

Feb. 23, 1965

F. KEOSIFF

3,170,692

MISSILE TARGET WITH HIT INDICATING MEANS

Filed Feb. 17, 1961

2 Sheets-Sheet 1

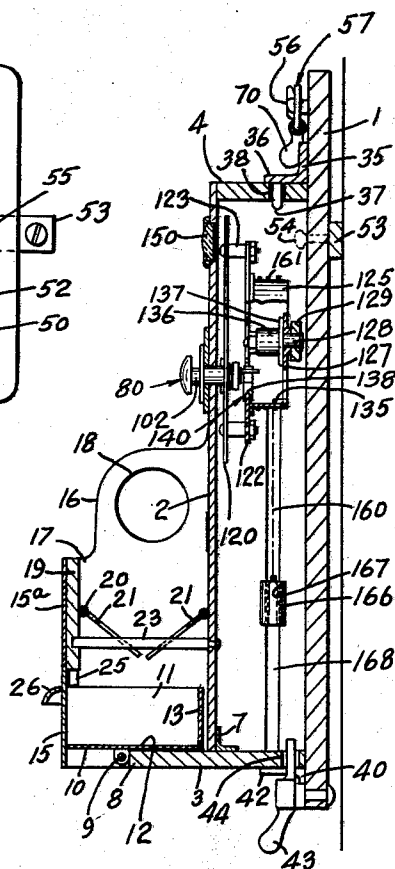
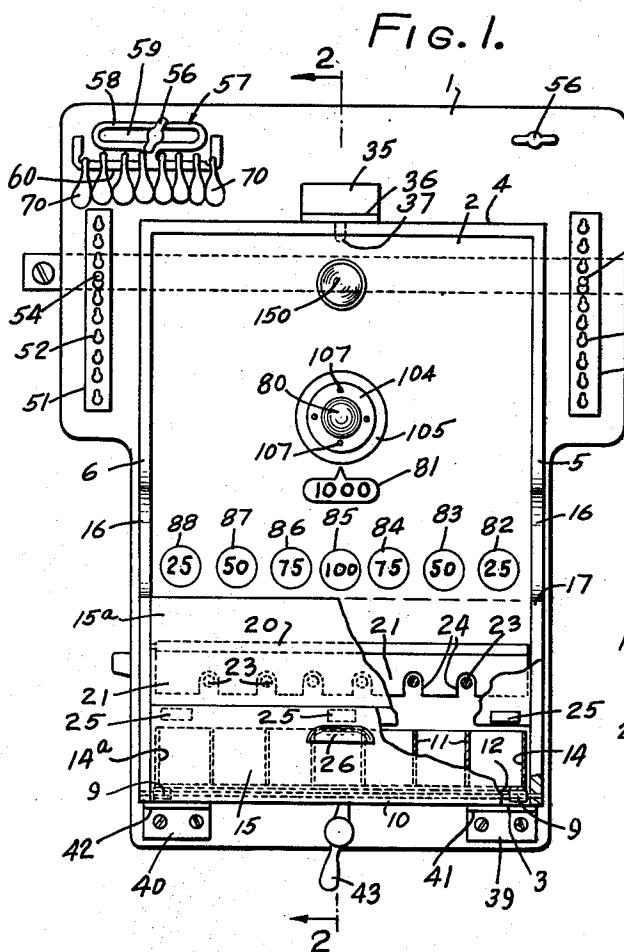


FIG. 2.

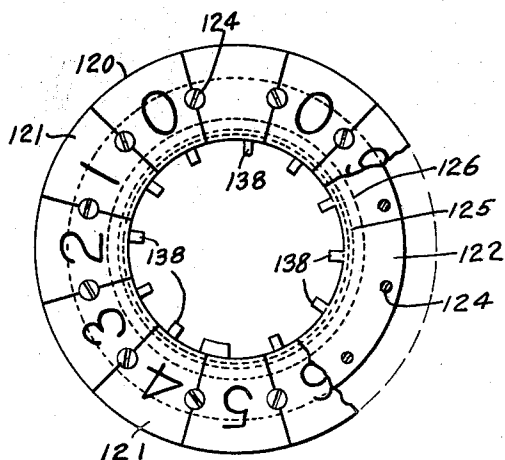


FIG. 4.

