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E. HASLETT

2,672,250

COASTER

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Fig. 1.

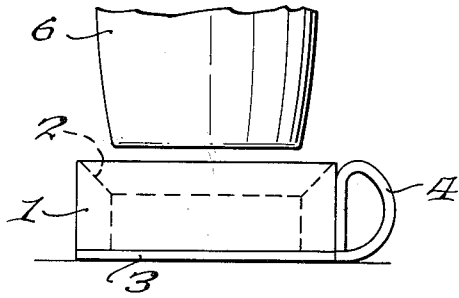


Fig. 3.

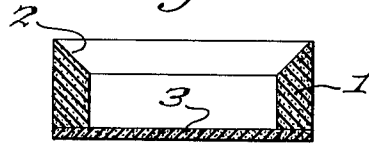


Fig. 4.

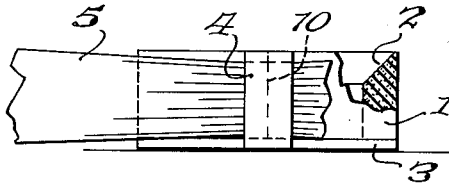


Fig. 2.

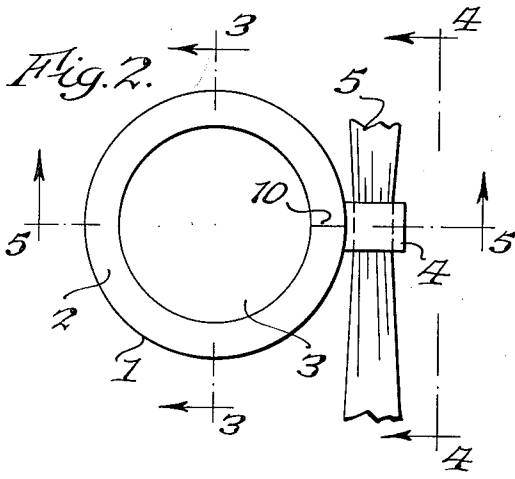


Fig. 6.

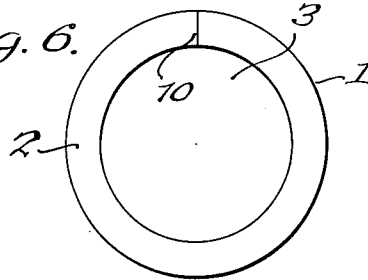


Fig. 7.

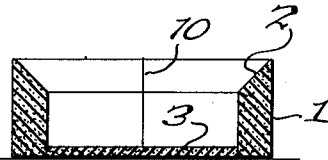


Fig. 5.

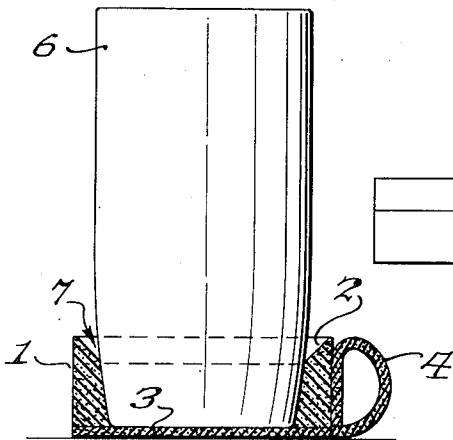


Fig. 8.

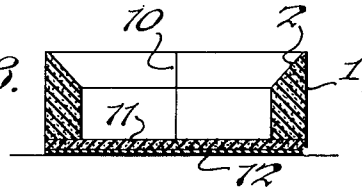
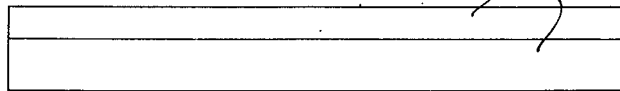


Fig. 9.



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COASTER

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10 Claims. (Cl. 215—100.5)

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This invention relates to coasters in which may be received and supported the bottom ends of objects such as drinking glasses, bottles and cans, in order to protect surfaces of furniture on which one may desire to place such objects. Heretofore, coasters commonly in use have generally been shallow pans or dishes of rigid materials in which such objects may be placed for support. A difficulty with such prior coasters is that they do not remain attached to the bottoms of any of such objects, and persons using such objects are likely, in moving about, to lose or negligently forget the coaster and place the object, without the coaster, directly on furniture, with possible injury to the furniture. If the object to be supported is cold, and the air is very humid, moisture may be condensed by proximity to the cold surface, collect on the outside surface of the object, and run down upon the furniture surface if no coaster is used, or collect in the coaster if one is used.

An object of the invention is to provide an improved coaster which may remain attached to an object, such as a glass, bottle or can, while in use, and which will not be open to the objections against prior coasters.

