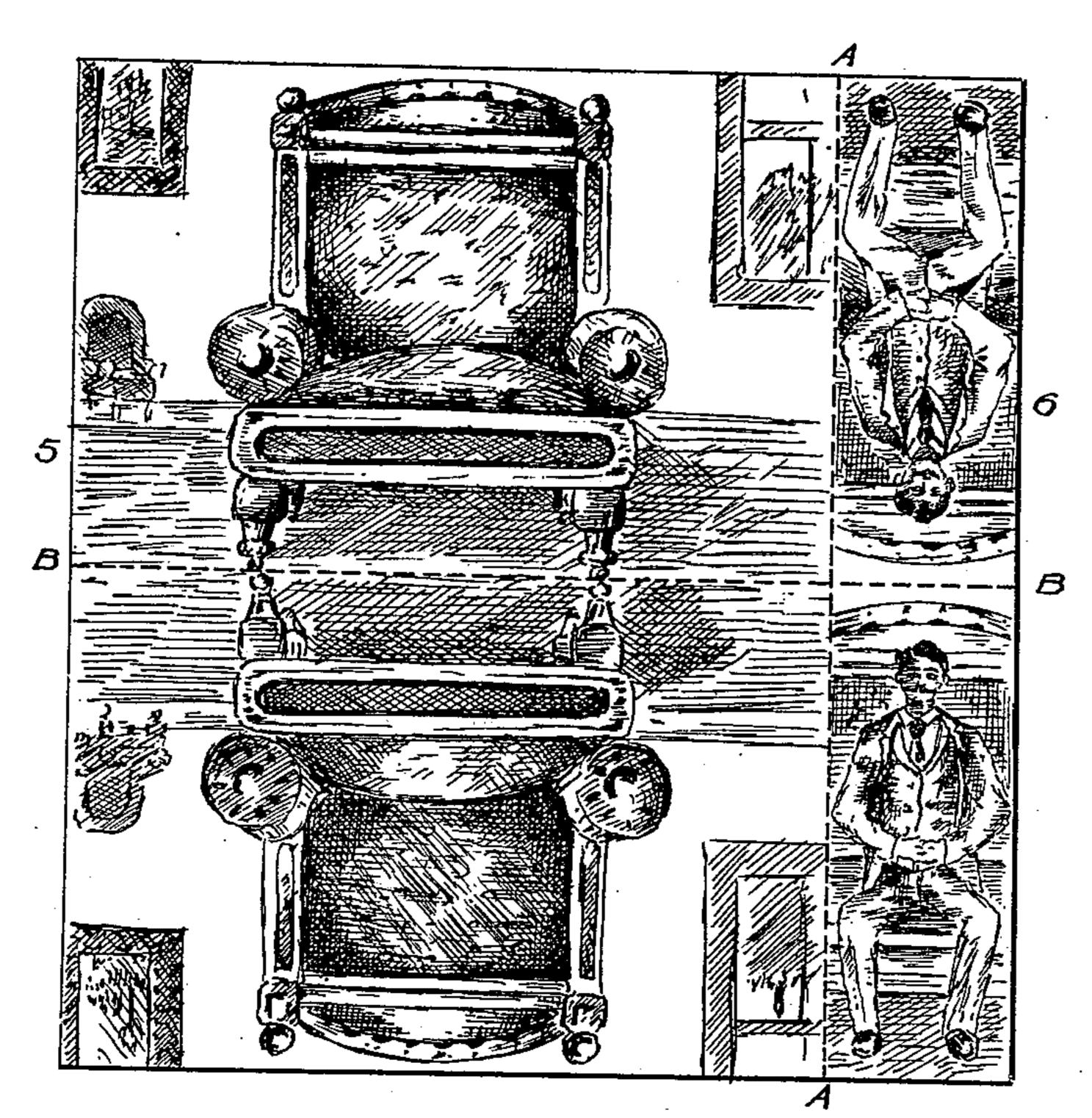
(No Model)