INVENTOR,
FEODOR KEOSIFF;
BY
Galvin Brown,
ATTORNEY

Feb. 23, 1965

F. KEOSIFF

3,170,692

MISSILE TARGET WITH HIT INDICATING MEANS

Filed Feb. 17, 1961

2 Sheets-Sheet 2

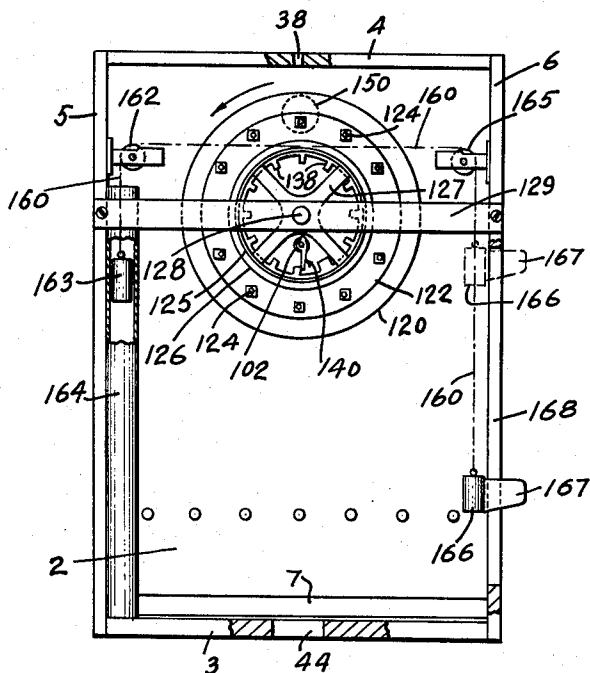


FIG. 3.

FIG. 7.

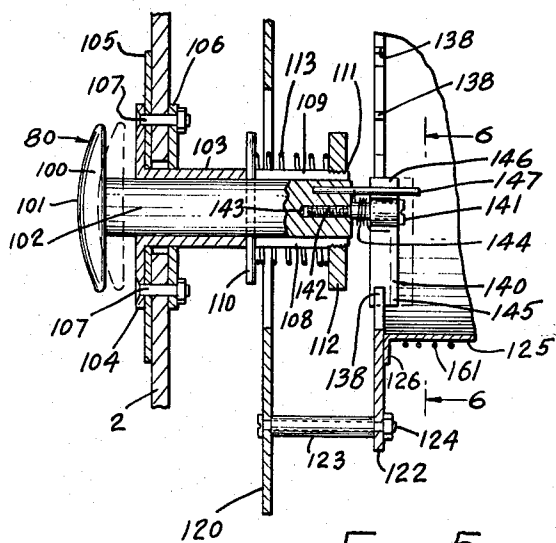
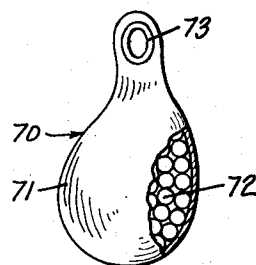
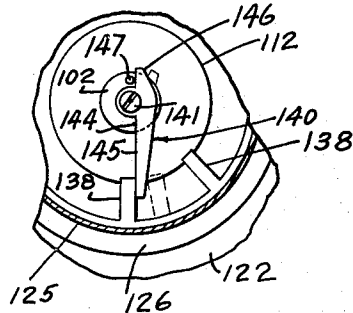


FIG. 5.

FIG. 6.



INVENTOR,
FEODOR KEOSIFF;

BY *Calvin Brown*,

ATTORNEY

1

2

3,170,692

MISSILE TARGET WITH HIT INDICATING MEANS

Feodor Keosiff, 11306 Culver Blvd., Culver City, Calif.

Filed Feb. 17, 1961, Ser. No. 89,991

6 Claims. (Cl. 273-102.1)

The present invention relates to a game of skill where a missile in the form of a leather pouch filled with shot or other material is thrown from a certain distance at a target. If the target is struck, an indicating means is actuated to show a certain number. If the target is not struck, the missile will drop into one of several pockets or compartments, each pocket having a certain numerical value. After a given number of missiles have been played, the numbered pockets and the total of strikes on the target are added to determine the final score and the person totaling the highest number is the winner. Suitable reset mechanism is provided for the target after a given play.

The device is to be played by both adults and children and affords pleasure to the players as well as requiring a certain degree of skill in playing the game.

