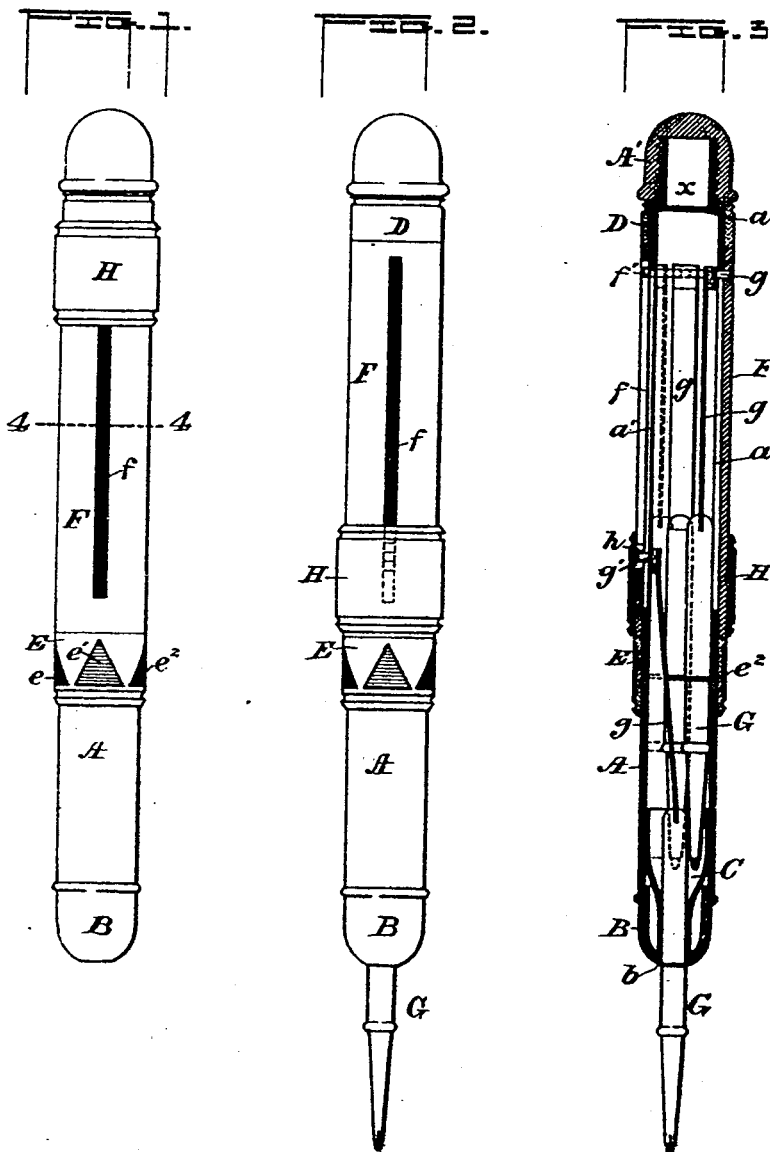


(No Model.)

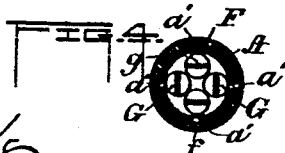
J. B. SMITH.
MAGAZINE LEAD PENCIL.

No. 489,043.

Patented Jan. 3, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES B. SMITH, OF BROOKLYN, ASSIGNOR TO EDWARD TODD & CO., OF
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MAGAZINE LEAD-PENCIL.

SPECIFICATION forming part of Letters Patent No. 489,043, dated January 3, 1893.

Application filed May 16, 1892. Serial No. 433,193. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. SMITH, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Magazine Lead-Pencils; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to pencils, and its object is to enable one to write in more than one color, or with leads of different degrees of hardness, with the same pencil case, so that one instrument may take the place of several.

The invention consists in a case containing two or more lead holders, and provided with means for propelling any desired holder.

In the drawings, Figure 1 is a side elevation of the pencil closed. Fig. 2 shows a lead holder projected. Fig. 3 is a longitudinal central section, and Fig. 4 is a cross section, on the line 4—4 Fig. 1.

The pencil case is composed of a barrel A, preferably cylindrical and having at one end a tip B, which is secured to the barrel by a slip joint or screw thread and contains a central hole *b*. Secured within the tip is a funnel C, the inner end of which is of a diameter to slide stiffly in the barrel A.

