

Aug. 21, 1934.

C. G. GAUNTLETT

1,970,959

MAT CONSTRUCTION

Filed Dec. 5, 1932

FIG. 5.

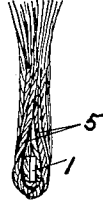


FIG. 1.

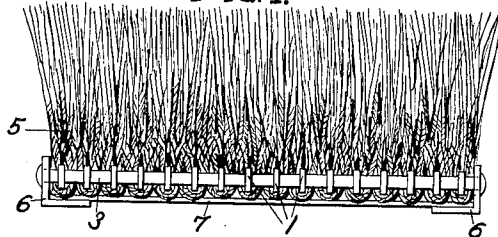


FIG. 4.

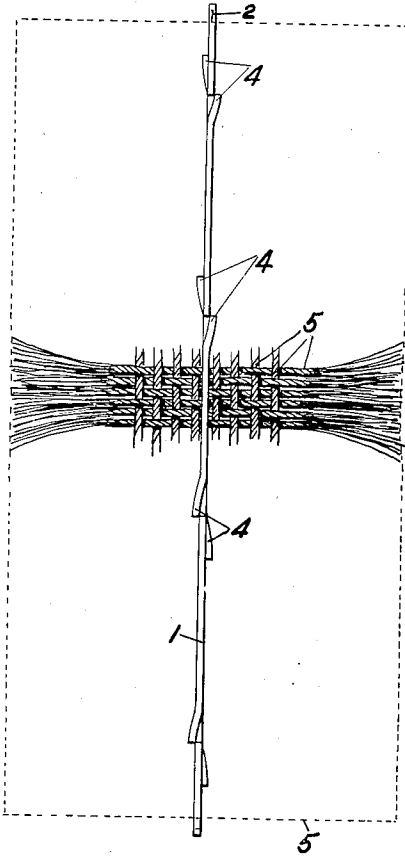


FIG. 3.

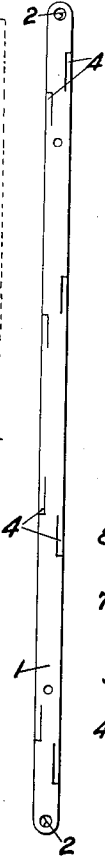
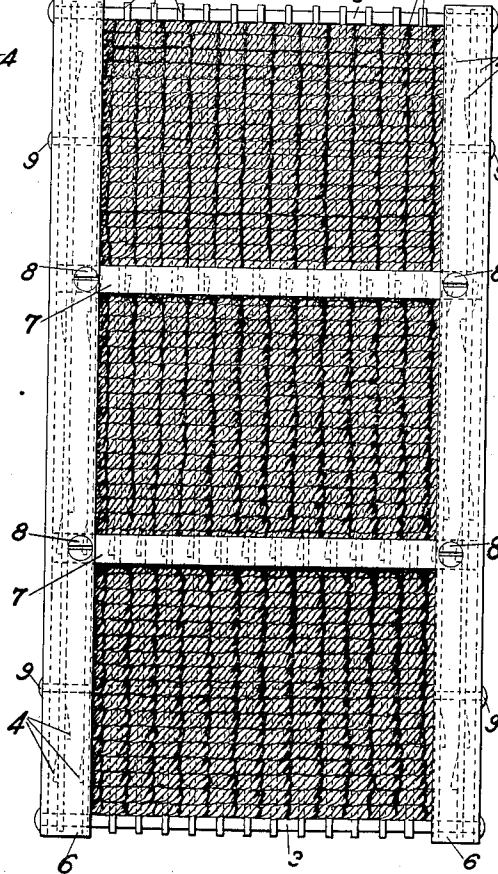


FIG. 2.



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1,970,959

MAT CONSTRUCTION

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Application December 5, 1932, Serial No. 645,683

4 Claims. (Cl. 273-33)

This invention relates to fiber floor mats and has for its objects improvements in mat construction whereby mats of any thickness and density may be made which will have more resistance to wear and tear, especially impacts, and which will be especially suitable as teeing-off mats for golf and similar purposes.

Other objects and advantages of the invention will appear in the following description and accompanying drawing.

In the drawing Fig. 1 is an end elevation of my improved mat.

Fig. 2 is a back view of the mat showing the metal frame elements.

Fig. 3 is an enlarged side view of one of the warp bars which holds the folded fiber fabric from slipping.

Fig. 4 is a plan view showing the warp bar placed on the center of a strip of frayed out fabric.

Fig. 5 is an end view of the warp bar showing the strip of fabric doubled up around it.

