

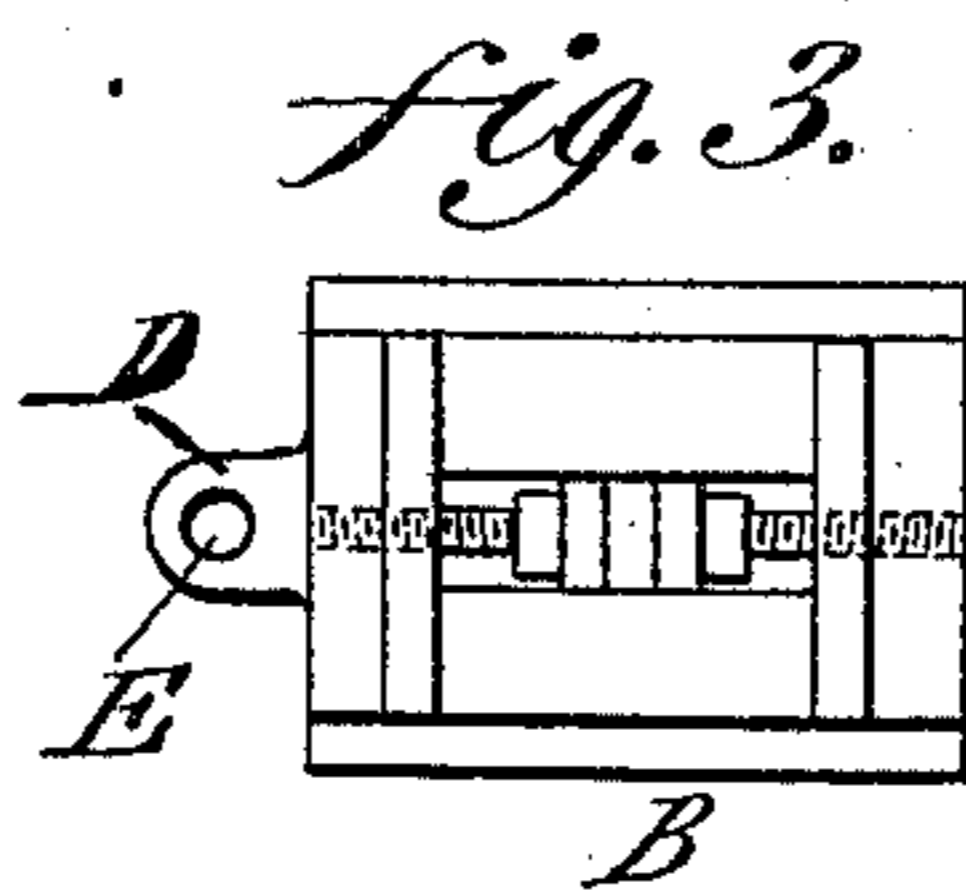
