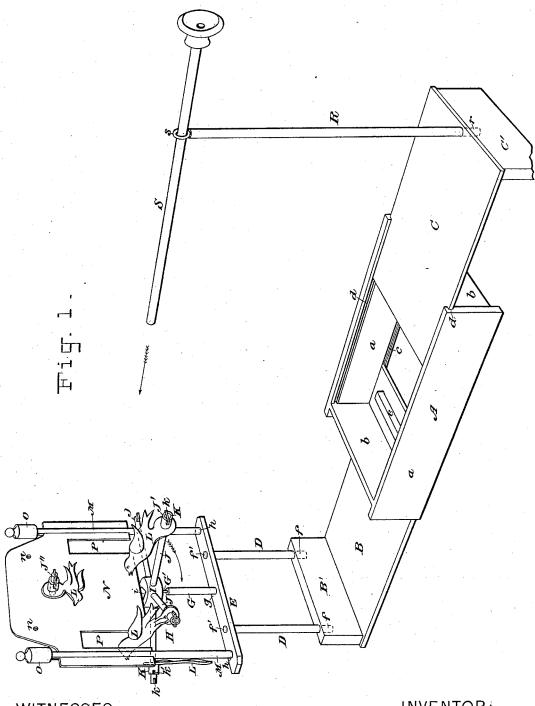
## W. W. BARNES. TOY SHOOTING GALLERY.

No. 264,125.

Patented Sept. 12, 1882.



WITNESSES:

& B. Bolton

Restructions

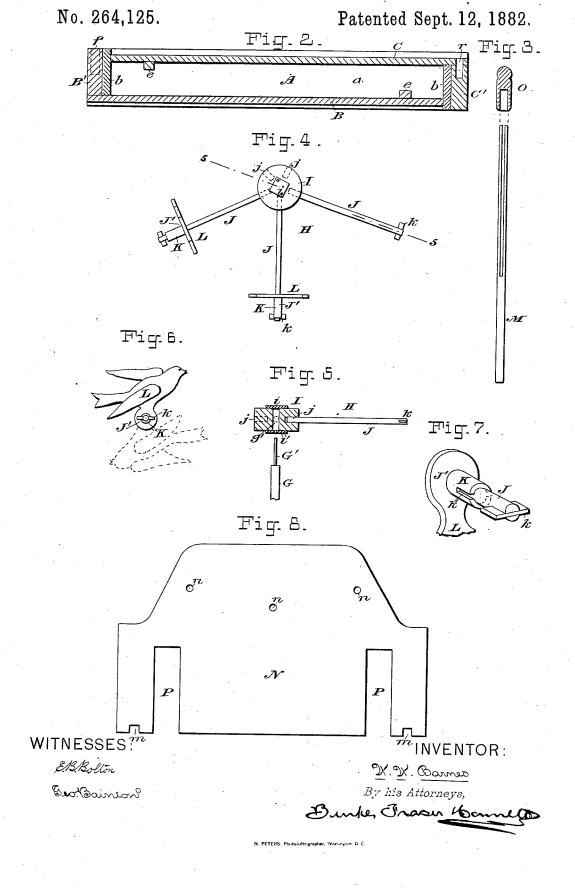
INVENTOR:

M. M. Barress

By his Attorneys,

Bunk France 1 Bom

## W. W. BARNES. TOY SHOOTING GALLERY.



## United States Patent Office.

WESLEY W. BARNES, OF NEW YORK, N. Y., ASSIGNOR TO McLOUGHLIN BROTHERS, OF SAME PLACE.

## TOY SHOOTING-GALLERY.

SPECIFICATION forming part of Letters Patent No. 264,125, dated September 12, 1882. Application filed April 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, WESLEY W. BARNES, a resident of the city, county, and State of New York, have invented certain new and useful 5 Improvements in Toy Shooting-Galleries, of which the following is a specification.

My invention is shown in the accompanying drawings, wherein Figure 1 is a perspective view of my toy as a whole, set up and ready to for use, and the remaining figures are detail views of parts thereof, which will be hereinaf-

ter described.

