

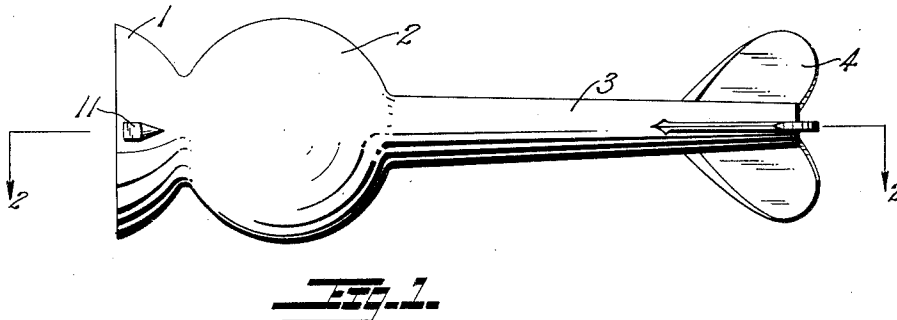
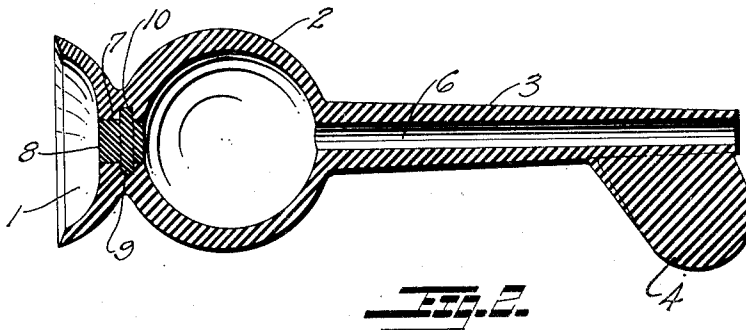
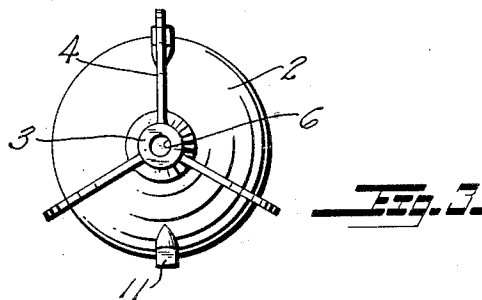
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DART

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DART

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This invention relates to an improved dart of the type which when thrown as in playing a game, against a target, will by a suction action fix itself or "stick" to the point at which the target is struck thereby.

An object of my invention is to provide a dart of the character described which is constructed and arranged in such manner that it may be thrown accurately, will not crack or break window panes or other fragile objects against which it is thrown, nor too readily "bounce", and in the majority of throws thereof will "stick" to the object struck thereby.

Another object is to provide a dart of the character described which is especially constructed and arranged to cushion the striking force thereof in a particularly novel and efficient manner and to the end that bouncing thereof from the target and failure of the dart to "stick" are minimized.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

Referring to the drawing,

Figure 1 is a top plan view of the dart of my invention.

Figure 2 is a longitudinal sectional view of the dart.

Figure 3 is a rear elevation of the dart.

The present embodiment of my invention, as shown in detail in the accompanying drawing, comprises a rubber suction cup 1 arranged on one side of a hollow spherical rubber body 2 from which extends a tapered rubber tail 3 having radial wings or vanes 4 on its free end. Preferably these parts are integral and formed simultaneously by being cast or moulded. The spherical or ball-like body is preferably of a diameter substantially equal to the width of the suction cup whereby the dart will be properly

balanced and of pleasing uniform appearance. The tail 3 is arranged in diametrically opposite relationship to the suction cup and is of course resilient and relatively flexible, the flexibility being increased by the rearward taper thereof. The purpose of the tail is to cause the dart to strike cup first against the object at which it is thrown. Owing to the resiliency and flexibility of the tail, should the cup fail to strike evenly the vibratory movement of the tail will cause the cup to instantly become adjusted to the proper position to create and maintain a suction action necessary to hold the dart to the surface struck thereby.

