

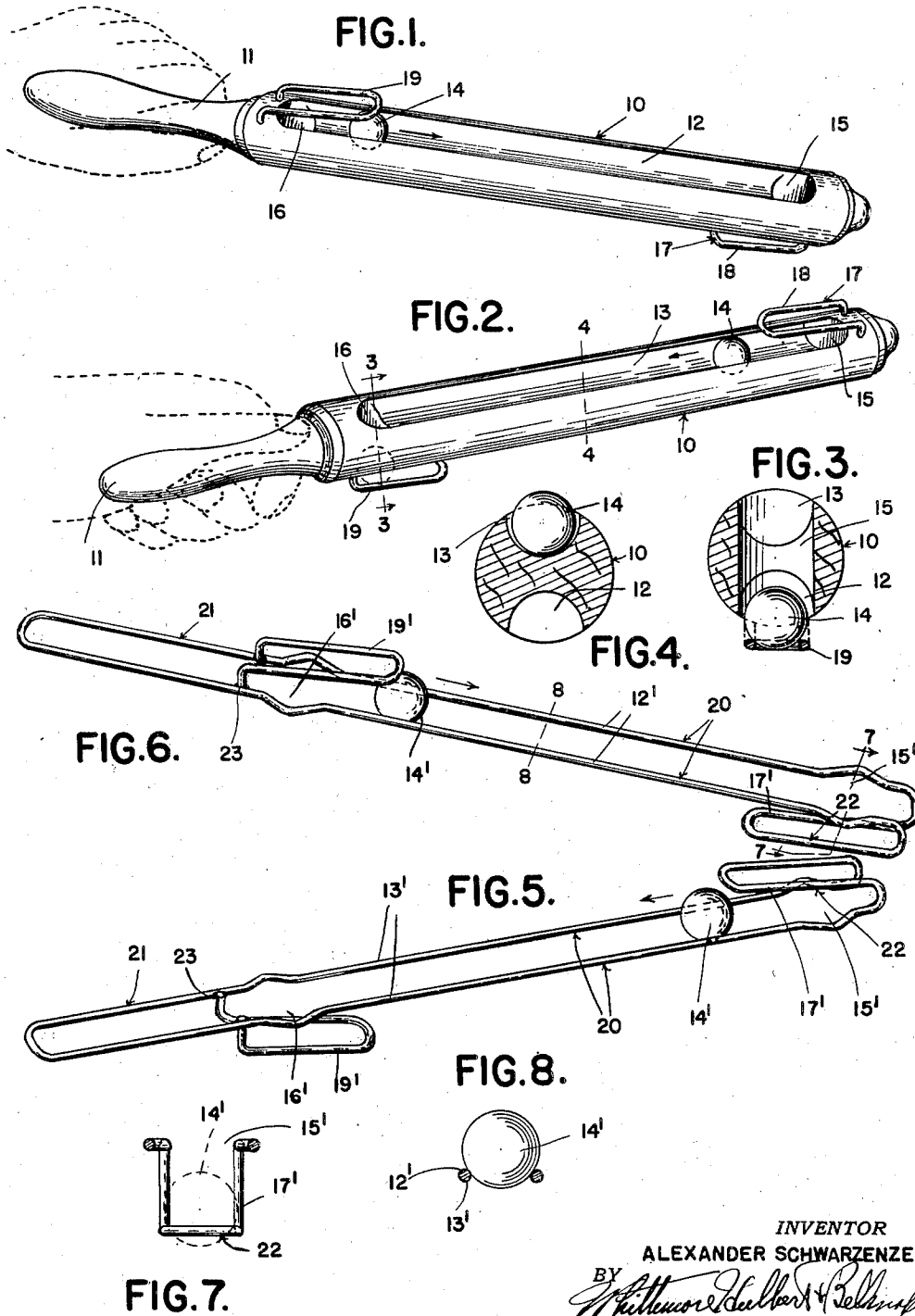
April 8, 1941.

