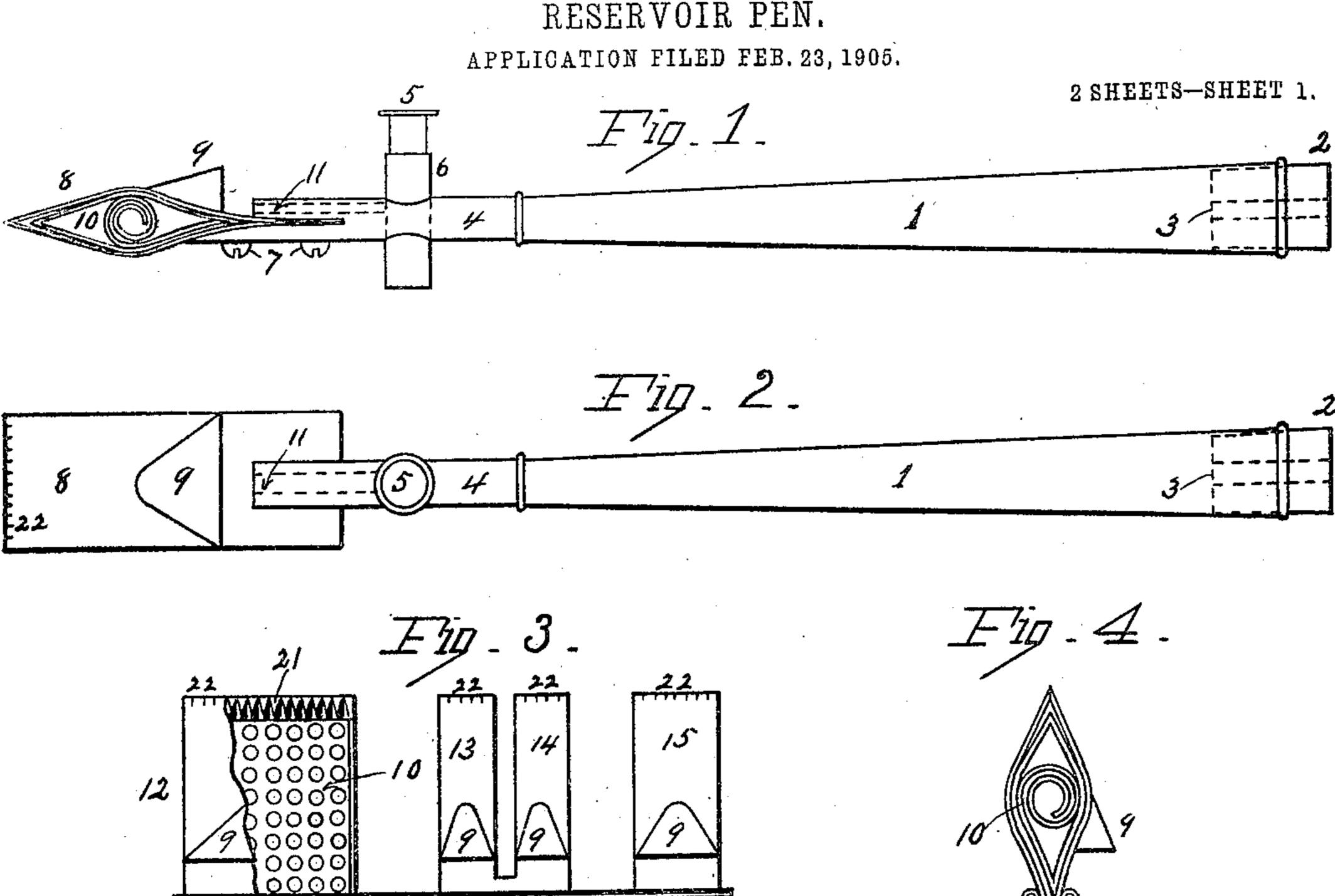
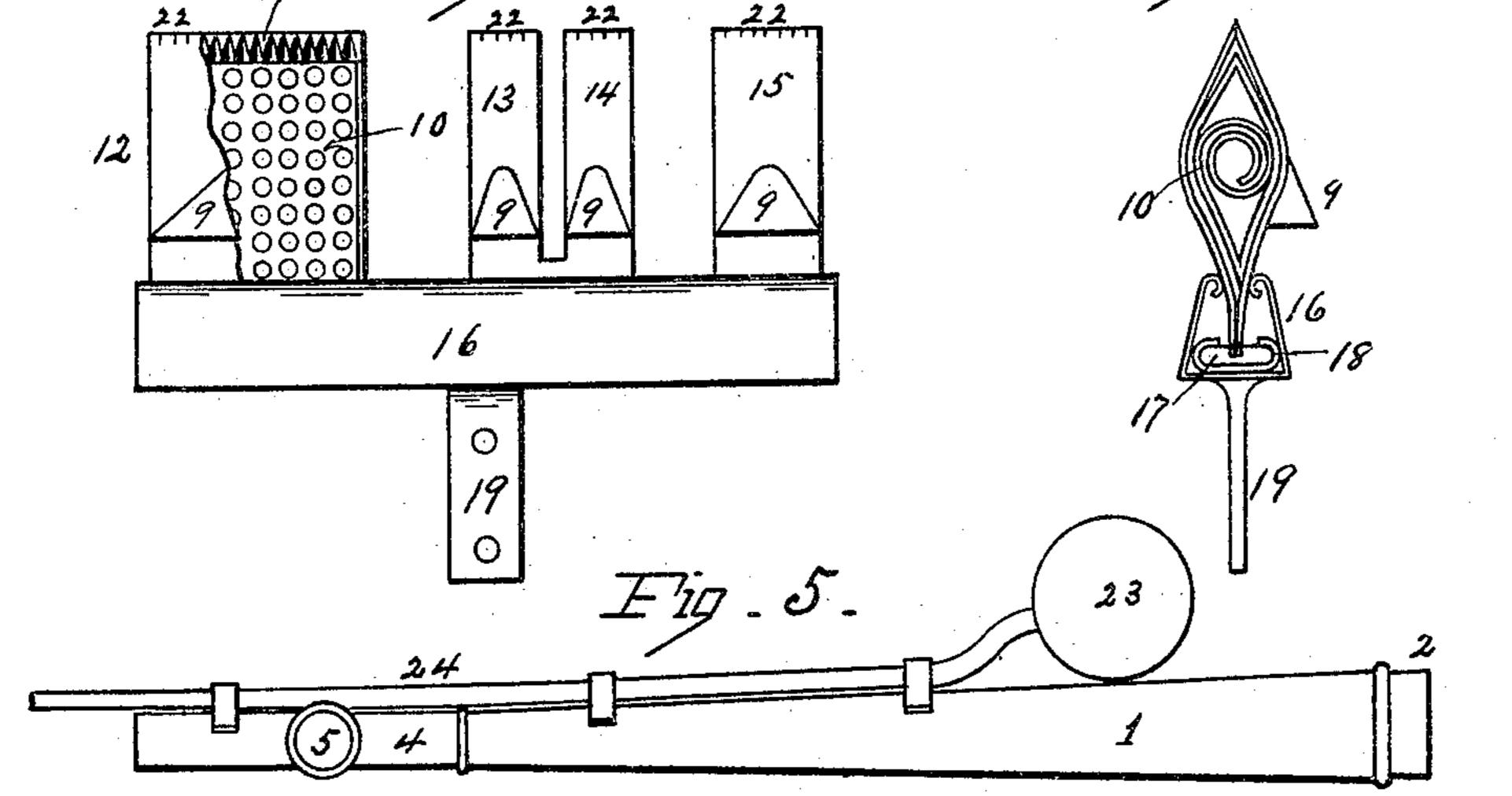
