

No. 619,804.

O. SVANSTRÖM.  
PUZZLE.

Patented Feb. 21, 1899.

(Application filed Mar. 28, 1898.)

(No Model.)

Fig. 1

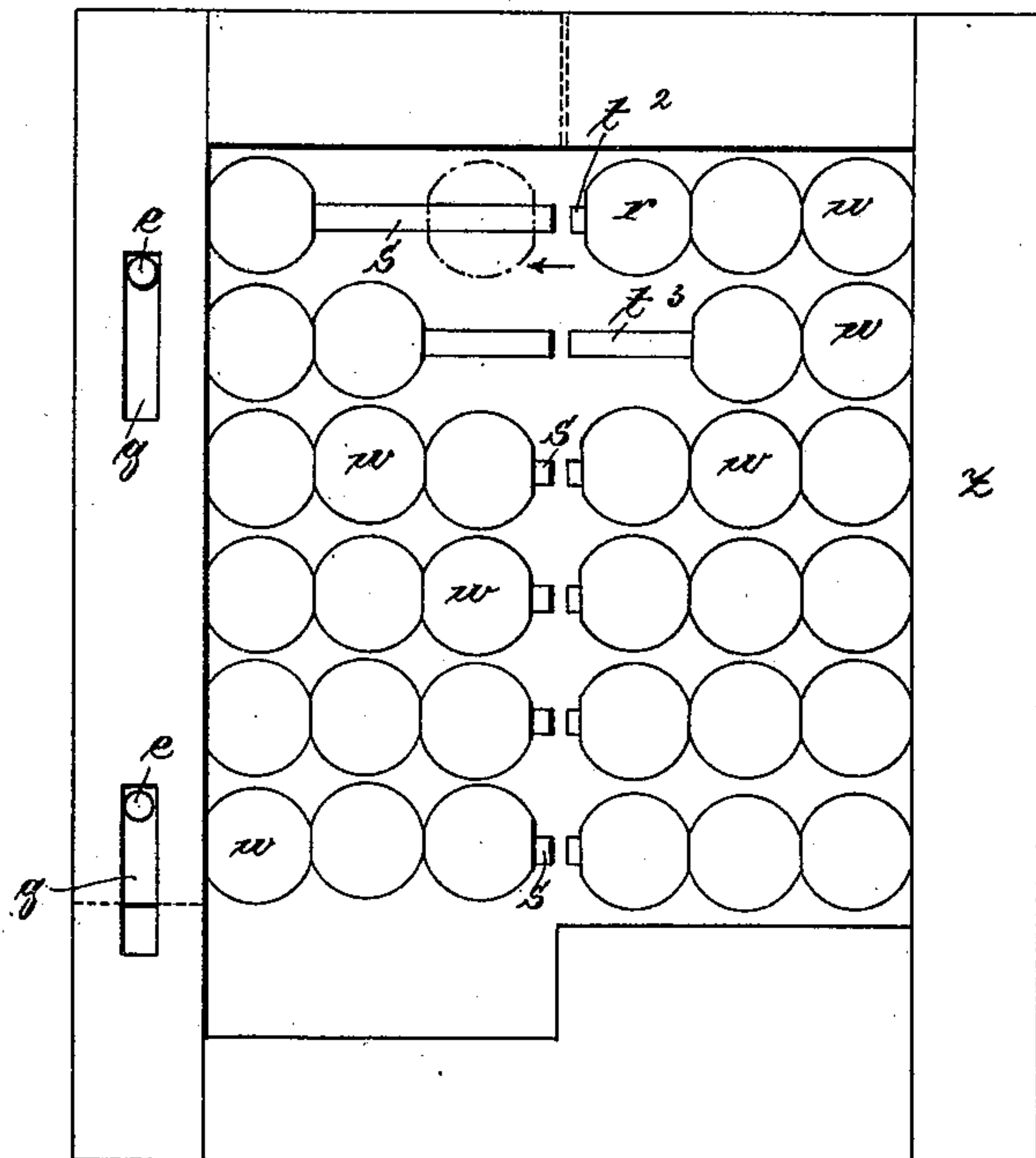


Fig. 1a

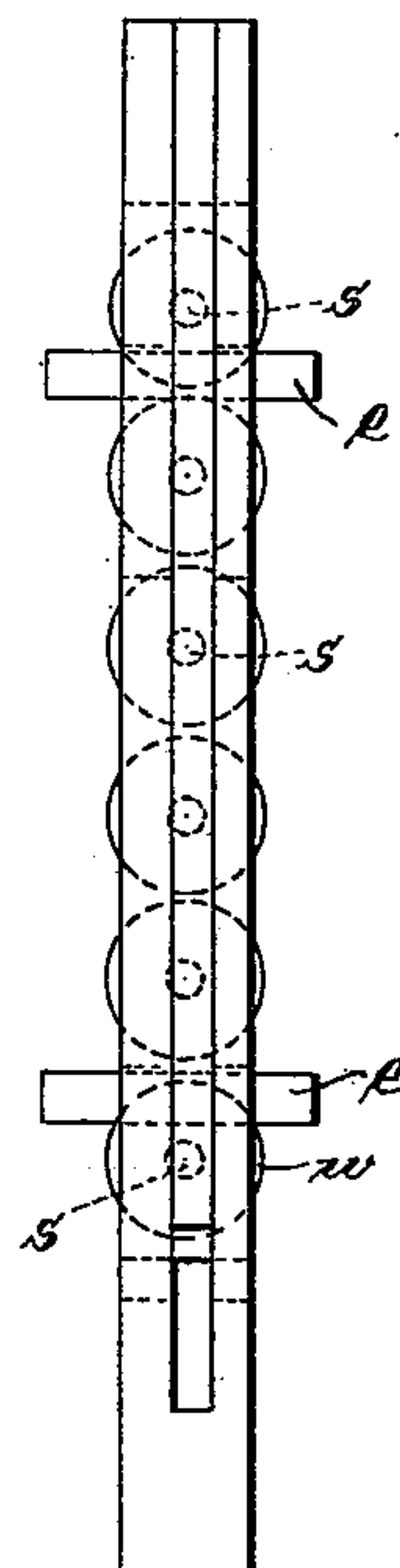


