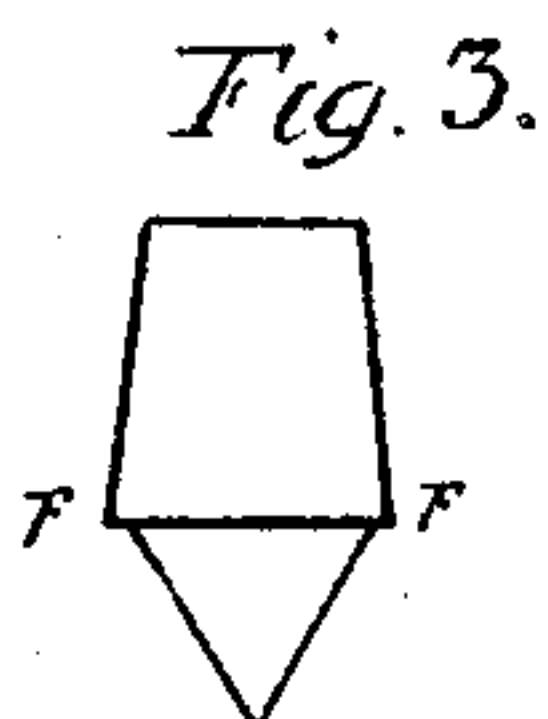
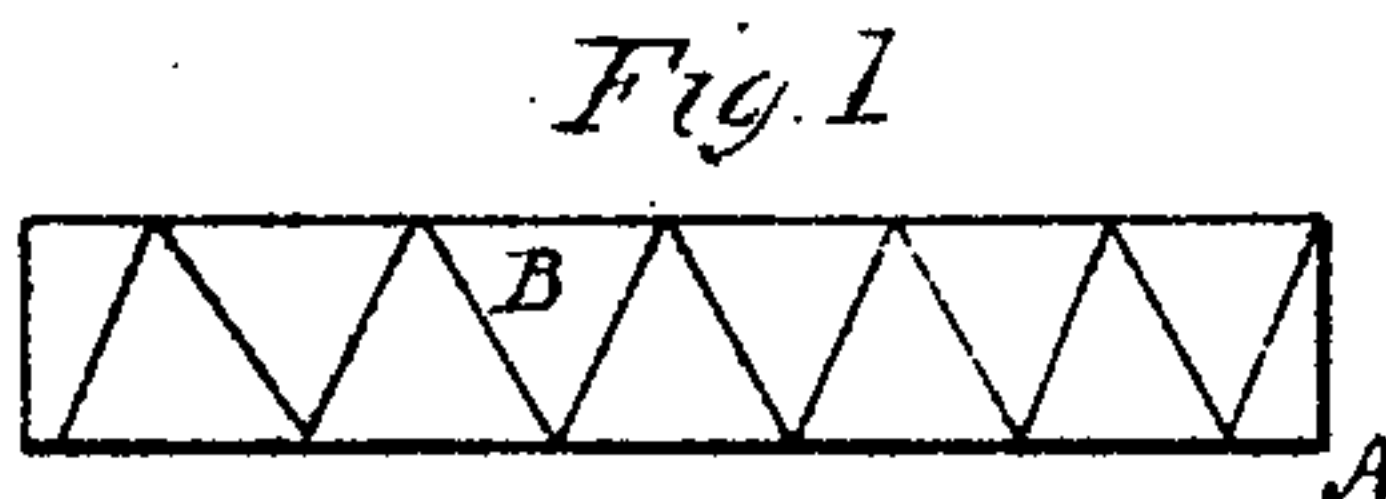
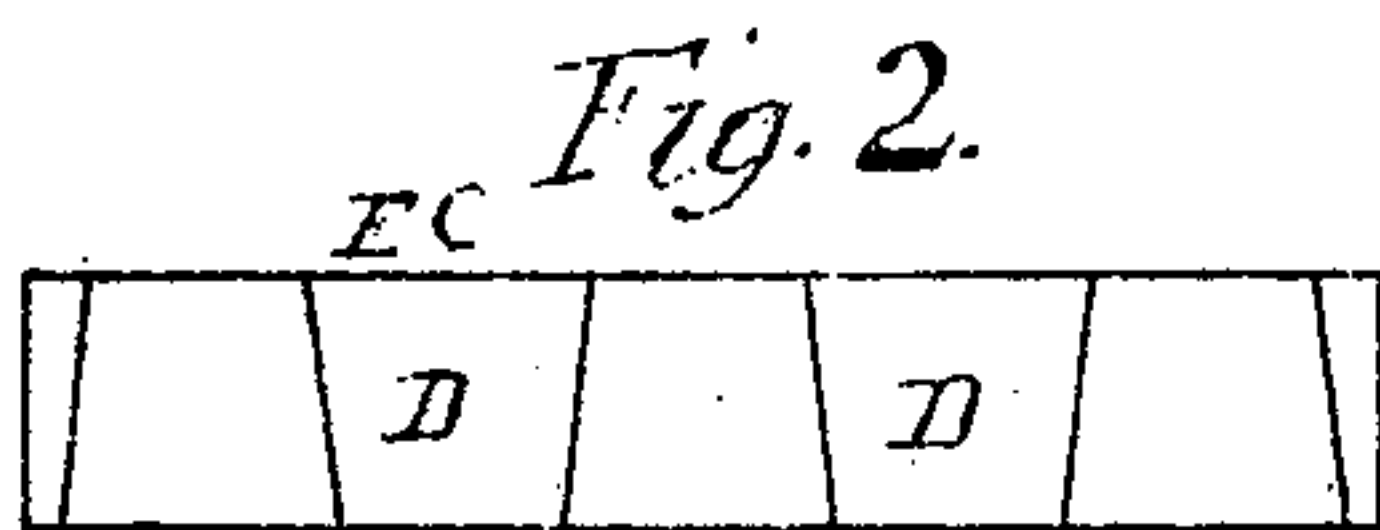


