

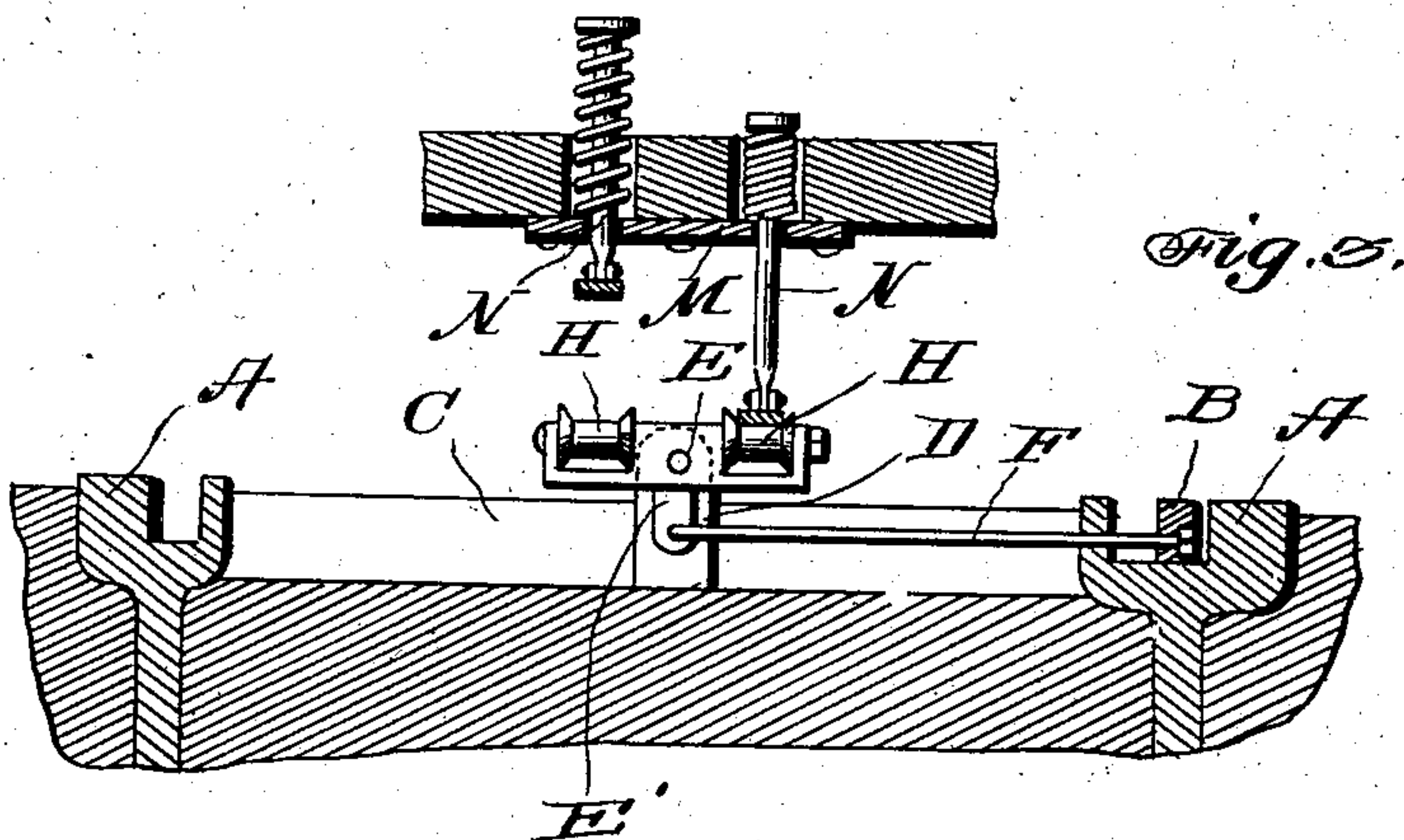
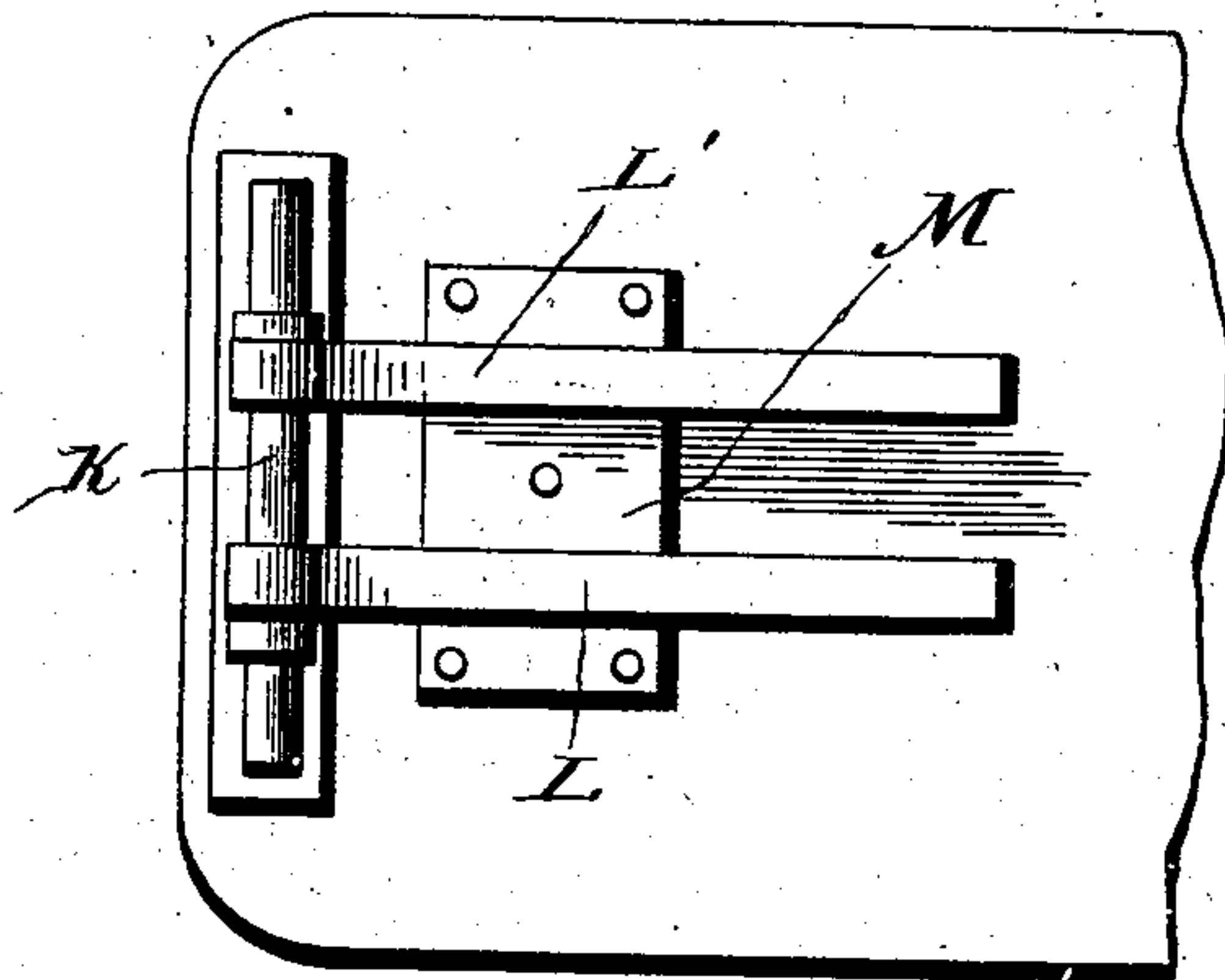
