

(No Model.)

H. HUNT & H. HUNT, Jr.
PENCIL.

No. 558,813.

Patented Apr. 21, 1896.

Fig. 1,

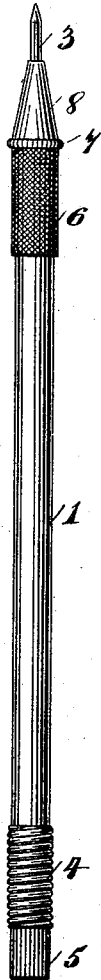


Fig. 2,

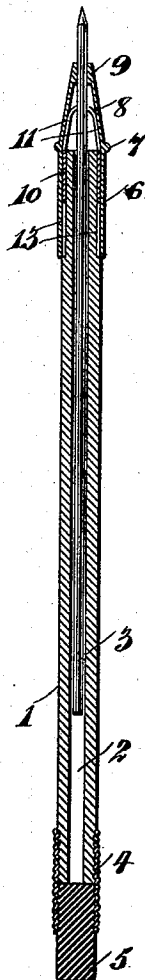


Fig. 3,

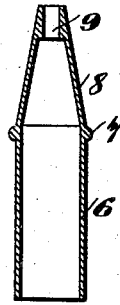
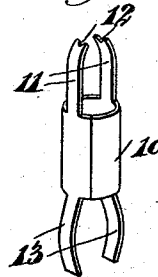


Fig. 4.



WITNESSES:

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HENRY HUNT AND HENRY HUNT, JR., OF WILKES-BARRÉ, PENNSYLVANIA.

PENCIL.

SPECIFICATION forming part of Letters Patent No. 558,813, dated April 21, 1896.

Application filed January 20, 1896. Serial No. 576,179. (No model.)

To all whom it may concern:

Be it known that we, HENRY HUNT and HENRY HUNT, JR., of Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented new and useful Improvements in Pencils, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in that class of pencils which are provided with a tubular body adapted to receive a lead for writing purposes, the end of the body being provided with means for clamping the lead when in position for writing, with its end protruding from the body, and said lead being movable in the body, so as to be adjustable, whereby, when its protruding end has been worn down, it may be moved to present a fresh point beyond the end of the body.

The invention consists in certain novel features of the construction, combination, and arrangement of the various parts of the improved pencil, whereby certain important advantages are attained and the device is made simpler, cheaper, and better adapted and more convenient for use than various other forms of pencils heretofore employed, all as will be hereinafter set forth.

The novel features of the invention will be carefully defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of a pencil constructed in accordance with our invention. Fig. 2 is a longitudinal axial section taken through the same. Fig. 3 is an enlarged axial section showing the clamping-sleeve for securing the lead in place to the body, and Fig. 4 is a perspective view drawn to an enlarged scale and showing a spring-metal band carrying the clamping-jaws for holding the lead and sleeve in place.

In the views, 1 indicates the body of the pencil, which is made tubular in form, being provided with a longitudinal hollow or chamber 2, formed axially through it and adapted to receive a lead stick 3, as clearly shown in Fig. 2. The opposite ends of the body are open, and at one end of said body is arranged a screw-threaded sleeve 4, fitting thereon and having its end projecting beyond the body in

position to receive and hold within it an eraser 5, which may be formed of rubber in a well-known way. The sleeve 4 being screw-threaded throughout its whole length, it will be seen that said sleeve is afforded a secure hold both on the body 1 of the pencil and on the eraser 5.

The opposite end of the body 1 of the pencil is provided with a removable cap or clamping-sleeve 6, adapted to fit over the outer side of the body, being tubular, as clearly shown in the drawings, and said sleeve is by preference made roughened, as indicated in Fig. 1, in order to afford a secure hold for the fingers thereon, and at the end of the circular portion of said clamping-sleeve is formed a projecting annular shoulder 7, also serving to afford a secure hold for the fingers.

The end of the sleeve 6 is made conical or tapering, as clearly shown at 8 in the drawings, and at the extremity of said tapering portion of the sleeve is formed an aperture 9, the walls of the sleeve being thickened at the point where said aperture is formed, so that said aperture is given a substantially cylindrical form corresponding to the form of the lead stick 3, and in this way it will be seen that when said lead stick is arranged to protrude from the end of the pencil, as indicated in Fig. 2, the walls of the aperture 9, being of suitable length, will afford a long bearing-surface for the lead stick, so as to prevent it from being broken off when pressure is applied to the pencil in writing, as would be the case were the walls of the tapered portion 8 not thickened at the point where the aperture 9 is formed. Were this latter construction employed, it will be seen that the wall of the aperture 9 would present a comparatively short edge bearing against the side of the lead stick 3, so that said stick would be broken when pressure is applied to the pencil in writing.

