

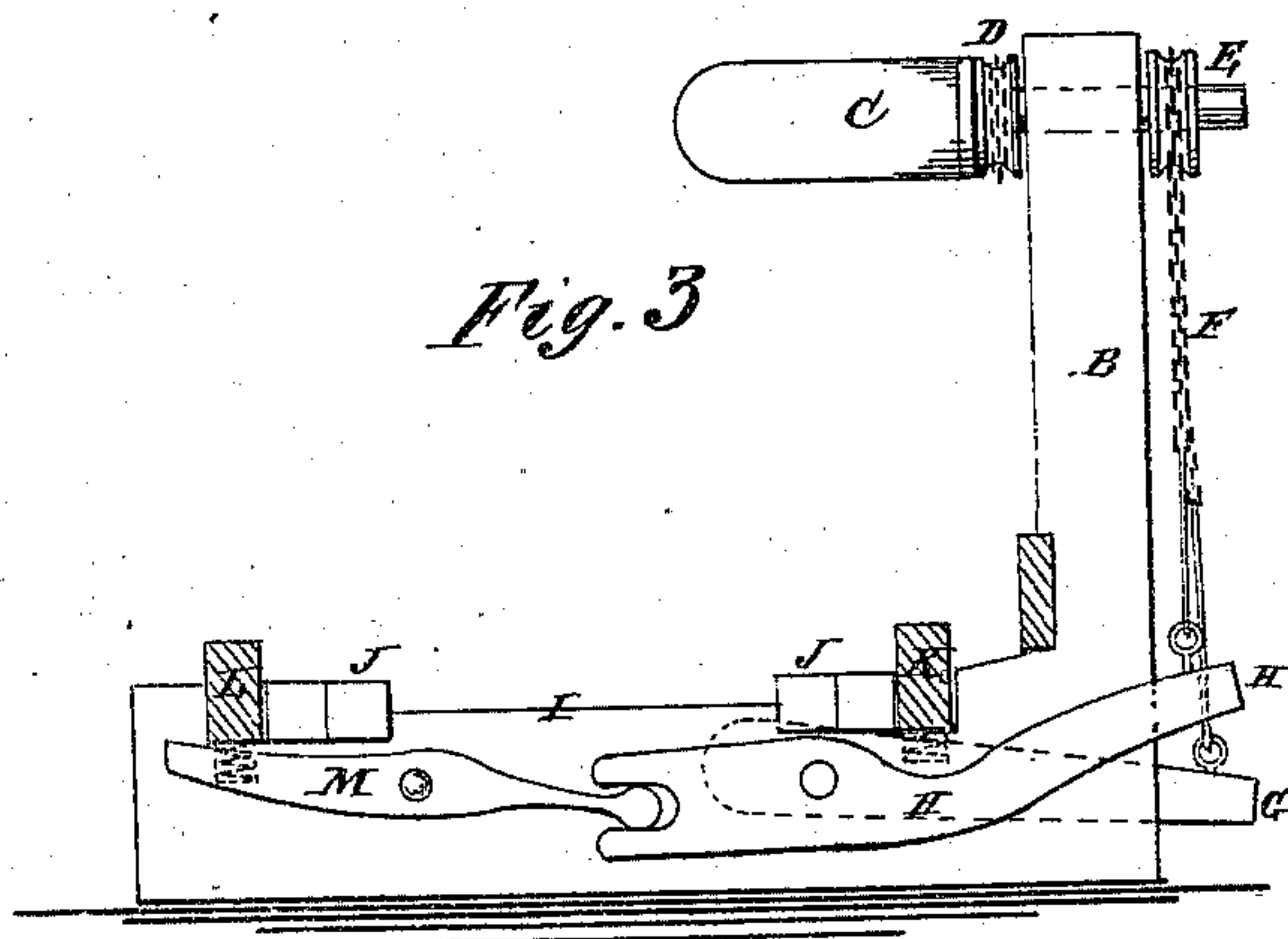
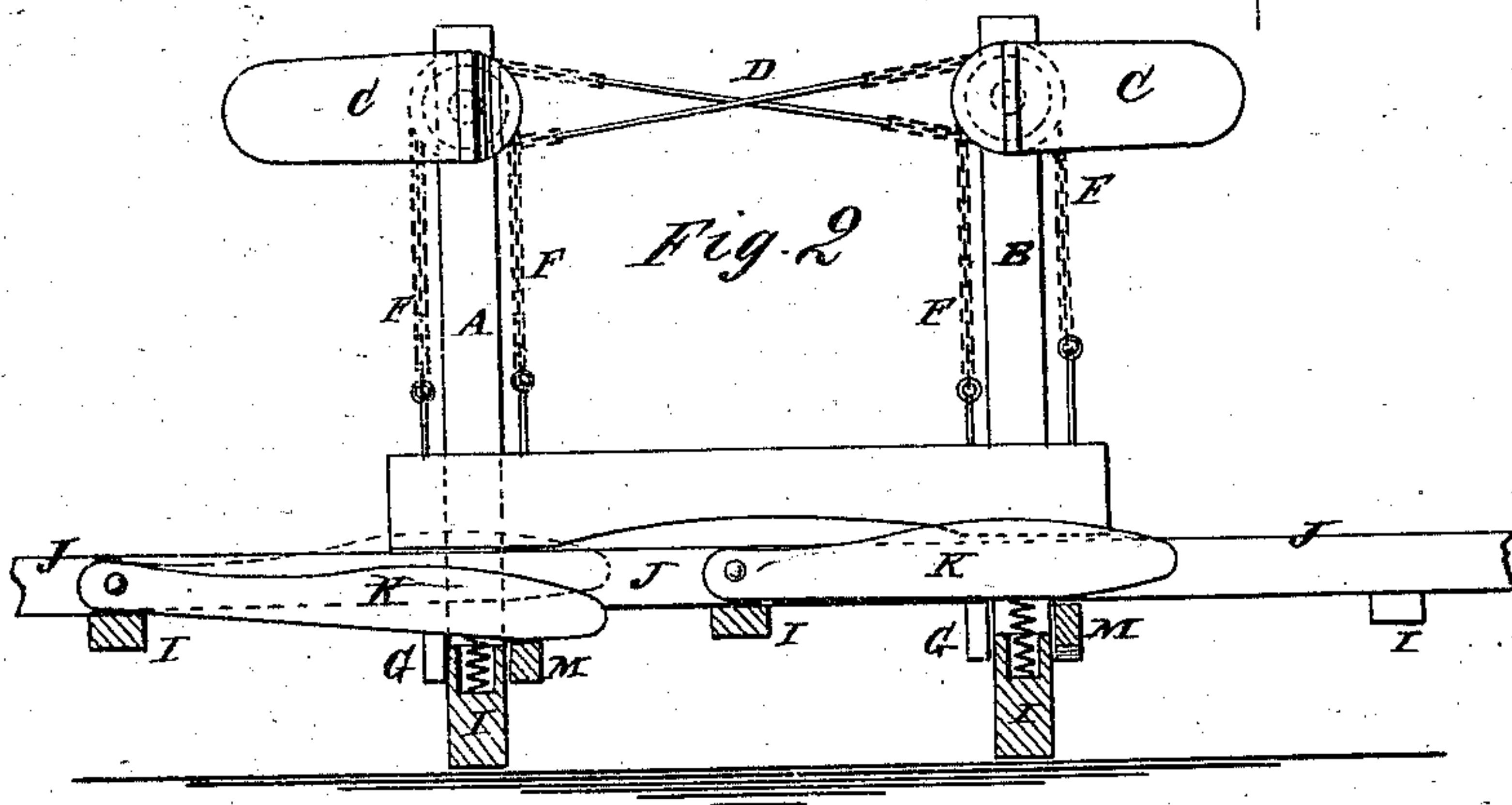
