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(54) Semicircular doormat

(57) A generally semi-circular novel doormat/floor-mat is made of twisted in brush fibre circular rods formed into predetermined patterns/designs which are fitted onto a partly concentrically formatted stiff frame.

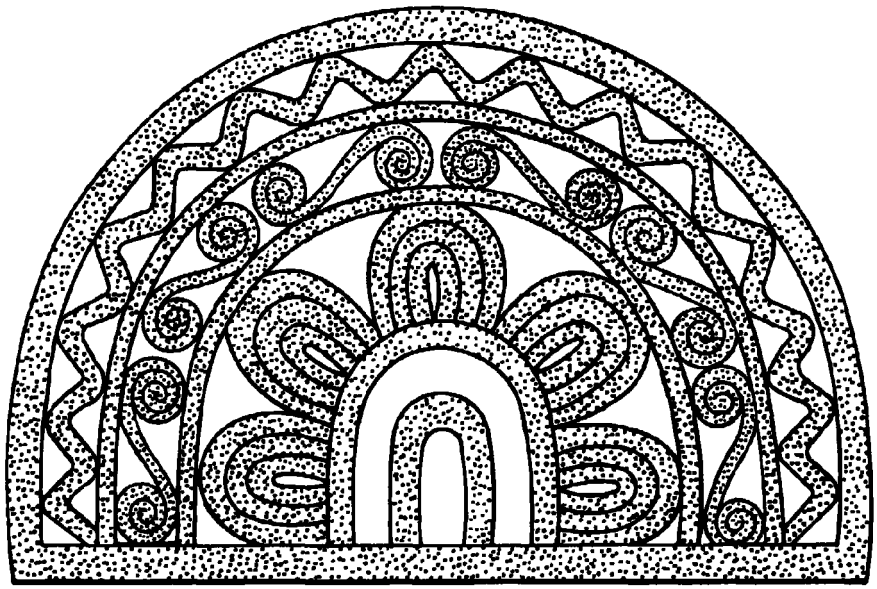

Fig. 7

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Description

Introduction

[0001] Conventional doormats/floormats hereto manufactured with coconut fibre and steel rods have been in use at the entrances, exits of doorways and at openings of all types of buildings and the designs and techniques used so far have served the purpose, only partially, creating certain disadvantages.

[0002] The most distinct disadvantage among many is the fact that the design of the mat could not be adjusted to match the required architectural circular and curved designs.

[0003] The proposed invention is to be made with twisted in brush fibre.

[0004] These are made by twisting metal wire with brush fibre entangled in the twisting wire using a specially designed machine. These can be made to required lengths and densities of fibre using this machine to obtain cylindrical fibre rods of required diameters. Different angles to each other due to the concentric nature of the frame of the alleged invention and hence the brushing action is more effective compared to the prior art mats. The spaced design, the radial spreading of fibre with optimum density provides quick evaporation of any moisture and thereby drying the alleged invention mat in a relatively short time.

[0005] Due to the nature of the raw materials used in making this mat of the alleged invention it could be made in a variety of colours and patterns, designs and shapes to give matching effect to the place of its use specially the architectural design and to suit any individual user's taste or requirement. It is also possible to make this said novel mat of semi-circular design with identical properties and features, pattern on both top and bottom sides when one side gets wasted thereby making this mat more durable and with a longer lifetime compared with other prior art mats.

[0006] The proposed invention also makes it possible to fold the mat for easy transportation and also provides an opportunity to fit if required a skirting around the periphery of the said mat with a suitable material such as rubber or plastic to have a smooth edge.

DESCRIPTION

[0007] The alleged invention is achieved by introducing various shapes made out of coconut fibre twisted rods, see figure 1 to 3 where the fibre rods are bent to the required shape in a particular embodiment it could be the shape of an animal or a letter or a combination of letters to constitute a message or a name or advertising material.

[0008] See fig. 7 to understand how these shaped twisted in brush fibre circular rods are inserted on each of the semi-circular concentric frame pieces made of galvanised iron rods so that they can be bound with smaller diameter wire to the welded frame.

