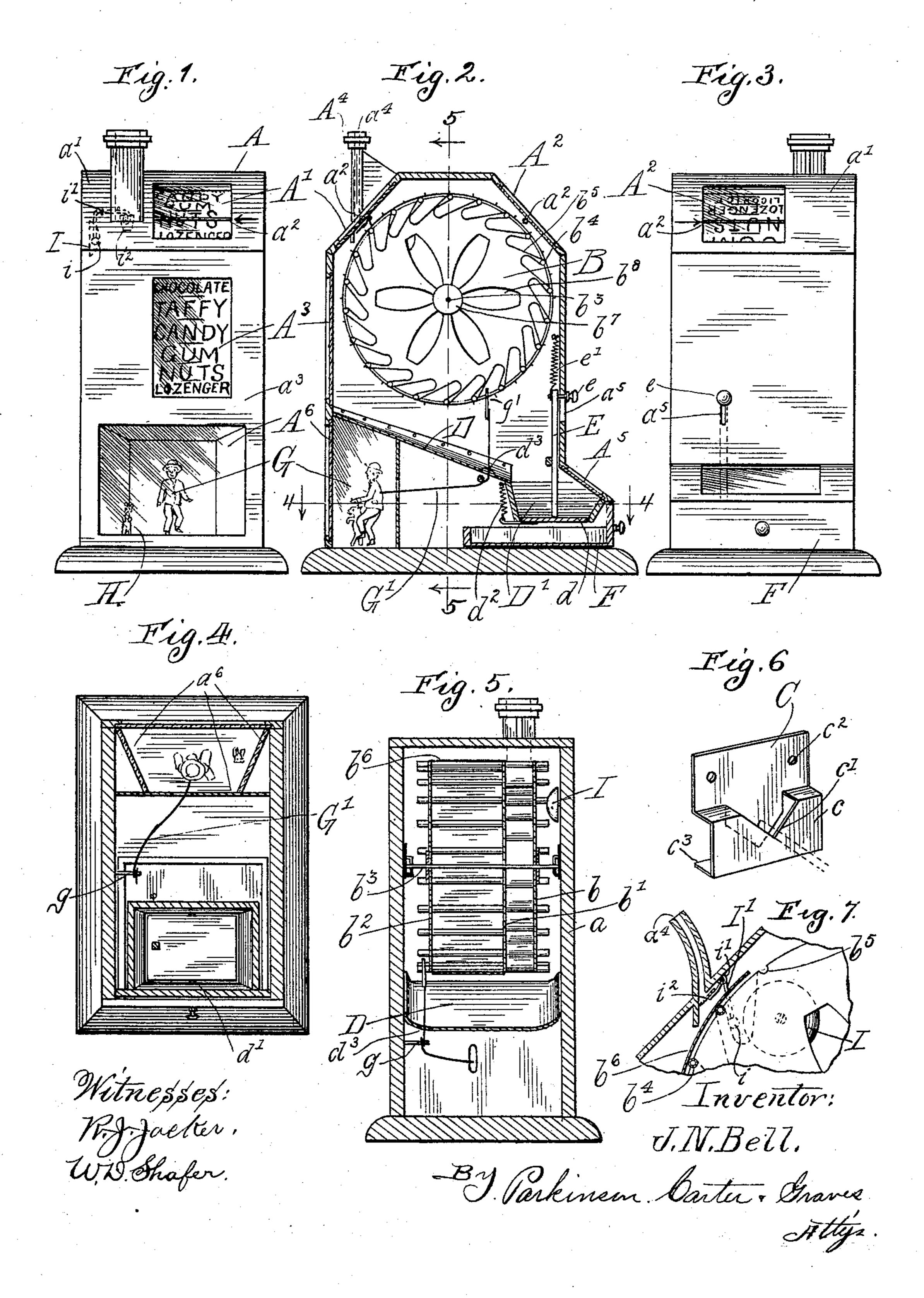
## J. N. BELL. SLOT MACHINE.

No. 585,077.

Patented June 22, 1897.



## United States Patent Office.

JONAS N. BELL, OF CHICAGO, ILLINOIS.

## SLOT-MACHINE.

SPECIFICATION forming part of Letters Patent No. 585,077, dated June 22, 1897.

Application filed January 28, 1897. Serial No. 621,005. (No model.)

To all whom it may concern:

Be it known that I, Jonas N. Bell, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of 5 Illinois, have invented certain new and useful Improvements in Slot-Machines, of which

the following is a specification.

My invention relates to that class of devices in which a rotary wheel or indicator is ro set in motion by the weight of a coin dropped through a slot in the machine-casing and acting on suitable mechanism to produce the desired rotation and in which any one of a variety of articles will be designated, either 15 by name or by an equivalent characteristic, according to the position in which the wheel or dial comes to rest.

The invention is intended more particularly for use in confectionery and cigar stores and 20 like establishments in which the attraction of the element of chance thus introduced is considered a desirable means of inducing purchasers to buy the goods of the class for which the machine is in each instance particularly

25 designed.

