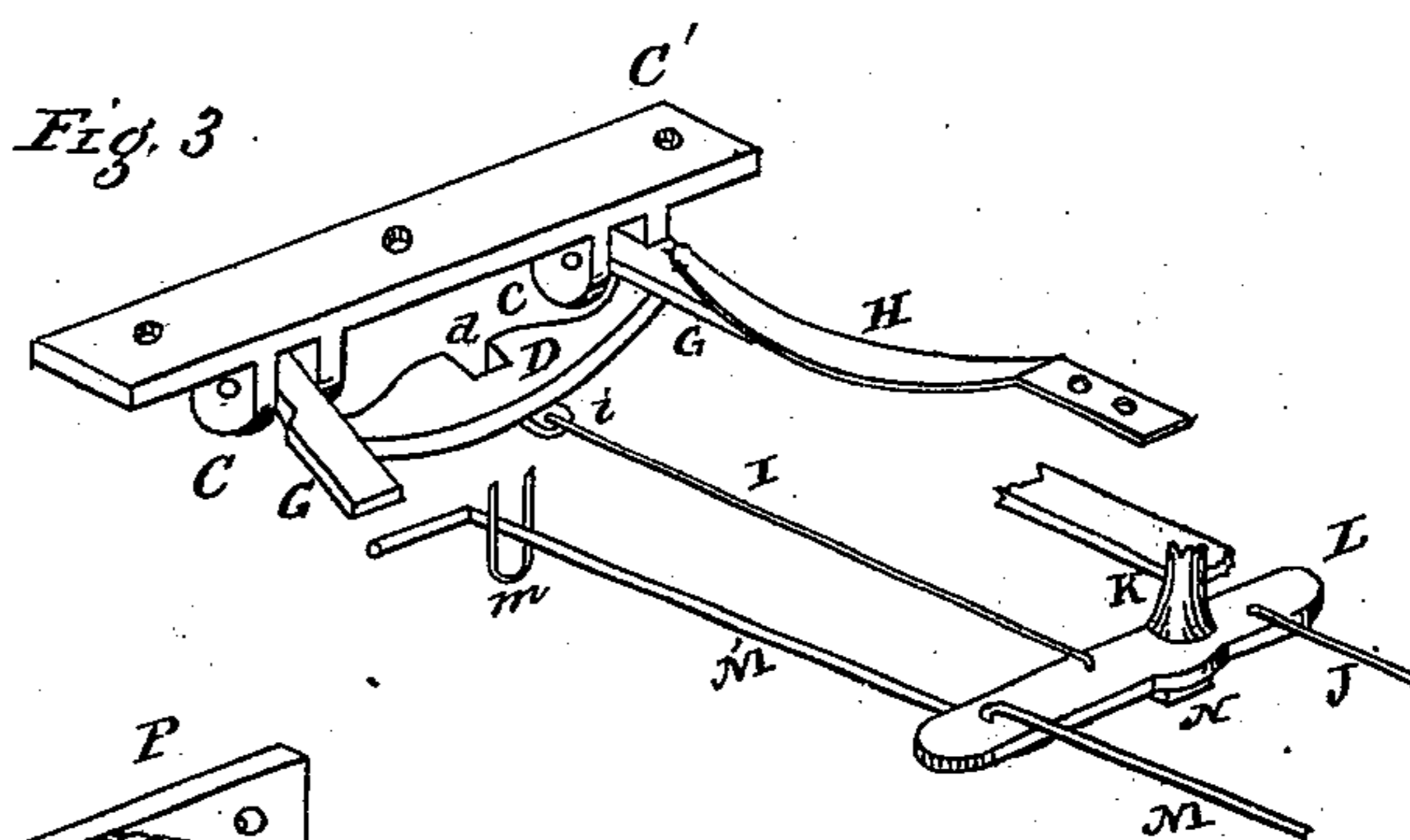