[0009] The designs with fibre twisted in circular rods inserted within the concentric semi-circular frame mat can be made very attractive by using dyed fibre of different colours.

[0010] The floormat/doormat as described above can also be made for a dual purpose by making a bootwiper using some of these designs of twisted in fibre circular rods in a vertical direction or by combining, the alleged invention mat with a prior art bootwiper.

[0011] The mat in the alleged invention using twisted in coconut fibre rods may be used as a wall hanging or an advertising display board.

[0012] The materials that are used for the frame in the alleged invention may be steel, plastic, wood, cane or a combination of these materials.

PREFERRED EMBODIMENT

[0013] The following description of the preferred embodiment does not in any way limit the scope of the particular embodiment only and this description of the preferred embodiment is only an example of one of the possible embodiments that are covered by the independent and the appended claims defined at the end of this complete specification.

[0014] Lengths of 4 mm diameter galvanised iron (G.I) wire are taken and cut to sizes so as to bend them to get four concentric semi-circular components 4, 6, 7, 8 (Fig (7)), spaced at predetermined intervals which can be welded onto a straight wire of the same diameter which will act as the base of this stiff frame.

[0015] This semi circular frame with concentric G.I wire rods is strengthened by welding or binding same diameter wire or 2.2 mm G1 wire to the base and the outermost concentric wire at different intervals symmetrical to a line passing the centre of the base wire at a perpendicular angle meeting the outermost concentric wire also at the centre point.

[0016] The twisted in circular fibre rods are bent to the shape of triangles or any other shape to a predetermined size to fit into the predetermined internal size of the concentric rods of the stiff frame as shown in fig. 1 to 3, say three rods are bent into these three different shapes. In turn these shapes also may be interconnected to get a required shape and size to fit the frame by way of binding with thinner wire or by gluing.

[0017] Another five rods are taken and one is made to the shape of the outer peripherical shape and size of the stiff metal frame (see Fig. 6).

[0018] Three of the remaining twisted in circular fibre rods are bent to give the shape and size of the other three concentric G.I wires of the stiff frame (see fig. 4). The remaining rod is used to make the shape in Fig. 5. The three concentric G.I wires and the base wire are also covered with a straight twisted in circular fibre rod 4, 7 and 8 (Fig. (7)). The piece in fig. (5) placed symmetrically at the centre above the base line and bound

with the small G.I wire to form component 5.

[0019] There is thus obtained a stiff frame made out of G.I wire of 4 mm diameter which is covered by twisted in circular fibre rods taking the same shape as shown in fig. (6). Now the three different rods with the three design shapes (fig. (7) component 1, 2, and 3) are placed in-between the concentric rods of the frame snugly fitting as shown in the fig. (7).

[0020] This fitting also may be carried out with binding wire. These components may paste or fixed with 2.24 mm wire hooks.

[0021] In the above manner it is possible to make the shapes and figures found in the ancient Sandakadapahana with twisted in circular fibre rods and attaching them to a stiff frame made to the size and shape of this ancient moment (see Figs. 1a-7a).

Claims

1. A generally semi-circular novel doormat/floormat made of twisted in brush fibre circular rods formed into predetermined patterns/designs which are fitted onto a partly concentrically formatted stiff frame.

2. A doormat/floormat as claimed in Claim 1, wherein the frame comprises a galvanised iron rod welded frame.

3. A doormat/floormat as claimed in Claim 1, wherein the frame comprises plastic, cane, wooden, aluminium, metal or a combination of any of these materials.

4. A doormat/floormat as claimed in any of Claims 1 to 3 where the predetermined shape is the shape of an ancient "Sandakadapahana".

5. A doormat/floormat as claimed in any of Claims 1 to 4, wherein the stiff frame is made out of several concentrically bent wires welded to straight wires at suitable intervals.

6. A doormat/floormat as claimed in any of claims where the said frame is made out of suitable wire having a diameter wound 4 mm to give the required stiffness and the strength.

7. A doormat/floormat as claimed in any of the above claims, where the pattern/design is symmetrical about the centre line perpendicular to the base line of the semi-circular mat.