In further detail, the invention comprises taking strips of heavy fiber matting such as bagasse, cocoanut, coir, or other fiber (or hair) matting, fraying out the two long edges and doubling each strip over a flat bar, stringing the rods on transversely extending or what may be termed woof rods, forcing the warp bars and their folded strips of material tightly together in a press and locking the assemblage within a steel frame.

The warp bars are designated 1 in the drawing and are flat steel bars apertured at the ends at 2 for the woof rods 3, and are provided adjacent each end with spines or barbs 4 struck up out of the metal and which spines point respectively towards the end of the bar to which they are nearest. These spines are preferably on opposite sides of the bars as shown in Fig. 4 so that they will dig into and engage the body of the fabric strip 5 when folded over the bar.

The strips of fabric are frayed out along both long edges to an extent equal to the depth or height of pile desired in the finished mat (for golf tee mats about two or three inches will suffice) and the rods 1 extend beyond the strips of fabric so as to pass the transverse round rods or woof rods 3 on which a plurality of the warp bars are assembled and tightly compressed by a suitable press. While the assemblage is under pressure the woof rods are secured as by bolting or riveting over at the ends to heavy side frame members 6 preferably taking the form of angle bars as best shown in Fig. 1 with one leg extending under the mat.

While the assemblage is under pressure, the side bars 6 are cross connected at intermediate points by flat metal straps 7 which may be held with screws 8, and which serve to prevent the side frames bulging under the enormous pressure of the tightly confined fibers, especially when they become wet. I may also run additional transverse rods or wires through the assemblage riveted over against the side frames as at 9 or otherwise secured in place.

The strips 5 of matting may be of any length or width, depending on the mat to be made, and of course of any weave or fiber, or hair, and they are frayed out by removing some of the warp strands from along opposite edges as shown in Fig. 4 while retaining the woven feature where the strip is wrapped around the bar so that the spines will engage a woven structure and not just separate transverse threads. If desired, more than one thickness of the fabric can be used to form the fabric strips 5.

After completing the mat it is placed bottom side down in a tray containing a shallow layer of asphaltic paint and allowed to remain for a few minutes to coat all the iron work and creep upward into the fibers, all so that the fibers of the clamped and bolted or riveted mat will be stiffened about half way up as well as rendered water, acid and alkali proof, and will cement together throughout that region parallel to the frame in an inseparable mass. In addition to the above I stain the fibers any desired color so as to make them attractive to look at.

Such a mat used for teeing off in playing golf and struck repeatedly by the clubs swung in a direction parallel to the length of the mat, will stand many months of use without being destroyed or the strands creeping along the bars 1 in direction of the club swung, by reason of the spines resisting any movement of the fabric in either direction along the bars 1 as well as the cement impregnated fabric resisting separation.

For golf tee purposes the mat is preferably made about four or five inches thick so as to yield a soft resilient upper surface to be struck by the clubs, but for heavy industrial mats and baggage smasher's mats the construction need not be so thick, but less fraying out is resorted to so as to maintain as much fibrous material as possible in the assemblage.

In considering my improved construction above described it will be evident that minor changes can be made without departing from the spirit of the invention as covered within the scope of my appended claims.

I claim:—

1. A mat adapted for use as a tee for supporting a golf ball to be driven therefrom comprising a row of flat bars of rigid material arranged parallel with their sides vertical, a strip of woven fibrous material wrapped around each bar and frayed along the opposite edges of the strip, the frayed edges of the woven strip projecting above the bars in contacting as a densely grouped mass to form the surface of the mat, and the woven portion of the strip covering the flat sides of the bar, means clamping the bars and their covering together whereby the outer opposite sides of the woven portion of each of the strips will interlock with the woven portions of the strips covering the sides of the adjoining bars.

2. A mat as defined in claim 1 in which the bars and portion of the strips covering the bars are covered with asphaltum, whereby the fibers of the woven portion are rendered substantially rigid with each other and with the bars and at the same time are protected against oxidization when the mat is imbedded in the ground.

3. A mat comprising a row of longitudinally extending parallel strips of fibrous material, each strip consisting of transversely extending fibres woven together intermediate their ends, a plurality of bars, a strip being folded longitudinally along a medial line about each bar with the ends of the transversely extending fibres forming the surface of the mat, and means clamping the bars together with the outer sides of adjacent strips in contact to form a compact mat.

4. In a mat for the purpose described, a series of evenly spaced thin flat bars set with their longest cross-sectional dimension vertical, a strip of woven material doubled around each bar to have its edge portions extend upwardly, said edge portions being unravelled to provide separate fibres with the fibres of the edges interengaging to form a dense mass and the fibres of one strip similarly interengaging with the fibres of adjacent strips, and means to secure the bars in position.

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25	100
30	105
35	110
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65	140
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75	150