

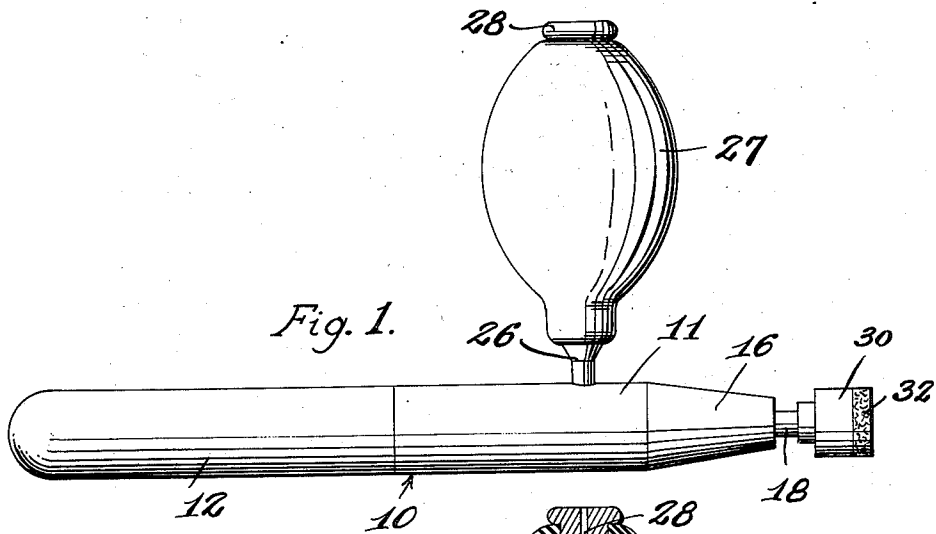
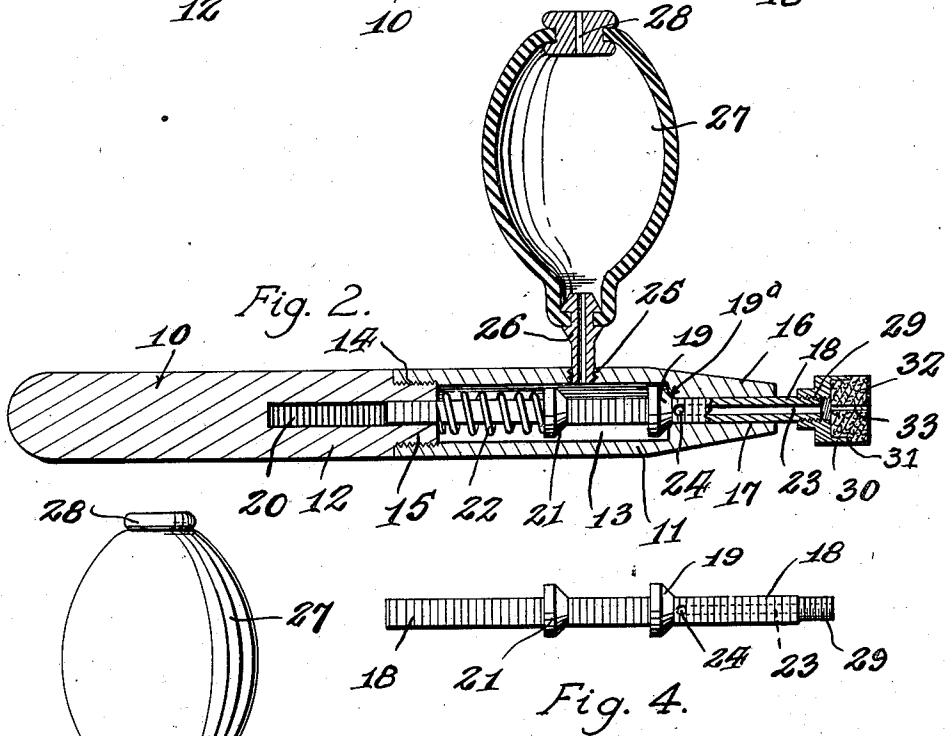
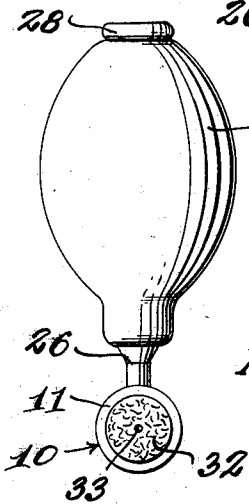
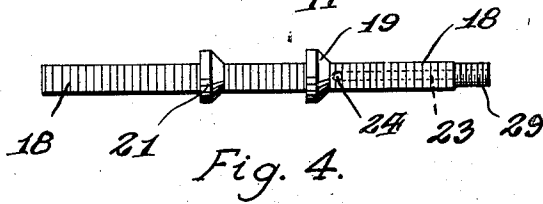
Oct. 12, 1937.