Fig. 2

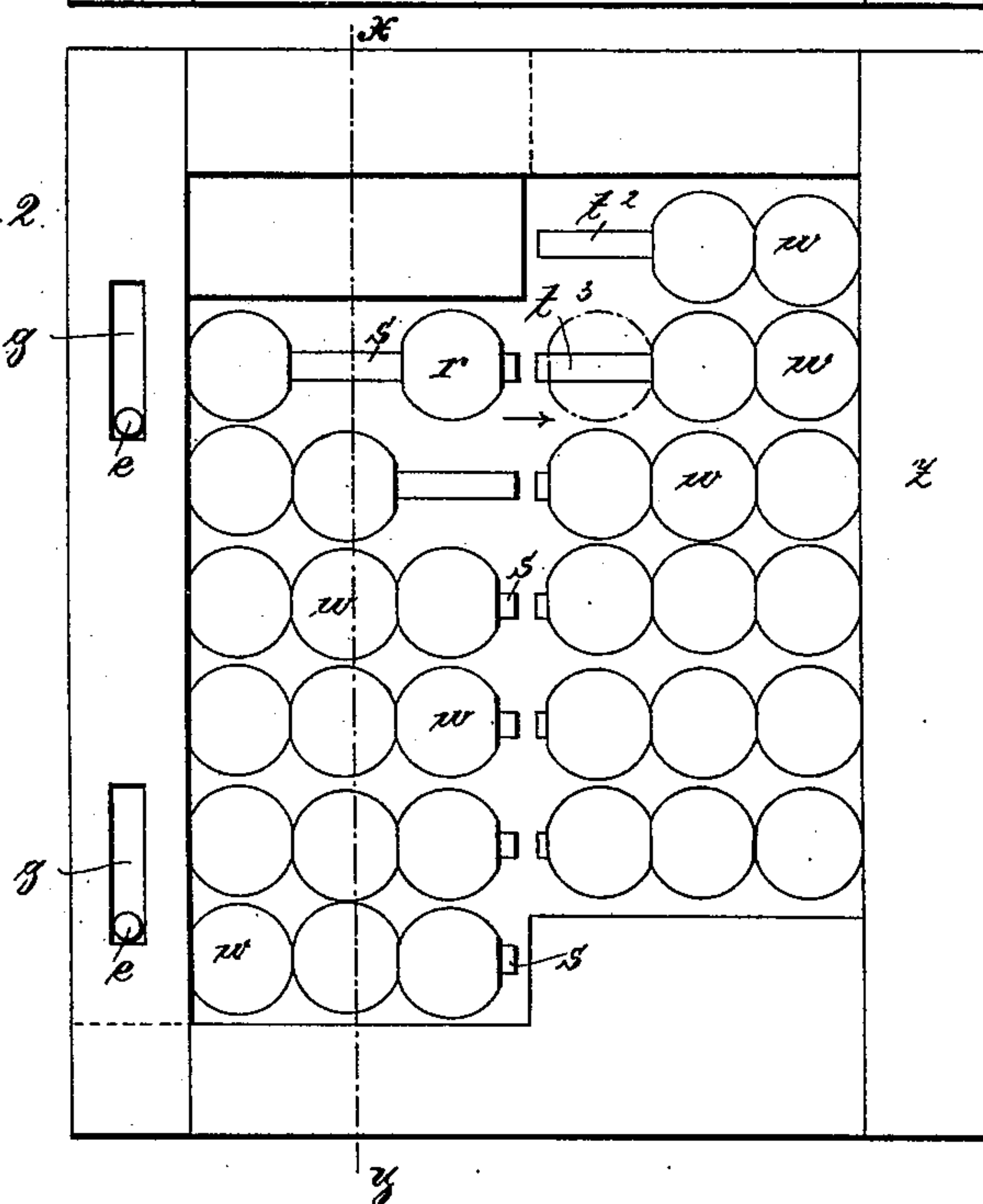
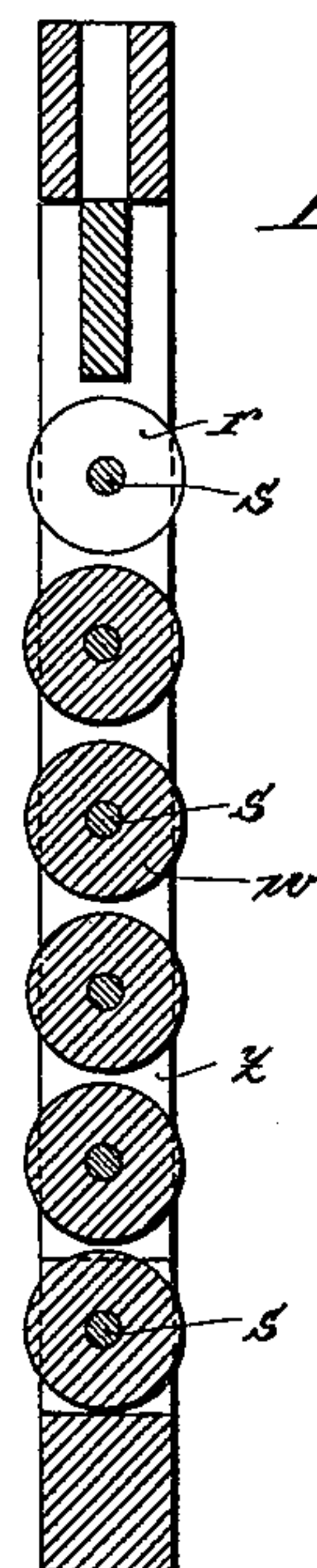


Fig. 2a



Witnesses:  
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# UNITED STATES PATENT OFFICE.

OLOF SVANSTRÖM, OF DIÖ, SWEDEN.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 619,804, dated February 21, 1899.

Application filed March 28, 1898. Serial No. 675,483. (No model.)

