

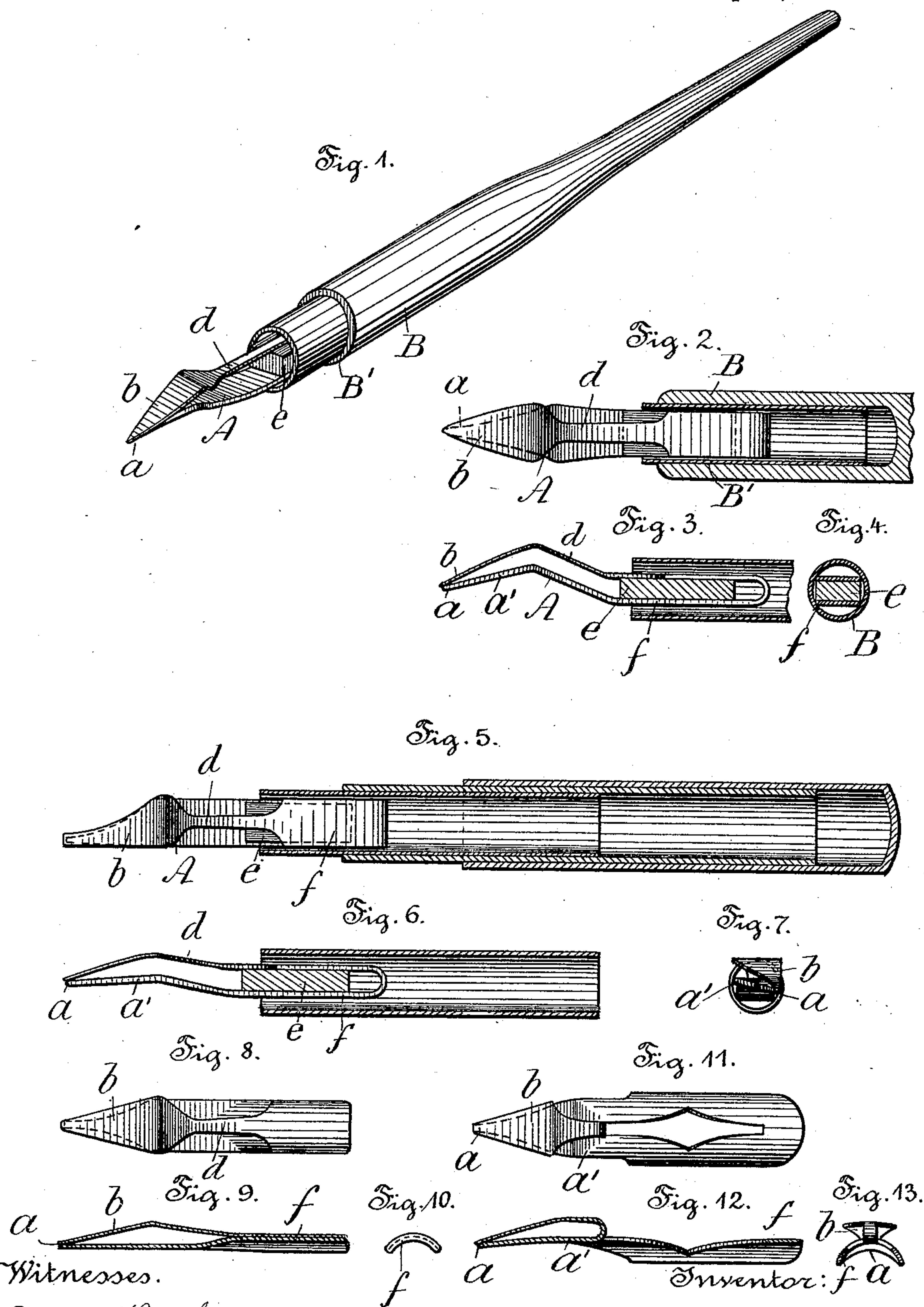
(No Model.)

2 Sheets—Sheet 1.

G. B. HAUG.  
WRITING PEN.

No. 496,875.

Patented May 9, 1893.



Witnesses.  
Philip Kassel.  
Philip Ungewiss.

Inventor: f a  
G. Bernhardt Haug.  
by Hermann Bormann  
att'y.

(No Model.)

2 Sheets—Sheet 2.

G. B. HAUG.  
WRITING PEN.

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Fig. 14.