A is a box of peculiar construction, which serves to inclose the various parts of the toy 15 when not in use, and answers also as a support or foundation for them when in use. It is shown open in perspective in Fig. 1, and in longitudinal vertical section in Fig. 2, where it is shut up. The two side pieces, a a, and 20 end pieces, b b, are fastened permanently together and form the body portion of the box. The bottom B thereof slides longitudinally in grooves cc, formed along the lower edge of the sides a a, and the lid or cover C slides out in 25 the opposite direction in grooves d d, formed along the upper edge of the sides a a. To the outer end of the bottom B is fixed an upright board or end piece, B', which, when the bottom is slid in to form a closed box, fits close 30 against the end piece b and enters a recess formed by extending the sides a a beyond the end pieces, b b. The lid C is also provided with a similar end piece, C', fixed to its under side and entering a like recess in the opposite 35 end of the box when the lid is closed.

To prevent the drawing out of the bottom B and lid C too far, a cleat, e, is fixed to each, near its inner end, so as to strike the end piece b when drawn out to the proper extent.

All the other parts of the toy are inclosed in

the box for packing or shipment.

When the toy is to be set up the lid C of the box is slid open and the inclosed pieces taken out. The bottom B is then slid out, as shown 45 in Fig. 1, to a greater or less distance. Two wooden pins, D D, are then stuck into two vertical holes, ff, bored into the cleat B'. On the upper ends of these pins is fitted a cross-

piece, E, having five holes—two holes (lettered ff) to engage the upper ends of the pins D D, 50 a middle hole, g, and two end holes, h h. Into the middle hole, g, is stuck a short vertical wooden pin, G, having a metal pin, G', projecting from its upper end, as shown best in Fig. 5. A flier, H, (shown in part in plan in 55 Fig. 4 and in vertical cross-section in Fig. 5,) is then put together. This flier consists of a central hub, I, and a number of radial arms or spokes, J J. The hub I is a short cylindrical block of wood, with a number of horizontal ra- 60 dial holes, j j, bored into it a short distance, and with a central vertical axial hole, g', a little larger than the pin G', bored through it. On its top is fixed a plate of metal, i, covering the hole g', and on its bottom is fixed another 65 plate, i', pierced with a smooth hole, smaller than the hole g', and fitting loosely the pin G'. Hence when the hub is mounted on the pin G its pin G' enters the hole g' and its smooth end comes against the metal plate i, so that the 70 hub may revolve on the pin with the greatest freedom, friction being, as nearly as possible, avoided and a good running fit being secured without any expensively accurate work.

Each radial arm J consists of a wooden pin, 75 its one end fitting any of the holes j j, and its other end provided with a cross pin or piece,

k, as best shown in Fig. 7.
L L are a number of birds or other figures or objects to be shot at. (Seen in front eleva- 8c tion in Fig. 6 and partially in the perspective detail, Fig. 7.) These are cut out of pasteboard or other stiff material, and each has a socket, J', beneath its center of gravity, through which the arm or spoke J may be passed. This 85 socket is elongated by means of a tube, K, which is fixed to the figure L and projects forward therefrom, and at its front end is notched at k' to engage the cross-pin k.

One spoke J is inserted through each bird 90 or figure L, the notch k' is engaged with the cross-pin k, and the opposite end of the spoke is stuck into one of the sockets jj in the hub I, so as to bring the bird right side up, as shown at the front in Fig. 1. When all the 95 spokes have thus been inserted the flier H is

complete, whereupon it is mounted on the pin G, as shown. Two pins, M M, split down from their upper ends, as shown in Fig. 3, are then stuck into the holes h h in the cross-piece E. 5 Into the splits in the two pins a screen, N, (shown detached in Fig. 8,) is slipped. This screen may be cut from pasteboard or other thin material, and has notches mm, which embrace the portion of the pins M M below their 10 split and retain the screen in place. On the top of each pin M is then slipped a cap, O, (shown in section in Fig. 3,) which confines the two halves of the split pin together. The screen N extends down nearly to the top of 15 the hub I, and has recesses P P extending up from its lower edge to admit the free passage of the birds L L when the flier H is revolving. Three holes, n n, more or less, are formed in the screen, and into these are inserted short 20 pins J", constructed in the same manner as the spokes J J, and carrying birds L L in the same manner. But one of these pins and birds is shown applied in Fig. 1. A pin, R, bearing on its upper end an eye, s, is stuck into a verti-25 cal hole,  $\bar{r}$ , bored downward into the cleat C'. A blow-gun, S, is then inserted through the eye s, and the shooting-gallery is complete. The flier H is then set in rotation by the hand, and small darts are shot against the birds 30 through the blow-gun S. Whenever a bird is hit it is forced back along the spoke J until its notch k' is free from the cross-pin k, whereupon the bird falls underneath the spoke and hangs head downward, as shown in Fig. 7 and 35 in dotted lines, Fig. 6. This does not interrupt the rotation of the flier, since the bar E is below the lowest point of the inverted birds. The birds may be numbered, so that each one "killed" will count the player that number of 40 points. The screen N conceals from the player all the birds beyond it, so that his aim need not be confused thereby. I design that it shall be decorated to simulate the foliage of the forest. Another screen may be arranged beneath the 45 flier to conceal also the "dead" birds on the opposite side of the flier.

