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D. KLEIN

SELF FILLING FOUNTAIN PEN

Filed Feb. 10, 1923

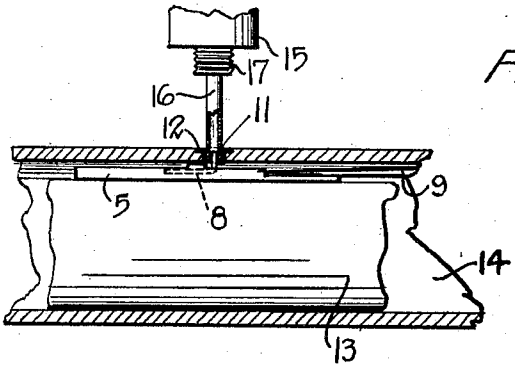

Fig. 1.

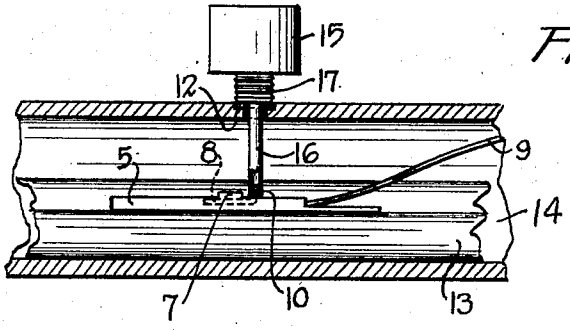

Fig. 2.

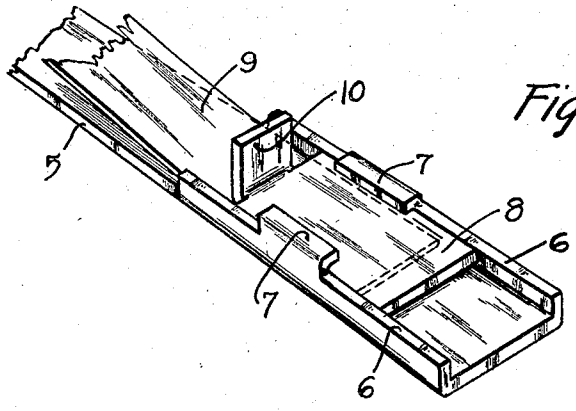

Fig. 3.

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DAVID KLEIN, OF NEW YORK, N. Y., ASSIGNOR TO MARX FINSTONE, OF BROOKLYN, NEW YORK.

SELF-FILLING FOUNTAIN PEN.

Application filed February 10, 1923. Serial No. 618,199.

To all whom it may concern:

Be it known that I, DAVID KLEIN, a citizen of the United States of America, residing at New York city, Bronx County, State of New York, have invented certain new and useful Improvements in Self-Filling Fountain Pens, of which the following is a specification.

This invention relates to fountain pens of the self-filling type and in particular to the bar which compresses the ink sack and the means for operating the same.

A particular object of my invention is to center the pressure of the bar that collapses the ink sack so that its pressure will be evenly distributed on the sack thereby preventing unnecessary wear and liability of the edge of said bar cutting the sack.

A further object of the invention is to provide a means whereby in the use of a key for operating the presser bar the same will be held centrally and therefore will have no tendency to slip off of the presser bar and pierce the ink sack or reservoir which is usually made of rubber.

Referring to the drawings wherein one embodiment of my invention is illustrated:

Fig. 1 is an enlarged sectional elevation taken through the barrel of a fountain pen showing my improved filling device applied thereto.

Fig. 2 is a view similar to Fig. 1 showing the presser bar in its lowermost position, the cap which is used for moving the bar being also shown in operating position; and,

Fig. 3 is an enlarged perspective view of the improved presser bar, the projecting portion thereof, which is engaged by the key, being clearly illustrated.

Referring to the drawings in detail, 5 indicates the presser bar which consists of a comparatively narrow flat piece of metal, which throughout the greater part of its length is provided with side flanges 6 opposite portions of which are extended as at 7 and bent over to securely hold in position a piece of metal 8 which rests partly on the presser bar 5 and partly on the end of a piece of spring steel 9 the latter being held frictionally under the piece 8. The spring steel is suitably fastened to the barrel so that the presser bar is normally kept in contact with the inner surface of the barrel 14.

The piece of metal 8 is provided with a reduced upturned end 10 which, when the presser bar is in place extends into a suitable opening 11 in the barrel of the pen as illustrated in Fig. 1. This opening 11 is provided with an eyelet or collar 12 preferably made of metal, which prevents wear of the part of the barrel adjacent the edge of said hole.

When the sack 13 is empty, a suitable end cap 15 which normally closes the upper end of the barrel is removed and the key portion 16, which consists of a piece of metal tubing extending from the reduced threaded portion 17 of the cap 15, is inserted into the opening 11 and the hollow end of the key 16 passes over the upturned piece 10 that extends from the presser bar into the opening 11. The lower edge of the key therefore rests on the presser bar and moves the same downwardly. The key member fits snugly in the collar 12 and as it moves downwardly there is no swaying movement thereof which would tend to apply more pressure to one side of the presser bar than to the other. Also the projection 10, fitting snugly into the end of the key cannot move sidewise and therefore the key is always centered on the presser bar and the latter is applied throughout its width and length with equal pressure on the sack 13, thus preventing undue wear thereof.

It will be noted that the upwardly extending portion 10 is flush with the exterior surface of the barrel so that there are no projections on the barrel which can catch in anything.

It is to be understood that I am not confined to the showing made in the drawing, but may make any changes of construction which fall withing the scope of the appended claims.

What I claim is:

1. A fountain pen comprising a barrel, a sack adapted to contain ink within said barrel, a presser bar adapted to collapse said sack, a spring member associated with said barrel body and said presser bar, a retainer piece adapted to hold said spring to said presser bar, and an upturned portion on said retainer piece.

2. A fountain pen comprising a barrel, a key, a presser bar in said barrel, a spring strip, a retainer piece adapted to hold said strip against the presser bar, and a projection formed on said piece with which said key is adapted to engage.

3. The combination with a fountain pen comprising a barrel having an opening therein and an ink container in said barrel, of a spring, a presser bar adapted to rest on said container; and means associated with said presser and said spring for wedging the spring against the presser bar, said means also having a projection adapted to extend into the opening in said barrel.

4. The combination with a fountain pen having a barrel formed to comprise an opening therein, of a presser bar within said barrel having flanges thereon and extensions on said flanges, a retainer held against said presser bar by said extensions and means on said retainer adapted to be engaged by an operating member whereby movement of the latter relative to the presser bar is prevented.

DAVID KLEIN.