No. 876,223. PATENTED JAN. 7, 1908.

J. A. NEWMAN & A. HAAPALA.

AUTOMATIC MAGAZINE PENCIL.

APPLICATION FILED SEPT. 6, 1907.

Fig. 1.

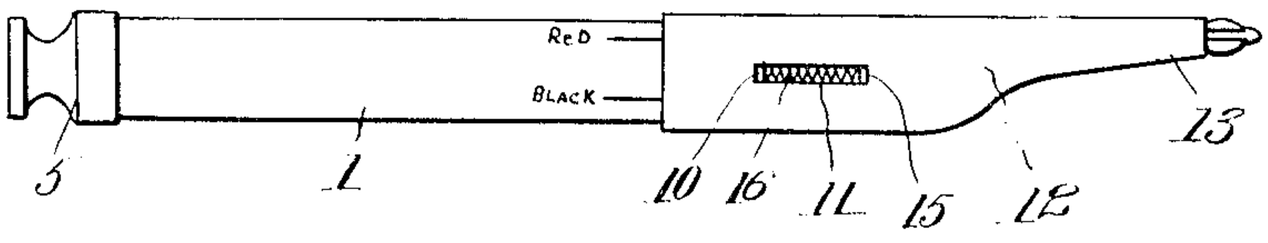


Fig. 2.

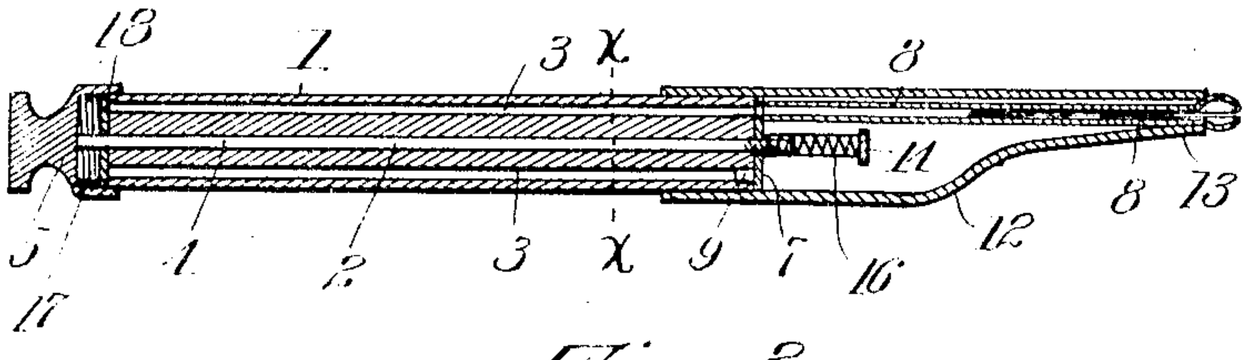


Fig. 3.

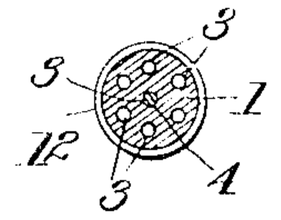


Fig. 4.

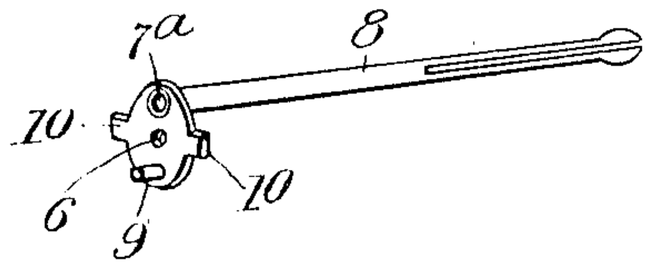


Fig. 5.


Witnesses

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# UNITED STATES PATENT OFFICE.

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## AUTOMATIC MAGAZINE-PENCIL.

No. 876,223. Specification of Letters Patent. Patented Jan. 7, 1908.

Application filed September 6, 1907. Serial No. 391,636.

*To all whom it may concern:*

Be it known that we, JOHN A. NEWMAN and ANDY HAAPALA, citizens of the United States, residing at Ashtabula Harbor, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Automatic Magazine-Pencils; and we 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 appertains to make and use the same.

Our invention relates to new and useful improvements in pencils and particularly to that class known as magazine pencils.

It has for its object to provide a pencil which may contain leads or crayons of different gradations as to hardness or color and having means to automatically bring any one of the leads or crayons into position to be used.

It consists in further details of construction and combinations of parts as will be hereinafter more fully described and specified.

In the accompanying drawing illustrating the preferred embodiment of our invention: Figure 1 is a side elevation of a pencil constructed in accordance with our invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a sectional view on line *x*—*x* of Fig. 2. Fig. 4 is a detail view of the grip, and Fig. 5 is a detail view of spring member of the nozzle.

