

E. C. HAVILAND.
Pencil.

No. 205,797.

Patented July 9, 1878.

Fig. 1

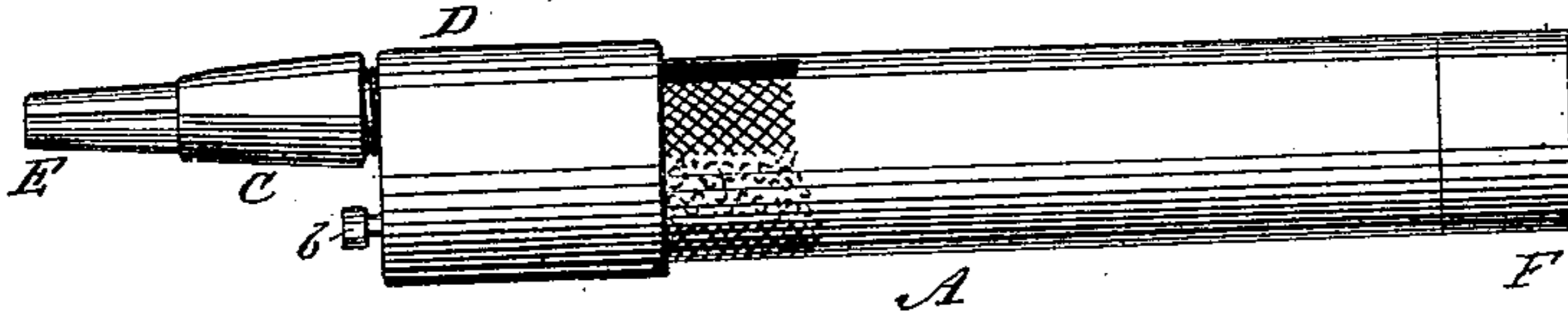


Fig. 2

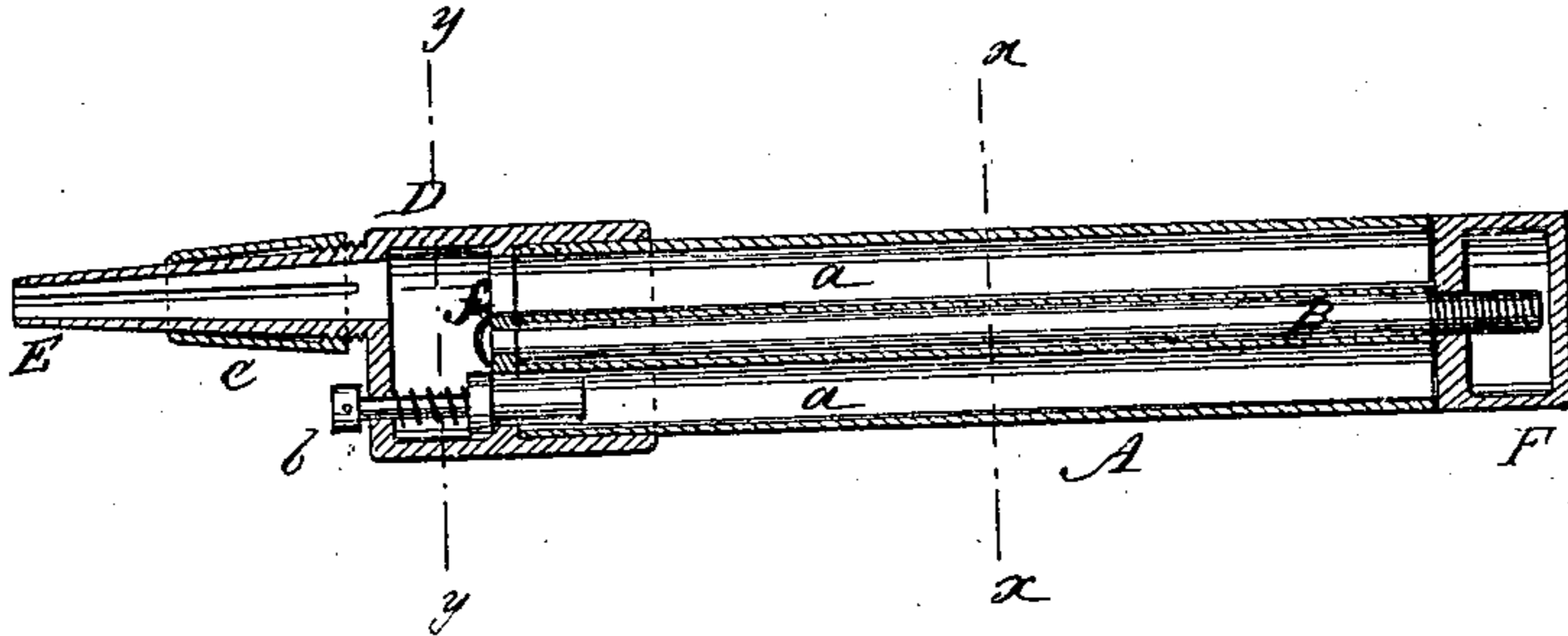
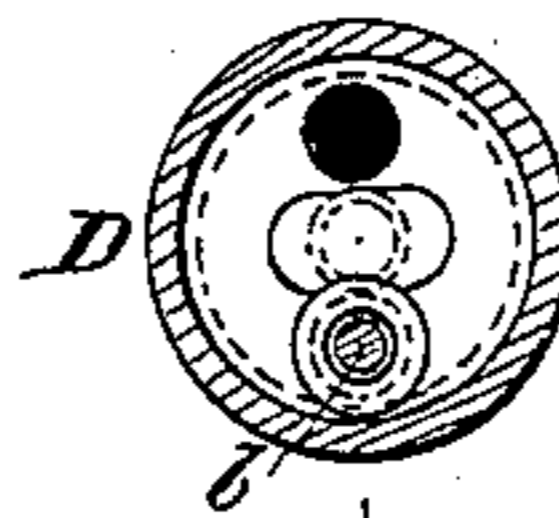


