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LIQUID FILLED DICE AGITATOR

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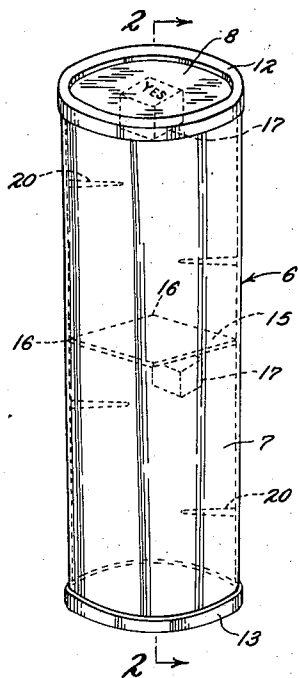


Fig. 1

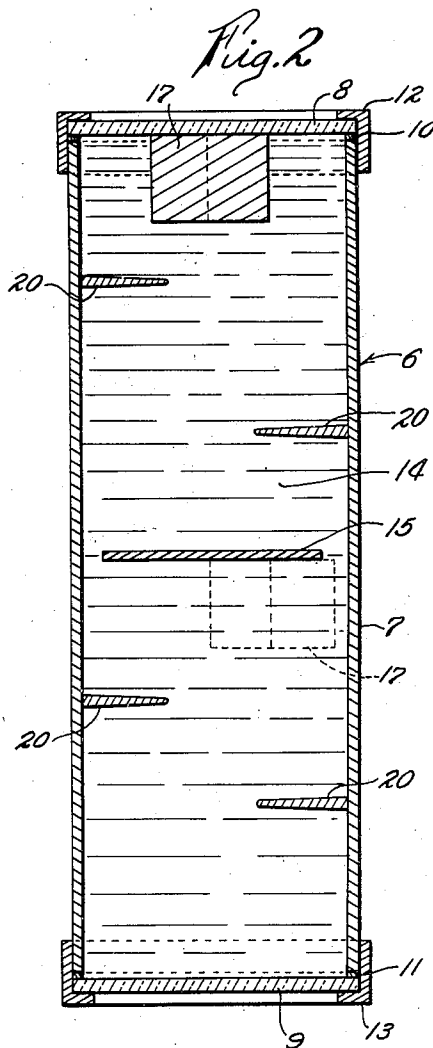


Fig. 2

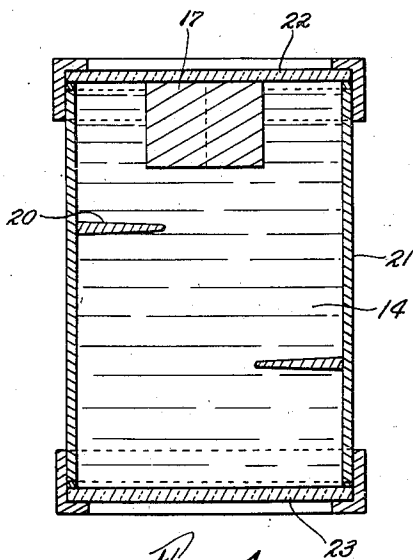


Fig. 4

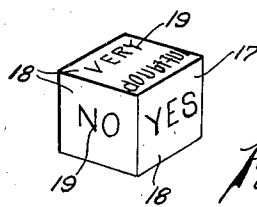


Fig. 3

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## UNITED STATES PATENT OFFICE

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## LIQUID FILLED DICE AGITATOR

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3 Claims. (Cl. 273-145)

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The present invention relates to an amusement device and is particularly directed to a device which presents unpredictable, discriminating marks of informative value for use in carrying out the steps in various games, or the like.

An object of the invention is to provide a device for presenting one of a number of informative game values at its uppermost end upon each end for end rotation of the device and to further provide a tamper-proof means for changing said values which is operative by the movement of said device.

Another object of the invention is to provide in an amusement device a concealed and automatic means for presenting a series of informative game values at the upper-most portion of the device upon each end for end rotation thereof.

A further object of the invention is to provide a positive delayed-action means for changing informative game values successively presented at an upper transparent end of the device after an end for end rotational movement of the device.

Other objects will be apparent from the following specification and drawings wherein:

Fig. 1 is a perspective view of my amusement device.

Fig. 2 is an enlarged cross-sectional view taken on line 2-2 of Fig. 1.

