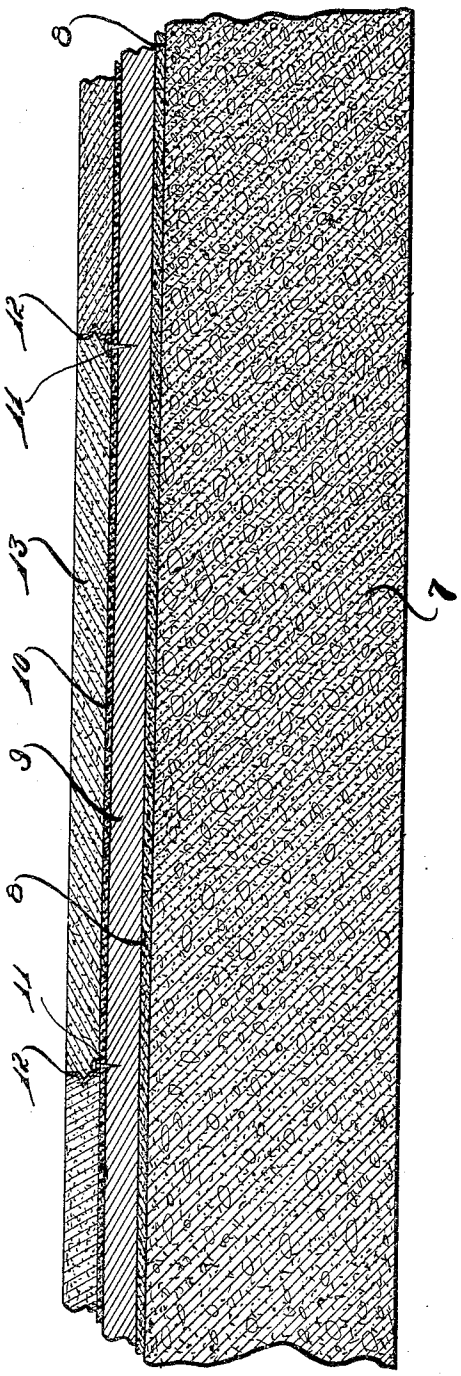
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FLOOR CONSTRUCTION

Filed April 17, 1929



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FLOOR CONSTRUCTION

Application filed April 17, 1929. Serial No. 355,729.

My invention relates to a new and useful improvement in a floor construction and has for its object a floor construction whereby a durable upper layer may be mounted on a non-yielding base and a resilient floor provided. The invention is particularly adaptable in use in mounting on a base or slab formed from concrete or other similar material, an upper wearing surface formed from concrete or the like and so mounted on the base as to be yieldable.

Another object of the invention is the provision of a construction whereby a wearing surface for a floor may be easily and quickly mounted on a non-yielding base in such a manner as to be yieldable under weight placed thereon.

Another object of the invention is a construction whereby a wearing surface for a floor formed from concrete or the like may be securely mounted on a non-yieldable base such as concrete or the like.

Another object of the invention is the provision of means for securing on a non-yieldable base such as concrete or the like, forms into which plastic hardening material may be poured to form the wearing surface of the floor.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawing which shows a cross section through a floor structure embodying the invention.

The wearing surface of the floor, which comprises the upper layer, may be formed from any suitable material such as tile, cement, magnesite or other hard surface floor topping.

The invention is particularly adapted for use in mounting a floor wearing surface which is formed from plastic hardening material and such a structure has been illustrated in the drawing.

In the drawing I have illustrated a base 7 formed from concrete and the like and covering the base 7 is a layer of adhesive material 8, such as asphalt or the like. Prior to applying the asphalt, it is desirable that all grease and similar material on the floor be removed by cleaning the surface of the base 8 with caustic or acid, after which an asphalt primer consisting of a thin coat, is mopped over the base 7. This is followed by a coat of hot asphalt which is mopped on the base 7. While this layer 8 of hot asphalt is in a plastic condition, a layer 9 of fibrous material, such as the commercial product known as Masonite, is placed in position as shown. The layer of asphalt 8 permits the laying of the layer 9 in a level position. Over the layer 9 is mopped a water proofing layer 10 from asphalt or the like. Secured by the brads or nails 11 are forms 12 into which the concrete or plastic material 13 is to be poured. The layer 9 serves, therefore, as a means for attachment of the forms 12 and serves as a material into which the brads or nails 11 may be driven.

With a floor constructed in this manner, a level floor may be economically provided and a concrete wearing surface is effected which is also resilient, the layer 9 being sufficiently yieldable under weight placed upon the layer 13 to provide the resilient or yieldable effect desired in the wearing layer 13. It is believed evident that by arrangement of the forms 12 in different shapes and positions and by coloring the plastic material 13, a variegated pattern floor wearing surface may be provided.

In this way, tile, mosaic and similar types of floors may be imitated.

In buildings constructed with the floor slab 7 formed from concrete or other similar material, a cracking of the floor slabs upon settling of the building often takes place. With the layer 13 mounted on the base 7 in the manner indicated, a cracking of the base 7 will not appear on the wearing surface 13 and thus it becomes possible to arrange in a building a concrete floor or a floor having a concrete wearing surface which is not liable to cracking through use or settling of the building.

The hard surfaced floor or wearing surface 13, is, it is apparent, formed sectional and the size of the section will depend upon the

amount of resiliency desired, the thickness of the slab which forms the wearing surface and other features. It is required, however, that this floor be formed in sections to give the necessary resiliency.

The present invention permits the forming of the wearing surface or layer 13 in very thin slabs, thus accommodating such a structure to various types of work, such as apartments, etc. The structure also serves as a sound-proofing construction for use in such types of buildings. Because of the sectional formation of the wearing surface and its freedom from cracking in response to a cracking of the base 7, the invention lends itself admirably for marine construction.

While I have illustrated and described the preferred form of my invention, I do not wish to limit myself to the precise detail of structure shown but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A floor construction of the class described, comprising: a concrete base; a layer of yieldable material affixed to the upper surface of said base and penetrable by affixing means; forms positioned on said layer; affixing means engaging said forms and pentrating said layer for securing said forms in position thereon; and plastic material of a hardening nature poured into said forms.

2. A floor construction, comprising: a non-yieldable base formed from hardened plastic material; adhesive layer of material on the upper surface of said base; a layer of material positioned on said adhesive layer sufficiently rigid for supporting superimposed layers and sufficiently yieldable to yield slightly under a load placed on said superimposed layers and penetrable by affixing means; a water-proof layer on the upper surface of said last mentioned layer; forms positioned on said water-proof layer; affixing means driven into said third mentioned layer and securing said forms in position; and a wearing surface of hardened plastic material filling said forms.

3. A floor construction of the class described, comprising: a non yieldable base formed from hardening plastic material; a layer of yieldable material supported on said base; a sectional wearing surface formed from plastic hardening material and supported on said layer and of sections sufficiently small for permitting yielding of the same slightly under a load placed thereon; and forms for said sections secured to and movable with said layer of yieldable material.

4. A floor construction of the class described, comprising: a non-yieldable base formed from concrete; a layer of yieldable material supported on and attached to said base; a wearing layer formed from hardened plastic material supported on said layer of yieldable material and formed in sections sufficiently small for permitting yielding of the same in unison with the yielding of said yieldable material under a load placed thereon; and forms for determining the shape and size of each of said sections and attached to said layer of yieldable material and moving in unison with the said layer of yieldable material and the sections of said wearing layer.

In testimony whereof I have signed the foregoing specification.

PAUL G. HEIDMAN.