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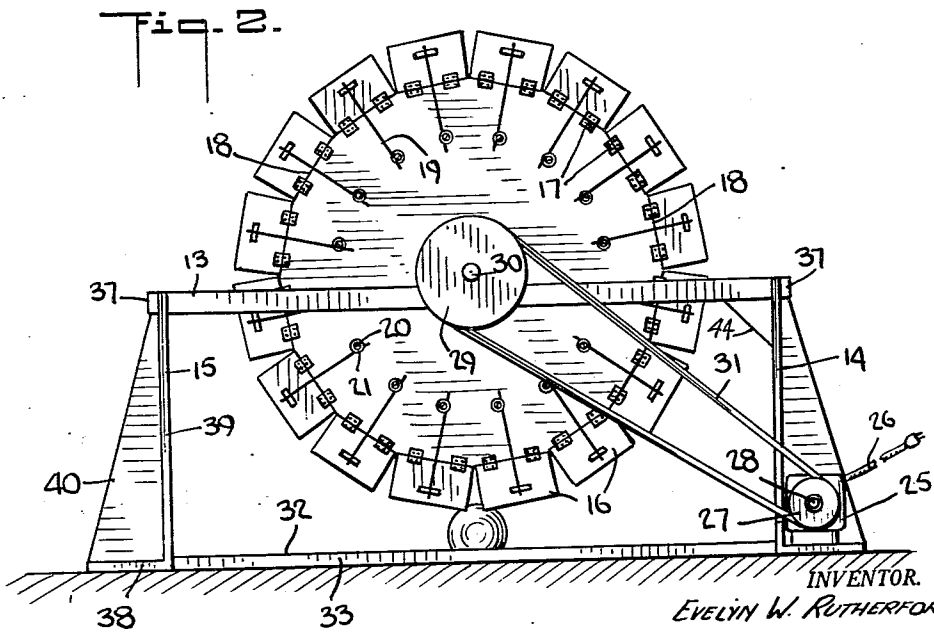
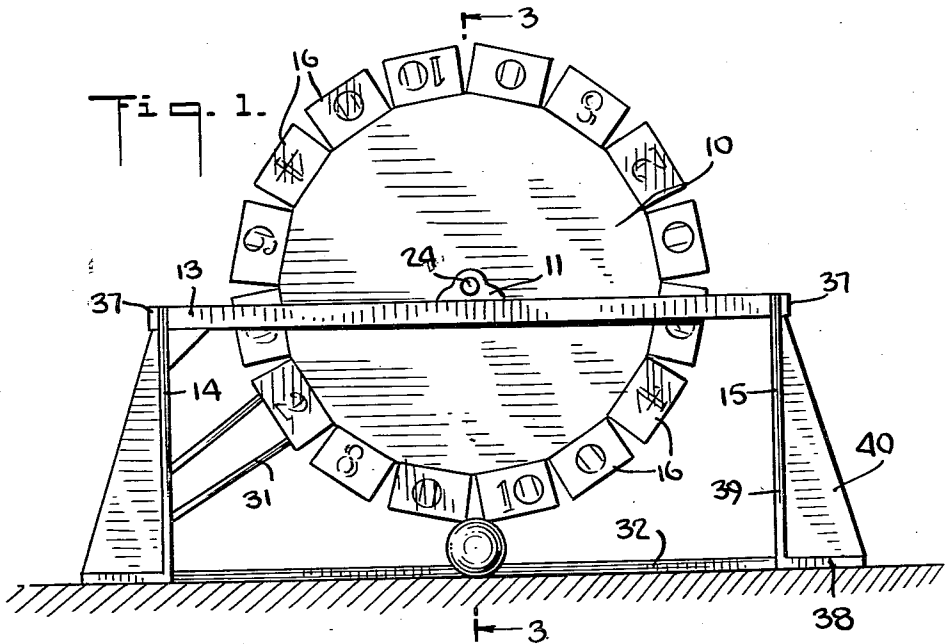
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BOWLING GAME