Near the upper end of the barrel is a partition *a*, and the end of the barrel is closed by a screw cap A', the chamber *x* forming a convenient receptacle for extra leads. Adjacent to the screw cap a collar D is formed on or secured to the barrel. Another collar E is similarly arranged a suitable distance above the tip B. Between the collars is a sleeve or jacket F which fits the barrel nicely and is readily revoluble thereon.

In the barrel A, between the collars D E are made several longitudinal slots *a'*, corresponding in number with the leads it is proposed to use. The jacket contains a single slot *f*, which can be made to register with any

desired slot *a'* by turning the jacket on the barrel.

The lead holders G, which may be of any usual or desired construction, are each provided with an extension or tail *g* composed preferably of a flat spring, carrying at its upper end a laterally projecting pin *g'*, which enters a slot *a'*, and is kept in engagement therewith by the resilience of the spring. The pins extend through the slots *a'* into an annular groove *f'* on the inside of the jacket near its upper end, whereby the lead holders are prevented from slipping down into the funnel C. But when the slot *f* of the jacket is made to coincide with a slot *a'*, the pin is released from the groove, since the slot *f* intersects the groove, as shown. The lead holder thus released can be pushed out of the tip B, by sliding the pin *g'* down the slots *a' f*. To accomplish this readily, a loose collar or slide H is provided, moving freely on the jacket, and provided with an internal block *h* projecting into the slot *f* and having a notch or recess adapted to engage a pin *g'*. When the collar H is at the upper end of the jacket as shown in Fig. 1, the notch in the block *h* coincides with the groove *f'* in the jacket, so that when the jacket is turned it carries the block over the pins *g'* in succession until the desired one is reached. The slide is then moved downward, carrying the pin with it, and pushing that particular lead holder down into the funnel C which guides it out through the hole *b* in the tip into the position shown in Figs. 2 and 3.

To afford a guide in the selection of the leads, I provide the barrel with letters, words or other devices, arranged in line with the slots *a'*.

In the drawings the collar E is shown as containing triangular spots of color *e e' e''*, corresponding with the respective colors of the leads. For instance, when four leads are used, as shown in the drawings, they may be colored respectively, black, red, green, and blue. The spots may consist of enamel let into shallow depressions. The advantages of such a device are so apparent, that they need not be especially mentioned.

While I am aware that the idea of a magazine pencil is not broadly new, yet I believe that the means I employ are novel, and far more simple and reliable than those heretofore proposed.

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

1. A magazine pencil, comprising a tubular barrel, two or more lead holders inclosed therein, and means, substantially as described, for selecting and propelling any one of said holders, as and for the purpose set forth.

2. A magazine pencil, comprising a tubular barrel, having longitudinal slots, two or more lead holders inclosed in said barrel, each having a pin projecting through one of said slots, and a slide for engaging any one of said pins and propelling the holder from the barrel, substantially as described.

3. A magazine pencil comprising a tubular barrel, having longitudinal slots, two or more lead-holders inclosed in said barrel and having pins projecting through said slots, a slide adapted to engage any one of said pins and propel the holder from the barrel, and means for locking the remaining holders in place in the barrel, substantially as described.

4. A magazine pencil, comprising a tubular barrel, having longitudinal slots, two or more lead-holders inclosed in said barrel, and having pins projecting through said slots, and a jacket revoluble on said barrel and containing a single longitudinal slot, and having an annular groove near one end to receive the pins, substantially as described.

5. A magazine pencil, comprising a tubular barrel, having longitudinal slots, two or more lead-holders inclosed in said barrel, and hav-

ing pins projecting through said slots, a jacket revoluble on the barrel and having a single longitudinal slot, and a collar sliding on the jacket and carrying a block entering the slot in the jacket and adapted to engage with the pin on a lead holder, substantially as described.

6. In a magazine pencil, the combination with the tubular barrel having longitudinal slots, of the lead-holders each having a spring extension carrying a pin engaging with one of said slots, substantially as described.

7. The combination with the barrel A having the slots a' , of the lead-holders G having the flat springs g carrying the pins g' entering said slots, substantially as described.

8. The combination with the barrel A, of the funnel C at one end, lead-holders G inclosed in said barrel, and means for propelling any one of them through the funnel, substantially as described.

9. A magazine pencil containing two or more lead holders, means for propelling any one of said holders, and a guide for selecting the proper holder, substantially as described.

10. The combination with the barrel A containing the lead-holders G, and provided with the slots a' , of the jacket F revoluble on the barrel and containing a single slot, and a collar E bearing devices in line with the slots a' to indicate the characters of the several leads, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES B. SMITH.

Witnesses:

JOHN R. TODD,
HAROLD SWAIN.