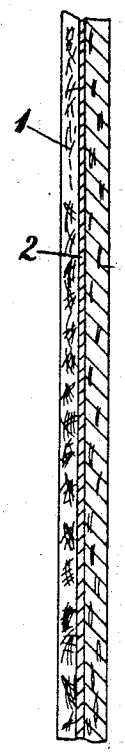
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FLOOR COVERING AND THE LIKE

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FLOOR COVERING AND THE LIKE

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This invention relates to floor coverings and the like of flexible or semi-flexible character.

There are, among others, two types of floor coverings of the character in question at present used, namely those which comprise a foundation of textile material, such as hessian, coated with a composition consisting essentially of cork and polymerized or oxidation products of linseed oil, that is to say the material known as linoleum, the coating of the composition in question being of appreciable thickness. The other class consists of felt impregnated with bituminous material the surface of which is decorated by the application thereto of a relatively thin layer of what may be described as paint.

Floorings having a backing of textile material such as hessian are subject to injury if laid upon moist surfaces as the moisture rots the textile material and appears to promote undesirable changes in the surfacing composition.

Floorings whether of canvas or bituminized felt surfaced merely with paint are subject to rapid deterioration owing to the destruction of the surface decoration by attrition.

It has been proposed to manufacture floor coverings by the application to bituminized felt of a relatively thick layer of compositions of the character used in the production of linoleum and difficulty has been experienced in securing a satisfactory bond between the bituminized felt foundation or backing and the coating composition and also in the application of the latter to the felt foundation.

The object of the present invention is to provide an improved flooring of a flexible or semi-flexible character having a wearing surface constituted by a linoleum composition and a backing or foundation of bituminized felt.

According to the present invention the bituminized felt is coated with an aqueous emulsion of a water insoluble resin such as rosin prior to applying the coating of linoleum composition and for the purpose of facilitating the adhesion between the latter and the bituminized felt.

While the composition may contain a proportion of filling or other solid material it would appear preferable that it should be free thereof or contain only a relatively small amount of such material.

When pitch or bituminous material is included in the composition it may be employed in a proportion equal to the proportion of rosin therein.

Thus, for instance, the composition may comprise 68 parts by weight of stearin pitch having a fusing point of 65 to 70° F., 61 parts by weight of rosin, 2 parts by weight of borax, 13 parts by weight of casein, 13 parts by weight of ammonia of 26° Baumé and a proportion of water sufficient to yield a composition of the desired consistency.

This composition is produced conveniently in the following manner:—

The pitch and rosin are mixed together with the application of heat, the temperature of the mass, however, being kept as low as possible and being maintained, for instance, at about 250 to 300° F. The mixture of pitch and rosin is run slowly at a temperature of 190 to 210° F. into a dispersion of casein formed by mixing casein with about 4 to 5 times its weight of water, allowing it to soak for a suitable period and then adding borax in solution gradually with agitation. The mixture produced by bringing together pitch and rosin and the casein dispersion formed as above described is allowed to cool when it will become more viscous and may be thinned by the addition of a further quantity of water. The ammonia is then added gradually and, after the addition of the ammonia, water is added.

In producing flooring in accordance with the invention the linoleum composition is first rolled out into sheet form and a single sheet of the composition is then applied to the face of a sheet of bituminized felt which has been treated with the rosin emulsion and allowed to dry.

The composite sheet thus formed is then passed between heated rollers.

If the production of an "inlaid" effect is

desired the sheet of linoleum composition will be first divided up into pieces of suitable form and size and a number of such pieces will be laid up in the treated surface of a sheet of bituminized felt and the whole then passed between heated rollers in the manner above indicated.

In the accompanying drawing which illustrates diagrammatically and in section a sheet of flooring material in accordance with the invention, 1 is the sheet of bituminized felt, 2 is the layer of adhesive and 3 the sheet of linoleum composition.

Having now described our invention, what we claim as new and desire to secure by Letters Patent is:—

1. A floor covering comprising a bituminized fibrous backing, a linoleum composition surface, and an intermediate adhesive binder formed of an aqueous alkaline caseinate emulsion containing a water insoluble resinous substance and a bituminous substance.

2. A floor covering comprising a bituminized felt backing, a linoleum composition surface, and an intermediate adhesive binder formed of an aqueous alkaline caseinate emulsion containing rosin and pitch.

3. A floor covering comprising a bituminized felt backing, a linoleum surface, and an intermediate adhesive binder formed of an aqueous alkaline caseinate emulsion containing rosin and stearin pitch.

In testimony whereof we have signed our names to this specification.

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