8. A doormat/floormat as claimed in Claim 7, where the said mat may be foldable by rotating about the said central line.

9. A doormat/floormat as claimed in Claim 7 where the designs or patterns within the concentric sub-frames include letters, messages, numbers or shapes of animals or trees and other geometrical shapes, advertising, slogans, designs or greetings giving a unique appearance.

10. A doormat/floormat as claimed in above claims, adapted for combination with a bootmat/Bootwiper to enhance the cleaning properties for a shoe or boot.

11. A doormat/floormat as claimed in above claims, where the said mat is adapted for use as a wall ornament in a house.

12. A method of making a novel doormat/floormat according to Claim 1 using the following steps:

a. bending stiff pieces of unequal length of wire concentrically and welding them on to a straight base wire keeping the ends of the concentric places at suitable intervals to obtain a stiff frame;
b. welding straight pieces of stiff wire at certain intervals to join the base straight wire and the concentric wires to strengthen the frame;
c. obtaining twisted in brush fibre circular rods of natural colours or with dyed colours;
d. marking certain shapes/designs or letters or letters or numbers by bending the twisted in brush fibre circular rods that fit into the space between the concentric wires of the stiff wire frame; and
e. binding using thin wire or/and gluing these bent twisted in brush fibre circular rods after placing them in between the concentric wires of the stiff frame.

