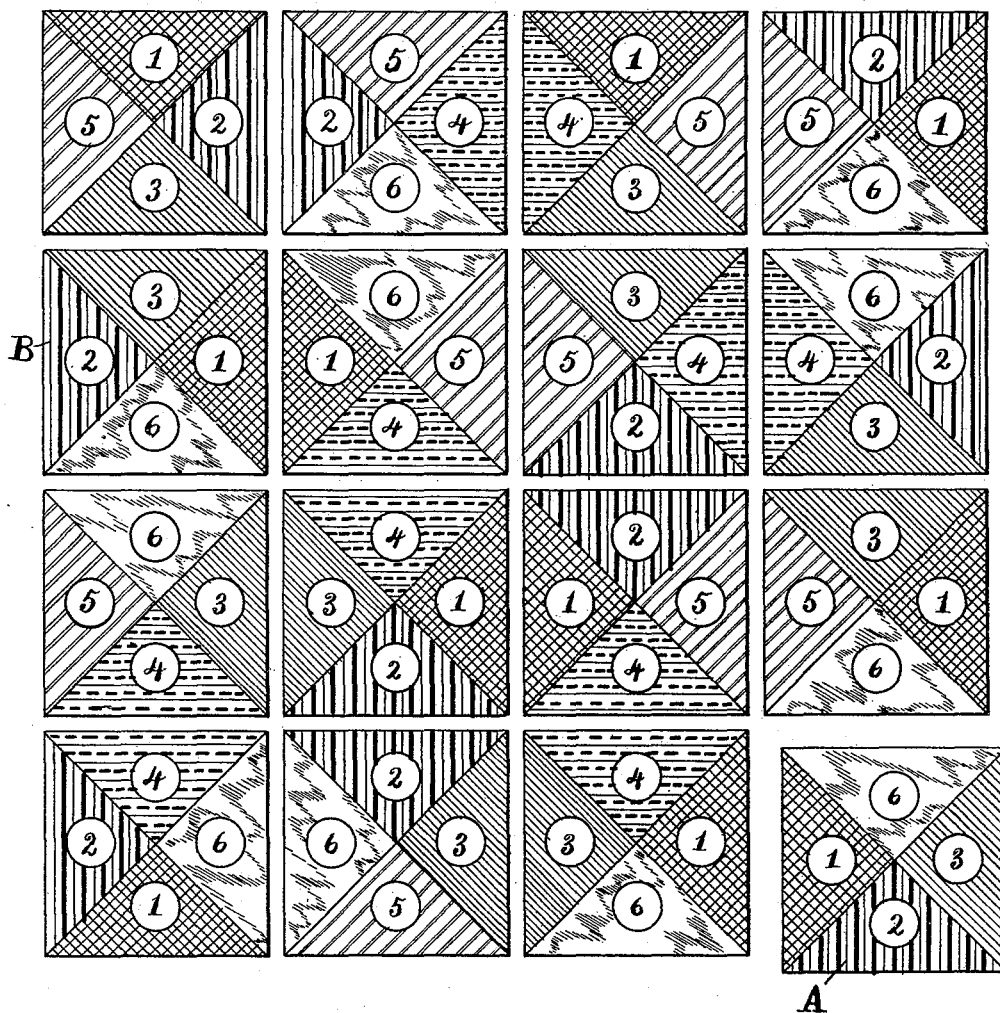# E. L. THURSTON.
PUZZLE.

No. 487,798.   Patented Dec. 13, 1892.

Fig 1.

WITNESSES.

Albert H. Baker.

Frank McGiller.

INVENTOR.

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UNITED STATES PATENT OFFICE.

EDWIN L. THURSTON, OF CLEVELAND, OHIO, ASSIGNOR TO LEONARD
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PUZZLE.

To all whom it may concern:

Be it known that I, EDWIN L. THURSTON, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of
5 Ohio, have invented certain new and useful Improvements in Puzzles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing.