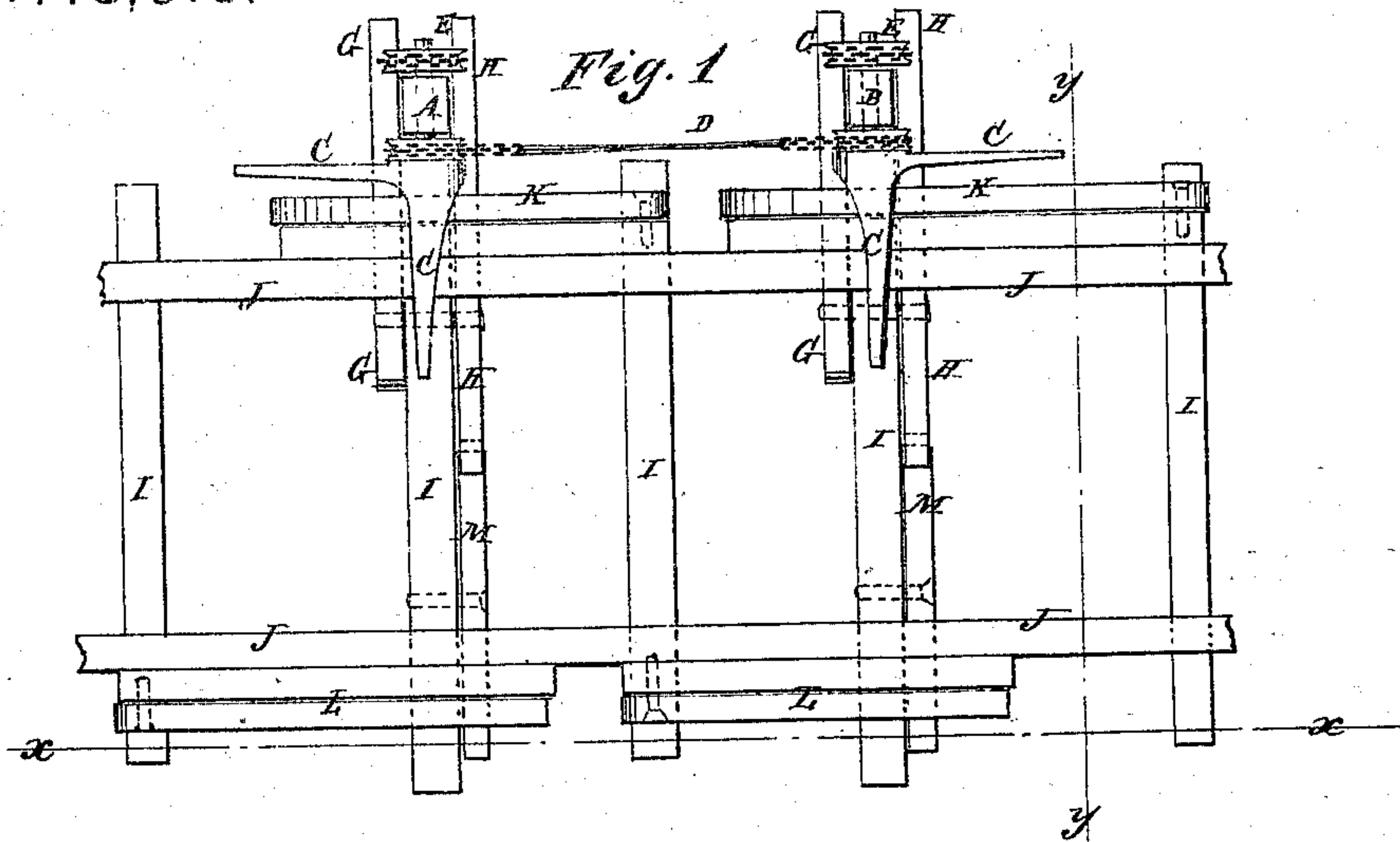
H. S. EVANS, dec'd.