W. E. ALBERTSON

2,095,727

FOUNTAIN LETTERING PEN

Filed May 20, 1935



Inventor

William E. Albertson,

By Christian K. Nielsen Attorney

Attorney

UNITED STATES PATENT OFFICE

2,095,727

FOUNTAIN LETTERING PEN

William E. Albertson, Atlanta, Ga., assignor to
Estes E. Parker, Atlanta, Ga.

Application May 20, 1935, Serial No. 22,470

2 Claims. (Cl. 120—43)

My invention relates to fountain pens, and more particularly to pens used by show card writers, and it consists in the constructions, arrangements and combinations herein described and claimed.

It is a cardinal purpose of the invention to provide a pen which will permit the lettering of a perpendicular plane, such as in the case of a show window.

It is a further purpose of the invention to provide a pen of the character described, in which the writing fluid will be automatically fed, upon application of slight inward pressure upon the writing point.

It is a still further object of the invention to provide a pen which may be readily dismantled and assembled, permitting ready cleaning of the parts, and one which may be employed with any writing fluid, regardless of its degree of fluidity.

Additional objects, advantages and features of invention will be apparent from the following description and accompanying drawing, wherein Figure 1 is a side elevation of a pen constructed in accordance with my invention.

Figure 2 is a longitudinal sectional view thereof.

Figure 3 is an end elevation of Figure 1.

Figure 4 is a side elevation of the valve plunger.

There is illustrated a pen generally indicated at 10, formed in two parts 11 and 12, cylindrical in form and of a size to be comfortably held in the hand of the artist in a manner which will be apparent.

The part 11 has formed therein a chamber 13 open upon one end which is interiorly threaded as at 14 and receives an exteriorly threaded stud 15 of the part 12. Thus the parts 11 and 12 are detachably connected permitting ready assembly of the pen.

The part 11 of the pen has a tapered forward end 16 centrally of which there is formed an axial bore 17, square in cross section, through which there is reciprocally mounted a stem 18 of a valve 19, and the part 12 of the pen is similarly formed with a bore 20, into which the rear end of the stem 18 is disposed. The bore 20 is of a length to permit a substantial rearward movement of the stem thereinto for a purpose to be presently explained.

The valve 19 is positioned within the chamber 13, and as shown in the present instance, has a conical face which is cooperable with a similar seat 19a formed in the rear portion of the end 16. The stem 18 has formed thereon an annular enlargement 21 spaced rearwardly of the valve

19 a substantial distance, serving as an abutment for one end of a helical spring 22, the other end of the spring being seated against the stud 15. Thus the spring 22 holds the valve 19 against its seat.

The stem 18 has an axial bore 23 extending from one end to a point slightly in advance of the valve 19, where a port 24 is formed. The port 24 enters the bore 23 at right angles and is normally positioned inwardly of the valve seat, and therefore upon rearward movement of the stem 18 the port 24 will clear the valve seat and establish communication with the chamber 13.

A threaded opening 25 is formed in the pen part 11 and receives therein a nipple 26 of a collapsible bulb 27, which is suitably vented as at 28.

