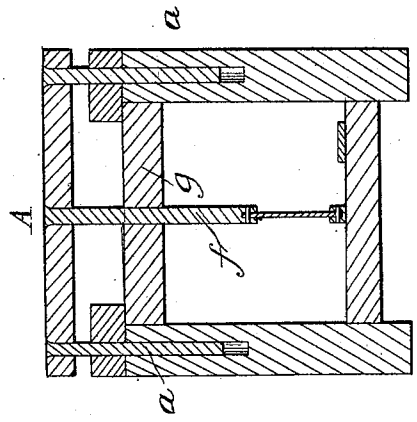
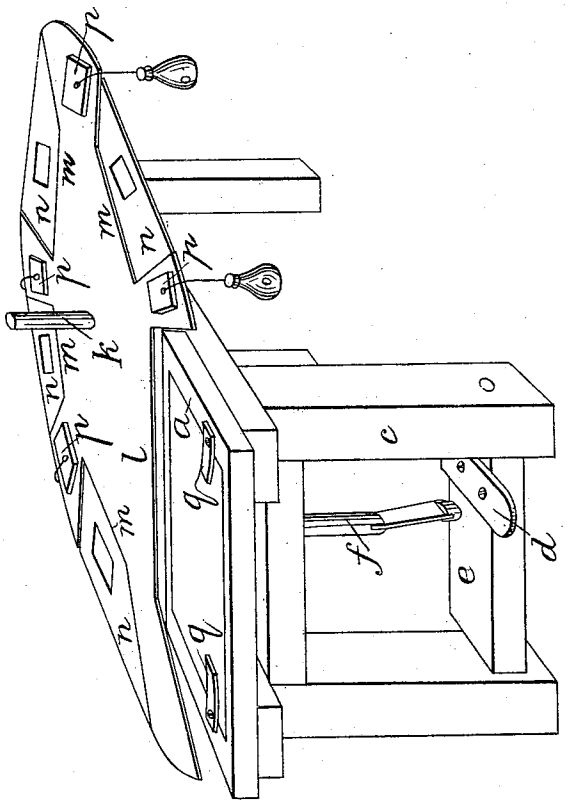
L. STEBBINS.

MODE OF COLORING MAPS.

No. 1,510. Patented Mar. 12, 1840.





THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LUCIUS STEBBINS, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN THE MODE OF COLORING MAPS.

Specification forming part of Letters Patent No. **1,510**, dated March 12, 1840.

To all whom it may concern:

Be it known that I, LUCIUS STEBBINS, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Machine for Coloring, Staining, or Painting Maps, Charts, or other Prints; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in the arrangement of thin plates of tin, lead, or any mixture of these two metals, with holes pierced through them, fitting or coinciding with the boundaries of States, counties, towns, or other boundaries designated on such prints to be colored with different colors through said holes by means of sponges wetted with a solution of the colors used, the maps or other prints to be immovably fixed on a table until all the desired colors be applied.

To enable other suitable mechanics to make and those skilled in the art to use my invention, I will proceed to describe its construction.

I first provide a table, *a*, (see drawing,) of sufficient dimensions to receive the sheet to be colored. This table is attached to a counter or suitable frame, *c*, in such manner as to admit of its being raised and again lowered to its original resting-place, but incapable of any shake or lateral motion. This I effect by slides, to which the table is made fast, which pass down into the standards of the frame, (shown at *a* in the section A, where the frame is represented as cut through vertically at the center of the slides,) or in any other convenient method. The table is raised by means of a pedal, *d*, acting as a lever, the fulcrum of which is the rolling bar *e*. From the back edge of this rolling bar a jointed rod, *f*, passes up through a collar, *g*, to the table, to which it is joined. This rod raises the table by means of the pedal *d*.

As a convenience in adjusting the metallic plates through which the patterns are cut and bringing them always to coincide with the boundaries to which they are fitted, I make use of a circular plate of metal, *i*, which operates on a fixed center, *k*. This plate should be of sufficient diameter to reach quite to the front edge of the table, over which it may revolve. A section of this circular plate is removed at *l*, sufficiently large to clear the outlines of the table, that it may not impede the operation of placing the sheets on the table. So many other sections of this plate are removed as there are colors used, usually four, *m m m m*. The plates of tin, lead, or any composition of these two metals, previously mentioned, or those through which the holes coinciding with the boundaries to be colored are cut, are fixed underneath these removed sections, as shown at *n n n n*.

Although I have here pointed out a revolving motion on a fixed center as a guide always to insure the proper adjustment of the patterns, I do not in practice always use this exact method, but this or one substantially like it. To fix the patterns to any straight edged board or other material and slide it along a fixed ledge, or to slide the table, the patterns being stationary, would answer the same end, the object being only in some way to furnish a guide for readily placing the patterns. I apply the colors with sponges *o o*, using one for each color, and charge them with the colors by daubing them onto folds of cotton or linen cloth *p p p p*, (or other absorbent substance,) saturated with the colors in solution.

The first thing to be attended to in the use of this machine is to cut the patterns through the metallic plates, which I do by placing a section of the map upon one of the plates, and then carefully cutting through both the map and plate along the required boundaries with some proper instrument. This being done, I have a correct pattern, through which one of the colors may be applied. I proceed in a similar manner with other plates and other sections of the map until patterns for all the colors required are thus obtained. A map or print to be colored is next to be placed on the table *a*, and being so fixed in its place by the springs *q q* by some certain points or objects on the map as that any number may afterward be fixed in exactly a similar position by the same points or objects. Then placing one of the metallic plates on the map, already fixed to the table, carefully adjusting the pattern cut through it to its appropriate boundaries, I proceed to fix it to the main or circular plate underneath one of the removed sections, and in like manner proceed with all the rest. While fixing these plates to the main plate the table should be raised hard up to the plate by the

pedal. It then only remains to apply the colors in rotation through the patterns, suffering the table to drop to prevent blotting after the color is applied and before bringing another pattern to its appropriate boundaries. When all the colors are applied in this way I remove the sheet, and, fixing another on the table, proceed as before.

I do not claim the invention of coloring through patterns or "theorems," as they are sometimes called; but

I do claim as my invention and desire to secure by Letters Patent—

Attaching the patterns to a plate revolving on a fixed center, as herein set forth, and the combination of the revolving plate with the table on which the map is placed, the whole constructed and operating as above described.

LUCIUS STEBBINS.

Witnesses:

JAMES DIXON,

FRANCIS PATTONS.