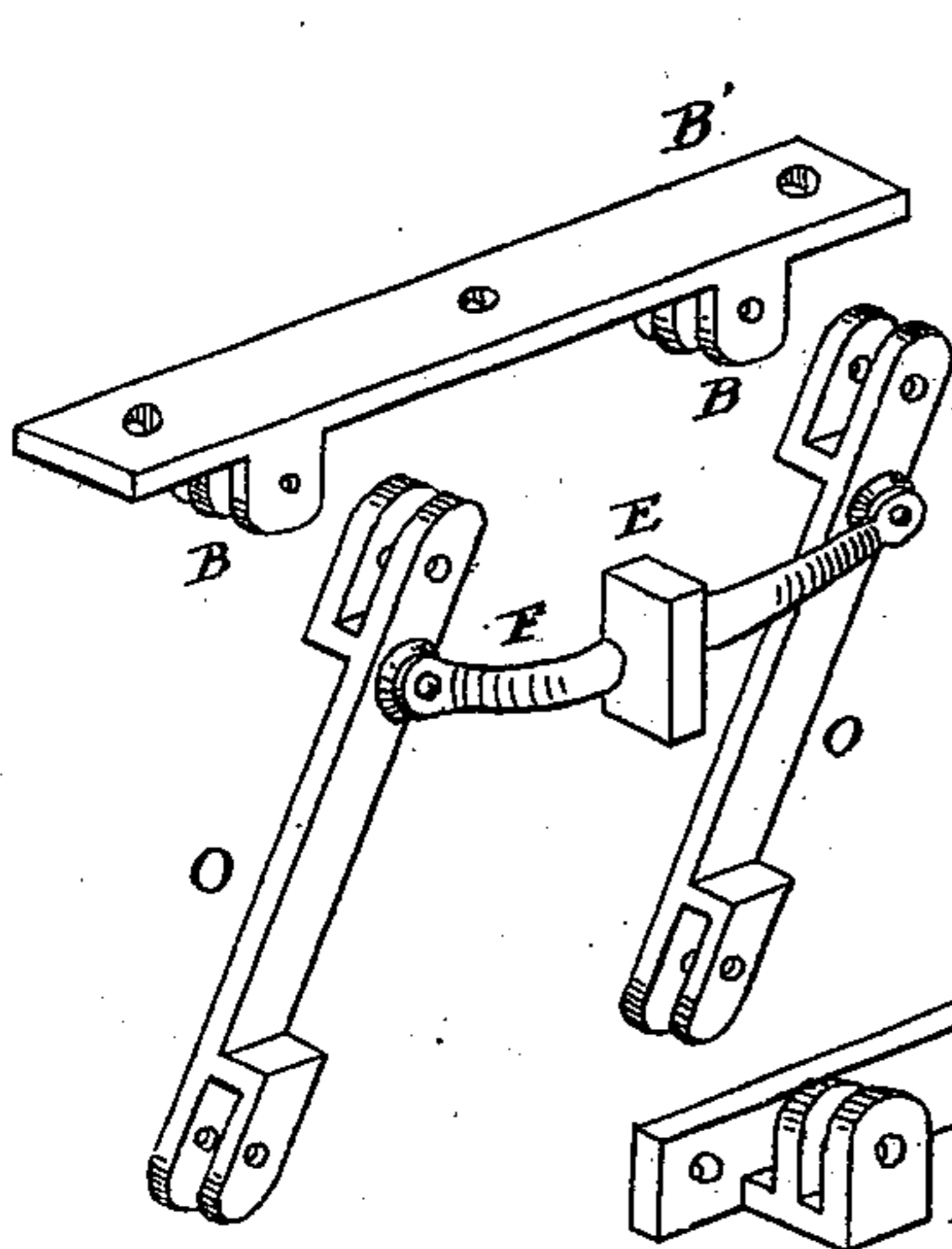
