

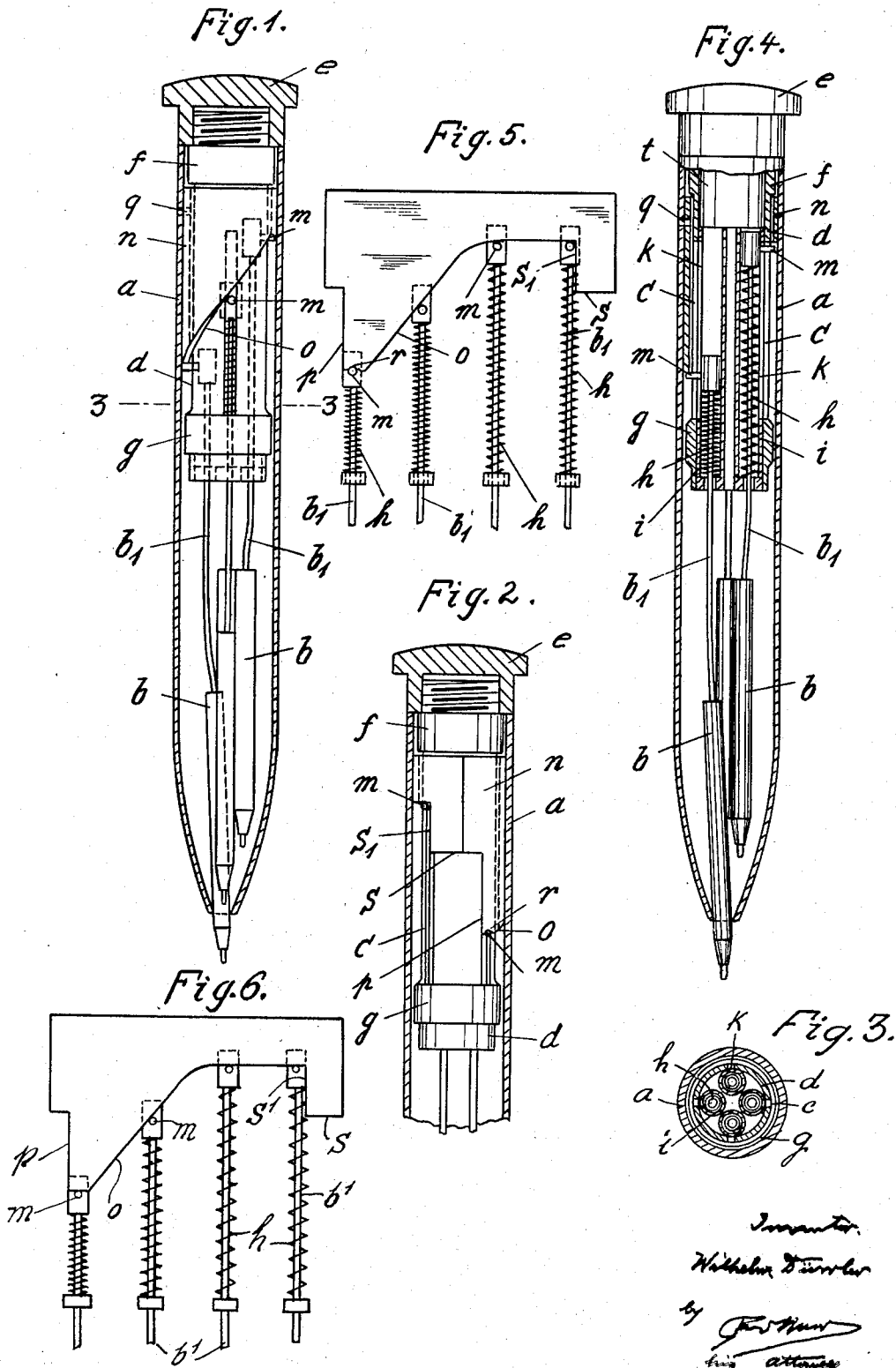
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SELECTIVE MAGAZINE PENCIL

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SELECTIVE MAGAZINE PENCIL

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This invention relates to a selective magazine pencil. A selective pencil of this type has become known, in which a helical-curve piece turnable in the casing sleeve of the selective pencil has a helical path formed by an obliquely ascending upper edge, from the highest point of which path a perpendicular edge extends to the lower end of the piece, so that the guide pin of a lead carrier actually sliding over the rear end of the curved path jumps forward under the action of a spring and projects from the point of the casing.

In selective magazine pencils of this type it happened that, owing to the jumping forward of the lead carrier, leads are thrown out which do not fit well in the carrier.

This inconvenience is obviated by the present invention.

The novelty consists in that the helical-curve piece, concentrically arranged relative to the guides of the lead carriers, the guide pins of which project from these guides, has a helical path formed by an obliquely descending lower edge, from the lowermost point of which extends a vertically ascending edge, so that the lead carrier, the guide pin of which has actually arrived at the lowermost point of the helical path is in the writing position from which it jumps back by the action of a return spring into the inoperative position when the guide pin is sliding up on the vertical edge.

The improved pencil is actuated simply by holding the casing with one hand and turning a knob of an inner sleeve with the other hand.

