No. 619,897.

E. G. MATTHEWSON.

Patented Feb. 21, 1899.

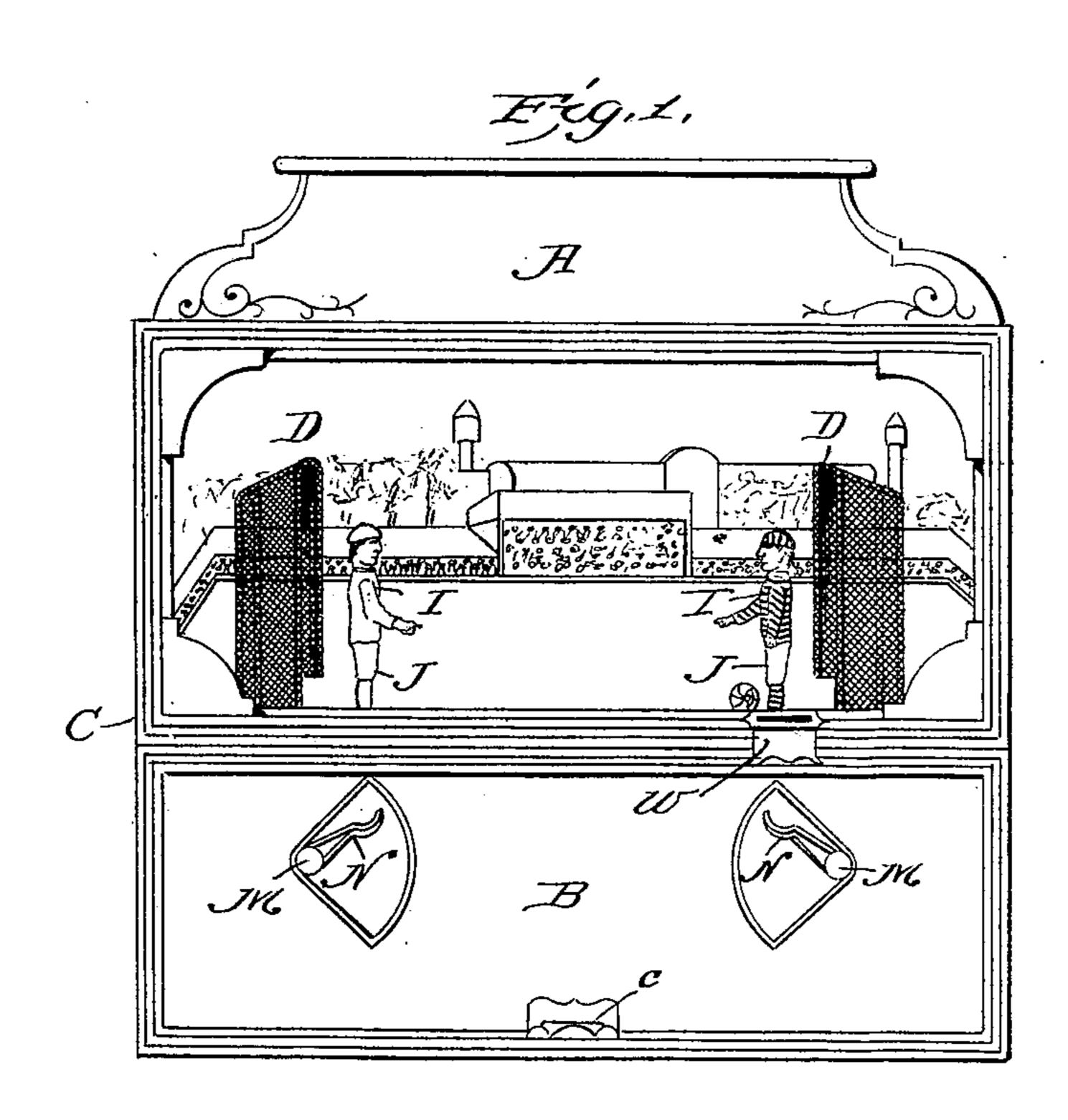
(Application filed Dec. 24, 1897.)