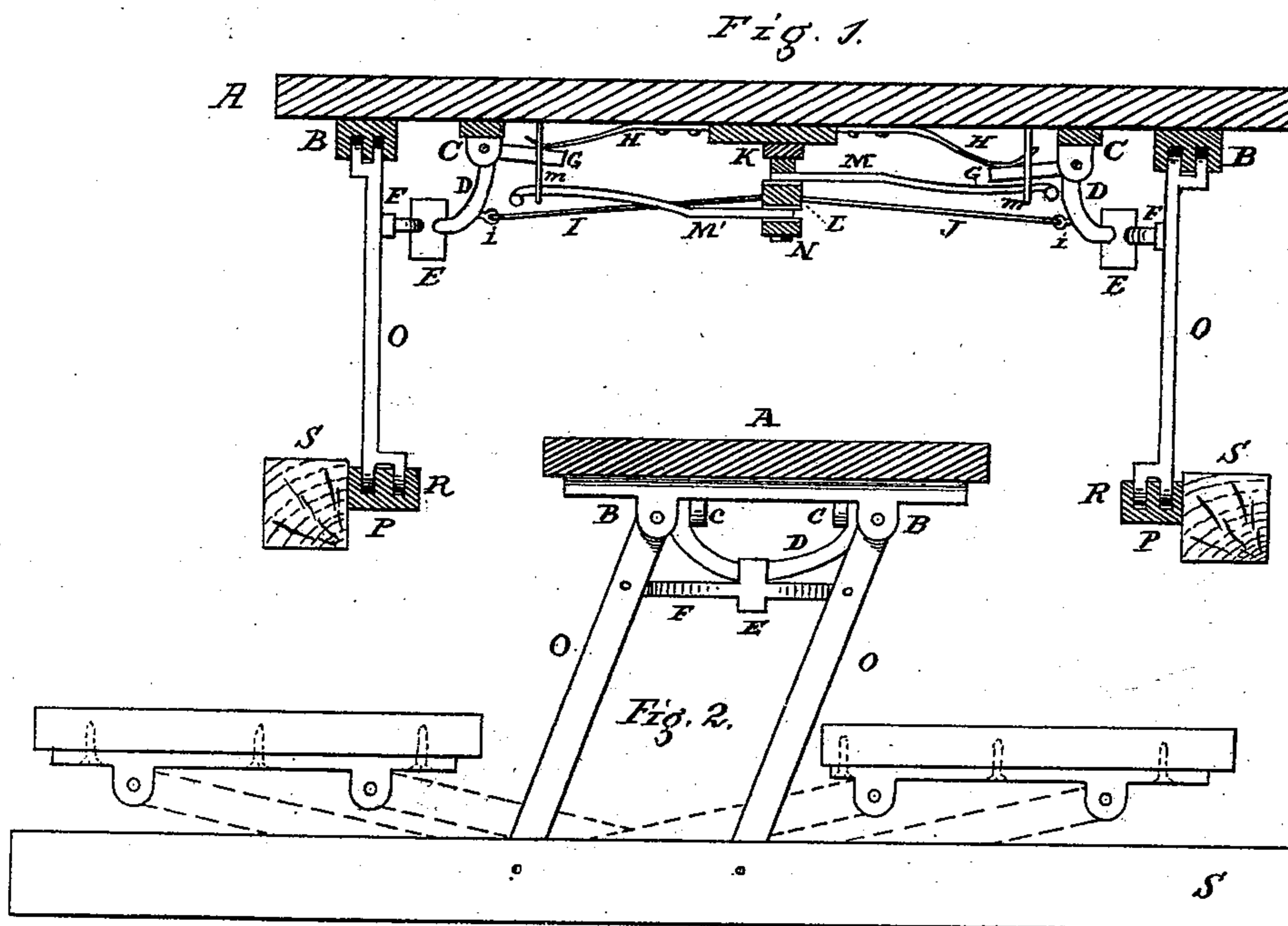