Another object is to provide an improved coaster which will automatically expand and contract and fit objects having considerable differences in size; which will frictionally adhere to the bottom of a glass, bottle, can or other object fitted therein, so as to remain attached to the object as the object is moved about; which will be exceptionally light in weight; which will collect, absorb and hold condensed moisture running down the exterior surface of the object fitted in the coaster; which will support the object it holds in a stable position, will not mar or injure any furniture or other surface on which it may be placed; which is washable and sanitary; which absorbs shocks, prevents noise, and avoids breakage of the object to which it is attached when that object is placed somewhat violently on a surface; which may provide a wide variety of color to distinguish individual glasses or bottles to which attached; and which is simple and attractive in appearance, and relatively inexpensive.

Another object is to provide an improved, simple, practical and inexpensive method of making coasters of cellular elastic material.

Other objects and advantages will be apparent from the following description of several embodiments of the invention, and the novel features

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will be particularly pointed out hereinafter in connection with the appended claims.

In the accompanying drawing:

Fig. 1 is a side elevation of one embodiment of a coaster constructed in accordance with this invention, with a glass above it in a position to be placed therein;

Fig. 2 is a plan of the same, with a napkin fitted in a loop on a side thereof;

Fig. 3 is a sectional elevation of the same, the section being taken approximately along the line 3—3 of Fig. 2;

Fig. 4 is another side elevation of the same, as viewed approximately from the line 4—4 of Fig. 2;

Fig. 5 is another sectional elevation of the same, the section being taken approximately along the line 5—5 of Fig. 2, but with a glass fitted in the coaster;

Fig. 6 is a plan of another embodiment of the invention;

Fig. 7 is a sectional elevation of the coaster of Fig. 6 to illustrate details of construction;

Fig. 8 is a sectional elevation of still another embodiment of the invention, and

Fig. 9 is a plan of a blank used in forming the ring of the improved coaster.

In the embodiment of the invention illustrated in Figs. 1 to 5, the coaster includes an annular ring 1 of cellular elastic material, having its upper end face 2 bevelled or chamfered off, so as to face inwardly as well as upwardly. A relatively thin disc 3, also of highly elastic material such as cellular elastic material, abuts the bottom of the ring 1 and is sealed or cemented thereto, so as to form with the ring a cup-like body of cellular elastic material. A small loop 4 of any suitable material, preferably formed of a thin strip of cellular, elastic material is attached to one exterior side of the ring, so that a small paper napkin 5 (shown only in Figs. 2 and 4) may be slipped through the loop 4 to be carried thereby and made available to the user of the coaster, when an object having such a coaster attached to its bottom end is served to a person. A bottle or drinking glass 6 may have the coaster attached thereto by placing the glass or bottle directly above the coaster, as shown in Fig. 1, and then forced downwardly into the coaster. As the bottom end of the glass or bottle engages the beveled end face 2 of the coaster ring, the glass or bottle will expand or cam the ring into an enlarged position as the glass enters the ring. The expanded ring will then frictionally engage the periphery of the bottle or

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glass so as to adhere firmly thereto and move therewith as the glass or bottle is moved about in use. The ring of the coaster preferably should not exceed 2 inches in height nor be less than about $\frac{1}{2}$ inch in height. The inside height of the ring should be at least about $\frac{3}{8}$ inch in order to grip an object securely. A height of about 1 inch appears to be about right for the exterior height of the ring for most purposes. The thickness of the wall of the ring is preferably between about $\frac{1}{4}$ and $\frac{1}{2}$ inches, and the bottom wall of the coaster, as represented by the disc 3, has a thickness preferably from about $\frac{1}{8}$ inch to $\frac{1}{2}$ inch and should be substantially less than the thickness of the ring wall. The thickness of the strip of which the loop 4 is formed may advantageously be about the same as that of the disc 3. It will be observed that the inner surface of ring 1 is at a level lower than that of the upper end of the ring encircling it, so that there is a rabbet or groove 7 (see Fig. 5) in the upper end of the ring surrounding the glass or object 6.

While the coaster may be molded in one piece of cellular elastic material, it is preferably formed by the method of cutting a strip 8 (Fig. 9) from a sheet of cellular elastic material of uniform thickness, and cutting one edge 9 at an angle or bevel when cutting that edge. The ends of this strip are then brought together, abutting end to end, and cemented together along line 10 in Fig. 2 to form a unitary, annular ring 1. The disc 3 is then cut or stamped from sheet material and cemented to the bottom of the ring. The loop 4 is formed of a strip of flexible material bent into loop form and cemented or otherwise attached to the side of ring 1.

If the side wall of the ring is too thin or too thick it won't fit both wine size and standard sizes of glasses, and if too thin the ring will not be self-supporting. While highly elastic, sheet rubber may be used as the bottom of the coaster, it is not as satisfactory as cellular material because it isn't noiseless and doesn't absorb shocks that might break a glass or bottle held therein.

