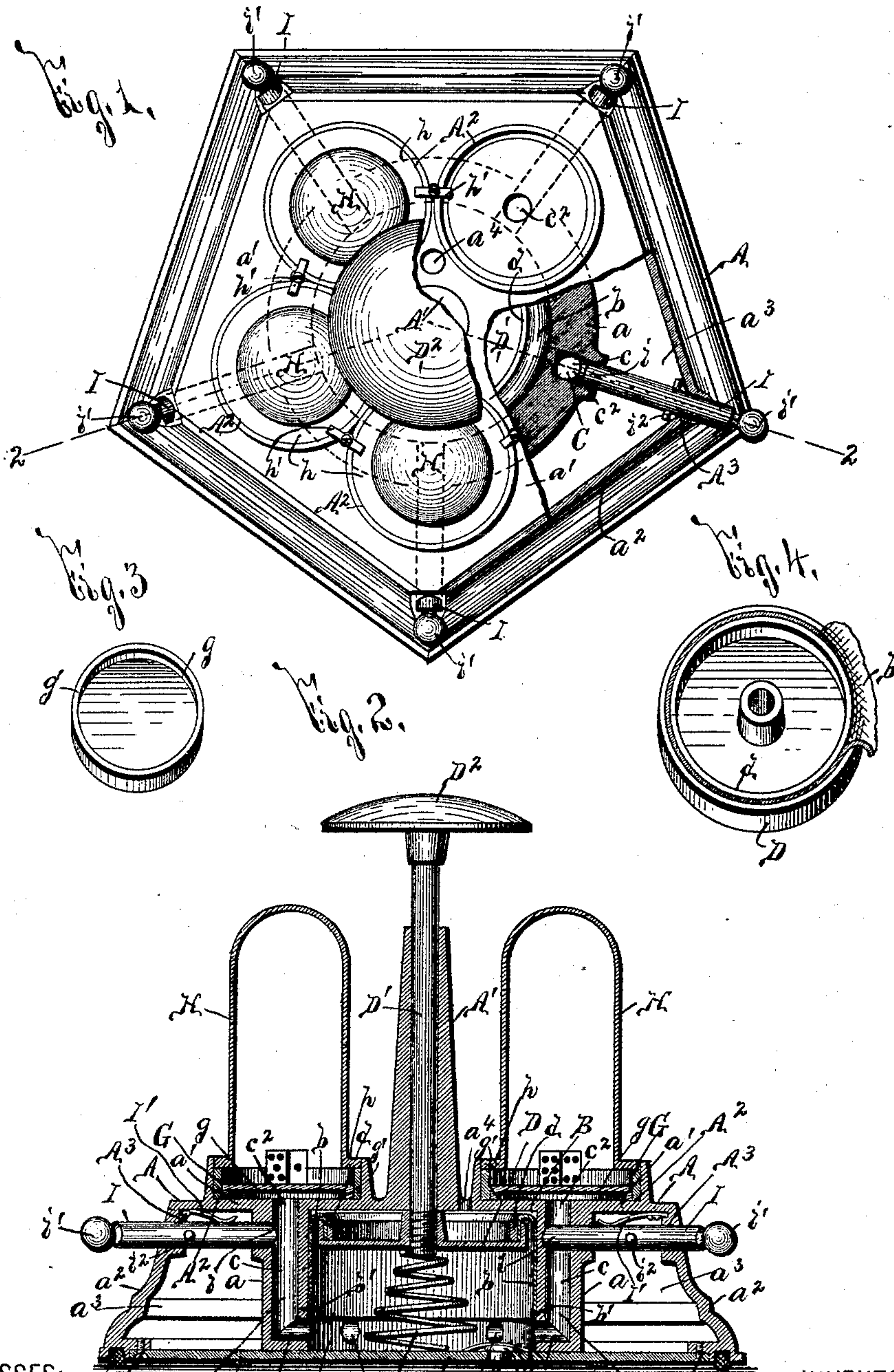


(No Model.)

J. J. PARKER.  
DICE CASTER.

No. 485,709.

Patented Nov. 8, 1892.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES J. PARKER, OF FULTON, NEW YORK.

## DICE-CASTER.

SPECIFICATION forming part of Letters Patent No. 485,709, dated November 8, 1892.

Application filed March 29, 1892. Serial No. 426,956. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES J. PARKER, of Fulton, in the county of Oswego, in the State of New York, have invented new and useful  
5 Improvements in Dice-Casters, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an improved dice-caster, and has for its object the production of a simple, effective, and durable device which is manufactured economically and is noiseless in operation.

