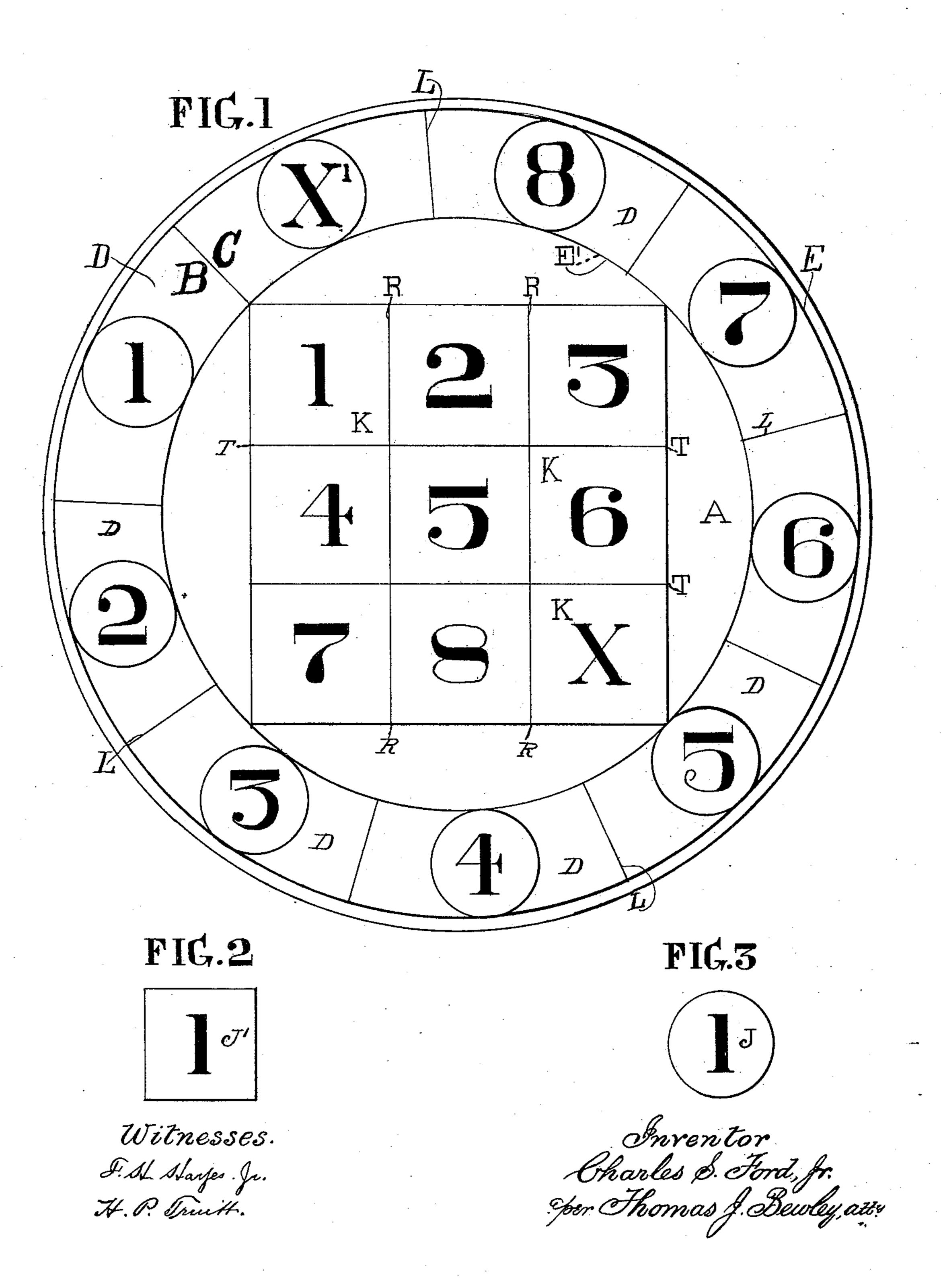
No. 483,912.

Patented Oct. 4, 1892.



UNITED STATES PATENT OFFICE.

CHARLES S. FORD, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO EDWARD BURRIS, OF SAME PLACE, AND THOMAS J. DUNCAN, OF EDEN, PENNSYLVANIA.

SPECIFICATION forming part of Letters Patent No. 483,912, dated October 4, 1892.

Application filed January 4, 1892. Serial No. 416,999. (No model.)

To all whom it may concern:

Be it known that I, CHARLESS. FORD, Jr., a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and 5 State of Pennsylvania, have invented a new and useful Improvement in Puzzles, of which

the following is a specification.