The forward end of the stem 18 is exteriorly threaded as at 29, and receives thereon the threaded shank of a chuck 30. The chuck 30 in the present instance comprises an annular flange 31 within which an absorbent pad 32 is securely held against displacement. The pad 32 is axially apertured as at 33, and as may be seen in Figure 2 is in alignment with the bore 23 so as to receive the writing fluid for thorough saturation of the pad.

Various sized pads may be used in connection with the stem, depending upon the character of lettering, and such interchange of pads may be readily accomplished by virtue of the screw threaded connection.

In filling the pen, the pad 32 may be removed or retained in position as desired, the bore 23 in either case being presented into a bottle containing the writing fluid and by positioning the stem 18 into contact with the bottom of the bottle and applying a light pressure to the pen, the stem 18 will be forced backward against the tension of the spring 22. Such movement will bring the aperture 24 into communication with the chamber 13. Upon compression and release of the bulb 27 fluid will be drawn into the chamber 13, by way of the port 23 and bore 24. As soon as pressure on the stem is released, the spring will force the stem 18 forwardly, and seat the valve 19. The pen is now in readiness for use.

In use, the pad 32 will be presented to the writing surface, the letters being formed by manipulation of the pen as is customary, and it will be understood that the pad 32 may be presented in flat contacting relation to the writing surface for production of lettering having a wide stroke, or the pen may be tilted at an angle so that the peripheral edges of the pad will produce the strokes forming the lettering, in which event a

script-like lettering may be produced. When the pad 32 becomes dry, it will only be necessary to exert a longitudinal pressure on the pen in the direction of the pad, such movement imparting a rearward movement to the stem 18, unseating the valve 19 and presenting the bore 24 to the chamber 13 whereby the writing fluid will pass to the pad. If found necessary, the fluid within the chamber 13 may be placed under slight pressure by compression of the bulb 27.

This may be attained by raising the forefinger of the hand in which the pen is held and pressing it upon the vent 28. This serves to close the vent and to compress the bulb, very slight compression being required. The valve serves to prevent excessive discharge of ink, and the pressure of the pen upon the work will determine the rate of flow of the ink by reason of the opening of the valve in proportion to the degree of pressure exerted. It will be understood that such pens are ordinarily grasped between the thumb, first and second digits near the point of the instrument, and in lifting the forefinger so as to rest on the outer side of the bulb, an equivalent grasp is maintained upon the instrument as a whole, so that it may be steadied adequately, and the normal and natural swing of the instrument as in card writing and lettering generally may be executed smoothly.

While I have shown and described a preferred construction of pen, this is illustrative only, for I am aware that variations in construction may be made, and I therefore consider as my own all such modifications as fairly fall within the scope of the appended claims.

I claim:—

1. A fountain lettering pen comprising a body having a fluid chamber and an axial bore, one end of the bore opening upon an end of the body, a stem member reciprocably mounted in the bore

and projecting through the open end of the body, a valve seat formed at the juncture of the bore and chamber, a valve carried by the stem and co-operable with the valve seat, an annular abutment on the stem, a helical spring on the stem, interposed between the abutment and one end of the chamber for normally holding the valve seated, said stem having an axial bore and a port opening upon one side thereof, said port being positioned in advance of the valve, a chuck member detachably mounted upon the outer end of the stem and in communication with the bore of the stem, a pad member carried by the chuck member, and a compressible bulb member in communication with the chamber.

2. A fountain lettering pen comprising a two part body member, one of the body members having a fluid chamber and an axial open ended bore, said other body member having a bore in alignment with the first named bore, a stem member reciprocably mounted in the aligned bores, and projecting through the open end of the first named bore, said chamber having a valve seat formed at the juncture with the open ended bore, a valve carried by the stem and co-operable with the valve seat, an annular abutment on the stem, a helical spring on the stem interposed between the abutment and said second named body member for holding the valve seated, said stem having an axial bore and a port upon one side thereof, said port being positioned in advance of the valve, a chuck member detachably mounted upon the outer end of the stem and in communication with the bore of the stem, a pad member carried by the chuck member, said pad member having an aperture in alignment with the bore of the stem, and a compressible bulb member in communication with the chamber.

WILLIAM E. ALBERTSON.