

No. 798,337.

PATENTED AUG. 29, 1905.

O. HAMMARLUND.

TOY.

APPLICATION FILED OCT. 25, 1904.

Fig. 1,

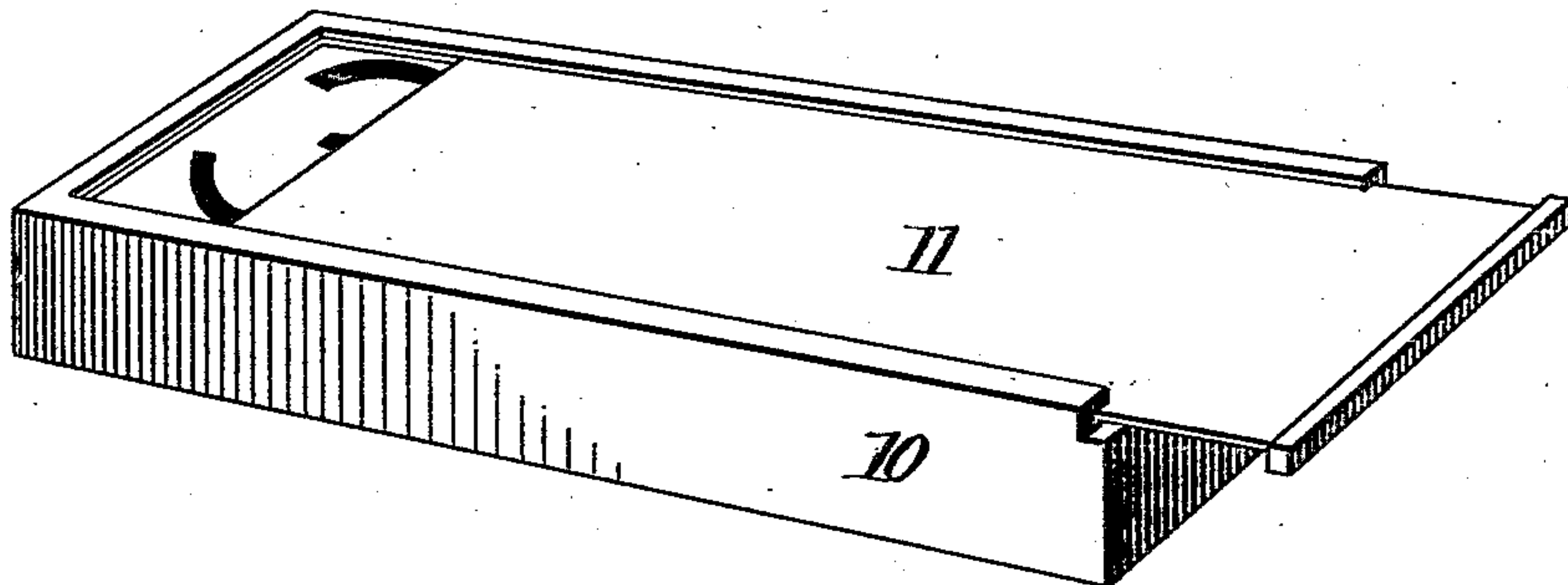


Fig. 2,

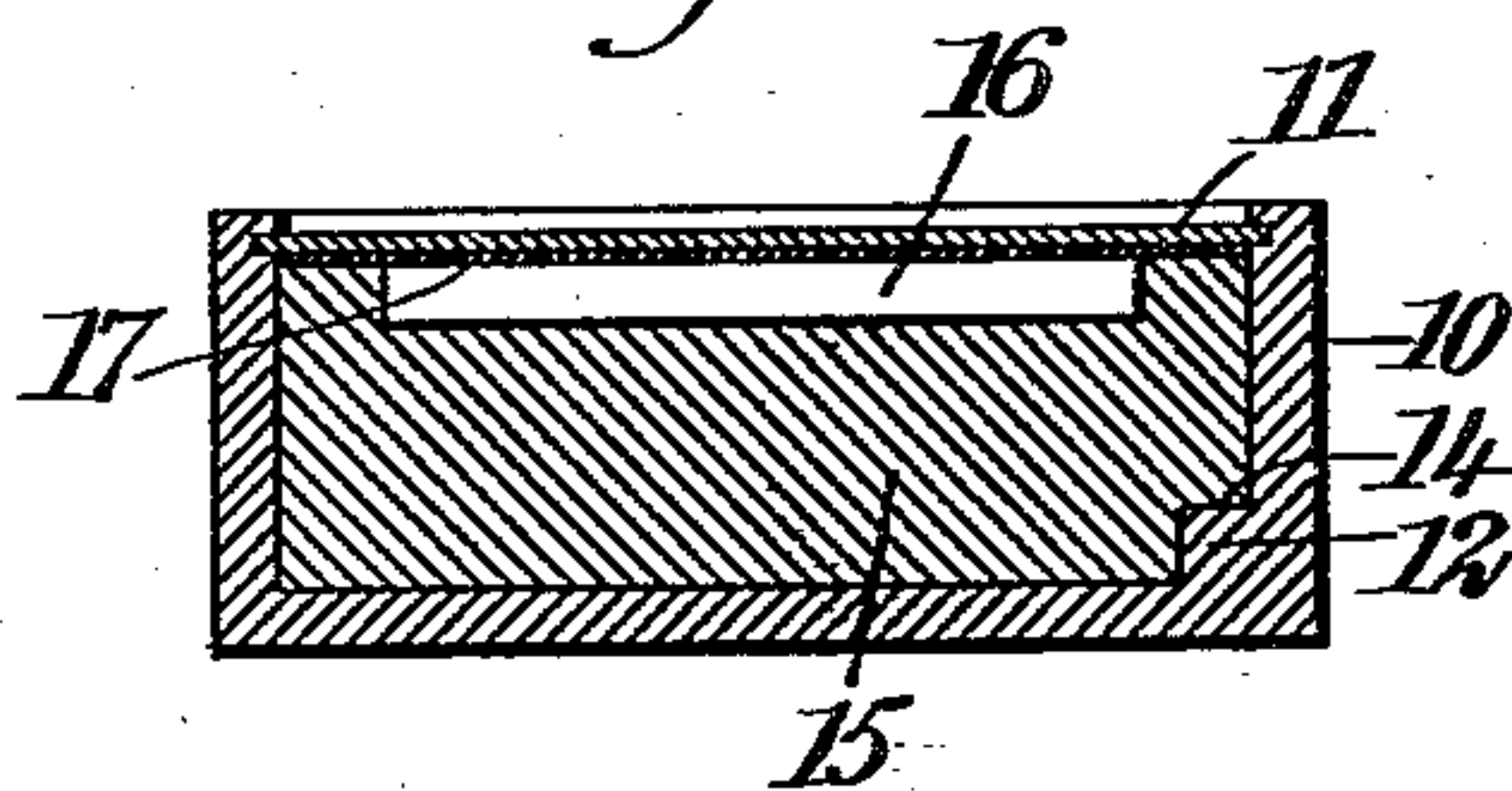


Fig. 3,

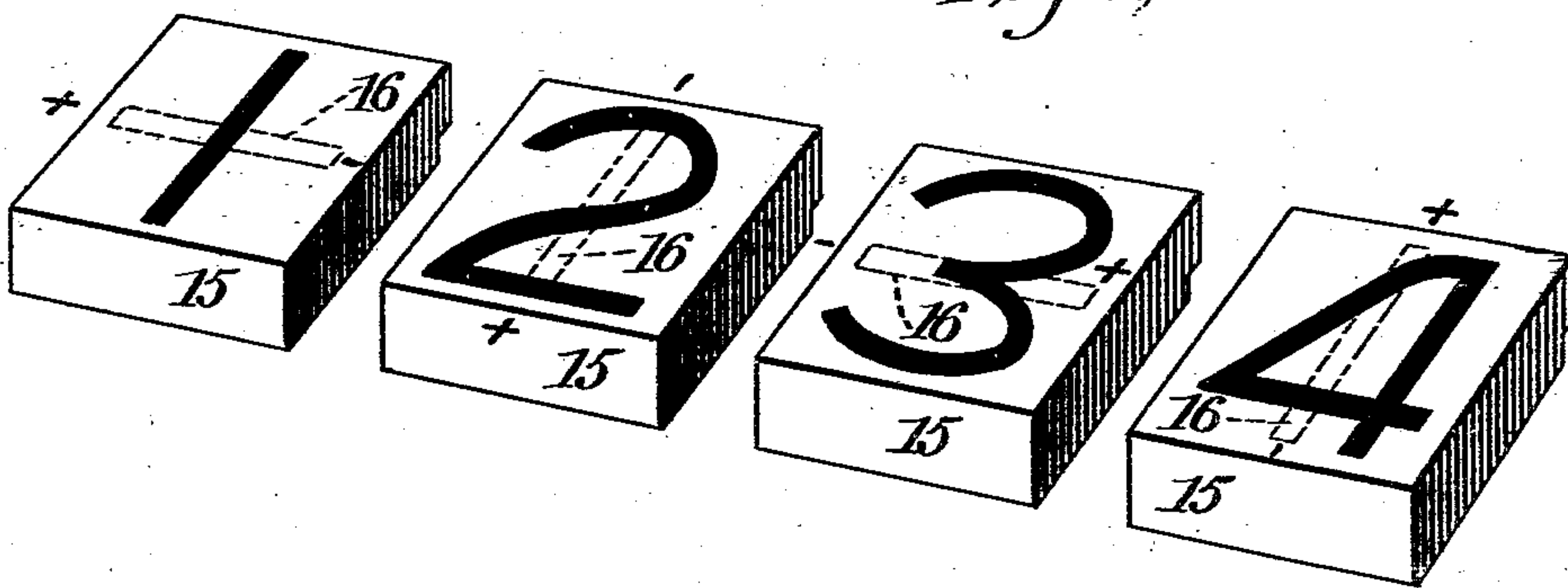
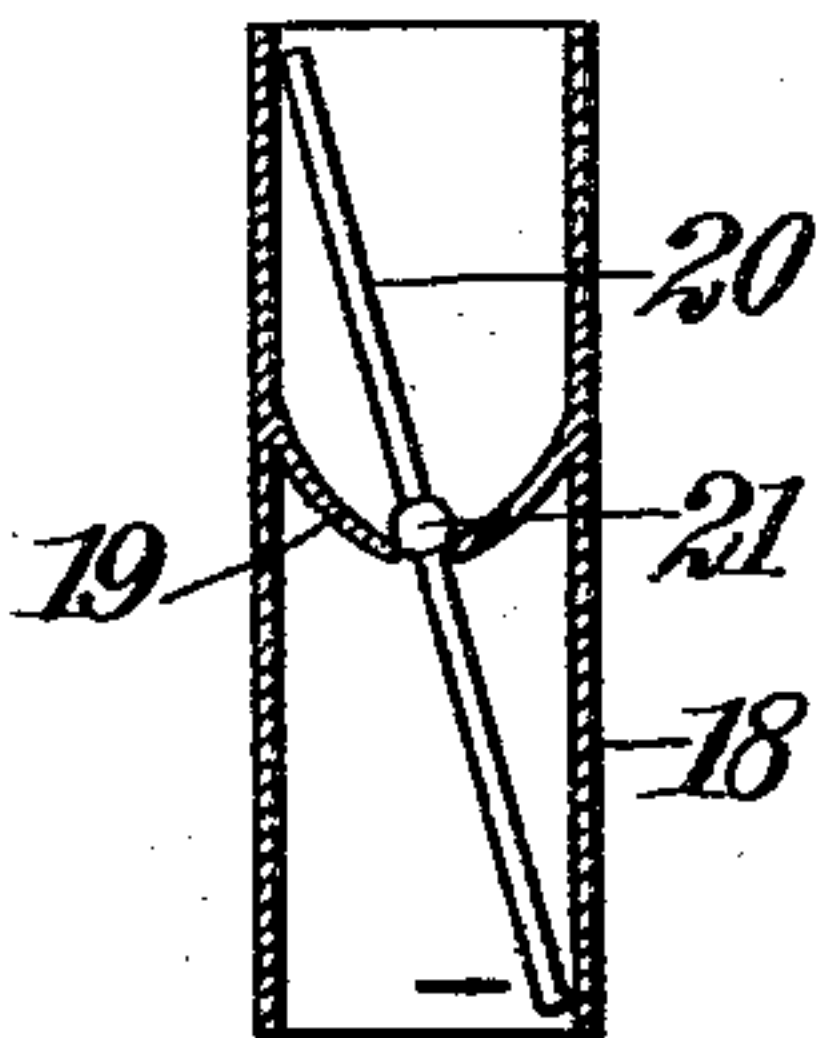


Fig. 4.



WITNESSES:

Edward Thorpe.  
Doac B. Owens.

INVENTOR

Oscar Hammarlund

BY

Mumford  
ATTORNEY



# UNITED STATES PATENT OFFICE.

OSCAR HAMMARLUND, OF NEW YORK, N. Y.

## TOY.

No. 798,337.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed October 25, 1904. Serial No. 229,949.

*To all whom it may concern:*

Be it known that I, OSCAR HAMMARLUND, a subject of the King of Sweden and Norway, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Toy, of which the following is a full, clear, and exact description.

This invention relates to a scientific toy, the true operation of which may be concealed from the casual observer, so as to puzzle the observer, and thus increase the interest of the device.