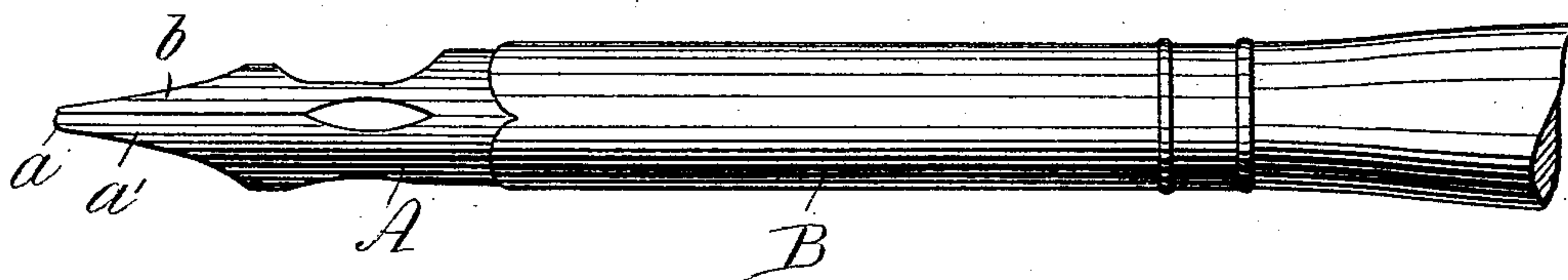


Fig. 15.

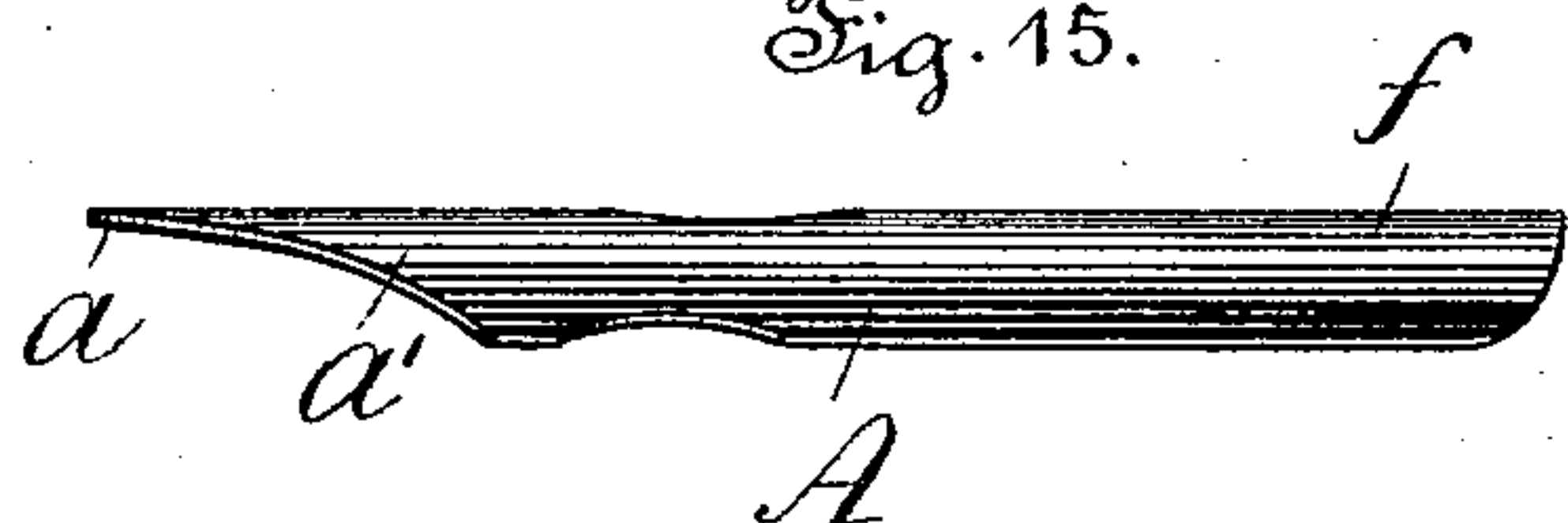


Fig. 16.



Fig. 17.

