Dec. 26, 1961 R. E. CRYDER ET AL 3,014,724

TELEVISION DART GAME

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Fig. 1

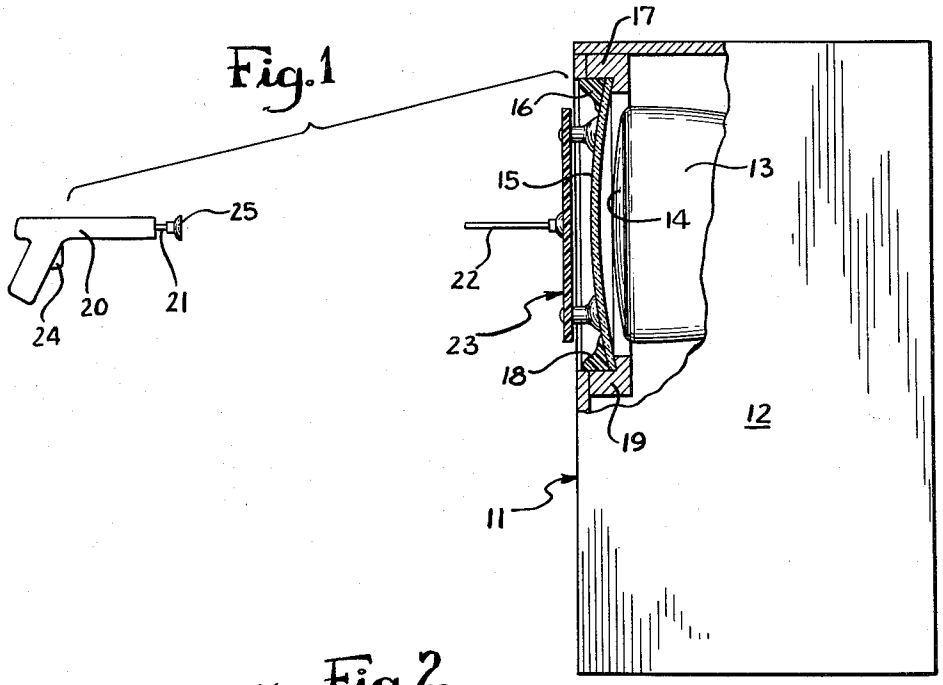
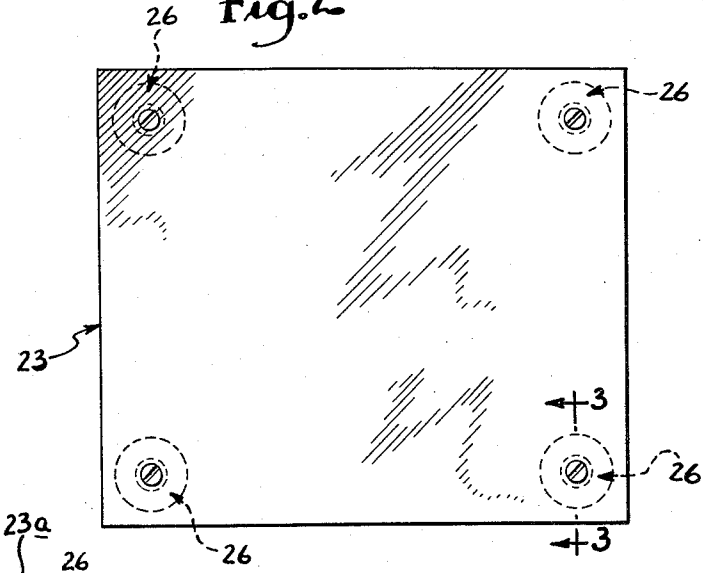


Fig. 2



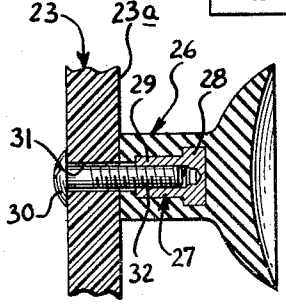


Fig. 3

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TELEVISION DART GAME

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This invention relates to a game apparatus which, in addition to its amusement value, also provides a cathartic means of expression for children watching television programs by enabling the child to shoot darts at the characters appearing on the television screen.

Target shooting games are preferred when they provide target subjects which are moving rather than stationary. However, mechanical arrangements for providing moving target subjects are invariably complicated and expensive so as to limit their use primarily to commercial shooting galleries and coin-operated games and generally to preclude moving-subject or animated targets in relatively inexpensive games for home use by children. The present invention obviates this problem by an arrangement which utilizes the light images appearing on a television screen as the moving target subjects, the televised light images being transmitted to the player through the target which is in the form of a blank transparent sheet mounted in front of the viewing screen.

