W. H. KRELL.

PENCIL.

APPLICATION FILED OCT. 11, 1912.

1,097,238.

Patented May 19, 1914.

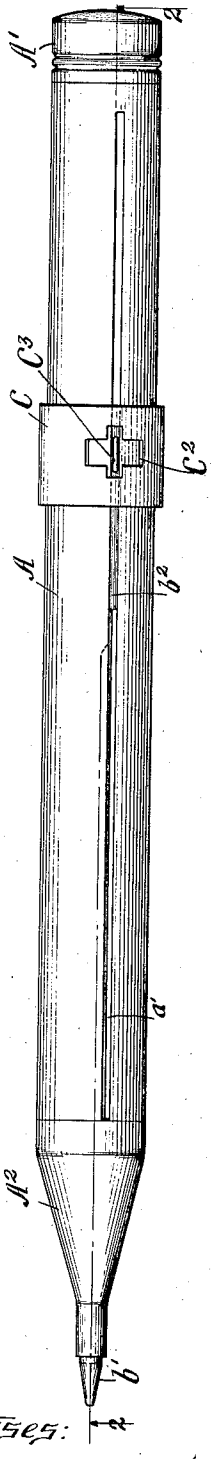


Fig. 1.

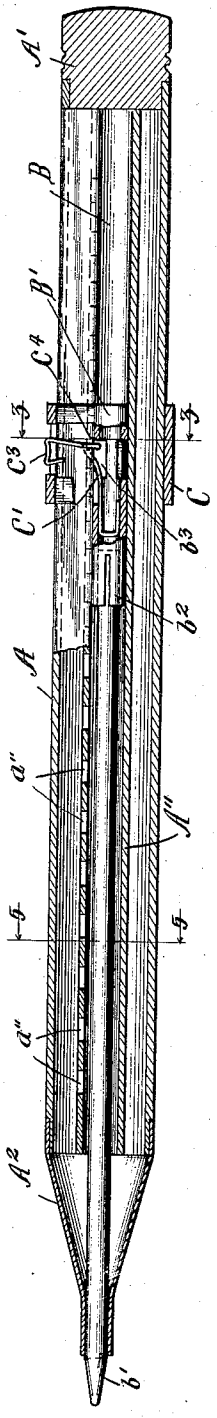


Fig. 2.

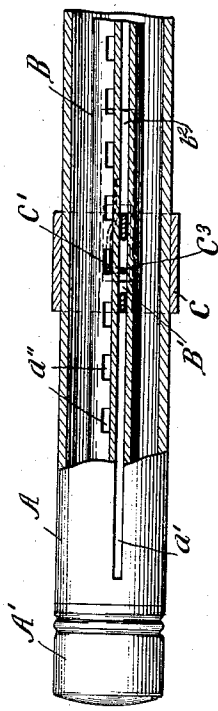


Fig. 4.

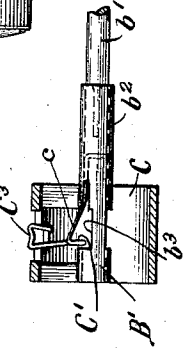


Fig. 6.

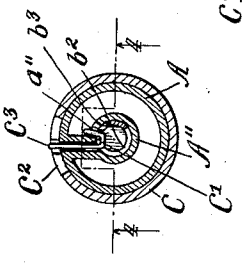


Fig. 3.

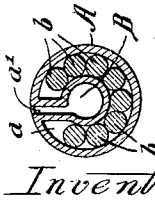


Fig. 5.

Witnesses:

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WILLIAM H. KRELL, OF CHICAGO, ILLINOIS.

PENCIL.

1,097,238. Specification of Letters Patent. Patented May 19, 1914.

Application filed October 11, 1912. Serial No. 725,215.

To all whom it may concern:

Be it known that I, WILLIAM H. KRELL, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Pencils, of which the following, taken in connection with the drawings, is a description.

My invention has for its object the production of a pencil which is so constructed that it is not necessary to sharpen the point when it becomes worn to the wood, but the user simply advances the lead, by advancing the band encircling the pencil handle the desired distance through the end of the pencil holder or casing containing the lead, and the pencil is at once ready for use.

