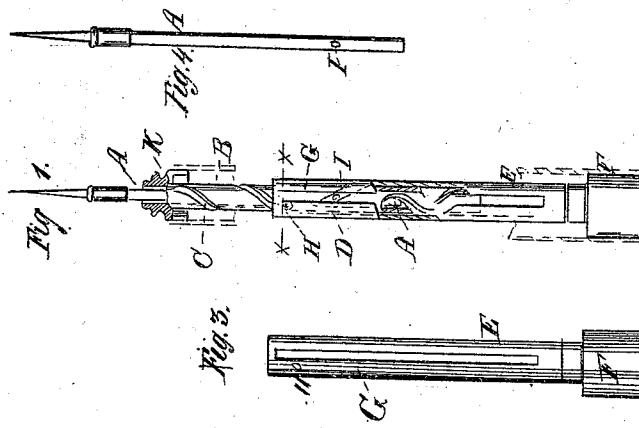
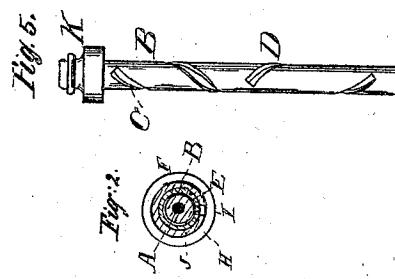


J. H. Rauch,
Pencil Case.

No. 91665.

Patented June 22, 1869.



Inventor:
J. H. Rauch.

Witnesses:

John G. Brooks
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United States Patent Office.

JOHN H. RAUCH, OF NEW YORK, N. Y.

Letters Patent No. 91,665, dated June 22, 1869.

IMPROVEMENT IN PENCIL-CASES.

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, JOHN H. RAUCH, of New York, in the county of New York, and State of New York, have invented a new and useful Improvement in Pen and Pencil-Cases; 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.

This invention relates to improvements in telescopic pencil and pen-cases, such as are made for being materially shortened for convenience in carrying in the pocket, intended to provide an arrangement whereby the extension and contraction of the pencil may be effected with fewer tubes and less friction, and the finished pencil may be made of small diameter, for convenience in carrying in the pocket and handling.

Figure 1 represents a side view, partly broken, of a pencil constructed according to my improvements, the outer cases being removed; and

Figure 2 represents a transverse section of the same, taken on the lines *xx*.

Figures 3, 4, and 5, are detached views, respectively, of the outer tube, the pencil, and the spirally-slotted tube.

Similar letters of reference indicate corresponding parts.

A represents the pencil-stock sliding within a tube, *B*, having two spiral slots *C D*, commencing at or near the centre, and running in opposite directions to the ends.

The said tube *B* slides within another tube, *E*, fixed to a stock, *F*, or outside barrel, in a manner to rotate thereon, but not to slide. It is provided with a straight groove, *G*, running nearly from end to end; and at the end through which the tube slides, it is provided with a stud, *H*, taking into the groove *C* of the tube *B*.

The stock *A* of the pencil is provided with a stud, *I*, working in the other spiral groove *D*, of the tube *B*, and also in the straight groove *G* of the rotating tube *E*.

The tube *B* is provided with a cap, *K*, at the end, whereon an outer section of casing-tube is secured, to work within another larger similar section, fixed to and a part of the stock *F*; but this is a common arrangement, and no part of my invention, with the exception that my invention enables me to make these cases of a smaller diameter than has been heretofore done with pencils having the same capacity of extension and strength.

When the fingers are applied to the cap *K* for extending the pencil, the fixed stud *H*, in the tube *E*, working in the spiral groove *C*, will cause the said tube *E* to rotate to the left, and this rotation produces an accelerated action upon the pencil-stock *A*, through the stud *I*, in the same direction, whereby the said stock is moved twice the distance that the tube *B* moves. When forced inward, a contrary action takes place.

I am aware that it is not new to produce this accelerated rotary and sliding movement of the pencil-stock by means of a system of sliding and rotating tubes, and I do not, therefore, claim this feature broadly.

But my invention consists in the herein-described arrangement, whereby the same is accomplished by the employment of only two tubes, instead of three, as heretofore employed.

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

The tube *B*, having the right and left spiral slots *C D*, in combination with the tube *E*, having the straight groove *G* and fixed stud *H*, the rotating stock *F*, and the pencil *A*, having the stud *I*, all arranged to operate in the manner described, for the purpose specified.

The above specification of my invention signed by me, this 17th day of February, 1869.

JOHN H. RAUCH.

Witnesses:

FRANCIS BLOCKLEY,
ALEX. F. ROBERTS.