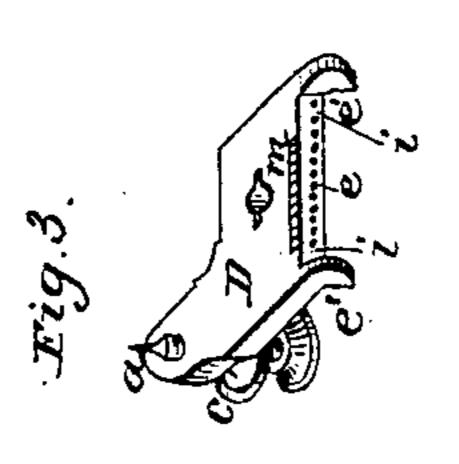
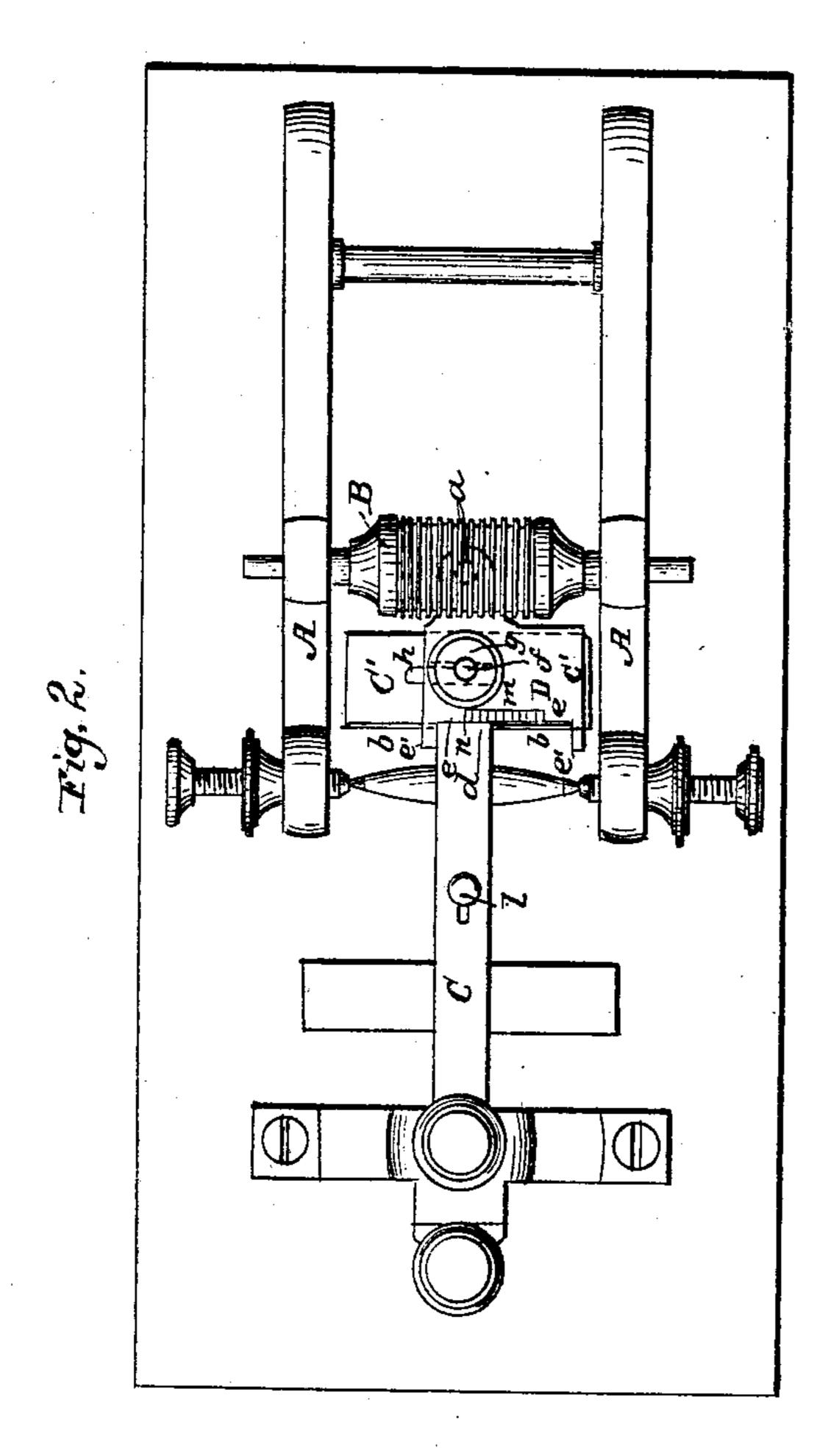
R. HENNING.

