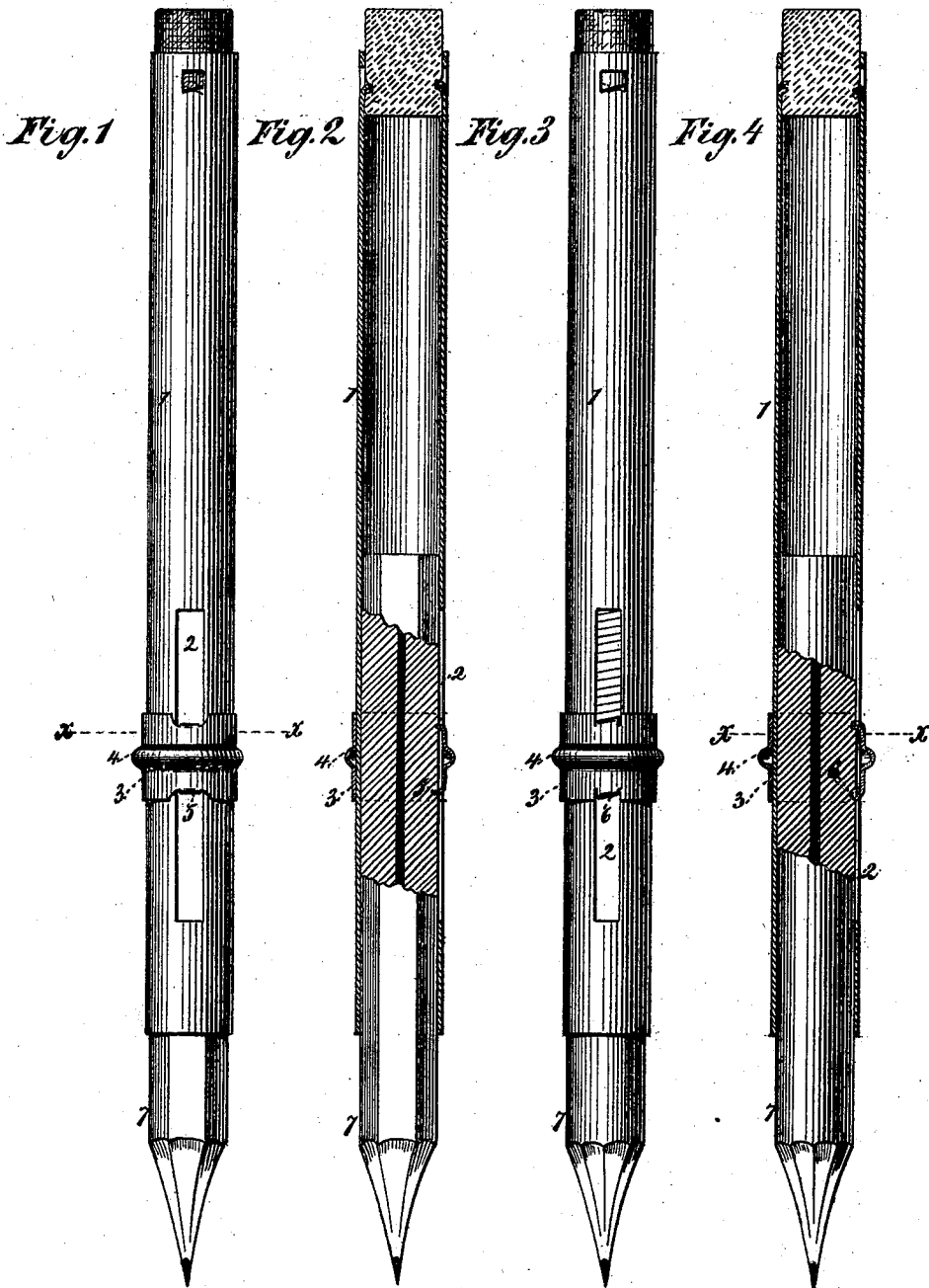


D. M. SOMERS.
POCKET-PENCIL.

No. 173,076.

Patented Feb. 1, 1876.



Witnesses:
M. Ryan
G. Roberts

Fig. 5

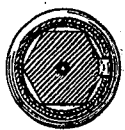


Fig. 6

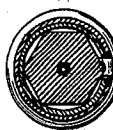
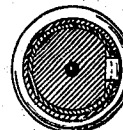


Fig. 7



Inventor

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UNITED STATES PATENT OFFICE.

DANIEL M. SOMERS, OF NEW YORK, N. Y., ASSIGNOR TO ORESTES CLEVELAND,
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IMPROVEMENT IN POCKET-PENCILS.

Specification forming part of Letters Patent No. **173,076**, dated February 1, 1876; application filed
December 3, 1875.

To all whom it may concern:

Be it known that I, DANIEL M. SOMERS, of the city, county, and State of New York, have invented an Improvement in Pocket-Pencils, of which the following is a specification:

The invention relates to that class of pocket-pencils in which an ordinary lead-pencil is contained in a case or holder, and more especially to such cases or holders when provided with a sliding carrier, having a means for holding the pencil at any point of its adjustment in the case, and propelling it into the case for protection, or protruding it therefrom for use in writing, as devised by and described in the application of Mark Safford.

The improvement consists in the means for engaging the sliding carrier with the pencil-stock, as will be more specifically hereinafter pointed out.