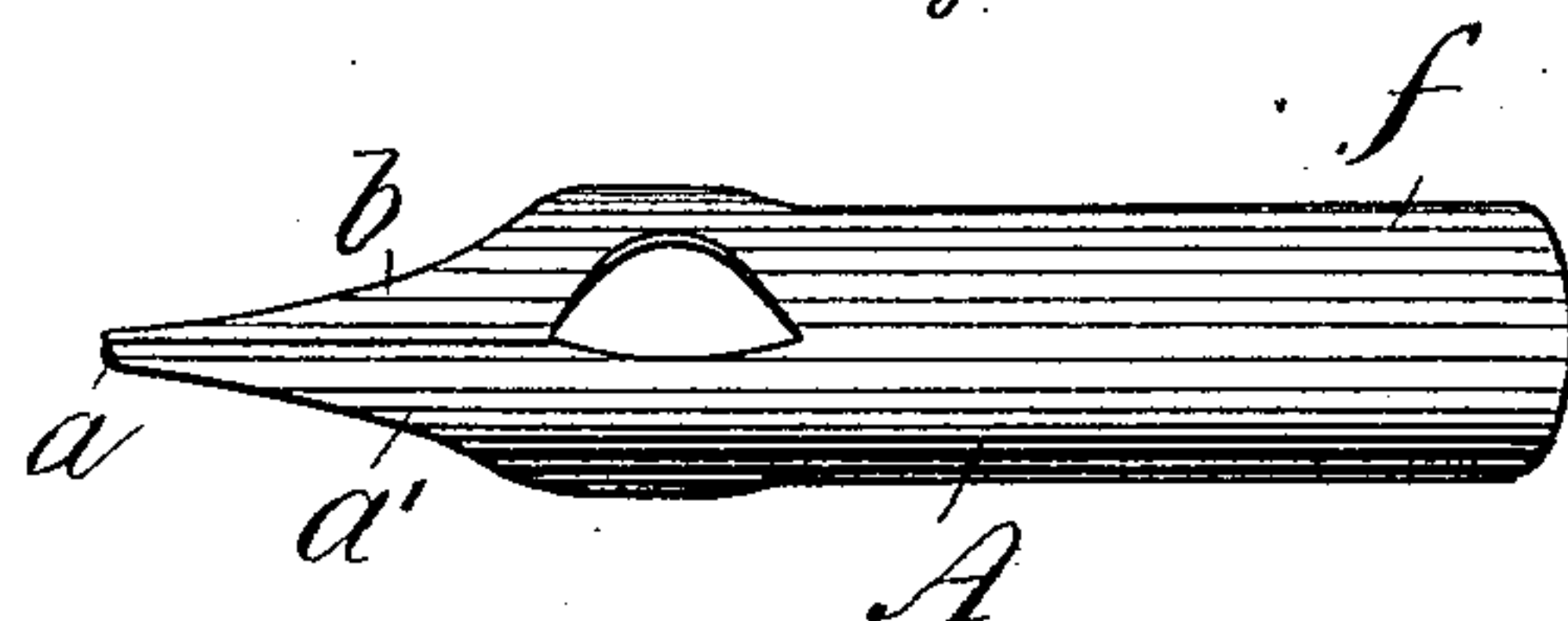
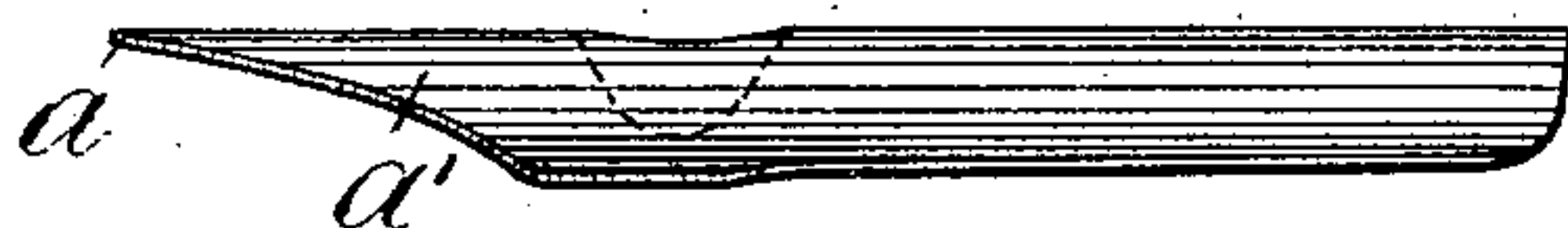


Fig. 18.



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# UNITED STATES PATENT OFFICE.

GOTTLIEB BERNHARDT HAUG, OF PHILADELPHIA, PENNSYLVANIA.

## WRITING-PEN.

SPECIFICATION forming part of Letters Patent No. 496,875, dated May 9, 1893.

Application filed September 19, 1892. Serial No. 446,326. (No model.)

*To all whom it may concern:*

Be it known that I, GOTTLIEB BERNHARDT HAUG, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and Improved Writing-Pens, of which the following is a specification.

