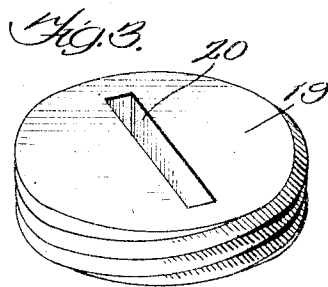
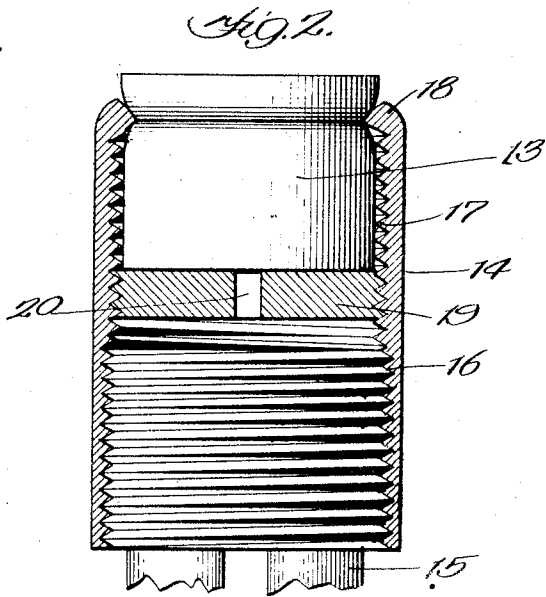
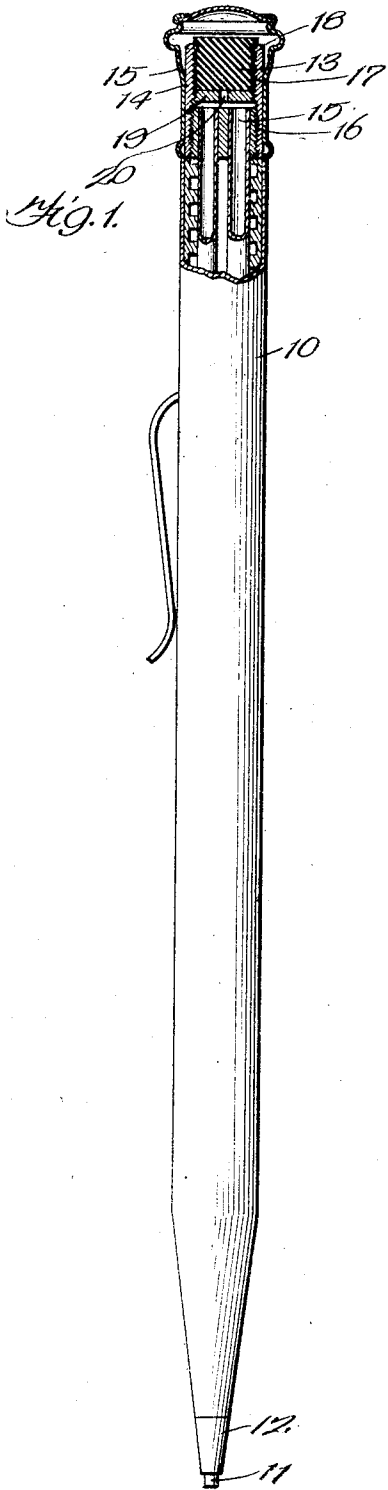


R. G. C. BOA.  
MECHANICAL PENCIL.  
APPLICATION FILED JAN. 17, 1918.

1,344,434.

Patented June 22, 1920.



Inventor:  
Robert George Crombie Boa  
By Arthur F. Pook  
Att'y

# UNITED STATES PATENT OFFICE.

ROBERT GEORGE CROMBIE BOA, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WAHL COMPANY, OF WILMINGTON, DELAWARE, A CORPORATION OF DELAWARE.

## MECHANICAL PENCIL.

1,344,434.

Specification of Letters Patent. Patented June 22, 1920.

Application filed January 17, 1918. Serial No. 212,351.

*To all whom it may concern:*

Be it known that I, ROBERT GEORGE CROMBIE BOA, a subject of the King of England, residing at Chicago, in the county of Cook and State of Illinois, United States of America, have invented certain new and useful Improvements in Mechanical Pencils, of which the following is a specification.

My invention is in a mechanical pencil and has for its object the providing of an improved support for a rubber eraser customarily present in such pencils.

In its preferred form I have shown my invention as applied to the mechanical pencil disclosed in the patent to Keeran, No. 1,130,741, issued March 9, 1915, but I do not wish to limit myself to its use in connection with the pencil described in said patent.

My invention will be best understood by reference to the accompanying figures, of which—

Figure 1 is a view of an assembled pencil with the upper part shown in section;

Fig. 2 is an enlarged section of some parts shown in Fig. 1, and

Fig. 3 is a detail.

The pencil shown in the cited patent to Keeran consists of a casing 10, provided with a lead 11, propelled by a suitable means through a tip 12. The rear end of the pencil is provided with a rubber eraser 13, which is held in a sleeve 14, screwed on the rear end of the double magazine 15, said magazine being slidably mounted in the casing 10. The sleeve 14 also serves as a support for a cap 15, frictionally mounted thereon, said cap serving to protect the eraser when not in use.

In my herein described invention I have constructed the sleeve 14 as shown in enlarged section in Fig. 2, said sleeve comprising two screw threads, one, 16, being of large diameter and being screwed on the double magazine 15. The upper end of the sleeve 14 contains a screw thread 17 of somewhat smaller diameter and is spun in at its upper end 18 (Fig. 2) to a diameter somewhat smaller than that of the eraser 13. A disk 19, having a slot 20 therein, is screwed in the thread 17 and serves as a support for the rear end of the eraser 13. As said eraser is used, the sleeve 14 is un-

screwed from the double magazine 15, a screw driver, pen knife or other narrow implement is inserted in the slot 20 and the disk 19 is screwed up in the thread 17, thereby forcing the eraser 13 through the constricted portion 18 and presenting a new surface for use. This process may be continued until all of the eraser 13 has been used, when the disk 19 may be taken out of the sleeve 14 and a new eraser 13 inserted and used as before. It will be observed that the difference in diameter between the large threads 16 and the small diameter 17 afford a shoulder against which the sleeve 14 is screwed on the double magazine 15, and also that the presence of the disk 19 affords a firm surface to resist the pressure of the eraser 13 when the same is in use.

Many variations may be made from the precise structure herein shown without departing from the spirit of my invention.

I claim

1. In an eraser support for a pencil, the combination of a sleeve having a large portion adapted to be fastened on the pencil and a smaller portion adapted to support an eraser, a disk supported in said smaller portion by a screw thread and means whereby said disk may be advanced.

2. In a mechanical pencil, the combination of a pencil casing, a sleeve mounted on said casing, said sleeve having an enlarged screw portion adapted to engage said casing, and a smaller screw portion adapted to support an eraser, and a disk provided with screw threads and adapted to be advanced in said smaller portion to thereby afford a firm support for the eraser.

3. In an eraser support for a pencil, the combination of a sleeve having a large portion adapted to be fastened on the pencil, a small portion adapted to support an eraser, a disk supported by a screw thread in said small portion and adapted to contact with one end of said eraser, and a slot in said disk, whereby the same may be screwed in said smaller portion to thereby gradually advance the eraser as the same may be used.

In witness whereof I have hereunto subscribed my name.

ROBERT GEORGE CROMBIE BOA.