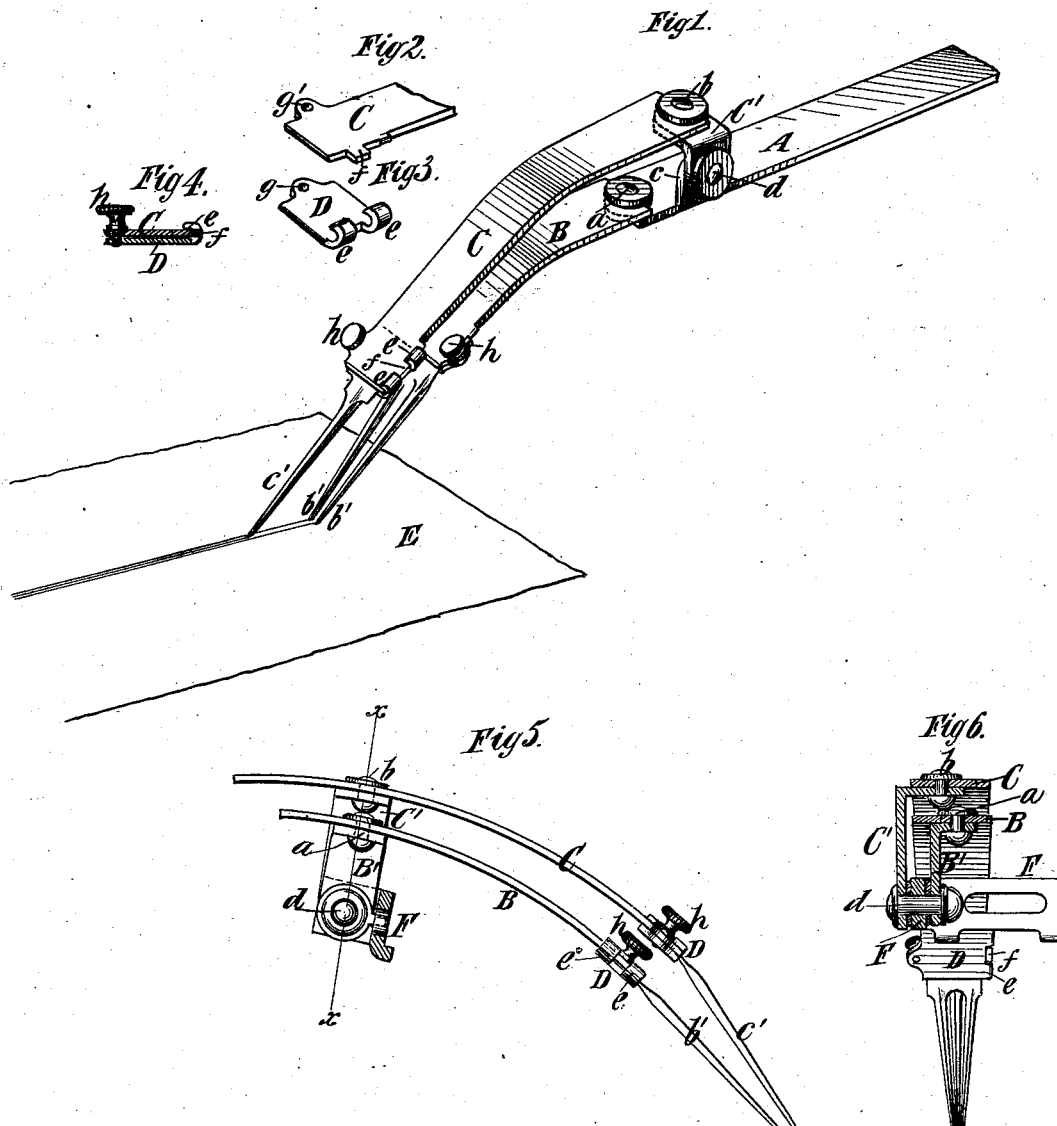


(No Model.)

W. A. McADAMS.
PEN HOLDER FOR RULING MACHINES.

No. 260,590.

Patented July 4, 1882.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM A. McADAMS, OF BROOKLYN, NEW YORK.

PEN-HOLDER FOR RULING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 260,590, dated July 4, 1882.

Application filed January 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. McADAMS, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pen-Holders for Ruling-Machines, of which the following is a specification.

The invention relates to means for providing for the adjustment of the pens which are used for two colors, as for ruling head-lines in account-books, &c.; and the principal object is to permit and provide for the adjustment of such pens laterally relatively to each other, so that the lines produced in one color may be equally or otherwise desirably interspaced between those produced in another color, or so that the lines produced in one, two, or more colors may be interspaced in any way desired.

To this end my invention consists essentially in pivoting the pen-holders to their supports by upright pivots, so that they may be readily adjusted laterally relatively to each other; and I also pivot one or both of said holders to an extension piece or bracket by a horizontal pivot or pivots extending transversely to the length of the pen-holders, so that one or both of them may be readily adjusted downward and upward to cause the pens to bear with greater or less pressure on the paper, all as fully hereinafter described.