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2 Sheets-Sheet 1



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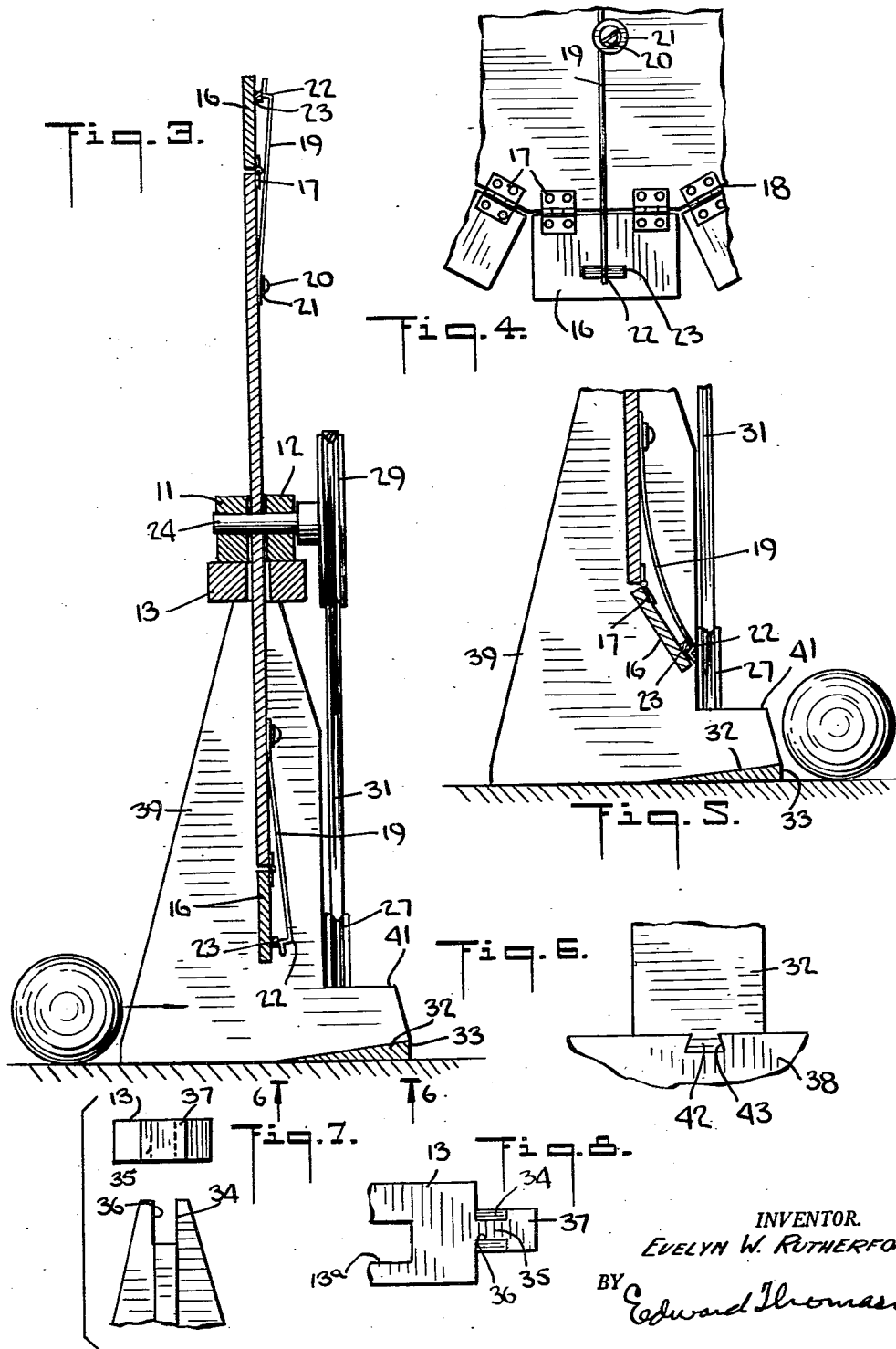
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BOWLING GAME

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3 Claims. (Cl. 273—127)

This invention relates to bowling games and is herein illustrated as embodied in a game especially adapted to be played indoors, in ordinary houses.

Games played by rolling balls against a group of upright pins are widely used, especially out of doors or on bowling alleys, and generally involve the serious disadvantage that either a player must go to the knocked down pins and set them up according to a specified rule or pattern, or else a complex pin setting device is employed.

These pin setting devices are expensive to install, often somewhat awkward in operation, and occupy expensive space behind the pins, and cumbersome.

According to the present invention, the pins are replaced by swingable battens or flaps radially hinged on a rotating wheel, and are easily swung on their hinges when struck by a rolling ball such as an ordinary croquet ball, swinging against the tension of a light spring which may catch on a lug and hold the swung flap.

In the form shown the device may be set close to a wall, leaving space only for the rolled ball to clear the wheel and leave it free to turn.

The flaps may carry various numeral values so a numerical score may be computed for each player, and a player's turn may end with a certain number of balls rolled.

At the end of a turn a player or spectator in a household may take the few steps to the wheel and snap the caught flaps back to radial position, ready for the next player.

The wheel may be continuously turned by a geared down electric motor, and the rate of turning so set as to add to the hazard of play for a large score.

The form shown includes a demountable frame which enables the device to be conveniently stored in a household closet with the uprights separately set.

If desired there may be included a cross bar adapted to lie on the floor behind the wheel to catch a ball rebounding from a wall at the rear, and thus keep the ball out of the way of a later struck flap.

Other features and advantages will hereinafter appear. In the accompanying drawings:

Fig. 1 shows a face view of the wheel and adjacent parts.

Fig. 2 shows a rear view of the same.

Fig. 3 shows a section on the line 3—3 of Fig. 1.

Fig. 4 shows some details of a flap and its adjacent parts on an enlarged scale.

Fig. 5 is a fragmentary sectional side view, including the parts shown in Fig. 4.

Fig. 6 is a horizontal detail seen from the arrows 6—6 of Fig. 3.

Fig. 7 is an exploded detail showing an end view of a support for the wheel journals and the standard into which it fits.