Fig. 3 is a perspective view of a buoyant member for my device.

Fig. 4 is a central cross-sectional view of a modified form of the amusement device shown in Figs. 1-3.

My amusement device consists of a manually operated unit 6 having a opaque side wall 7 which is preferably tubular in plan and is closed at its top and bottom ends by transparent end walls 8 and 9 respectively. Sealing rings 10 and 11 are interposed between the edges of the side wall and the respective transparent end walls 8 and 9 and suitable caps 12 and 13 encircle said end walls and are suitably fastened to the side wall to provide airtight connections between said end walls and the tubular side wall.

A heavy viscous liquid 14 completely fills the closed chamber formed by the opaque side wall and the transparent end walls to thereby pre-

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clude the formation of air bubbles in the liquid. The chamber is divided into an upper and a lower compartment by means of a rectangular, transverse barrier 15 which has its corners 16 soldered or otherwise fastened to the interior surface of the tubular wall 7.

Each compartment contains a multi-faced member 17 which is immersed in the viscous liquid and displaces a greater mass of the liquid than its own mass so that it tends to float or be buoyed up in the liquid. The buoyant member takes the form of a cube having six (6) flat surfaces 18 (Fig. 3) each of which is provided with informative indicia 19 bearing predetermined values for playing certain games or the like.

Each compartment is provided with a number of turning devices 20 which take the form of spikes longitudinally projecting from the tubular side wall 7 into the liquid so that the vertical projection lines between the inner ends thereof are less than a width dimension of the buoyant member. This construction insures contact of the buoyant member with at least one of the turning devices during the latter's upward movement after the chamber is manually rotated end for end.

A modification of the device shown in Fig. 4 provides for a tubular side wall 21 having transparent end walls 22 and 23 which form a closed chamber for containing viscous liquid 14, the buoyant member 17 is immersed in the liquid and said side wall is provided with projections 20 as in the preferred embodiment of my invention.

In operation, when my device is rotated end for end as for example in Fig. 2, when the transparent end 9 is turned upwardly and the transparent end 8 forms the bottom of the device, the buoyant members 17 will begin to slowly rise through the viscous liquid from their illustrated positions toward the upper part of the compartments. In so doing, said members come in contact with one or more of the devices 20 which turns them in their upward movement so that the member in the upper chamber presents a different informative game value beneath its transparent end wall, whilst the buoyant member in the lower compartment is conditioned for the next succeeding rotation and remains in

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contact with the barrier 15. It will therefore be noted that the buoyant members in this form of my device alternate in presenting a succession of values at the upper transparent end of the device when it is successively rotated end for end.

In the modification shown in Fig. 4, a face of the buoyant member is presented successively to each transparent end of the device when it is rotated end for end.

It is contemplated that the heavy viscous liquid 14 contained in the chamber may be treated with a substance which would give it a cloudy appearance to preclude visibility through it from the transparent end walls and to furthermore treat the faces of the buoyant member with the color substantially that of the liquid to thereby make the cube imperceptible beneath the transparent wall. The indicia on the faces of the member may be of a color contrasting with that of the liquid so that it stands out in relief against the liquid and faces when observed exteriorly of the unit.

What is claimed is:

1. In an amusement device the combination of a closed chamber, a transparent end wall for the chamber, a cloudy viscous liquid within the chamber, a buoyant member in the liquid having a plurality of faces provided with a color substantially that of the liquid, and indicia on the faces having a color contrasting with that of the liquid and the said faces.

2. In an amusement device the combination of a closed chamber having an opaque side wall, a transparent end wall for the chamber, a substantially opaque liquid filling the chamber, a

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buoyant, multi-faced member immersed in the liquid and having an overall, exterior color substantially that of the liquid, and indicia on the faces of the member, said indicia having a color contrasting with that of the liquid and said faces, whereby only the indicia on the upper most face of the member is distinguishable through the end wall when said device is operated to present the member beneath the said end wall.

3. In an amusement device the combination of a closed chamber having an opaque side wall, a transparent end wall for the chamber, a substantially opaque and viscous liquid filling the chamber, a buoyant, multi-faced member immersed in the liquid and having an overall, exterior color substantially that of the liquid, and indicia on the faces of the member, said indicia having a color contrasting to that of the member and the liquid, to thereby provide a retarded movement to the member in the liquid so that only the upper face of said member is gradually presented beneath the window.

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