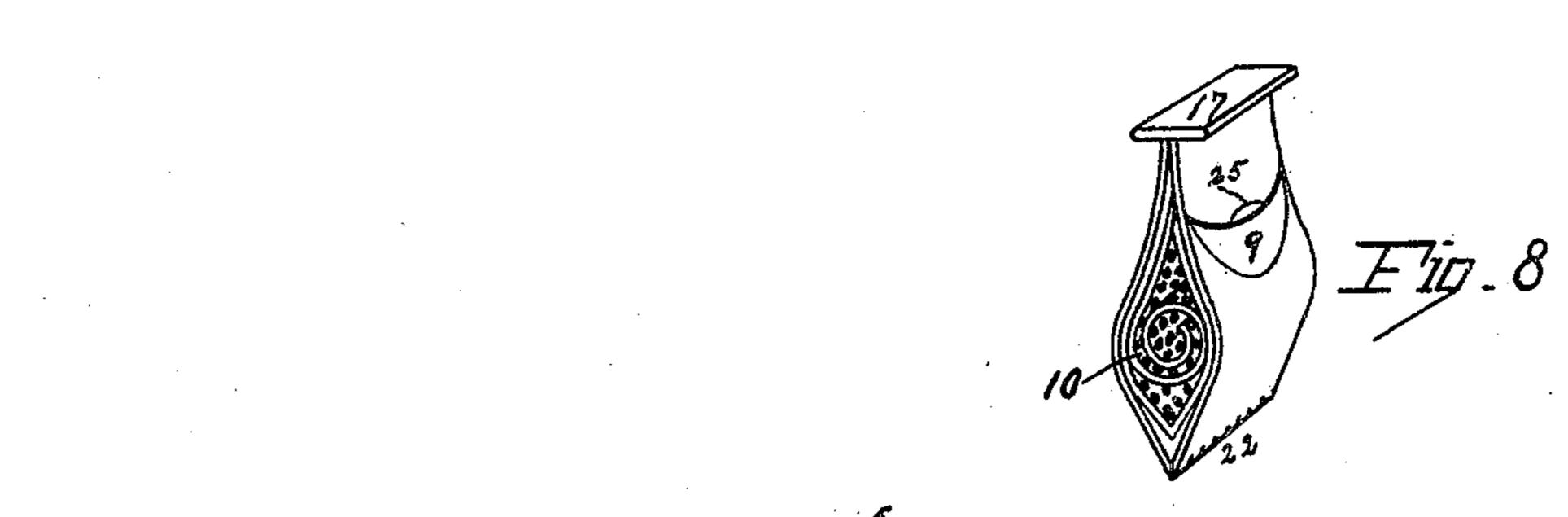
J. BALLANCE. RESERVOIR PEN.







