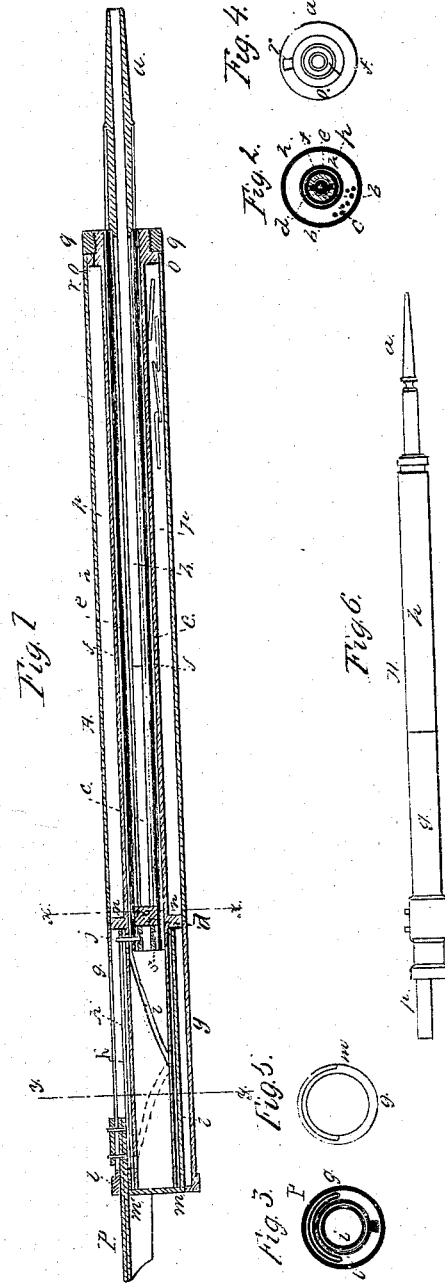


F. W. Cox.
Pen & Pencil Case.

N^o 48,374. Patented Jun. 27, 1865.



Witnesses.
M. L. W. Cox.
W. P. Cox.

Inventor
Fredrick W. Cox.

UNITED STATES PATENT OFFICE.

FREDERICK W. COX, OF BROOKLYN, NEW YORK.

PEN AND PENCIL CASE.

Specification forming part of Letters Patent No. 48,374, dated June 27, 1865.

To all whom it may concern:

Be it known that I, FREDERICK W. COX, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Pen and Pencil Case; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal central section of my invention in an enlarged scale. Fig. 2 is a transverse section of the same, the line *x x*, Fig. 1, indicating the plane of section. Fig. 3 is a similar section taken in the plane indicated by the line *y y*, Fig. 1. Fig. 4 is a detached plan or end view of the collar closing the reserve-lead case. Fig. 5 is an end view of the upper end of the case, or of that end containing the pen. Fig. 6 is a side elevation of the same in a smaller scale than the previous figures.

Similar letters of reference indicate like parts.

The object of this invention is to produce a pencil-case which is capable of carrying a long lead, and to fetch the point in, and which is provided with a case to carry some reserve leads of the full length, and also a pen applied over the screw, where it does not interfere with the reserve-lead case.

In pencil-cases of the ordinary construction the tube to which the tip is secured simply forms a guide for the lead; but the length of the lead is determined by the tip. The reserve leads are carried in the outer end of the case, and the depth of the reserve-lead case corresponds to the length of the lead to be used in the tip. Furthermore, the tube which carries the lead is provided with a cover, so as to obtain sufficient strength of metal for the pin, by the action of which and of a helical groove the longitudinal motion of the tip is produced, and thereby the construction of the pencil-case is rendered complicated and expensive.

In my improved pencil-case the tip *a*, which carries the lead, is secured in a tube *b*, which, together with the tip, is equal in length to the entire length of the case *A*. The bore of the

tube *b* is equal to that of the tip, both being made to fit the lead to be used, and a pusher, *c*, is fitted into said tube in the ordinary manner. The inner end of this pusher is secured in a slide, *d*, which projects through slots in the tube *b*, and the edges of which are provided with screw-threads to engage with an internal screw-thread cut in the tube *e*, which incloses the pencil-tube *b*. By turning the tip and pencil-tube independent of the tube *e* the pusher is made to travel back and forth, and the length of the lead projecting from the tip can be regulated.

The pin *j*, which produces the longitudinal motion of the tip, as will be presently explained, is secured in the tube *e*, and it projects through said tube into a circular groove, *s*, turned in the end of the tube *b*. By the use of this groove the application of a cover to the tube *b* is rendered unnecessary, and at the same time the tube *b* is prevented from moving in a longitudinal direction. The tube *e* is surrounded by a tube, *f*, which extends throughout the entire length of the pencil-case, and which is covered by the outside shell, *g h*, as clearly shown in Figs. 1 and 2 of the drawings. A portion of the tube *f* is provided with a helical slot, *i*, and the pin *j*, which projects from the tube *e*, is made to catch in said helical slot and also in a longitudinal rectilinear slot, *k*, in the covering-tube *l*, which is firmly connected to the outer shell, *g*, of the case. By holding said outer shell and turning the tube *f* in the proper direction the tip is made to move in a longitudinal direction, or parallel to the axis of the case, by the action of the pin *j* and helical slot *i*. The shell *g* is secured at its outer end to a ring, *m*, fastened to the tube *l*, and its inner end is guided by a ring, *n*, secured to the tube *f*. That end of the tube *f* next the tip is surrounded by the outside shell or case, *h*, which is fastened at its upper or inner end to the ring *n* and supported by a collar, *o*, secured to the outer end of the tube *f*, as clearly shown in Fig. 1.

The space between the tubes *f* and *h* forms the reserve-lead case *p*, and access is had to this space through an aperture, *r*, in the collar *o*, as shown in Fig. 3. The space is closed by a cap, *q*, as clearly shown in Fig. 1. This re-

serve-case is capable to hold full-length leads, and by removing the cap *q* access can be had to it.

P is the pen-clip, which is made to work over the screw *i* and between the shell *g* and the tube *l*, as shown in Figs. 1 and 3. It will be noticed that the pen moves out on the opposite end of the tip *a*, and it does not interfere with the reserve-lead case.

If desired, the outer shell, *g h*, may be made out of one piece, which, in that case, has to be secured to a ring which is attached to the tube *l*, and instead of being fastened to the collar *o* it (the case) turns loosely thereon. In that case the tip is fetched in and out by holding the cap *q* and turning the shell *g h*; but if the shell is made in two parts, as shown in the drawings, the tip is fetched in and out by holding the tube *h* and turning the tube *g*, or vice versa.

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

1. Extending the longitudinally-moving re-

volving pencil - tube *b* throughout the entire length of the case *A*, substantially as described, so that long leads can be inserted, and at the same time the tip can be fetched in.

2. The circular groove *s* in the tube *b*, in combination with the pin *j*, substantially as herein set forth, so that sufficient hold for the said pin is obtained without the necessity of a cap over the tube *e*, and at the same time the pencil - tube *b* is prevented from moving in a longitudinal direction.

3. The collar *o*, applied in combination with the tube *f* and shell *h*, substantially as and for the purpose specified.

4. The reserve - lead chamber *p*, extending partially or wholly around the tube *b* and from end to end of the shell *h*, as shown and described.

FREDERICK W. COX.

Witnesses:

M. M. LIVINGSTON,
C. L. TOPLIFF.