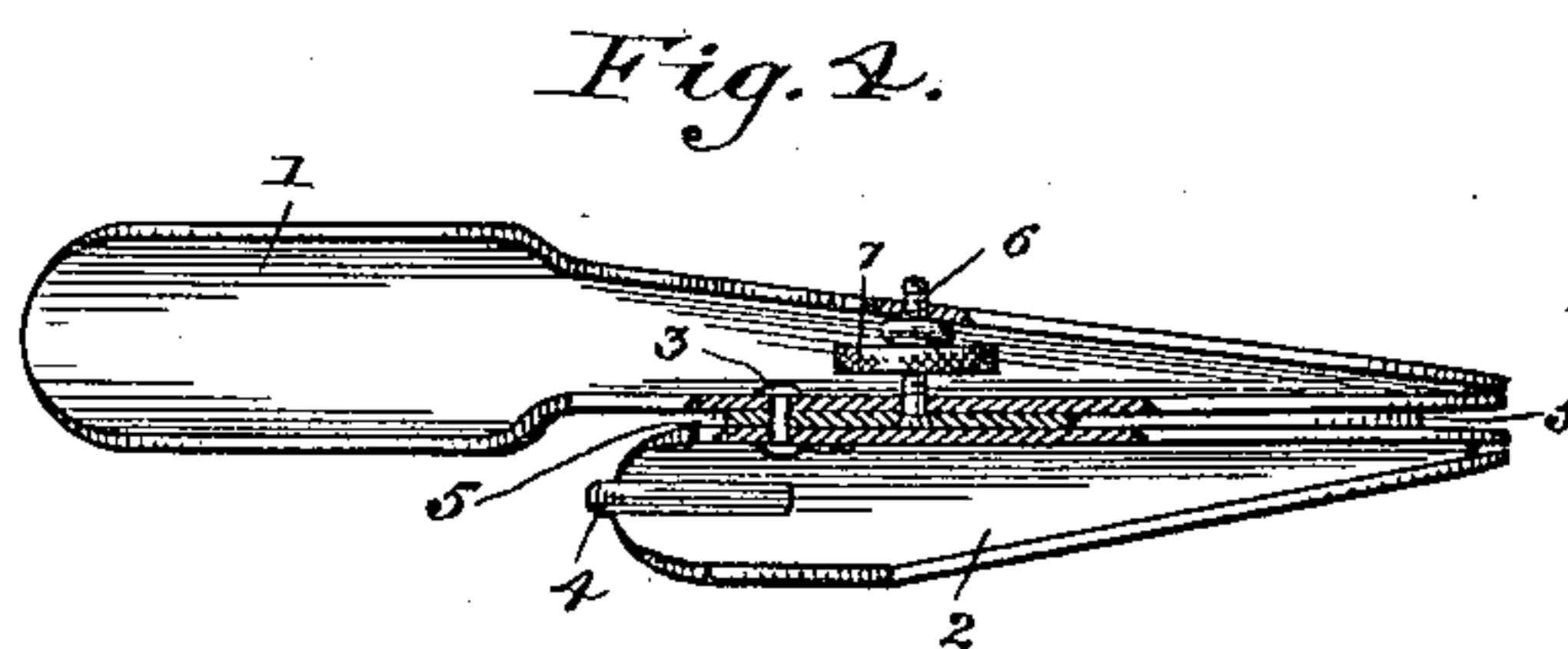