My invention relates to that class of puzzles
10 which are composed of a number of tablets the surface of which bear certain marks, configurations, or symbols which are designed to match with or bear a predetermined relation to the marks, configurations, or symbols on
15 adjacent tablets when said tablets are properly arranged in contact.

My invention consists of a puzzle composed of a number of tablets having, separately and collectively, the characteristics hereinafter
20 described, and shown in the drawing, and definitely distinguished in the claims.

In the puzzle shown in the drawing sixteen blocks are employed. The block marked A is not, however, an essential part of said puz-
25 zle. It is added for the purpose of completing the figure and making the puzzle when solved more symmetrical in appearance. The tablets comprising it are necessarily in the form of parallelograms and are preferably
30 square. The surface of each is divided into four substantially-equal sections, the lines of division extending diagonally from corner to corner, thereby forming triangular sections, each of which extends across one whole side
35 of the tablet. Each section bears a symbol, and the same symbol does not appear twice on the same tablet. Any symbols which suit the fancy may be used, and I have shown numerals to represent any kind of symbols;
40 but I prefer to use colors as symbols for the following among other reasons, viz: Colors give no information as to which of the four sides is to be at the top or bottom or at either side, the eye can more readily select any de-
45 sired block, and a much prettier puzzle is produced.

Puzzles like that shown in the drawing, which are composed of square tablets divided into triangular sections, each of which fills
50 one side, are generally more difficult of solu-

tion than puzzles in which the tablets are differently shaped and divided, for while it may be easier to match any two or three or more tablets less than the whole number, there are more chances of misplacing them, and such 55 misplacement would generally be an error which would make a complete solution impossible.

As before stated, fifteen blocks are essential to the specific puzzle shown in the drawing. 60 Six symbols are employed thereon. It is possible to make only fifteen combinations of four out of six symbols, and the symbols employed in the said puzzle are so disposed upon the several tablets that each tablet contains 65 one of said possible combinations—that is to say, no two of the fifteen tablets bear the same four symbols. The sixteenth tablet A is a duplicate of one of the other tablets (that marked B) to this extent, that it bears the 70 same four symbols; but the symbols are differently arranged upon the said two tablets.

When the tablets are properly arranged in contact, the touching sections contain the same symbols, and the outline figure formed is simi- 75 lar in shape to the separate tablets forming it when sixteen tablets are employed. When only the fifteen tablets are employed, one vacant space is necessarily left in said outline figure. 80

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

1. A puzzle consisting of a number of equal-sized tablets in the form of a parallelogram, 85 the surface of each of which is divided by lines running diagonally from corner to corner into four triangular sections, each section containing a symbol, of which the same symbol does not appear twice on the same tablet 90 and no two tablets bear the same four symbols, with one possible exception, said symbols being disposed upon the several tablets in such manner that the entire number of tablets may be laid in contact when the touch- 95 ing sections on contiguous tablets contain the same symbol.

2. A puzzle composed of fifteen rectangular tablets, the surface of each tablet being divided into four triangular sections, the divis- 100

sion line between them extending diagonally from corner to corner, each section containing one of six different symbols, said symbols being arranged on the several tablets, substantially as shown and described, whereby no two tablets contain the same four symbols, and all the tablets are adapted to be laid in contact and form a rectangle from which one tablet is missing when the touching sections of contiguous blocks contain the same symbol, with or without a sixteenth tablet, similarly shaped and divided, bearing four of said symbols and adapted to fit the vacant space and complete the rectangle.

3. A puzzle composed of fifteen square tablets, the surface of each of which is divided into four triangular sections, each section being colored one of six different colors, said colors being applied to the several tablets in such manner, substantially as shown and described, that no two tablets have four similarly-colored sections, and that all the tablets may be laid in contact and form a large square from which one corner block is missing when the touching sections of contiguous blocks are similarly colored, with or without a tablet similarly shaped and divided and colored to adapt it to fill the said corner space, substantially as specified.

<div align="center">EDWIN L. THURSTON.</div>

Witnesses:
    ALBERT H. BATES,
    FRANK. MILLER.