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2,237,748

SKILL DEVICE

Filed Nov. 21, 1938



UNITED STATES PATENT OFFICE

2,237,748

SKILL DEVICE

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Application November 21, 1938, Serial No. 241,660

3 Claims. (Cl. 273-199)

This invention relates generally to amusement devices and has as one of its principal objects to provide a device of this character which not only requires a certain amount of skill for manipulation but, in addition, develops co-ordination between the eyes and hand movements of the user.

A further advantageous feature of this invention consists in the provision of a device of the character set forth composed of a relatively few simple parts capable of being inexpensively manufactured and assembled.

The foregoing, as well as other objects, will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawing, wherein—

Figure 1 is a perspective view of a device constructed in accordance with this invention;

Figure 2 is a perspective view showing the device in a different position;

Figure 3 is a cross sectional view taken substantially on the plane indicated by the line 3-3 of Figure 2;

Figure 4 is a cross sectional view taken substantially on the plane indicated by the line 4-4 of Figure 2;

Figure 5 is a perspective view of a slightly modified form of construction;

Figure 6 is a perspective view showing the device in Figure 5 in a different position;

Figure 7 is a cross sectional view taken substantially on the plane indicated by the line 7-7 of Figure 6;

Figure 8 is a cross sectional view taken substantially on the plane indicated by the line 8-8 of Figure 6.

Referring first to the embodiment of the invention illustrated in Figures 1 to 4, inclusive, it will be noted that my improved skill device comprises a body portion 10 having a handle 11 at one end adapted to be grasped by one hand of the operator in the manner clearly shown in Figures 1 and 2. The body portion 10 and handle 11 are, preferably, although not necessarily, formed of one piece of material and, while various different types of material may be employed, nevertheless, perfectly satisfactory results are possible by forming the device from a length of inexpensive wood.

The body portion 10 is shown in Figures 1 to 4, inclusive, as having longitudinally extending grooves 12 and 13 in opposite sides thereof forming tracks over which a ball 14 is adapted to roll when the device is declined. The grooves or tracks communicate with each other at op-

posite ends of the body portion 10 by means of openings 15 and 16 drilled, or otherwise formed in the body portion. The diameter of each opening is sufficiently greater than the diameter of the ball 14 to allow its free passage from one track through the body portion to a position adjacent the opposite track.

As will be presently described, when the device is held in the position thereof shown in Figure 1 by the operator, the ball 14 rolls downwardly in the track 12 and passes through the opening 15 at the free end of the body portion 10. As the ball is delivered from the opening 15, it is deposited on a trap or guard 17 having a portion 18 overlying the track 13 in spaced relation to the latter. In the embodiment of the invention illustrated in Figures 1 to 4, inclusive, the trap 17 is in the form of a length of wire looped, or return bent to provide the portion 18 aforesaid and the free ends are anchored in the body portion 10 beyond the opening 15. The strands of wire of the looped portion 18 are spaced laterally from each other a sufficient distance to support the ball 14, and the spacing of the looped portion 18 from the track is sufficient to permit unobstructed movement of the ball along the trap toward the loop which serves to arrest the ball in registration with the adjacent end of the track 13. If desired, the portion 18 of the trap may be inclined slightly in a direction away from the track to facilitate movement of the ball beyond the delivery end of the opening 15 to a position opposite the track 13 so that when the device is twisted to the position shown in Figure 2, the ball will be deposited on the track 13. A similar trap 19 is provided at the opposite side of the device adjacent the opening 16 for retaining the ball 14 as the same passes through the opening 16 to the track 12.

In operation, the device is held in the position thereof shown in Figure 1 by grasping the handle 11 with one hand and the ball 14 is placed on the track 12 at any point between the openings through opposite ends of the body portion. Inasmuch as the body portion is inclined in the direction of the arrow shown in Figure 1, it follows that the ball 14 rolls down the track 12 to the opening 15 and falls through the opening 15 to a position on the trap 17. As stated above, the portion 18 of the trap is inclined in a direction to provide for movement of the ball in a direction toward the handle 11 of the device so that upon twisting the device through an arc of approximately 180° to the position illustrated in Figure 2, the ball is deposited on

the track 13. At the same time that the device is twisted, it is also inclined in the opposite direction in order to insure immediate movement of the ball in the direction of the arrow in Figure 2 toward the handle end of the device. As the ball 14 reaches the end of the track 13 adjacent the handle 11, it drops through the opening 16 onto the trap 19 and by again twisting and changing the direction of inclination of the device, the ball is caused to roll down the track 12 toward the opening 15. It will be observed that by carefully co-ordinating the twist and change of direction of inclination of the device, the above cycle of movement of the ball may be repeatedly effected without interruption.