The range of the gallery may be increased

or diminished at will by sliding out or in the lid

and bottom of the box A.

It is evident that the blow-gun may, if preferred, be held entirely in the hands and the

standard R discarded.

It must not be inferred from the detailed description which I have given of my invention 55 that I am necessarily confined to the use of these details. On the contrary, many of them are expedient only and in no wise essential. For instance, in lieu of the particular connection of the birds with the spokes above de-60 scribed, a single metal pin may be driven into each spoke J near its outer end, and this pin may stand vertically, the slot k' being correspondingly arranged, the obvious essential being that the birds or other objects, when struck, 65 shall fall from their upright positions, as if

killed, and the screen N and frame D D, E,

and M M may all be made in one piece of board, instead of in the separate pieces shown.

I am aware that a rotary part bearing objects to be shot at, which fall when hit, is not 70 new of itself; but such rotary device has always heretofore been placed entirely behind a screen, the objects being visible only through an opening in the screen on their passage past such opening.

75 What I claim as new, and desire to secure to McLoughlin Brothers, my assignees, by

Letters Patent, is as follows:

1. In a toy shooting-gallery, the combination, with a flier, H, mounted rotatively, and 80 consisting of a hub and radial arms or spokes bearing on their extremities birds or other objects, L L, of a screen, N, arranged substantially in a plane with the axis of rotation of the flier, and provided with recesses P P to 85 permit the objects L L to pass through the screen, whereby the objects L L travel around a portion of the screen upon the rotation of the flier, substantially as set forth.

2. The flier H, consisting of a hub, I, mount- 90 ed rotatively on a vertical axis, radial spokes J J, projecting horizontally therefrom, and birds or other objects, L L, each provided with a tubular socket, J', through which one of said spokes is passed, and with means, substan- 95 tially as described, for retaining the objects in upright position on the spokes, with their centers of gravity above the spokes, combined to-

gether substantially as set forth.

3. The combination, in a toy shooting-gal- 100 lery, of a target and its supporting-frame, a box, A, consisting of side pieces, a a, end pieces, b b, sliding bottom B, having cleat B' fixed to it, means for the attachment of the supporting frame of the target to said cleat, 105 sliding lid C, having cleat C' fixed to it, and stops e e, fixed to said bottom and lid within the box, substantially as set forth.

4. The combination of flier H, pivot-pin G', screen N, having recesses PP, and an upright 110 supporting-frame for said pivot and screen,

substantially as set forth.

5. The combination of pin or spoke J, bird or other object, L, tubular socket K thereon, notch k' in said socket, and cross-pin k on said 115

spoke, substantially as set forth.

6. The combination of screen N, hole n therein, pin J", adapted to enter said hole, bird or other object, L, having socket J' below its center of gravity to receive said pin, and means 120 for interlocking said socket with said pin to hold the bird erect thereon, substantially as set forth.

7. The combination of cross-bar E, having sockets g and h h, pin G, fitting socket g, split 125 pins M M, fitting sockets h h, screen N, adapted to enter the splits in said pins, caps O O, adapted to fit over the split ends of said pins and confine the halves thereof together, and flier H, adapted to be mounted rotatively on 130 pin G, substantially as set forth.

8. The combination of inclosing box A, sock-

ets ff therein, pins D D, fitting said sockets, cross bar E, having sockets f'f' fitting said pins, and sockets g and h h fitting pins G and M M, with said pins, screen N, having recesses P P, and with flier H, adapted to be mounted rotatively on pin G, substantially as set forth.

In witness whereof I have hereunto signed Tenney Connett, J. S. Brown.