The object of the invention is to provide a simple and cheap construction in which the wheel or rotary indicator will be of such light weight and easy-running qualities that it will 30 be readily set in motion by the coin for which it is intended, in which the construction and arrangements of the parts will be such that the reading indicated by the stopping of the wheel at any point will be equally visible to 35 the purchaser who has operated the device and to the salesman behind the counter and on the opposite side of the machine, and in which certain other desirable characteristics will be attained, as will hereinafter appear.

The invention consists in the matters herein 40 set forth and more particularly pointed out

in the appended claims.

In the accompanying drawings, Figure 1 is 45 ed in accordance with my improvements. Fig. 2 is a sectional side elevation thereof. Fig. 3 is a rear elevation. Fig. 4 is a horizontal sectional view taken on line 4 4 of Fig. 2. Fig. 5 is a transverse sectional elevation taken 50 on line 5 5 of Fig. 2. Fig. 6 is a perspective detail of one of the bearing-plates for the

wheel. Fig. 7 is an enlarged sectional detail showing more particularly the construction of the wheel at its periphery and the bell mechanism.

In said drawings, A designates an outer casing made of wood or sheet metal or other suitable material, and preferably of some attractive or unique design—such, for example, as the crude representation of a house, herein 60 illustrated.

B designates a rotary wheel of extremely light construction and consisting, as herein shown, of three circular disks of cardboard or paper or other light material, (designated b, 65 b', and  $b^2$ .) Said disks are perforated at their centers by a wire or light rod  $b^3$ , which forms the axle of the wheel and is mounted at its extremities in bearing-plates C, secured to the inner surface of the side walls a of the 70 casing. At their peripheries said disks are connected by bars  $b^4$ , which are desirably made of ordinary paper tubing and are seated in marginal notches  $b^5$  in said disks so, as to lie parallel to the axle  $b^3$ .

The spaces between the disks b and b' and between the tubular connecting-bars  $b^4$  are utilized in the construction of pockets  $b^5$  for receiving the coin by which the wheel is rotated, said pockets being herein shown as 80 formed by looping a strip of stiffened cloth or fabric between the bars, as shown in Fig. 2. The other side of the wheel between the disks B' and  $b^2$  is covered by a cylindric wrapping  $b^6$ , on which are printed the names of a num- 85ber of articles or varieties of merchandise to be sold—such, for example, as "Candy," "Gum,"

"Nuts," "Lozenges," &c. The centers of the pasteboard disks may be strengthened by reinforcing-pieces  $b^7$ , and the bodies of the disks 90 may be cut away, as at  $b^8$ , to lighten the structure.

A' and A<sup>2</sup> designate two observation-openings provided at the front and rear, respeca front elevation of a slot-machine construct- | tively, of the machine and desirably arranged 95 in sloping top corner-walls a' of the top of the casing. Said openings will ordinarily be glazed and are each provided with a transverse wire or equivalent mark or marking device  $a^2$ , located adjacent to the periphery 100 of the wheel B and intended for the purpose of marking the article to be delivered to the

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customer. The object of providing two such indicating-marks is that the customer in front of the counter and the salesman at the rear of the counter may simultaneously be apprised 5 of the purchase indicated, and to this end the names of the objects or kinds of merchandise appearing on the wheel are arranged in regular series, which series is repeated two or more times, so that each name appears more than 10 once. The spacing of the names is, furthermore, such that the difference, measured in degrees, between two names of the same object is just equal to the angular distance between the marking-wires  $a^2$  at the front and 15 rear openings A' and  $A^2$ , considered with reference to the axis of the wheel B. With this construction it is obvious that at whatever point the wheel stops both of the wires will indicate the same kind of merchandise or ar-20 ticle, and the salesman may therefore proceed at once to procure the article from the shelves or cases without waiting to examine the indication made at the opening on the opposite side of the machine through which the cus-25 tomer is looking. A third glazed opening A<sup>3</sup>, arranged in the front wall  $a^3$  of the machine below the opening A', is herein shown as a means of affording the customer a more complete view of the range of chances offered. The slot for receiving the coin is located at a convenient point in the upper front por-

tion of the machine above the pockets  $b^5$  of the wheel B, and is herein shown as a representation of a chimney  $A^4$ . A coin dropped 35 through the slot will lodge in one of the pockets  $b^5$  of the wheel and by its weight start the latter to rotating. When the pocket in which the coin has lodged reaches the lower part of its path of revolution, the coin will slip out 40 and is guided by an inclined plate D into a hopper D' in the lower rear portion of the casing. As herein shown, this part of the casing is extended rearwardly and provided with an upper and rearwardly-facing glazed 45 opening A<sup>5</sup>, through which the salesman may view the coin deposited and make sure that it is genuine and that a washer or other substitute has not been surreptitiously used instead of a coin before delivering the merchan-50 dise called for.

