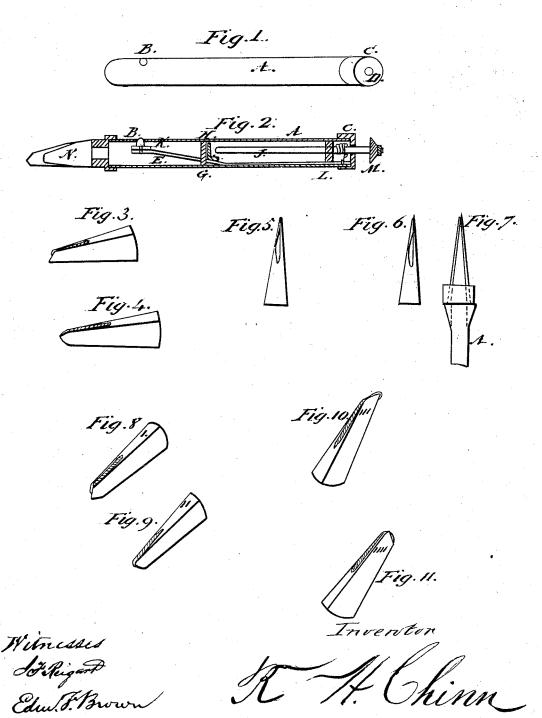
## R.H.Chinn Fountain Pen Nº 110,342. Patented Iee.20,1870.



## United States Patent Office.

## RICHARD H. CHINN, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 110,342, dated December 20, 1870.

## IMPROVEMENT IN PENS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, RICHARD H. CHINN, of the city of Washington and District of Columbia, have invented a new and useful "improved Writing-Pen and Pneumatic Pen-holder;" and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification, in which—

Figure 1 represents the cylinder of the pen-holder. Figure 2 represents the interior devices of the pen-holder, partly in section, with the pen at the

Figure 3 shows the one side, that is, the wider side of the pen.

Figure 4 shows the opposite and wide side of the pen.

Figure 5 shows the narrow side of the pen.

Figure 6 shows the opposite narrow side of the

Figure 7 shows how the pen may be in two pieces or plates, attached to the end of the holder, and fitting against a shoulder on the outside, so that the ink may flow inside without hindrance to the point of the pen; the plates may be held and tightened by a ring encircling them securely to the holder.

Figure 8 shows the extreme point of the pen, by which a fine or small hand is written.

Figure 9 shows the opposite side, by which a free or fancy hand may be written, shading the letters sidewise.

Figure 10 shows that by using the flat side or width of the pen a larger or regular hand can be written.

Figure 11 shows that the opposite flat side of the end or point of the pen writes a heavy and large hand, that is most useful for indorsing or directing large sized envelopes or packages.

The nature of my invention consists in the fourpointed or sided pen, two of the sides being stiff, and the other two, or flat sides, being elastic, so as to produce four different sizes or characters of writ-

The pen can be attached to the end of the ordinary pen-holder, or to a fountain pen-holder, and my holder consists in a flat spring fastened on the inside of the cylinder, operated upon by a center rod or piston for supplying the holder and pen with a sufficient quantity of ink.

The object of my invention is to produce a pen suitable for different hands, either a light, uniform, or heavy hand, and to be used as a fountain-pen or on a plain handle.

A represents the outside cylinder of the ink-holder, with an aperture, B, at the side, and a circular head, C, with an aperture, D, for the piston-rod to move in.

E is a flat spring, with a valve on the one end that operates so as to open or close the aperture B.

G is a gum-elastic ring, that is fitted upon the spring E and fills up the cylinder near its center, to prevent any ink from passing further back.

H is an upright plate, fastened upon the top of the spring E, against which the piston-rod J is pressed, so as to press the end of the spring downward and lower the valve from the aperture B.

The valve K is of India rubber, with a circular knob to close the aperture or open it when the holder is to be replenished with ink.

At the top of the opposite end of spring E is another India-rubber ring, L, that assists in keeping the upper end of the holder air-tight and prevents any ink from passing out beyond it.

The piston J passes through the head C, in-the center of which is a small spiral spring, P, to aid the pistor in recoiling after it has been pressed down by the finger at the button M at top, until the valves B and K are opened to receive the ink when the pen is dipped into the inkstand, and when the finger is withdrawn from the button M the spring-valve K closes the aperture B and allows no ink to escape but in a direct flow from the point of the

A thin tongue, N, may be used between the sides of the pen to assist and regulate the flow of ink if deemed necessary.

I number each side of my pen 1, 2, 3, and 4, and when I wish to write a fine, small hand, I use the point, as shown at fig. 8, and the writing is uniform, all of one style, without any heavy or shaded lines, and without regard to the pressure upon the pen, as the point is stiff and the writing always the same.

To write an ornamental hand I use the opposite corner of the point of the pen, as shown at fig. 9, that is slightly rounding, and as the pen is writing it makes its own heavy or shaded lines, although the point is stiff, the left-hand point projecting beyond the opposite point.

To write a plain and regular hand, the up-stroke fine and the down-stroke heavier, I use the flat side of the pen, that is elastic, with the point to the right, as shown at fig. 11. (10?)

The heavy hand, as shown at fig. 11, is written free and rapid, the rounding side being to the right as the pen is moved upward, and it cannot catch in the paper; and as its flat side is also elastic, the pressure of the hand gives a broad and even downward stroke to the pen, the whole width of the point if required.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The four-sided pen, Nos. 1, 2, 3, and 4, having two stiff points and two elastic points, to be used with or without a fountain-handle, as herein described, and for the purposes set forth.

2. The flat spring E, valves K and B, flange H, piston J, rubber rings G and L, when used, arranged, and operating in a cylinder A as a fountain pen-holder, in combination with my four-sided pen, as herein described, and for the purposes set

Witnesses: RICHARD H. CHINN. J. FRANKLIN REIGART, EDM. F. BROWN.