To this end it consists, essentially, in a frame  
15 having an air passage or duct, a movable die-support mounted in proximity to the exit of said passage or duct, a compression device for forcing a current of air through the passage or duct for agitating the support, a stop  
20 movable into said duct for preventing the passage of the air, and in the detail construction and arrangement of the parts, all as hereinafter more particularly described, and pointed out in the claims.

25 In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

30 Figure 1 is a top plan view, partly in section, of my invention, illustrating the general construction and arrangement of the parts. Fig. 2 is a longitudinal vertical sectional view taken on line 2 2, Fig. 1, further illustrating  
35 the detail construction and arrangement of the parts. Fig. 3 is an isometric perspective of one of the inverted die-supports, and Fig. 4 is an isometric perspective of the detached plunger for compressing the air and agitating  
40 the dice-supports.

It is well known that players with dice are more or less liable to take advantage of one another by unfair manipulation of the dice and sometimes by the use of "loaded" dice.  
45 My invention is designed to obviate this liability of cheating by giving to each player an equal chance and incasing the dice from handling. I am aware, however, that in dice-casters previously devised the dice have been  
50 so incased for preventing cheating and presenting an even chance to each player. These

dice-casters are, however, owing to their peculiar construction, somewhat noisy in operation and are liable to become inoperative or uncertain in action, owing to the interposition between the actuating plunger and the  
55 dice-supports of motion-transmitting mechanism, as hinged levers, &c. My invention is particularly differentiated from this class of dice-casters in that the motive power for agitating the dice-supports is a current of compressed air produced by the action of a movable plunger or other suitable compression device. Consequently no rattling is produced and the device is positive and certain, as there  
60 is no intermediary mechanism between the actuating-plunger and the dice-supports.

The frame A of my invention may be of desirable form, size, and construction, and I have here illustrated a preferred type thereof  
65 shown as pentagonal in form and as provided with yielding feet *l*, which are suitably secured thereto, are formed of rubber or other suitable material, and are arranged at the corners of the frame. The frame A is also  
70 provided with a central chamber B and a series of air passages or ducts C, having the upright extremity *c* and the laterally-turned end *c'* opening from the lower extremity of the central chamber B. The central chamber B  
80 and the air passages or ducts C are formed, preferably, in a hub *a*, depending from the top wall *a'* of the frame A within the outer shell *a''* of said frame, and interposed between the hub *a* and the wall *a''* is a cavity *a'''*, which  
85 greatly decreases the weight of the frame.

Movable within the central chamber B is a plunger D, formed, preferably, of less diameter than the chamber B, so as to obviate fitting of said plunger within the chamber B, and  
90 thus decrease the cost of production of my invention.

Within the chamber B is a lining *b*, formed of flexible material impervious to air and arranged with one edge suitably secured at *b'*  
95 to the lower extremity of the chamber B and the other secured by a removable ring *d* or other suitable means to the plunger D, whereby when the plunger is forced downwardly the upper extremity of the lining follows with  
100 the plunger, and aids in forcing the air from the chamber B into the ducts or passages C.



The movement of the plunger D is facilitated by an opening  $a^4$  in the portion of the top wall  $a'$  of the frame A, directly imposed above the chamber B for permitting inlet and outlet of air to the upper portion of said chamber B as the plunger descends and rises.

Extending upwardly from the frame A is a central hub  $A'$ , and movable within this hub is a plunger-rod  $D'$ , suitably secured at one end to the plunger D and provided at the other end with a hand-engaging portion  $D^2$ .

E is a spring of suitable construction for forcing the plunger D toward the upper extremity of the chamber B, and, as here shown, this spring consists of a conical-shaped spiral interposed between the lower face of the plunger and the adjacent face of the bottom wall  $B'$  of the chamber B. This bottom wall  $B'$  is preferably removable in order to simplify the manufacture of the dice-caster and facilitate repair thereof, and is suitably secured in position by screws or other fastening means  $B^2$ .

At the central portion of the wall  $B'$  is the air-inlet F, which is of any desirable form, size, and construction, being here shown as a plate  $f$ , mounted above an opening  $f'$  in the wall  $B'$ , secured to the central portion of a flexible strap  $f^2$ , held in position by suitable fastening means  $f^3$ .