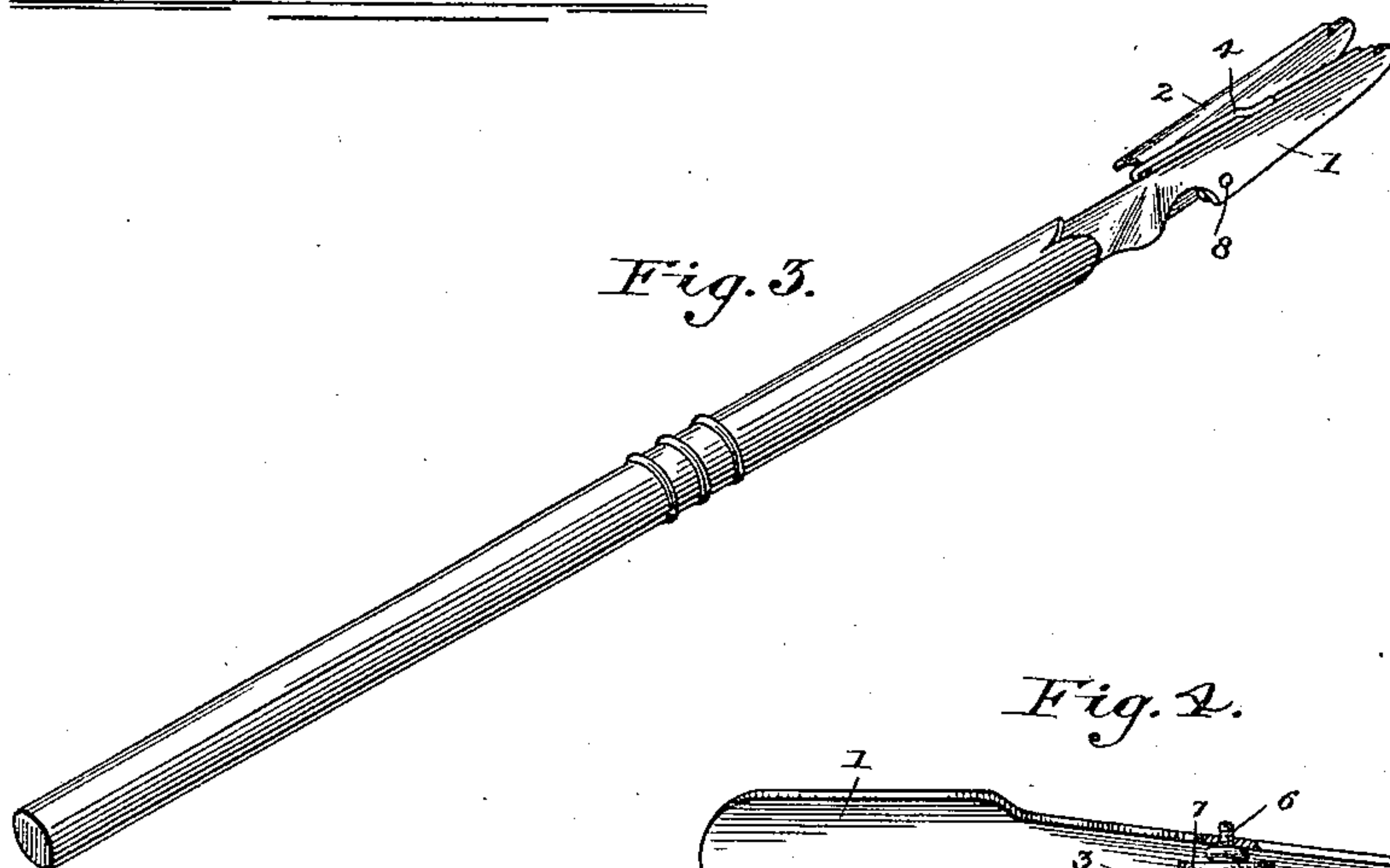
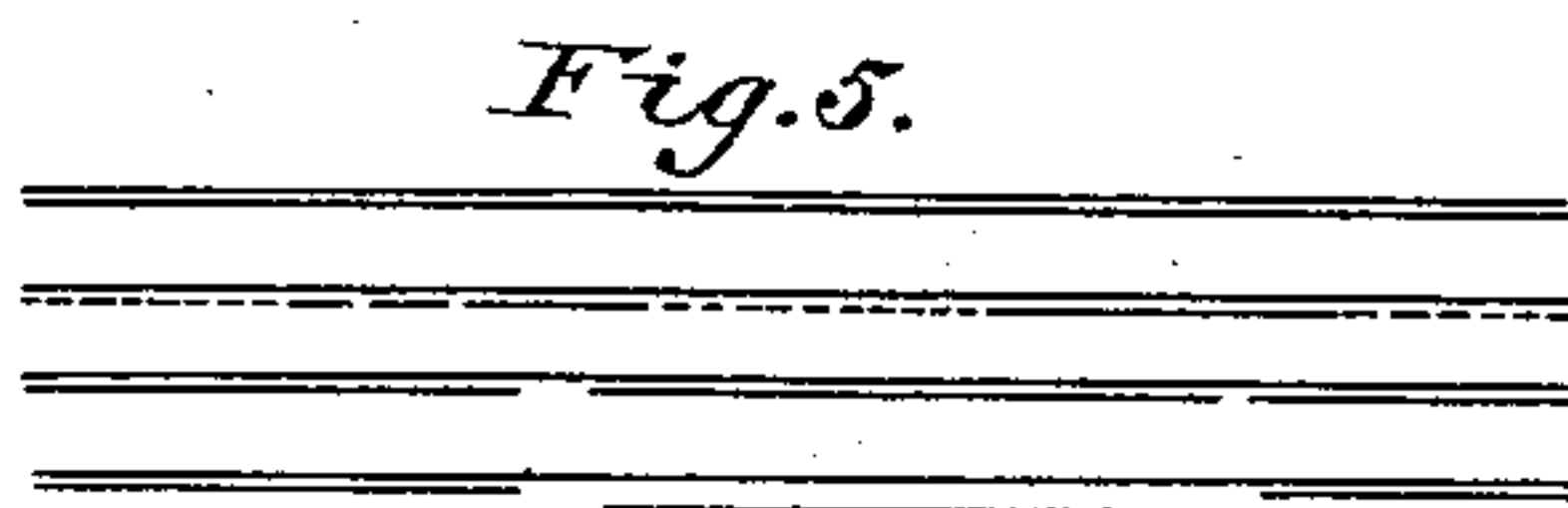