Fig. 3



Fig. 4



WITNESSES:

C. Neveux
C. Sedgwick

INVENTOR:

E. C. Haviland

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDWIN C. HAVILAND, OF SYDNEY, NEW SOUTH WALES.

IMPROVEMENT IN PENCILS.

Specification forming part of Letters Patent No. **205,797**, dated July 9, 1878; application filed February 8, 1878.

To all whom it may concern:

Be it known that I, EDWIN C. HAVILAND, of Sydney, in New South Wales, have invented a new and Improved Revolving Pencil, of which the following is a specification:

Figure 1 is a side elevation of my improved pencil. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section on line *xx* in Fig. 2. Fig. 4 is a transverse section taken on line *yy*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a pencil which may contain lead of different colors or of different degrees of hardness, any one of which may be brought into use whenever required.

The invention consists in the combination of a pivoted barrel, with a holder for the leads, and a stop for retaining the holder in any required position.

Referring to the drawing, A is a barrel, bored centrally throughout its entire length to receive the rod B, the front end of which rod is journaled in a diaphragm or plate, *f*, of a nozzle, D, so that the barrel can revolve with the rod. Instead of this construction the barrel may turn on the rod, which thus serves as an axis-pin, the rod, in both instances of the construction described, being secured in the diaphragm by riveting or heading the end thereof, as is shown in Fig. 1.

The barrel is traversed longitudinally by several holes, *a*, for receiving leads of different colors or of the same color, having different degrees of hardness.

The nozzle D has a rear socket for receiving the front end of the revolving barrel or magazine, and its split tapering tube E projects in line with one of the holes *a* in the barrel A. At the side of the nozzle opposite the tube E there is a spring-bolt, *b*, which engages one of the bores or lead-chambers in the barrel A, and prevents the nozzle from turning.

The tapering split tube E is threaded externally, and upon it a nut, *c*, is placed, by turning which the lead is tightened or loosened. The nut may be milled or roughened, to facilitate the manipulation thereof. A head, F, is screwed on the end of the rod B to retain the barrel A and to hold the leads in the holes *a*.

Leads of various colors are placed in the different holes, and their color is indicated by a stripe of similar color on the outside of the barrel. When it is desired to use a lead of a particular color the spring-bolt *b* is withdrawn, and the barrel A is turned until the desired color is opposite the split tube E. The spring-bolt is then allowed to enter one of the holes *a*, and the pencil is placed in a vertical position with the nozzle downward, when the lead drops into the split tube, and may be clamped by turning the milled nut *c*. The barrel is filled with leads by removing the head F and inserting them in the upper end of the pencil.

I do not limit or confine myself to the particular form or arrangement of parts herein described, as they may be varied without departing from my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A pencil having a revolving many-chambered barrel or magazine for leads, a nozzle or cap-piece adapted to receive and hold the leads from any one of the chambers, and a device, substantially as described, for locking the barrel to the nozzle, as and for the purpose set forth.

2. The combination of the revolving barrel A, nozzle D, having the split tapering tube E, the rod B, and head F, substantially as shown and described.

EDWIN CYRIL HAVILAND.

Witnesses:

EDWARD TURNER,

WILLIAM HENDERSON.