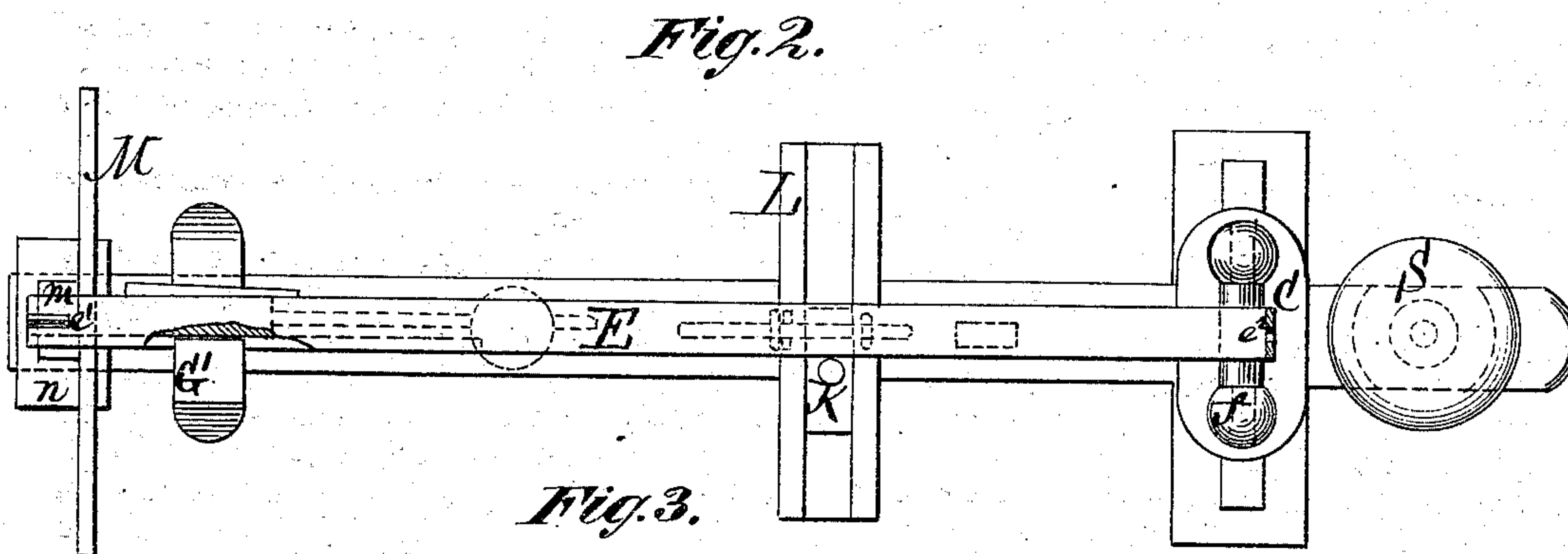
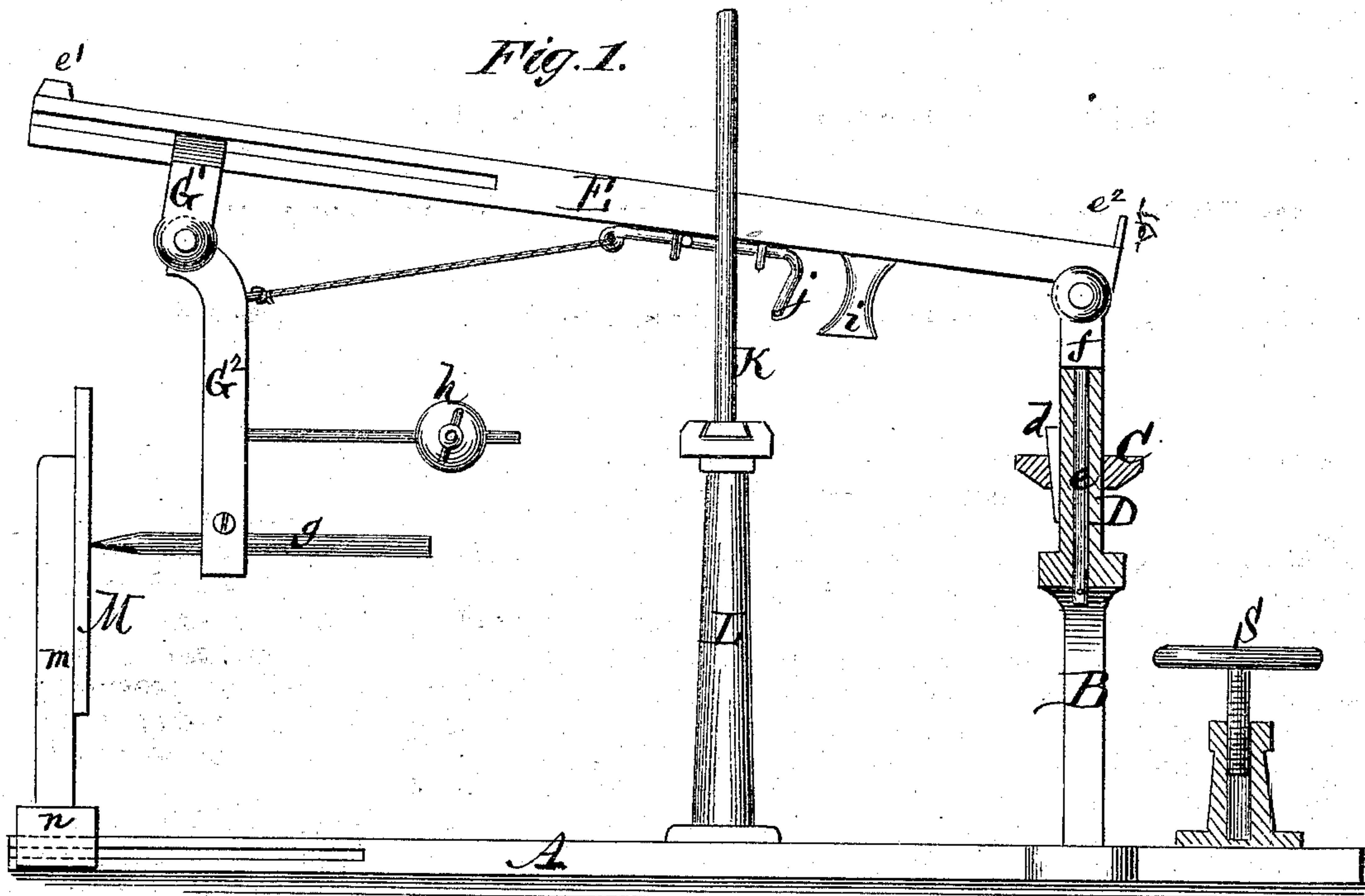


