United States Patent [19]

Moore

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[54] PREFABRICATED FLOORING

[75] Inventor: **John H. Moore**, Lancaster, Pa.

[73] Assignee: **Armstrong Cork Company**, Lancaster, Pa.

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[52] **U.S. Cl.** .....**206/59 F**, 52/390, 161/38, 161/40

[51] **Int. Cl.** **B65d 85/66**

[58] **Field of Search**.....161/36–40, 145; 52/479, 622, 390; 206/59 G, 59 R, 59 F

[56] **References Cited**

UNITED STATES PATENTS

3,084,403	4/1963	Elmendorf	206/59 R X
2,715,596	8/1955	Hawley	206/59 R X
3,077,059	2/1963	Stout	52/388
3,279,138	10/1966	Dittmar	52/390 X
3,425,889	2/1969	Willits	161/48 X
2,653,358	9/1953	MacDonald	161/38 X

Primary Examiner—Robert F. Burnett
Assistant Examiner—Joseph C. Gil
Attorney—Clifford B. Price

[57] **ABSTRACT**

A resilient flooring or carpeting is mounted on a slat-like structure. The individual slats are not bonded together and are securely fastened to the underside of the flooring. The floor material is sufficiently resilient to permit the flooring with the slats attached thereto to be rolled in a large roll. When the roll of material is laid out on a flat support, the individual slats abut adjacent slats and form a subfloor for the flooring which is bonded to the slats.

1 Claim, 2 Drawing Figures

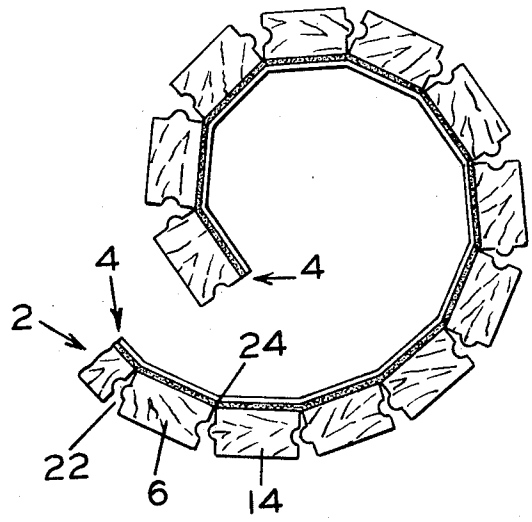


Fig. I

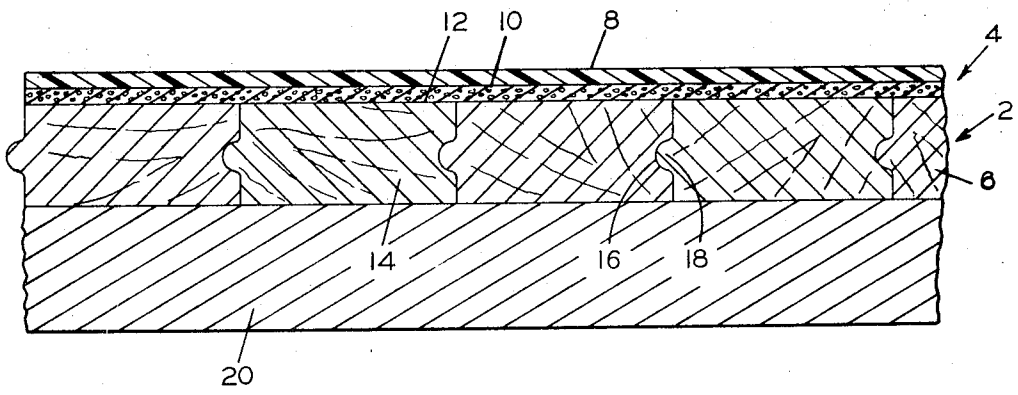
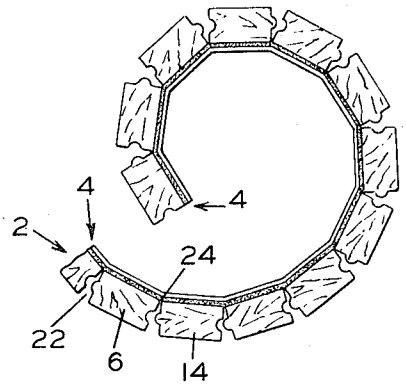


Fig. II



INVENTOR
JOHN H. MOORE

BY

ATTORNEY

PREFABRICATED FLOORING

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention herein is a flooring construction and, more particularly, a prefabricated flooring construction consisting of the wear layer surface and subfloor.

2. Description of the Prior Art

Broadly, the idea of a prefabricated construction material is suggested in U.S. Pat. No. 3,077,059. Herein a flexible backing is provided with a brick veneer. This assembly is delivered to the construction site in a roll and then unrolled and placed on the side of the building.

