J. Thomas,
Pen.

No. 1671. Patented July 3. 1840

Fig 1

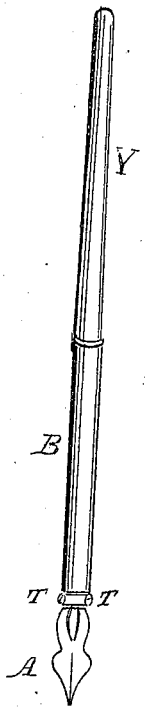

Fig 2

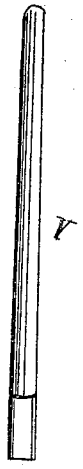

Fig 3

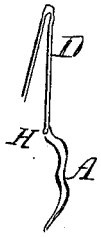

Fig 4

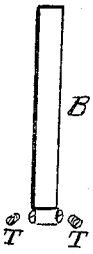

Fig 5

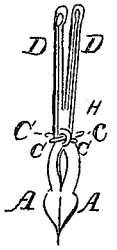

Fig 6

Fig 7

UNITED STATES PATENT OFFICE.

DAVID THOMAS, OF HINGHAM, MASSACHUSETTS.

STEEL WRITING-PEN.

Specification of Letters Patent No. 1,671, dated July 3, 1840.

To all whom it may concern:

Be it known that I, DAVID THOMAS, of Hingham, in the county of Plymouth and State of Massachusetts, have invented a new and useful Improvement in the Construction of Steel Writing-Pens, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 represents the pen ready for use; Fig. 2, the handle; Fig. 3, side view of the steel nibs; Fig. 4, the tube or holder; Fig. 5, front view of the nibs; Fig. 6, section of the holder showing the set screws and projections; Fig. 7, ditto showing the axes in the screws and cavities.

Similar letters refer to similar parts in the figures.

Instead of making the pen of one piece of metal rendered elastic by means of a slit extending through it for a certain distance as in other steel pens, I construct mine of two pieces of metal A A, the lower ends of which are adapted to each other and form the nibs of the pen which are shaped much after the ordinary way, the upper ends being attached to the penholder in the following manner, viz: To the upper part of each pen and at right angles to it I have two projections, C C, one on each side forming pivots for supporting the pen; which pivots are placed in cavities or boxes made in the corners of the penholder B (which is made square or oblong) in the following manner, viz: In one corner or angle of the pen holder I form a box or cavity and in this, place a pivot of one of the pieces and in the opposite corner or angle form another box or cavity by introducing a set screw T from the outside through the corner of the pen holder, so that its point shall rest in the angle referred to, in which point of the screw I make the cavity referred to, and in this, place the other pivot of the same piece; the axis of which by this arrangement is made to cross the penholder from angle to angle in a diagonal direction. The set screw T on which one of the pivots works is employed for the purpose of enabling me by screwing it up to keep them in place as the boxes they rest in wear away. The axis of the other piece constituting the pen I arrange in the penholder in the same way, the pivots it rests upon being placed in cavities in the two remaining corners of the tube B one of them being in the point of a set screw T as in the other one, as thus arranged the axis of the two pieces forming the pen cross each other diagonally from angle to angle of the pen holder, one of the pieces being formed with an eye H on each side of which the pivots it rests upon is placed, through which eye one of the projections C forming the axis of the other piece passes, it being made longer for this purpose, which arrangement or interlacing of the axes assists in keeping together more firmly the two parts of which the pen is composed.

I attach to the upper end of each piece forming the pan a strip of steel D which extends along the inside of the tube for some distance and is then bent under upon itself extending back again along the tube for nearly the required length of spring, the end being left free to press against the inside of the tube so as to form a point of resistance to the pen, the whole force applied to which in consequence of its resting on pivots, as described, is brought to bear on the spring which by their yielding impart an elasticity to the pen and for the purpose of preventing said returned part of the spring from moving sidewise in the holder they are brought between two studs or projections P, P, Fig. 6.

The pen holder or tube B is covered with leather, gum caoutchouc, a stuffed cushion, or any other elastic substance for the purpose of preventing that unpleasant feeling experienced in grasping the common uncovered metallic pen, which pen holder B is made of brass or other suitable material, of a square, oblong, round, or other convenient form, into which the handle, Y made of wood, or other suitable material, is inserted.

What I claim as my invention, &c., which I desire to secure by Letters Patent is—

1. The before described mode of making the steel writing pen of two pieces of steel with firm unelastic nibs, the elasticity being produced above the nibs and suspending the same in a tube or holder by pivots crossed at angles and turning in cavities in two of the angles of said tube and in the points of set screws passing through the other angles by which the pen is properly adjusted for writing, and also the two stops or points in the tube for holding the shanks of the springs in their proper places as described.

2. Also in covering the holder with leather, gum caoutchouc, a stuffed cushion or any other elastic substance.

DAVID THOMAS.

Witnesses:

WM. P. ELLIOT,

C. H. WILTBERGER.