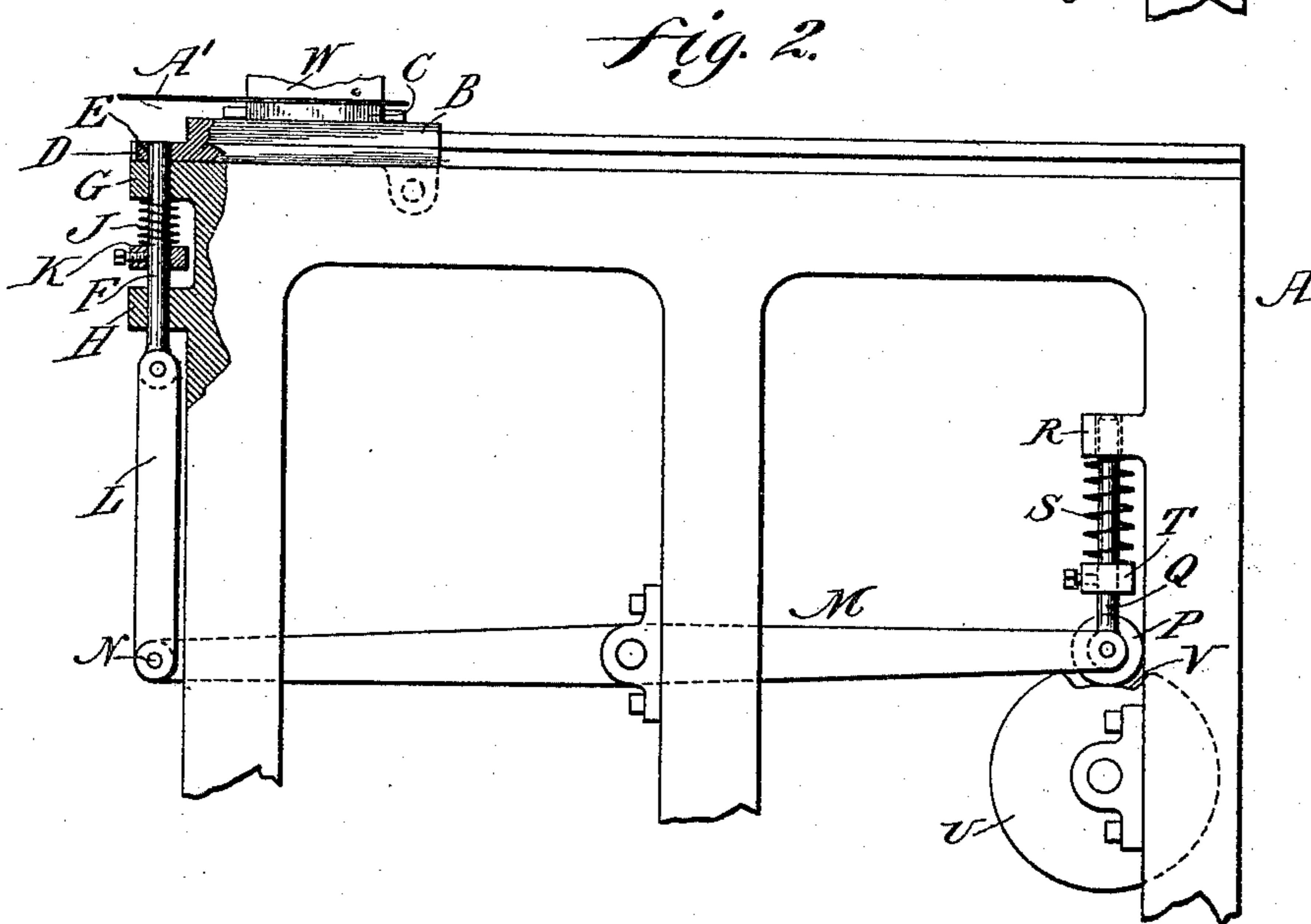