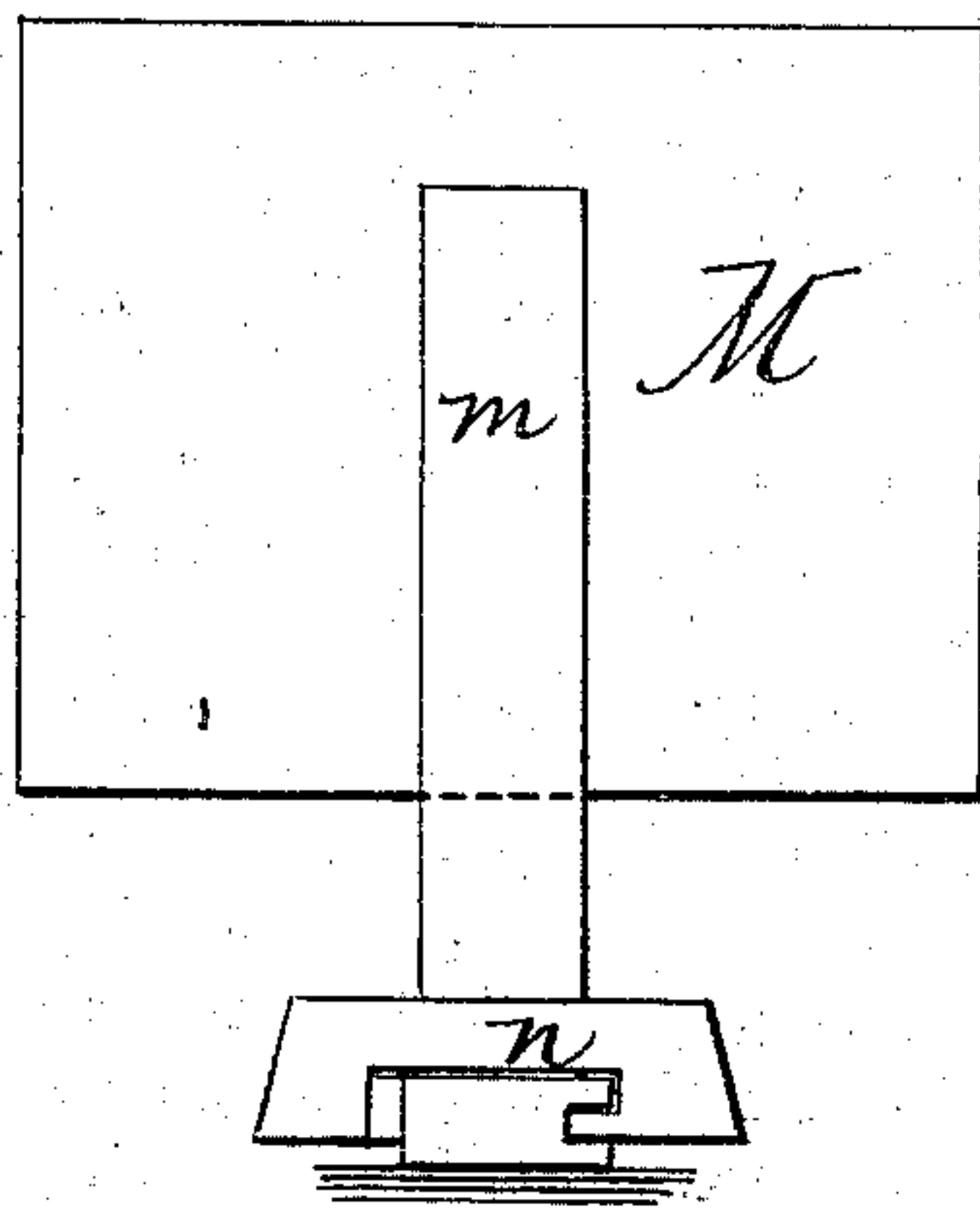
A. MORSE.  
Perspective Drawing Apparatus.

