(No Model.)

F. A. ALTENEDER.

DRAWING PEN.

No. 480,541. Patented Aug. 9, 1892.

FIG. 1.

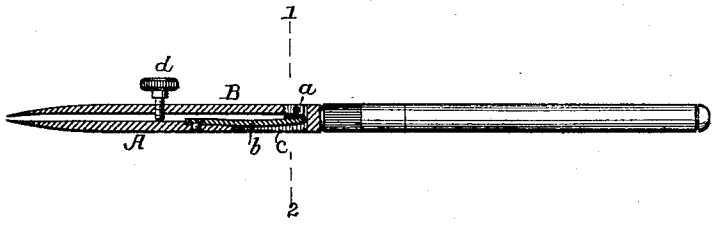


FIG. 3.

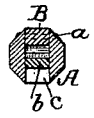


FIG. 2

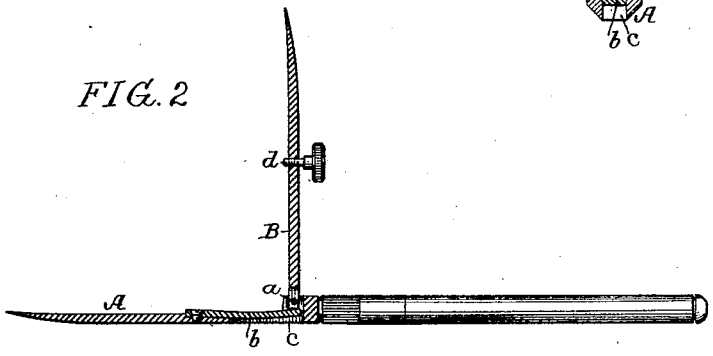
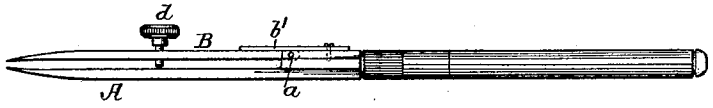


FIG. 4.



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UNITED STATES PATENT OFFICE.

FERDINAND A. ALTENEDER, OF PHILADELPHIA, PENNSYLVANIA.

DRAWING-PEN.

SPECIFICATION forming part of Letters Patent No. 480,541, dated August 9, 1892.

Application filed May 16, 1892. Serial No. 433,136. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND A. ALTENEDER, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Drawing-Pens, of which the following is a specification.

The object of my invention is to so construct a drawing-pen, bow-pen, compass-pen, or the like that the blades of the same can be readily cleaned without interfering with or altering the desired adjustment of said blades of the pen in respect to each other, and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a side view, partly in section, of a drawing-pen constructed in accordance with my invention, the blades being in the position which they assume when the pen is in use. Fig. 2 is a view similar to Fig. 1, but showing the blades separated for the purpose of cleaning the same. Fig. 3 is a transverse section, on an enlarged scale, on the line 1 2, Fig. 1; and Fig. 4 is a side view illustrating a modification of the invention.

Ordinary drawing-pens having one or both of the blades pivoted and in which the adjustment of the blades in respect to each other is effected by a set-screw passing through an opening in one blade and adapted to a threaded opening in the other blade are objectionable because this set-screw must be withdrawn from the threaded opening whenever it is desired to separate the blades for the purpose of cleaning the same, a new adjustment of the blades in respect to each other being necessary after each cleaning operation.

In ruling work where it is important that all of the lines shall be alike great care in adjustment is required after each cleaning of the pen.

In carrying out my invention I provide one of the blades of the pen with an adjusting set-screw which simply bears upon the other blade and limits the approach of the points of the blades, said blades being caused to approach each other by the action of a suitable spring.

In the drawings, A represents the fixed blade of a drawing-pen, and B a blade pivoted to the fixed blade at *a* and acted upon by a spring *b*, secured to said fixed blade and adapted to a longitudinal slot *c* therein, this spring acting upon the pivoted blade at a point beyond the fulcrum of the same, so that its tendency is to cause the point of the pivoted blade to approach and, if not restricted, to come in contact with the point of the blade A. To a threaded opening in the blade B, however, is adapted a set-screw *d*, which bears upon the inner side of the blade A and serves to limit the approach of the two blades, thus regulating the distance apart of the points of the blades to accord with the desired width of the line to be drawn.

When it is desired to clean the pen, it is simply necessary to raise the blade B, as shown in Fig. 2, whereupon the inner faces of the blades are exposed for cleaning purposes, the spring tending to hold the blade in the elevated position, and when the blades have been properly cleaned the blade B can be restored to its former position, the adjustment of the blades, dependent upon the set-screw *d*, being then precisely the same as before.

Both of the blades of the instrument may be pivoted, if desired, and the adjusting-screw may be carried by either blade, and different forms of springs may be used for acting upon the pivoted blade.

In Fig. 4, for instance, I have shown a spring *b'* acting upon the outer side of the blade B to close the same, this spring being pivoted at the rear end, so that it can be turned to one side and thus moved out of the way when it is desired to raise the blade B.

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

1. A drawing-pen having a pivoted blade acted upon by a spring tending to cause said pivoted blade to approach the other blade, but permitting the free separation of the blades, and a set-screw carried by one blade and having a bearing upon the other for limiting the approach of the blades, substantially as specified.

2. A drawing-pen having a fixed blade and a pivoted blade free to move away from the fixed blade, a spring acting upon said pivoted blade at a point beyond the fulcrum, so as to tend to move the point of the blade toward that of the fixed blade, and a set-screw carried by one blade and having a bearing upon

the other for limiting such approach, substantially as specified.

3. A drawing-pen having a fixed blade with longitudinal slot, a pivoted blade free to move away from the fixed blade, a spring carried by said fixed blade, adapted to the slot of the same and acting upon the pivoted blade so as to close the same, and a set-screw carried by one blade and having a bearing upon the other, so as to limit the approach of the blades, substantially as specified.

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

FERDINAND A. ALTENEDER.

Witnesses:

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