The invention likewise consists in a novel construction of clamp for securing the pens to their holders.

In the accompanying drawings, Figure 1 represents a perspective view of two pen-holders embodying my invention, and a piece of paper whereon the pens are ruling. Fig. 2 represents a perspective view of the end portion of one of the holders with its clamp removed. Fig. 3 represents a perspective view of the clamp alone. Fig. 4 represents a transverse section of the pen-holder and clamp together. Fig. 5 represents a side view of two open holders of slightly-modified construction; and Fig. 6 represents a transverse section on the dotted line *xx*, Fig. 5.

Similar letters of reference designate corresponding parts in all the figures.

Referring first to Figs. 1 to 4, inclusive, A designates the extension-piece, which is adapted to be clamped to the pen-bar of a ruling-machine, and B C designate the two pen-hold-

ers which are carried thereby. The holder B is pivoted by an upright rivet or pivot, *a*, to the end of the extension-piece A; but the holder C is pivoted by an upright rivet or pivot, *b*, to an angle-piece, *C'*, which may be considered as a part of the holder. The extension-piece A has on its side an upturned lug or ear, *c*, and the upright arm of the angle-piece *C'* is pivoted to this lug by a horizontal pivot, *d*, extending transversely to the length of the pen-holders while the horizontal arm carries the pen-holder C.

The pen-holder B is represented as carrying two pens, *b'*, which are designed to rule lines of one color—say red—and the holder C is represented as carrying a single pen, *c'*, which is designed to rule lines of another color, say blue.

The extension-piece A constitutes a support for the pen-holder B, while the pen-holder C is supported directly by the angle-piece *C'* and indirectly by the extension-piece A.

The pens might be secured to the pen-holders in any suitable manner; but I prefer to use clamps D, one of which is clearly shown in Fig. 3. It is provided on one side with claws or lugs *e*, which are adapted to fit upon or over the edge of the holder, and the latter may have a lug or ear, *f*, projecting from its side and adapted to enter between the claws or lugs *e*, and thus hold the clamp against slipping upon the holder.

In the side of the clamp D opposite the claws *e* is a hole, *g*, and in the corresponding side of the holder is a hole, *g'*, and when it is desired to clamp a pen to the holder the end of the pen is inserted between the clamp and the holder, and is clamped by turning a screw, *h*, inserted in holes *g g'*.

Inasmuch as the two holders B and C are pivoted at *a b*, they may be adjusted laterally relatively to each other, and by this adjustment I enable the line made by the pen *c'* in the holder C to be made half-way between the two lines made by the pens *b'*, or at any required distance from either line.

The angle-piece *C'* of the holder C being pivoted at *d*, the said holder may be swung upward or downward to compensate for wear of the pen *c'*, or to cause the pen to bear upon the paper E with more or less pressure.

The extension-piece A may be made flexible

at that part which is secured in the clamp of the pen-bar, and by bending it more or less, as is desired, both pen-holders may be adjusted upward and downward together.

5 Referring now to Figs. 5 and 6, it will be seen that both pen-holders B C are pivoted at *a b* to angle-pieces B' C', and the angle-pieces are pivoted at *d* to a bracket or arm, F, which is to be secured to the machine.

10 The pens *b' c'* of the two holders are shown as secured in place by clamps D, like those previously described.

The two holders may be swung or adjusted laterally upon their pivots *a b* relatively to each other, and as both the angle-pieces B' C' 15 are pivoted at *d* they may both be adjusted upward and downward.

By my invention I provide for adjusting the pen-holders laterally relatively to each other 20 with greater accuracy and convenience than is possible where the pens themselves must be bent to adjust or set their points.

What I claim as my invention, and desire to secure by Letters Patent, is—

25 1. The combination, with a pen-holder for a ruling-machine and a support therefor, of an upright pivot connecting said holder with its support so that it may be readily swung or adjusted laterally, substantially as and for the 30 purpose specified.

2. The combination, with an extension-piece or bracket, of two pen-holders carried thereby

and separately pivoted, substantially as herein described, for adjustment laterally relatively to each other, as herein set forth. 35

3. The combination, with a pen-holder for a ruling-machine, and its support, of a horizontal pivot extending transversely to the length of the pen-holder and connecting the latter with its support, whereby provision is afforded for 40 adjusting the pen-holder upward and downward independently of the other pen-holders of the machine, substantially as specified.

4. The combination, with the extension-piece or bracket A, the pen-holders B and C, and 45 the angle-piece C', of the upright pivot *a*, connecting the pen-holder B and extension-piece A, the horizontal pivot *d*, connecting the angle-piece C' and extension-piece A, and the upright pivot B, connecting said angle-piece and 50 pen-holder C, all substantially as specified.

5. The combination, with the pen-holder, of a clamp, D, provided with the claws *e* and the screw *h*, substantially as and for the purpose specified. 55

6. The combination, with the pen-holder provided with a lug, *f*, of the clamp D, provided with the claws *e*, and the clamping-screw *h*, substantially as and for the purpose specified.

WILLIAM A. McADAMS.

Witnesses:

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