

(No Model.)

T. F. GEARY.
CONSECUTIVE NUMBERING HEAD.

No. 461,408.

Patented Oct. 13, 1891.

Fig. 1.

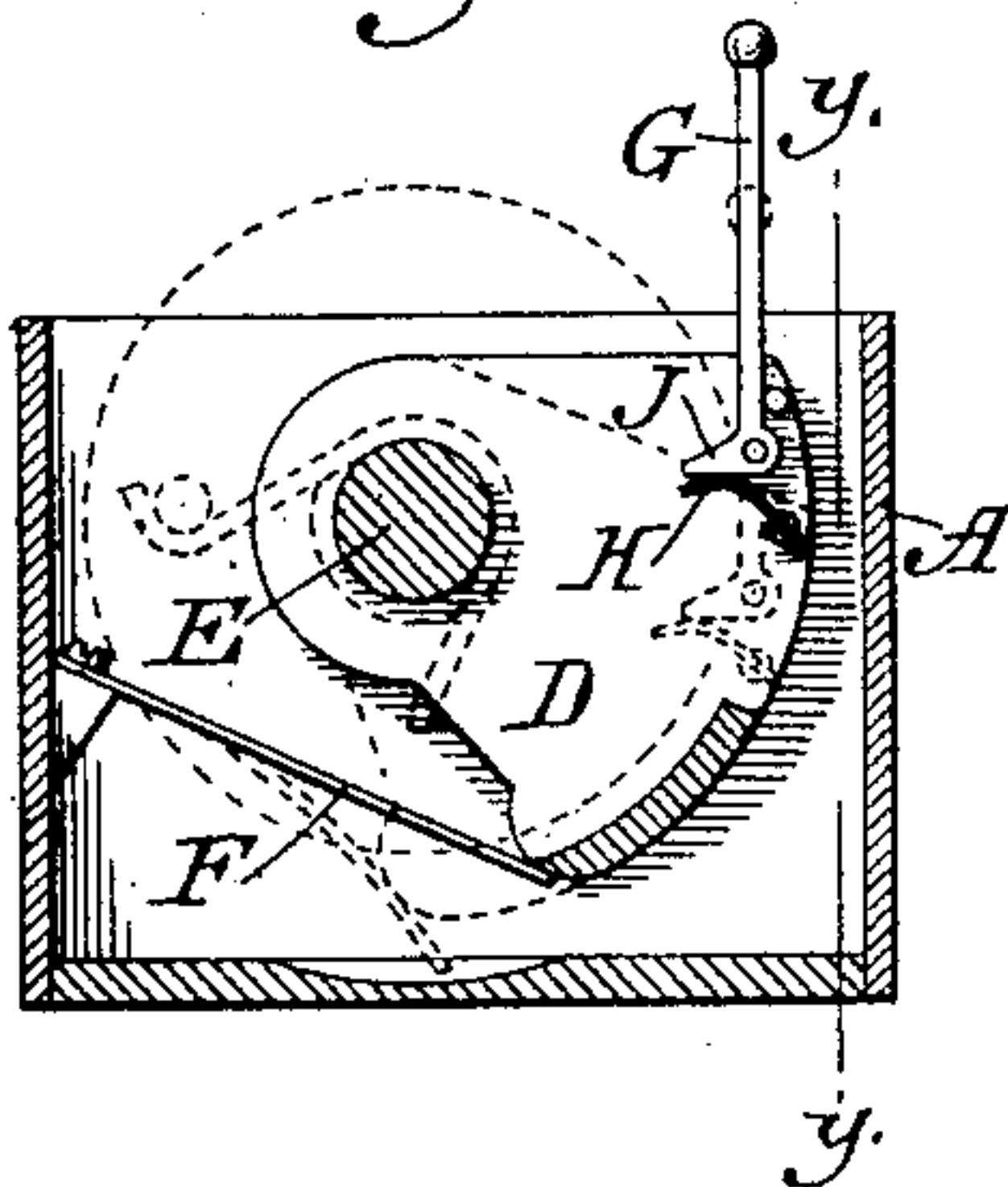
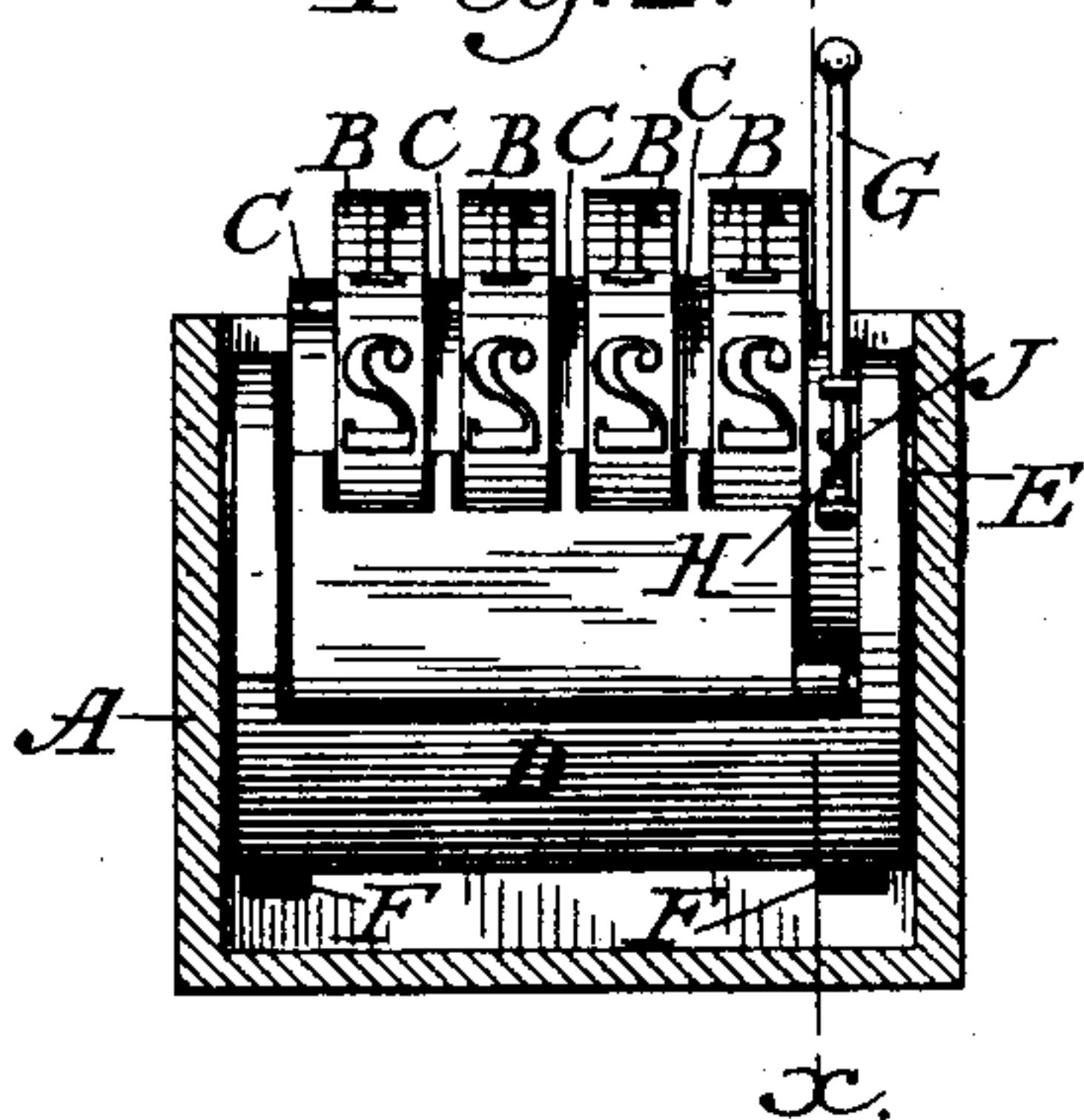


Fig. 2. x.



