Nov. 13, 1956 J. F. DEASY 2,770,460

MISSILE AND TARGET DEVICE THEREFOR

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Fig. 1.

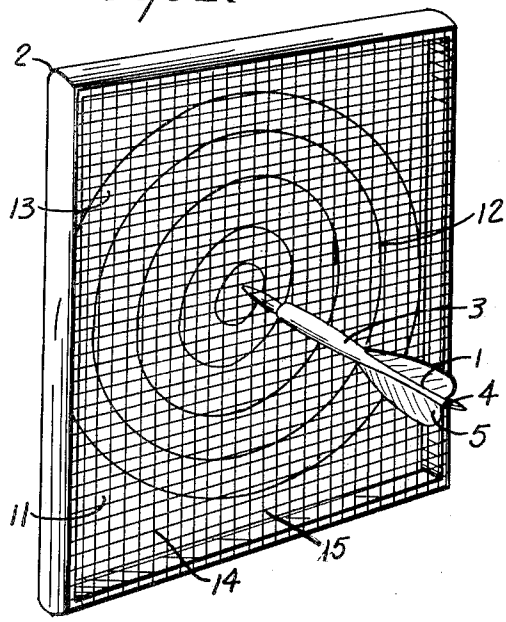


Fig. 3.

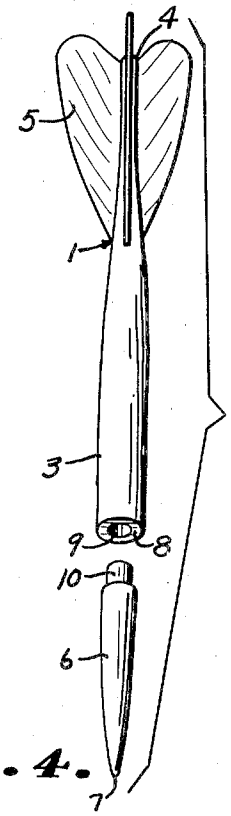


Fig. 2.

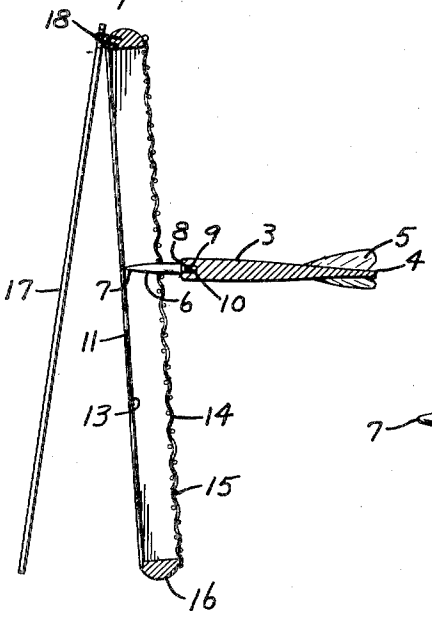
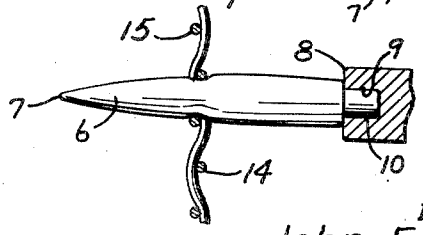


Fig. 4.



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MISSILE AND TARGET DEVICE THEREFOR

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2 Claims. (Cl. 273—102)

This invention relates to a novel game apparatus in the form of a missile and target device therefor and has for its principal object to provide a harmless missile such as a dart or arrow having a resilient, compressible portion, pin or spike in its forward end together with a target device having a mesh or like open target area which the missiles penetrate when projected thereat.

In dart game structures commonly used, the dart or missile usually has a metal pin extending from the forward end with a sharpened point whereby when the missile is projected against a target board, the sharp metal point penetrates therein and remains in place until removed by the player after counting of the score. The sharp metal points present a hazard when the dart devices are used by children and can cause injury to persons, walls or furniture if struck by the dart missile.

Further objects of the present invention are to provide an amusement device of missiles and targets which can be played indoors without the disadvantage of dart points injuring walls or furniture; to provide a missile structure in the form of a dart or arrow having at its leading end a tapered resilient compressible material for penetrating openings in a target; to provide a target device for use with such a missile and having a suitable marking on a sheet of material with a mesh spaced in front of the sheet, the openings in the mesh being of such size and shape as to receive the compressible point of the missile and compress the tapered portion of same as the point moves through the opening; to provide a target device having a mesh formed of spaced wires, rods or the like with the spacing between same such that the end of a missile can penetrate therebetween and as penetration continues, the compressible point of the missile wedges into close locking engagement between the target wires or the like to hold the missile in place until removed by the user; and to provide a missile and target therefor for amusement either indoors or outdoors with little likelihood of injury to persons or articles and that can be economically manufactured in a strong, sturdy structure.

In accomplishing these and other objects of the present invention I have provided improved details of structure the preferred forms of which are illustrated in the accompanying drawings wherein:

Fig. 1 is a perspective view of the target device and missile extending therein.

Fig. 2 is a vertical sectional view through the target device and missile.

Fig. 3 is a disassembled perspective view of the missile in the form of a dart.

Fig. 4 is an enlarged view of the forward end of the missile extending into the mesh of the target illustrating the compressing of the forward end of the missile by the target mesh to hold the missile in place.

Referring more in detail to the drawings:

1 designates a missile illustrated in the form of a dart for projection at a target 2. The dart consists of a body 3 preferably tapered toward the rear end 4 thereof.