Furthermore, since the advent of commercial television, its possible adverse psychological affect upon children has been a major concern in view of the enormous extent to which television has come to pervade and dominate the child's perception of his environment. It is frequently held that television programs can be harmful to the child in that they stimulate the child's psychic energy to highly intense emotional levels, which energy the child cannot effectively discharge because of lack of any acceptable effective means of expression and release such as are available to the adult.

Also a cause of serious concern is the fact that commercial television programs result in habitual passive observance wherein the child does nothing but sit and view, usually for hours, without any active participation in the apparent environment as it appears on the television screen. This may develop in the child a tendency to passivity in relating to the environment, rather than the more healthy pattern of active participation. Of course, the lethargy and lack of physical exercise are additional detrimental aspects of this passivity.

The present invention attempts to obviate these harmful aspects of television by enabling the child to express his aggressions and other emotional states and to participate actively in the television program by shooting harmless darts at the characters, personalities and other images appearing on the television screen.

The apparatus of the present invention comprises, in its preferred embodiment disclosed herein, a blank transparent target having means for removably mounting it to a television set immediately in front of the viewing screen. A dart or projectile is provided with means for adhering to the target upon striking the latter, and the subject invention further comprises a gun for shooting the dart at the target.

Other objects and advantages of the present invention will appear as the detailed description proceeds or are inherent in the structure as disclosed in the accompanying drawings wherein:

FIG. 1 is a side elevational view of the invention with portions of the television set broken away and shown in section;

FIG. 2 is a front elevational veiw of the blank transparent target; and

FIG. 3 is a vertical sectional view taken on line 3—3 of FIG. 2 and showing means for mounting suction cups to the target.

Referring first to FIG. 1, the reference numeral 11 designates a television set of any conventional or suitable type and comprising a side wall 12 partially broken away to show the picture tube 13 having a viewing screen 14 at the front end thereof. A convex transparent shield 15 of glass or plastic is usually mounted in front of screen 14 by means of a conventional mounting frame comprising upper frame elements 16, 17 and lower frame elements 18, 19 in addition to similar side frame elements not shown. These frame elements outline a "picture area" which term is used herein to define that portion of the front surface of the television set wherein the image is displayed. In the event the set does not have a shield such as at 15, the term "picture area" refers to the area of the screen as outlined by the usual screen mask.

The combination of the present invention further comprises a dart gun 20, one or more darts 21, 22 adapted to be shot or propelled by the gun 20, and a target 23. Gun 20 may be of any conventional or suitable construction and the details thereof will not be described because they are not pertinent to the present invention, it being merely necessary to note that upon actuation of trigger 24, the gun 20 will propel a dart 21 or 22 in the usual manner. Darts 21, 22 are also conventional and are provided at their forward ends with the usual suction cup 25 adapted to adhere to a planar surface when the darts 21, 22 strike thereagainst.

Target 23 is of unusual construction and is preferably in the form of a rectangular blank sheet of transparent material, such as plastic or any other material which can absorb the shock of the fast moving darts 21, 22 without breaking or cracking. Target 23 is preferably provided adjacent each of its four corners with suction cups 26 for removably mounting target 23 to the front surface of shield 15, or in the case of television sets not having such a shield, directly to the front surface of the picture tube screen itself. Of course, it will be readily apparent to those skilled in the art that other suitable means may be devised for removably mounting or locating target 23 in front of viewing screen 14. However, the disclosed arrangement comprising suction cups 26 is highly advantageous in that the cups are composed of resilient material and provide a resilient target mounting means for absorbing the shock imparted by the momentum of darts 21, 22 striking target 23. In order to assure that darts 21, 22 will stick to target 23, it is necessary to propel the darts at a relatively high velocity, thereby resulting in a substantial impact energy problem which is obviated by the resilient mounting afforded by suction cups 26.

As shown in FIG. 3, each of the suction cups 26 is preferably formed of rubber and is molded with a metal insert 27 having a retaining shoulder 28 formed integral with an elongated internally-threaded shank 29. A bolt 30 extends through a suitable opening 31 provided in target 23 and has a threaded shaft 32 in engagement with the internally threaded bore of shank 29 so as to retain each of the four suction cups 26 securely attached to the rear surface 23*a* of target 23. It will be apparent that target 23 may be quickly and easily mounted to its operative position in front of viewing screen 14 by pressing suction cups 26 against shield 15.