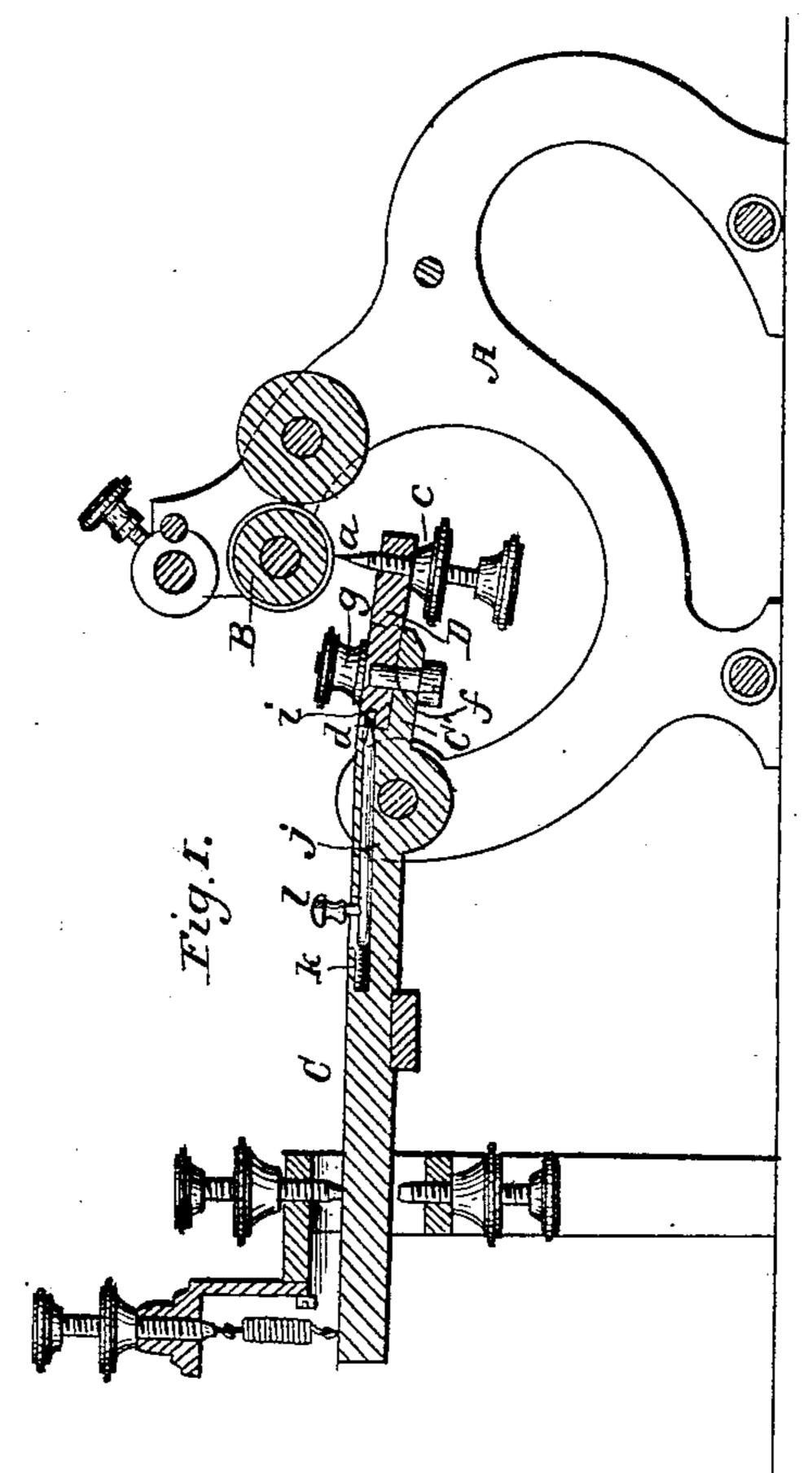
Telegraphic Register.

No. 42,253.

Patented April 5, 1864.







Witnesses: Holoonily Geoll Reev Inventor:
Bleuning
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United States Patent Office.

ROBERT HENNING, OF OTTAWA, ILLINOIS, ASSIGNOR TO J. D. CATON, OF SAME PLACE.

IMPROVEMENT IN TELEGRAPH-REGISTERS.

