviates loss of power and wear. Mechanical fastening devices, such as rivets, are unsuitable for securing this canvas covering to the pulleys, and therefore I have compounded a cement which will be efficient to secure a canvas covering tightly upon the pulley and which will cause the covering to adhere firmly to the surface of the pulley.

This cement is compounded as follows: Take two gallons of pine tar and six pounds of rosin and cook together for a period of one hour or until all of the rosin is completely dissolved. I then dissolve six pounds of glue in

one quart of water and two quarts of vinegar, one pound of salt and two pounds of flour made into a paste. This mixture is cooked for a period of about one hour and then added to the tar and rosin while the latter is hot. To the compound thus produced I add one pound of sal-soda and cool the mixture, when it will be ready for use and may be applied either to the surface of the belt or to the surface of the pulley by means of a brush or otherwise.

The proportions of the several ingredients above mentioned may be varied and their chemical equivalents may be used instead of the ingredients mentioned.

I claim—

1. The herein-described cement composed of tar, rosin, glue, vinegar, salt, flour and sal-soda in about the proportions mentioned.

2. The herein-described cement for securing canvas coverings to pulleys composed of a mixture of pine, tar and rosin while hot with a mixture composed of glue, vinegar, salt, and flour cooked together and added to the tar and rosin mixture while hot and sal-soda.

ELMER E. HAWES.

Witnesses:

H. I. HUNT,
CHARLES D. OCAIN.