My invention relates to pens used in the art of writing with ink or other suitable fluid. The pens heretofore in use possessed some very disadvantageous features of which the following may here be enumerated. First the common pointed pens when used on ordinary paper would generally engage and frequently enter the paper, which resulted in the sudden arrest of the pen and a consequent squirting of ink, secondly the varied pressures upon such pens required for ordinary script writing proved to be very injurious to the nerves and muscles of the writer's hand especially when in constant operation, thirdly the pens heretofore known had very little facilities to store liquid ink for use, and fourthly the same were ever ready, especially when overfilled with ink, to spill some of it onto the paper or other articles. For these reasons pens were often laid aside by writers and recourse was taken to the common lead pencils to write manuscripts, on account of being a more convenient instrument for the purpose.

The object of my invention is to overcome the above mentioned disadvantages and to provide a pen of simple construction by which first an easy gliding motion of the pen over any kind of paper is insured, secondly the pressure to be exerted upon the pen while writing may be constant and the stiffness of the pen may be varied to accommodate the different requirements of the writer, thirdly the pen may hold a considerable amount of ink or other writing liquid without endangering the cleanliness of the paper, pad or other articles and fourthly the liquid or ink is protected from being readily evaporated, as very little of the same is exposed to the atmosphere.

My invention consists of a pen having a stout writing point and a flexible follower for conducting ink to the said point.

My invention further consists of a pen hav-

ing a solid writing point and an adjustable, flexible follower for conducting ink to the said point.

My invention further consists of a pen made of one piece of metal bent back upon itself forming a solid writing point and a flexible follower to conduct ink or other liquid to the said point.

My invention further consists of a pen made of one piece of metal and having one split or half thereof made stronger or stiffer than the other; and my invention further consists of the improvements hereinafter more fully set forth and pointed out in the claims.

The invention will be more fully understood taken in connection with the accompanying drawings forming part hereof and in which—

Figure 1 is a perspective view of a pen of my improved construction and showing the same as applied to a pen holder. Figs. 2, 3 and 4 are views illustrating my improved pen more in detail and having its writing point in the line of the axis of the pen, and the flexible follower adjustably held thereto. Figs. 5, 6 and 7 are views illustrating a pen having the writing point out of alignment with the axis of the pen. Figs. 8, 9 and 10 illustrate a pen having a modified construction and in which the flexible follower is non-adjustably affixed to the body of the pen. Figs. 11, 12 and 13 illustrate a pen having the flexible follower stamped out of the body of the pen and bent toward the writing point. Figs. 14, 15 and 16 show a modified form of pen, the elastic or flexible follower being located on one side of the writing point, and Figs. 17 and 18 show a similar form of pen.

Referring now to the drawings for a further description of my invention and especially to Figs. 1 to 7 inclusive, A is the pen made of sheet metal and consists of the blade  $\alpha'$ , of substantially triangular form having the writing point  $\alpha$ , and the follower  $b$  of a similar shape, these two parts may be made as shown of one piece of metal bent together so as to form two superposed points of equal length, but if desired the upper point or follower may be extended longitudinally and laterally beyond the lower or writing point to vary the thickness of lines; the writing point  $\alpha$  should



be slightly rounded off for the purpose of insuring an easy gliding motion over the paper when writing with the pen. The elasticity or flexibility of the follower is facilitated by the diminished portion *d*, which may be of any strength desired. The elasticity of the writing point and the pressure with which the same bears upon the paper or tablet may be adjusted by the block or wedge *e* placed within the space formed by the body *f* of the pen A, and this adjustment is accomplished by the out or inward movement of the block *e*, which, when moved inward or away from the writing point *a* makes the leverage, with which the writing point bears upon the paper, longer and by moving the same in the opposite direction makes the leverage shorter or the stiffness of the blade greater. It is however important, that the bearing of the lower blade *a'* at the front edge of the wedge *e*, should be very well brought toward the point of the pen, while the upper blade *b* should be bent about a point beyond the front edge and toward the back of the wedge or support *e*; and that these bearing and bending points, should also be kept well apart by providing a wedge of considerable thickness to allow the writing and following points a range of play when in contact with the paper for producing marks or writing. The body *f* with the wedge or block *e* may be held in any preferred holder B having a suitable aperture B'.

