

M. F. SKIDMORE.
 FOUNTAIN PEN,
 APPLICATION FILED JULY 17, 1909.

999,407.

Patented Aug. 1, 1911.

Fig. 1.

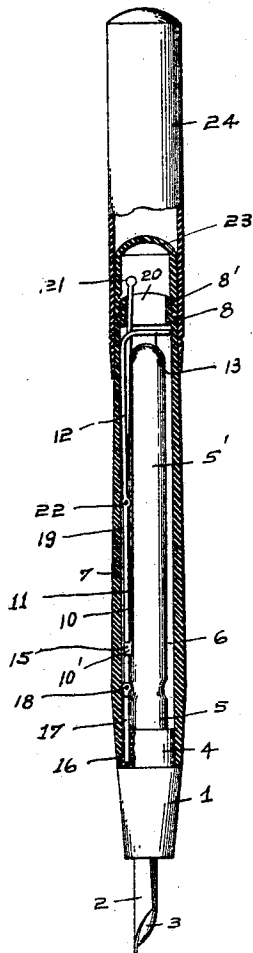


Fig. 6.

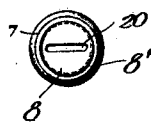


Fig. 4.

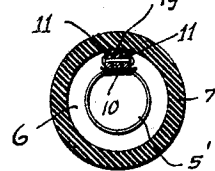


Fig. 3.

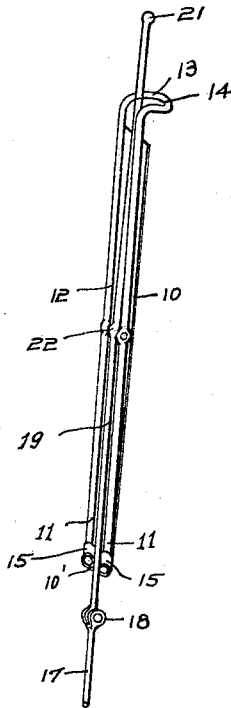


Fig. 2.

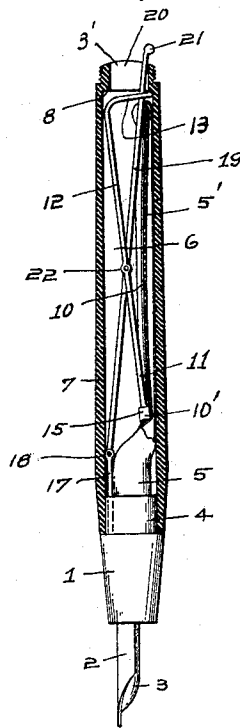
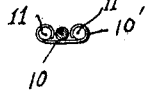


Fig. 5.



Witnesses—
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UNITED STATES PATENT OFFICE.

MAJOR F. SKIDMORE, OF TOLEDO, OHIO.

FOUNTAIN-PEN.

399,407.

Specification of Letters Patent.

Patented Aug. 1, 1911.

Application filed July 17, 1909. Serial No. 508,233.

To all whom it may concern:

Be it known that I, MAJOR F. SKIDMORE, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Fountain-Pen, of which the following is a specification.

My invention relates to a fountain pen of the kind having a collapsible ink reservoir housed within its stem and has for its object to provide means to more evenly collapse said reservoir initiatively to its filling and so arrange the compression means that the same may be readily housed within the stem without undue encroachment upon the space allotted to the reservoir and in such a juxtaposition thereto, that without injury to its walls, said reservoir may be collapsed for filling for a greater portion of its length as well as of its girth.

The objects of my invention are accomplished as hereinafter described and illustrated in the drawings in which—

Figure 1, is a view partly in section of a fountain pen constructed in accordance with my invention and showing the normal position of my compression means and the reservoir in full. Fig. 2, is a like view but showing the mechanism in the position in which the reservoir is collapsed. Fig. 3, is an isometric view of my compression mechanism. Fig. 4, is a section through the pivotal joint, and Fig. 5, is a view showing a method of attaching the pressure plate to the rocker bar. Fig. 6, is an end view of the barrel showing the reduced nipple and the slot for the pressure-lever.