Other features of advantage of my construction will be apparent from the following description of the device.

In the drawings I have illustrated what I now consider the preferred form of my construction, although it is obvious that the details thereof may be changed without departing from the spirit of my invention, which has for its main purpose a pencil having means for advancing the lead through one end of the casing retaining the same, leaving it always ready for use without necessity for sharpening the same.

In these drawings: Figure 1 is a plan view of the pencil; Fig. 2 is a longitudinal section of the same taken on line 2—2 of Fig. 1; Fig. 3 is a transverse section on line 3—3 of Fig. 2; Fig. 4 is a sectional view of the working mechanism looking at the opposite side of that shown in Fig. 2; Fig. 5 is a transverse sectional view taken on line 5—5 of Fig. 2; and Fig. 6 is a detail view of the spring mechanism and lead holding clamp.

Referring to the drawings A represents the barrel or casing forming the handle of the pencil, which is preferably cylindrical in shape, and is provided with a plug or cap A′ at one end thereof and a funnel shaped point A^2 at the opposite end. Either of these end fittings may be screw threaded to the barrel A, or may be held in place by frictional engagement alone.

The barrel A is formed of any material suitable for the purpose and is bent to the shape shown in cross section in Figs. 3 and 5, forming the outer tube A and the inner tube A″, having therebetween a chamber *a*, and an opening *a′* extending longitudinally thereof. This chamber is utilized for the purpose of carrying an additional supply of leads *b*, *b* (Fig. 5), from which to replace the lead in the point of the casing when it is worn out. The inner tube A″ is provided with a plurality of openings *a″*, extending longitudinally thereof as shown in Figs. 2 and 4.

Positioned within the central bore B is a lead holding member B′, which is formed of a piece of metal having a clamp b^2 at one end thereof, within which the lead *b′* is held when in position for use. Projecting from the lead holding member is a band C which extends through the slot *a′* and encircles the barrel A. Secured within the lead holding member is a wire spring C′ having a projection *c′* which is adapted to extend into one of the openings *a″* and hold the same in fixed position with the point of the lead, *b′*, extending from the end of the casing and ready for use. The wire forming this spring is extended outwardly through the opening c^2 in the band C, to form a thumb piece c^3 by means of which the spring may be depressed from the outside of the casing or barrel A.

The lead holding member B′ is recessed as at b^3 at a point directly beneath the projection *c′* of the spring to allow for the depression of the spring when it is desired to reverse the lead *b′*. Pressure upon the thumb piece c^3 depresses the spring *c* carrying with it the projecting end thereof which extends into one of the openings *a″* in the barrel A″.

When in use the pressure against the point of the pencil is being exerted against the ring *c′* which extends into one of the recesses *a″* in the inner tube and locks it against any backward movement. When the point of the pencil is worn close to the casing, the band C is advanced toward the point of the pencil until the spring drops into the next recess and thereby holds the lead *b′* in fixed position until it is again worn close to the casing, when the band is again advanced to the next recess in the inner tube, and so on until the lead is worn close to the clamping member B′. The remaining short end piece is then removed from the clamp, another piece of lead inserted, the spring C depressed and the band C moved toward the opposite end of the pencil until only the point *b′* is exposed when it is ready for use again.

One of the advantages in a pencil of this

kind is that the point may be quickly drawn inside the casing by moving the band C upwardly a single notch or recess, thus protecting the point from being broken when carried in the pocket or elsewhere.

I claim:

A pencil comprising a casing having an outer and an inner tube formed of a single piece of sheet metal and having a longitudinal opening through the outer tube, the inner tube having a plurality of openings arranged longitudinally thereof, a lead holding member movable longitudinally of the inner tube, a spring secured to the lead holding member, said spring having a projection thereon adapted to engage one of the openings in said inner tube as the lead holding member is advanced to lock the same in fixed position, a band encircling the casing and engaging said member through the elongated opening whereby the lead holding member may be moved in either direction and locked in fixed position, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM H. KRELL.

Witnesses:
A. V. WELDON,
WELLS GOODHUE.