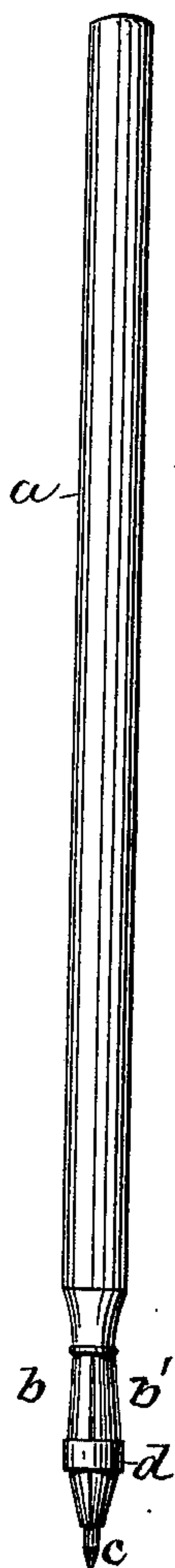


L. de FABER.  
Pencil.

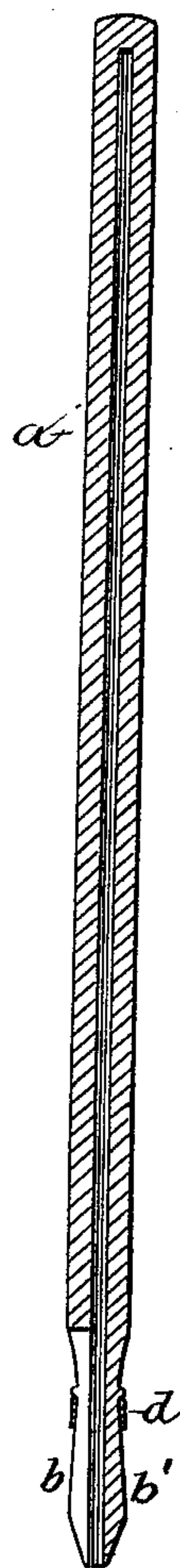
No. 213,884.

Patented April 1, 1879.

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

*E. E. Masson*  
E. E. Masson

Inventor:

*Lothaire de Faber*  
by *A. Pollok*  
his attorney.

# UNITED STATES PATENT OFFICE.

LOTHAIRE DE FABER, OF STEIN, NEAR NURNBERG, GERMANY.

## IMPROVEMENT IN PENCILS.

Specification forming part of Letters Patent No. **213,884**, dated April 1, 1879; application filed February 5, 1879.

*To all whom it may concern:*

Be it known that I, **LOTHAIRE DE FABER**, of Stein, near the city of Nurnberg, Germany, have invented a certain new and useful Improvement in Pencils, of which improvement the following is a full, clear, and exact description.

The new kind of pencil which I have invented, and which forms the subject of the present application for Letters Patent, is based on the principle of lead-holders or endless pencils; but it realizes its purpose under a much simpler and more economical disposition than heretofore, and reminds one of the ordinary pencil, which is sharpened by cutting away the envelope of wood surrounding the stick of plumbago. There is a difficulty, which is found to become greater and greater as time passes, in procuring cedar-wood for the fabrication of pencils, which difficulty has led me to search for a system in which the stick of plumbago is separate from the envelope, so that the latter may have an almost indefinite duration.

For this purpose I have combined a special mode of adjustment, which does not comprise any of the complicated mechanism of ordinary lead-holders, and which is effected by means of one small binding-ring, which retains directly the stick of plumbago in the envelope in the neighborhood of the point.

It is this combination which constitutes the new and distinctive character of my invention; and the manner in which the same is or may be carried into effect will be readily understood from the following description, referring to the accompanying drawings, which form a part thereof.

Figure 1 is a perspective view of the pencil; Fig. 2, a view in longitudinal section of the holder and clamping-ring, and Fig. 3 a view in cross-section.

The envelope is preferably wood; but it may be made of any other desired material. It has throughout its entire length the form and dimensions of the wooden envelope of ordinary pencils, except at one end, where it has a particular conformation, as shown in the drawings. This extremity *b* of the envelope has the form of two truncated cones placed base to base, and in it are formed three slits or slots, so as to form the three branches of a clamp.

The stick of graphite, *c*, is placed in a perforation in the interior of the holder or envelope *a*, and for use it is made to project beyond the conical extremity. It is to maintain it in this position that I place thereon the ring *d*. This ring, which is of metal, slides or moves upon the inner cone, *b'*. As it is pressed outward it meets a larger portion, and thus causes the branches of the clamp to approach each other, and consequently shuts the holder upon the rod of graphite, which is thereby perfectly fixed within the holder. If the ring be drawn up or inward, the opposite effect is produced—that is to say, the branches open in virtue of the natural elasticity of the clamp, and the lead is loosened so that it may be drawn outward, or altogether removed if there is occasion.

The ring may be entirely plain; but to insure the retention of the ring in whatever position it may occupy at the moment of binding, it may be formed with ribs or grooves on the inside, so that by turning all the desired adhesion will be given upon the material of which the holder is composed.

As is readily seen, the mode of binding by the use of a single ring is most simple, and offers no comparison to the mechanism which is employed in lead-holders, even the largest.

In my plan the clamp is formed of the body itself of the holder, and does not constitute an exterior device put on after cutting or shaping the end of the holder. The ring is the only piece added to the pencil, properly called.

One may therefore, without rashness, prophesy that this new plan of manufacture, quick and inexpensive, will be able to compete in cheapness with the ordinary wood-enveloped pencils, over which the improved pencils have the advantage of dispensing with the cutting to sharpen the pencil, and also of preserving the envelope in all its length for placing therein successively an indefinite number of sticks of plumbago, according as they are used.

Pencils may be made in accordance with my invention of all sizes, and the envelopes or holders of all materials and with any desired ornamentation.

I claim as my invention—

1. A pencil or lead-holder, substantially as described, the same consisting of the centrally-perforated wooden envelope of substantially



uniform cross-section and solid periphery throughout the greater part of its length, but formed at one end into the shape of two cones base to base, which conical portions are slit to form a clamp, in combination with a binding-ring movable on the inner of said cones, essentially as shown and specified.

2. A pencil or lead-holder consisting of a wooden envelope of solid periphery throughout the greater part of its length, but formed at one end into the shape of two cones base to base, which are slit to form a clamp, the bases of said cones being of substantially equal cir-

cumference with the main part of the envelope, and a shoulder being formed where the inner cone is joined thereto, in combination with a binding-ring movable on the inner of aforesaid cones, substantially as shown and described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

LOTHAIRE DE FABER.

Witnesses:

ROBT. M. HOOPER,  
A. CABYL.