*E. Wiley.*

*Manufacture of Pens.*

*N<sup>o</sup> 73419*

*Patented Jan. 14 1868.*



*Witnesses:*

*Theo. Troche*  
*W. Brown*

*Inventor:*

*E. Wiley*  
*Per Murray &*  
*Attorneys*

# United States Patent Office.

EDWIN WILEY, OF BROOKLYN, NEW YORK.

*Letters Patent No. 73,419, dated January 14, 1868.*

## IMPROVEMENT IN MANUFACTURE OF PENS.

*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, EDWIN WILEY, of Brooklyn, E. D., Kings county, New York, have invented a new and useful Improvement in the Manufacture of Pens; 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.

The present invention relates to that class of pens commonly known as the "Union Pens," and which are made with their "nib" of gold, and their heel or body of silver or other inferior metal.

Heretofore these pens have been manufactured by soldering together, edge to edge, parallel strips of gold and silver, or other inferior metal, and then rolling such strips lengthwise of the seam to the thinness that the metal is to have in a finished pen, when, after cutting such combined metal strip into blanks of the proper form, and raising such blanks into the shape of a pen, the point is then fused thereon, completing the manufacture of the pen. But by this mode of manufacture, as the point to the pen can only be soldered on after the manufacture of the pen is otherwise completed, for the reason that the blank cannot be then rolled without injuring the same, the nib of the pen is thereby so annealed or softened from being heated by the soldering as to be deprived of its elasticity to such an extent as to greatly deteriorate it, it being, in fact, of no greater value or utility, as a pen, than a "gold pen" that has been repointed.

To produce a pen of the class to which this invention relates, that will have all the elasticity of nib possessed by a pen made entirely of gold, is the object of this invention, and it consists in first rolling the combined metal strip in the direction of its seam, to a thickness some two or three times greater than that of the finished pen, and in then cutting from such combined metal strip blanks of a similar form to the blanks used for making pens entirely of gold, but with a "burr" at the extreme ends of the seam, between the two metals, whereby such blanks, with the point previously soldered thereon, can then be rolled across their seam to the thinness required for the pen, without being split or broken along the same, and without injury to the point, after which the blanks are to be raised into the form of a pen, as heretofore. In the accompanying drawings—

Figure 1 is a view of a strip of gold, showing it as marked off for being cut into blanks for the nibs to the pens.

Figure 2, a view of the strip of silver, showing it as marked off for being cut into blanks for the heel part to the pens.

Figure 3, a view showing a nib and heel blank united edge to edge.

Figure 4, a view of a pen completed.

Similar letters of reference indicate corresponding parts.

A, in the drawings, represents a strip of gold, rolled to the proper thickness, and cut clean along both edges. This strip, from end to end, is shown as marked off into proper-shaped blanks, B, for forming the nibs. C, the strip of silver, rolled to the proper thickness, and then marked off into blanks, D, of a quadrangular shape, with the broad end, E, somewhat wider than the triangular nib-piece B that is shown in fig. 3, as joined to it by the use of solder for the purpose of preventing the silver (which is the softer of the two metals, gold and silver,) from being rolled thinner than the gold, as the combined metal blank is rolled to the thinness required for the pen, and to enable the blank to be rolled in a direction across its seam without danger of splitting the blank. Previous to rolling the blank, as above stated, the point is fused on the same, which is allowable, as by the accumulation of the solder at the ends of the seam, the blank can be rolled in a direction across the seam, as before stated. In lieu of accumulating the solder upon the blank at the extreme ends of the seam, between the two metals, if the two strips from which the blanks are cut are joined or soldered together before being cut, and then the blanks cut from the combined strips, the same result can be effected if in the cutting of the blanks a "burr" is formed from the metal at the two ends of the seam, it being here meant by a "burr" leaving the metal "thrown up" at the two ends to its seam.

By my improvement, herein described, a pen can be produced, as is obvious, having all the elasticity and durability of a pen when made entirely of gold, and at a greatly-reduced expense.

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

In the manufacture of pens composed of both gold and silver, and known as the Union Pen, giving the seam between the two metals an extra thickness by means of solder, or otherwise, substantially as and for the purpose described.

EDWIN WILEY.

Witnesses:

WM. F. McNAMARA,  
ALBERT W. BROWN.