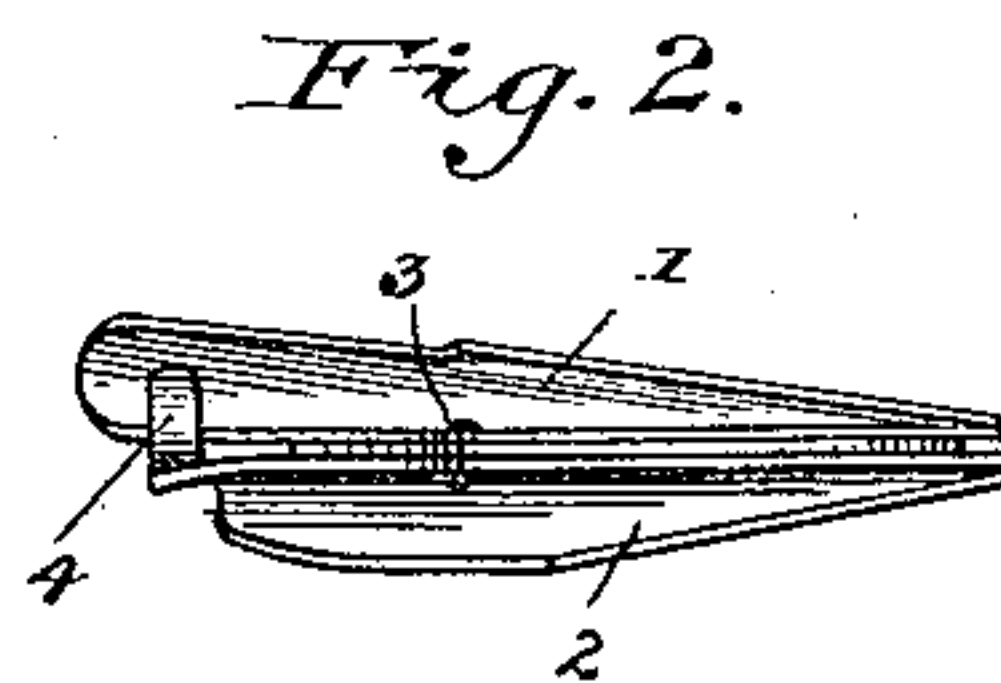
