

R. J. ESTES.

PEN.

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1,177,404.

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Fig 1.

Fig 2.

Fig 3.

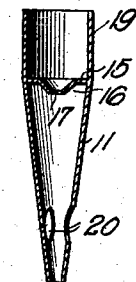
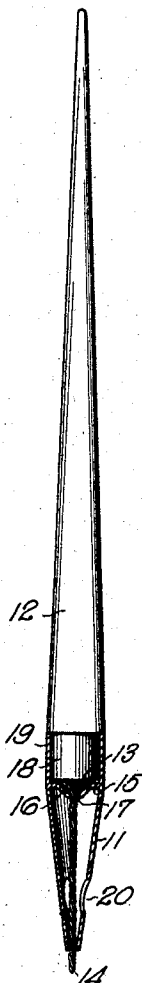
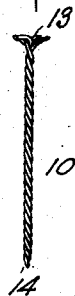


Fig 4.



WITNESSES

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To all whom it may concern:

Be it known that I, ROBERT J. ESTES, a citizen of the United States, and a resident of Coalgate, in the county of Coal and State of Oklahoma, have invented a new and improved Pen, of which the following is a full, clear, and exact description.

My invention relates to a pen including a nib and a holder therefor, the holder being adapted to receive a pen staff.

More particularly, the invention relates to a pen nib formed of twisted wire constituting an elongated shank, the convolutions of the wires being close together so that a substantially solid shank is produced. The forward ends of the wires are reduced, preferably on beveled lines, to jointly constitute a unitary writing point, while at the rear end the wires are spread to form a head. The tubular holder has a transverse partition arranged to accommodate the head of the pen nib, the holder in the rear of the partition receiving the reduced end of the pen staff which seats the head of the nib on the transverse partition of the holder, the holder, in front of the partition, being tapered to provide a reduced forward end through which the shank of the nib snugly extends and is braced, the holder serving to contain an ample supply of ink which is received through lateral openings in the holder.

The form and arrangement of the elements result in strength and simplicity; convenience in changing the nib; insures a firm holding of the nib, and provides for an ample supply of ink and a free feed of the ink.

Reference is to be had to the accompanying drawings forming part of this specification in which similar reference characters indicate corresponding parts in all the views.

Figure 1 is a sectional side elevation of a pen embodying my invention; Fig. 2 is a side elevation thereof; Fig. 3 is a longitudinal section of the holder; and Fig. 4 is a side elevation of the pen nib.

In forming a practical embodiment of my invention in accordance with the illustrated example, a pen nib designated generally by the numeral 10, is formed of a plurality of twisted wires. The convolutions of the wires are close together so that a practically solid elongated shank is produced. The pen nib is accommodated in a tubular holder 11,

adapted at its rear end to receive the forward end of a staff 12.

The wires, constituting the shank 10, are spread at the rear end to form a more or less tapered head 13. At the forward end the wires, constituting the pen nib, are tapered or otherwise reduced to jointly form a unitary writing point 14.

The holder 11 is formed with a transverse partition 15 a short distance from the rear end of said holder. At the center, the partition 15 is depressed as at 16 and presents a central orifice 17 for the passage of the nib 10 therethrough, the said orifice 17 alining with the forward convergent end of the holder.

In the rear of the transverse partition 15, the holder 11 is preferably cylindrical as at 19, and accommodates the forward end 18 of the staff 12, said end 18 being preferably reduced to present a shoulder to contact with the rear end of the holder 11. Near the front end of the holder 11, the same is formed with lateral openings 20 for the inlet of ink.

In practice, the pen nib is inserted in the holder 11 from the rear end thereof, it being necessary only to pass the forward end of the nib through the orifice 17. The placing of the holder on the staff 12 will force the nib forwardly and seat the head 13 thereof in the depression 16 of the partition 15. The staff will thus maintain the pen nib firmly in position and resist rearward movement thereof under the pressure of writing.

In use, the holder is charged with ink by dipping the same in an ink-well so that the ink may enter the openings 20. The spirals, presented by the twisted shank of the nib, serve to conduct the ink forwardly through the convergent forward end of the holder 11 to the writing point 14. The construction permits a ready cleaning of the pen and the renewal of the nib, but the form of the nib is such that the renewal thereof will be rarely necessary.

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

1. A pen including a tubular holder having a transverse partition formed therein, the partition being formed with a central tapered depression forward of the rear end of the holder, said depression presenting an aperture, the holder being tapered in front of said partition and adapted, in the rear

of said partition, to receive a pen staff, and a pen nib formed of a plurality of twisted wires having their convolutions in close relation forming a substantially solid shank, the rear ends of the strands being spread to constitute a head fitting the said depression, the head being adapted to be forced to seat in the said depression by the forward end of a pen staff, when the holder is placed on the latter, the wires of the pen nib being reduced at the front end to jointly form a writing point, and there being lateral openings in the tubular holder near the front end thereof for entrance of ink.

2. A pen comprising a tubular holder having a transverse partition formed with a central aperture, a pen nib in the form of an elongated shank having a head at the rear end, the shank being accommodated in the holder and extending through the said partition and through the forward end of the holder, and a pen staff on which the rear end of the holder is detachably fitted, the forward end of the holder engaging the head of the pen nib and holding the same against the partition of the holder.

3. A pen including a pen nib in the form of an elongated shank formed with a writing point at the front end and with a head at the rear end, and a tubular holder having a contracted front end through which the shank of the nib extends, the holder having a seat near the rear end receiving the said head of the pen nib, the holder at the rear end being formed to receive the forward end of a pen staff.

4. A pen nib formed of closely twisted wires constituting an elongated shank, the forward ends of the wires being formed into a unitary writing point.

5. A pen nib formed of closely twisted wires constituting an elongated shank, the forward ends of the wires being formed into a unitary writing point, the said wires at the rear end being formed into a head.

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

ROBERT JAMES ESTES.

Witnesses:
 CARL RAY,
 R. F. ESTES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."