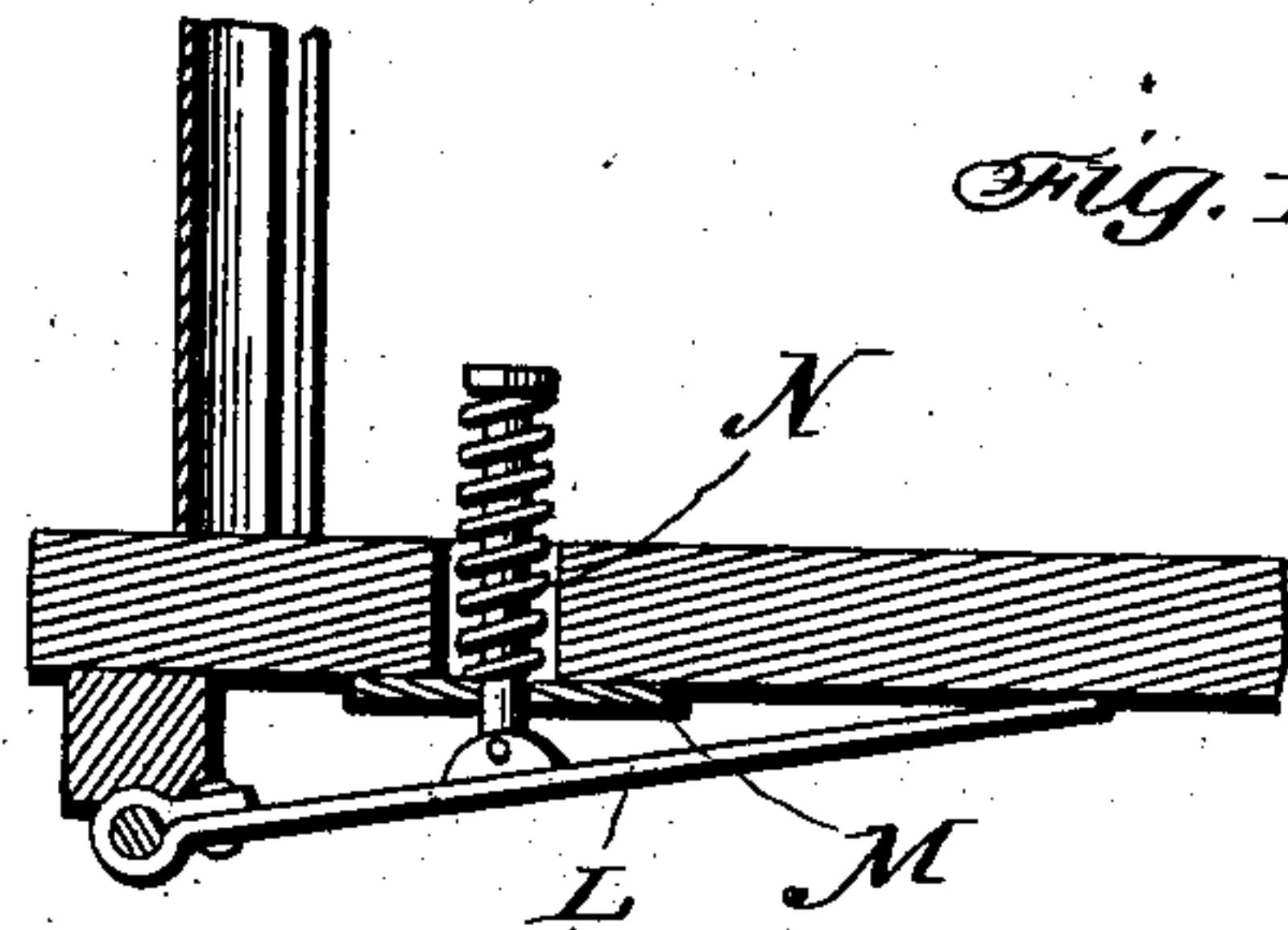
No. 721,279.