The bottom d of the hopper D' is mounted on pivots d' and may be dumped by means of a bar E, having a connected handle e, which projects through the rear wall of the casing. 55 The coin then falls into a cash-drawer F, which

will preferably be locked by any suitable device. (Not herein illustrated.) A spring  $d^2$ serves to normally hold the hopper-bottom d in its closed or horizontal position, and a simi-

60 lar spring e' normally raises the bar E free from said hopper-bottom and maintains the handle e at the upper part of the slot  $a^5$ , through which it projects.

As a further improvement for the purpose 65 of adding attractiveness to the apparatus, particularly when used for selling confectionery and the like to children, I have herein l

shown a puppet or toy figure G, supported upon the end of a vibrating wire G'. Said wire is loosely mounted upon a supporting-peg 70 g, projecting from the side wall of the casing, and extends upwardly and thence through an aperture  $d^3$  in the inclined plate D, its upper extremity being formed by an attached flexible piece g', of felt or other suitable ma- 75 terial, which projects upwardly into the path of the peripheral bars  $b^4$  of the wheel, so that when the wheel is rotated the puppet G is given a vibratory or dancing motion, but without interfering materially with the turning 80 of the wheel. A glazed window  $\Lambda^6$  in the lower part of the front wall of the casing renders such puppet visible, and reflecting-surfaces  $a^6$  may be provided at the back and sides of the puppet to improve the effect. 85 Additional toy figures H of a stationary nature may be also introduced for this purpose.

As a simple and economical form of bearing for supporting the wheel-axis with little friction I have devised that shown in detail 90 in Fig. 6. The bearing is formed of a sheet of tin or the like, having its lower portion cstruck forward and provided with a central notch c', in which the axle end may rest. Apertures  $c^2$  in the upper portion of the plate 95 permit it to be readily tacked to the inside of the casing, and when the top of the latter is removed the wheel may be lifted in or out of its bearings at pleasure. The lower edge  $c^3$ of the plate is bent back, as shown, into the roo plane of the top of the plate and rests against the casing-wall, so as to steady the bearing.

To give notice to the salesman when the wheel is operated and to offer a further feature of attraction, a bell I is arranged to be 105 rung whenever a coin is dropped through the slot. Said bell (shown in detail in Fig. 7) is fastened to the side wall of the casing just far enough within the periphery of the wheel to escape contact with the projecting end of 110 the tubular bars  $b^4$  and is struck by a hammer i, carried by an oscillatory arm or wire I', which is pivoted by being bent at right angles and passed through staples i'. The opposite end of the pivot portion is then bent again 115 at right angles and provided with a tip  $i^2$ , which projects beneath the slot  $a^4$  into the path of the falling coin. The impact of each coin upon the lever-arm thus swings the hammer against the bell and sounds the same.

The tip  $i^2$  of the arm which projects beneath the slot is preferably made of leather or other flexible material which will bend to permit the coin to pass freely, though stiff enough to accomplish the ringing of the bell. The 125 slot  $a^4$  in Fig. 6 is, as a further improvement, shown as curved to prevent the operation of the wheel by a pencil or the like thrust into the slot.

Obviously various changes may be made 130 in the details of construction without departing from the broad spirit of the invention, particularly insomuch as pertains to the double-indicator feature.

I claim as my invention—

1. A slot-machine provided with a wheel adapted to be actuated by a coin and bearing on its periphery different names arranged in two or more series, and indicators on the opposite sides of the machine arranged to simultaneously designate the same name of two series.

2. A slot-machine provided with a casing, a rotary wheel adapted to be actuated by a coin, observation-openings at the front and rear of the casing, and indicators at the observation-openings, the periphery of the wheel being marked with a plurality of names each of which appears more than once, and so arranged that two like names are always indicated by said indicators.

3. A coin-actuated wheel for slot-machines made of a plurality of disks mounted on a common axle, and connected at their peripheries by bars arranged parallel to said axle, and a series of coin-pockets formed by looping a strip of fabric between said bars.

4. A coin-actuated wheel for slot-machines formed by a plurality of disks mounted on a common axle, peripheral notches in said disks, tubular bars resting in said notches parallel to said axle and coin-receiving pock-

ets formed by looping a strip of fabric between the tubular bars.

5. A slot-machine comprising casing A provided with observation-openings A' and  $A^2$  with indicators  $a^2$  thereat, the wheel B bearing on its periphery the names of merchandise articles arranged in regular series and 35 repeated whereby the same name is marked by the indicators at the two openings, and also provided with coin-receiving pockets arranged to rotate beneath the coin-slot, inclined plate D, hopper D', tilting hopper-bottom d, and cash-drawer F, substantially as described.

6. In a slot-machine, the combination with a vending-wheel marked with merchandise articles and an indicator, of a vibrating wire 45 extending into proximity to peripheral projections on said wheel, a flexible tip on the wire for engaging said projections, and a puppet mounted on the opposite end of the wire whereby the rotation of the wheel under 50 the weight of the coin causes the puppet to vibrate substantially as described.

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Witnesses:

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