According to my invention I provide a number of blocks having magnets therein. These blocks are preferably placed in a box or other receptacle, which may be closed at will. In conjunction with the box I employ a device which I shall term a "detector-tube," and which comprises a tubular body with a freely-mounted magnetic needle therein. By placing the blocks in the box and holding the detector over the same the magnetic needle will be actuated by the variously-positioned magnets in the box, and if the operator has previously memorized the positions of the needles which correspond to the particular blocks he can tell the various locations of the blocks within the box without removing the cover of the latter.

For the full understanding of my invention reference is had to the accompanying drawings, which illustrate, as an example, the preferred embodiment of the invention, in which drawings like characters of reference indicate like parts in the several views, and in which—

Figure 1 is a perspective view of the box with the cover partly removed and showing one of the blocks in position. Fig. 2 is a cross-section of the box, taken through one of the blocks and the cover of the box. Fig. 3 is a perspective view showing four blocks and illustrating the variously-positioned magnets therein; and Fig. 4 is a longitudinal section of the detector-tube, showing the needle in place.

10 indicates the box, which is here shown as fitted with a sliding cover 11, and which is provided interiorly with a rib 12, adapted to match with a rabbet or other groove 14, formed in the block 15, so as to prevent placing the blocks in the box in any but a predetermined position relative to the sides of the box, the reason for which will hereinafter appear. While the blocks cannot be removed from the box, turned, and replaced, they may, never-

theless, be shifted with respect to each other at will. In each block a magnet 16 is placed, preferably in such a manner that the magnets will be concealed. This may be best done by letting the magnets into the surface of the block and covering the block—for instance, by a facing, (shown at 17 in Fig. 2.) The magnets 16 are arranged in a different position in each block, as indicated by the positive and negative marks in Fig. 3. The detector comprises a tube 18, in which is located a socket-like partition 19, with a central opening. Through this opening is loosely passed the magnetic needle 20. Said needle is provided with a ball or enlargement 21 intermediate its ends and adapted to engage the partition 19, so as to mount the needle with a swivel or ball-and-socket joint and allow the same to be vibrated in any direction within the tube. Preferably the needle is of a length not exceeding the length of the tube, so that it will be concealed from the casual observer. It will be seen, however, that by inverting the tube the needle may be dropped freely from the tube, and if proper care is exercised it may be caught in the hand of the performer without being detected by the observer.

If the blocks are placed in the box and the cover moved to closed position, the detector when placed over one of the blocks will have its needle actuated and moved to one side or the other of the tube, according to the position of the magnet in the block over which the detector is placed. If, therefore, the operator memorizes the various positions of the needle which correspond to the blocks, he may determine the positions of the blocks within the box by merely placing the detector successively over the four blocks when inclosed by the box.

In practice the toy is best operated as a puzzle or trick, the operator handing the box and blocks to the observer and telling him to rearrange the blocks and close the box, whereupon the operator will determine the position of the blocks by looking through the detector. Then when the detector is placed over the box in order to delude the observer the operator may appear to be examining the box through the detector-tube; but, in fact, he will be merely noting the various positions of the needle 20, and in this way he can tell the precise positions of the blocks.

Various changes in the form, proportions, and minor details of my invention may be re-



sorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the terms of my claims.

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

1. In a toy of the character described, a detector, comprising an elongated casing, and a  
10 magnetic needle having a universal-joint connection with the casing intermediate of the ends thereof.

2. In a toy of the character described, a detector comprising an open-ended elongated  
15 casing, and a magnetic needle loosely pivoted in the casing to permit it to readily drop out when the casing is inverted.

3. In a toy of the character described, a detector comprising an open-ended elongated  
20 casing, and a magnetic needle in the casing and having a ball-and-socket connection therewith.

4. A toy comprising a box, a block adapted to be inclosed thereby, the block and box being of such relative sizes as will admit moving the block bodily within the box, means for preventing the placing of the block within the box in any but a predetermined position

relative to the sides of the box, a magnet carried by the block, a detector comprising a  
30 magnetic needle, and means for mounting the same.

5. A toy comprising an elongated box having a rib therein, a block capable of moving  
35 bodily along the box and having surfaces engaged with the rib, a magnet attached to the block, a detector comprising a magnetic needle, and means for mounting the same.

6. A toy detector comprising a tube, a magnetic needle contained therein, and means for  
40 mounting the needle intermediate of the ends of the tube and so as to vibrate in all directions.

7. A toy detector comprising a tube, an orificed partition therein, and a magnetic needle  
45 having an enlargement, the needle being passed through the orificed partition and the enlargement engaged with the partition, for the purpose specified.

In testimony whereof I have signed my name  
50 to this specification in the presence of two subscribing witnesses.

OSCAR HAMMARLUND.

Witnesses:

ISAAC B. OWENS,  
JNO. M. RITTER.