When television set 11 has been turned on and tuned to a particular channel and target 23 is located in front of viewing screen 14, the light images depicting the characters, personalities and other objects appearing on screen 14 are seen through blank transparent target 23

by the child or other viewer so as to make it appear that target 23 is provided with animated or moving target subjects. The child loads gun 20 with one of the darts 21, 22 and aims gun 20 at one of the target subjects appearing on target 23. Actuation of trigger 24 causes propulsion of the dart in the usual manner and upon striking target 23 the dart will stick thereto as shown at 22 in FIG. 1, thereby indicating whether the desired target subject has been hit.

It should be understood that the specific embodiment shown in the drawings and described above is merely illustrative of one of the many forms which the invention may take in practice and that numerous variations may be devised without departing from the scope of the invention as delineated in the appended claims which are to be construed as broadly as permitted by the prior art.

We claim:

1. In combination, a television set having a picture area for displaying animated light images, a transparent target, means for removably mounting said target to said television set in a position in front of said picture area, whereby said target will be apparently provided thereon with animated target subjects in the form of said light images transmitted through said target, a dart having means for adhering to said target upon striking the latter, and a gun for projecting said dart at said animated target subjects appearing on said target, said removable mounting means comprising means responsive to a manual thrust upon the target for removing the target from said position thereof.

2. In combination, a television set having a viewing screen for displaying animated light images and having a transparent shield in front of said screen, a transparent target, a suction cup secured to said target and having an adhering surface in removable adhering engagement with said shield for removably mounting said target in a position in front of said shield and said screen, whereby said target will be apparently provided thereon with animated target subjects in the form of said light images transmitted through said target, a dart having a suction cup at its forward end for adhering to said target upon striking the latter, and means for projecting said dart at said animated subjects appearing on said target.

3. In combination, a television set having a picture area for displaying animated light images, a transparent target, means for removably mounting said target to said television set in a position in front of said picture area whereby said target will be apparently provided thereon with animated target subjects in the form of said light images transmitted through said target, a dart having means for adhering to said target upon striking the latter, and a gun for projecting said dart at said animated target subjects appearing on said target, said mounting means comprising a plurality of suction cups secured to said target and having adhering surfaces for engagement with said television set.

4. In combination, a television set having a picture area for displaying animated light images, a transparent target, means for removably mounting said target to said television set in a position in front of said picture area whereby said target will be apparently provided thereon with animated target subjects in the form of said light images transmitted through said target, a dart having means for adhering to said target upon striking the latter, and a gun for projecting said dart at said animated target subjects appearing on said target, said mounting means comprising a plurality of suction cups secured to said target and having adhering surfaces for engagement with said television set, said adhering means comprising a suction cup at the forward end of said dart.

5. A combination for use with a television set having a viewing screen for displaying animated light images and which may also have a transparent shield in the front of said screen, said combination comprising a blank transparent target, means for removably mounting said target in a position in front of said screen, whereby said target will be apparently provided thereon with animated target subjects in the form of said light images transmitted through said target, a dart having means for adhering to said target upon striking the latter, and a gun for projecting said dart at said animated subjects appearing on said target, said mounting means comprising a plurality of suction cups secured to said target and having adhering surfaces for engagement with said television set.

6. A combination for use with a television set having a viewing screen for displaying animated light images and which may also have a transparent shield in the front of said screen, said combination comprising a blank transparent target, means for removably mounting said target in a position in front of said screen, whereby said target will be apparently provided thereon with animated target subjects in the form of said light images transmitted through said target, a dart having means for adhering to said target upon striking the latter, and a gun for projecting said dart at said animated subjects appearing on said target, said mounting means comprising a plurality of suction cups secured to said target and having adhering surfaces for engagement with said television set, said adhering means comprising a suction cup at the forward end of said dart.

7. In combination, a television set having a picture area, a blank transparent planar target located in front of said picture area, a dart having means for adhering to said target upon striking the latter, a gun for projecting said dart at said target, means for resiliently mounting said target to said television set to absorb a substantial portion of the impact energy of the dart upon striking the target, said resilient mounting means comprising a suction cup formed of resilient material.

8. A combination for use with a television set having a picture area for displaying animated light images, said combination comprising a transparent target, means for removably mounting said target in a position in front of said picture area, whereby said target will be apparently provided thereon with animated target subjects in the form of said light images transmitted through said target, a dart having menas for adhering to said target upon striking the latter, and means for projecting said dart at said animated subjects appearing on said target, said mounting means comprising a suction cup, and means for securing said cup to said target, said cup having an adhering surface for engagement with said television set.

References Cited in the file of this patent

UNITED STATES PATENTS

1,035,811	Paterson	Aug. 13, 1912
2,106,400	Brethen	Jan. 25, 1938
2,224,287	Busch	Dec. 10, 1940
2,231,640	Rubin	Feb. 11, 1941
2,458,368	Kamin	Jan. 4, 1949
2,808,820	Haley	Oct. 8, 1957