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UNITED STATES PATENT OFFICE.

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CONSECUTIVE-NUMBERING HEAD.

SPECIFICATION forming part of Letters Patent No. 461,408, dated October 13, 1891.

Application filed May 18, 1891. Serial No. 393,062. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. GEARY, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Consecutive-Numbering Heads; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of numbering-heads in which the numbering-wheels are actuated by means of a swinging frame carrying pawls, which in the oscillation of the frame engage and move ratchet-wheels fixed to the numbering-wheels, and of which an example is found in the numbering-head for which Letters Patent of the United States were granted to Reinhardt and Ellis May 26, 1885, No. 318,803. Heretofore in this class of machines the oscillation of the head has been produced by means of an independent spring-seated vertical plunger either at one end or in front of the wheels, or by means of an equivalent spring-seated vertical frame inclosing the wheels, the vertical plunger or frame being connected with the swinging frame by a combination of intermediate levers adapted to convert the vertical movement of the one into the swinging movement of the other. These devices, although very generally used, have been found objectionable because of the amount of space taken up by the actuating plunger or frame and the consequent length or width required in the numbering-head outside of the numbering-wheels.

The object of my invention is to simplify the construction of the numbering-head and render it more compact, and this I accomplish by combining a spring with the swinging pawl-frame to carry it automatically to its normal elevated position, and also affixing to its outer end at any convenient point thereon an upwardly-projecting rod or other suitable projecting piece extending high enough to be struck and depressed by the platen of the printing-press in which the numbering-head may be placed whenever the platen is dropped to produce an impression

from the type, this rod or other projection being pivoted to the frame.

In the accompanying drawings, Figure 1 is a vertical section in line xx of Fig. 2, illustrating one end of the swinging pawl-frame in a numbering-head with my invention applied thereto. Fig. 2 is a similar section in line yy of Fig. 1, affording a front view of the swinging frame and numbering-wheels.

A represents the outer case of the numbering-head, in which the numbering-wheels B B, the ratchet-wheels C C, and the swinging frame D, carrying the pawls which actuate the ratchets, are mounted to operate in the customary manner. In said numbering-head no provision is made for an independent plunger and levers to actuate the swinging pawl-frame. Hence the ends of the pawl-frame, which are pivoted to swing as usual upon the shaft E, on which the numbering-wheels revolve, are brought closely against the ends of the case.

One or more springs F are fitted in the lower part of the case to bear against the pawl-frame in position to force it automatically upward when left free, this upward movement of the frame being made in the customary manner to cause an engagement of the pawls carried thereby with the appropriate ratchets to move the numbering-wheels, or spiral springs F' F' may be fitted to encircle the axial shaft E in a recess in the ends of the pawl-frame for the same purpose.

At the outer free edge of the swinging pawl-frame a rod G is pivoted to project upward from the frame beyond the casing of the head in position to be engaged at its outer end by the platen of the press in which the numbering-head may be placed, and it is automatically upheld in said upright position by means of a spring H, engaging a toe J, projecting from the lower pivotal end of the rod.

The spring H allows the rod to oscillate and yield upon its pivot as the pawl-frame swings downward under the pressure of the platen, so that the movement of the end of the rod in engagement with the platen shall be as small as possible and the rod will maintain substantially its vertical position. (See dotted lines, Fig. 1.)

I claim as my invention—

The combination, with the swinging pawl-
frame in a numbering-head, of a rod pivoted
to its outer free edge to project above the top
of the casing, a spring supporting the rod in
5 its elevated position, and a spring actuating
the frame to move it outwardly, substantially
in the manner and for the purpose herein set
forth.

In testimony whereof I have signed my
name to this specification in the presence of 10
two subscribing witnesses.

THOMAS F. GEARY.

Witnesses:

A. N. JESBERA,
A. WIDDER.