The fountain pen illustrated in the drawings is of usual form and its head (1) is formed to socket and support a pen 2, being also provided with a supply tube 3 and opposite to the pen and the supply tube, said head is diametrically reduced to form a shoulder offset 4 and again reduced in diameter to form a nipple portion 5 upon which a sack 5' for the ink, or a reservoir of collapsible material is mounted. The shoulder offset 4 is of a size to forcibly telescope into the bore 6 of a barrel or stem 7 which has its opposite end closed by a head 8. The head 8 is provided with a threaded extension 8' of a reduced diameter. The barrel 7 is of a length to house the ink-

sack within its bore and to compress said sack for filling, I have provided a pressure plate 10 which is of a length to extend from near the nipple to the free end of the sack, and as a means to bear the plate upon the sack I have coupled the head end 10' of the plate to the free arms 11 of a lever 12 which are so angled near the head 8 that short arms 13 are formed which are of a length slightly less than the diameter of the bore 6 being connected by means of an integral bight 14. The long arms 16 and the short arms 13 of the lever 12 and the connecting loop 14 are preferably formed of a single piece of wire, which is doubled upon itself and separated by a bight of a width slightly more than the diameter of the wire and after being thus doubled, said arms 13 are formed by bending the doubled wire at a suitable distance inward from the bight. As a means to secure the long arms 11 to the pressure plate said plate is provided with lips 15 which are adapted to embrace and clench the respective ends of the long arms 11. The offset shoulder 4 of the head is provided with an end bore 16 in which is pressed a stem 17 the free end of which is upset to form a head 18. The pressure lever 19 is pivoted to this head and extends therefrom between the arms 11 through the slot 20 a suitable distance outward from the head 8 and is provided with a terminal knot 21. To impart motion to the arms 11, said pressure lever is coupled to the arms about midway of their length by a pivot 22 common to the arms and to the lever. By the plate, angled lever and bar thus arranged and housed within the bore of the stem 7 collapsing pressure may be brought to bear upon the ink sack by pressing upon free end of the lever 19 which results in rocking of the angled lever 12 and depresses the free end upon the ink sack, while the free end of the pressure plate is brought to bear upon the ink sack by the pressure directly imparted by the lever 19 to collapse the head and the pressure bar being made of spring wire which is flexed to collapse the reservoir will return the parts to their normal position when pressure upon the lever 19 is released, with the result that the ink sack is filled by external pressure. The free end of the lever 19 is protected by means

of cap 23 which is threaded to the extension of the head 8 and 24 designates a housing cap for the pen, which, when not in use for such purpose, is telescoped upon the head end 8.

What I claim is,

1. A fountain pen, having a tubular stem and a compressible ink-sack; a pressure plate, a lever adapted to rock within the cavity of the tubular stem and having its inner end coupled to the inner end of the pressure-plate, and a spring operating lever, fixed to the head end of the stem, and pivotally connected to rock lever, adapted to impart with the rock-lever a parallel compressing motion to the pressure plate.

2. A fountain pen, having a tubular stem and a housed in ink-sack, compressing means for said ink-sack, comprising a pressure-plate, an angled lever, having the end of its long arm fixed to the end of the pressure-plate adjacent the nipple for the ink-sack, and its short arm adapted to rock upon the wall of the stem, a spring pressure bar, extended from the nipple, being pivotally connected to the long arm of the angle lever about mid-way of its length, and

adapted to bear upon the free end of the pressure-plate.

3. A fountain pen, having an ink-sack housed within a built-up tubular stem; compressing means for the ink-sack, comprising a pressure-plate, lever arms coupled to the inner end of said plate and angled at the outer end of said plate to bear upon the wall of the stem, being connected by an integral bight, adapted to form a gap between the levers, a spring pressure bar located within said gap, being fixed to the head end of the stem and articulated near the head and pivotally connected to each of the long arms of the angled levers about mid-way of their length, and adapted to bear upon the free end of the pressure-plate, and a slot in the stem for the extension of the spring pressure-bar and permitting its movement across the area of the stem.

In witness whereof, I have hereunto set my hand this 10 day of May 1909.

MAJOR F. SKIDMORE.

Witnesses:

S. T. KLOTZ,

E. J. MCKINDLEY.