While any cellular, highly elastic material may be used, those known as sponge and foam rubber or latex are preferred. Such cellular rubber materials are now formed of natural rubber and also of the synthetic resinous materials popularly known as synthetic rubbers. There are two types of such cellular elastic materials, one known in the trade as foam rubber which, because it has many small cells communicating with each other to cause it to act as if it has one continuous cell, is called unicellular by some. It is porous and water absorbent or sponge-like in its characteristics, and the other known in the trade as sponge rubber which is multicellular, non-porous or impervious, and non-absorbent of water. The foam or porous rubber is an expanded cellular material with macroscopic, intercommunicating cells, and is also sometimes called an intercellular, or open cell structure rubber. The sponge rubber is similar except that the cells are closed or non-communicating. I prefer to use the multicellular or sponge rubber in sheet form as the base of the coaster, and the unicellular or foam rubber for the ring 1, so that the ring 1 will absorb moisture condensing on the glass or bottle and collecting in the groove 7 in the top end of the coaster and around the glass or bottle. Both types of cellular material may be washed, are perfectly sanitary, and when the coaster is removed and squeezed, after use, any condensation collected in the absorbent ring 1 will be

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squeezed out as it is in a sponge when the sponge is squeezed. Such materials may be easily washed and sterilized.

In the embodiment shown in Figs. 6 and 7, the ring 1 is formed as explained in connection with Figs. 1 to 5, but the bottom disc 3, instead of being cemented across the entire bottom end of the ring, is of a size to enter the opening in the bottom of the ring and at its periphery is cemented to the inner periphery of the ring. The loop 4 is omitted in this embodiment.

In the embodiment shown in Fig. 8, the ring is formed as explained for Figs. 1 to 5, but the bottom disc is of two cemented together layers 11 and 12. The layer 11 may be of unicellular elastic material like the ring 1, and in that case, the layer 12 of thin, highly elastic, dental rubber sheeting is preferably cemented to the bottom face of layer 11 so that it will prevent passage of moisture through the bottom layer 11.

The coaster may be made of a variety of differently colored materials, so that different glasses or bottles which they support, may be easily distinguished from one another. When the word "rubber" is used, it is intended to include not only natural rubber, but also all of the resinous rubber-like materials that are commonly used as a substitute for rubber and have rubber characteristics. Coasters of this type are light in weight, sanitary, and inexpensive.

It will be understood that various changes in the details, materials and arrangements of parts which have been herein described and illustrated in order to explain the nature of the invention, may be made by those skilled in the art within the principle and scope of the invention, as expressed in the appended claims.

I claim:

1. A coaster of cuplike shape having an open end and an opposite closed end, the side wall being of water absorbent, sponge like, foam latex, and the closed end of approximately equal elasticity but impervious on its outer face.

2. A coaster comprising an annular ring of unicellular, elastic, water absorbent material, open at one end, and a multi-cellular disc of elastic, non-water-absorbent material attached to and closing the other end of said ring.

3. The method of making a coaster which comprises cutting a strip of unicellular elastic material with one side edge bevelled, bringing the ends of the strip into abutting relation to form a ring, with the narrower face on the inside, cementing together the abutting ends of the strip, and cementing a disc of multi-cellular, elastic material to the end of the ring opposite from the bevelled edge.

4. A coaster comprising an annular ring forming a side wall which is longitudinally straight in vertical section at the inside wall for a substantial part of its height, a flat disc of uniform thickness across it secured to, bridging and closing one end of said ring, the other end of said ring being open, said ring being formed of highly elastic, cellular, water absorbent material, the cells of which are macroscopic, and said disc being impervious to the passage of water from face to face therethrough under the action of gravity.

5. A coaster of cup-like shape with a cylindrical cavity having one end open and an opposite end closed, the side wall being circumferentially unconfined so as to be free to expand outwardly when an object is inserted in the ring, and of water absorbent, cellular elastic material, the cells of which are macroscopic, and the closed

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end being cellular and elastic, but impervious to the passage of water therethrough from face to face.

6. A coaster comprising an annular, cylindrical ring of elastic, cellular, water absorbent material, open at one end, and a disc of elastic material carried by, bridging and closing the other end of said ring, said disc being impervious to the passage of water from face to face therethrough, and the outer circumference of said ring being fully exposed and unconfined, so as to be free to expand outwardly when an object is inserted in the ring.

7. A coaster comprising an annular ring of elastic, cellular, water absorbent material, and a disc of elastic, cellular material extending entirely across and cemented to one end face of said ring to close it at that face, said disc being impervious to the passage of water therethrough from face to face.

8. A coaster comprising an annular ring of elastic, cellular, water absorbent material, and a disc of elastic, cellular material within and extending across the passage of said ring, flush with one end thereof and cemented to the inside wall of said ring, said disc being impervious to the passage of water therethrough from face to face.

9. A coaster comprising an annular ring of elastic, cellular, water absorbent material, and a disc of elastic material secured to and closing one end of said ring, said disc being formed of two superposed, adhering layers, the upper layer which forms the closed end of the ring passage being cellular with macroscopic cells, and the other layer being highly elastic and impervious to the passage of water therethrough from face to face.

10. A coaster comprising a cup-like, elastic body having an approximately cylindrical cavity with one end open and the other end closed and formed of elastic expanded cellular material with

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macroscopic cells throughout, the side wall of said body being water absorbent and the closed end wall of said body being impervious to the passage of water therethrough from face to face.

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