*To all whom it may concern:*

Be it known that I, OLOF SVANSTRÖM, a subject of the King of Sweden and Norway, and a resident of Diö, in the Kingdom of Sweden, have invented certain new and useful Improvements in Puzzles, of which the following is an exact specification.

This invention relates to an improved puzzle, the object or purpose of which being to sharpen the powers of perception, improve the understanding, and also to form a means of recreation.

The puzzle consists generally of a frame in which several rows of colored balls or the like are movably arranged upon rods or pins extending across the interior of the said frame, the rods being parted at the center, or approximately so, for the purpose of admitting of longitudinal displacement, or, more precisely, for the purpose of enabling one half-row of the colored balls to be brought in a line with another half-row—namely, with the row immediately adjacent. The balls can thus be moved over or across adjoining rows to enable the aforesaid balls to be brought in a certain order as regards their color—namely, the order required to effect the solution of the especial problem sought to be solved—as hereinafter more fully described.

In order to make my invention more clear, I refer to the accompanying drawings, in which—

Figure 1 shows in dotted lines the position which the ball *r* would assume by being moved in the direction of the arrow to the left-hand portion of the pin *s*, whereas in Fig. 2 it will be seen that the left half-row has been longitudinally displaced in a downward direction to the extent or distance of one row, so that the ball *r*, previously in a line with the row *t*<sup>2</sup>, is now in a line with the row *t*<sup>3</sup>. Fig. 1<sup>a</sup> is an end view, and Fig. 2<sup>a</sup> a cross-section on the line *xy* of Fig. 2. If the said ball is now moved in a horizontal direction to the right, the said ball, as is clear, will be caused to occupy a place upon the right-hand portion of the row *t*<sup>3</sup>. The said ball *r* has thus by three movements been brought from the right-hand portion of the row *t*<sup>2</sup> to the right-hand portion of the row *t*<sup>3</sup>.

I will give an example of a problem or task which may be set when using the puzzle. For

instance, balls of an especial color, and, for the sake of example, I will presume black-colored balls, are to be brought into such position as the balls marked in the drawings with the letter *w*. To effect this task, the balls are moved from row to row in the manner hereinafter described until the black-colored balls have been brought into the required order.

It will be clear that any other problem may be set or another method of arranging the balls sought to be obtained—in short, that the variations in the employment of the puzzle will be found to be very numerous. Instead of balls I may employ, for instance, small figures to slide upon the pins, or the balls may be provided with numbers and the task or problem set to effect a definite combination of these numbers. Furthermore, the balls may be of wood, colored glass, porcelain, &c., in which small holes are bored or molded to allow of the said balls being moved from rod to rod. Also it will be clear that the before-said balls, blocks, or figures may be suitably ornamented in order to improve the general appearance of the puzzle.

As a characteristic feature of my improved puzzle I will mention that the same differs from other games of patience and that only one dividing—*i. e.*, changing—line is provided, for which reason the solution of a problem or the working out of a task upon the puzzle is rendered somewhat more difficult and therefore more interesting.

As another characteristic feature I mention that my improved puzzle has two half-rows, which are displaceable one to the other, upon which half-rows suitable colored balls or the like may be horizontally displaced.

It is considered that the drawings will sufficiently explain the further details of the puzzle.

The particular office or function of the slats *g* and pins *e* is to permit of the movement of the adjustable frame and to effect thereby the interruption of the cross-rods.

It may, however, be stated that the vertical movement of the inner portion of the frame, which, as hereinbefore mentioned, in the present instance is effected by aid of pins *e* and slats *g*, may be carried out in any other suitable manner, corresponding to the material of

which the frame or puzzle may be manufactured or in accordance with the wishes of the purchaser.

Having thus fully described the nature of  
5 this invention, what I desire to secure by Letters Patent of the United States is—

In an improved puzzle, the slotted adjustable frame provided with a series of interrupted cross-rods, provided with balls of various  
10 colors, whereby the balls may be brought

from a lower row to a higher row or inversely from a higher row to a lower row, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

OLOF SVANSTRÖM.

Witnesses:

C. H. DAY,  
FRITZ SPERLING.