H. AMES.
Telegraph-Key.

No. 213,312. Patented Mar. 18, 1879.

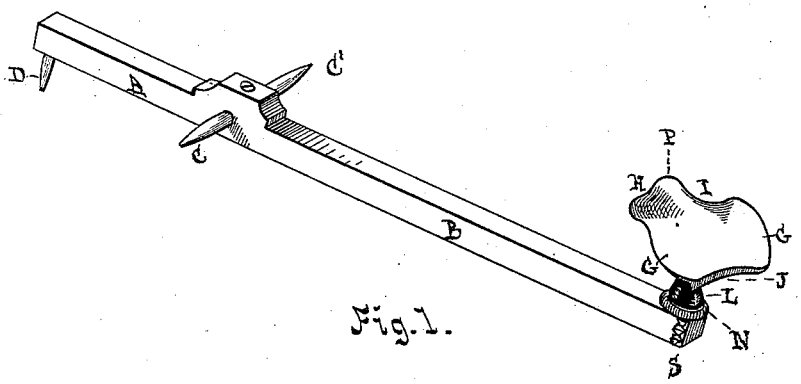

Fig. 1.

Witnesses:

L. Quaid

Levi W. Perkins.

Inventor:

Henry Ames

UNITED STATES PATENT OFFICE.

HENRY AMES, OF WILTON, NEW HAMPSHIRE.

IMPROVEMENT IN TELEGRAPH-KEYS.

Specification forming part of Letters Patent No. **213,312**, dated March 18, 1879; application filed October 28, 1878.

To all whom it may concern:

Be it known that I, HENRY AMES, of Wilton, in the county of Hillsborough and State of New Hampshire, have invented a new and useful Improvement in Telegraph-Keys, of which the following is a specification:

In the drawing, making a part of this specification, the knob and the key-lever of a telegraph-key are represented in perspective.

The main features of my improvement in keys for sending messages by electric telegraph consist in the position and form of the knob of the key, whereby the fingers of the operator are conveniently applied, and at the same time partially relieved from the fatigue that attends the use of the common circular knob having a flat surface; also, in the combination of the improved knob with the screw-adjustment and lever to which the knob is attached.

It is very desirable that the fingers and thumb of the operator be in a free and natural position, and to effect this there are two depressions or open grooves, H and I, upon the side or the knob that is farthest from the operator, which form rests or supports for the fingers, while they are at the same time slightly separated by the intervening prominent part P. These grooves are usually occupied by the first and second fingers, but the second and third fingers may also be conveniently used.

The part G, at the top of the knob, is nearly plane or level, and from it on the side opposite the two grooves a narrow lip, J, projects downward, forming a slightly-curved rest to fit the ball of the thumb. This lip is thin at its lower edge, thus allowing the soft part of the thumb to have a firm hold upon the lower side of the knob and facilitate the upward movement of the key-lever. The fingers and thumb resting mainly upon the parts H I J are in a suitable position for the proper play of the muscles and for insuring a firm gripe of the knob and its prompt action downward or upward.

The shank L of the knob terminates in a screw, S, which enters the end B of the lever A B. The set-nut N is placed between the lever and the base of the knob, and when tightened holds the knob at any required horizontal angle with the lever, thus allowing the operator to set the knob in the position that he prefers and which is most suitable for his peculiar mode of touch or manipulation of the key. The height of the knob is also regulated by the screw S.

The short end A of the lever is provided on the lower side with a platinum point, D, which makes or breaks electric contact as the lever moves upon its fulcrum C C′ by the action of the fingers upon the knob.

What I claim is—

A telegraph-key having a knob provided with grooves or indentations for the fingers and a curved recess and lip for the thumb, together with a shank and screw for attachment to the lever of the key, and for the adjustment of the knob in a horizontal direction at any required angle with the lever A B, substantially as described.

HENRY AMES. [L. S.]

In presence of—

L. QUAID,

LEM W. PERKINS.