An object of the invention is to provide amusement to the player while likewise requiring skill in order to effect high scores when playing the game.

Other objects include a game which is attractive in appearance, simple of construction, and inexpensive in cost of manufacture.

In the drawing:

FIGURE 1 is a fragmentary, front elevation of the game casing and showing certain details of construction in cross section;

FIGURE 2 is a transverse section on the line 2-2 of FIGURE 1;

FIGURE 3 is a fragmentary, partially cross sectional rear elevation of the casing and certain mechanism therein;

FIGURE 4 is a fragmentary enlarged view of a numbered dial used in the invention;

FIGURE 5 is a fragmentary sectional view, on an enlarged scale, of the target and associated mechanism to be actuated by the target;

FIGURE 6 is a fragmentary sectional view on the line 6-6 of FIGURE 5; and

FIGURE 7 is a fragmentary partially sectional view of one of the missiles used in the practice of the invention.

Referring now to the drawings, I provide a suitable casing having a back wall 1, front wall 2, a base 3, a top wall 4 and side walls 5 and 6. The base, top and side walls are all joined to the front wall 2 and form an enclosure for mechanism used in the practice of the invention. Upon reference to FIGURE 2, it will be seen that the front wall is secured to the base 3 by means of a bracket or brackets 7 and that the base extends forwardly of the front wall as shown at 8. The forward edge of the base has hingedly secured thereto at 9 a drawer 10, the drawer resting in part, on the forward extension of the base 3 with the drawer divided into compartments or trays 11. The drawer compartments are open at the top with the drawer provided with a base 12 having a back wall 13 and end walls 14 and 14a between which are located the several compartments 11. The front wall 15 of the drawer extends above the back and end walls 13 and 14, as shown in FIGURE 2, and the casing or framing is so constructed as to provide that the side walls 5 and 6 extend forwardly as shown at 16 and 17 so as to merge with the wall 15 and to cover that area which is included between the wall 15 and the top and base walls 4 and 3. This gives the cabinet an L-shape appearance viewed in side elevation. The cabinet side

wall portions at 16 and 17 are bored for both sides as shown at 18 to provide handles so that the cabinet may be lifted or carried. When the drawer is tipped on its hinges 9, access is provided to the different compartments 11. There is a solid wall 19 which extends between the end wall portions 5 and 6 and particularly those portions indicated at 16 and 17. Wall 19 acts as a stop for the front wall 15 of the drawer when the drawer is in a horizontal position and which wall likewise has hingedly thereto at 20 a longitudinally extending swing gate 21. A cooperating swing gate is hinged to the front wall 2 and these gates are actuated to a horizontal position by coil springs surrounding the hinge pins. To stabilize the wall 19 with relation to the front wall 2, I have provided tie pins or bolts 23 in spaced horizontal relationship as shown in FIGURE 1. Both gates are slotted along their forward edges at 24 at a plurality of points so as to straddle the pins or tie bolts 23 when the gates are moved from a horizontal position downwardly. I provide the drawer 13 with one or more magnets 25 and preferably the member 15 is formed of magnetic material so that after tipping the drawer it may be held in a horizontal position, as shown in FIGURE 2, by the magnet or magnets 25 being adjacent the bottom edge of member 19. The drawer front 15 is provided with a handle 26 to render tipping of the drawer easy of accomplishment. While the drawer front 15 may be of one piece, I have shown the same in two vertically aligned parts as shown at 15 and 15a. This is a matter of choice.

An angle bracket 35 is secured to the rear wall 1 intermediate its width with one leg 36 thereof overlying the top 4 and provided with one or more depending pins 37 which are received within transverse bores 38 in the top 4. The back wall 1 is provided with a pair of angle brackets at 39 and 40, one leg of each of which at 41 and 42 engages the bottom of the base 3 to act as the support for the casing or framing. A swing catch 43 has a portion which enters a transverse slot 44 of base 3 whereby the casing or framing is held to and between the brackets 35, 39 and 40. Releasing the catch 43 allows removal of the framing from the rear wall 1.