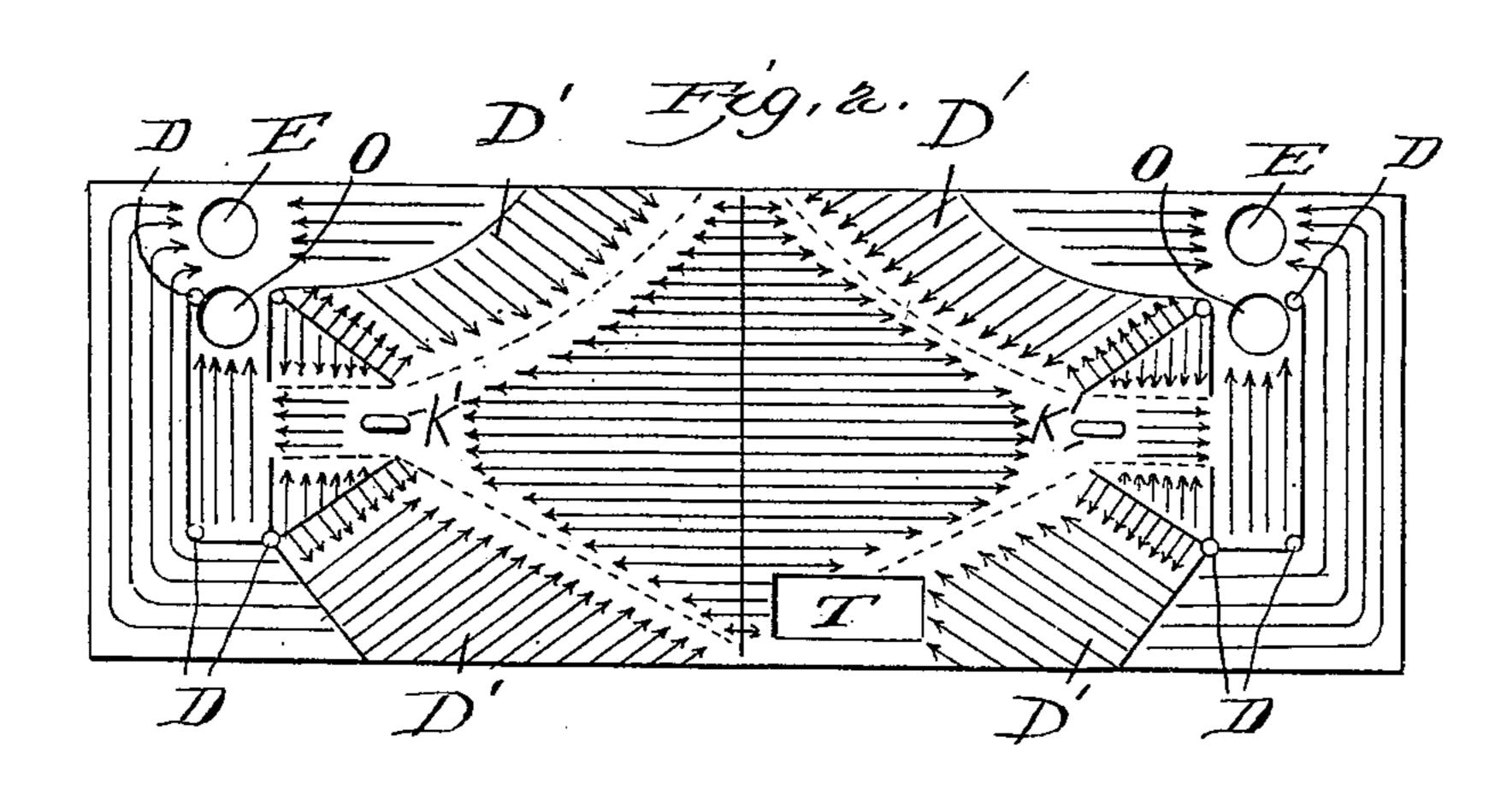
COIN FREED GAME.

(Application nied Dec. 24

(No Model.)