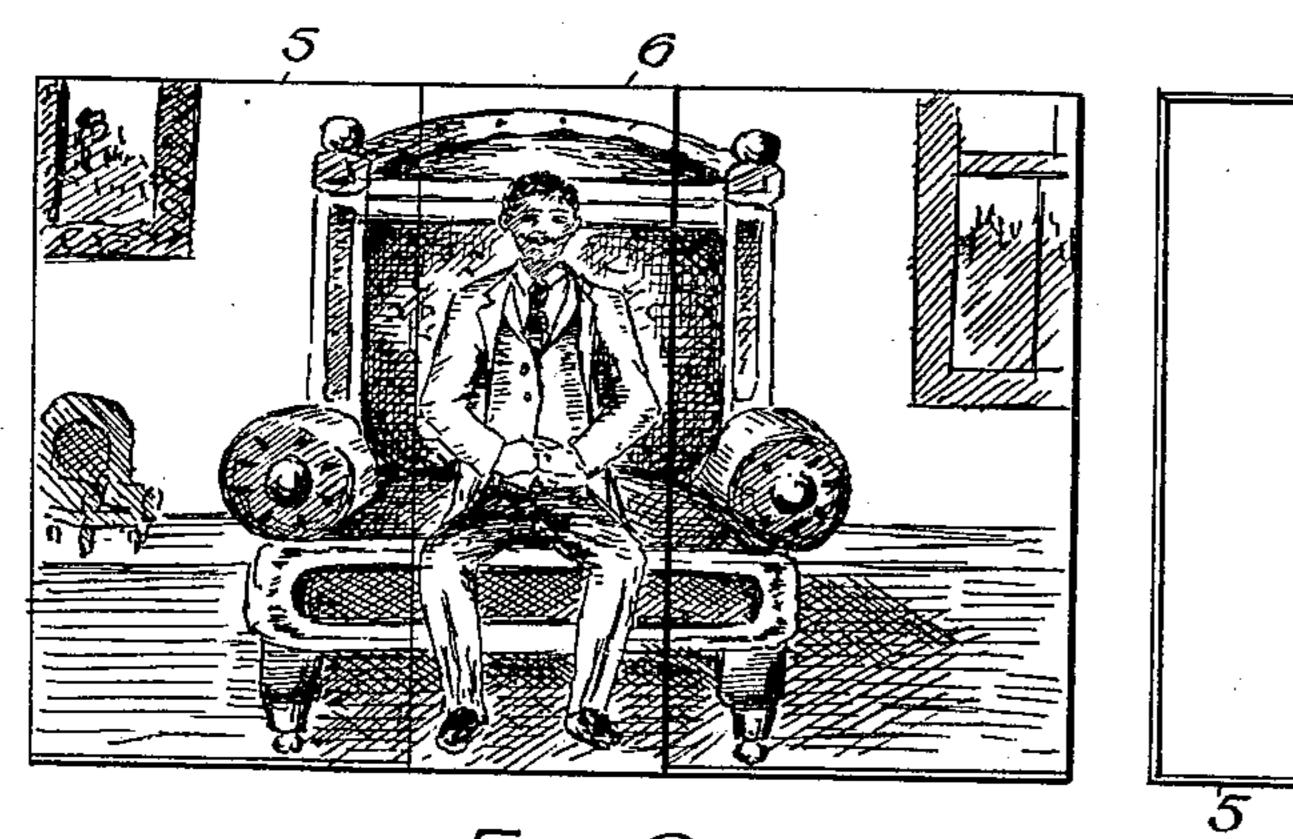
## L. DIESTERWEG. PUZZLE.

No. 582,604.

Patented May 11, 1897.







F1G.2

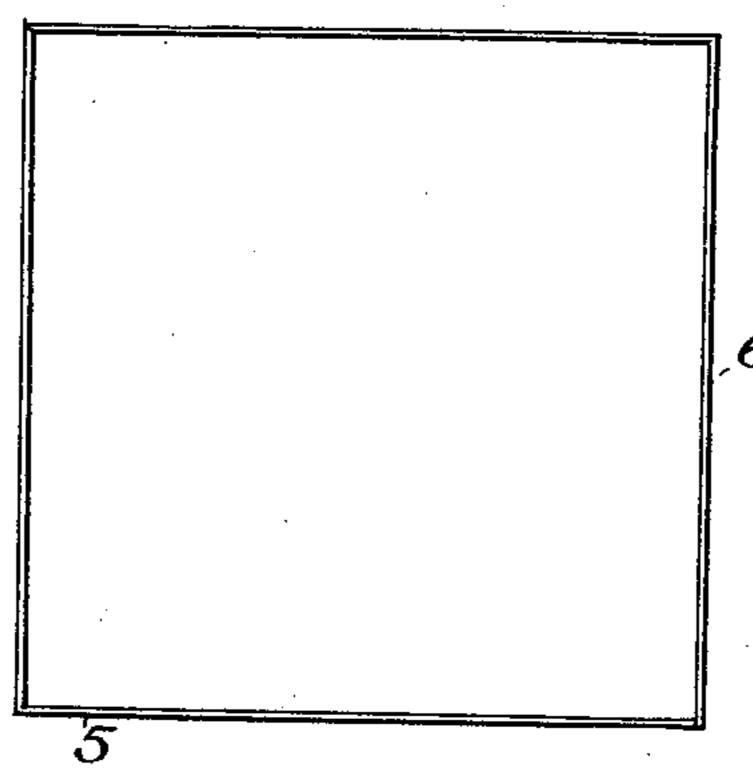


FIG.3

Witnesses Q. J. Slandet. Edith Himsworth. Byhio Ottorney All Man

THE NORRIS PETERS CO., PHOTO-LITHOL, WASHINGTON, D. C.

## United States Patent Office.

LOUIS DIESTERWEG, OF DENVER, COLORADO, ASSIGNOR OF ONE-HALF TO EDWARD LEHMAN AND EDWIN P. STARBIRD, OF SAME PLACE.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 582,604, dated May 11, 1897.

Application filed March 17, 1897. Serial No. 627,963. (No model.)

To all whom it may concern:

Be it known that I, Louis Diesterweg, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and 5 State of Colorado, have invented certain new and useful Improvements in Puzzles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to 10 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved puzzle, my object being to provide a novel and ingenious device of this class which shall be simple in construction, attractive, and at the

same time difficult to solve.

