April 13, 1943. N. E. WEIGEL 2,316,478

PEN POINT MATERIAL

Filed Oct. 21, 1941

Fig. 1.

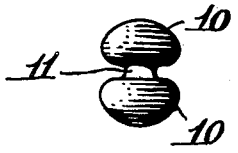


Fig. 2.

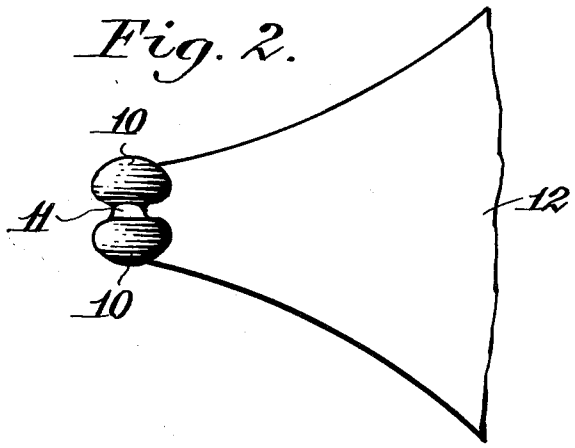


Fig. 3.

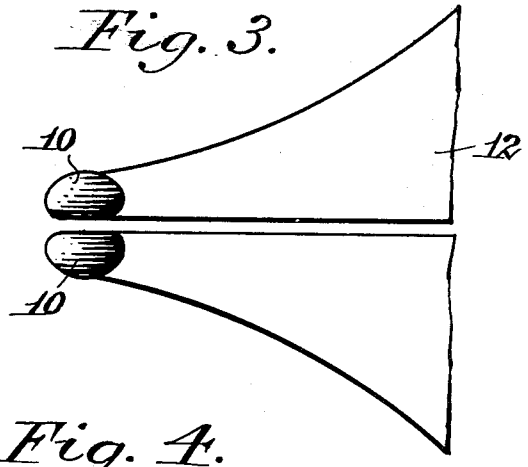
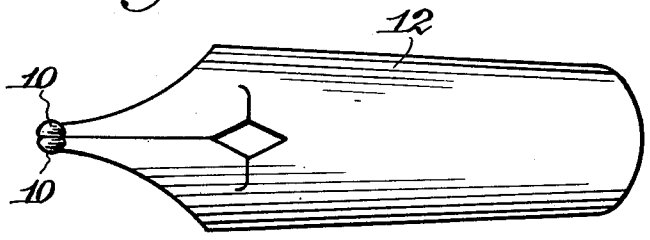


Fig. 4.



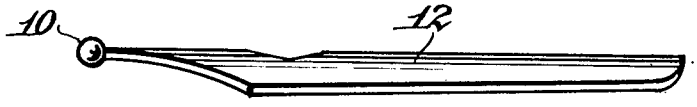


Fig. 5.

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PEN POINT MATERIAL

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Application October 21, 1941, Serial No. 415,900

6 Claims. (Cl. 120—109)

This invention relates to the manufacture of pen points or nibs, and more particularly to pen point material used in fashioning or forming the writing point of a nib.

An object of the invention is the provision of pen point material which is not only pre-formed, but which is also pre-finished, in order that by a simple method the material may be secured to a nib without requiring additional operations such as grinding and smoothing and thereby effecting an economy in labor with a corresponding reduction in the cost of production.

Another object of the invention is to provide a writing point material of such kind and nature that may be secured or welded to the writing end of a nib, and which may then be cut or slitted together with the nib in one and the same operation and thus complete the work of providing the nib with a writing point having the desired characteristics.

The nature of the invention and its distinguishing features and advantages will appear when the following specification is read in conjunction with the accompanying drawing in which:

Fig. 1 is a view of a unit of pen point material used in accordance with the invention.

Fig. 2 is a plan view of a pen point showing the material secured thereto.

Fig. 3 is a plan view of the pen point and point-forming material after being slitted to complete the writing point.

Fig. 4 is a plan view of a pen finished in accordance with the invention.

Fig. 5 is a side view of the pen shown in Fig. 4.

Referring now more particularly to Fig. 1 it will be apparent there is shown a unitary structure consisting of two solid bodies 10 and a portion or link 11 which joins the bodies to each other in side by side relation. This structure so formed constitutes pen point material to be used for providing a writing point on a pen or nib. In accordance with the invention use is made of material whose molecular composition gives to the unit formed therefrom a pre-finished smooth and highly polished surface throughout. Use is therefore made of a hard metal composition, preferably iridium. An ingot or block of this metal is melted by a fusing operation and allowed to drop into a suitable mold to form the unitary structure aforesaid. Each of the bodies 10 is well rounded throughout, or in other words is devoid of any sharp surfaces or edges. The portion or link 11 may be round or any other shape in cross-section, and its cross-sectional mass or diameter is considerably less than that of the bodies 10. The portion 11 is intended merely to hold the bodies 10 in the spaced side by side relation as shown so that they may be brazed or otherwise be secured to the writing end of a pen blank and then be cut while slitting the blank to complete the writing point without requiring any additional grinding or smoothing operations. The bodies 10 may be of any suitable geometrical shape having a rounded or curved contour so that when the portion 11 is cut they will be complemental to each other to form a perfect writing point consisting of two pre-finished tips. The portion 11 will be entirely removed in the slitting operation. It is to be understood that the bodies 10 may be globular with their perimeters merged to join the bodies, or the bodies may be ovoidal in shape with their perimeters joined by merging them, or the bodies may be semi-globular and rounded throughout and joined to each other in side by side relation by a reduced cuttable portion 11.

The point-forming material having the characteristics and features mentioned will be secured in place according to known steps of manufacture, as by brazing or welding, to the notched writing end of a pen blank 12 as shown in Fig. 2. The blank is then put through various other developing operations until it is ready to be slitted. This operation is then performed which consists in cutting through the material between the bodies and at the same time the blank is slitted by the cutter which results in a pen or nib as shown in Fig. 4 and Fig. 5. The pen point is then complete in all respects requiring no additional grinding, smoothing or polishing. The point so formed will provide a writing surface in any position of a writing instrumentality on which the pen is mounted.

The formation of the unitary structure consisting of two point-forming bodies or tips joined to each other by a reduced portion between the same lends itself to the ready emplacement thereof on the writing end of a pen blank and also constitutes a guide in carrying out the slitting operation.

I claim:

1. Pen point material consisting of two preformed and pre-finished writing point-forming bodies joined by a cuttable portion cross-sectionally smaller than the bodies and arranged between them.

2. Pen point material consisting of two similar writing point-forming bodies joined by a cuttable portion cross-sectionally smaller than the bodies

and arranged between them and integral therewith.

3. Pen point material consisting of hard metal fused into two writing point-forming tips joined by a cuttable portion arranged between them and the cross-sectional diameter of said portion being less than that of said tips.

4. Pen point material whose molecular composition gives the same an outer smooth surface, and said material consisting of two complemental writing point-forming tips joined by a cuttable portion cross-sectionally smaller than the tips and disposed between them, said portion when fully cut leaving two pre-finished tips aforesaid.

5. Pen material for producing a writing point and consisting of preformed point-forming tips joined to each other side by side in slightly spaced relation by a portion smaller in diameter than that of the tips so that they may be parted at said portion by a suitable cutter when the material is secured to the writing end of a pen blank.

6. Pen point material of unitary structure and consisting of two pre-finished writing point-forming tips joined by a cuttable spacing link cross-sectionally smaller than the tips disposed between them.

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