Arranged adjacent the rear end of the body 3 are a plurality of feathers 5 or flights of other suitable light material to serve as a balancing device and aid in holding the missile in a straight line during flight. The forward end of the missile preferably has a relatively slender pin or spike portion 6 of resilient, compressible material such as rubber or synthetic rubber tapered toward the front end to a point 7. In the illustrated structure the pin or spike portion is a separate part formed of the resilient compressible material; however, the missile may be made with a resilient compressible sheath on the forward end of the body 3. In the illustrated structure the pin or spike 6 is suitably secured to the forward end 8 of the body of the missile, the forward end 8 of the body 3 being provided with a recess 9 and the rear end of the pin or spike 6 having an extension 10 of reduced diameter adapted to be inserted in and form a tight fit in the recess 9. The extension 10 is suitably secured in the recess as by adhesive or other suitable securing means. While the missile is shown in the form of a dart, it is believed obvious that it could also be in the form of an arrow with the body 3 elongated to form the shaft thereof and the rear end 4 provided with a conventional nock.

The target 2 consists of a board 11 which may be of plywood, fiber board or other suitable sheet material having a bull's-eye or other suitable target area 12 marked on the forward face 13 thereof. A front member 14 of perforated metal or mesh formed of wire, rods or other suitable strands 15, either woven or welded, is arranged in spaced relation to the forward face 13 of the target board 11, said front member being suitably supported relative to said target board to maintain the spaced relationship therebetween. The front member portions 15 defining the openings are relatively thin and the spacing between the wires, rods or portions 15 thereof is substantially less than the greatest diameter of the tapered spike 6 of the missile whereby when the spike enters into an opening defined by the wires, rods or portions 15, the force of the missile will cause the spike to penetrate until the wires, rods or portions 15 compress the compressible material of the spike 6 as illustrated in Fig. 4. The compressing of the spike by the wires, rods or portions 15 creates sufficient friction to retain the missile in engagement with the mesh and prevents same from falling from the target. It has been found that hardware cloth makes a suitable mesh for use on the target.

It is preferable that the spacing between the front member 14 and the forward face 13 of the board 11 be slightly greater than the distance the spike 6 normally extends through the mesh so as to prevent the point 7 of the missile from striking the board 11 with sufficient force to cause the missile to bounce backward from the target. The peripheral edges of the mesh 14 may be turned rearwardly and connected to the periphery of the board 11. However, in the structure illustrated, a frame 16 is arranged around the periphery of the board 11 to form a forwardly extending flange and the mesh or front member 14 is secured to the forward edge of said frame which extends from the forward face 13 of the board 11 sufficiently to provide the desired spacing between the front member and said board.

The target 2 is provided with a brace rod 17 hingedly connected as at 18 to the upper portion of the frame 16 whereby the lower end of the rod 17 may be swung to space same from the lower edge of the frame to support the target in upright condition. However, the frame may be hung on a wall or otherwise supported as desired. The target may be made of any desired size and a number of missiles or darts may be discharged against it in each game.

It is believed obvious I have provided a game apparatus including a missile and target therefor that is economical to manufacture and usable for amusement either indoors or outdoors without danger of injury to walls, furniture or persons.

What I claim and desire to secure by Letters Patent is:

1. In game apparatus of the character described, the combination of a target member having a sheet of material with a suitable target marked on the forward face thereof, a mesh member overlying the target area and spaced forwardly from said sheet of material, said mesh having a plurality of substantially uniform equally spaced parallel wires extending across the target area in one direction and a plurality of substantially equally spaced parallel wires extending across the target area at right angles to the first named wires and forming substantially square openings therebetween, said wires being secured together at their crossing points, means securing the mesh and sheet together to maintain the spacing therebetween in the target area, and a missile having an elongated body for projection toward the target, said missile having a relatively slender resilient compressible portion at the forward portion thereof, the resilient compressible portion tapering from the forward end of the missile to a transverse dimension that is larger than the transverse dimensions of the openings in the mesh whereby when the missile is projected toward the target and the forward end of the missile enters an opening in the mesh the portions of the mesh defining the opening engages and compresses the compressible material of the missile preventing displacement of the missile, the spacing between the mesh and target sheet being slightly greater than the portion of the missile projecting through the opening in the mesh whereby the mesh stops and holds the missile with the point of the missile close to yet spaced from the target.

2. In game apparatus of the character described, the combination of a target member having a sheet of material with a suitable target marked on the forward face thereof, a mesh member overlying the target area and spaced forwardly from said sheet of material, said mesh having a plurality of substantially uniform, equally spaced parallel wires extending across the target area in one direction and a plurality of substantially equally spaced parallel wires extending across the target area at right angles to the first named wires and forming substantially square openings therebetween, said wires being secured together at their crossing points, means securing the mesh and sheet together to maintain the spacing therebetween in the target area, a missile having an elongated body with balancing flights adjacent to the rear end thereof for projection toward the target, a relatively slender spike on the forward end of the body and tapering therefrom to a substantially pointed forward end, said spike being of resilient compressible material and having a transverse dimension adjacent to the forward end of the body that is larger than the transverse dimensions of the openings in the mesh whereby when the missile is projected toward the target and the pointed end of the missile spike enters an opening in the mesh, the extent of movement of the spike into the opening is limited and the portions of the mesh defining the opening engages and compresses the compressible material of the spike effecting engagement of the mesh and spike which prevents displacement of the missile, the spacing between the mesh and target sheet being slightly greater than the portion of the spike projecting through the opening in the mesh whereby the mesh stops and holds the missile with the point of the missile close to yet spaced from the target.

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