The frame A is formed with a series of depressions or seats  $A^2$ , arranged, preferably, around the central hub  $A'$ , and supported within these seats, directly above the exit  $c^2$  of the passages C, are the dice-supports  $g$ . The seats  $A^2$  are preferably provided with bushings G, and the dice-supports are of any suitable light material and of desirable form, being here shown as circular and as provided with a depending flange  $g'$ . Directly above the supports  $g$  are transparent shells H, formed of glass or other suitable material, and preferably provided with shoulders  $h$ , upon which rest screws or other fasteners  $h'$  for removably securing said shells in position upon the frame.

I represents stops movable into and out of the passages or ducts C for shutting off the passage of the air to the corresponding support  $g$ . These stops may also be of desirable form, size, and construction, and are here illustrated as a cylindrical rod mounted in bearings  $A^3$  in the shell A, with one end  $i$  adapted to enter the duct C and the other  $i'$  to project from the wall  $a^2$ . A shoulder  $i^2$  on the stop-rod I prevents its removal, and a spring  $I'$  holds the stop in its adjusted position.

Upon reference to the drawings and the foregoing description it will be evident that the frame A may be readily cast to the desired form, and that the only fitting required is for the plunger-rod  $D'$ , the supports  $g$ , and bushings G and the rods I. It is therefore apparent that my dice-caster is very economically manufactured.

As previously stated, the motive force is

compressed air, and there is no interposing mechanism, as levers or similar parts, between the central actuating-plunger rod  $D'$  and the movable dice-supports.

The operation of my invention will be readily perceived from the foregoing description, and upon reference to the drawings, it will be particularly noted that the same is simple, durable, effective, and economical. It is evident, however, that the air-compression device may be somewhat changed from that shown, and described in the drawings, and that the detail construction and arrangement of other parts may also be changed. Hence I do not herein limit myself to such construction and arrangement.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a dice-caster, the combination of a frame having an air-passage or duct, a support for one of the dice, mounted in the path of the air passed through the passage or duct, and a compression device for forcing the air through said duct and moving the support, substantially as and for the purpose described.

2. In a dice-caster, the combination of a frame having an air passage or duct, a support for one of the dice, mounted in the path of the air passed through the passage or duct, a compression device for forcing the air through said duct and moving the support, and a stop movable into said duct for shutting off the passage of the air, substantially as described.

3. In a dice-caster, the combination of a frame having an air passage or duct, a support for one of the dice, mounted in the path of the air passed through the passage or duct, a transparent shell above the support, and a compression device for forcing the air through said duct and moving the support, substantially as specified.

4. In a dice-caster, the combination of a frame having an air passage or duct, a movable support for one of the dice, mounted in the path of the air passed through the passage or duct, a compression device for forcing the air through the passage or duct and moving the support, a shell removably mounted above said support for permitting access thereto, and a fastener for retaining said shell in its normal position, substantially as set forth.

5. In a dice-caster, the combination of a frame having an air passage or duct, a movable support for one of the dice, mounted in the path of the air passed through said passage or duct, and a movable plunger for forcing the air through said passage or duct and moving said support, substantially as specified.

6. In a dice-caster, the combination of a frame having an air passage or duct, a movable support for one of the dice, mounted in the path of the air passed through said passage or duct, a movable plunger for forcing the air



through said passage or duct and moving said support, and a stop movable into and out of said passage or duct, substantially as set forth.

5 7. In a dice-caster, the combination of a frame having an air passage or duct, a movable support for one of the dice, mounted in the path of the air passed through said passage or duct, a movable plunger for forcing the air through said passage or duct and moving said support, a stop movable into and out of said passage or duct, and a spring for retaining the stop in its adjusted position, substantially as specified.

15 8. In a dice-caster, the combination of a frame having a series of passages or ducts, a series of movable dice-supports mounted above the exits of the respective passages or ducts, a series of transparent shells mounted above the dice-supports, and a plunger for forcing the air through said passages or ducts to move the dice-supports, substantially as set forth.

25 9. In a dice-caster, the combination of a frame having a series of passages or ducts, a series of movable dice-supports mounted above the exits of the respective passages or ducts, a series of transparent shells mounted

above the dice-supports, a plunger for forcing the air through said passages or ducts to move the dice-supports, and independent stops movable into the respective passages or ducts for preventing the passage of the air, substantially as set forth. 30

10. In a dice-caster, the combination of a frame having a central chamber, passages or ducts leading from one extremity of said chamber, movable dice-supports mounted above the exits of the respective passages or ducts, a plunger movably mounted in said central chamber, and a flexible lining for said central chamber, having one end secured to the plunger and the other to the wall of the chamber, substantially as and for the purpose described. 35 40

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 9th day of January, 1892. 45

JAMES J. PARKER.

Witnesses:

CLARK H. NORTON,  
L. M. BAXTER.