

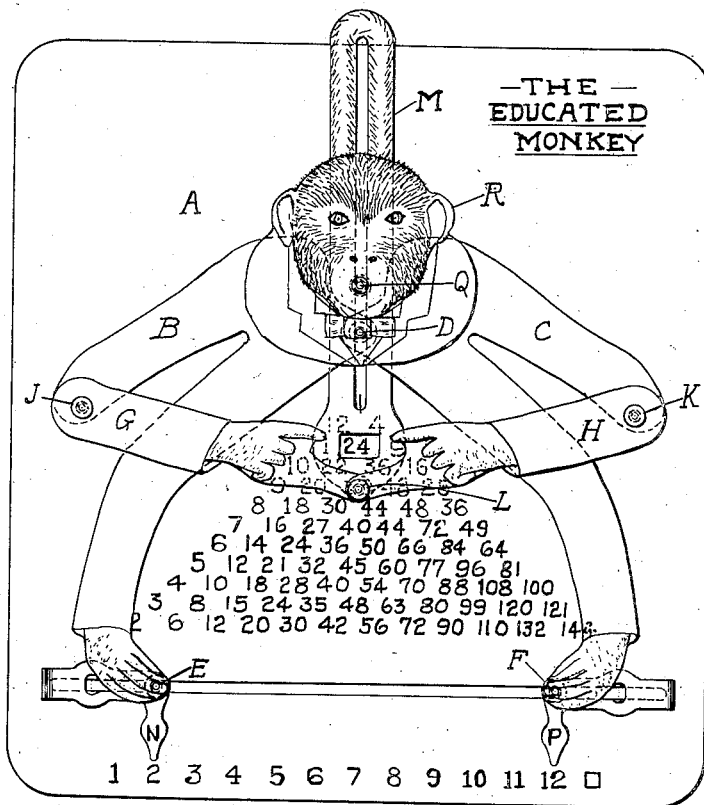
W. H. ROBERTSON.

TOY.

APPLICATION FILED SEPT. 3, 1915.

1,188,490.

Patented June 27, 1916.



WITNESSES:

Adine
Carl Beust.

INVENTOR.

William Henry Robertson

UNITED STATES PATENT OFFICE.

WILLIAM HENRY ROBERTSON, OF BELMONT, OHIO, ASSIGNOR TO THE EDUCATIONAL NOVELTY COMPANY, OF DAYTON, OHIO, A CORPORATION OF OHIO.

TOY.

1,188,490.

Specification of Letters Patent. Patented June 27, 1916.

Application filed September 3, 1915. Serial No. 48,870.

To all whom it may concern:

Be it known that I, WILLIAM HENRY ROBERTSON, a citizen of the United States, residing at Belmont, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Toys, of which I declare the following to be a full, clear, and exact description.

My invention relates to toys for educational purposes and its mechanical construction is very similar to another invention of mine for calculating purposes shown and described in application for Letters Patent of United States, Serial Number 15,674.

The present invention is intended to stimulate the interest of children in the study of numbers and for this purpose uses a combination of parts believed to be entirely new in the toy art.

As far as I am aware, a number chart has never before been combined with any object resembling and representing a living creature which can be adjusted in relation to the chart to perform computations, thereby suggesting the idea of a calculating animal.

With such a novel combination, it is intended to interest the child and increase his knowledge of numbers and number tables.

With these and incidental purposes in view, the invention consists in certain novel features of construction and combination of parts, hereinafter described with reference to the accompanying drawing, which accompanies and forms a part of this specification.

By reference to the chart shown on plate A of the accompanying drawing, a series of numbers are shown and above this a multiplication table. From the arrangement of the numbers it can be seen that the product of any two numbers of the series lies on an imaginary line which is the perpendicular bisector of another such line connecting the two numbers of the series. Also, that this product is located above the slot in plate A at a height depending on the distance between the two numbers of the series.

Two members B and C are shown pivoted at D. To these are attached arms G and H pivoted respectively at J and K, and pivoted to each other at L, and also to tail M which has a slot in which are the studs Q and D, both of which are riveted to head R. Pointers N and P are secured to the members

B and C by studs E and F, which also pass through the slot in plate A. These studs with the aid of teats pushed out from the pointers N and P into the slot in plate A, serve to guide the motion of the pointers. Obviously, when the pointers N and P are brought closer together, the square hole in tail piece M is lowered and when the pointers are moved farther apart, the same hole is raised.

It will further be observed that the square hole in tail M lies on a line which is a perpendicular bisector of the line connecting the centers of studs E and F. Therefore, the motion of this hole satisfied the conditions necessary to enable it to expose the product of any two numbers directly pointed at by the pointers. However, it is found both by theory and experiment that for the regular arrangement of table as shown, it is necessary that the three distances from the centers of stud J to the centers of studs D, L, and E be equal each to each; likewise, for distances K D, K L, and K F, where the letters represent the centers of the studs.

It is evident that by the apparatus described, results could be found on an addition table and many other kinds of tables as readily as on a multiplication table.

While the form of the invention herein shown and described is admirably adapted to accomplish the purpose primarily stated, it is not intended to confine the invention to the form of embodiment herein disclosed for it is susceptible of embodiment in various forms, all coming within the scope of the claims which follow.

What I claim as new and desire to secure by Letters Patent of the United States, is:

1. In a toy, a chart having characters and a table of results, and a movable image of an animated creature having members adjustable to occupy various positions relative to the chart in each of which positions characters are designated and corresponding results indicated.

2. In a toy a chart having a table of computations and a series of numbers, and a movable image of an animated creature having its members such as limbs adjustable to set to various positions relative to the chart in each of which positions two limbs of the image designate each a numeral while an-

other portion of the image indicates a resulting computation.

3. In a toy a chart having a series of characters and a table of results and an
5 image of an animated creature composed of relatively movable parts, representing movable members of the animated creature two of which parts are pivoted together and adjustable to set at various positions in each
10 of which positions the two parts designate each a number and co-act to control the indication of corresponding results.

4. In a toy a chart having a series of numbers and a table of computations and
15 an image of an animated creature having members such as arms, legs, feet and fingers, two legs being pivoted together and adjust-

able to set at various positions relative to the chart in each of which positions the two feet designate each a number, while the
20 fingers indicate the corresponding computation.

5. In a toy, a chart having various characters, and a movable image of an animated creature having limbs, one of which is ad-
25 justable relative to the chart to set at various positions in each of which positions the limb and two other portions of the movable image indicate each a character there being
30 three characters thus indicated each of which is a function of the other two.

In testimony whereof I affix my signature.

WILLIAM HENRY ROBERTSON.