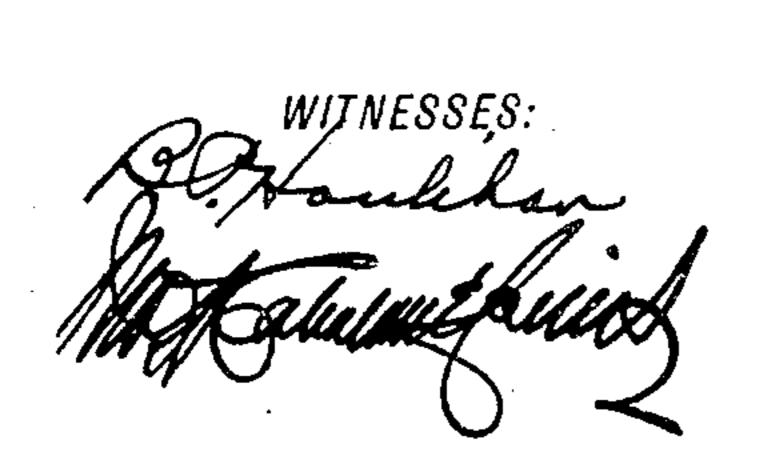


Fig. 9. 31. 4. 30. 30. 30.

John Ballance

BY

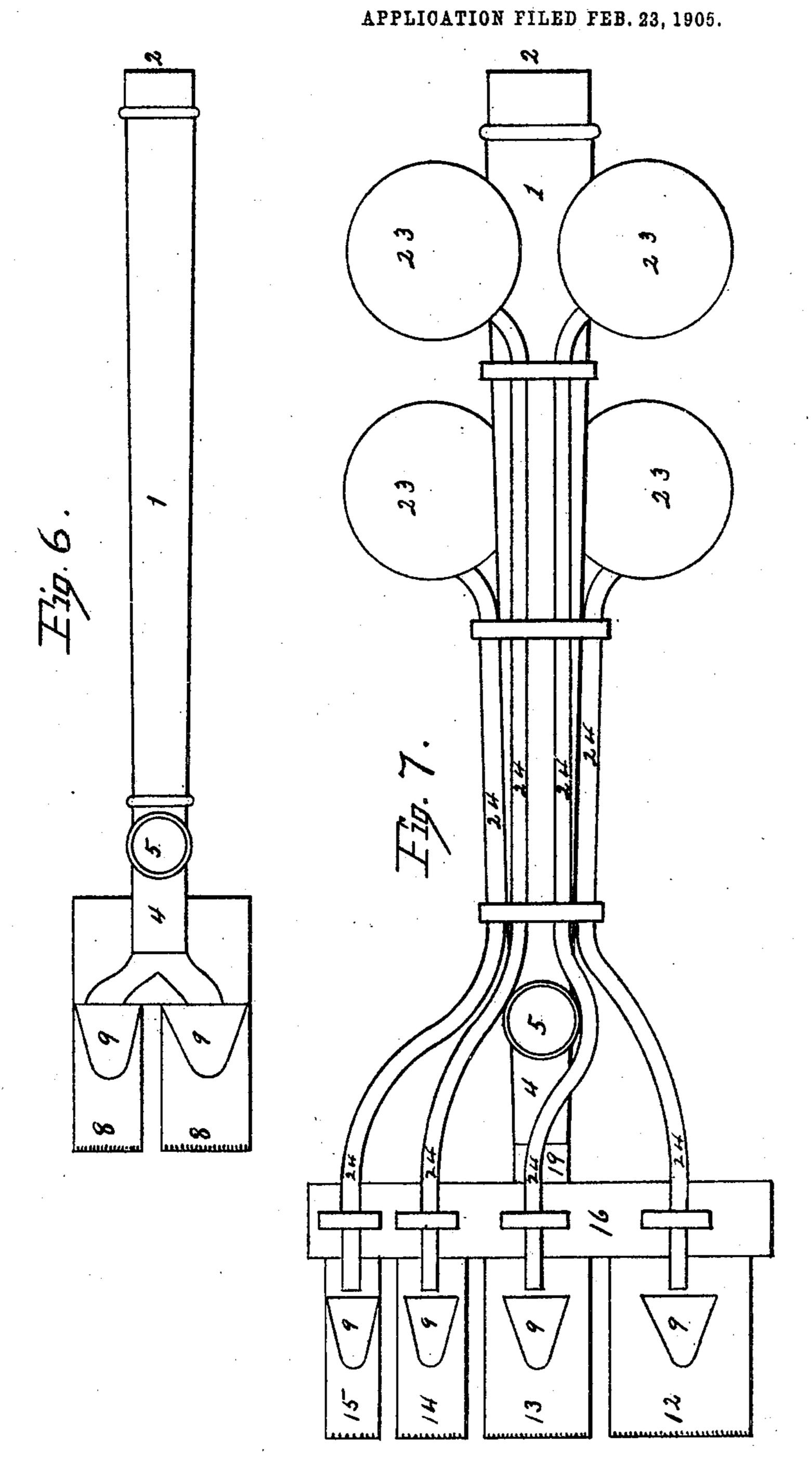
F. S. Gerrin

ATTORNEY

J. BALLANCE.

RESERVOIR PEN.

2 SHEETS-SHEET 2.



B. Fouldan Between felico

INVENTOR

Solution BY

F. S. Perrin.

ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN BALLANCE, OF NEW YORK, N. Y.

RESERVOIR-PEN.

No. 798,250.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed February 23, 1905. Serial No. 246,939.

To all whom it may concern:

Be it known that I, John Ballance, a citizen of the United States, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Reservoir-Pens, of which the following is a specification.

My invention relates to improvements in reservoir-pens in which a supply of ink or other fluid is stored within the tubular handle or one or more reservoirs attached to the handle; and the object of my improvement is to provide a reservoir-pen that will form lines or characters of various widths and different colors.

I attain my object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of my improved pen. Fig. 2 is a plan of the same as it appears with a single pen-point. Fig. 3 is a plan of a frame or holder for two or more pen-points. Fig. 4 is a side elevation of the frame or holder and a pen-point. Fig. 5 is a plan of the tubular handle with one reservoir attached thereto. Fig. 6 is a plan of the tubular handle with two pen-points attached thereto. Fig. 7 is a plan of the same with four reservoirs attached thereto. Fig. 8 is a view in perspective of a single pen-point, and Fig. 9 is a partial vertical section of a portion of the tubular handle.

Similar numerals refer to similar parts throughout the several views.