J. A. HAWTHORN.  
Vehicle Shifting-Seat.

No. 210,031.

Patented Nov. 19, 1878.



·WITNESSES·

*Geo. M. Amory.*  
*Jacob Stauffer.*

·INVENTOR·

*John A. Hawthorn*

# UNITED STATES PATENT OFFICE.

JOHN A. HAWTHORN, OF LANCASTER, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO ALDAIS F. HAWTHORN, OF SAME PLACE.

## IMPROVEMENT IN VEHICLE SHIFTING SEATS.

Specification forming part of Letters Patent No. **210,031**, dated November 19, 1878; application filed October 31, 1878.

*To all whom it may concern:*

Be it known that I, JOHN A. HAWTHORN, of the city of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Shifting Seats for Vehicles, of which the following is a specification:

This invention relates to a class of jump or shifting seats for vehicles, in which the legs or supports are in pairs, hinged to a top and bottom plate connecting with the under side of the seat and inner face of the sills of the vehicle, as herein more fully set forth.

The accompanying drawings, marked with letters of reference, and a brief explanation, will enable those skilled in the art to make and apply the same, in which—

Figure 1 is a front elevation of the seat with the appliances and the supports on the sill. Fig. 2 is an end view centrally; the solid and dotted lines indicate the position on either side the seat can be made to assume. Fig. 3 shows perspective illustrations of the construction of the several combinations shown detached.

To the under side of the seat A, near the ends, on each side, is affixed the upper plate, B', provided with lugs B, forming a double bearing. A similar plate, P, is attached to the inner vertical face of the sill S of the vehicle, with like double bearings R. The supports or legs O have their ends, on opposite sides of the same, provided with an extra lug to fit into the aforesaid double bearings B R on the seat and sill-plates, by which the seat is more firmly supported on the pivot-bolts through said double ends and bearings. These legs O are combined, also, near their upper bearings, by a curved cross-piece, F, to which, at its center, an oblong square lug, E, is affixed firmly. This lug E projects on the inner side, for the purpose hereinafter mentioned. There is another plate, C', parallel to plate B', under the seat, on each side, having lugs or bearings C, for a hinged arched catch-plate, D, provided with a notch, d, centrally to receive the square edge of the projecting lug or bolt E, aforesaid. On each end of said arched and hinged catch-plate D there is a rigid projecting foot-piece, G, upon the upper surface of which a

strong flat spring, H, is made to bear, to hold the hinged arched piece D firmly against the lug E, that locks or enters the notch d, aforesaid. The one end of these springs H is affixed to the under side of the seat A. Thus the seat is doubly braced and firmly locked and held in place.

In order to disengage the parts for shifting the seat back or front, I use a lever, L, centrally, so as to allow it to vibrate on a standard, K, connected with a plate attached to the under side of the seat, said lever being secured by an ordinary nut, N, and washer. It also has rods M' M, one on each side, as shown, either to pull or push the lever to one side or the other.

m are staples, which support the ends of the rods. To operate the hinged arch-pieces D, I affix an eyed staple, i, to them, from which a wire, I, connects with the forward portion of the lever on one side, and a wire, J, on the rear portion of said lever with the like connection on the other side. Thus it is easily understood that a push or pull on the lever tends to draw both hinged and notched pieces D inward, so as to become disengaged from the lock-piece E, and allow the seat and combined legs to lie or fold down in either direction to the front or rear of the vehicle. The raising of the seat will lock the same by the spring-action.

The arched piece might be provided with notches at several points, so as to adjust the seat to several different elevations, if desirable.

I am aware that legs on pivots uniting the seat and sill on plates are shown in various patents, and that springs, notches, and levers are not new; nor do I claim such apart from the construction and combined arrangement herein set forth and described; but I am not aware that legs have heretofore been used having each end adapted for double bearings, and combined with an upper cross-piece in pairs, nor that the hinged and notched cross-piece with its projecting feet were ever before known or used in shifting seats. Therefore,

What I deem novel and useful in my arrangement, and desire to claim as my invention in jump or shifting seats, is—

1. The cross-piece or brace F, provided with

a central lug or piece, E, in combination with the pair of supports O, each end adapted to the double bearings on the seat and sill plates B' P, substantially as and for the purpose specified.

2. In combination with the lug or piece E on brace F, the arched and hinged plate D, having notch *d*, when provided with a project-

ing foot or piece, G, a spring, H, eyed lug *i*, wires I J, and lever L, the whole arranged and operating substantially as and for the purpose herein described.

JOHN A. HAWTHORN.

Witnesses:

JNO. M. AMWEG,  
JACOB STAUFFER.