No. 154,068.

Patented Aug. 11, 1874.



*Fig. 3.*



Witnesses  
John Becker.  
Fred. Haynes.

Inventor.  
Andrew Morse.  
By his Attorney  
Brown & Allen.



# UNITED STATES PATENT OFFICE.

ANDREW MORSE, OF SKOWHEGAN, MAINE.

## IMPROVEMENT IN PERSPECTIVE-DRAWING APPARATUS.

Specification forming part of Letters Patent No. **154,068**, dated August 11, 1874; application filed June 22, 1874.

*To all whom it may concern:*

Be it known that I, ANDREW MORSE, of Skowhegan, in the county of Somerset and State of Maine, have invented an Improved Apparatus for Drawing Perspectives, of which the following is a specification:

My invention consists in the combination of an arm-rest, a sight-beam, a pencil-holder, a guide, and a drawing-board, all the parts being adjustable and arranged and operating in the manner and for the purpose hereinafter particularly described and set forth.

In the accompanying drawing, Figure 1 is a side view of my improved apparatus. Fig. 2 is a top view. Fig. 3 is an end view.

Near one end of a base or platform, A, is a standard, B, on the upper portion of which is an adjustable arm-rest, consisting of a board, C, sliding in a vertical bar, D, and held in place by a wedge, *d*, or other suitable device.

The sight-beam consists of a bar, E, the rear end of which is connected with the standard B by a suitable universal joint. In the drawing the joint represented consists of a vertical pivot, *e*, working in the standard B, and having its upper end attached to a cross-head, *f*, to which the rear end of the sight-beam is pivoted horizontally, by which means the sight-beam may be oscillated in any desired direction. On the upper side of the sight-beam are sight-pieces *e*<sup>1</sup> *e*<sup>2</sup> similar to the sight-pieces on fire-arms.

The pencil-holder consists of a bar, G<sup>1</sup>, arranged to slide horizontally on the front portion of the sight-beam, and a bar, G<sup>2</sup>, having its upper end pivoted to the lower side of the bar G<sup>1</sup>, so as to hang vertically, and provided, near its lower end, with a socket for the reception of the pencil *g*. The bar G<sup>2</sup> may be provided with a weight, *h*, to assist in keeping the point of the pencil against the drawing-board, said weight being adjustable, so as to increase or diminish the pressure of the pencil. On the under side of the sight-beam is a knob or projection, *i*, for engagement with the thumb of the operator, and immediately in front of said knob is a sliding bar, *j*, for engagement with the finger. The

bar *j* is connected by a cord or wire with the pencil-holding bar G<sup>2</sup>.

The guide consists of a vertical bar, K, the lower end of which is arranged to slide horizontally in the upper part of a standard, L, extending upward from the platform A, so that it may be moved by the left hand of the operator at pleasure. It may be provided with a lever engaging with the sliding portion and extending downward to be operated by the foot instead of the hand.

The drawing-board M is attached to a standard, *m*, the lower end of which is attached to a block, *n*, arranged to slide horizontally on the platform A, or some suitable projection thereon.

The parts of the apparatus which are arranged to slide may be held in desired positions by means of wedges, set-screws, or other suitable devices.

An adjustable stool, S, may be attached to the base or platform.

The operator sits upon the stool S, resting both arms upon the arm-rest C and "taking sight" through the sight-pieces *e*<sup>1</sup> *e*<sup>2</sup>. With one hand the sight-beam E is operated, the thumb resting against the thumb-piece *i*, and the finger against the finger-piece *j*. With the other hand the guide K is moved toward the right or left, serving as a side rest for the sight-beam, and enabling the operator to draw straight vertical lines. The forward sight-piece *e*<sup>1</sup> is kept in a line between the eye and the outline of the object to be drawn, and by moving the sight-beam so that said sight-piece will follow said outline, the pencil produces the desired figure upon the paper which is attached to the drawing-board M.

The pencil-holder should always hang vertically, in order that the pencil may maintain a uniform position with relation to the drawing-board.

The pencil may at any time be withdrawn from contact with the board by pressing upon the finger-piece *j*.

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

1. The drawing apparatus herein described,

consisting essentially of the sight-beam E, jointed pencil-holder G<sup>1</sup> G<sup>2</sup>, and the vertical drawing-board M, all adjustable, and constructed and arranged substantially as and for the purpose set forth.

2. The combination of the finger-piece j, with the sight-beam and pencil-holder, as shown and described, for the purpose specified.

3. The adjustable guide K, in combination

with the sight-beam, as shown and described, for the purpose specified.

4. The adjustable arm-rest C, arranged as shown and described, for the purpose specified.

ANDREW MORSE.

Witnesses:

EZRA STAPLES,  
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AVERY ALLEN.