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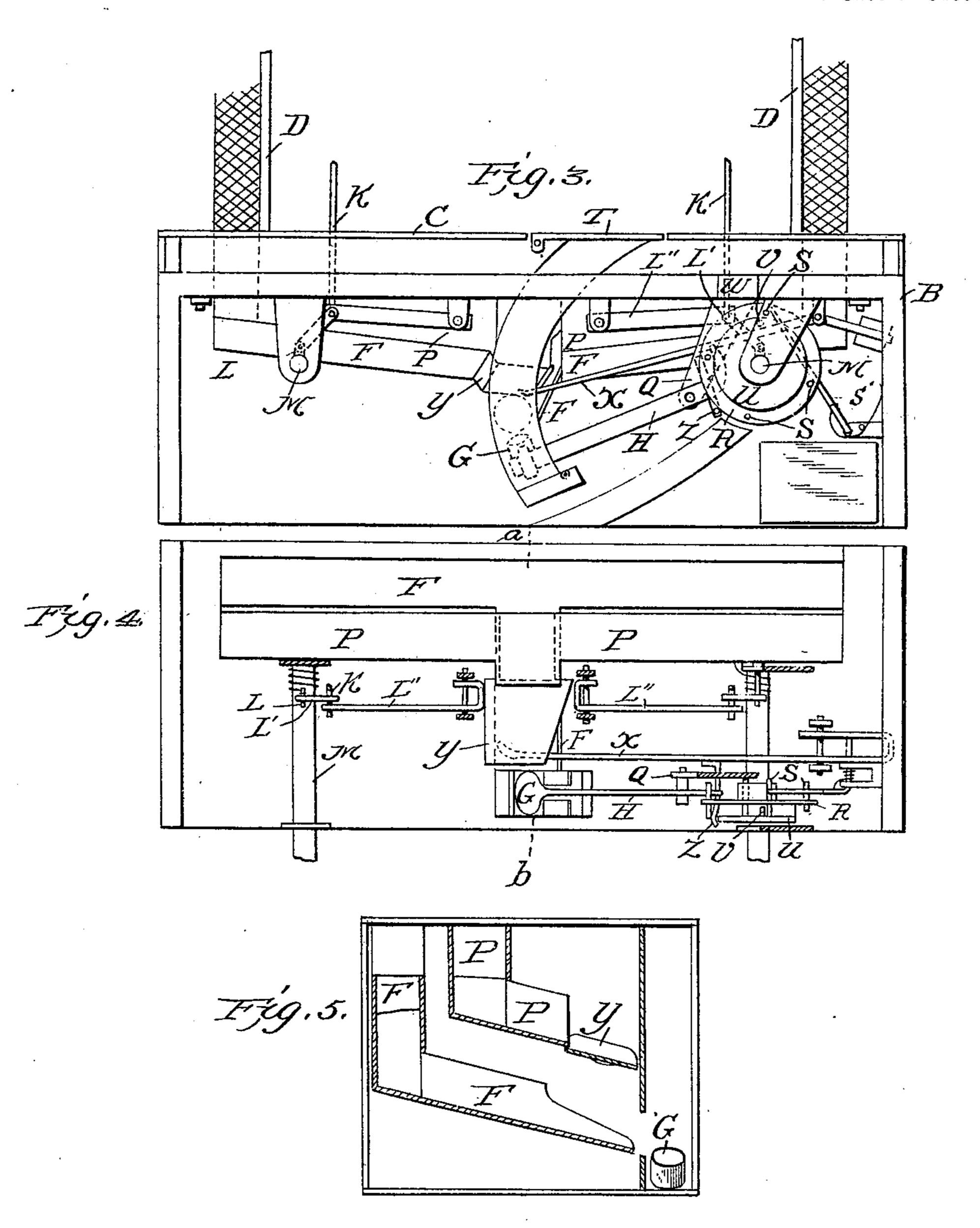
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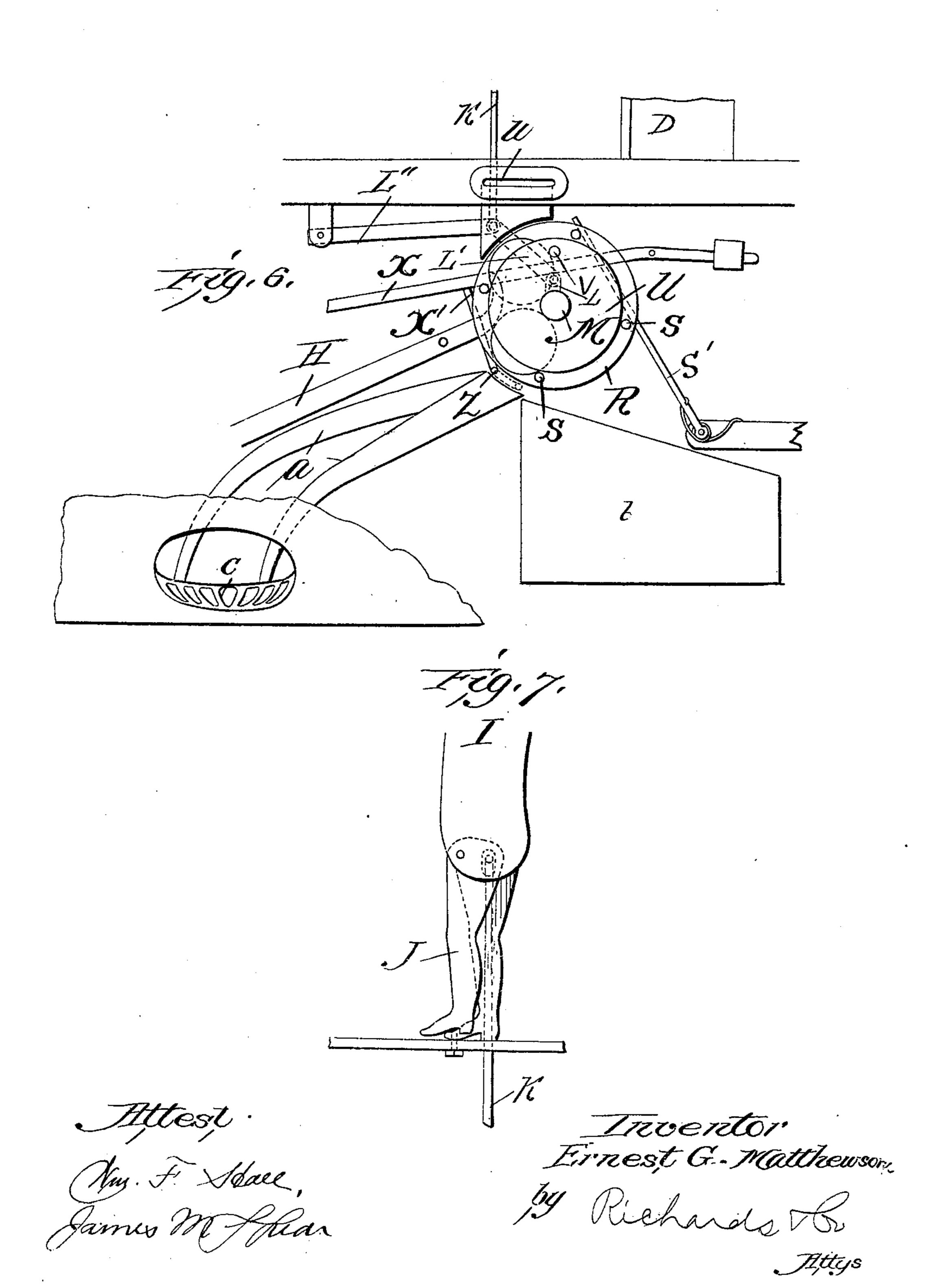
COIN FREED GAME.

