June 25, 1940. H. B. SCHEIDEMANTEL ET AL 2,205,802

PIT MAT FOR BOWLING ALLEYS

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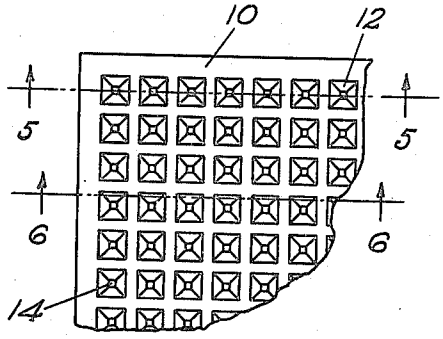


FIG. 1

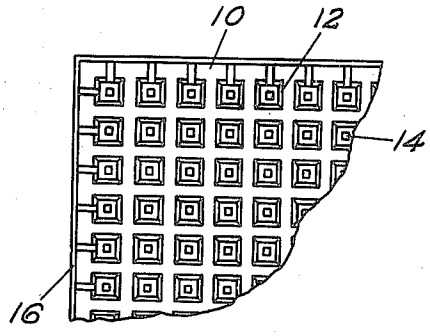


FIG. 2

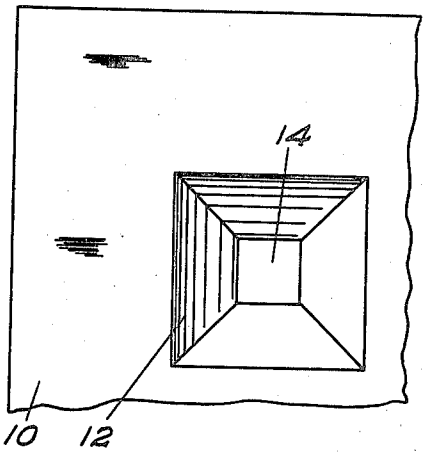


FIG. 3

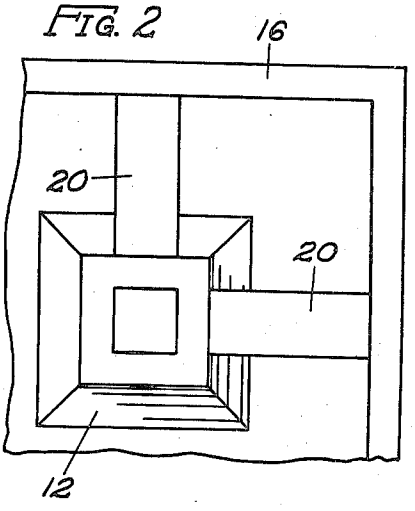


FIG. 4

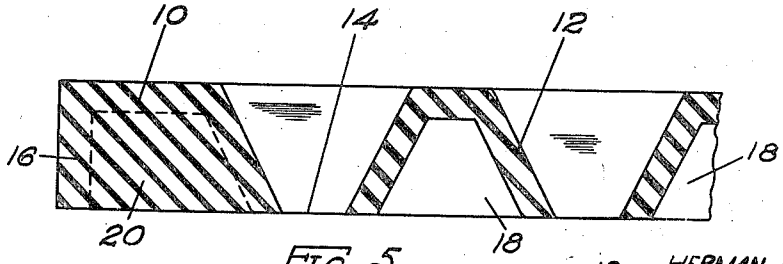


FIG. 5

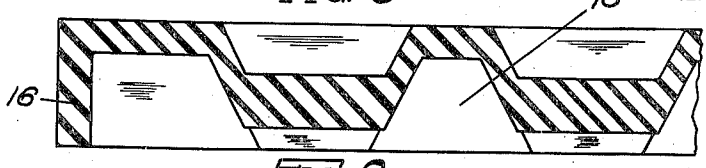


FIG. 6

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PIT MAT FOR BOWLING ALLEYS

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Application January 25, 1939, Serial No. 252,724

3 Claims. (Cl. 273—54)

This invention relates to an improved pit mat for bowling alleys and has for one of its principal objects the provision of a pit mat which is very resilient and cushions the blows of the balls and pins which are knocked into the pit and which furthermore will be strong and durable so as to withstand the strain of the impacts.

