March 17, 1925. 1,530,305

E. E. DA PARMA

PENCIL HANDLE

Filed May 4, 1922

Fig. 1,

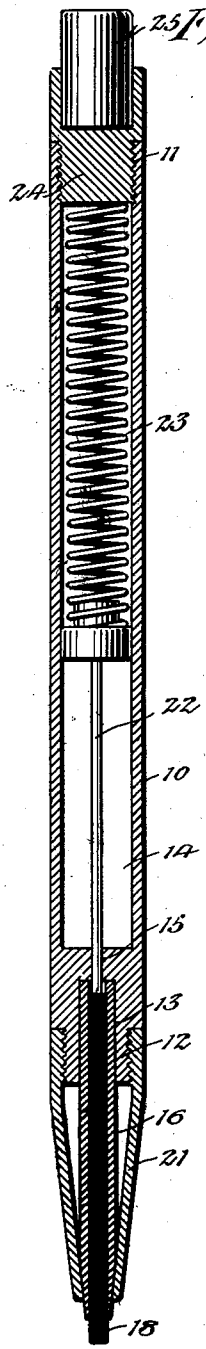


Fig. 2,

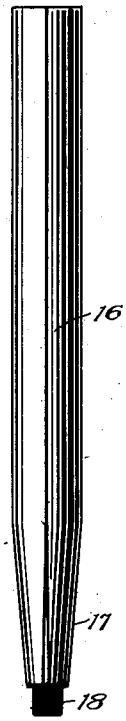


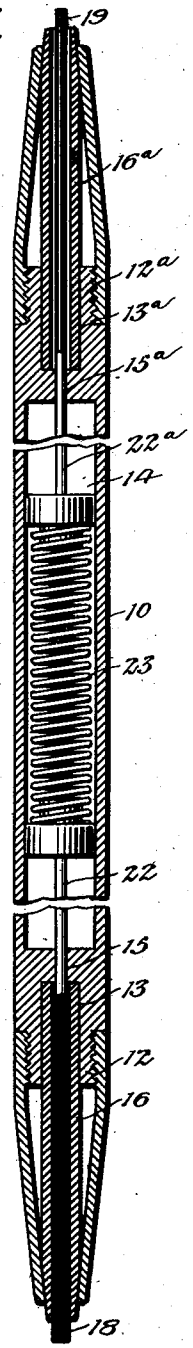
Fig. 3,



Fig. 4,



Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

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PENCIL HANDLE.

Application filed May 4, 1922. Serial No. 558,343.

To all whom it may concern:

Be it known that I, EDWARD E. DA PARMA, a citizen of the United States, and a resident of the city of New York, borough of the Bronx, in the county of Bronx and State of New York, have invented new and useful Improvements in Pencil Handles, of which the following is a full, clear, and exact description.

This invention relates to pencil handles for holding lead of various shapes.

The general object of the invention is the provision of a cheap, simple and durable pencil handle for holding lead of different shapes.

A further object of the invention is the provision of a pencil handle having both ends adapted for holding lead so that lead of two different shapes may be used.

These objects are accomplished by providing a barrel in which the lead holding means is mounted and associating with the lead holding means means for feeding the lead.

These and other objects of the invention will be more clearly understood from the following detailed description and accompanying drawings.

Figure 1 is a vertical section through the pencil handle, showing its construction;

Figure 2 is a side elevation of the split sleeve used for holding the lead;

Figure 3 is an end view of the split sleeve shown in Figure 2 showing the lead in position;

Figure 4 is an end view of the split sleeve shown in Figure 2, with lead of circular cross section in position;

Figure 5 shows a modification of the pencil handle with both ends adapted to receive and hold lead.

Referring to the above-mentioned drawings, a barrel 10 is shown with the upper end open and provided with an internal thread 11. The lower end of the barrel 10 is cut down to give a projection 12 of smaller diameter than the barrel. Extending through the projection and into the end of the barrel is a socket 13, and leading from the socket 13 into the chamber 14 in the barrel 10 is an opening 15. A sleeve 16 has its lower end 17 shaped like a cone. The conical end of the sleeve 16 is split or slotted as shown in Figures 2, 3 and 4. This sleeve 16 is mounted in the socket 13. As shown in Figures 3 and 4, the opening 20 through the sleeve 16 is so shaped that it will receive either a rectangular-shaped piece of lead 18 or a piece of lead 19 of circular cross section.

The projection 12 on the lower end of the barrel is threaded and an actuating sleeve 21 having an internal thread in its upper end is mounted on this projection and cooperates with the lower cone-shaped end 17 of the split sleeve to press it into engagement with the lead mounted therein. Slidably mounted in the barrel chamber 14 is a plunger 22 which extends through the opening 15 into the opening 20 in the split sleeve. A coil spring 23 is also located in the chamber 14 of the barrel 10 and retained in position by a plug 24 making threaded engagement with the internal thread provided in the upper end of the barrel. The upper end of this plug 24 is adapted for receiving a rubber 25. The coil spring serves to force the plunger 22 against the lead 18 and serves to feed the lead when the sleeve 16 is released by the operation of the actuating sleeve 21.

In the operation of this pencil, lead of the desired cross section is first placed in the split sleeve 16. The actuating sleeve 21 is then screwed onto the projection 12 until it engages the split sleeve 16, forcing the same into engagement with the lead. The pencil is then ready for use. After the lead has worn down and it is necessary to have more lead projected beyond the end of the split sleeve, the actuating sleeve 21 is screwed part way off projection 12, releasing the split sleeve 16. The plunger 22, which is under pressure of the spring 23, feeds the lead, and when the lead has been projected a sufficient distance beyond the end of the sleeve the actuating sleeve 21 is again screwed tightly into position on the projection 12, forcing the sleeve 16 into tight engagement with the lead.

In the modification shown in Figure 5, the barrel 10 is provided with two threaded projections 12 and 12^a with sockets 13 and 13^a extending into the projections 12 and 12^a, respectively. Sleeves 16 and 16^a are mounted in the sockets 13 and 13^a, respectively. Two plungers 22 and 22^a are slidably mounted in the chamber 14 of the barrel 10 and are actuated by the spring 23 to feed the pieces of lead 18 and 19. In this

case a piece of lead of circular cross section and one of rectangular cross section are available for immediate use.

I would state in conclusion that while the illustrated examples constitute practical embodiments of my invention, I do not limit myself strictly to the exact details herein illustrated since manifestly the same can be considerably varied without departing from the spirit of the invention as defined in the appended claims.

Claims:

1. A pencil handle, comprising a barrel having an open and internally threaded upper end, the lower end of the barrel having a reduced and threaded extension and provided with a socket and an opening leading from the socket into the barrel, a plug screwing into the upper end of the barrel, a lead holding sleeve having a conical and split lower end, said sleeve being secured in the socket and projecting beyond the end of the barrel, a plunger in the barrel and extending through the opening into the sleeve in engagement with the lead therein, a spring in the barrel between the plunger and plug, and a conical sleeve screwing on the threaded extension of the barrel and having its lower end engaging the lower conical end of said sleeve.

2. A pencil holder, comprising a barrel having an open upper end, the lower end of the barrel having a reduced and threaded extension and a passage communicating with the barrel, a plug in the upper end of the barrel, a lead holding sleeve carried by the extension of the barrel and having a lower conical and split end, said sleeve projecting beyond the barrel and having the opening thereof shaped to receive round or rectangular shaped leads, a spring pressed plunger in the barrel and extending into the sleeve in engagement with the lead therein, and a conical sleeve screwing on the extension of the barrel and engaging the conical end of the said sleeve.

EDWARD E. DA PARMA.