Fig. 8 is a top view of the standard end in place and shown exploded in Fig. 7.

In the form illustrated a wheel 10, shown as a solid

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disc, rotates in journals 11, 12 carried on opposite sides of the wheel 10, on a slotted cross bar 13, which in turn rests detachably on end standards 14 and 15.

The wheel 10 shown carries on its periphery flaps or battens 16, hinged to the wheel 10 by rear hinges 17 at the edge of short chords 18, so that the flaps 16 are side by side close together but swing independently of each other.

The front faces of the flaps 16 are normally held flush with the front face of the wheel 10 by wire springs 19 held by screws 20 and washers 21 to press the flaps 16 forward by pressing their stepped ends 22 on lugs 23 on the backs of the flaps 16. The screws 20 are shown as radially inward from the flaps, perhaps a third of the distance from the hinges 17 toward the shaft 24.

To play the game the device is usually set at one end of a room and the wheel 10 is set revolving slowly by starting an electric motor, shown in a reduction gear box 25, as by plugging its cord 26.

The most satisfactory speed of the wheel 10 is usually about six revolutions a minute, obtained by belting a small wheel 27 on the shaft 28 of the gear box 25 to a larger wheel 29 fastened to the rear extension 30 of the shaft 24 fastened to the wheel 10.

The wheels 29 and 27 preferably carry slotted faces to hold a cord or other small belt 31.

When the wheel is thus rotating a player at a distance rolls a ball, often a standard 3 inch croquet ball of wood or fairly hard elastic composition, toward the rotating wheel, with the hopes of knocking a flap or flaps 16 rearwardly, so the flap will be caught by its spring 19 and held.

A convenient size for an indoor wheel is thirty inches in diameter carrying sixteen flaps 16.

If the flaps are numbered, the player may endeavor to hit a single flap scoring 10, or two flaps 6 and 4.

When a ball has struck and swung back a flap or flaps it usually continues on. It may be prevented from rebounding from a wall behind the wheel 10 by suitable devices for keeping the ball clear of all flaps on the turning wheel as by a wedge shaped back bar 32 over which the ball rides easily when rolled by the player, but which blocks a rebounding ball by its flat rear face 33.

The game device of the present invention is shown as especially adapted to be disassembled readily so as to be readily stored in a household closet, and easily set up when wanted.

To this end the standards 14 and 15 are provided with slotted tops 34, so that a neck 35 (see Figs. 7 and 8, Fig. 8 showing only the top ends of the standard) fits into the slot 36, while an enlargement 37 beyond the neck 35 catches and holds the ends of the standard 14 or 15, holding the parts interlocked together, but easily separated.

In Fig. 8 the slot in the crossbar 13 is shown enlarged at 13a near the standards so as to permit the wheel to continue to turn even though a batten has been pushed back by a ball.

The standard 15 is shown with a wide or square base 38 carrying fixed to it a pyramidal end board 39, and a central triangular brace 40 projecting away from the wheel 10.

The standard 14 is similarly constructed, but carries the motor and gear box 25 in a corner between the brace and end board and the end board is shown cut away at 41 to clear the belt 31.

The wedge-shaped stopping bar 32 is shown at Fig. 6 and adapted to be removably caught by its tenon 42 in the mortise 43 of the base 38.

Thus the stopping bar 32 adds to the stability of the set-up device.

To further steady the set-up device and to take the

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pull of the belt 31, the cross bar 13 may carry a thrust brace 44 adapted to bear against the adjacent standard well below the top of the standard.

The device is readily disassembled by lifting the cross-bar 13 at the end opposite the belt, lowering the cross-bar end to slacken the belt, lifting the other end of the cross bar to free it, freeing the belt, storing the wheel still journalled in the cross bar slot, lifting the standards to free them from the tenons 42, storing the standards and then the wedge-shaped bar.

Having thus described one form of the invention in some detail, what is claimed is:

1. In a game device, a wheel having peripheral flaps, a spring for each flap holding each flap in either of two positions, a cross bar having a slot in which the wheel turns, journals for the wheel on the cross bar, a separate standard for each end of the cross bar and each having a top adapted to removably interlock with the cross bar, flat bases carrying the standards, and a ball controlling bar adapted to removably interlock with each of said bases and having a wedge shaped section highest at the back to arrest balls rebounding to the front.

2. In a game device, a wheel having peripheral flaps, a spring holding each flap, journals for said wheel, a cross bar having a slot in which said wheel turns on its journals and having enlargements near each end adapted to pass a swung flap, standards carrying said cross bar and re-

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movably intermeshed with it, a shaft turning with the wheel in said journals, a pulley fast to said shaft, a motor carried by one standard, and a belt driving said pulley by said motor.

3. In a game device, a wheel having peripheral flaps, a cross bar having a slot in which said wheel turns, journals carried by the cross bar supporting said wheel, standards for supporting said cross bar and adapted to be removably interlocked with it at its ends, a motor device for turning said wheel slowly by the motor and carried by one of the standards, and a ball control device bar adapted to be removably interlocked with the standards to connect them at their bottoms.

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