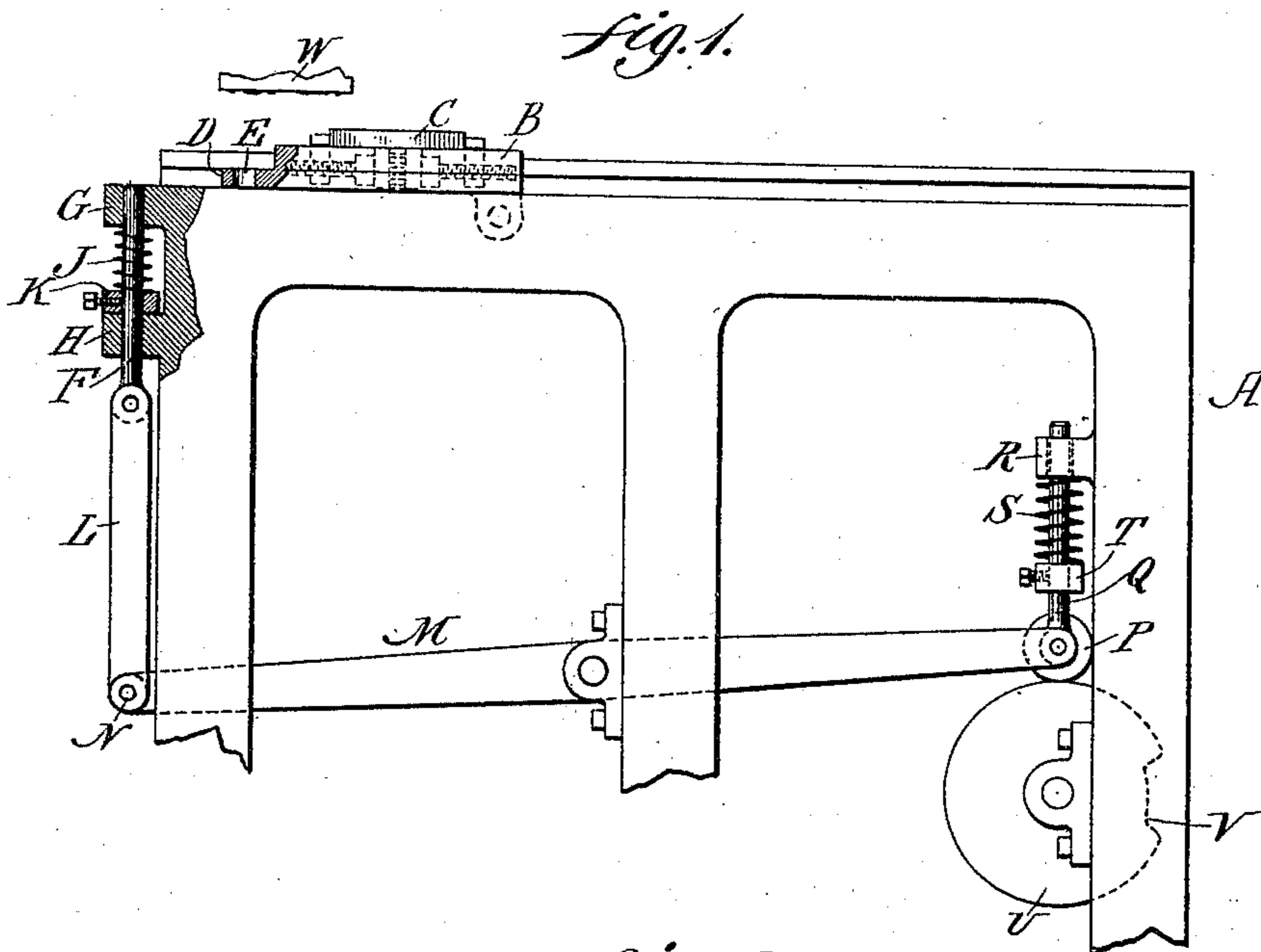
No. 695,864.

