No. 723,314. PATENTED MAR. 24, 1903.

E. B. ROTH.

DIE.

APPLICATION FILED AUG. 28, 1902.

NO MODEL.

Fig.1.

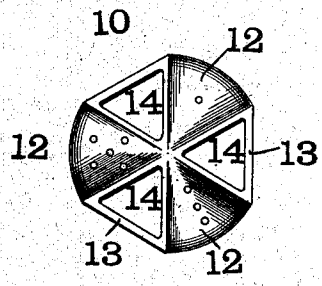


Fig.2.

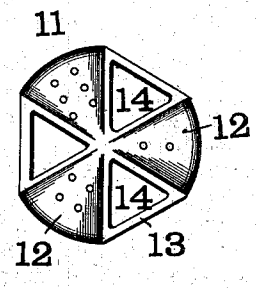


Fig.3.

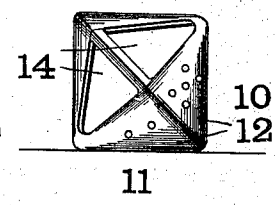


Fig.4.

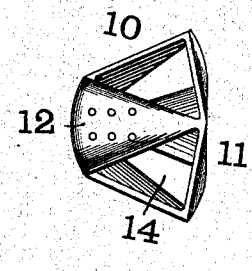


Fig.5.

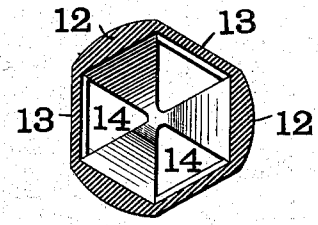


Fig.6.

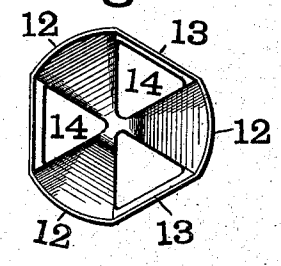
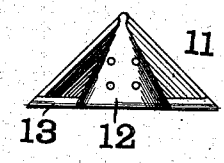


Fig.7.



Witnesses

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UNITED STATES PATENT OFFICE.

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DIE.

SPECIFICATION forming part of Letters Patent No. 723,314, dated March 24, 1903.

Application filed August 28, 1902. Serial No. 121,324. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. ROTH, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Dice, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to certain improvements in dice, and has for one of its objects the production of a die which cannot be loaded.

Another object of my invention is to so shape the die that it cannot be rolled along the edges of one side in an inclined position, so that when it comes to rest this side will be down and the opposite side will be uppermost. This is termed "peaking" the dice and can be done with the ordinary cubical dice. The form of my dice also prevents the die from being slid along on one face without turning over.

My invention consists in part of a hollow die provided with a plurality of faces bearing numbers or other characters and a plurality of perforated faces, exposing the interior to view.

My invention also consists in certain other features, which are described in the following specification and pointed out in the claims affixed hereto.

In the accompanying drawings, which illustrate dice made in accordance with my invention, Figure 1 is a plan view looking at one end of the die. Fig. 2 is a plan view looking at the opposite end of the die. Fig. 3 is a side elevation showing the die at rest upon a flat surface. Fig. 4 is a top plan view of the die in the position shown in Fig. 3. Fig. 5 is a central section, and Figs. 6 and 7 are a bottom plan view and side elevation, respectively, of one-half of the die.

Like marks of reference refer to similar parts in the several views of the drawings.

Each die is formed of two hexagonal pyramids 10 and 11, respectively, the pyramids being joined at their bases. Each of the pyramids 10 and 11 is provided with three faces 12, bearing numbers or other suitable characters. These faces 12 are preferably numbered by means of spots or dots like the ordinary cubical dice. The faces 12 are convex, as clearly shown in the drawings, for a purpose which will be hereinafter described.

Each of the pyramids also has three flat faces 13, upon which the dice rest when they are thrown. These faces 13 are provided with perforations or openings 14 to expose the interior of the dice to view. These perforations or openings 14 preferably occupy practically the entire faces 13, so as to fully expose the whole interior of the die to view. The number-bearing faces 12 of one pyramid are placed adjacent to the number-bearing faces of the opposite pyramid, as shown in Fig. 3, so that when the die rests upon the flat faces 13 one of the number-bearing faces 12 will be uppermost. The dice are preferably made of metal and may either be cast as shown in the sectional view in Fig. 5 or they may be made by stamping the pyramids separately out of thin sheet metal, as shown in Figs. 6 and 7, and afterward uniting the bases of the two pyramids by soldering them or in any other suitable manner. While I prefer to make the dice out of metal, they may be made out of any suitable material and formed by any suitable process.

As the dice are formed with hollow interiors and are provided with the openings 14, it will be impossible to load the dice, as the metal of which the dice are formed is too thin to allow a sufficient quantity to be cut away to lighten one side, and as the interior is fully exposed to view it would be impossible to attach extra weight to any of the faces.

Owing to the form of the dice, it would be impossible to either peak them or to slide them along flat surfaces without turning over, as can be done by the ordinary cubical dice.

Owing to the faces 12 being made convex, the dice will not readily come to rest upon these faces, and hence will not display one of the flat perforated faces 13 on its upper side, as might readily otherwise happen.

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

1. A hollow die provided with a plurality of faces bearing numbers or other characters

and a plurality of openings between said faces exposing the interior to view.

2. A hollow die provided with six faces bearing numbers or other characters and six openings between said faces exposing the interior to view.

3. A hollow die provided with a plurality of convex faces bearing numbers or other characters and plurality of openings between said faces exposing the interior to view.

4. A hollow die in form of two pyramids placed base to base, each of said pyramids being provided with a plurality of faces bearing numbers or other characters, and a plurality of openings between said faces exposing the interior to view.

5. A hollow die in form of two hexagonal pyramids placed base to base, each of said pyramids being provided with three faces bearing numbers or other characters and three perforated faces exposing the interior to view.

In testimony whereof I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

EDWARD B. ROTH. [L. S.]

Witnesses:

JAMES H. BRYSON,

W. A. ALEXANDER.