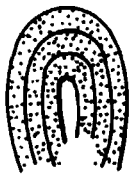

Fig. 1

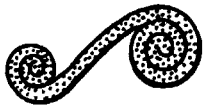

Fig. 2

Fig. 3

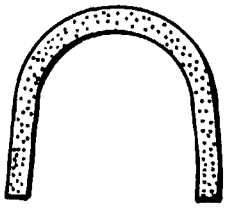

Fig. 4

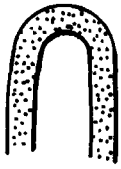

Fig. 5

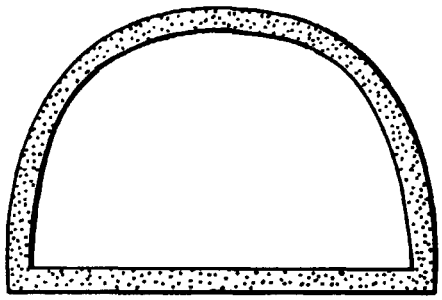

Fig. 6

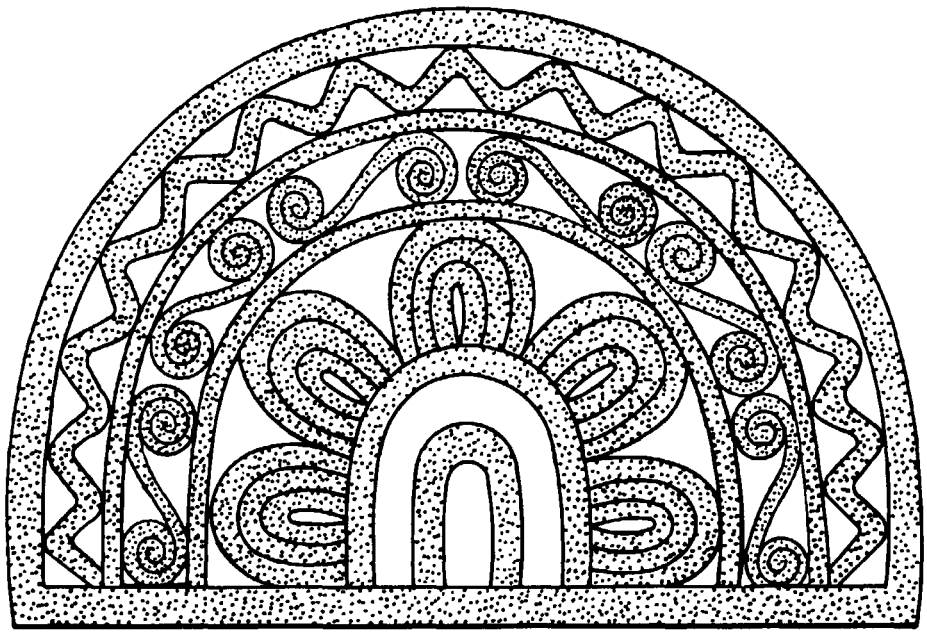

Fig. 7

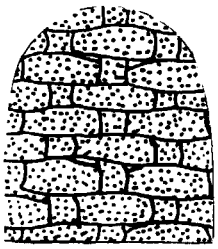

Fig. 1a

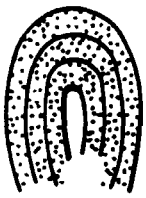

Fig. 2a

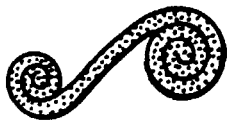

Fig. 3a

Fig. 4a

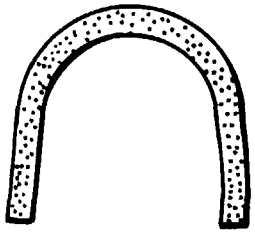

Fig. 5a

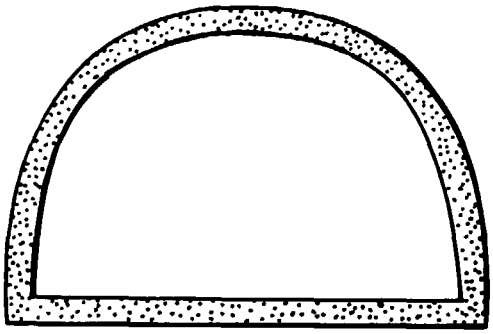

Fig. 6a

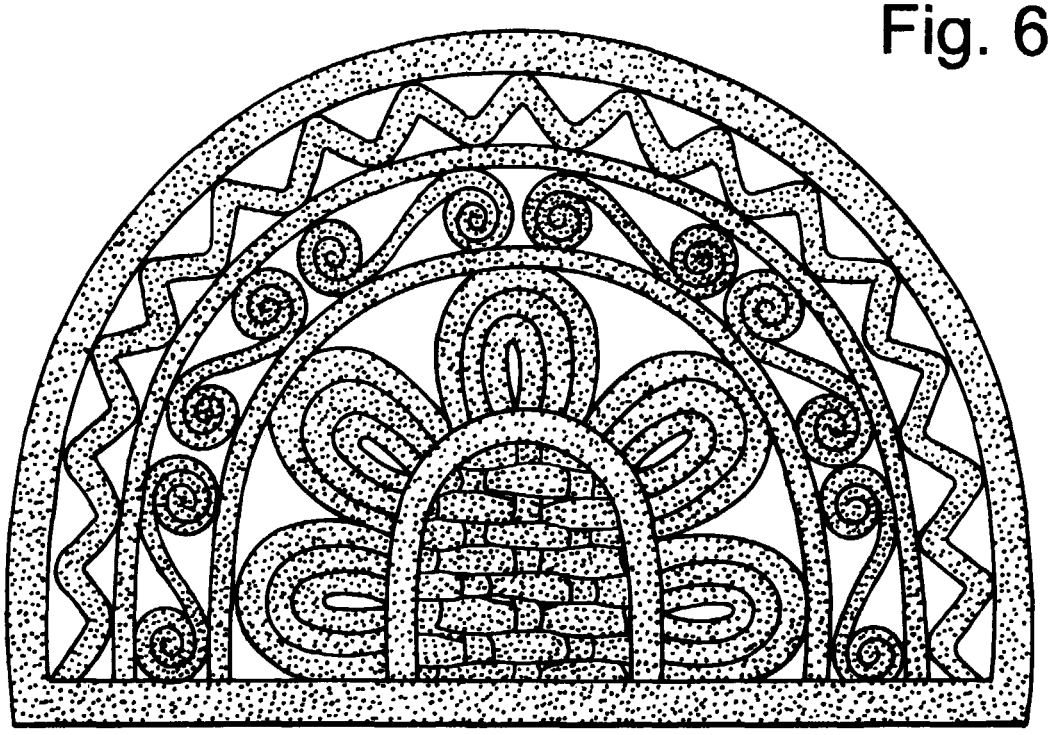

Fig. 7a