The embodiment of the invention illustrated in Figures 5 to 8, inclusive, operates in the same manner as the one previously described, but differs structurally from the latter in that it is formed entirely of wire stock. In detail, a strand of wire of proper length is bent to form laterally spaced longitudinally extending strands or rails 20 connected together by means of looped portions 21 and 22. In the present instance, the free ends of the strands are permanently secured together at the point 23 and the strands are spaced from each other a distance less than the diameter of the ball 14' so that the latter may be supported on either side of the strands.

Upon reference to Figures 5 and 6, it will be noted that the strands are bent laterally outwardly at longitudinally spaced points to provide openings 15' and 16' of sufficient size to allow the ball 14' to drop through the same. The top surfaces of the portions of the strands extending between the openings from the track 12' and the undersurfaces of these portions of the strands form the opposite track 13'. In this connection, it will also be noted from the above figures that the looped portion 21, extending beyond the opening 16', forms a handle adapted to be grasped by one hand of the operator in the same manner as the handle 11 in the first described form of the invention.

The opposite looped portion 22 is return bent to provide a trap 17', identical to the trap 17 hereinbefore described in that it intercepts the ball 14' as the latter falls through the opening 15' from the track 12'. A similar trap 19' is provided at the opposite side of the device in registration with the opening 16' so as to intercept the ball 14' as it passes through the latter opening from the track 13'. The trap 19' is formed of a strand of wire looped, as illustrated, and having the free ends angularly bent for attachment to the strands forming the handle portion of the device. The angularly bent ends may be soldered or welded to the strands 20 to provide an integral construction.

Thus, from the foregoing, it will be observed that while both embodiments differ substantially from each other in construction, nevertheless,

they are adapted to be manipulated in the same manner to effect a complete cycle of travel of the ball. It will also be noted that both of the devices not only afford a source of amusement to anyone using the same but, in addition, assist in developing accurate co-ordination of the mind and hand movements of the operator.

What I claim as my invention is:

1. An amusement device comprising a body portion composed of laterally spaced rails cooperating to form longitudinally extending tracks at opposite sides of the body portion over which a ball is adapted to roll and having portions bent outwardly at longitudinally spaced points to provide openings through which the ball is adapted to pass from one side to the other, guide means positioned to intercept the ball as it passes through said openings and effective to guide the ball to a position in registration with the adjacent track out of registration with the opening, and means operatively associated with the guide means acting to arrest movement of the ball along the guide means.

2. An amusement device comprising a body portion composed of laterally spaced rails cooperating with each other to form longitudinally extending tracks at opposite sides of the body portion over which a ball is adapted to roll and having provision at longitudinally spaced points for the passage of the ball from one side of the body portion to the other, the ends of the rails at one end of the body portion being return bent and extended to a position to receive the ball as it passes through one of the openings and to guide the ball out of registration with the latter opening to a position permitting engagement of the ball with the adjacent track upon inverting the device, and means interconnecting the free ends of the return bent portions of the rails and engageable with the ball to arrest movement of the latter.

3. An amusement device comprising a body having laterally spaced wire strands forming longitudinally extending tracks at opposite sides of the body over which a ball is adapted to roll and having portions bent laterally outwardly at longitudinally spaced points to provide openings through which the ball is adapted to pass from one side of the body to the other, the ends of the wire strands at one end of the body being return bent and extended to a position for receiving the ball as it passes through one of the openings, said return bent portion extending beyond the last named opening to guide the ball out of registration with the opening and having the free ends connected by a looped portion engageable with the ball to arrest movement of the ball along the return bent portion and means at the opposite side of the body in registration with the other of the openings to intercept the ball as it passes through the latter opening.

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