The writing point or edge *a* and follower point *b* may either be in alignment with the axis of the holder as shown in Figs. 1 and 2 or they may be out of same as shown in Figs. 5 and 7 and the shape of writing blade *a'* and follower *b* in the other direction may be varied, as appears in Figs. 3, 6, 9 and 12, to suit the different requirements of the writer; for instance the writer holding a pen at an angle of about forty degrees to the paper would be suited by selecting the shapes as are illustrated in Figs. 9 and 12, whereas the writer holding the pen at an angle of less degrees to the paper would do well to select the shapes illustrated in Figs. 3 and 6. The latter shapes are more desirable when a great storing of ink is required as the extra bend in the blades are adapted to retain the same.

As the pens illustrated in Figs. 1 to 7 inclusive are adapted to fit holders B, having apertures B' of certain dimensions, in Figs. 8 to 13 are illustrated pens which are adapted to suit any of the common holders now in use and the construction of the pen shown in Figs. 8 to 12 is similar to that previously described, with the exception, that the body portion *f* is closed and bent transversely so as to have a half circular cross section, and the adjusting block or wedge *e* is dispensed with.

The pen illustrated in Figs. 11 to 13 is in all respects the same as shown in Figs. 8 to 10 with the exception that the follower *b* for conveying ink to the writing point *a* is stamped out of the body *f* and bent forward

into contact with the writing point *a*, the rear portion of the pen A or body *f* being bent so as to form a half cylinder adapted to fit the common holder now in use.

In Figs. 14 to 18 I have shown modified forms of pens having the follower *b* disposed alongside of the writing point or blade *a'* instead of on top of same as in the previously described pens and with which the desirable results in the operation of writing are obtained.

In use the pen is in contact with the paper by its dull or rounded off writing point *a* on the writing blade *a'* which latter is comparatively stiff, and the follower *b* conveys ink from between the blades or splits to the said point *a*, and slightly bears also upon the paper whereby a uniform appearance of writing or lines is had, and an easy manipulation without any undue strain on the writer's hand is insured.

It will be obvious that modifications may be made, as to shapes and detailed location of the writing and follower points or edges constituting the pen, without departing from the spirit of the invention *i. e.* to provide a writing or guiding point and a follower, the former being of a more or less stiff and the latter of a resilient or more elastic character, as will be readily understood by those skilled in the art to which my invention appertains.

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

1. A pen formed of a piece of sheet metal, whereof one end is rendered more elastic than the other, by reducing the cross section thereof, both ends provided with suitable points and bent toward each other so that the end of greater elasticity is superposed upon the end of less elasticity whereby an ink receptacle is formed, in combination with a pen holder and an adjusting block or wedge, to regulate the elasticity of both the lower and upper extremities, substantially as and for the purposes set forth.

2. A pen formed of two blades or prongs of different elasticity both blades united at their inner ends and bent so as to form a corrugated ink receptacle the blade or prong of greater elasticity superposed upon the blade of less elasticity, in combination with a penholder and an adjusting block at or near the united ends and between the said blades, to adjust the elasticity of the respective blades substantially as and for the purposes set forth.

3. A pen formed of two blades or prongs of different elasticity, both blades or prongs bent so as to form a corrugated ink receptacle the blade or prong of greater elasticity superposed upon the blade or prong of less elasticity substantially as and for the purposes set forth.

4. A pen formed of two blades or prongs of different elasticity the rounded off point of the less elastic prong serving as the writing



point and the point of the other prong serving as a conductor for the ink substantially as and for the purposes set forth.

5 5. A pen formed of one piece of sheet metal and having two prongs whereof one is of greater elasticity than the other the upper and more elastic point or blade forming an arrow head and the lower and less elastic prong or blade being of constant thickness and having a  
10 point of equal width which gradually increases toward the back of the pen substantially as and for the purposes set forth.

6. A pen formed of one piece of sheet metal and having two prongs whereof one is of  
15 greater elasticity than the other substantially as and for the purposes set forth.

7. A pen made of a flat sheet of metal one end of half of which forms an arrow head and the other a wedge having concave edges and  
20 of constant thickness, the former end or half being thinner and more elastic than the other, both ends bent toward each other so that the

arrow shaped and thin end is superposed upon the extreme of the wedge shaped end to constitute a writing point and an ink recep- 25  
tacle between the said ends or halves substantially as and for the purposes set forth.

8. A pen made of a flat sheet of elastic metal one end of which forms an arrow head and the other a wedge having concave edges, 30  
the end forming the arrow head reduced in cross section to render it more elastic than the other or wedge shaped end, in combination with a holder and a block to facilitate the adjustment as to the stiffness or elasticity 35  
of the respective ends substantially as and for the purposes set forth.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

G. BERNHARDT HAUG.

Witnesses:

HERMANN BORMANN,  
CHARLES RETTIG.