One of the important objects of this invention is to provide a bowling alley pit mat which will automatically keep itself clean, in that dust, dirt and the like will drop through openings in the mats, this occurring automatically as the mats of this invention are pounded by the balls and pins whereby the dust and dirt will be deposited onto the floor.

Still another important object of the invention is to provide a bowling alley pit mat which when used in this connection will eliminate the necessity of unduly frequent cleanings of the pits, in that deposited dirt and other foreign material is held under the mat for a considerable length of time without the necessity of removal.

Another and still further important object of the invention is the provision of a pit mat for bowling alleys or the like which is composed of rubber or some similar resilient material which can be molded to shape and which will be so constructed that the inherent resiliency of the material will be supplemented by the particular construction so that a practically noiseless article will result.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawing and following specification.

The invention, in a preferred form, is illustrated in the drawing and hereinafter more fully described.

In the drawing—

Figure 1 is a top plan view of the improved bowling alley pit mat of this invention;

Figure 2 is a bottom view of the same;

Figure 3 is an enlarged view of the upper left-hand corner of the structure of Figure 1;

Figure 4 is a bottom view of the structure of Figure 3 on the same scale;

Figure 5 is a sectional view taken on the line 5—5 of Figure 1; and

Figure 6 is a sectional view taken on the line 6—6 of Figure 1.

As shown in the drawing:

The reference numeral 10 indicates generally the improved bowling alley pit mat of this invention, the same being composed of some resilient material such as rubber, and preferably molded, fairly soft rubber. The mat has a plurality of depressions 12 arranged in regular series throughout its body, these depressions being preferably surrounded by a fairly wide integral border, as shown.

As best illustrated in Figures 3 and 4, the depressions are preferably square in outline, although they may be of other shapes, and these depressions taper downwardly toward a central opening 14 at the bottom.

The under-surface of the mat 10 is channeled, as best shown in Figure 2, to provide spaces or recesses outlining the tapered frusto pyramidal depressions 12, and a downwardly depending border 16 is provided around the outer edge of the mat, as best shown in Figures 5 and 6. The portions of the mat between the frusto pyramidal depressions 12 are recessed below, as shown at 18 in Figures 5 and 6, and the border 16 is reinforced by integral webs 20 which join the walls 16 to the outer faces of the depressions 12. As shown in these figures, the walls forming the depressions 12 are thus approximately one-fifth the thickness of the entire mat.

It is obvious that the webs 20 may extend throughout the length and breadth of the mat, if desired, and it is further obvious that the depressions may be frusto conical as well as frusto pyramidal. The openings 14 in the bottoms of the depressions allow free passage of dust, dirt, and other foreign materials, through the mat onto the bottom of the pit, and the upper surface of the mat 10 is accordingly spaced from the pit floor by the side walls 16 of the mat itself and the sloping side walls 12 which outline the depressions.

It will be obvious that herein is provided a pit mat for bowling alleys which, on account of its great resiliency, will be practically noiseless and which will furthermore automatically clean itself by allowing any dust and the like which falls thereupon to pass through the mat and the openings 14 to the floor of the pit. The combination of the resilient side walls for the mat, and the depressions, together with the webbed structure, most clearly shown in Figures 5 and 6, will provide a particularly resilient construction which is admirably adapted for this particular type of work.

We are aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the principles of this invention, and we therefore do not propose limiting the patent granted there-

on otherwise than as necessitated by the prior art.

We claim as our invention—

1. A rubber pit mat for bowling alleys comprising a single molded sheet having parallel top and bottom surfaces, a plurality of openings therethrough arranged in parallel rows and provided with inclined side walls converging toward the bottom of the mat and recesses extending upwardly from the bottom of the mat into the portions thereof between said openings.

2. A rubber pit mat for bowling alleys comprising a single molded sheet having a plurality of parallel rows of inverted frusto pyramidal depressions providing crossed rows of flat supporting surfaces therebetween, said sheet being hollowed out under said supporting surfaces to provide supporting and inclined walls of substantially uniform thickness.

3. A rubber pit mat for bowling alleys comprising a single molded sheet having a plurality of openings therethrough and recesses in the underside of the portions between said openings to provide air filled chambers.

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