Nov. 17, 1953 M. B. T. MOORE 2,659,687

FLOOR COVERING

Filed Feb. 11, 1952

FIG. 1.

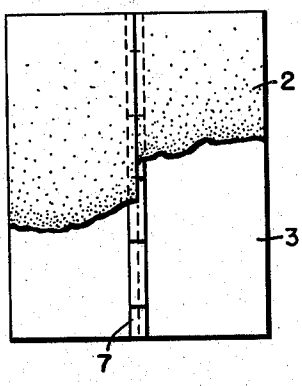


FIG. 2.

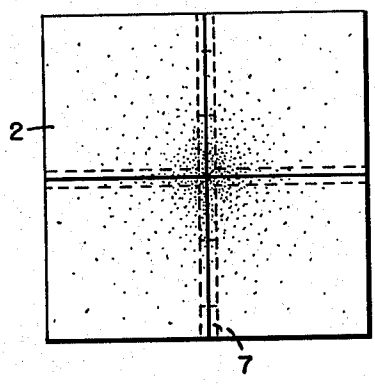


FIG. 3.

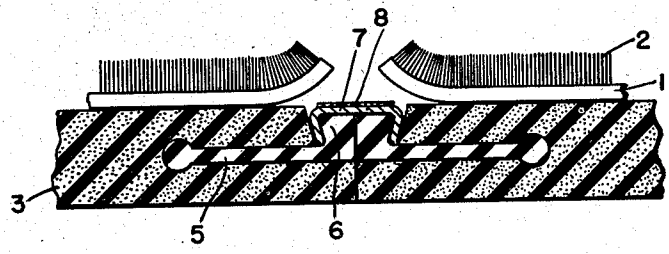


FIG. 4.

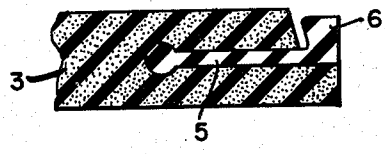


FIG. 6.

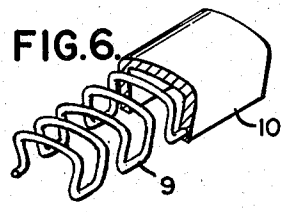


FIG. 5.

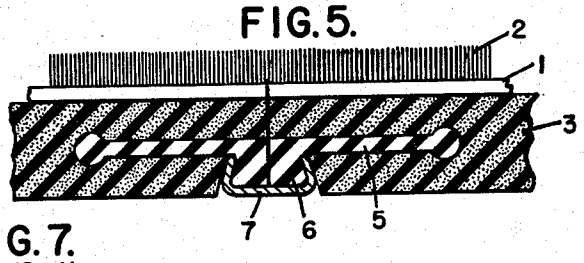
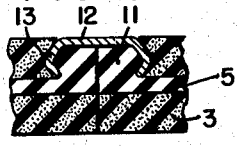


FIG. 7.



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2,659,687

FLOOR COVERING

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3 Claims. (Cl. 154—49)

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This invention relates to composite floor coverings, and particularly to carpets in which the carpet is bonded or permanently adhered to a pad or underlying cushion of resilient rubber or the like. One of the objects of the invention is to provide means for attaching carpet sections together for ready replacement should a section be accidentally burned, stained or otherwise injured to such extent as to be unsightly. The construction is made for access from the upper or lower faces of the composite floor covering as desired.

Another object of the invention is to produce means for attaching or detaching the units or sections of the carpet without the use of special tools and by unskilled or untrained personnel.

A further object is to produce an edge lock for carpets of such nature that the carpet can be rolled up either at right angles or parallel to the edge locking strip, when it is desired to uncover the floor for polishing, cleaning or otherwise.

With the objects named in view and others as will hereinafter appear, the invention consists in certain new and useful features of construction and organization of parts as hereinafter described and claimed; and in order that it may be fully understood, reference is to be had to the accompanying drawing, in which:

Figure 1 is a face view of a section of edge interlocked carpet strips involving the invention with the locking members shown in relatively short lengths although it is to be understood that the locking members can be of equal length to the carpet strips, if desired.

Figure 2 is a similar view of four sections of carpet united by the lock of the invention, similar to that of Figure 1.

Figure 3 is an enlarged section through adjoining carpet edges showing the carpets turned back for applying or removing the locking key.

Figure 4 is a section of a pad edge with the carpet omitted to more clearly illustrate the interlocking strip embedded in the pad, the locking key being omitted.

