

N. LOVERIN,
 Apparatus for Teaching History, &c.
 No. 198,749. Patented Jan. 1, 1878.

Fig. 1.

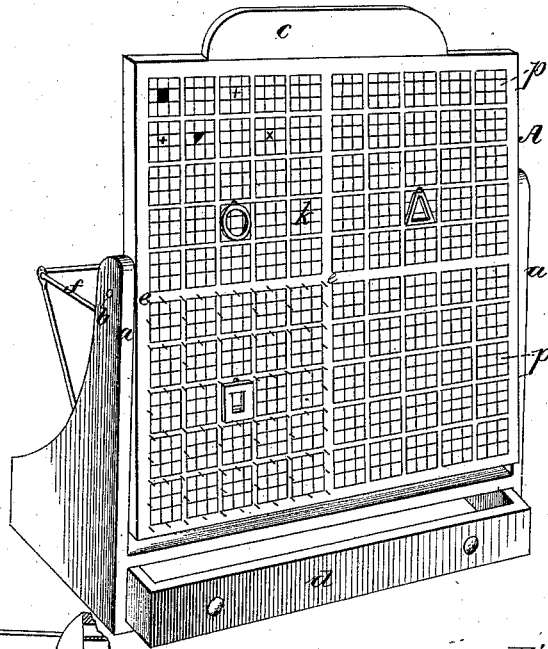


Fig. 2.

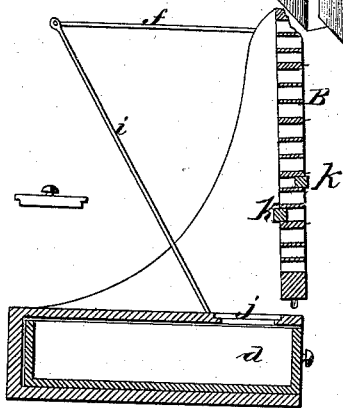
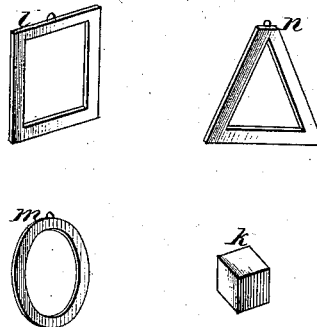


Fig. 3.



Witnesses.

W. A. Ledges
 H. P. St. John

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NELSON LOVERIN, M. D., OF MONTREAL, QUEBEC, CANADA.

IMPROVEMENT IN APPARATUS FOR TEACHING HISTORY, &c.

Specification forming part of Letters Patent No. **198,749**, dated January 1, 1878; application filed July 24, 1876.

To all whom it may concern:

Be it known that I, NELSON LOVERIN, M. D., of Montreal, Province of Quebec, Dominion of Canada, have invented a Historical Centograph, of which the following is a specification:

My invention consists of a square frame, divided into one hundred squares, each of which is subdivided into nine compartments and symbols, adapted to the study of history.

The frame is partitioned in such a way as plainly to represent ten rows, each of which possesses ten squares in all, therefore one hundred. These latter are subdivided each of them into nine compartments or smaller squares, and constructed so that they will receive and permit of the transmission of cubes, which, when pushed through, fall upon a curtain that directs them to a drawer intended for their reception.

Over the center of each of the one hundred squares is a projecting pin, upon which to suspend other symbols that hang in front of the small compartments above mentioned, when in position. The standards receive the frame any side up, or either surface forward, and are perforated to receive a wire that holds the upper margin of the curtain, whose lower border is fastened by hooks to the top of the opening above the drawer that receives the cubes.

The central partitions, cutting each other at right angles and dividing the frame into four equal parts, are much thicker than the others, thus affording strength, as well as resting points for vision, during rapid calculations of time.

Thus constructed, the apparatus, which I wish to patent as "Loverin's historical centograph," is complete.

Figure 1 on the drawings is a perspective view. Fig. 2 is a section of the lower half of the same. Fig. 3 is a perspective view of the symbols.

In the drawing, A, Fig. 1, represents the square frame in position, divided by a series of partitions, vertical and horizontal, into one hundred squares, each of which is subdivided into nine compartments or squares, *p*, open back and front, to receive and discharge the small symbols. It is supported upon trun-

nions or standards *a a* by means of pivots, one of which is seen at *b*. It may be inclined to any angle best adapted to the wishes of a class of students.

The blackboard *c* is attached to the upper side, but in reckoning events before the Christian era, being made removable, can be placed at the bottom of the frame, over the drawer *d*.

Above the surface of the lower left-hand quarter of the frame may be seen projecting pins *e*, upon which to suspend the large symbols, three of which are drawn in position. A portion of the wire to which the curtain belongs may be seen at *f* as it leaves the back of the trunnion or standard.

B, Fig. 2, is a section of the lower half of the frame. It affords a view of one of the cubic blocks entering and another cube or block passing out from one of the small compartments or squares above described.

A lateral view of the curtain *i* may be seen as it leaves the wire *f* and stretches to the box of reception *d*. At *j* is an opening through which the cubes fall into the drawer *d*.

Fig. 3 gives a perspective view of the symbols, to which others might be added—as, for instance, circles, semicircles, and stars. The smallest, *k*, is a cube, which, by being variously colored on each of its sides, can represent six different conditions of things as regards history. The symbols *l m n* are the square, circle, and triangle, to each of which is appended an opening or loop intended to catch upon the pins and permit of its being suspended in any place in front of the nine small compartments required, as shown in Fig. 1 of the drawings, where three are represented in position.

When the centograph is applied to the study of history, the entire frame represents one hundred years—a century; the rows, decades; the single squares, years; while the nine compartments of each year are intended for the reception of the variously-colored cubes as symbolical of some event classified with those of the same subdivision, and which are easily understood in consequence of the part occupied by them. The blackboard is useful to indicate the particular century under consideration.

It will hence be seen that any century, decade, year, or compartment may be brought

before a class for investigation. In counting the centuries from the creation to the present time, the order will be from above downward and from left to right, and the proper place for the blackboard will be on top of the frame; but if counting from the Christian era back to the creation, the board may be fixed to the bottom and the order of counting reversed.

When applied to the teaching of statistics, the nine compartments of each year become respectively the representation of the nine digits, beginning with unity at the upper and left-hand corner, counting to the right, in the same way as numbered when applied to the study of history. In this way the nine digits are represented by the small cubic symbols, the tenth or cipher being indicated by the large suspended symbols.

The above apparatus may be made of other material than wood, and, when properly constructed, will serve as a powerful adjunct to

the study of history, in familiarizing the student with time, a portion of which it always represents, holding historical events to view in chronological order, as shown by the Bern and Zabian systems of universal history, of which I claim to be the legal proprietor.

What I claim as my invention is—

1. The square frame *A*, centrally hung upon pivots *b* in the standards *a a*, and provided with the compartments *p* and cubical blocks *k*, substantially as described.

2. The apparatus for teaching, herein described, consisting of the square frame *A*, having compartments *p*, blocks *k*, symbols *l m n*, and blackboard *c*, all arranged for use, substantially as set forth.

NELSON LOVERIN, M. D.

Witnesses:

JOHN J. EVANS,
D. SMITH.