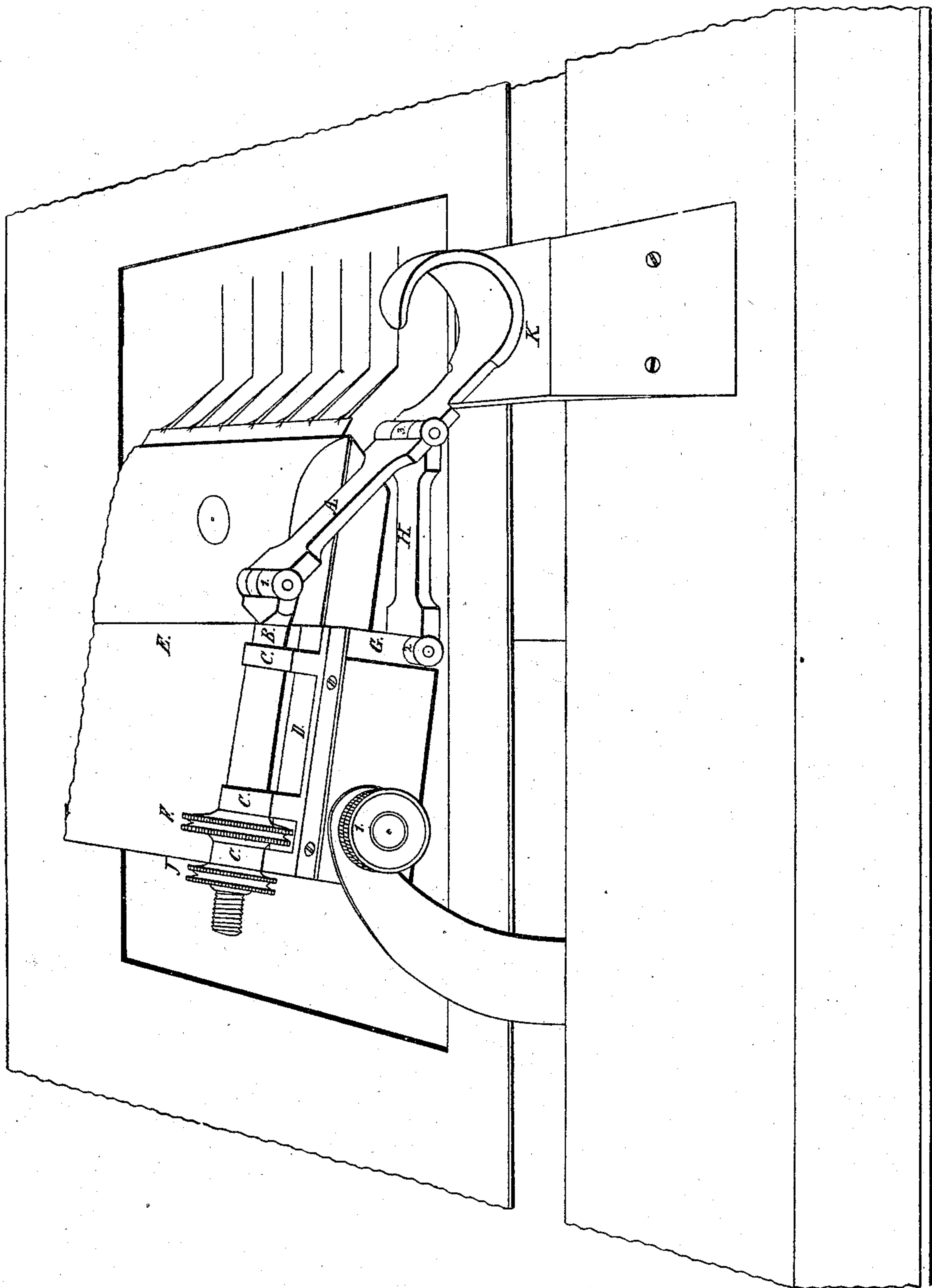


*W. O. Hickok*  
*Paper Ruling Mach.*  
*N<sup>o</sup> 8,168.      Patented Jun. 17. 1851.*





# UNITED STATES PATENT OFFICE.

W. O. HICKOK, OF HARRISBURG, PENNSYLVANIA.

## REGULATOR FOR THE PEN-BEAM IN RULING-MACHINES.

Specification of Letters Patent No. 8,168, dated June 17, 1851.

*To all whom it may concern:*

Be it known that I, W. O. HICKOK, of Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Improvement on the Regulator of the Pen-Beam of the Ruling-Machine; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification and which is a perspective view of the regulator, in combination with a section of the pen-beam and ruling-machine.

The instrument now in use for regulating the position of the pens of a ruling machine, consists of a flexible piece of copper or brass, permanently secured to the pen beam, and bent as occasion requires, until the pens are brought into correct position; and in consequence of the necessity of frequently raising and lowering the pens, this flexible regulator is subject to frequent derangement, and the consequent necessity of a troublesome readjustment. These difficulties are entirely obviated, by substituting my regulator, which is constructed so as to be inflexible and yet capable of the nicest and most ready adjustment.

A, is a piece of grass, bent up at one end in the usual shape (called a foot, for resting on the block K, and also to serve as a means for raising and lowering the pen-beam) and having at the other end a hinge joint (1) connecting it with another piece of brass B, which is made cylindrical and so as to slide accurately through the bearings or posts C, C, C. These posts are connected with, and form part of a plate or base D, which is permanently screwed to the pen beam E. On the other end of this cylindrical piece B, a screw thread is cut which works in and passes through a revolving adjusting nut or finger burr F, which is held between two of the posts; and when turned, causes the cylindrical piece B, to slide to the right or left within the bearings, as occasion may require.

Attached to, and forming part of the plate or base, is a projection G, which is connected by a hinge joint (2) with another piece of brass H, which has at its other end, connection with the first mentioned piece A, by means of a hinge joint (3). Now, as the pen beam turns upon a journal or pivot at I, it is evident that, while the hooked foot of the regulator rests upon the block K, if the finger burr F, is turned, the cylindrical piece B, will slide within the bearings C, C, C, and cause either a depression or elevation of the pens—and also that the raising of the pen beam (by means of a finger applied to the hooked foot of the regulator) and letting it fall, will not alter the adjustment.

In order to prevent the adjusting wheel F, from being moved by accident, after the pen beam has been adjusted, a small set screw wheel J, on the sliding piece, is screwed up against the intervening post, and effectually secures it against being moved by any slight cause.

I do not claim to be the inventor of the flexible, hooked regulator, attached to the pen beam as heretofore constructed; but

What I claim as my invention, and desire to secure by Letters Patent, are—

1. I claim the pieces G, H, A, B, in combination with the hinge-joints (1, 2, 3) arranged and combined substantially and for the purpose, as herein described.

2. I claim the sliding piece B, the bearings C, C, C, and the finger wheel F, in combination with the pieces G, H, A, uniting by hinge joints, or in any other manner substantially the same; using in the construction of the whole machine, any material adapted to the purpose of forming, as herein described, a pen beam regulator, for ruling machines.

W. O. HICKOK.

Witnesses:

C. A. SNYDER,  
JACOB LOOK.