As shown in FIGURE 1 the rear wall is enlarged as to width at its upper end so as to extend beyond the sides 5 and 6 of the framing and likewise to extend above the top wall, 4. This construction permits both sides of the upper end of the rear wall to be provided with plates 50 and 51 which plates are provided with vertically aligned keyhole slots as indicated at 52, to provide for relative height adjustment between a wall and the framing. This is accomplished by providing a wall bar 53 which is attached in a horizontal position on the wall or other foundation member, the wall bar being provided with two outstanding lugs or hooks at 54 and 55 which enter aligned keyhole slots, as illustrated in FIGURES 1 and 2.

The upper end of the back wall 1 carries a pair of spaced apart rotatable T-handles generally designated as 56 for securing one or more racks 57. The racks in this instance each include an elongated member 58 provided with a central slot 59 adapted to receive the T handle and when the T handle is turned, as shown in FIGURE 1, it holds the rack. In addition, each rack 57 includes an elongated member 60 of cylindrical cross section for receiving and holding missiles 70, of the type shown in FIGURE 7.

The missiles may take different forms, but in the present instance the missiles include a soft leather pouch or bag 71 within which is disposed shot 72, the upper end of the pouch being closed and provided with a grommet 73. The grommets are free to slide upon the member

3

60 of the rack 57. Ends of the member 60 are turned at right angles to the missile carrying portion, as shown in FIGURE 1, in order to retain the missiles on the rack.

A target 80 is positioned on the front wall 2. Preferably the target 80 is intermediate the width of the front wall and substantially mid-way between the top of the front wall and the height of the wall 15. This position may vary but the position indicated has proved to be satisfactory in the playing of the game. As shown, the target when actuated, scores the highest number, and in the present instance is arbitrarily set at 1000, as shown at 81. Other numbers appear on the front wall 2 below the target to indicate scoring, as shown at 82 to 88 inclusive. These latter numbers are positioned above the different compartments of the drawer to the end that if the target 80 is missed by the player when throwing a missile, the missile will drop downwardly into one of the compartments of the drawer, which compartment will have some scoring value in accordance with the numbers at 82 to 88 inclusive. The arrangement is such in the play of the game that each time the target 80 is struck and actuated, a dial is rotated to indicate the number of strikes. This mechanism for the target is shown in the several figures and particular reference is made to FIGURE 5.

The target 80 includes a button or head 100 having a convex outer surface 101 centrally mounted on a shank 102. The shank moves within a guide sleeve 103 which sleeve is flanged at its outer end 104. The front wall 2 is bored to allow sleeve passage therethrough. The flange is braced by a pair of rings or washers 105 and 106 positioned on opposite sides of the front wall 2, the flange 104 engaging the washer 105 and the washer 106 having the sleeve 103 passed therethrough. The combination of washers and flange 104 are secured in working relationship with the front wall at the bore thereof by means of equidistantly spaced bolts carrying nuts, as shown generally in FIGURE 5 at 107. The sleeve 103 is longitudinally slotted at 108 and 109, the slots being diametric and the shank 102 carries a transverse pin 110, ends of which project beyond the periphery of the shank, as shown in FIGURE 5. The pin ends are received within the grooves 108 and 109 and function to prevent rotation of the shank 102 and likewise to limit movement of the shank in one direction; to wit: outwardly beyond the flange 104. The sleeve 103 is externally threaded at 111 to receive a nut 112 and interposed between the nut 112 and the pin 110 and surrounding the sleeve 103 is a helical coil spring 113. This coil spring normally urges the shank 102 outwardly, as indicated in the full line position of FIGURE 5. The shank 102 may be reciprocated within the sleeve from the full line position of the head 100 to the dotted line position of FIGURE 5.

An annular disk type dial 120 is positioned rearward of the front wall 2 with the shank 102 passed freely through the central bore thereof. The dial 120 bears graduations, as shown in FIGURE 4, from zero to nine in equally spaced sequence, as shown at 121.

Spaced inwardly from the dial and parallel thereto is an annular disk 122, disks 120 and 122 being held spaced apart and in parallel relationship by a series of equidistantly spaced apart spacer sleeves 123 through which are passed bolts 124, which bolts are passed through aligned openings in both disks, as shown in FIGURE 5. A drum 125, provided with a front flange 126, is secured to the disk 122, as shown in FIGURE 5. The drum and the disks 120 and 122 lie on the same axis, see FIGURE 2.

