PATENT SPECIFICATION

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COMPLETE SPECIFICATION.

Pencil Holder.

I, KARL FEND, of No. 93, Friedenstrasse, Pforzheim, Germany, of German nationality, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to a pencil holder of the type in which the lead is brought into the advanced position by the movement of a pushing pin in longitudinal direction and comprises an internally threaded magazine for the reserve leads, closed by a head adapted to be screwed off. The pushing pin is guided in a rotatable plunger which consists of a tube slit in longitudinal direction, and is adapted to be pulled out during the writing, in order to lengthen the pencil. A head is mounted on the end of this plunger designed to move the push pin positively forward or backward according to the direction in which said head is being rotated. With this object in view the push pin has at its end a flattened nut engaging with the grooves of an internally and externally threaded sleeve into the magazine sleeve and supported at the lower end in a bearing sleeve which is fixed by soldering on the inner wall of the casing. The threaded sleeve projects beyond the magazine sleeve and receives on its outer end the head for closing the magazine. The magazine sleeve is of star-shaped cross section and is rigidly connected with the casing as in known constructions.

The black-lead pencil taken from the magazine and inserted into the holder is securely guided by a bored steel point mounted in the point of the holder and made elastic by slits. This split steel point does not form part of the present invention.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming a part of this specification, with the understanding that while on the drawing one embodiment of the invention is disclosed, the invention is not confined to any strict conformity with the showing of the drawings, but may be embodied in any manner which does not make a material departure from the salient features of the invention.

In the drawing:—

Fig. 1 shows in longitudinal section the pencil holder according to this invention.

Fig. 2 shows the inner mechanism without the outer sleeve partly in elevation and partly in section.

Figs. 3 and 4 show the plunger with the push pin in two positions standing at right angles the one to the other.

Fig. 5 is a cross section of Fig. 4.

Fig. 6 shows in cross section the magazine sleeve with the reserve lead pencils.

a is the sleeve-like casing of the pencil holder of circular or polygonal cross section into the rear end of which the magazine sleeve *b* is inserted which is fixed in position by soldering. The magazine sleeve *b* is internally threaded, of star-shaped cross section (see Fig. 6) and closed at the inner end by a plate *c*.

The spaces between the inner wall of the casing *a* and the magazine sleeve *b* serve each to accommodate one reserve lead pencil *d*.

Into the internal thread of the magazine sleeve *b* an internally and externally threaded sleeve *e* is screwed on the rear end of which, projecting from the magazine sleeve *b*, a head *f* is screwed which closes the rear end of the magazine. The threaded sleeve *e* is supported at the front end in a bearing sleeve *g* fixed by soldering on the inner wall of casing *a*. In the front end of a smooth extension *p* of the threaded sleeve *e* a tube *o* is mounted which serves as holder for the lead pencil

[*Price* 1/-]

and is further designed to receive the front end of a push pin *i*.

In the threaded sleeve *e* the plunger *h* is rotatably mounted which is designed to positively guide the push pin *i*. This plunger *h* consists of a sleeve slit on its entire length, a holding knob *k* being fixed on its outer end. A flat externally threaded block *m* fixed to the rear end of the push pin *i* engages with the opposite slits of the plunger *h* so that its threaded edges projecting through these opposite slits engage with the internal threads of the sleeve *e*. In the conical front end of the casing *a* a steel point *n* is inserted which is rendered elastic by longitudinal slits and has a tubular threaded extension screwed into the conical front end of casing *a*. The inner diameter of the bore of the steel point is somewhat narrower than the diameter of the lead pencil *d*.

The pencil holder is used in the following manner:

The head *k* is rotated in anti-clockwise direction until the plunger *h* with the block *m* and the push pin *i* fixed to said block can be pulled out of the casing *a*. The head *f* having been screwed off the projecting ends of sleeve *e* a graphite lead *d* is taken from the magazine and the head *f* is screwed on to close the magazine again. The graphite lead is inserted into the pencil holder from the front end of the same so that it is stored in the lead tube *o*. The plunger *h* with the push pin *i* is re-inserted into the holder whereupon the head *k* is rotated in clockwise direction so that the block *m* is screwed forward in the internal threads of sleeve *e* and the push pin *i* is thus positively advanced in longitudinal direction in pushing forward the graphite lead through the tube *o* and through the steel point *n* into the working position.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

Pencil holder in which the lead is advanced by means of a push-pin and provided with a magazine closed by a head adapted to be screwed off, characterized in that the internally threaded magazine of star-shaped cross section is closed by a head screwed on the rear end of a threaded sleeve *e* screwed into said magazine, said threaded sleeve *e* being also internally threaded to receive the threaded edges of a block *m* fixed on the rear end of the push pin *i* which is positively guided by a rotatable plunger *h* consisting of a sleeve having two opposite longitudinal slits and having a knob on its outer end by means of which said plunger can be pulled out of the pencil holder during the writing so that the pencil holder is lengthened for the extent which the actual position of the push pin *i* permits.