The end of the body 1 on which the clamping-sleeve 6 is arranged is somewhat reduced or cut out beneath said sleeve, as clearly shown in the sectional view, Fig. 2, and on said reduced or cut-out portion of the body is arranged a spring-metal band 10, of the form seen in Fig. 4, said band being constructed from a piece of metal bent to a circular form and adapted to fit on the reduced end portion

of the body. At opposite sides of its forward end the spring-metal band 10 is provided with forwardly-projecting arms 11, having notched end portions 12, adapted, when the arms are pressed together, to engage the opposite sides of the lead stick 3, so as to securely clamp the same against the longitudinal movement, and the said arms 11, being constructed of spring metal and being integral with the band 10, it will be seen that they are normally held apart and out of position to engage the lead stick by their own elasticity. At the opposite end of the spring-band 10 are formed projecting arms or branches 13, each of which is bent slightly outward at its central portion, and is held in its bent position by its own elasticity, and said arms 13 are adapted to be engaged and straightened out by the sleeve 6 when the same is applied to the end of the body, whereby the arms act to hold said sleeve securely against removal from the body, their free ends being pressed into engagement with the sides of the body and serving to hold the spring down in place thereon.

In operation, the sleeve 6 being inserted on the end of the body 1, it will be seen that the said sleeve is held in place by reason of the elasticity of the arms 13 of said sleeve, and when said sleeve is in position on the body its tapered portion 8 will be in such a position as to engage the arms 11 at the forward end of the band 10 and press the notched ends 12 thereof into close engagement with the sides of the lead stick 3, whereby said stick will be clamped against longitudinal movement in the body at a point between the end of the body and the opening 9 through which the lead protrudes. When the sleeve 6 is moved endwise on the body, it will be seen that its tapered portion 8 will be withdrawn from engagement with the spring-arms 11 of the band 10, so that said arms will be disengaged from the lead stick, and said stick will be permitted to move freely in the body 1.

From the above description of our improvements it will be seen that the pencil is of an extremely simple and inexpensive nature and is especially well adapted for the purposes for which it is intended, and it will also be readily understood that the device is susceptible of considerable modification without material departure from the principles and spirit of the invention, and for this reason we do not wish to be understood as limiting ourselves to the precise form and arrangement of the parts as herein set forth.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a pencil, the combination of a tubular body adapted to receive a lead, clamping-

arms projecting beyond one end of the body and having their extremities normally held apart but adapted when moved toward each other to engage opposite sides of the lead, a band secured on the end of the body adjacent to said clamping-arms, a spring-arm carried on the band and having one portion bent outward from the body and adapted to be flattened against the side of the same, and a clamping-sleeve having a roughened surface mounted to slide on the end of the body outside of said band and having a thickened portion the end of which is perforated for the passage of the lead, said thickened portion being adapted when the sleeve is moved to engage the spring-arms and press the same into engagement with the lead, said sleeve being movable longitudinally on the body outside of the spring-arm, and being adapted to be held in place on the body by engagement with said arm, substantially as set forth.

2. In a pencil, the combination of a body having a hollow to receive the lead, a band encircling one end of the body a spring-arm integrally formed on said band and having one portion bent outward from the body and adapted to be flattened against the side of the same, a clamping-sleeve having an aperture for the passage of the lead, said sleeve being movable longitudinally on the body outside of the said spring-arm and adapted to be held in place on the body by engagement with said arm, and spring clamping-arms integrally formed on said band arranged to engage the lead between the aperture in the sleeve and the end of the body, said clamping-arms being actuated by the movement of the sleeve, substantially as set forth.

3. In a pencil, the combination of a hollow body, a band secured on one end thereof and having spring clamping-arms extending beyond the end of the body and adapted to engage the lead, spring-arms projecting from the opposite end of the band and having their central portions bent away from the body and adapted to be pressed flat against the same, and a clamping-sleeve having a tubular portion adapted to slide on the body over the bent portion of the spring-arms, and to be held in place by engagement with said arms, said sleeve being provided with a conical portion having an opening for the passage of the lead, said conical portion being arranged to engage the clamping-arms and press the same into engagement with the lead, substantially as set forth.

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Witnesses:

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