U.S. Pat. No. 2,508,128 discloses a structure for providing curved surface walls, etc. Here a slat-like structure is fastened to the back of a flexible board. The slat-like structure provides support for the flexible board when it is bent into a curvilineal surface. The slat-like structure is spaced to permit the forming of the curvilineal surface.

Finally, NASA has developed a portable flooring surface for use on surfaces to which a temporary flooring may be provided. The temporary flooring is composed of a plastic foam plank structure with a plurality of the foam planks being held together by webbing. The structure is basically a portable slat-type flooring.

The object herein is to provide a flooring for commercial use wherein a conventional resilient flooring or carpeting is factory assembled to a subfloor structure composed of a plurality of slats. This can then be rolled up in the factory and delivered to the job site. There the subfloor and finished flooring are laid in one operation.

SUMMARY OF THE INVENTION

The flooring herein is fabricated by placing either resilient or carpeting material on thin slats of hardboard or other material. The flooring material has the hardboard tightly bonded to the back side or nonfinished surface of the flooring. The thin slats of hardboard are adjacent and abutting each other when the flooring is placed in a single plane, but the individual pieces or slats of hardboard are not adhesively fastened together so that the combination structure may be rolled up. The slatted hardboard with the flooring can then later be fastened to a smooth subfloor or a wood joist structure by the use of an adhesive. Consequently, both the finished flooring and the subfloor are delivered to the building site as a unitary structure to be installed at one time.

BRIEF DESCRIPTION OF THE DRAWING

FIG. I is a cross-sectional view of the prefabricated floor in position; and

FIG. II is a cross-sectional view of the prefabricated floor in its rolled form.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The prefabricated floor **2**, as shown in FIG. I, is composed of a decorative flooring **4** and a subfloor structure **6**. The decorative flooring **4** can be either a resilient type flooring often referred to as hard surface flooring or it may be carpeting. In the embodiment shown in FIG. I, the flooring **4** is composed of a wear layer surface **8** and a foam backing surface **10** similar to that shown in assignee's U.S. Pat. No. 3,360,422. The subfloor **6** is composed of a hardboard underlayment material which is cut into slat-type form. Obviously, the slat material could be made of vinyls or other man-made products.

The flooring **4** is adhesively bonded to the one side **12** of the slat structure of the subfloor **6**. The individual slats **14** are not adhesively secured to adjacent slats. The individual slats are of a thickness approximately equal to that of a conventional subfloor material, that is, approximately three-fourth inch. The widths of the slats may vary from ¾ inch to about 2½ inches. This permits a structure which may be readily rolled up. Where two pieces of slat material join themselves, there could be flat abutting surfaces or you could have a groove in one board with a slight tongue in the other. This is shown in FIG. I wherein the groove is element **16** and the tongue is element **18**.

Referring now to FIG. II, there is shown the prefabricated floor in its rolled-up state. In FIG. I the prefabricated flooring is shown in its installed position over a conventional support structure **20**. This could be a concrete slab structure to which the slat-type subfloor **6** was adhesively secured or element **20** could be a rafter-type floor structure wherein the individual slats **14** span the space between a series of rafters. In FIG. II the flooring **4** is sufficiently flexible that it may be bent into a large size roll. The center core could be 10 to 12 inches in diameter. The subfloor **6** which is composed of a plurality of individual slats is adhesively bound to the back side of the flooring. By not having the adjacent edges of the individual slats bonded to each other, they can separate sufficiently to permit the prefabricated floor to be rolled up into a roll structure. When the flooring is rolled up, a spacing **22** will exist between the individual slats, but the individual slats will still be adjacent each other at the point **24** where two adjacent slats are bonded to the flooring **4**.

The prefabricated floor will be fabricated in the factory by having the subfloor slat elements fastened to the back side of the flooring **4**. This structure would then be rolled up and delivered to the job site as a roll. A conventional support structure such as the rafters of a floor or a concrete subfloor for a slab-type construction will be in position, and the roll of prefabricated flooring **2** will be unrolled in position over the conventional support structure. Glue would be utilized in many cases to fasten the lower side of the subfloor to the underlying support structure. This would eliminate the need for laying the subfloor as a separate operation from the laying of the actual finished flooring.

What is claimed is:

1. A roll of prefabricated flooring consisting of a two-part laminate structure, the upper laminate structure being a vinyl wear layer and a foam backing layer, used to provide the decorative and wear surface of a floor, and the second laminate structure being a plurality of approximately ¾ inch thick hardboard slat elements which are fastened to the underside of the upper laminate structure, said slat elements being otherwise unsecured, to each other and being so positioned relative to each other that when the flooring is in a single plane the sides of two adjacent slat elements abut each other and are in contact.

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