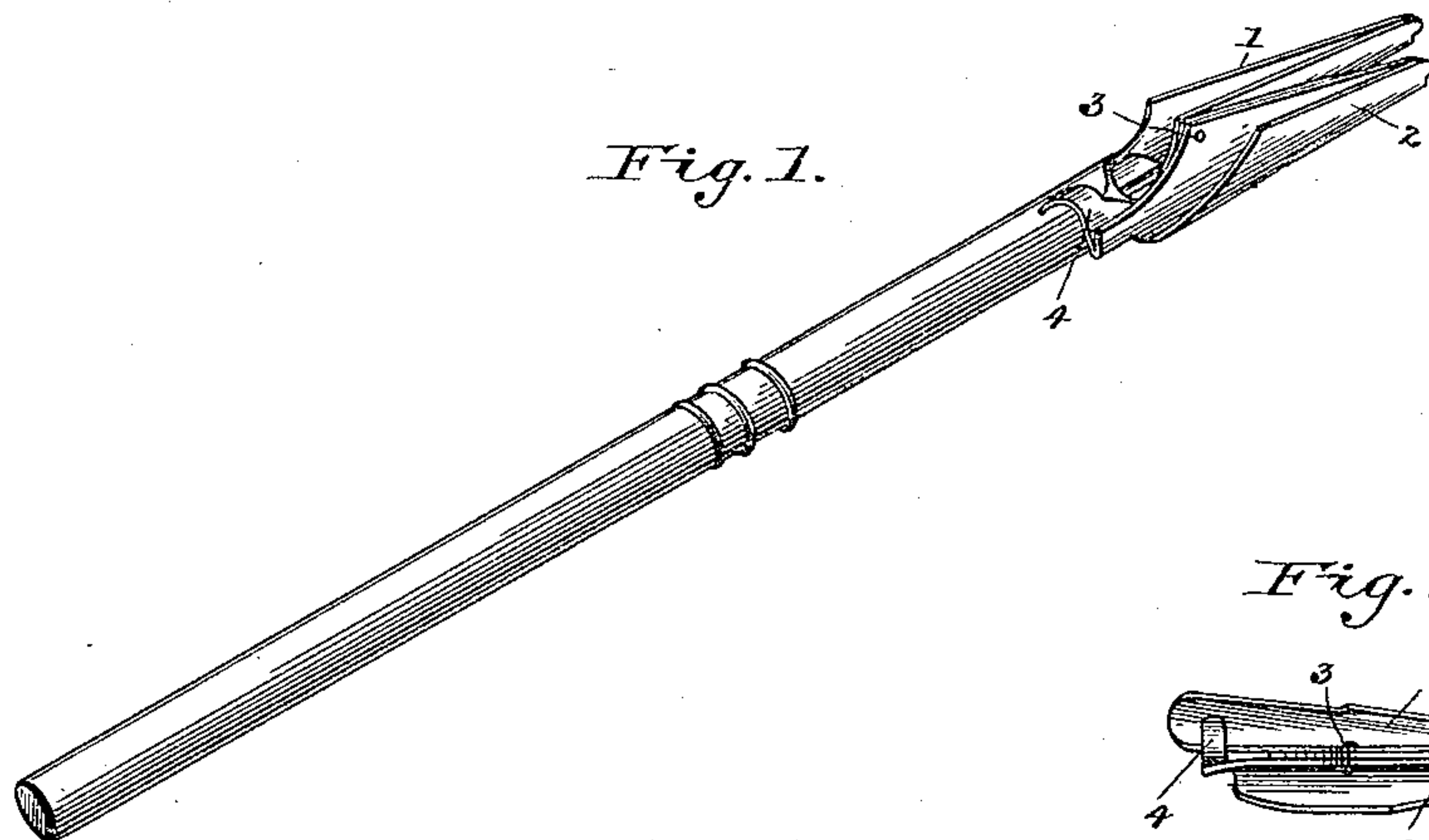