(Application filed Dec. 24, 1897.)

(No Model.)

Patented Feb. 21. 1899.

3 Sheets-Sheet 3



United States Patent Office.

ERNEST G. MATTHEWSON, OF LONDON, ENGLAND.

COIN-FREED GAME.

SPECIFICATION forming part of Letters Patent No. 619,897, dated February 21, 1899.

Application filed December 24, 1897. Serial No. 663, 347. (No model.)

To all whom it may concern:

Be it known that I, ERNEST GEORGE MAT-THEWSON, a subject of the Queen of Great Britain, and a resident of Upper Norwood, 5 London, county of Surrey, England, have invented an Improved Coin-Freed Game, of which the following is a specification.

This invention has been patented in Great Britain under date of May 7, 1896, No. 9,731.

The object of my invention is to construct a model of a foot-ball game which cannot be used unless a coin or the like is inserted in the machine, and to carry my invention into effect I construct my improved coin-freed

15 foot-ball game, as follows:

In the accompanying drawings, Figure 1 is a front elevation of the complete machine. Fig. 2 is a plan of the field upon which the game is played. In this plan the heavy lines 20 indicate the high parts, the dotted lines the low parts, and the arrow-headed lines the direction of the slopes. Fig. 3 is an elevation of the box beneath the glass-fronted case with the front removed, showing the mechanism. 25 Fig. 4 is a plan of Fig. 3. Fig. 5 is a section through a b, Fig. 4. Fig. 6 is an enlarged detail view of the parts in proximity to the right-hand handle of the apparatus. Fig. 7 is an enlarged detail view of a sufficient por-30 tion of one of the figures to illustrate the movable leg.

Similar letters denote corresponding parts

throughout the drawings.