Patented Mar. 18, 1902.

W. FULLARD.
PLATE PRINTING AND EMBOSING PRESS.

(Application filed Mar. 15, 1901.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM FULLARD, OF COLWYN, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO WILLIAM E. WEBER, OF WYNCOTE, PENNSYLVANIA.

PLATE-PRINTING AND EMBOSSING PRESS.

SPECIFICATION forming part of Letters Patent No. 695,864, dated March 18, 1902.

Application filed March 15, 1901. Serial No. 51,235. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FULLARD, a citizen of the United States, residing at Colwyn, in the county of Delaware, State of Pennsylvania, have invented a new and useful Improvement in Plate-Printing and Embossing Presses, of which the following is a specification.

My invention relates to improvements in a plate-printing and embossing press; and it consists of a locking device for the die-chuck thereof.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figures 1 and 2 represent partial side elevation and partial sectional views of a locking device embodying my invention, showing the parts in different positions. Fig. 3 represents a plan view of the die-chuck employed.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a portion of the frame of a plate-printing or embossing machine, upon which is suitably mounted the die chuck or carriage B, the same being adapted to travel on said frame in a horizontal line and adapted to receive the impression-die C, having means for securing the same therein, said die-chuck being further provided with a tongue or projection D, having an opening E therein. Any suitable means may be employed for imparting proper motion to said die-chuck.

F designates a bolt which is guided in the ways G and H on the frame A and has a coiled spring J connected therewith and a nut K for adjusting the tension of said spring. Secured to the said bolt F is a link L, the lower end of which is pivoted, as at N, to a lever M, which is journaled to the frame A, the opposite end of the lever having connected therewith a roller P and a bar or rod Q, which passes through a guide R and is provided with a spring S and an adjusting-nut T.

U designates a cam suitably journaled on the frame A, to which power is applied and which has the depressed portion V, it being noticed that the spring S is adapted to hold the roller P in contact with said cam U at

all times, the said spring being stronger than the spring J.

The operation is as follows: The parts being in the position seen in Fig. 1 and motion being imparted to the die-chuck B, the same moves forward until it assumes the proper position beneath the plunger W, the motion of the cam U being so timed that when said carriage is in this position the roller P will enter the depression V by reason of the action of the spring S. This carries down one end of the lever and forces up the opposite end and with it the link L and the bolt F, which thus enters the opening E in the tongue D of the die-chuck, which is securely locked in position, while the plunger W imparts the impression to the paper or material A'. The cam U continuing to revolve, the roller P rides up the inclined face and forces down the opposite end of the lever and removes the bolt F from the opening E, and the carriage moves backward to receive the next charge of ink.

It will be noticed that by reason of the spring J a quick return is assured to the bolt F, for should the lever M or any of the connecting parts break the spring J will immediately remove the bolt from the opening H, the importance of which is apparent.

It will be evident that various changes may be made by those skilled in this art which will come within the scope of my invention, and I do not, therefore, desire to be limited in every instance to the exact construction herein shown and described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a plate-printing and embossing machine, a plunger, a die-chuck and a bolt adapted to enter said chuck when in the proper position beneath the plunger and lock the same.

2. In a plate-printing and embossing machine, a plunger, a die-chuck, a bolt mounted in the frame of the machine as guide and adapted to engage with said chuck to positively lock the same during the period of embossing, and means for causing said bolt to automatically engage with and disengage from said chuck.

3. In a plate-printing and embossing machine, a plunger, a die-chuck, a bolt carried by the frame and adapted to move in a vertical direction, a lever connected therewith, and
5 means for automatically operating said lever to cause said bolt to engage with and be disengaged from said chuck.

4. In a plate-printing and embossing machine, a plunger, a die-chuck to which motion is imparted, an opening therein and a
10 bolt adapted to be operated to enter the opening in said chuck to lock the same in perfect alinement with said plunger which insures perfect registration.

15 5. In a plate-printing and embossing machine, a plunger, a bed, an opening therein, a bolt adapted to move in said opening in the bed as a guide and to fit the same closely, a die-chuck, an opening therein which is adapted
20 to register with the opening in the bed when the die-chuck is in perfect alinement with the plunger, and means for causing said bolt to enter and leave the opening of the

chuck, whereby the latter is locked to the bed at the proper time. 25

6. In a plate-printing and embossing machine, a bolt suitably mounted in the frame of the machine, a lever, a connection between one end of said lever and said bolt, a cam adapted to contact with the opposite end of
30 said lever in order to raise and lower the same, whereby said bolt is operated.

7. In a plate-printing and embossing machine, a bolt, a die-chuck suitably guided, a lever suitably connected to the frame of the
35 machine, a connection common to one end of the lever and said bolt, an arm carried by the other end of said lever, and being suitably pivoted, a cam suitably supported adjacent to the end of the lever and a spring adapted
40 to hold said lever in contact with said cam.

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