(No Model.)

H. H. HAZEN, H. LYDDON & T. FARMER.  
RULING PEN.

No. 428,250.

Patented May 20, 1890.



Witnesses

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# UNITED STATES PATENT OFFICE.

HENRY H. HAZEN, HENRY LYDDON, AND THOMAS FARMER, OF OIL CITY,  
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## RULING-PEN.

SPECIFICATION forming part of Letters Patent No. 428,250, dated May 20, 1890.

Application filed December 18, 1889. Serial No. 334,222. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY H. HAZEN, HENRY LYDDON, and THOMAS FARMER, citizens of the United States, residing at Oil City, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Ruling-Pens; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention has for its object to provide a ruling pen designed especially for the use of bank-clerks, accountants, book-keepers, draftsmen, and others, whereby continuous or broken multiple parallel lines may be drawn with the same pen with equal facility as single lines and without previous alteration or adjustment of the pen-points, and without changing the position in which the pen is held in the hand.

To this end the invention consists in the multiple ruling-pen shown in the accompanying drawings, and hereinafter described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of one form of our ruling-pen attached to a common holder. Fig. 2 is a plan view of this form of pen detached. Fig. 3 is a perspective view of another and preferred form of our pen, the pen being turned over to show a different arrangement of the spring. Fig. 4 is a view of this preferred form, similar to Fig. 2, showing a means of adjusting the pen-points so as to rule close or open parallel lines. Fig. 5 shows samples of parallel-line ruling done with this pen.

1 denotes a ruling-pen of a form now well known, consisting of a piece of any suitable metal cut or stamped out and pressed or folded into the shape represented in the different views, having its bottom, or part next to the paper, closed and its top open, so that its side walls form a reservoir or receptacle for the ink. It has, like all pens, the usual shank, by which it is attached to any kind of a holder. Its sides converge from near the shank to the point, where there is a small slit for the easy flowing of the ink. To the side of such a pen, preferably to that

side opposite to the edge of the ruler, against which the pen is held when in use, we attach, by means of the pivot 3, another pen 2, in all respects, so far as its ruling function is concerned, a duplicate of the first mentioned. Instead of making this supplemental pen with a shank like the other, we form it in one instance into a spring 4, as shown in Figs. 1 and 2, and in another instance we attach to it the form of spring seen in Figs. 3 and 4. The kind of spring used, however, may be varied within limits determined only by the character of the device and the uses for which it is intended. It is obvious that many different forms may be used. Though no particular form is essential to our invention, generically speaking, we hereby represent two forms which we have found convenient and effective in use. The first-mentioned form is a mere lateral offset from the shank, bent up to the form shown, so as to overlie the top of the holder when the pen is in place, and is arranged so as to yieldingly hold the point of the supplemental pen slightly in advance of the other, or in such position that in use it will be in drawing contact with the paper, while the other is out of contact therewith. The other form of spring is shown in Figs. 3 and 4. It consists of a small piece of metal or strip of wire 5, fastened to the upper part of the shank and bent around and back toward the point of the pen and deflected over toward the adjoining pen, so as to bear at its free end on the under side thereof, as seen in Fig. 3. These two forms are equally effective in use; but the last-mentioned has the advantage of being concealed and out of sight. Whatever kind of spring is used, however, it is obvious that it must be so arranged as to hold the point of the supplemental pen in advance of the other, as above described.

In pivoting the supplemental pen to the side of the other we prefer to interpose between them and make rigid with the main pen a thin strip of metal 5. This serves to separate the pen-points the requisite distance for drawing parallel lines, which distance, and of course the space between the lines, may be varied by using strips of metal of different thicknesses. It also affords a firmer



seat for the rivet and makes the connection stronger and adds to the durability of the device.

