

(No Model.)

C. W. BOMAN.
LEAD PENCIL.

No. 562,272.

Patented June 16, 1896.

Fig. 1.

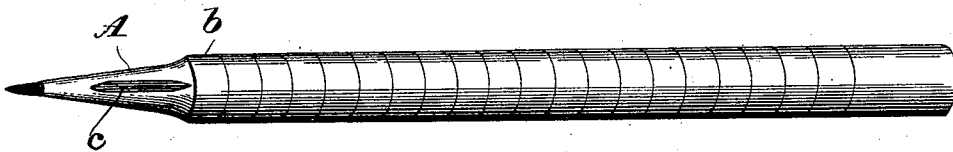


Fig. 2.



Fig. 3.

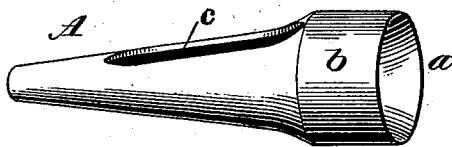


Fig. 4.

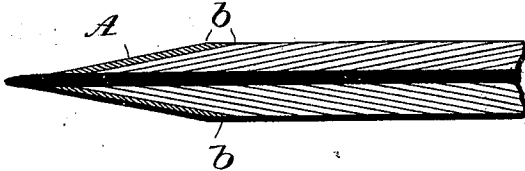
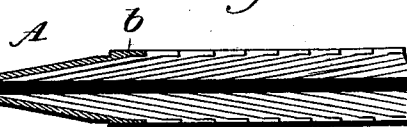


Fig. 5.



Witnesses:
L. C. Hills.
J. B. Keefe

Inventor:
Claes W. Boman,
by *Marshall Bailey*
his Atty.

UNITED STATES PATENT OFFICE.

CLAES WM. BOMAN, OF NEW YORK, N. Y., ASSIGNOR TO THE EAGLE PENCIL COMPANY, OF SAME PLACE.

LEAD-PENCIL.

SPECIFICATION forming part of Letters Patent No. 562,272, dated June 16, 1896.

Application filed March 10, 1896. Serial No. 582,527. (No model.)

To all whom it may concern:

Be it known that I, CLAES WILLIAM BOMAN, of the city, county, and State of New York, have invented certain new and useful
5 Improvements in Lead-Pencils, of which the following is a specification.

The pencil in which my present invention is comprised is one composed of a series of conical or tapering tubes nested or packed
10 one within the other—said tubes being removable one after the other to expose fresh portions of the lead as the latter wears away. This broadly is not new with me.

My invention resides in the construction of
15 the tubes and the manner in which they are put together, so as to give a smooth, even exterior to the body of the pencil. It will first be described in connection with the accompanying drawings, forming part of this
20 specification, and will then be more particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a pencil embodying my invention. Fig. 2 is a longitudinal axial section of the
25 same. Fig. 3 is a view of one of the cones detached. Figs. 4 and 5 are sections showing cones of modified external form.

The cones A of which the pencil is composed are made of any suitable material—
30 preferably wood, the grain of the wood running lengthwise of the cone. I have termed them "cones;" but strictly speaking they are not. They are tubular, and have a tapering front end, which may vary in form somewhat. As for example the front end in the
35 main figures, Figs. 1 to 3, tapers from heel to point, but this taper is not a straight taper, but is slightly concaved at the rear; that in Fig. 4 has a straight taper from heel to point, while that in Fig. 5 has a straight taper for
40 the major portion of its length, but at the rear for a short distance is cylindrical—this cylindrical part being less in diameter than the base a. But all of them have a base or
45 rear portion a, which is cylindrical or of other suitable external contour, with a surface b that is parallel to the axis of the cone. It is these surfaces b which when the cones are nested together form the exterior of the pen-

cil, and enable that exterior to be given a 50 smooth and perfect finish. Each cone internally is formed so as to fit tightly and accurately upon the tapering portion of the other, covering all of the latter excepting the part
55 b. These cones, it may be remarked, can be formed rapidly, accurately and in large quantity by the use of well-known lathes.

After the parts of the pencil are put together, the exterior of the pencil can be finished in any ordinary or suitable way—the
60 glue in the first coating or dressing usually applied to the pencil serving to bind the cones together, while the lead before its insertion may be passed through a glue bath, so as to carry with it enough glue to cause it to be
65 held in place in the pencil.

To facilitate the removal of the cones, each is formed with one or more longitudinal slits, notches slots in its tapering portion, extending only part way of that portion. This is
70 to enable the cone to be picked off more readily by the fingers. In this way the cone retains its strength, having its ends intact, and therefore is not liable to split when nested with another.

Having described my invention, what I
75 claim herein as new, and desire to secure by Letters Patent, is—

1. A pencil composed of a series of cones nested and packed one within the other, each
80 cone formed with one or more longitudinal slits or notches c extending part way only of its length, substantially as hereinbefore set forth.

2. A pencil composed of a series of cones 85 nested and packed one within the other, having base portions b which together form the exterior of the pencil and formed each with one or more longitudinal slits or notches c extending part way only of its length, substan-
90 tially as hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 6th day of March, 1896.

CLAES WM. BOMAN.

Witnesses:

SAMUEL KRAUS,
PERCY H. BUCKMASTER.