UNITED STATES PATENT OFFICE.

AUGUSTUS LE PLONGEON, OF BROOKLYN, NEW YORK.

TOY.

SPECIFICATION forming part of Letters Patent No. 502,101, dated July 25, 1893.

Application filed November 7, 1892. Serial No. 451,144. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS LE PLONGEON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Toys, of which the following is a full, clear, and exact description.

My invention relates to a spelling and computing toy and its operation is effected by hand pressure.

I employ in carrying out my invention a frame with legs, upon which and pivotally connected thereto is an overhanging table top. A casing with a dial upon which are letters and figures is connected upon the face of the table top at the end above the frame. An arbor or shaft passes vertically through the casing and projects above the dial where it carries a pointer. A cord is connected at one end to the legs of the frame and passes over a roller and through the casing, and its other end is wound around a spool or drum on the vertical shaft and a helical spring, like a light clock spring, is connected at one end to said shaft and at its other end to the casing, and I prefer to employ above the dial a disk upon the shaft and rotatable with it and in which disk is an opening through which a single letter or figure can be seen at once. The toy is operated by hand pressure on the overhanging table top.

In the drawings, Figure 1 is an elevation and partial section illustrating my improvement. Fig. 2 is a sectional plan at the line x, x, of Fig. 1, and Fig. 3 is a plan of the dial.

a represents the frame, b the legs and c c' the cross bars connecting the lower ends of the legs. An arm c^2 is mortised in and projects from the cross bar c'.

The table top is represented at d and the same has a longitudinal rib d' and is pivotally connected to the frame a by a pivot pin e. The larger portion of the top rests on the frame a and the overhanging portion is slightly smaller.

The casing is made with sides f, a base piece f' and top f^2. The base f' is connected to the table top upon the end supported by and resting directly on the frame a and the dial h with letters and figures as shown is connected on the face of the top f^2. The shaft i passes vertically through the casing with a bearing in the base piece f' and to the upper end is secured a pointer k above the dial h, and I prefer to employ a disk l above the pointer upon the shaft i and the same revolves with the shaft i and has an opening therein of about the size of a single letter or figure.

m is a helical spring within the casing, one end of which is connected to said casing and its other and inner end is connected to the shaft i.

A spool or drum n is secured upon the shaft i within the casing and around the same in an opposite direction to that of the spring m is wound a cord o. This cord passes out of the casing over a roller o' and down to the end of the mortised arm c^2 to which it is secured.

The table top is tilted on its pivot pin e by placing the hands upon the overhanging portion, and the degree of tilting is governed by the pressure of the hands. As the table top is tilted the cord o is unwound from the spool or drum n and the shaft i is rotated thereby against the action of the spring m which is thus coiled tighter. With the rotation of the shaft the pointer is rotated and its disk l and at the maximum pressure the pointer stops at a letter or figure which it designates and which can be seen through the opening in said disk. With the release of pressure or the removal of the hands the expansion of the spring m rotates the shaft i, winding the cord o upon the drum n and returning the parts to their normal position. The variations in pressure permit the pointer to change from one letter or figure to another and thus to spell with the letters or compute with the figures.

Instead of the metal spring m a rubber band wound round a drum or cylinder may be employed to bring back the pointer to its normal position.

I claim as my invention—

1. The combination with a supporting frame, of a pivoted table top capable of tipping, a dial with figures and letters, a pointer and shaft and means substantially as specified for rotating the shaft and pointer and for returning the same to a normal position, substantially as set forth.

2. The combination with a supporting frame having legs, of a pivoted and overhanging table top connected therewith and capable of tipping, a dial with figures and letters, a point-

er and shaft, a cord and pulley for rotating the shaft and pointer and a spring for returning the same to a normal position, substantially as set forth.

3. The combination with a supporting frame having legs, of a pivoted and overhanging table top or board connected therewith and capable of tipping, a dial with letters and figures and a supporting case therefor at one end of the board, a shaft passing vertically through the case and a pointer thereon above the dial, a cord and pulley for rotating the shaft and pointer with the tilting or tipping of the board, and a spring for returning the parts to a normal position, substantially in the manner and for the purposes set forth.

Signed by me this 28th day of October, A. D. 1892.

AUGUSTUS LE PLONGEON.

Witnesses:
E. C. GREEN,
WM. M. MONROE.