In the drawing, 1 represents the barrel or magazine which may be turned up from solid metal or constructed of sheet metal. A longitudinal central hole 2 is bored or otherwise formed in the barrel. Arranged in a circle around the central hole 2 are other longitudinal passages or compartments 3 to receive the leads or crayons. The hole 2 is adapted to receive a rod 4 having screw threads on one end and a cap 5 on the other end adapted to encircle the outer end of the barrel. The screw threaded end of the rod 4 engages a screw threaded central socket 6 in a circular disk 7 provided with an opening 7ª in which the grip 8 is secured. The grip is made in the well known split tube type. Arranged diametrically opposite the opening 7ª on the disk 7 is a lug or pin 9 adapted to enter the end of one of the crayon compartments 3 in the barrel 1 and hold said barrel in position with the opposite compartment registering with said opening 7ª in said disk thereby forming a continuous straight tube to permit the passage of the crayon in said registering compartment to pass into the gripping tube. Lugs 10 are arranged on the opposite edges of the disk 7 and are adapted to engage longitudinal slots 11 in the nozzle 12 when the grip is inserted in said nozzle. The nozzle has a tapered end portion 13 to encircle the split end of the tube 8. The spring member of the nozzle consists of a cross piece 14 having lugs 15 to engage the slots 11, and a spring 16, one end of which is permanently secured to the inner face of said cross piece and the other end adapted to pass over the screw threaded end of the rod 4 and abut against the disk 7. By this construction the spring causes the lugs 15 to contact with the ends of the slots 11 which in turn forces the tapered end 13 down around the enlargement at the split end 8ª of the tube 8, whereby the lead is gripped.

A spring 17 is arranged between the cap 5 and end of barrel 1, a circular plate or washer 18 being placed on the rod between the spring and end of the barrel to prevent the leads from becoming entangled with the spring. This presses the barrel against the disk 7 and keeps the pin 9 in engagement with one of the passages 3, thereby preventing turning of the different parts while the pencil is being used.

When it is desired to change the crayons the pencil is held vertical with the point up and the cap 5 pressed, releasing the lead from the grip and allowing it to drop back into its compartment in the barrel. The barrel and cap are then moved toward each other so as to compress the spring 17 and disengage the pin 9 from the compartment with which it has been engaged, thereby permitting either the barrel or the nozzle to be turned until the desired lead is in position as determined by the indicator. The cap is then released and the parts locked in position by the pin 9. The position of the pencil is then reversed, permitting the desired crayon to drop down into the tube 8 and be clamped by the end 8ª in position ready for use. When the crayons become exhausted the chambers or compartments may be refilled by inserting the leads

through the tube 8 in substantially the same manner as when positioning the lead to be used.

We claim:

1. A magazine pencil comprising a revoluble barrel containing a plurality of radial crayon compartments, a nozzle having longitudinal slots therein, a grip in said nozzle, a disk attached to said grip and having lugs extending into the slots in said nozzle, means carried by said disk to lock said barrel in position so that one of said compartments is in alinement with said grip, a plate having lugs also arranged in said slots in said nozzle, and a spring between said plate and disk for the purpose specified.

2. A magazine pencil comprising a revoluble barrel containing a plurality of radial crayon compartments, a nozzle having longitudinal slots therein, a grip in said nozzle, a disk attached to said grip and having lugs extending into the slots in said nozzle, a rod passed through said barrel and secured to said disk, means carried by said disk to lock said barrel in position so that one of said compartments is in alinement with said grip, a plate having lugs also arranged in said slots in said nozzle, and a spring between said plate and disk for the purpose specified.

3. A magazine pencil comprising a revoluble barrel containing a plurality of radial crayon compartments, a nozzle having longitudinal slots therein, a grip in said nozzle, a disk attached to said grip and having lugs extending into the slots in said nozzle, a pin on said disk adapted to enter any one of said compartments and lock said barrel in position so that another of said compartments is in alinement with said grip, means to actuate said disk to withdraw said pin from the compartment engaged thereby for the purpose of adjustment, a plate having lugs also arranged in said slots in said nozzle, and a spring between said plate and disk for the purpose specified.

4. A magazine pencil comprising a revoluble barrel containing a plurality of radial crayon compartments, a nozzle having longitudinal slots therein, a grip in said nozzle, a disk attached to said grip and having lugs extending into the slots in said nozzle, a rod passed through said barrel and secured to said disk, a pin on said disk adapted to enter any one of said compartments and lock said barrel in position so that another of said compartments is in alinement with said grip, a plate having lugs also arranged in said slots in said nozzle, and a spring between said plate and disk for the purpose specified.

5. A magazine pencil comprising a revoluble barrel containing a plurality of radial crayon compartments, a nozzle having longitudinal slots therein, a grip in said nozzle, a disk attached to said grip and having lugs extending into the slots in said nozzle, a capped rod passed through said barrel and secured to said disk, a spring arranged between said barrel and the cap on said rod, a pin on said disk adapted to enter any one of said compartments and lock said barrel in position so that another of said compartments is in alinement with said grip, a plate having lugs also arranged in said slots in said nozzle and a spring between said plate and disk for the purpose specified.

In testimony whereof, we affix our signatures, in presence of two witnesses.

JOHN A. NEWMAN.
ANDY HAAPALA.

Witnesses:
H. A. WEIBLEN,
J. E. PILMER.