A is a suitable case with a glass front, hav-35 ing a base B about six inches deep, inclosed to form a box. The top of this box forms the bottom of the glass-fronted case. This represents the field C and is so shaped that the highest part is in the center and sloped from 40 the center to each side. A short distance from each side of the case model goal-posts D are fixed. Sloping guides D', which are only raised parts in the field, extend in an oblique direction to the main slopes, and thus 45 if the ball drops upon the field near the central part it will run to one side or the other and be guided by the guides D' to a position in the center of one of the goals. If the ball runs down either side of either of the goals, it so will run down behind and through one of the holes E in the field and be conducted underneath the base or field, by special channels F, I

into a bucket G, which is attached to a lever H, fitted in the box beneath the field. In the center between each of the pairs of goal-posts 55 a model of a man I is fixed by one leg, the other leg J being pivoted and fitted with a connecting-rod K, passing down the fixed leg, as shown in dotted lines in Fig. 7, through the base or field at hole K', Fig. 2, into the 60 box beneath. This rod is actuated through connecting-rods L' and L" by cranks L, attached to spindles M, which pass through the front of the box under the case, terminating in small handles N in the front of the base of 65 the case, one handle on each side of the front of the case. By partially depressing these handles the pivoted leg of either model-man, according to which handle is depressed, is made to kick. It will be seen that if the ball 70 runs down the central longitudinal part of the field or base-board it is directed in front of the kicking-leg of the model-man whichever side it happens to roll, and by depressing that side handle the model-man in connection there- 75 with is made to kick the ball, and if kicked in the proper direction it will go past the opposite man through the goal. At the back of each goal a screen or goal-net is fixed, which causes the ball to fall. It is then led 80 by slopes through one of the holes O beneath the base-board or field into channels P, leading to a position in the inclosed box just above the position that the channels F lead the ball if it went on either side of the goals. 85 The ball may hit the opposite man or one of the opposite goal-posts instead of going between the posts, and if so it rolls down and is led by the shape of the base or field in front of one of the men again, when it may 90 be kicked again and again until it either goes through a goal or on either side of one of them. In either case the ball is led by the sloping channels F or P in the box to a position near the front of the base-box, that from 95 the goals P being above and that from either side of the goals F being below. If below, it falls directly into the bucket G, attached to the lever H, the said lever being pivoted to a bracket Q, fixed in the box. The short end 100 of the lever or the opposite end to that to which the bucket is attached is arranged to come by the side of a disk R, running loose upon one of the spindles M, extending through

the front of the case or base-box, by which the model-man's leg is actuated. Through this disk four pins S are fixed at equal intervals near its periphery, projecting on each 5 side. Those at the back come in contact with and actuate the bucket-lever H, and if the disk R is rotated a quarter of a revolution one of the pins S depresses the short end of the lever H, thus raising the bucket end of 10 it, which contains the ball and carries the ball up through a trap-door T in the base or field and delivers it. The ball then runs down to one man or the other, as previously described. Upon the same spindle M, in front 15 of the disk R, a second disk u is fixed, so that when the spindle M is partially turned by the handle N this disk u turns with it, and upon this disk, facing the loose disk R, one pin V is attached at a lesser radius than the pins S 20 on the loose disk, so as to clear in passing. A coin-chute W, leading from the front of the case, delivers the coin between these two disks R and u, and it falls on the spindle M between one of the four pins S on the loose 25 disk R and the pin V upon the fixed disk u. Thus the coin forms a connector from the fixed disk to the loose disk, and if the handle N be now depressed from the outside of the case the fixed disk would drive the 30 loose disk a quarter of a revolution, the distance to which the movement of the handle is limited by stops. The loose disk will in turn raise the bucket end of the lever H and deliver the ball in the field to be played with. 35 The coin is held in position near the bottom of the loose disk by an extension X' of a lever X, one end of which lever is pivoted to a bracket at the end of the box. This lever is long enough and is shaped to reach to 40 the end of the upper channel P, down which the ball rolls when it passes through either goal, and this end of the lever carries a tray Y, into which the ball rolls. A pin Z projects from the extension X' in a position to 45 just come under the two disks, and the lever is counterweighted to keep the tray end elevated and the projecting pin Z touching the periphery of the disks R and u, so that when the coin pushes the loose disk R around and 50 reaches a position near the bottom it is held there by the pin Z, and the fixed disk u and handle N return to their normal positions by means of a spiral spring fixed around the spindle M, one end of the said spring being fixed 55 to the bracket supporting the inner end of the spindle and the other end to the spindle itself. When the next coin is inserted in the machine, it falls between the disks R and u, but above the next projecting pin S upon the 60 loose disk, and the movement of the handle N again partly revolves the two disks. This movement carries the previous coin past the before-mentioned pin Z upon the lever X, and it falls into a suitable receptacle b, and the 65 last coin takes the place of the previous one and is held by the pin Z, as before. Should the ball be kicked through either goal, it