An embodiment of the invention is illustrated by way of example in the accompanying drawing in which

Figs. 1 and 2 show each an elevation of the magazine pencil, the casing being shown in section.

Fig. 3 is a cross section on line 3—3 of Fig. 1.

Fig. 4 is a longitudinal section through the centre of the selective magazine pencil.

Fig. 5 is a development of the helical-guide piece formed in the casing.

Fig. 6 is a similar view of Fig. 5 showing a modified construction of the helical-guide piece.

In the sleeve-like casing *a* an inner sleeve *d* having as many slits *c* as there are lead carriers *b* is mounted so that it can be turned. On the end of the inner sleeve *d* projecting from the sleeve-like casing *a* a cap-like knob *e* is screwed which serves as handle for turning the inner sleeve.

The inner sleeve *d* has two annular thickenings

f and *g* which ensure the central position of the sleeve in the casing *a*. Lead carriers *b* fixed on rods *b₁* are under the action of pressure springs *h* and guided, together with the springs, in sleeves *i* which have each one a slit *k* registering with the corresponding slits *c* of the inner sleeve *d*, so that guide pins *m* fixed on the thickened ends of the rods *b₁* project through both *k* and *c*.

The helical-guide piece *n* is rigidly secured to the inner wall of the casing *a* by pins *q*. Although the pins *q* do not extend through the inner sleeve *d* and therefore do not directly fix the latter, they nevertheless serve for indirectly securing the inner sleeve *d* in the casing *a* through the intermediary of the helical-guide piece *n*, as the guide pins *m* bear against the curve *o* of the helical guide-piece *n* under the action of the pressure springs *h* which press against the front end of the inner sleeve *d*. In this manner all pressure springs tend to push the inner sleeve *d* forward in axial direction. By securing the helical-guide piece by means of the pins *q* it is likewise not possible for the inner sleeve to slip out of the casing *a* at the rear end of the inner sleeve *d*. The longitudinal displacement of the inner sleeve *d* in forward direction is also prevented by a rear thickening *f* which bears against the rear edge of the helical-guide piece *n* extending transversely in the casing *a*. The helical-guide piece is therefore secured to the inner wall of the casing between the thickenings *f* and *g* of the inner sleeve *d* and has an edge forming a helical curve *o* terminating in a short front edge and further a vertical edge *p* extending from the short front edge on the opposite side to the curve *o*. This helical-guide piece *n* is permanently pressed against the thickening *f* of the inner sleeve *d* by the pins *m* of the spring-controlled lead carriers *b*, the thickening *f* being thus held in the casing *a* so that it cannot be pulled out because the pins *m* bear against the helical-guide piece *n* which is fixed in the casing *a* by the pins *q*. The guide pins *m* of the lead carriers *b* rest upon the curve *o* at uniform distances apart and slide upward and forward on this curve *o* if the inner sleeve *d* is turned by means of the cap *c*, the casing *a* being held at the same time with one hand. The foremost guide pin *m* engages in a notch *r* in the short front edge of the helical-guide piece, as soon as its lead carrier extends from the point of the pencil casing and is in the position for writing. If the inner sleeve *d* is turned further the guide pin *m* is lifted out of notch *r* and jumps back

under the action of the spring *h* along the edge *p* to the beginning of curve *o*.

To ensure that the guide pin *m* of the lead carrier *b* actually in writing position, does not slip off the short front edge if no notch *r* is provided, a step *s*, in length substantially less than the circumferential spacing of the guide pins, extends from the edge *p*, and the guide pin preceding that which is resting on the short front edge bears against the inner edge *s*₁ of this step as shown in Fig. 6.

The container *b* located in the inner sleeve *d* serves to hold spare leads.

I claim:

1. A selective magazine pencil, comprising in combination with a casing having an open pointed front end, an inner sleeve in said casing having a number of longitudinal slots, thin sleeves in said inner sleeve having each a longitudinal slot registering with one of the slots in said inner sleeve, lead carriers one in each of said thin sleeves and each having a thickened rear end, spiral springs one on each of said carrier bearing against the thickened rear end thereof located in the corresponding thin sleeve and adapted to return the advanced lead carrier into the position of rest, pins laterally projecting one from each of said lead carriers and extending through the slot of the corresponding thin sleeve and through the corresponding slot of the inner

sleeve, a helical-guide piece in the rear end of said casing and rotatably accommodating the rear end of said inner sleeve, said helical-guide piece having an oblique front guide edge terminating in a short front edge with a longitudinal guide edge extending therefrom, a knob on the rear end of said inner sleeve adapted to be turned by hand relatively to said casing to bring into position for writing the carrier whose pin bears against the oblique front edge of said guide piece, the lead carrier in the writing position with its pin on the short front edge of the guide piece springs back into inoperative position along the longitudinal guide edge under the action of its spiral spring.

2. A selective magazine pencil as specified in claim 1, in which the helical-guide piece has a notch in the short front edge adjacent the vertical guide edge.

3. A selective magazine pencil as specified in claim 1, in which the helical-guide piece has a stepped return edge from the foremost point of the helical-guide edge comprising first a longitudinal edge a transverse edge in length substantially less than the circumferential spacing of the guide pins and a second longitudinal edge forming an abutment for the guide pin of the carrier preceding the one in operative position.

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