It is frequently desirable to rule parallel lines of varying distances apart, and our invention includes means for adjusting the pen-points, so as to accurately space these lines, whereby with a single stroke a number of accurately-spaced parallel lines may be drawn without requiring any skill in the use of or attention to the position of the ruler. This, it will be seen, is a great advantage, inasmuch as without the aid of measuring-instruments it is difficult to rule groups of parallel lines spaced with accuracy. To accomplish this adjustment of the pen-points, we have contemplated the use of a milled button screwing upon a small threaded pin projecting from one side of the fixed pen, or preferably the metal strip between the pens, the screwing of the button in one way or another serving to spread the points apart, in an obvious manner. Any other form of adjusting device, however, may be used, the particular kind or construction not being material to our invention in its broad sense.

The means we have illustrated in the drawings are as follows: 6 is a small threaded pin seated in the metal strip 5, which is interposed between the pens. This pin would be seated in the side of the pen itself, however, were this interposed strip dispensed with. 7 denotes a small button having a milled edge and screwing upon this threaded pin. The free end of the pin extends out through an opening 8 in the outer side of the pen. It is obvious that as the button is screwed along the pin toward the outer end it will bear against the inner wall of the outer side of the pen and force the two pens apart, and that as it is screwed in a reverse direction it will allow the pens to assume their normal position close together, separated only by the interposed strip or the adjacent sides of the two pens.

Such being the construction, the operation of ruling with our pen is extremely simple; in fact, it does not differ from the manner of using other pens, except that it requires the exercise of a little more pressure in drawing double or treble lines than when ruling a single line. It being understood that the point of the pivoted pen is normally held by the spring in advance of the other, it is obvious that when a single line is to be ruled a light pressure only is required, for if the stress of the spring be overcome the other pen-point is immediately brought down to the paper and a double line is drawn. If the pen is constructed to have a capacity for drawing treble lines, it must, of course, have two pivoted pens, and there must be a spring between each pen. We have found, however, that the double pen is preferable, as it is

neater in appearance, cheaper to make, and quite efficient in use.

Fig. 5 illustrates samples of ruling with the pen and shows the adaptability of the device to different kinds of ruling. To make the broken lines, it is only necessary to relieve the pressure of the hand on the holder, when the spring causes the points to separate, as described.

We have shown the supplemental pen pivoted on the right-hand side of the main or holder pen. While this is the preferred arrangement for right-handed persons, it might be reversed—that is, the pivoted pen be on the other side, so as to come next to the ruler. This, however, does not give so firm a guide as when the fixed pen is the guiding one.

We are aware that multiple-point pens are not new, and that we do not claim; but we believe ourselves to be the first to provide a multiple-point pen wherein one pen-point is normally held by a spring in advance of the other, so that by slightly varying the pressure the pen may be made to rule single or double lines; also, that we are the first to provide a multiple-point pen with means whereby the points may be set to rule parallel lines of different distances apart.

What we claim and desire to secure is—

1. In combination with a ruling-pen of the kind described, a supplemental pen pivoted to the side thereof, and a spring arranged to hold the point of one pen slightly in advance of the other, substantially as described.

2. In combination with a ruling-pen of the kind described, a supplemental pen pivoted to the side thereof, a spring arranged to hold the point of one pen in advance of the other, and means whereby the points may be set at varying distances apart, substantially as described.

3. The combination of the pen 1, adapted to be attached to any ordinary holder, the supplemental pen 2, connected to the pen 1 by the pivot 3, and the spring 4, arranged to hold the point of the pen 2 in advance of that of the pen 1, substantially as described.

4. The combination of the pen 1, adapted to be attached to any ordinary holder, the supplemental pen 2, connected to the pen 1 by the pivot 3, the spring 4, arranged to hold the point of the pen 2 in advance of that of the pen 1, and the milled button 7, screwing upon the threaded pin 6 and acting to spread the points apart, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY H. HAZEN.  
HENRY LYDDON.  
THOMAS FARMER.

Witnesses:

WILLIAM H. DORWORTH,  
IMLA HOLLOWAY.