The tubular handle 1, with a stopper 2, having an air-vent 3, fits closely within the tube 4, to which is attached a valve-chamber 6, carrying the adjustable valve 5, referred to hereinafter. The tube 4 is extended beyond the valve-chamber 6 and formed into a receptacle for the pen-point 8 and secured thereto by the screws 7. Upon the upper surface of the pen-point 8 is attached the cup 9, that con-

nects with the interior of the pen-point 8 by 45 means of an inlet 25, (see Fig. 8,) through which the fluid flows from the channel 11 to the perforated absorbent 10, which is coiled within the pen-point.

In Fig. 3 the pen-point 12 is partially broken away, showing the absorbent 10 and the corrugated interior edge 21 of the pen-point with slits 22 extending from the corrugations through the metal to its outer surface to give an elasticity to the pen-point and allow the 55 fluid to flow freely.

The angular frame or holder 16 may be at-

tached to the tube 4 by means of the arm 19 and the screws 7 and two or more pen-points—such as 12, 13, 14, and 15—secured to the frame by inserting the shoulder 17 (see Figs. 60 4 and 8) within the spring-clasp 18 and the angular frame 16 until they are held firmly in their desired positions.

The pen-points 12, 13, 14, and 15 may be moved close together to form one single wide 65 line, or they may be separated any desired distance to form two or more lines of the same width or different widths by inserting penpoints of dissimilar breadths and separating them to conform to the distances desired between the lines. For forming two or three narrow lines of a regular width and separation I prefer to divide a pen-point into two or more compartments, as shown at 13 and 14 in Fig. 3.

One or more bulbs or reservoirs 23 of Fig. 5 are attachable to the tubular handle 1 by means of flexible tubes 24, which conduct the fluid within the reservoir to one of the cups 9. By pressing upon the reservoir the 80 fluid is forced into the cup 9, then flows through the inlet 25 (see Fig. 8) to the interior of the pen-point 8, and saturates the absorbent 10.

To the handle 1 may be attached two or more bulbs or reservoirs similar to 23 in Fig. 85 5 and each filled with a different colored fluid, having their tubes 24 communicating with special pen-points upon the frame 16, so each line may be formed in a different color or combination of colors, as desired. The han-90 dle 1 may contain one colored fluid, while the reservoirs can contain the same or different fluids to produce the desired combination of colored lines.

The adjustable valve 5, previously referred 95 to and shown in a partial vertical section in Fig. 9, consists of a cylindrical casing 6 with a spiral spring 30 within its lower chamber, a plunger 5, having an aperture 31 extending through its diameter, a conduit 11, extending 100 from the casing 6 to a cup upon the penpoint, and the tube 4, connecting the casing 6 with the tubular handle 1. When the handle 1 is filled with a fluid and the stopper 2 replaced, the spring 30 has caused the plun- 105 ger 5 to move upward within the casing 6 until the aperture 31 has moved above the opening of the conduit 11 and the outlet for the fluid is closed. If now the plunger 5 is depressed, the aperture 31 will come in line 110 with the conduit 11 and allow the fluid to flow through the conduit 11 to fill the pen-point.

By removing the pressure upon the plunger 5 the spring 30 will raise the plunger 5 to its normal position and cut off the flow of the fluid. By means of the air-vent 3 in the stopper 2 the fluid within the handle 1 flows freely through the valve 5 when the aperture 31 is in line with the conduit 11.

What I claim as my invention, and desire

to secure by Letters Patent, is—

10 1. In a reservoir-pen, a pen-point consisting of two diametrically opposite flat tapering walls forming a chisel-shaped point at one end and a support at the other having corrugations upon the inner surfaces of the walls at the point and slits through the walls and corrugations, an absorbent inclosed within the walls, one of said walls having an orifice leading to the absorbent, and means for delivering liquid within the pen-point.

2. In a reservoir-pen consisting of a barrel having a reservoir therewithin and one or

more pen-points containing an absorbent attached thereto, the combination of one or more reservoirs of elastic material adapted to carry liquids, attachable to said barrel, and 25 flexible tubes extending from said reservoirs to the pen-points

to the pen-points.

3. In combination with the barrel of a reservoir-pen, a pen-point holder adapted to be attached to the barrel, two or more pen-points 30 containing an absorbent adjustable upon the holder, two or more reservoirs of elastic material adapted to carry liquids, attachable to the barrel, and flexible tubes extending from the reservoirs to the pen-points.

Signed at New York city, in the county of New York and State of New York, this 21st

day of February, A. D. 1905.

JOHN BALLANCE.

Witnesses:

H. T. Hubert, John Splitdorf.