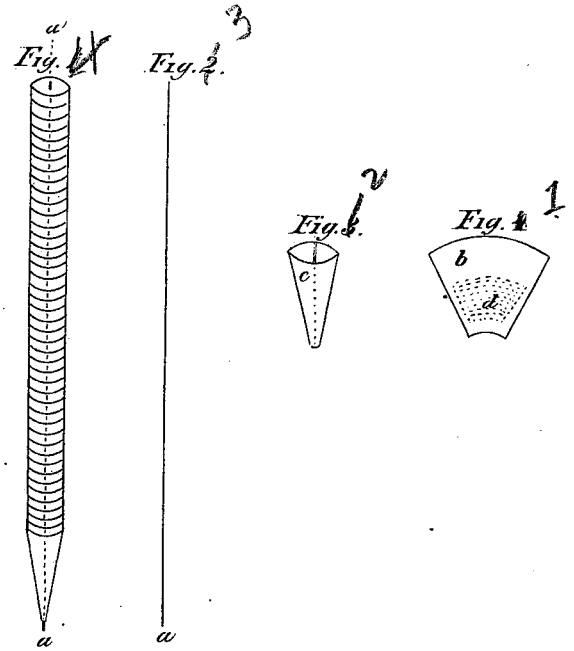
F. SHOLES.

PENCIL.

No. 191,816. Patented June 12, 1877.



Witnesses

E. H. Benedict

Thomas S. Brown

Inventor

Frederick S. Sholes.

UNITED STATES PATENT OFFICE.

FREDERICK SHOLES, OF NEW YORK, N. Y., ASSIGNOR TO D. M. SOMERS, OF SAME PLACE.

IMPROVEMENT IN PENCILS.

Specification forming part of Letters Patent No. **191,816**, dated June 12, 1877; application filed September 28, 1876.

To all whom it may concern:

Be it known that I, FREDERICK SHOLES, of the city, county, and State of New York, have invented Improvements in Lead-Pencils, of which the following is a specification:

The invention relates to that class of lead-pencils of which the case covering the needle or stem of lead is made of a series of layers or funnels of paper, wood, cloth, felt, or other material glued, pasted, or compactly pressed together; and its nature is in combining a layer or surface of sand with each layer or funnel of paper or other material, and in providing or making each funnel or layer with a longitudinal open seam.

The accompanying drawing and following description fully illustrate the invention.

The figures of the drawing represent views as follows: Figure 1 is a view of a thin, flat piece of paper, wood, cloth, felt, or other material, cut in the form of a segment of an annular circle; Fig. 2, a view of a funnel or frustum of an inverted hollow cone; Fig. 3, a view of a needle or stem of lead; and Fig. 4, a view of a complete lead-pencil of such a case.

The description is as follows: A represents a stem or needle of lead; B, a thin web or flat piece of paper, wood, cloth, felt, or other material, in the form of a segment of an annular circle, so it may be folded into a funnel or frustum of an inverted hollow cone; C, a funnel or frustum of an inverted hollow cone, formed by folding the web or thin piece of paper or other material A around an inverted cone; D, a surface of sand, spread on and attached to the outer circumference or periphery of the layer or funnel C; and E, a longitudinal open seam in the layer or funnel C.

Perhaps the best and cheapest substance for the layers or funnels C is sand-paper, prepared in a suitable manner.

The function of the sand D is to scour and put a fine point when needed to the stem or needle A as the needle or stem A is worn out and exhausted, and a layer or funnel, C, has to be removed from time to time. Each layer as it comes off makes a convenient piece of sand-paper with which to rub and point the needle or stem A.

The function of the seam E is to provide a convenient place to begin the removal of a layer or funnel, C. The seam is made by the meeting, or nearly meeting, of the two edges of the thin web B when wrapped around the frustum of a cone. Should the cone be punched from pulp, the seam can be formed at the same time, or can be afterward cut through either the entire length of the cone or part way, leaving the ends with their circumference unbroken. It can be made more or less open, as desired, thus each layer or funnel C when reached is practically in two, and furnishes a long and convenient place to insert the finger-nail or other instrument used for the removal.

I therefore claim as follows:

1. The combination of a series of layers or funnels of paper, felt, cloth, wood, or other material, pasted, glued, or pressed compactly together, with a stem or needle of lead, when each layer or funnel is provided with an open seam, substantially as described.

2. The combination of a layer or coating or surface of sand, with one side or surface of each layer or funnel of a lead-pencil case or covering, substantially as described.

FREDERICK SHOLES.

Witnesses:

GEORGE H. BENEDICT,

THOMAS S. BROWN.