Figure 5 is a view similar to Figure 3 in which the interlock is detachable from the bottom or top, and contacts the floor, the construction permitting complete bonding of the carpet to the pad, rather than having loose edges as will hereinafter appear.

Figure 6 is a fragmental enlarged view of the preferred method of making the key.

Figure 7 is a view similar to Figure 3, but of a slightly modified construction.

In the said drawing, where like reference characters identify corresponding parts in all of the figures, 1 is the backing and 2 the nap of a carpet, said carpet being formed in strips as shown in Figure 1, or rectangles as in Figure 2. The carpet is permanently united to an underlying pad or cushion of rubber or similar resilient material 3, said pad being coextensive with the overlying carpet. The edges of the carpet which are to be detachably united to an abutting carpet, however, are not permanently adhered to the pad, except in such construction as shown in Figure 5. However, in Figures 3 and 4, since the edges must be lifted and turned back for access to the locking means as will hereinafter more particularly appear, said carpets adjacent the locks are not permanently bonded to the pads.

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Embedded in the pad along the edge as by being molded in place during manufacture, is an interlocking strip of tough resilient material 5 formed with a head 6, which, in the preferred construction, is exposed from the top face of the pad 3, the carpet being turned back for access as shown in Figure 3. By preference the top of the head 6 is below the plane of the pad, the thickness of an interlocking key, preferably comprising a U-shaped key 7, of any desired length, preferably as long as the strips or sections of carpet being secured together. The keys 7 are applied by engaging one end at an angle to the resilient heads 6 to compress the heads so that the key can be gradually applied for its full length. The edges of the carpet sections are thus held juxtaposed and cannot separate. Either of the constructions shown in Figure 3 or 5 may be used, the key in the latter case being flush with the bottom of the pad, while in the former it is substantially flush with the top of the pad.

In the construction shown in Figure 3, where it is thought there may be some danger of the edges of the carpet curling up in service, a strip 8 having adhesive on both sides may be applied to the keys 7. With this arrangement the carpet edges cannot curl up.

Where the carpet is made up in rectangles, Figure 2, or where it is made in strips as in Figure 1, and it is desired to be able to roll up the carpet regardless of the direction of the locking strips, it is clear the keys must be perfectly flexible and must not build up thicker than the carpet during the rolling movement. Therefore, the preferred method of manufacturing the key 7 is illustrated in Figure 6. In this construction, 9 is a resilient wire bent to form a continuous U-shaped channel of any desired length. By preference the wire coil 9 is embedded in a covering of tough but resilient material 10, such as rubber.

Figure 7 illustrates interlocking heads 11 of

double wedge shape. The keys 12 cooperating with these heads having legs 13 of double wedge shape for gripping adjacent pairs of heads 11. With this construction the keys 12 can be engaged by a straight downward pressure.

From the above description and drawing, it will be apparent that I have produced a construction embodying all of the features of advantage set forth as desirable, and while I have described and illustrated the preferred construction, it is to be understood that I reserve the right to make all changes within the spirit and scope of the appended claims.

I claim:

1. A composite floor covering comprising a pair of edge abutting units, each formed of a carpet bonded to an underlying pad, a resilient interlocking strip embedded in but partially exposed at the edge of the pad, and a resilient locking key interconnecting the locking strips and flush with the adjacent faces of the pads, said key being sufficiently flexible to permit the floor covering to be rolled up either parallel or at right angles to the interlocking edges.

2. A composite floor covering comprising a pair of edge abutting carpets, a pad bonded to the underside of each carpet, a yieldable locking strip embedded in each pad and having a dove-tail locking end exposed at the edge of the pads by notching the corresponding pad faces, the opposite face of the pads being coextensive with the proximate faces of the locking strips, the carpet edges overlying the exposed dove-tail locking strips, and a yieldable locking key receiving and uniting the dove-tail strips by movement at right angles to the face of the pads, the exposed face of the key being coplanar with the faces of the pads.

3. A composite floor covering comprising a carpet, a pad bonded to the underside of the carpet, a yieldable locking strip embedded in the pad and having a dove-tail locking end exposed at the edge of the pad by notching the corresponding pad face, the opposite face of the pad being coextensive with the proximate face of the locking strip.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,706,354	Geist	Mar. 19, 1929
2,104,941	Baynton et al.	Jan. 11, 1938
2,324,171	Paradise	July 13, 1943

FOREIGN PATENTS

Number	Country	Date
22,006	Great Britain	of 1891