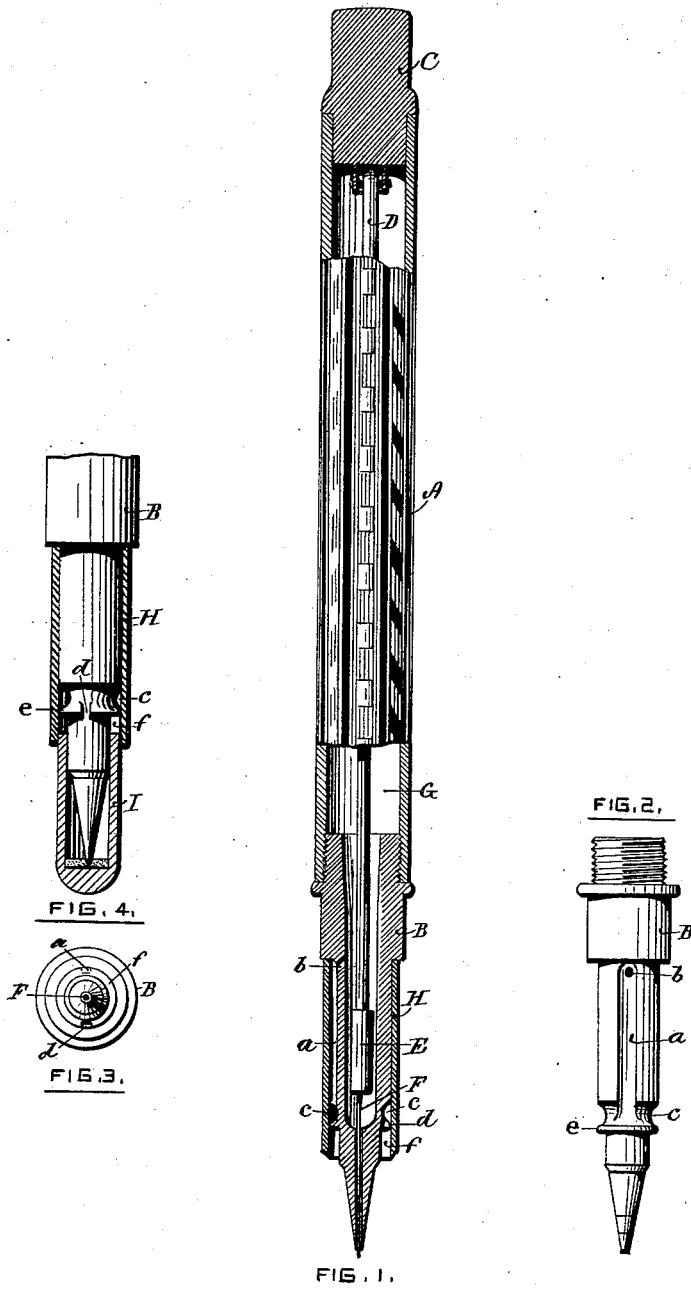


(No Model.)

A. T. CROSS.  
STYLOGRAPHIC FOUNTAIN PEN.

No. 303,624.

Patented Aug. 19, 1884.



WITNESSES:

*Worates Scholfield*

*Chas F. Schuch*

INVENTOR:

*Alfred T. Cross*

# UNITED STATES PATENT OFFICE.

ALONZO T. CROSS, OF PROVIDENCE, RHODE ISLAND.

## STYLOGRAPHIC FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 303,624, dated August 19, 1884.

Application filed June 13, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ALONZO T. CROSS, of Providence, in the State of Rhode Island, have invented an Improvement in Stylographic Fountain-Pens, of which the following is a specification.

My improvement relates to that class of fountain-pens in which the air is made to pass into the ink-chamber from the lower end of the pen-case; and it consists in the improved construction and arrangement of the air-inlet, and also in an annular overflow-chamber, as hereinafter set forth.

Figure 1 is a longitudinal section of a stylographic pen embodying my improvement. Fig. 2 is a side elevation of the point-section, with the covering-sleeve removed. Fig. 3 is an end view of the point-section. Fig. 4 is a detail section showing a point-cap adapted for closing the pen ink-tight.

In the accompanying drawings, A is the barrel or reservoir of the pen, and B is the point-section.

To the tightly-fitting cap C, at the upper end of the reservoir A, is loosely connected the metal rod D, at the lower end of which is placed the hard-rubber coupling E, and into the lower end of the coupling is secured the writing-spindle F, which passes loosely through the fine bore of the point-section. The outer side of the inner point-section tube is provided longitudinally with a groove, *a*, extending downward from the orifice *b*, which serves to admit the air to the ink-chamber G, and terminating in a circumferential groove, *c*, which extends around the point-section.

In the rim *e*, at a point diametrically opposite the line of the groove *a*, is made the air-inlet notch *d*, and over the point-section is placed the covering-sleeve H, extending for a

slight distance below the rim *e*, thus forming an annular overflow-chamber, *f*, adapted to receive the ink forced down by the sudden expansion of air at the upper end of the ink-chamber.

In order to close the pen perfectly tight, for carrying the same in the pocket, I form the cap I so that its forward end will fit closely within the lower circular edge of the sleeve H, as shown in Fig. 4. The ink will thus be prevented from passing out either at the bore of the point-tube or through the air-inlet passage when the pen is carried point downward in the pocket.

I claim as my invention—

1. In a stylographic fountain-pen, the combination of the point-section provided with an orifice extending from the bore of the point-section to the exterior surface of the same, and with a downward laterally-deflected groove extending from the orifice, with a sleeve adapted to cover the groove, and to form an annular overflow-chamber around the point-section, substantially as described.

2. In a stylographic fountain-pen, the combination of the point-section provided with a sleeve, H, adapted to form an annular overflow-chamber, with the point-cap adapted to pass under the projecting edge of the sleeve, substantially as and for the purpose specified.

3. In a stylographic fountain-pen, the combination of the point-section B, provided with the orifice *b*, groove *a*, circumferential groove *c*, and notch *d*, with the covering-sleeve H, adapted to form an annular overflow-chamber, *f*, substantially as described.

ALONZO T. CROSS.

Witnesses:

SOCRATES SCHOLFIELD,  
CHAS. F. SCHMELZ.