My invention has for its object the construction of a puzzle for amusement and pastime, 10 as well as to cause an exercise of skill in those interested in its performance; and it consists in the formation from a circular piece of thin metal or stiff card-board (as may be found to be most effective, durable, and economical for 15 the purpose) of a disk having upon its face near the periphery an annular space inclosed within two concentric lines, that is subdivided into spaces or compartments by radial lines that diverge equidistantly from the inner line 20 to the circumference. Upon the surface of the disk, within the space surrounded by the inner circumferential line, is formed a series of rectangular spaces subdivided by lines crossing each other at right angles, which are 25 marked by the numerals from "1" to "8," the ninth space being designated by a cross "x." One of the spaces in the outer circle of subdivisions is marked by an alphabetical as well as a numerical figure, and another ad-30 jacent thereto by an alphabetical figure and "×" mark.

In the accompanying drawings, which make a part of this specification, Figure 1 is a face view of the disk A, upon which the operation 35 of the puzzle is performed, with its series of segmental subdivisions D, encompassed by the concentric lines E E', separating them from the series of square or rectangular spaces K and from each other by the radial lines L, 40 forming a series of compartments which are numbered from "1" to "8" and one marked "X'," as shown, and two are marked alphabetically, which in the present instance are marked "B" "C." Fig. 2 represents a face 45 view of one of the square counters or blocks J'. Fig. 3 represents one of the circular counters or blocks J, numbered as shown.

A is the disk, constructed of thin sheet metal or of card-board of sufficient thick-50 ness and strength to form a base to print or l stamp upon its face a representation of the divisions and spaces by means of which the operation of the puzzle is effected.

E E' are concentric circular lines, the outer one E being arranged near to the edge of the 55 disk. The circular space between these two lines is subdivided into a series of segmental spaces or compartments, which have numerals from "1" to "8" marked thereon, with the exception of an additional space, which is 60 marked "X'," the spaces "1" and "X'" being also marked "B" and "C," respectively. The space on the surface of the disk within the previously-mentioned encircling line E' is divided into a series of equilateral squares 65 K by means of the vertical lines R and horizontal lines T. These squares K are marked with a numeral throughout the series from number "1" to "8," leaving one to be marked with a x, as shown in the drawings.

The method of performing the puzzle is as follows: The circular counters or blocks are arranged indiscriminately or numerically, as desired, upon the surface of the segmental spaces and the square counters upon the rect- 75 angular spaces, the space "X" in the square and "X'" in the segmental space being permitted to remain uncovered by either of the counters J J'. The square counters J'should be manipulated so as to occupy their numeri- 80 cal order in the rectangular spaces without crossing over each other or being removed from the surface of the disk A. Then the square counters must be moved numerically from number "1" to number "8" in numeri- 85 cal order to the segmental spaces D at "C" and the circular blocks J in the segmental spaces D must be moved numerically or in regular order or rotation to the rectangular spaces K at "B." Upon moving the first 90 block, (number "1,") either circular or square, to the segmental space "X" at "C," the corresponding number must be moved from the space it occupies in the segmental series of spaces D to the rectangular space "1" from 95 segmental space "B," and so on until all the blocks, circular and square, in corresponding pairs are removed to the spaces in the circle between the concentric lines E E' and the rectangular spaces K, the movements being con- rec tinued until all the sets of corresponding blocks occupy their original positions. The puzzle may be operated in a reverse manner by indiscriminately arranging the counters, 5 both square and circular, with like results, as aforesaid. The object of the puzzle is to arrange the rectangular counters and the circular counters in their corresponding spaces without occupying the corresponding spaces twice, except with the first block number "1" at the commencement of the operation of the puzzle.

I claim as my invention and desire to se-

cure by Letters Patent—

The circular disk A, having a series of segmental spaces or subdivisions D arranged equidistant from each other upon its border between the concentric lines E E' and subdi-

vided by the lines L, radiating from the center of the disk, forming spaces D, marked numerically from number "1" to "8," and one space additional marked "x'," the spaces "1" and "x'" being also marked alphabetically "B" "C," as shown, and the rectangular spaces K, formed upon said disk by means of the series of horizontal and vertical lines R and T, in combination with a series of square and circular counters J' J, marked, respectively, from number "1" to number "8," substantially as herein shown and described, for 30 the purpose set forth.

CHARLES S. FORD, JR.

Witnesses:
EDWARD BU

EDWARD BURRIS, JOHN F. GILLAM.