

*F. A. Wait,*  
*Per.*

*No. 17,761.*

*Patented July 7, 1857.*

*Fig. 1.*



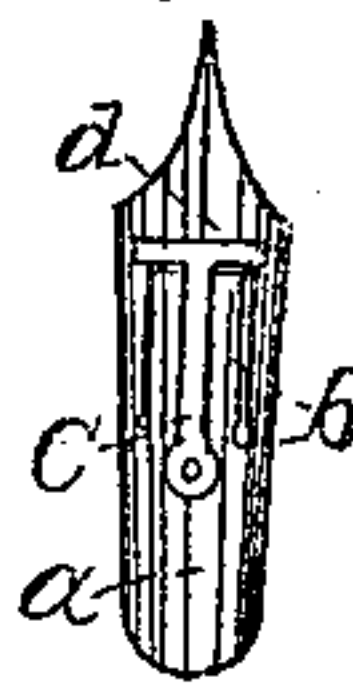
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



# UNITED STATES PATENT OFFICE.

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## METALLIC PEN.

Specification of Letters Patent No. 17,761, dated July 7, 1857.

*To all whom it may concern:*

Be it known that I, F. A. WAIT, of the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Metallic Pens; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a view showing the blank pen cut out of metal. Fig. 2 a pen curved without the spring holder. Fig. 3 is a view of the spring detached. Fig. 4 a plan view of a complete pen.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In Fig. 1, *a* the blank metal, *b* the slots cut in the pen. In Fig. 2 is the pen curved showing the slots in the same. Fig. 3 the spring *c*, the spring and *d* bow end passing over the pen. In Fig. 4 *a* the pen, *b* the slots cut in the pen, *c* the spring, *d* the bow end of the spring which catches over the pen and serves as a protection to the sides of the pen and aiding in its elasticity.

In construction of my pen I can use any material generally used, but I contemplate generally to use gold. The pen is cut by dies as shown in Fig. 1, and when the slots are made the back may be enlarged or drawn, thus making it a little larger than the space out of which it was cut. This is then made so as to lap over the ends of the bowl of the pen which fits past it on the upper side, and may be made thus to give strength to the pen. The spring is also made by being cut out in the shape desired and in the same way.

In the operation of my invention I may

find an advantage by attaching a piece of india rubber on the inside of the pen through the slot under the spring *c* on the back of the pen as shown by red line in Fig. 4. The object of this is to act as a fountain pen, and to be used when the pen is required to hold a greater quantity of ink.

It will be seen that by means of the slots in the sides I gain a much greater degree of elasticity sidewise, and then by means of the spring *c* extending down over the arch of the pen just below the cross slot the points of the pen are always held in place, the spring acting at the same time to aid the elasticity of the pen either in its side elasticity or vertical spring.

One particular advantage of my pen over others is the great ability it has to expand so as to make a very broad stroke, the india rubber thus assisting to retain the ink and only to let it flow as required. The spring *c* or conductor also has this effect, as the capillary attraction holds the ink until it is all slowly drawn out of the pen as it is used on the paper, thus giving to it great lateral elasticity and a greater retainer of the ink. By this means of uniting the spring *c* I gain the advantage of making a very elastic pen and one at the same time light and of greater durability and lightness.

Having thus described the construction and operation of my invention, what I claim is—

The arrangement of the spring guard *c* and slots *b* in pen *a*, operating as described, and for the purposes set forth.

F. A. WAIT.

Witnesses:

F. G. CLAYTON,  
RUFUS PRENTICE.