In the accompanying drawings, which illustrate my invention and constitute a part of this specification, is represented, in—

Figure 1, a plan; Fig. 2, a longitudinal section; Fig. 3, a plan of a modification; Fig. 4, its longitudinal section; Fig. 5, a transverse section of Fig. 1 on line *x*; Fig. 6, a transverse section of a holder, showing a modified form of the projection 6; and Fig. 7, a transverse section of a round pencil with one side made flat.

A tube, 1, made of metal or of rubber or similar material, by any of the modes of forming such articles, constitutes the case or holder. It may be a plain tube, have an ornamented exterior surface, be provided with knurled or beaded ends, be made with a closed butt-end, or be furnished with a rubber eraser held within one of its ends by any of the known means for retaining such attachments in or upon tubular holders. A carrier, 3, consisting of a short tube, of such a diameter that it will fit over the tube 1, is made to slide freely thereon, which movement may be more readily accomplished through a bead, 4, which forms a bearing for the fingers. From one or both edges of this carrier a flange or tooth, 5, is made to project inwardly, passing through a longitudinal slot, 2, in the case to such a distance as

will cause it to impede the introduction of a pencil whose diameter is but slightly less than that of the interior of the tube; but a pencil of polygonal form, as in Figs. 1, 2, or one having a single flat side, as in Fig. 7, may readily be introduced into the tube when the flat side of the pencil is opposed to the flange or tooth of the carrier, as is best shown in Fig. 7.

If the sliding carrier is moved to the front end of the slot 2, and a pencil has been introduced into the tube, as just described, to a distance which leaves its point 7 protruding sufficiently to be used in marking, the carrier may be secured to the said pencil by simply turning the pencil a distance sufficient to cause its rib or raised corner, formed by the union of the planes of its flat sides, to engage the flange or tooth 5, which, by reason of its thin edge, cuts into or displaces the wood, so as to form a seat, which affixes the pencil thereto. If a round pencil with one flat side has been used the flange or tooth will cut into the wooden stock at the point where it meets the increased diameter of the pencil, as will be readily understood from an inspection of Fig. 7. Thus united to the sliding carrier, the pencil may be moved thereby into and out of the tube at the will of the user.

When in a closed position, the pencil-point will be fully protected by the walls of the tube which inclose it, and when its point is projected for use a convenient means for manipulating it is furnished by the case or handle. When the point is worn away the pencil may be disengaged from the holder, readjusted in a new position, and operated as before explained.

By this device the pencil may be adjusted, held, projected, and used until a short and valueless piece remains, thus affording a means for the economic consumption of a pencil, which at the same time affords a suitable handle for it, without regard to the length of the pencil it holds.

In rapidly-adjusting polygonal pencils in this holding device, or where too much force is used in rotating the pencil into engagement with the pencil-rib, the tooth of the carrier may be forced entirely through said rib, and

the lower surface of the next flat side thus underlie the said tooth, and the pencil thus remain unattached to the carrier. To prevent this occurring, I have provided the tooth with two fangs, as in Fig. 6, the effect of which is that when one fang has cut through the rib, the other will abut against it, and form a stop tending to limit further rotation of the pencil.

It is apparent that the device, as thus far explained, is not adapted to hold a round pencil, having an unbroken periphery, for the reason that such a pencil cannot be introduced by a right-line movement into the case or holder, since it cannot pass by the tooth or flange 5; but in Figs. 3 and 4 the said tooth or flange is given the pitch of a screw-thread, whereby it is adapted to engage with the surface of a round pencil, or with the ribs of a polygonal pencil, and propel it into the tube when the pencil is rotated.

When a pencil has in this manner been secured to the carrier, and adjusted to the proper position, it may be moved in and out of the case, as has been described with reference to Figs. 1 and 2. When its point is worn away it may be readjusted by simply screwing the pencil outward.

The effect of the engagement of the pencil with the projecting tooth of either form of the holding device is that the carrier is forcibly drawn against the surface of the case, and creates such a frictional bearing thereon as will enable the carrier to support a pencil at any point where it may be left in its longitudinal or sliding movement upon the case.

I claim—

1. A pencil-holder, consisting of a slotted

tubular case, adapted to receive a pencil within it, combined with a sliding carrier, by which the pencil may be propelled in and out of its case, the said carrier being provided with a projection having a screw-thread pitch to engage with and adjust the pencil, substantially as shown and described.

2. A pencil-holder, consisting of a slotted tubular case, provided with a sliding pencil-carrier, said carrier being constructed with a bearing-tooth, for engaging with the pencil, and adapted by its frictional bearings upon the exterior of the case to retain the pencil at any point of its longitudinal adjustment, substantially as shown and described.

3. In combination, with a longitudinally-slotted case, a sliding pencil-carrier, provided with a holding-tooth, so constructed as to permit a flat-sided pencil to pass freely underneath it, and engage its projecting corner or surface thereon when the pencil is slightly rotated, substantially as shown and described.

4. A sliding pencil-carrier, provided with a projecting tooth, having fangs which bear on opposite sides of a corner or rib of a polygonal pencil, whereby said pencil may be readily inserted to a proper point in its case, adjustably secured to said carrier, and propelled longitudinally therein, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL M. SOMERS.

Witnesses:

HENRY T. MUNSON,
JOHN C. FOSTER, Jr.