goes, as described, down the upper channel P and falls into the tray Y of the lever X, and its weight depresses the lever, thus allowing 70 the ball to descend and roll off the tray into the bucket the same as if it had rolled down the lower channel F; but the depression of the tray-lever X causes the pin Z, affixed to it, which was in contact with the periphery 75 of the disks R and u, to be depressed also, and this allows the coin to fall out from its position. Directly the ball falls from the tray into the bucket, the counterweight raises the lever X to its former position. If this hap- 80 pens, the coin falls short of the receptacle b, where it would fall if carried past the leverpin Z by the next coin, and falling in this position it is led by a guide a (see Fig. 6) out of the box into a receptacle c in front and 85 is therefore returned to the person using the machine. Thus it will be seen that when the ball is kicked on either side of the goal it is lost to the user and the coin is retained by the machine. If, however, it is kicked through 90 a goal, the ball is likewise lost to the user until again freed by a coin; but in this case the coin is returned to the user, and if the ball does neither of these things it runs back upon the field in front of one or the other of the 95 model-men to be kicked again until one or the other of the foregoing alternatives happens. A spring-actuated rod S' bears against the pins S and serves to cause the disk to come to rest in the correct position to receive the 100 next coin between disks R and u.

Various modifications may be made, hockey or other ball games may be substituted for foot-ball, and any suitable materials may be

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I claim— 1. A coin-controlled game apparatus comprising a field, figures oppositely located thereon having each a movable leg, said field having sloping portions adapted to center a 110 ball in proximity to the movable leg of one of the figures, means for operating said movable legs and coin-controlled mechanism for delivering the ball upon the said field, substantially as described.

2. A coin-controlled game apparatus, comprising the field, the goal-posts, the figures located in proximity to the goal-posts and having each a movable leg, means for operating said legs said field having sloping portions 120 adapted to center a ball in proximity to one of the figures, coin-controlled mechanism for delivering a ball upon the field and means for returning the ball to the field after it has passed in rear or through the goals, substan- 125 tially as described.

3. A coin-controlled game apparatus, comprising a field, figures oppositely located thereon, and having each a movable leg, said field having sloping portions adapted to cen- 130 ter a ball in front of one or the other of said movable legs, a spindle in connection with the movable leg beneath each figure extending to the front of the apparatus and having

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an operating-handle, ball-delivering mechanism for delivering the ball upon the field and coin-controlled mechanism interposed between the ball-delivering mechanism and one 5 of the spindles, whereby the rotation of the handle will deliver the ball into the field,

substantially as described.

4. A coin-controlled apparatus, comprising the field, the goal-posts, the figures having 10 movable legs, coin-controlled means for delivering a ball into the field which is centered in front of one of the movable legs of the figures means for operating the movable legs, channels leading from opposite ends of the 15 field to the central portion beneath said field, and an elevating device for raising the ball to the surface of the field at the center there-

of, substantially as described.

5. A coin-controlled game apparatus, com-20 prising the field, the goals located near each end thereof, the figures located in proximity to said goals, each of said figures having a movable leg adapted to strike a ball to knock it toward the opposite end of the field, a spin-25 dle and operating-handle located in proximity to each figure, mechanism interposed between each spindle and figure whereby the rotation of the spindle causes the figure to strike the ball, coin-controlled means for returning 30 the ball to the center of the field, and means

for returning the coin to the operator under certain circumstances, substantially as de-

scribed.

6. A coin-controlled apparatus comprising the field having goal-posts and two openings 35 at each end, figures located in proximity to said goal-posts and having movable legs, said field having sloping surfaces between the figures adapted to center a ball in proximity to one of said movable legs, and having sloping 40 surfaces between the goal-posts adapted to deliver the ball to one set of openings and sloping surfaces outside the goal-posts adapted to deliver the ball to the other set of openings, channels connecting said openings with 45 the central portion of the field beneath the same, an elevating apparatus adapted to receive the ball from the channels and deliver it to the central portion of the field, coin-controlled mechanism for operating the ball-ele- 50 vating apparatus, and means controlled by the passage of a ball through one set of channels for causing the delivery of the coin back to the operator, substantially as described.

In witness whereof I have hereunto set my 55

hand in presence of two witnesses.

ERNEST G. MATTHEWSON.

Witnesses:

H. F. TALLACK, FRED C. HARRIS.