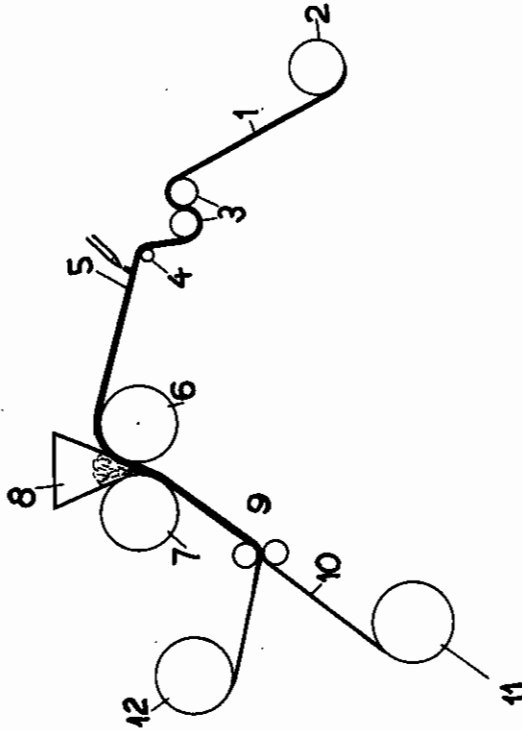


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# ALIEN PROPERTY CUSTODIAN

## LINOLEUM COVERINGS FOR FLOORS

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As it is known linoleum strips for covering of floors, wall socles, stair steps, and the like are generally constituted of a fabric foundation, particularly jute fabric, to which is united by means of calendering or pressing the kneated mass of linoleum. Such strips are applied to a rigid floor by means of mastic or glue, which do the fastening between the free fabric foundation of the linoleum sheet and the floor.

These coverings, although very advantageous under many aspects, show some deficiencies.

The fastening by means of mastic or glue may be weakened on account for inst. of humidity or crystallisation of the adhesive so far as to promote the loosening of the covering from the floor so that it is not advisable to employ the linoleum covering in places situated in the open or submitted to great affluence of people, where hygiene requires very often the cleaning with plenty of water.

Furthermore considering the possible influence of humidity on the adhesive power of the fastening means, it is generally preferred to wait till the floor is completely seasoned before the covering is applied to, so that a period of some length elapses between the casting of the reinforced concrete floor and the appliance of the linoleum covering.

At least, the employment of the jute fabric foundation, which surely is particularly suitable for the purpose, but sometimes costly and of difficult supply, influences noteworthy the cost of the finished product.

The present invention relates to a floor covering, which offers all the advantages of the linoleum covering and eliminates all the disadvantages as said before.

The floor covering according to the present invention consists of two strata: the one of linoleum, the surface of which will be seen after being laid down, and the other of resilient rubber, the surface of which will be applied to the floor. The two strata are juxtaposed and united each other on the whole surface of them, by means for inst. of adhesive or other suitable method. These coverings may be of any form or size, for inst. they can be manufactured in rolls, as the standard strips of linoleum on jute foundation, or in sheets, or plates, or the like, in which the rubber foundation substitutes the one of jute normally employed up to now.

The covering according to the present invention can be applied to the floor to be covered either by means of adhesives or mechanically.

In the first case the inferior stratum of the

linoleum covering should be preferably smooth, for the floor covering according to the present invention allows to eliminate the adhesive hitherto employed for linoleum and all the deficiencies connected with them, because the rubber foundation allows to perform the fastening by means of adhesives or mastics employed in rubber floor coverings, which give far more satisfactory results.

In the other case should the fastening of the covering according to the present invention be performed by mechanical means, the surface of the rubber foundation should preferably be provided with prominences of different shape having a dovetail section. These prominences are integrating part of the foundation and are plunged into the fluid cement cast between the floor surface and the covering, so that they are firmly seized as soon as the cement consolidates. It results, that the floor covering is anchored to the floor in a steady and lasting manner.

These mechanical means for the fastening of the covering to the floor are of great importance for the aim of the present invention and represent a particular object of it, for the anchoring obtained by these means is very firm and steady, is not subjected to atmospheric influence, for inst. humidity or heat, and therefore is very suited to the most extensive appliances. Furthermore not being subjected to the influence of humidity the covering can be applied without any delay after the casting of the reinforced concrete floor.

The juxtaposing of the linoleum stratum with the rubber foundation can be done employing any suitable method, either by interposing of adhesives, or of selfvulcanising agents, or of solutions suitable to obtain the adhesion of the rubber foundation to the linoleum sheet, or the like.

According to one way to carry into execution the present invention the elements of the covering which are the linoleum sheet, without the jute fabric support, obtained through pressing or calendering and the rubber foundation sheet are prepared separately and united by means of complementary selfvulcanising rubber solutions.

Another way to carry into effect the present invention is to prepare separately the rubber sheet for the foundation and to coat the surface contacting the linoleum sheet with a suitable adhesive and to contact the coated surface of the rubber sheet with the linoleum sheet by passing the strip for inst. through the linoleum calender, instead of the hitherto employed jute fabric.

As already said, the rubber sheet can be pro-

vided on the surface to be affixed to the floor with prominences or grooves for the anchoring of the covering to the floor by means of fluid cement. During the uniting operation of the rubber foundation to the linoleum sheet it is preferable to protect the prominences or grooves by means of a material which fills completely the interspaces and which is easily torn off at the final operation.

A specification of one preferable way to carry out to effect the invention is given only as an example.

The sheet of vulcanized rubber is prepared pressing the sheet in contact with a coarse mesh fabric, if the case treated with known means to avoid sticking of the rubber to it during the vulcanization. The pressure during the vulcanization causes the rubber to plastify and to flow into the meshes of the fabric and to assume their form. As a matter of course changing the type of fabric employed, the shape and size of the prominences will change too. The superior face of the rubber sheet to which the linoleum sheet has to be united can be made rough, as already said, by means of regular fabric during the vulcanization or by rasping, or the like.

Said rubber sheet, which can contain ground rubber scraps, textile fibers and the like, has for inst. a thickness of about 1 m/m. and the vulcanization is performed by a continuous process and pressing the coarse mesh fabric against the rubber sheet.

After the vulcanization the fabric, or the net, or the like, used to form the prominences on the

inferior surface of the rubber sheet can be torn off or left on the sheet to protect the prominences till to the uniting operation of the rubber sheet to the linoleum one. The uniting can be performed according to the process illustrated in Fig. 1 of the drawing. The rubber sheet 1, which is still carrying the fabric used for the forming of the prominences, is unrolled from the drum 2, passes through the two rolls 3 and by means of the tensioning roll 4 is sent to the linoleum calender 8, after having been sprayed with adhesive by the jet 5. The kneaded linoleum mass, falling from the hopper 8, is applied to the superior surface of the rubber sheet 1 as this passes between the rolls 6 and 7 and remains firmly united in an uniform stratum by the action of the adhesive and of the pressure exerted by the rolls.

The floor covering strip after being so formed leaves the calender, passes the rolls 9, the coarse mesh fabric 10 is torn off and enrolled on the drum 11, and the finished strip is enrolled on the drum 12.

The different processes as described do not limitate the scope of the invention, though constituting particular object and preferred actuating means. It is as well understood that the rubber foundation of the floor covering can be obtained from any rubber compound. By rubber is meant any natural or synthetic or regenerated or ground rubber, admixed or not with fillers, vulcanising agents, accelerators and such like addenda of the rubber art.

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