A spider 127 having in the present instance, four equidistantly spaced apart radial arms, has the outer extremity of the arms secured to the drum 125, see FIGURE 3. The spider is mounted upon a central bolt 128 in such a manner as to permit simultaneous rotation of the spider and the associated mechanism which includes the drum 125 and the disks 120 and 122. Bolt 128 supports the drum and associated elements by being secured to a support bar 129 which extends transversely between the sides

4

5 and 6 of the framing, see FIGURE 3. To assure stability, the ends of the radial arms of the spider are bent at right angles for engagement with the inner surface of the drum, see FIGURE 2 at 135. The bolt 128 is within a sleeve 136 having a flanged end 137 which is fastened or otherwise secured at the center of the spider 127. Generally, the bolt is only threaded at its inner end for the reception of a nut, the shank of the bolt otherwise being smooth so as to rotate readily within an opening provided for said bolt in the bar support 129.

The disk 122 is provided with internal, spaced apart teeth, here designated generally as 138. The teeth are adapted to be engaged by a dog or detent 140, see FIGURES 3 and 5. The dog 140 is carried upon the smooth head 141 of a screw 142, the screw portion of which is centrally received in a screw threaded opening 143 lying on the axis of shank 102. A coil spring 144 is provided for normally urging rotation of the dog 140 about the head 141 in one direction. The dog 140 includes an elongated arm 145 and a nose portion 146, the mounting for the dog 140 being eccentric relative to the head 141. See FIGURE 6. The shank 102 is provided with an extended pin 147 which functions as a stop for engaging the nose 146 to limit rotation, in one direction, of the dog 140 or detent. The spring 144 normally urges the nose 146 into engagement with the stop pin. The dog 140 is so positioned as to lie within the confines of the drum and disk 122 for engagement with a tooth 138. When the button 100 is pushed inwardly to the dotted line position of FIGURE 5, the shank 102 is likewise moved inwardly which moves the dog 140 out of engagement with a tooth 138. At this time the drum is rotated and the button 100, by being suddenly released and being moved back to the full line position of FIGURE 5 by the spring 113, brings the dog 140 into the path of movement of a succeeding tooth 138 of the disk 122, thus stopping rotation of the drum. Hence, from a zero indication on the dial, the next indication will be 1 and this indication may be viewed through lens 150 situated above the target 80 and held to the front wall 2 in any appropriate manner. Obviously the disk may be illuminated if desired, in any event the numbers on the disk are sequentially viewed through the lens 150.

To rotate the drum I provide a cable or chain 160 which is rove about the drum, as shown in FIGURE 2 at 161, one end of the cable being passed around a sheave 162 carried in a suitable bracket fastened to the inside of side wall 5 of the framing, the cable end carrying a weight 163 guided as to movement within a vertical tube 164. The opposite length of cable is passed around a sheave 165 carried by a bracket secured to side 6 of the framing with the cable end secured to a weight 166. Weight 166 is provided with a handle 167 which projects through a slot 168 in the side wall 6. There is a difference in weight between the weights 163 and 166, weight 166 being lighter. Thus when the zero numeral on the dial is visible through the lens 150 the parts are in the position of FIGURE 3. If the target head 100 is struck by a missile and moved inwardly to release the dog 140 from tooth engagement, the drum will be rotated by the weight 163 pulling upon the cable 160, to rotate the drum, the dog 140 returning under spring action for engagement with the following tooth to stop said rotation. When all nine numbers have been used, the drum is reset by moving the weight 166 downwardly by grasping the handle 167 to move said weight. It is evident that the dog 140 by rotating in one direction freely and the opposite direction being restrained, that the resetting of the drum and the dial is easy of accomplishment.

The operation, uses and advantages of the invention just described, are as follows.

To play the game, and assuming the indication on the dial is zero, one or more of the missiles are removed from a rack or racks and the player stands a certain distance away from the device. The missile is thrown or

5

tossed toward the target 80. If the target is missed, the missile will fall into one of the compartments of the drawer and give a certain score indication. If the target is struck, the dog 140 will move from tooth engagement and then return for engagement with a following tooth. Thus each time the target is struck, the drum will be permitted to rotate one number at a time on the dial. Supposedly, each target movement will give a high score such as 1000. After a given number of missiles have been tossed or thrown a game total is made by tipping the drawer downwardly on its hinge 9 to evaluate the missiles in the given compartments and under the numbers 82 to 88 inclusive, plus the dial indication if the target 80 has been struck. While the game appears simple, it is surprising how few times the target 80 will actually be struck by a missile.

