No. 613,811. Patented Nov. 8, 1898.

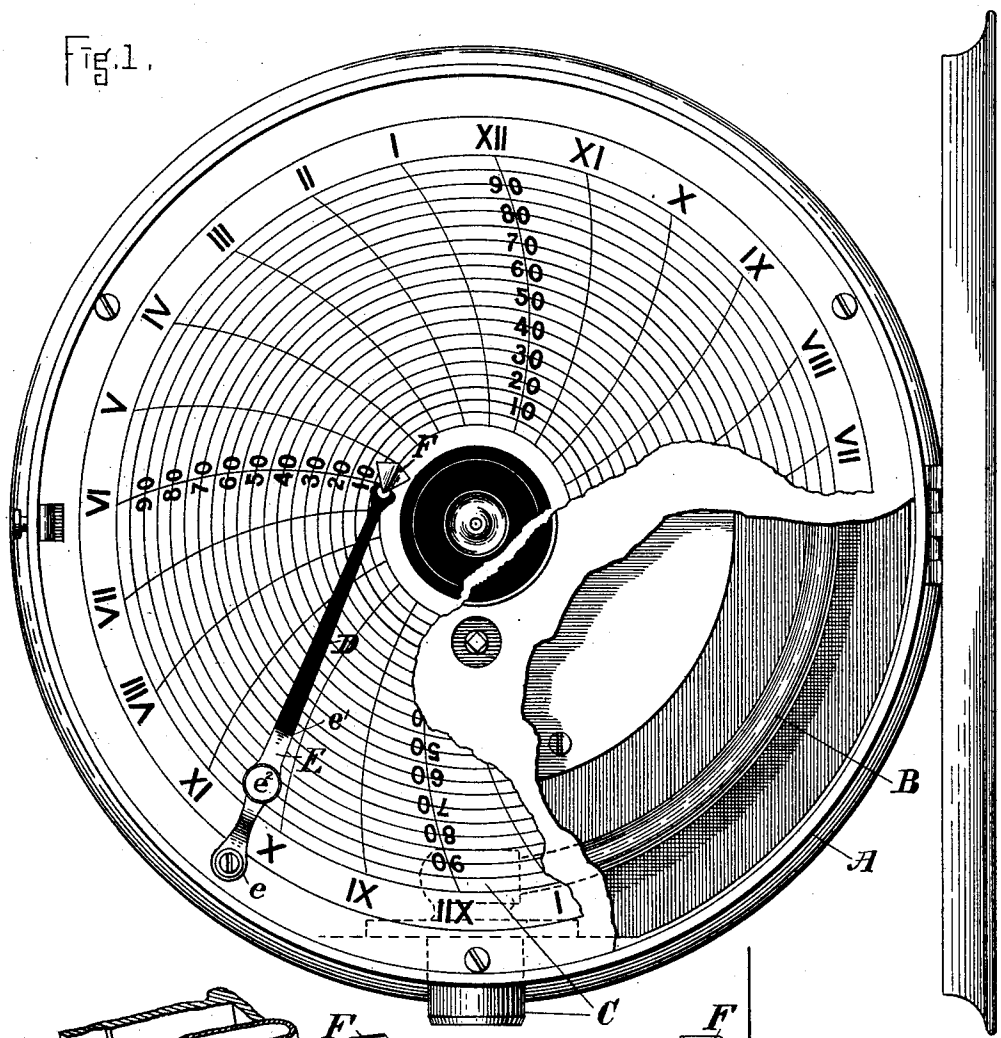
F. L. WOLFE.

PEN OR PENCIL LEVER FOR RECORDERS.

(Application filed Feb. 16, 1898.)

(No Model.)

Fig. 1.