It is to be noted that the ball like body is relatively heavy and acts to compress the suction cup when the latter strikes the object at which the dart is thrown. A solid rubber ball of the size of the present body would be too heavy and lack the cushioning action necessary to prevent the dart from bouncing away from the target as well as prevent breaking or cracking of a fragile target such as a glass window or door. Consequently the ball like body is of hollow form and made of comparatively soft and flexible rubber. At the point adjacent the tail, the body is arranged to be relatively flexible, whereby the weight and striking force of the tail is compensated for. Preferably the wall of the body is gradually tapered to a relatively thin area thereof surrounding the tail, to provide for the tail cushioning effect aforementioned.

To make the tail light as to weight and relatively flexible, it is formed with a bore 6 extending therethrough and registering with the space interiorly of the hollow body 2. This bore also vents the hollow body and this is important inasmuch as compression of air within the body and bore would take place if the bore were closed and make the body stiffer and thus interfere with the desired cushioning action aforementioned.

In the manufacture of the dart, the mold core, not shown, is constructed in such manner as to form a short bore 7 through the center of the suction cup and the adjacent portion of the body 2. This bore or opening

must be closed in order that the suction cup will operate to provide the required suction action aforementioned. Consequently I preferably employ a compressible rubber plug 8 to seal the bore, said plug having an annular flange 9 engaging in an annular groove 10 formed between the ends of said bore. The plug is slightly oversize and is compressed to fit it in the bore whereby it will fit snugly therein and form an effective seal.

To facilitate the removal of the dart from the target to which it adheres, the cup is provided with lugs or finger pieces 11 on the exterior thereof.

It will be apparent that I have provided an improved dart with which various games of skill may be played with great amusement and safety.

It is important to note that the improvements hereof are largely contributed by the means for automatically venting the hollow space interiorly of the body 2. When the dart strikes the target the body 2 compresses and if the air therein were not allowed to then escape the cushioning action of the body might be impaired to an extent such that the dart would bounce away from instead of "stick" to the target. Although I have shown the hollow body vented to the atmosphere through the bore of the tubular tail, I wish it understood I may provide for said venting action in any other manner.

I claim:

1. A dart comprising a hollow body portion of resilient, compressible rubber, a suction cup carried on one side of said body portion, and a flexible resilient tail portion extending outwardly from the opposite side of said body portion, said tail portion having a bore extending longitudinally therethrough with the ends of the bore communicating with the interior of said body portion and the atmosphere respectively.

2. A dart comprising a hollow body portion of resilient, compressible rubber, a suction cup carried on one side of said body portion, and a flexible resilient tail portion extending outwardly from the opposite side of said body portion, said tail portion having a bore extending longitudinally therethrough with the ends of the bore communicating with the interior of said body portion and the atmosphere respectively, said body portion having the wall thereof adjacent the tail portion formed relatively thin.

3. A dart comprising a hollow body portion of resilient, compressible rubber, a suction cup carried on one side of said body portion, and a flexible resilient tail portion extending outwardly from the opposite side of said body portion, said tail portion having a bore extending longitudinally therethrough with the ends of the bore communicating with the interior of said body portion and the atmosphere respectively, said body portion having greater flexibility at the portion thereof adjacent the point where the tail portion is joined thereto.

4. In a dart, a spherical hollow body portion of resilient compressible rubber, a rubber suction cup carried by said body portion, a flexible resilient tail portion joined to said body portion at a point thereon opposite the suction cup, said tail portion having a bore extending longitudinally therethrough with its ends opening into the space interiorly of the body portion and the atmosphere respectively and vanes on the outer end of the tail portion.

5. In a dart, a spherical hollow body portion formed of resilient compressible rubber, a rubber suction cup formed integral with said body portion and disposed in front thereof, a resilient flexible rubber tail portion formed integral with said body portion at a point thereon opposite the suction cup and having a bore extending longitudinally therethrough, said bore having its ends communicating with the space interiorly of the body and the atmosphere respectively, said body portion having the wall portion thereof adjacent the joint of the tail portion, formed relatively thin, said tail portion tapering toward its free end, and vanes carried on the free end of said tail portion.

6. In a dart, a hollow compressible body arranged to discharge air therefrom into the atmosphere when compressed by the force of the dart striking its target, a suction cup carried by said body portion, and a tail portion extending outwardly from said body portion.

7. In a dart, a hollow resilient and compressible body arranged to be compressed and to discharge air therefrom to the atmosphere incident to the striking of the dart against a target at which it is thrown, a rubber suction cup carried on a side of said body, and a flexible tail portion fixed to said body at a point opposite the cup.

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