The drawer is held in the position of FIGURE 2 by the magnets 25 but is easily tipped downwardly, and, of course, the entire device may be removed from the rear wall 1 or adjusted as to height by changing the location of the pins 54 and 55 in the keyhole slots 52.

The game will afford amusement to both young and old.

The scoring is, of course, arbitrary and the player notes which compartment the missile falls into if the target is struck. The numerical value of the compartment is deducted from the total score each time the target is struck.

The front wall 2 is preferably maintained in a vertical position and functions as the game board against which the missile is thrown.

I claim:

1. A game including a substantially vertically positioned playing board, a target carried by the playing board and toward which a missile is to be directed by a player, said target having a head extending forwardly from the front of the playing board, a shank secured to the head, a sleeve surrounding the shank, the sleeve extending through the playing board, an annular numbered disk dial positioned rearwardly of the playing board and freely surrounding the sleeve, an internally toothed disk spaced from the dial and fixedly secured thereto, the dial and the toothed disk being fixedly secured together; said shank provided at its end opposite the head with a swing dog; movement of the target head inwardly toward the front of the playing board releasing the dog from tooth engagement with the disk, means for rotating the toothed disk, means projecting the head outwardly from the playing board to bring the dog into engagement with a following tooth of the toothed disk, and means to move the dial one number at a time.

2. A game including: a substantially vertically positioned playing board, a target carried by the playing board and towards which a missile is to be directed to move the target inwardly of the playing surface of the playing board if the target is struck, said target having a head, a shank secured to the head, a sleeve surrounding the shank, the shank being passed through the playing board in substantially right angular relation to the plane of said playing board, and means surrounding the sleeve for normally urging the shank and the head forwardly of the playing surface of the playing board, a dog movably carried by the end of the shank opposite the head, means restraining the dog against rotary movement in one direction, an internally toothed annular disk surrounding the dog and in

6

position for tooth engagement with the dog, an annular disk dial bearing indicia freely surrounding the sleeve and means securing the dial and the annular toothed disk together for simultaneous movement, movement of the head inwardly toward the playing surface of the playing board moving the shank to momentarily release the dog from engagement with a tooth of the annular disk to permit rotation of said disk and the annular disk dial in one direction, said means when restoring the head and shank outwardly of the playing surface bringing the dog into engagement with a following tooth to stop rotation of the annular toothed disk and the dial.

3. The device as set forth in claim 2, characterized in that means is provided for rotating the annular toothed disk when the dog is released from tooth engagement.

4. The device of claim 3, said last named means comprising: a drum and a cable rove about the drum, the cable being weighted at its ends and the weights being unequal whereby the heavier weight will rotate the drum and lift the lighter weight.

5. A game including: a playing board adapted to be held substantially in a vertical position, a target towards which a missile is to be directed to effect a score, said target having a head positioned forwardly of the playing board, a shank passed through the playing board and supporting at one end said head, the opposite end of said shank positioned rearwardly of the playing board and provided with a dog, a disk type dial rearwardly of the playing board and an annular disk provided with internal spaced apart teeth for engagement and disengagement with the dog, means normally maintaining the head spaced forwardly of the playing board surface and for bringing the dog into tooth engagement, movement of the head inwardly toward the playing board surface releasing the dog from tooth engagement, means for rotating the annular toothed disk in one direction each time the dog is released from tooth engagement, and means to move the dial one number at a time.

6. The device as set forth in claim 5, said second named means comprising a drum secured to the annular toothed disk and a cable rove about the drum, the cable ends carrying weights one of which is heavier than the other whereby when the dog releases a tooth of the annular toothed disk the drum will rotate the third named means moving the dial one number.

References Cited by the Examiner

UNITED STATES PATENTS

866,222	9/07	Ripley	273—102.1
926,003	6/09	Johnston	273—102.1
1,754,030	4/30	Mattson	273—102.1
2,563,057	8/51	Neininger	273—102.4
2,636,739	4/53	Preston	273—102.1
2,691,526	10/54	Wesley et al.	273—102.4
2,809,039	10/57	Glass	273—102.1
2,861,808	11/58	Musser	273—102.1
2,992,003	7/61	Smolen et al.	273—102.1

RICHARD C. PINKHAM, *Primary Examiner*.

LEONARD W. VARNER, JR., EVON C. BLUNK,
Examiners.