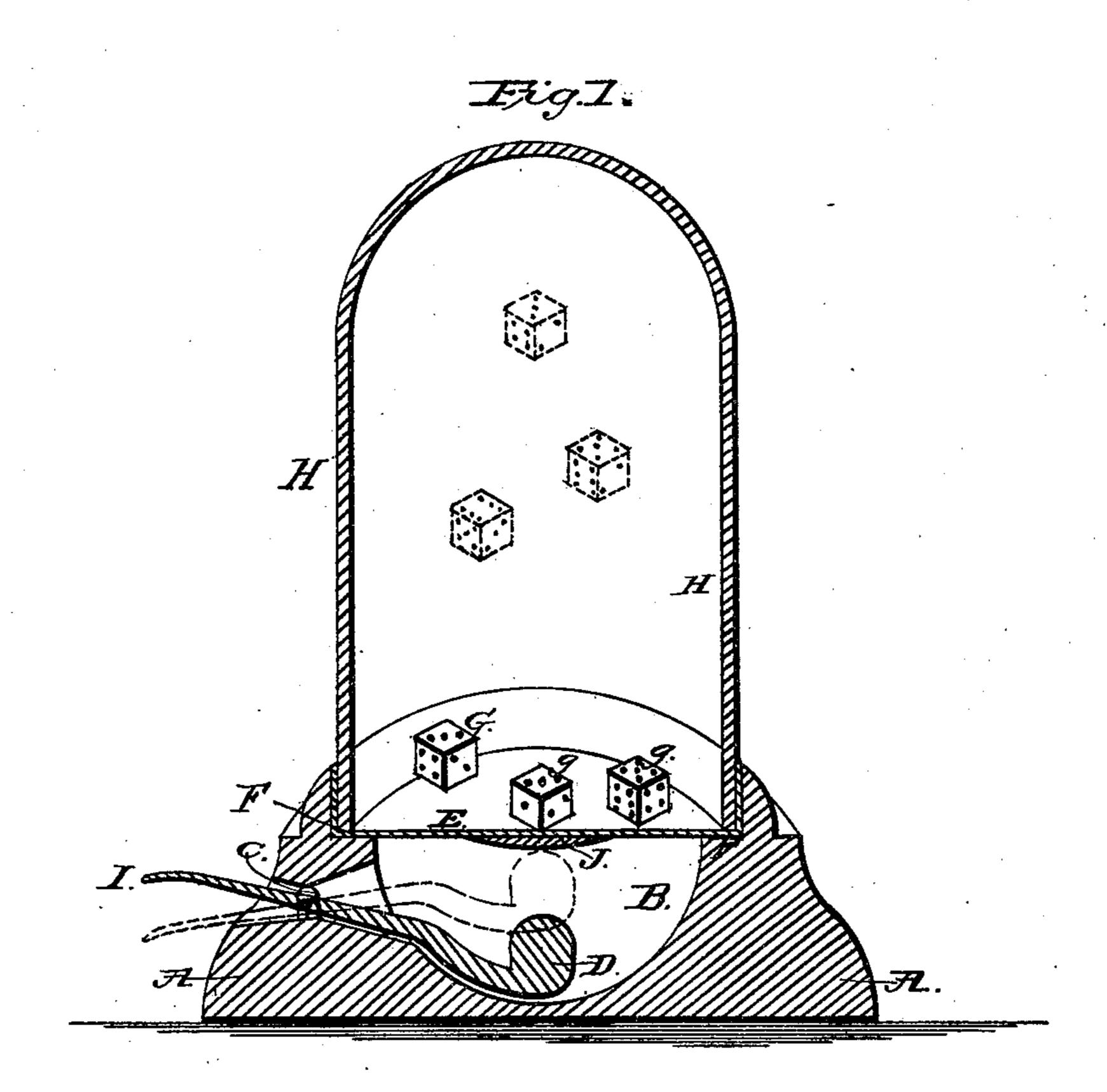
## G. R. MACINTIRE.

DICE-CASTER.

No. 178,537.

Patented June 13, 1876.



J. J.

Witnesses:

E.G. Alber.

Inventor:

Geo. N. Machture

## UNITED STATES PATENT OFFICE.

GEORGE R. MACINTIRE, OF NEW YORK, N. Y.

## IMPROVEMENT IN DICE-CASTERS.

Specification forming part of Letters Patent No. 178,537, dated June 13, 1876; application filed September 28, 1875.

To all whom it may concern:

Be it known that I, GEORGE R. MACINTIRE, of the city, county, and State of New York, have invented a new and Improved Apparatus for Casting Dice; and I do hereby declare that the following is a full and exact description thereof, which will enable others skilled in the art to make and use the same.

Figure 1 is a half section, in elevation, showing the several different parts. Fig. 2 shows the flexible diaphragm with center disk.

Similar letters represent similar parts.

In Fig. 1 of the drawing, A is the base, composed of wood or other material, and in which is a hollow chamber, B. In or through the side is attached a pivot-pin, at C, on which rests or bears the arm of hammer D. E is a flexible diaphragm, of rubber or other material, which rests on shoulder F of base A, and on which rest the dice G g g, all held and confined in place by glass top H. D represents hammer, which acts against diaphragm. I is the finger-piece of hammer D, which projects out of base. J of Fig. 2 shows metal disk, attached to center of diaphragm, for the protection thereof from the action of

the hammer, and to equalize said action thereon.

To operate my apparatus, strike lightly finger-piece I. This causes hammer D to fly upward, striking diaphragm on center, the concussion thereof causing the dice to bound upward and invariably change their position.

I am aware that a spring-plunger in a dicecaster has been employed; but,

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

1. The dice-caster herein described, consisting of the base A, having pivoted hammer D, a flexible diaphragm, provided with the center disk J and the glass top H, combined and arranged to operate substantially as set forth.

2. In a dice-caster, the combination of the base A, pivoted hammer D, and flexible diaphragm, with the top H, substantially as described.

To the above specification of my improvement I have signed my hand.

GEO. R. MACINTIRE.
In presence of—
E. G. Albee,
A. M. Ladd.