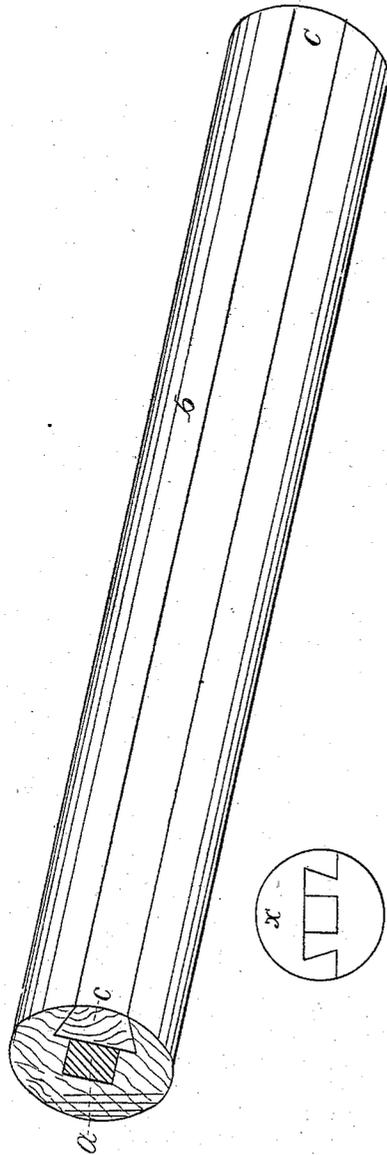


O. Cleveland,
Pencil.

No. 43,391.

Patented July 5, 1864.



WITNESSES.

Richard H. Taylor
of Amherst Hall.

Orestes Cleveland INVENTOR.

UNITED STATES PATENT OFFICE.

ORESTES CLEVELAND, OF JERSEY CITY. NEW JERSEY.

IMPROVEMENT IN PENCILS.

Specification forming part of Letters Patent No. 43,391, dated July 5, 1864.

To all whom it may concern:

Be it known that I, ORESTES CLEVELAND, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Pencils; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, and to the letters of reference marked thereon.

In the ordinary method of constructing wooden lead-pencils the lead is laid in a groove in the flat side of a prism that is somewhat larger than a semicircle in section, and the pencil is completed, so far as the inclosure of the lead is concerned, by gluing a flat piece over the lead to complete the circle of the section and form an entire cylinder. In another common method the groove for the reception of the lead is plowed into the wood from the exterior of the cylinder, and after placing the lead in the bottom of the groove the remainder is filled with a suitable slip of wood, of the same width as the lead, which is glued into it. The objection to both these methods, and that which my invention is intended to obviate, is that the supplementary pieces of wood glued to the pencil for the purpose of retaining the lead in position are likely to become loose and split off, especially when the pencil is exposed to dampness or any other cause that would affect the tenacity of the glue.

My invention consists in dovetailing the supplementary piece of wood into the body of the pencil in such a manner that it is not likely to get loose, and that it can only be taken out of the groove by removing it endwise.

To enable others skilled in the arts to which it appertains to make and use my invention,

I will proceed to describe its construction and operation with reference to the drawing, which represents a pencil made according to the manner I have described.

The lead *a* is inclosed in a cylinder of cedar, *b*, or other suitable material, in which has been plowed a groove with a rectangular bottom of the requisite size for its reception. The outer part of the groove is cut in the form of a dovetail, in the manner shown, with the narrow part sufficiently wide for the passage of the lead, and this dovetailed portion is closed and filled by the piece *c*, which is inserted from the end and closely fitted and glued in the usual manner. In a similar manner the pencil may be constructed as shown in the supplementary figure marked *x*.

The pencils may be made cylindrical or hexagonal and finished in any desirable manner without departing from the principle of my invention, which consists in closing the groove for the reception of the lead with a supplementary dovetailed piece which does not depend simply upon the adhesiveness of the glue to retain the parts together; and although I have described the application of my invention to black-lead pencils only, it is obvious that the same principle of construction may be employed in all those varieties of pencils in which colored crayons, French chalk, slate-pencils, india-rubber, and other matter may be used as a core inclosed in a prism of wood or other suitable material.

I claim, as a new article of manufacture—

A pencil constructed with the parts glued together with dovetailed joints, substantially as described.

ORESTES CLEVELAND.

Witnesses:

RICHARD H. TAYLOR
WM. KEMBLE HALL.