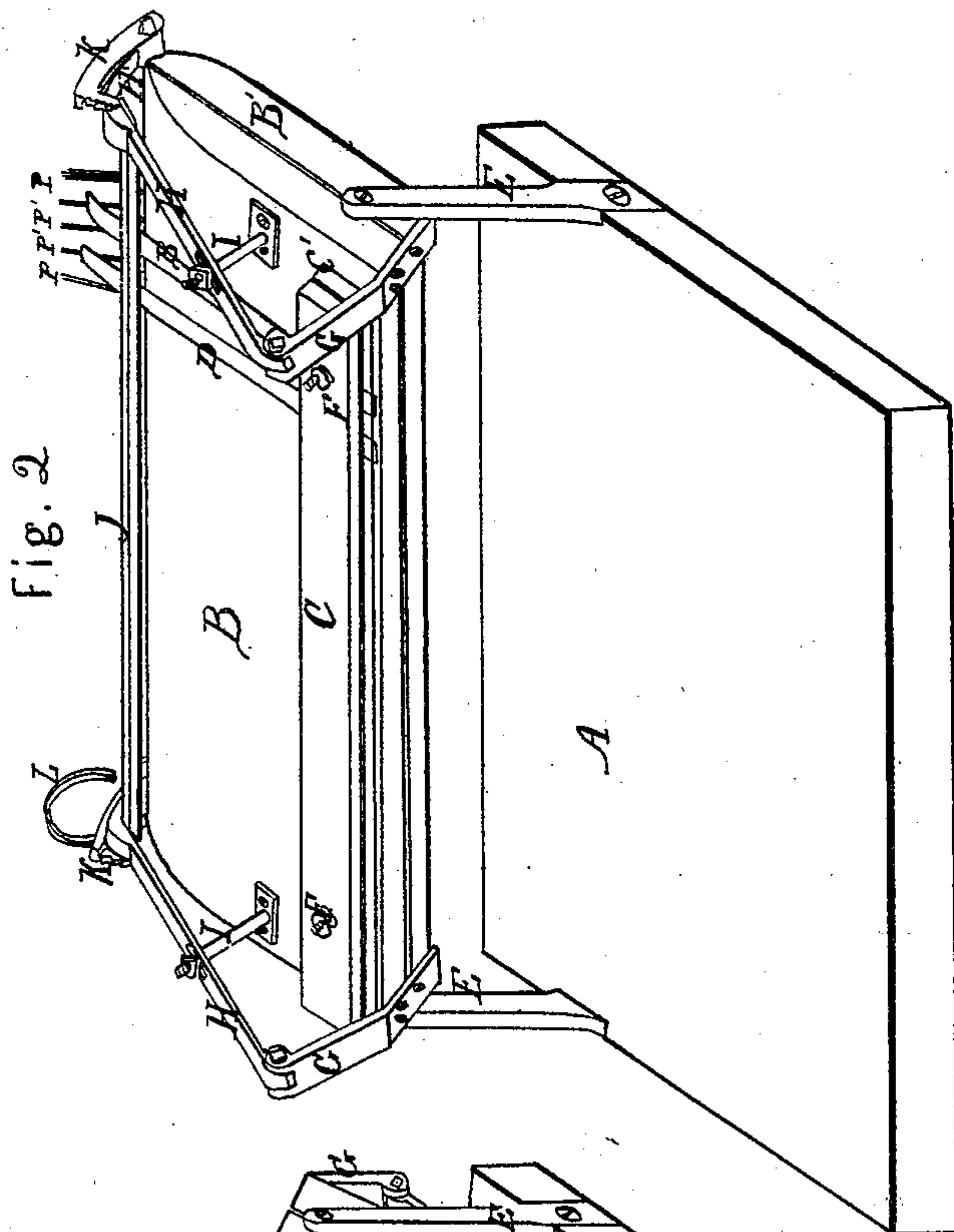


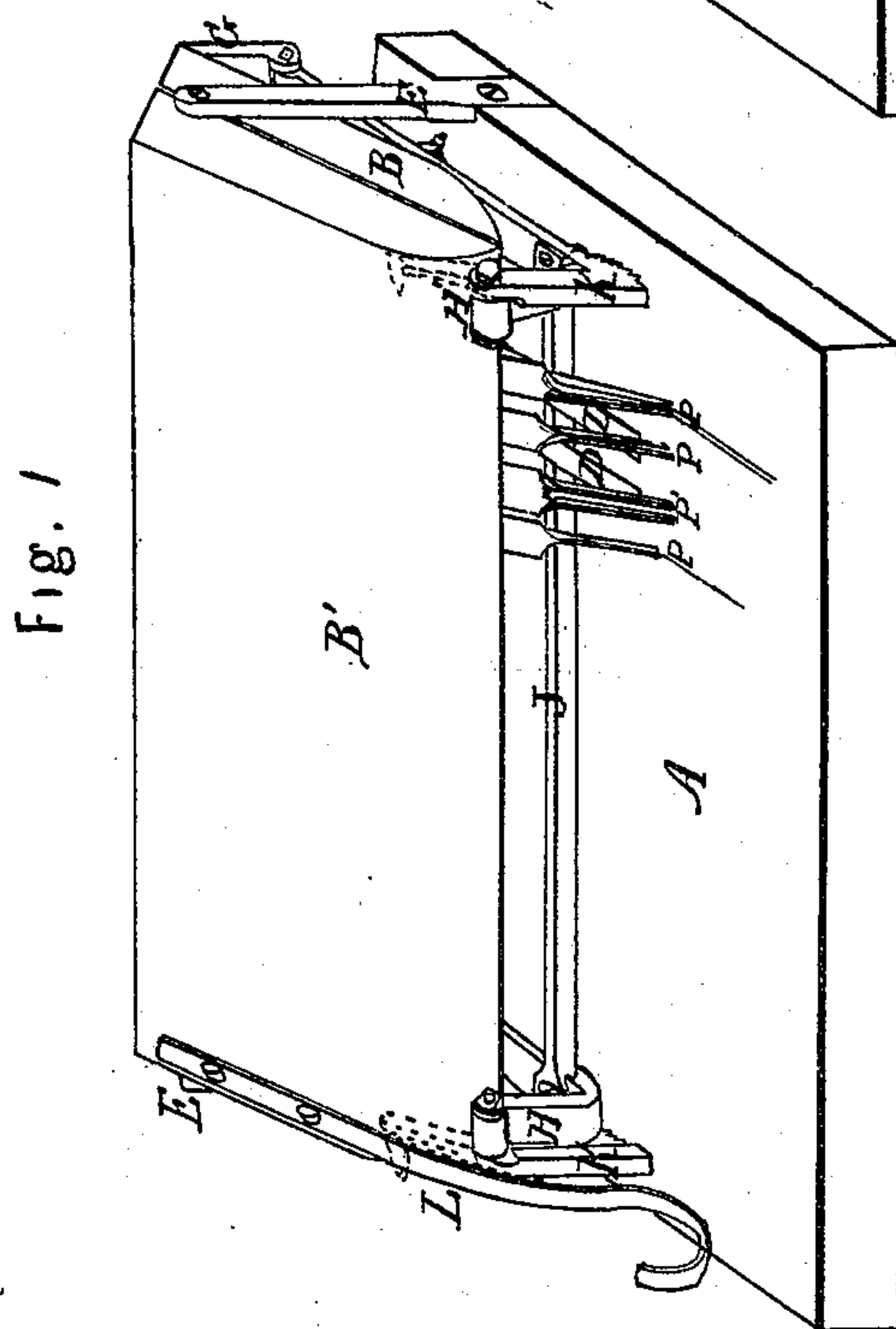
*J. J. Walser*  
*Ruling Mach.*

N<sup>o</sup> 85,550.

*Patented Jan. 5, 1869.*



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Witnesses:

G. H. Chapin  
C. C. Gibson.

**Inventor:**

J. J. Halsen



# United States Patent Office.

JACOB J. WALSER, OF CHICAGO, ILLINOIS.

