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PATENT SPECIFICATION

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COMPLETE SPECIFICATION.

Improvements in Fountain Pens.



We, CLAUD JOHANNES VOSS, CHRISTIAN LAUSEN, and WILHELM GEORG HUBERT DZIAMBOR, all of German Nationality, trading as the firm, SIMPLO FÜLLFEDER
5 GESELLSCHAFT VOSS, LAUSEN & DZIAMBOR, of No. 75/77, Schanzenstrasse, Hamburg 6, Germany, 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 self-filling fountain pens, in which a rubber tube is compressible by means of a blade spring
15 and a pressure pin provided on the end of the holder.

It is known in self-filling pen holders, which are filled by means of a piston-like device, to provide, for actuating the piston, a rear closing cap, which during the filling of the holder need not be screwed off, the unscrewing movement being limited by a stop.

Fountain pens are also known in which
25 the rubber tube or sac is adapted to be deflated by the buckling of a spring on the application of end pressure applied by operating a rotatable non-removable head.

As compared with the known constructions the feature of the present invention consists in that a head screw having a left hand screw thread is screwed into a pressure pin provided on the end of the holder
35 and that a threaded sleeve is screwed on the threaded pin.

By unscrewing the sleeve on the pressure pin and pushing the sleeve and the pin into the holder the spring in the holder will be buckled and will compress the ink tube, and on again pulling the sleeve and pin out of the holder the pressure will be removed from the spring so that the tube will fill with ink, after which the sleeve is again screwed tightly
45 onto the pin.

Apart from the fact that holders provided with such closures can be operated by one-armed persons, a further important advantage of the closing cap consists in that when screwing the cap onto the pressure pin the air can escape from the inside of the holder.

An embodiment of the invention is [Price 1/-]

illustrated in the accompanying drawing in which;

Fig. 1 shows the holder in longitudinal section.

Fig. 2 shows in section the rear end of the holder with unscrewed cap.

Fig. 3 shows in section the rear end of the holder with unscrewed inwardly pressed cap.

According to the invention the pressure pin consists of a square block *a* which is let into a square bore in the holder *b*, secured by an annular nut *c* and mounted on a plug *d* provided with an external right hand screw thread and a left hand screw threaded bore. A head screw *e* is inserted into the plug, and has a left hand screw thread corresponding to the internal screw thread in the plug. A sleeve *g* is screwed into the cap *f*, which sleeve has an internal screw thread only on its front end *g*¹, by means of which thread the cap *f* is screwed onto the screw plug *d*.

The fitting together of the closure is effected in the following manner:—

The pressure pin *a*, *d* is inserted from the rear into the square bore of the holder, so that the free end *h*₂ of the pressure spring *h* comes to lie in the conical hole *a*₁. The pressure pin is secured against falling out by an annular nut *c* screwed into the holder *b*. The sleeve *g* is then screwed onto the screw plug *d* and the head screw with left hand screw-thread inserted into this plug. Finally the cap *f* is screwed tightly onto the sleeve *g* with right-hand screw thread.

If the cap *f* is unscrewed, the sleeve *g* guided on the plug *d* is displaced and the cap *f* can only be unscrewed until the screw collar of the sleeve *g* encounters the head of the screw *e*, as shown in Fig. 2. The cap *f* and the pin *a*, *d* connected thereto can then be pressed into the holder the distance indicated by *i* (see Figs. 2 and 3). By this inward pressure the ink tube is compressed in known manner by the spring *h* and the filling can take place.

The filling is effected by pulling the cap *f* and the pressure pin *d* outwards thereby removing the pressure from the spring *h*.

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Thus the tube will have sucked itself full of ink and is again freed from the spring. During the screwing of the cap onto the pressure pin the air has sufficient time to escape from the holder. It is of particular importance that the filling parts are not accessible.

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

Self-filling fountain pens, in which a

rubber tube is adapted to be compressed by means of a blade spring and of a pressure pin provided on the end of the holder, characterized in that in the pressure pin *d* a head screw *e* having left hand screw thread is screwed and on the pin a threaded sleeve *g* is screwed on which the closing cap *f* can be screwed tight.

Dated this 26th day of May, 1930.

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

Fig.1

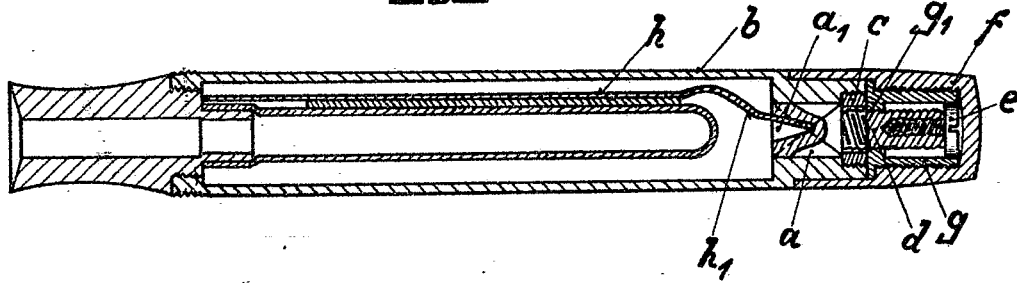


Fig.2

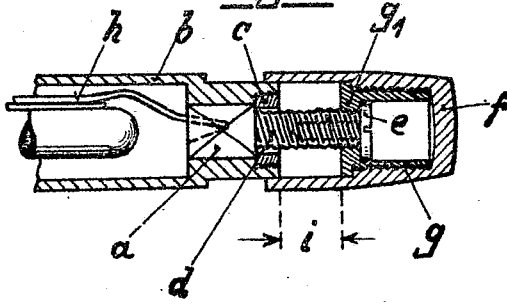


Fig.3

