(No Model.)

## T. DORGAN & A. BRIDGES. PUZZLE.

No. 490,069.

Patented Jan. 17, 1893.

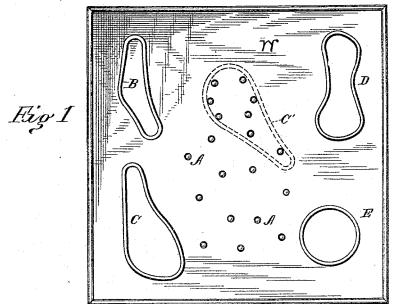
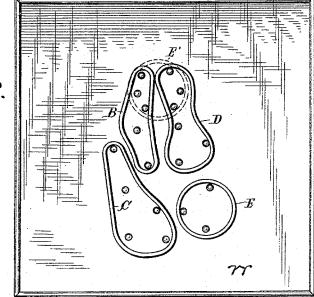


Fig2.



Witnesses C. C. Budme I. Bowend.

Inventors

## UNITED STATES PATENT OFFICE.

THOMAS DORGAN, OF CARLTON, AND ALFRED BRIDGES, OF SOUTH YARRA, VICTORIA.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 490,069, dated January 17, 1893.

Application filed June 28, 1892. Serial No. 438, 312. (No model.)

To all whom it may concern:

Be it known that we, THOMAS DORGAN, residing at Barkly Street, Carlton, and ALFRED BRIDGES, residing at Grosvenor Street, South 5 Yarra, in the Colony of Victoria, subjects of the Queen of Great Britain and Ireland, have invented certain new and useful Improvements in Puzzles; and we do hereby declare that the following is a description thereof.

This invention relates to a puzzle apparatus formed in the shape of a block or base having a number of vertical pins or projections arranged thereon. These are placed in a seemingly irregular manner. A number 15 of rings or loops of rigid material such as stiff metal wire are also used these being of various irregular shapes. The rings are placeable over the pins in many different ways and each ring may be placed so as to 20 embrace more or less pins according to its position but it will be found that it is a matter of some difficulty to discover what positions the rings should be made to occupy so that they shall collectively inclose the whole 25 of the pins. This problem can however be solved and to do so constitutes the puzzle. We do not really place the pins altogether at hap-hazard but adopt a device which tends

to lead those who attempt to solve the puz30 zle to fall into a trap and to miss the solution. The ring which for example should
when correctly located be so placed as to
cover only three pins will in actual trial be
found capable of covering a larger number
35 as six in other locations, and the ring which
ought to be placed to inclose a certain five
pins is capable of being placed so as to in-

close a larger number as eight. As these erroneous locations are easy to discover the consequence is that persons trying to solve the puzzle persistently adopt one or more of them, not knowing them to be erroneous and they thus fall into the trap, producing an endless amount of amusement in their efforts

45 to place the remaining rings so as to inclose the remaining pins which however are so placed as to render this impossible.

Our invention is not confined to any special number or special position of pins or number or form of rings: all these may be varied provided there is embodied the aforesaid

"trapping" device in a puzzle by means of fixed pins, and movable rings.

We shall now describe our puzzle apparatus more particularly by reference to the attached sheet of drawings showing by Fig. 1 a plan of the block or board from which the pins project and also showing the rings and by Fig. 2 the same plan view as before but with the rings placed over the pins in the 60 manner necessary for the solution of the puzzle.

A A are pins springing from the base block W B, C, D, E, are rings of irregular and unlike forms.

C' and E' indicate by dotted lines how the rings C and E could be placed, so as to inclose a much larger number of pins than they really should inclose in order to solve the puzzle.

We specially arrange the grouping of the pins as indicated at C' and E' so as to constitute a device or trap to mislead those endeavoring to solve the puzzle and so delay the solution. As to the remaining pins they 75 are placed as shown in the drawings irregularly on the board, but with this characteristic that if the player fall into a trap and misplace any one ring then the positions of the other pins are such as that they cannot be 80 inclosed by any arrangement of the remaining rings.

Having now particularly described the nature of our invention and in what manner the same is to be performed we claim:—

A puzzle apparatus consisting of movable rings of irregular unlike shapes, and of fixed pins irregularly located in a base, wherein the puzzle consists in so placing the rings as to inclose all the pins, and wherein in order 90 to retard the solution of the puzzle the pins are so grouped as to constitute a trap or traps substantially as set forth.

In witness whereof we have hereunto set our hands in the presence of two subscribing .95 witnesses.

THOMAS DORGAN. ALFRED BRIDGES.

Witnesses:
G. G. TURRI,
JAMES HINGSTON.