Letters Patent No. 85,550, dated January 5, 1869.

## IMPROVEMENT IN PAPER-RULING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB J. WALSER, of Chicago, in the county of Cook, and State of Illinois, have invented an Improved Striker for Paper-Ruling Machines; 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, and letters marked thereon, making a part of this description, in which—

Figure 1 is a perspective representation of my invention, as attached to and arranged to operate with the pen-beam of the ordinary paper-ruling machine.

Figure 2, a perspective representation of the same, so turned back as to show the attachment at the under side.

The nature of the present invention consists in supporting the pens above the paper, by means of adjustable rests or plates, bearing on a cross-bar, which is adjusted with hinged levers or bars, so formed as to provide suitable supports for pivoted rests, the lower ends of which move out with the apron, and permit the pens to bear upon the paper when the rule-lines are to be made.

The difficulty now experienced in operating strikers of ruling-machines consists in the care and trouble involved in so placing the pens on the paper as to commence the lines at the proper place or heading, and also to stop the pens on a given line.

To obviate this difficulty, and to provide a more complete machine, is the object of the present invention.

A represents a part of the bed or table of the machine, over which the aprons are moved by the ordinary mechanism now used for that purpose.

B B' represent a two-part pen-beam, which supports the ordinary ruling-pens P P', in the usual manner.

In the drawings, the pen-beam is represented as being pivoted to standards E, which are supported by the table A, but it may be pivoted to any other part of the machine that will permit the pens P P' to occupy a suitable position relative to the table or bed A.

G G are straps, which are rigidly fastened to the back edge of the pen-beam B B', and hinged to levers or bars H, as shown in both figures.

These levers or bars are so adjusted, by means of bolts and nuts I, as to raise and lower the front edge of the pen-beam B B', relative to the table or bed A, and they project upward far enough at their front ends, as shown at H', to support two pivoted rests K, which have teeth or notches on their lower ends, bearing on the apron, and moving with it far enough to let the pens P P' strike the paper when they are to operate.

A two-part clamp, O C', is fastened to the under

side of the pen-beam B B', and supports a series of metal rests, D, corresponding in number with the number of pens P used in the pen-beam, said rests being adjustable in the clamp, and holding the pens in any required position above the paper.

To prevent the rests D from springing down at their front ends, a cross-bar, J, is placed under them, and rigidly fastened to the lever H.

### Operation.

To rule with my improved striker, place the paper over the bed A in the usual manner, then so lower the pen-beam B B' as to bring the pivoted rests K on to the apron which carries the paper forward. This operation will, if the rests D have been properly adjusted, bring the pens P P' down to a position which is a little above the paper. The machine is now put in motion, and the apron carries the paper forward over the table A, and moves the lower ends of the pivoted rests K forward, and gradually brings the pens P P' into position to make the rule-lines.

At fig. 1, the drawing represents the pivoted rests K moved forward, as when the pens P P' are in use, but, by raising the pen-beam B B' by means of the lever L, they will hang parallel with the vertical projections H' of the levers H, and support the pens P P' at a distance above the paper, as aforesaid, preparatory to striking another head.

This striker will raise single, double, and treble ruling-pens for several heads, and drop them according to the heading or headings for which they are set, thus enabling the ruler to stop on one line at the bottom of the page, and to strike several heads at the top of the page, with one length of pens.

The device can be put in operation in a very short time, and left on the machine when not in use, without causing any inconvenience to the operator.

Having thus described my invention, I do not claim the pen-beam B B', it having been used before; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. The combination of the straps G G, hinged to the levers H, bolts and screws I, and pivoted rests K, substantially as set forth and shown.

2. The combination of the clamps O C', adjustable rests D, bar J, levers H, and rests K K, constructed and arranged to operate the pens P P', as and for the purpose specified.

J. J. WALSER.

Witnesses:

G. L. CHAPIN,  
E. E. GEBSON.