To these ends the invention consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 illustrates the puzzle before the parts are detached. Fig. 2 is a front view of the puzzle when solved, the two parts being detached and placed in the proper relative positions. Fig. 3 is an end 30 view of the two parts shown in the proper relative position when the puzzle is solved.

Similar reference - characters indicating corresponding parts in these views, let the numerals 5 and 6 designate the two parts of 35 the puzzle, which, as originally presented, is formed, as shown in the drawings, upon a single sheet of some suitable flexible material, or material which may be bent to allow the parts to assume the positions hereinafter de-40 scribed. The sheet must be divided on the dotted line A A, thus separating the two parts 5 and 6 of the puzzle. This feature is explained before the solution is attempted. This line may be perforated, colored, or dot-45 ted in manufacturing the puzzle.

The two parts 5 and 6 of the puzzle may be composed of paper or other suitable flexible material, as before stated. Upon each part is formed or represented two objects, 50 one of which is inverted with reference to

sists in placing the two parts in such relative positions that the two objects on the one part shall, respectively, occupy logical or natural positions with reference to the re- 55 spective objects on the other part without cutting either part or detaching or separating the two objects thereon. This is accomplished by creasing each part on the line B B between the two objects and bending each 60 part relatively outward, so that the two objects shall occupy positions at right angles to each other. The two parts are then put together in such a manner as to form a square or rectangular figure in end view, (see Fig. 3,) 65 the right angles of each part being located

diagonally opposite each other.

Any desired object may be represented on the two puzzle parts. As shown in the drawings, two chairs are represented on the part 5, 70 while two men in a sitting posture are represented on the part 6. When the part 5 is flat or occupies a single plane, one of the chairs is inverted with reference to the other; and when the part 6 is flat or in a single 75 plane one of the men is inverted. When, however, each part is creased or bent on the central line B B between the two objects, whereby the two chairs occupy positions at right angles to each other and the two men 80 occupy positions at right angles to each other, and the two parts being placed in position to form a square, (see Fig. 3,) the two men will occupy proper positions with reference to the respective chairs in which they appear to be 85 sitting, each man occupying a position directly in front of his chair. The natural position of one man with reference to one chair is shown in Fig. 2. The position of the two men with reference to the two chairs is shown in Fig. 3—9° that is to say, the man on the vertical portion of part 6 forming the right-hand side of the square is directly in front of the chair on the vertical portion of the part 5 forming the left-hand side of the square, while the man 95 on the horizontal portion of the part 5 forming the upper side of the square is directly in front of the chair on the horizontal portion of the part 5 forming the lower side of the square.

As before stated, any other object may be the other. The solution of the puzzle con- | represented on the two parts 5 and 6. The

TOO

solution of the puzzle consists in arranging the two parts so that the two objects on the one part shall occupy certain natural or logical positions with reference to the two ob-5 jects on the other part when either object on the one part is in the observer's line of vision. The solution is always the same regardless of the objects employed, and consists in bending the two parts so that the two objects shall 10 form a right angle, the two parts being then placed in position to form a square or rectangular figure in end view. Of course it is not necessary that the angles or figures mentioned shall be geometrically correct in order 15 to solve the puzzle. If the two parts are bent so that the objects shall occupy positions in planes forming either obtuse or acute angles, there will be a substantial solution of the puzzle. The same idea may be carried out by 20 forming more than two objects on each part of the puzzle, and so bending or arranging the two parts that other geometrical figures, as hexagonal or octagonal figures, may be formed. In this case each object on the one 25 part would occupy a natural, logical, or predetermined position with reference to the object on the parallel portion of the other part. Hence in speaking of squares and right angles I am simply describing the specific con-30 struction shown in the drawings, but it must be understood that the invention is not limited thereto, but is capable of many variations without departing from the invention herein explained.

As regards the material to be employed in

the manufacture of the puzzle, paper is prob-

ably preferable, as it is cheap, but thin sheet |

metal or any other material that may be bent to occupy the positions stated may be employed.

Having thus described my invention, what

I claim is—

1. A device of the character described comprising two parts upon each of which are represented two similar objects, one object on 45 each part being inverted with reference to the other object on the same part when the said part occupies a single plane, whereby when one part is bent on a line between the two objects, and the two parts arranged to 50 form a rectangular or other figure in end view, the two objects on the one part shall occupy natural or logical positions with reference to the two objects on the other part.

2. A device of the character described comprising a number of parts upon each of which are represented or formed at least two objects, one of which is inverted with reference to the other object on the same part, whereby when each part is bent so that the two relatively- 60 inverted objects shall occupy positions in planes forming a suitable angle, and the parts arranged to form a suitable geometrical figure in end view, the objects on the one part shall occupy natural, logical or any desired 65 predetermined positions with reference to the

objects on the other part.
In testimony whereof I affix my signature

in presence of two witnesses.

## LOUIS DIESTERWEG.

Witnesses:

G. J. ROLLANDET, EDITH HIRNSWORTH.