Jan. 19, 1932. H. MIDGLEY 1,841,837

MAT

Filed Sept. 29, 1930

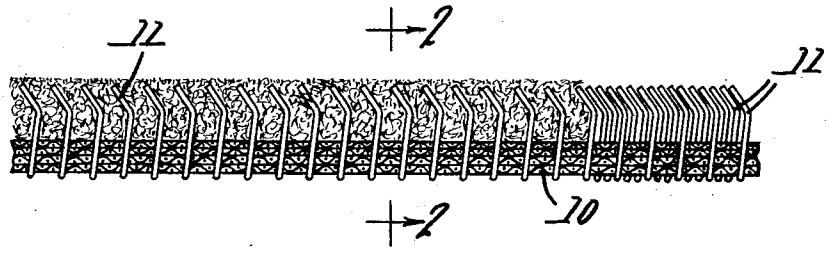


Fig. 1.



Fig. 2.

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MAT

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This invention relates to a mat and is particularly adapted for a driving-off mat for a golf course, although it is capable of other uses. For instance, it can be used as a door mat.

The principal objects of this invention are to provide a mat of considerable stiffness with a comparatively soft and yielding body and upper surface; to construct it in such a way that it will be very difficult if not impossible to wear depressions and grooves in it by the ordinary wear and tear to which the device is subjected and to provide a construction in which the top surface is held in position by means secured firmly in the base of the mat and incapable of wearing and making depressions in the same way as a textile material would be.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which

Fig. 1 is a longitudinal sectional view of a mat constructed in accordance with this invention; and

Fig. 2 is a transverse sectional view on the line 2—2 of Fig. 1.

This mat, being designed particularly for use in supporting a ball for driving off in miniature or ordinary golf, is designed to have a very durable structure and a comparatively soft or level upper surface.

In the form shown in Figs. 1 and 2 it comprises a foundation 10 of a combination of textile and rubber sheets preferably but, of course, any other material can be used that is tough and durable and will stand the weather out of doors. This material is provided with teeth 11 preferably formed of pieces of wire in the form of staples. Preferably the material is made on a card clothing manufacturing machine and is in fact a piece of card clothing.

The wires 11, however, are comparatively stiff and large in size. They might be straight but they are shown as bent at the ends in the direction in which the user of the mat drives off. The foundation and teeth can be varied within wide limits as will appear later.

In this preferred form, after the piece of card clothing is constructed it is provided on the top with a thick felt like layer of hemp or any other coarse fibre and this layer is saturated with glue or similar material, preferably rubber cement, and is beaten into the card clothing so as to form a fabric like a felt with numerous interstices. The cement is in a liquid or plastic condition when the fibre is applied and the fibre with the cement adhering to its particles is beaten down from the top of the teeth 11 to the foundation 10 so that it surrounds the wires 11 and forms a loose mass throughout the length of the wires. The top of the surface of the fibrous material is just slightly above the tips of the wires 11 and presents a flat somewhat soft flexible surface. The individual mats preferably are cut out of larger sheets of material made in this way or they can be made individually.

It will be seen that, when this mat is set up on a golf course with the teeth pointing in the direction in which the ball is to be driven and the mat is anchored in the ground, it will form an ideal flexible mat for this purpose. It furnishes no resistance to the desired travel of the ball and the teeth resist the tendency of the ball placed always in the same spot to form a depression in the upper surface of the mat. The teeth are made of wire which is resilient and if depressed by a blow they fly back to the same level by their own resiliency. Even after the fibre is very largely worn away, the teeth themselves will constitute a good surface on which the balls will not readily roll away and from which they can be driven without resistance. The fabric is extremely durable for this purpose and as long as it lasts it is unlikely to develop any channels or depressions that cause the ball to jump upwardly into the air when driven from the mat. It will stand all kinds of weather. The wires also protect the fibre from wear.

Many changes can be made in this idea within the scope of this invention. The foundation can be made of tarred paper to reduce expense, the wires can be formed of staples, as in ordinary card clothing, or of

single wires; they can be straight or bent as has been shown, the bent construction being preferred.

In any event holes are not likely to form in the fabric, ragged edges are not likely to develop and irregular putting is decreased.

Although I have illustrated and described only one form of the invention I am aware of the fact that modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited in this respect but what I do claim is:—

1. As an article of manufacture, a mat provided with a foundation or bottom having metallic members extending upwardly therefrom and a body of fibrous material held together by an adhesive on the fibers thereof, said body of fibres and adhesive extending throughout the metallic part of the foundation and having its upper surface substantially in the plane of the upper portions of said metallic parts.

2. As an article of manufacture, a fabric for use in making mats consisting of a foundation having metallic portions extending away from the foundation and separated from each other so as to provide interstices among them and a body of interlaced fibres saturated with liquid or plastic adhesive material forced into the interstices to bind the fibres thereto and presenting a top surface substantially in the plane of the upper ends of the metal portions.

3. As an article of manufacture, a fabric adapted to be cut into mats or the like which consists of a durable and flexible foundation, wires anchored in the foundation and projecting upwardly therefrom and a body of fibres saturated with a plastic cement filling the interstices between the wires and extending to the tops thereof to furnish a flat upper surface.

4. As an article of manufacture, a driving off mat having a strong flexible durable bottom, provided with substantially vertical resilient metallic wires having interstices between them, and a soft body of fibres held together with an adhesive and penetrating into said interstices to hold the fibre thereto and present a durable resilient upper surface.

5. As an article of manufacture, a driving off mat for golf or the like which consists in a foundation of card clothing, the spaces between the teeth of which are filled with rough fibre having a plastic cement extending throughout its body, said rough fibre and cement filling the space between the foundation of the card clothing and the tops of the teeth and furnishing a body throughout that space having a flat surface for the mat.

6. As an article of manufacture, a mat for the purpose described, consisting of a body of card clothing having a horizontal foundation and resilient teeth extending transversely therefrom, the teeth being bent at the top in one direction and a filling for the space between the teeth consisting of a body of mixed coarse fibre and a rubber cement furnishing a top surface of a comparatively resilient character substantially coinciding with the plane of the tops of the teeth.

In testimony whereof I have hereunto affixed my signature.

HERBERT MIDGLEY.