PATENTED FEB. 24, 1903.

R. A. BROCK.
STREET CAR SWITCH OPERATING MECHANISM.

APPLICATION FILED NOV. 1, 1902.

NO MODEL.



Witnesses

R. A. Boswell.

A. L. Hough.

Inventor

Robert A. Brock,

By

Franklin V. Hough

Attorney

UNITED STATES PATENT OFFICE.

ROBERT A. BROCK, OF SPRINGFIELD, OHIO.

STREET-CAR SWITCH-OPERATING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 721,279, dated February 24, 1903.

Application filed November 1, 1902. Serial No. 129,764. (No model.)

To all whom it may concern:

Be it known that I, ROBERT A. BROCK, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Street-Car Switch-Operating Mechanism; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in switch-operating mechanism for street-railways; and it consists in the provision of switch-operating mechanism carried by the car and adapted to operate the switch while the car is in motion.

The invention consists, further, in various details of construction and combinations of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

My invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a vertical sectional view through my improved mechanism for operating switches. Fig. 2 is a bottom plan view of a car, showing the members for tripping the switch mechanism; and Fig. 3 is a sectional view transversely across the tracks, showing the manner in which the switch is operated as one of the members secured to the car is brought into contact with the tripping mechanism.

Reference now being had to the details of the drawings by letter, A A designate the tracks of a railway, and B a switch-rail. Mounted between cross-pieces C intermediate the rails is a standard D, on which is mounted a tilting bar E, having a downwardly-extending portion E', to which one end of a rod F is connected, the other end of which rod is fastened to the swinging switch-rail B. Near each end of said tilting bar is journaled an antifriction-roller H, the outer end of each being preferably flanged in order to hold the tripping member upon one or the

other of said rollers, accordingly as it is desired to open or close the switch.

Mounted upon the bottom of the platform of a car is a shaft K, to which are loosely held corresponding ends of the bars L and L'. These bars, which may be of any desired shape or formed, if preferred, into the shape of rods, extend underneath the car and are normally held with their free ends against the bottom of the car by means of the push-posts N, which are connected to said bars in any suitable manner. A spring is mounted on each push-rod and bears between the head of the rod and the plate M, fastened to the under surface of the car. By means of said springs it will be observed that the free ends of said bars will be normally held in contact with the under surface of the bottom of a car. Said bars are spaced apart and are adapted when depressed to be in positions to contact with one or the other of said antifriction-rollers upon the tilting bar, which actuates the switch to open or close the same, as may be desired.

While I have shown a certain detailed construction embodying the features of my invention, it will be understood that I may make alterations in the details of the device without departing from the spirit of the invention.

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

The combination in a switch-operating mechanism, of a tilting bar mounted between the rails of a railway, flanged antifriction-rollers mounted on said bar, and means for throwing the switch-rail as said bar is tilted, a shaft mounted on the under surface of a car, bars connected to said shaft, spring-actuated push-rods connected to said bars and adapted to hold the same with their free ends normally against the under surface of the bottom of a car, said bars adapted to be depressed by the push-rods so as to contact with said antifriction-rollers, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

ROBERT A. BROCK.

Witnesses:

LULA SMITH,
HENRY MARTIN SINGLETON.