Specification forming part of Letters Patent No. 42,253, dated April 5, 1864.

To all whom it may concern:

Be it known that I, ROBERT HENNING, of Ottawa, in the county of La Salle and State of Illinois, have invented a new and useful Improvement in Telegraph-Registers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of a register with my improvement. Fig. 2 is a plan of the same with some of the upper. parts omittted to show the improvement. Fig. 3 is a perspective view of the sliding pen-holder.

Similar letters of reference indicate corre-

sponding parts in the several figures.

In telegraph-registers, as most commonly constructed, the style or steel pen is so attached to the pen-lever as to be immovable laterally; and in order to write upon the paper in as many lines as practicable the paper has to be moved laterally, and the working-surface of the rollers has to be of a length almost equal to twice the width of the paper. As one of the rollers is pressed upon the paper by means of springs bearing on each end of the roller, every time the paper is moved laterally these springs have to be readjusted, else the pressure of the roller will be greater on one edge of the paper than on the other, causing it to run untrue in its passage between the rollers.

The main object of this improvement is to obviate the necessity of moving the paper laterally, and thereby obviate the above difficulty; and to this end it consists in the use of a penholder which is movable in a direction parallel with the length of the rollers, in combination with a plurality of grooves in the roller, against which the pin operates instead of only one groove, as in the rollers of the registers heretofore constructed, the said grooves corresponding in number and distance apart with the lines of writing desired to be made on the paper; and my invention further consists in a certain mode of combining the movable penholder with the pen-lever, and adjusting it relatively to the several grooves of the roller, whereby the said pen is enabled to be brought |

exactly opposite to the said grooves, and the lines of writing on the paper are always made at equal distances apart, so that a greater number of lines are enabled to be made upon the paper, and the paper thereby economized.

To enable others skilled in the art to make and use my invention, I will proceed to de-

scribe its construction and operation.

A is the frame which contains the bearings for the axles of the rollers which feed the paper, and for the several axles of the clocktrain, and also the center screws which support the rock-shaft of the pen-holder.

B is the many-grooved roller, arranged in the usual position in the said frame, and having its grooves at equal distances apart.

C is the pen-lever, arranged and operating in the usual manner, but instead of having the pen or style a screwed into it in the usual manner, has the end next the roller B formed with a flat T-shaped head, C', for the reception of the movable pen-holder D, into which the pen or style a is screwed and secured by a set-nut, c, in the usual manner.

The pen-holder D consists of a flat plate having a straight edge, e, which fits against a shoulder, d, on the lever C, and two lugs, e'e', which lap over the straight edge b of the Tshaped head of the pen-lever, and when placed upon the said holder is thereby prevented from moving lengthwise of the pen-lever when placed upon the flat upper surface of its T-shaped head C, where it is secured by means of a binding-screw, f, and nut g, the said nut passing through a slot, h, in the head C', which permits the adjustment of the pen-holder in a direction parallel with the length of the grooved roller or transverse to the length of the penlever.

The edge c has provided in it a number of holes, i i, corresponding in number and in the distance of their centers from each other with the grooves in the roller B, the said holes being for the reception of the point of a sliding pin or bolt, j, which is located within the pin-lever and forced into any one of the said holes i i that may be opposite to it by means of a spiral spring, k, arranged behind it. This bolt serves by entering the proper hole i to hold the pen-holder with the pen or style exactly

opposite any one of the grooves of the roller B. It is drawn back, when it is desired to move the pen-holder, by means of a knob, l.

To adjust the pen or style to the different grooves of the roller the nut g of the set-screw f is slackened and the bolt j withdrawn from the hole i, which it has entered, and the holder is then moved transversely to the lever to bring the boltopposite to the next or any other hole, i, which it then is allowed to enter. The nut g is then screwed up to secure the holder firmly to the lever. To facilitate the adjustment there is a graduated scale, m, on the top of the pen-holder, and an index-point, n, on the lever.

The following is what I claim as my invention and desire to secure by Letters Patent:

1. In combination with the many-grooved roller B, employed to support the paper against the pen or style a, the pen-holder D, attached adjustably to head C', so as to adapt the pen a to be moved longitudinally in respect to the roller B, substantially as and for the purposes herein described.

2. The movable pen-holder D, provided with a series of holes, *i i*, and the spring-bolt *j* or its equivalent, combined with the lever and the many-grooved roller, substantially as and

for the purpose herein set forth.

ROBERT HENNING.

Witnesses:

JAS. C. WARNER,
JOHN D. ELLWANGER.