Dated this 18th day of July, 1923.

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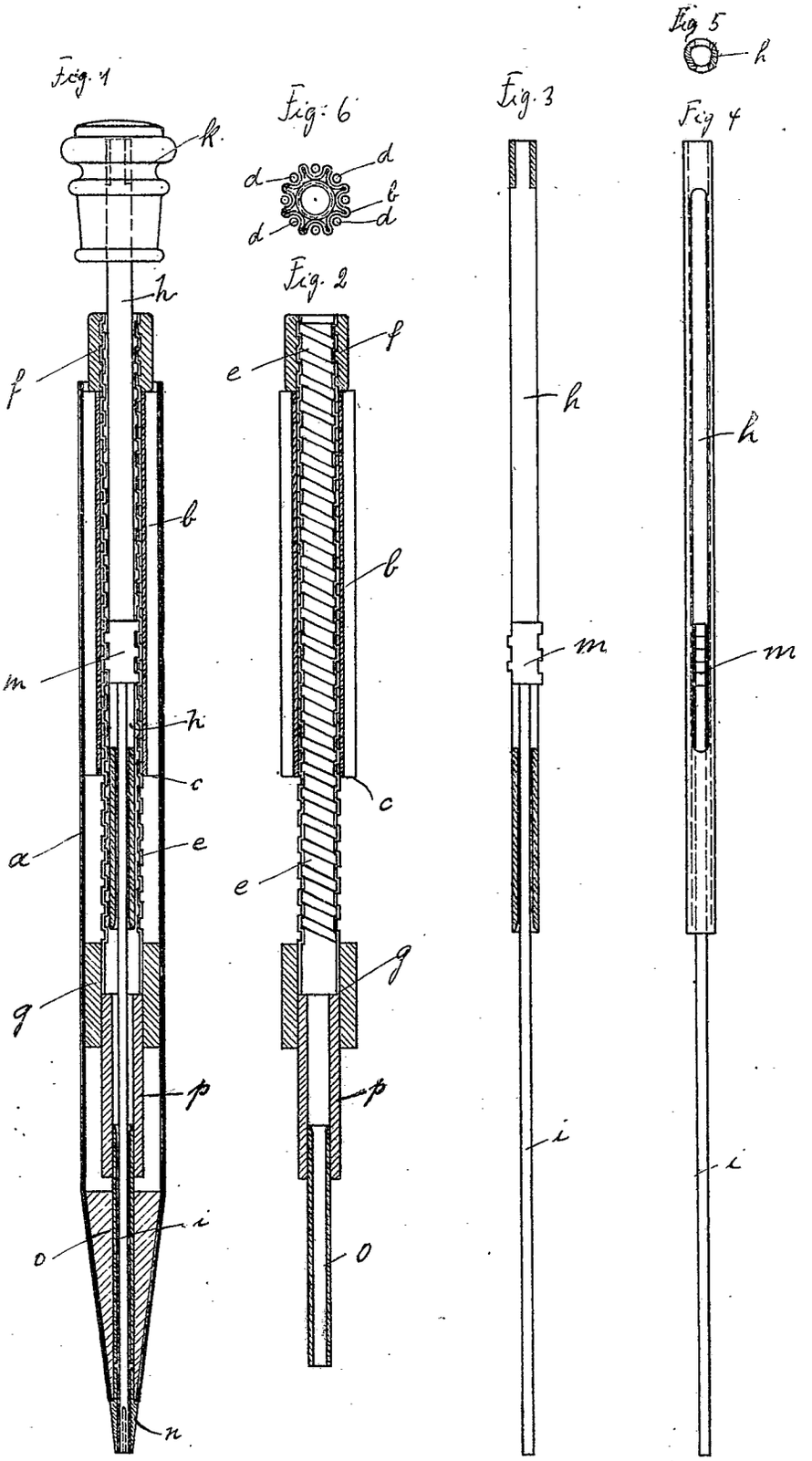
Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1924.

[This Drawing is a reproduction of the Original on a reduced scale]



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