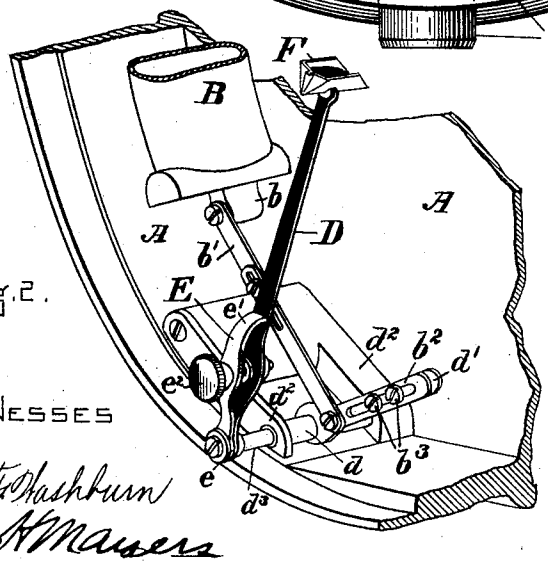


Fig. 2.

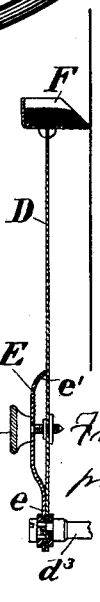


Fig. 3.

Witnesses

R. F. Washburn

C. A. Masers

Inventor,

Frank L. Wolfe,

per W. H. Singleton.

attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK LESLIE WOLFE, OF MEDFORD, MASSACHUSETTS, ASSIGNOR TO THE CROSBY STEAM GAGE AND VALVE COMPANY, OF BOSTON, MASSACHUSETTS.

PEN OR PENCIL LEVER FOR RECORDERS.

SPECIFICATION forming part of Letters Patent No. 613,811, dated November 8, 1898.

Application filed February 16, 1898. Serial No. 670,567. (No model.)

To all whom it may concern:

Be it known that I, FRANK LESLIE WOLFE, a citizen of the United States, residing at Medford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Pen or Pencil Levers for Recorders; and I 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.

This invention relates to an improvement in pen or pencil levers for recorders, and relates more especially to means by which the lever is made adjustable.

The invention consists in the construction hereinafter pointed out.

In the annexed drawings, Figure 1 shows a front view of a recording-gage with the glass thrown open, having a portion of the dial removed, showing the internal construction. Fig. 2 shows a perspective view, enlarged, of a portion of the interior of the case. Fig. 3 shows a detailed radial section taken through the pen-lever.

In the drawings, A represents the usual case of a recording-gage, containing the usual Bourdon-tube spring B, which is anchored in the socket C, as indicated in dotted lines in Fig. 1. At its other end the Bourdon-tube spring B has a tip b, which is attached to one end of the lever b'. At the other end this lever b' is attached to a link b^2, which in turn is adjustably attached by screws b^3 to another link or arm d', secured to a shaft d. This shaft d turns in bearings d^2, fastened to the lower inside of the case A. The projecting end d^3 of the shaft d is connected to or carries the pen-lever D, at the outer end of which is the ink-holder or pen F, the point of which slides over the dial, upon which it makes a record. Outside of the lever D a bent or curved piece E is secured by its lower end e to the shaft d, and its upper inwardly-curved end e' bears against the pen-lever D. Between its two ends a screw e^2 passes through the curved piece E and is secured or threaded through the pen-lever D. By this means in turning the screw e^2 the pen-lever D is moved away from or toward the curved piece E micrometrically. This movement is induced by the spring action of the pen-lever between its union at one end with the curved piece E and the upper part of this curved piece where it is in contact with it. By turning the screw e^2 inward the pen-lever is drawn toward the curved piece, and by this action its upper part carrying the pen is thrown in an opposite direction, or toward the dial. Withdrawing the screw this upper part of the pen-lever, with its pen, moves outward, or from the dial, due to the yielding of the lower part of the pen-lever between the two ends of the curved piece.

Having described my invention, what I claim is—

1. In a recording-gage, the combination of the pen-holder, support therefor, a plate secured to such support, and bearing at both ends upon the pen-holder, and means for varying the distance between the pen-holder and plate, as set forth.

2. The combination of the pen-holder, D, the shaft, d, to which the pen-holder is secured, the curved plate, E, secured at one end to the shaft, d, and at the other end bearing against the pen-holder, and the screw, e^2, connecting the curved plate, E, between its ends with the pen-holder, D, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK LESLIE WOLFE.

Witnesses:
J. H. MILLETT,
ARTHUR L. BOWKER.