

O. M. ALLEN.

PENCIL.

No. 189,886.

Patented April 24, 1877.

Fig. 1.



Fig. 2.



WITNESSES

Edw. Nottingham
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OSCAR MONROE ALLEN, OF KALAMAZOO, MICHIGAN.

IMPROVEMENT IN PENCILS.

Specification forming part of Letters Patent No. 189,886, dated April 24, 1877; application filed September 15, 1876.

To all whom it may concern:

Be it known that I, OSCAR MONROE ALLEN, of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Pencils, and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification:

My invention relates to pencils, and more especially to that class in which the crayons are loose from the case, and as they wear away are fed forward to the working end of the pencil, and are retained there by engaging mechanism.

In pencils of this character heretofore in use, the bore of the crayon-chamber is of transverse sectional size corresponding to the cross dimension of the crayon used, and but one longitudinal layer of the latter can be accommodated therein, so that when this one layer, of same or shorter length than the pencil, and constituting the first supply of crayon as originally bought with the pencil, is exhausted, resort must be had for a second and further short supply of the lead or crayon.

Thus an inconvenience is experienced in the use of the pencil, since it may be with difficulty or delay that a suitable and similar article of the lead is obtained and introduced in the case. My invention is designed to obviate the necessity for such frequent renewals of the writing material, and to greatly increase the capacity of the porte-crayon or lead holder without affecting in increase the exterior dimensions of the usual pencil-case.

My improved pencil consists of a main-stock, or case, constructed with a bore approximately the full cross-measurement of the case, and thereby adapted to receive several different layers or longitudinal series of leads or crayons; and is further provided with an auxiliary feed-tube or cylinder, which extends a short distance into the lead-chamber, while its outer extremity is constructed and provided with the usual, or any other suitable, clamping mechanism to secure the lead in place when properly adjusted for writing.

Referring to the drawings: Figure 1 is a

view in side elevation. Fig. 2 is a longitudinal central section.

A is the stock or case, and may be of any appropriate material and dimension, though I prefer to make it of metal, and in the usual size and style of pencils. B is the lead or crayon chamber, extending the length of the case, and of transverse area or diameter almost equal to that of the exterior case; that is, only a thin wall or encasing jacket forms the body of the case. C is the auxiliary feed-cylinder, and may be of wood or material same as the main case; it extends rearward into the lead-chamber a short distance, while its opposite and forward extremity is continued out beyond the front end of the case, and is provided with longitudinal slots which serve to allow the front and lower end of the feed-cylinder to be compressed or expanded, so as to feed forward or retain in place the lead, as same may be controlled by the exterior locking-sleeve D.

This cylinder C is hollow, and has an interior bore just corresponding to the diameter of the lead or crayon used, so that but one section or longitudinal layer of same can be received therein at a time; it frees or retains the lead as it is correspondingly operated upon by the locking-sleeve D, as is common in pencils of this same general class.

The essential feature of my invention is the enlarged chamber for the leads, in combination with the small feeding-cylinder; and I desire to be understood as claiming this broadly; the other parts or construction of the pencil is in no wise connected with my invention, and I have shown such mechanism as is well known in the art simply for illustration; it is apparent that any other old or novel clamping mechanism may be used for locking and unlocking the lead as it is used in wear.

By my improvement it is evident that a large stock of crayons or leads can be constantly at hand and ready for use, without the necessity of having an independent case for keeping same in, which is liable to be lost or mislaid. By this means I obtain all the advantages of the separate lead or crayon case without the trouble of a second article, since the enlarged chamber of the pencil answers as a reservoir for the leads.

The interior extremity of the feed-tube is constructed funnel-shaped so as to readily receive the crayons from the main chamber and introduce them singly for use at the working end of this tube.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The pencil constructed with a reservoir crayon-chamber, forming a single shell case, and adapted to automatically feed its crayons into the tip of the pencil, substantially as described.

2. In a pencil provided with loose leads or crayons, the combination, with a chamber adapted to receive two or more longitudinal series of said leads or crayons, of a small

auxiliary feed-cylinder for presenting them singly for use, substantially as and for the purpose described.

3. The combination, with the stock of a pencil case adapted to hold several layers of loose crayons, of a feed-tube constructed funnel-shaped at its inner extremity for readily presenting a single crayon to the close-fitting bore at the working end of the tube, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of September, 1876.

OSCAR MONROE ALLEN.

Witnesses:

FRANK MALLON,
E. H. CRANE.