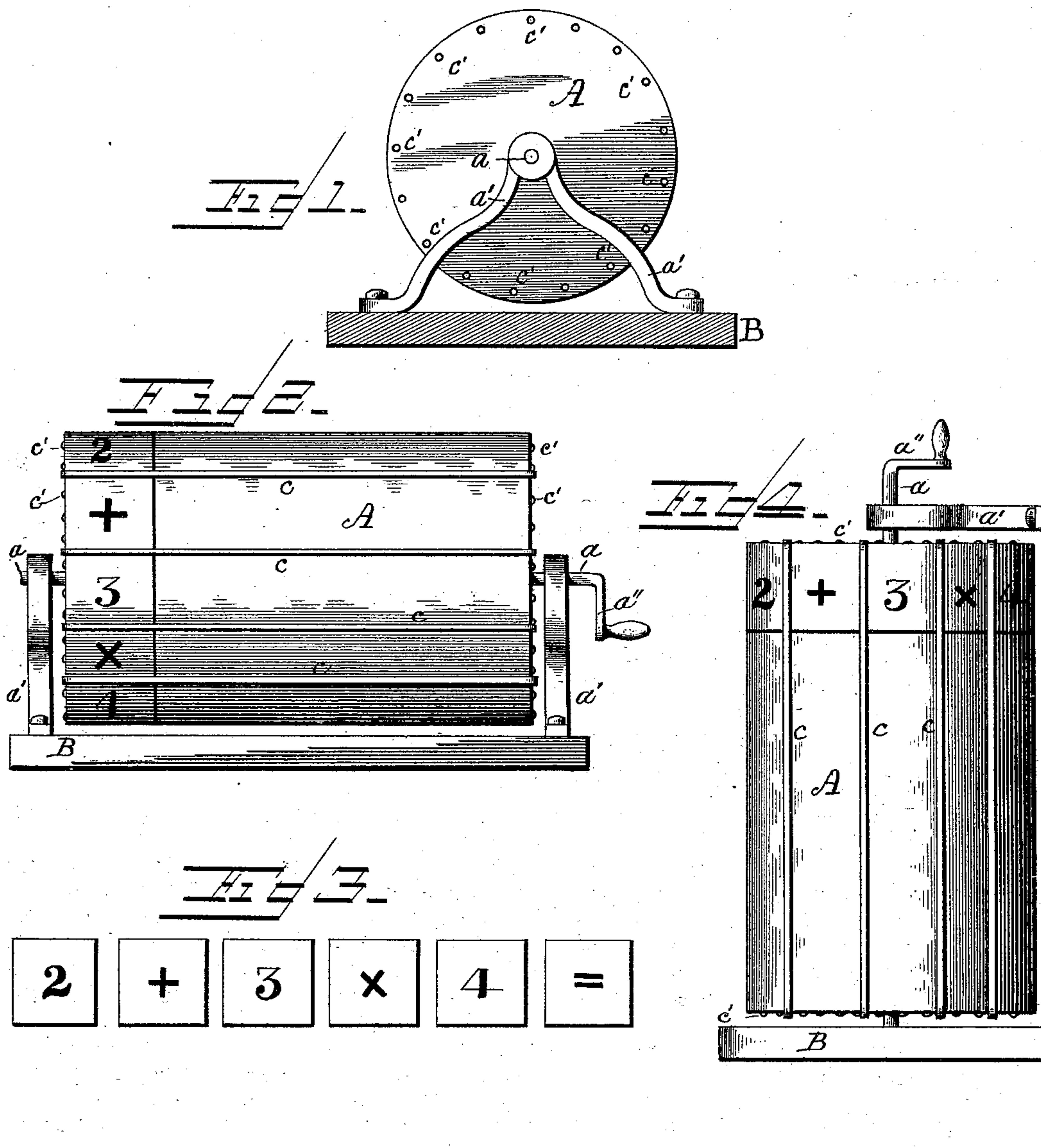


(No Model.)

J. F. CLARK.
ROTARY BLACKBOARD.

No. 488,625.

Patented Dec. 27, 1892.



2	+	3	x	4	=
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WITNESSES

C. N. Hood
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UNITED STATES PATENT OFFICE.

JAMES F. CLARK, OF COLUMBIA SULPHUR SPRINGS, WEST VIRGINIA.

ROTARY BLACKBOARD.

SPECIFICATION forming part of Letters Patent No. 488,625, dated December 27, 1892.

Application filed April 13, 1892. Serial No. 429,013. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. CLARK, a citizen of the United States, residing at Columbia Sulphur Springs, in the county of Greenbrier and State of West Virginia, have invented certain new and useful Improvements in Rotary Blackboards; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain appliances for school purposes whereby an improved method of object teaching is obtained which will be hereinafter more particularly described and pointed out.

In the accompanying drawings forming part of this specification: Figure 1 is an end view of the device. Fig. 2 is a horizontal view of the device. Fig. 3 is a series of cards having certain figures on them. Fig. 4 is a view of a modification of the device with its axis vertical.

A is a hollow cylinder which may be made of any suitable material, as wood or metal, and is to be slated, or covered with a black silicated cloth, to form a school blackboard. The board may have its periphery of any convenient number of plane surfaces, instead of the circular form, in which case the plane surfaces may be of ordinary slates attached. This cylinder, A, has an axle, *a*, which is supported on brackets, *a' a'*, fastened to a base board, B. The axle, *a*, has a crank handle or may have a thumb screw *a''*, at one end by which the cylinder can be rotated.

c c c, &c., represent elastic straps which are stretched longitudinally over the surface of the cylinder, A, at convenient distances apart, and, that such convenient distances may be obtained; buttons or hooks, *c' c' c'*, &c., are inserted at each end of the cylinder, A, as shown in the figures, so that the distance apart of these straps, *c*, may be regulated at

the pleasure of the teacher to suit the size of the cards in use.

In Fig. 3 is shown a series of cards marked 2, +, 3, ×, 4, =. The same cards are shown as being held on the cylinder by the straps, *c*.

In Fig. 4, the cylinder is placed vertically and the cards are arranged correspondingly.

The instructor in any branch of knowledge, by the use of this device as a blackboard, will have his series of cards printed, engraved, painted or otherwise illustrated for the purpose of object teaching; such cards as he desires to employ in the lesson will be placed on the cylinder, to be held by the straps, *c*, as shown in the figures. To the right of these cards he will write in chalk the description device, figure, &c., of each card. In the example shown he instructs the class in arithmetic that $2 + 3 \times 4$ is equal to 20.

For very young beginners the cards will have various objects of natural history; for instance, domestic animals, a cat, &c. The teacher will write the names in chalk on the cylinder, and after explanations will remove a card at a time and ask what the word reads, thus directing the attention of the pupil. As memory is predicated upon a fixed attention upon any particular object, the pupil is gradually educated up to a close observation, and by this effort, memory becomes cultivated, and a knowledge of single and connected facts is rapidly acquired thereby. This method can be employed in any branch of knowledge for object teaching.

I claim—

A rotary cylindrical black-board having a series of bands arranged axially on the exterior surface, for retaining removable object cards in combination with said cards for the purpose of instruction, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAS. F. CLARK.

Witnesses:

S. S. CARPENTER,
J. A. G. SHIPLEY.