

H. K. ECKEL.
COMPOSITION BODY FOR SHOE SOLES AND THE LIKE.
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1,383,793.

Patented July 5, 1921.

Fig. 1.

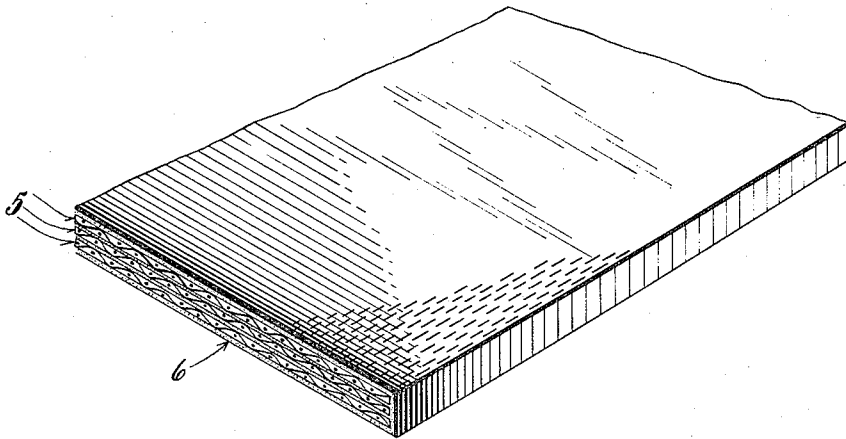
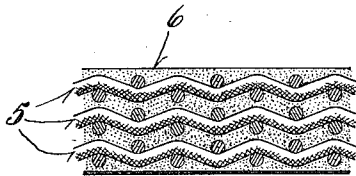


Fig. 2.



WITNESSES:

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HENRY K. ECKEL, OF MILWAUKEE, WISCONSIN.

COMPOSITION BODY FOR SHOE-SOLES AND THE LIKE.

1,383,793.

Specification of Letters Patent. Patented July 5, 1921.

Application filed February 7, 1919. Serial No. 275,568.

To all whom it may concern:

Be it known that I, HENRY K. ECKEL, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in a Composition Body for Shoe-Soles and the like; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to new and useful improvements in compositions of material having wear resisting qualities and adapted for use for shoe soles, floor coverings, or for similar uses requiring a somewhat flexible body.

It is in general the object of my invention to improve the wear resisting qualities of compositions of this character, and it is more particularly my object to provide a wear resisting body which may be built up of a plurality of layers of woven fabric material connected by a suitable binder embodying wear resisting qualities.

A further and important object resides in the provision of a composition of this character which may be manufactured at a minimum cost and which to this end may, without detracting from its efficiency, utilize fabric woven of short fibers not able to meet the tensile strength requirements of ordinary commercial fabrics and hence available at a low cost.

With the above and other objects and advantages in view, which will be apparent as the description proceeds, my invention resides in the novel features of construction, combination and arrangement of parts as hereinafter more particularly described and defined by the appended claim.

In the accompanying drawings:

Figure 1 is a perspective view of a section of a composition wear resisting body incorporating my invention.

Fig. 2 is a sectional view through the body.

Referring now more particularly to the accompanying drawings, my improved com-

position body is made up of a plurality of layers of relatively heavy woven fabric 5 of cotton or other suitable material. This fabric is preferably made up of short fibers conducting to an exceedingly low cost of the fabric, inasmuch as the tensile strength of the fabric is not material to my composition. These layers of fabric are embedded in and impregnated with a mixture 6 formed essentially of adhesive substance into which is mixed powdered hard mineral substance to resist wear. The mixture 6 is preferably composed of rubber cement with which is mixed powdered hard iron ore and silica, and relatively small quantities of linseed oil and gasoline to form a vehicle reducing the consistency of the mass. While I prefer the use of rubber cement, which makes a water-proof body, other adhesive material may be employed which is somewhat flexible in its effective form. Also other variations in the mixture may be resorted to without departing from the spirit of my invention. The adhesive mixture is preferably reduced for application to the consistency of a thick paint. It is then coated upon the individual layers of fabric and the layers are placed together and subjected to considerable pressure to form the complete composition. An exceedingly economical, durable and otherwise efficient composition body is thus provided which is flexible in nature and which is particularly adapted for use for shoe soles, floor coverings and the like.

What is claimed is:

A wear-resisting composition body comprising a plurality of layers of woven fabric impregnated with and maintained in cohesion by rubber cement mixed with powdered iron ore, the fabric material constituting the major portion of the composition.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin.

HENRY K. ECKEL.