JANE D. EVANS, Adm'r.

Automatic Railroad Signals.

No. 143,815.

Patented Oct. 21, 1873.



Witnesses:

A. W. Amquist
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Inventor:

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UNITED STATES PATENT OFFICE.

JANE D. EVANS, OF WEST CHESTER, PENNSYLVANIA, EXECUTRIX OF
HENRY S. EVANS, DECEASED.

IMPROVEMENT IN AUTOMATIC RAILROAD-SIGNALS.

Specification forming part of Letters Patent No. **143,815**, dated October 21, 1873; application filed
July 29, 1873.

CASE B.

To all whom it may concern:

Be it known that HENRY S. EVANS, now deceased, late of West Chester, in the county of Chester and State of Pennsylvania, did invent a new and useful Improvement in Automatic Railroad-Signal, of which the following is a specification:

Figure 1 is a top view of the improved device. Fig. 2 is a detail longitudinal section of the same taken through the line *x x*, Fig. 1. Fig. 3 is a detail cross-section of the same.

Similar letters of reference indicate corresponding parts.

This invention has for its object to furnish an improved device, by the use of which railroad-trains will be enabled to set the signals automatically as the train approaches and leaves a station, a crossing, a curve, or other place requiring care, and which shall be simple in construction and reliable in operation. The invention consists in the arrangement of the signals, the connecting chains or wires, the operating chains or wires, and the various levers and incline with each other, as herein-after fully described.

A B are posts set upon each side of the dangerous place, and in such positions that the signals C attached to said posts may be readily seen from such a distance as will enable the engineer to readily stop his train before reaching said point. The signals C are pivoted to the posts A B and are connected by the chains D, which are attached to the rotating part of the said signals, so that each signal may be operated by and from the other. The chains or wires D cross each other or not, according as it is desired to move the signals in different directions or in the same direction. When the distance between the posts A B is considerable, the chains or wires D may be supported by one or more intermediate posts. With each signal C is connected a wheel, E,

around which passes and to which is secured the middle part of the chains or wires F. The ends of the chains F are attached to the outer ends of the levers G H, which pass in upon the opposite sides of a tie, I, and beneath the rails J. The levers G are pivoted to the side of the ties I in such positions that they may be pressed down to operate the signals by the inclined bars K placed parallel with the rails J, and at such a distance from said rails that they will be struck and operated by a wheel placed upon a journal projecting at the side of the engine. As a train passes in the opposite direction this projecting wheel strikes and presses down the inclined bars L arranged upon the other side of the track, and which bear down upon the ends of the levers M, which are pivoted to the ties I, and the inner ends of which are jointed to the inner ends of the levers H. The levers H are concaved upon their upper sides beneath the inclined bars K, so that the said inclined bars K and the levers M may be operated independent of each other. The inclines K L when relieved from the downward pressure of the car-wheels are again raised to their former position by coiled springs N placed beneath them in recesses in the ties I.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

The arrangement of the signals C, connecting chains or wires D, chains or wires F, levers G and H M, and the inclines K and L with each other, substantially as herein shown and described.

JANE D. EVANS,
Executrix.

Witnesses:

WM. WHITEHEAD,
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