

(No Model.)

W. B. SALES.

2 Sheets—Sheet 1.

CARRIAGE TOP.

No. 273,766.

Patented Mar. 13, 1883.

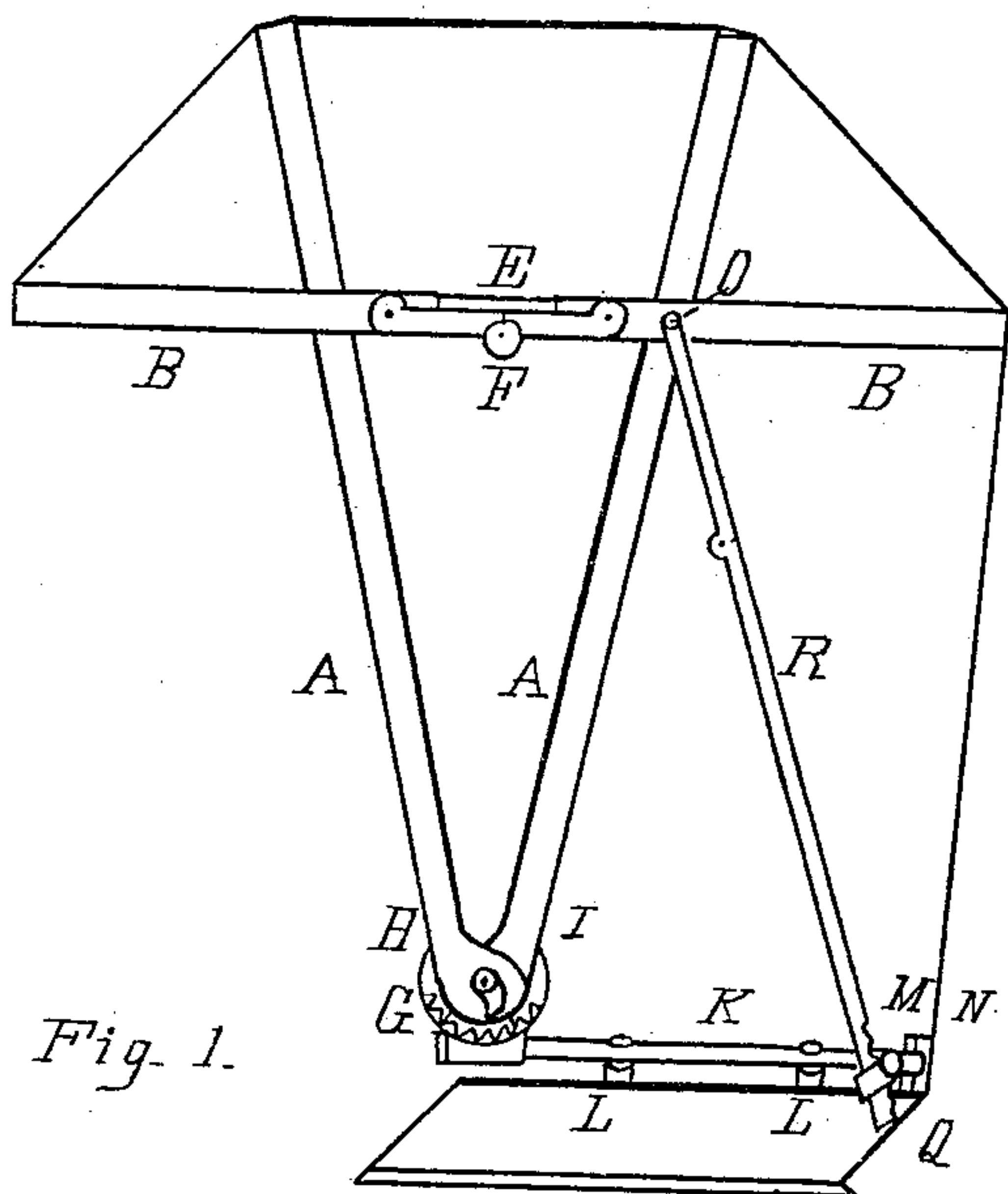


Fig. 1.

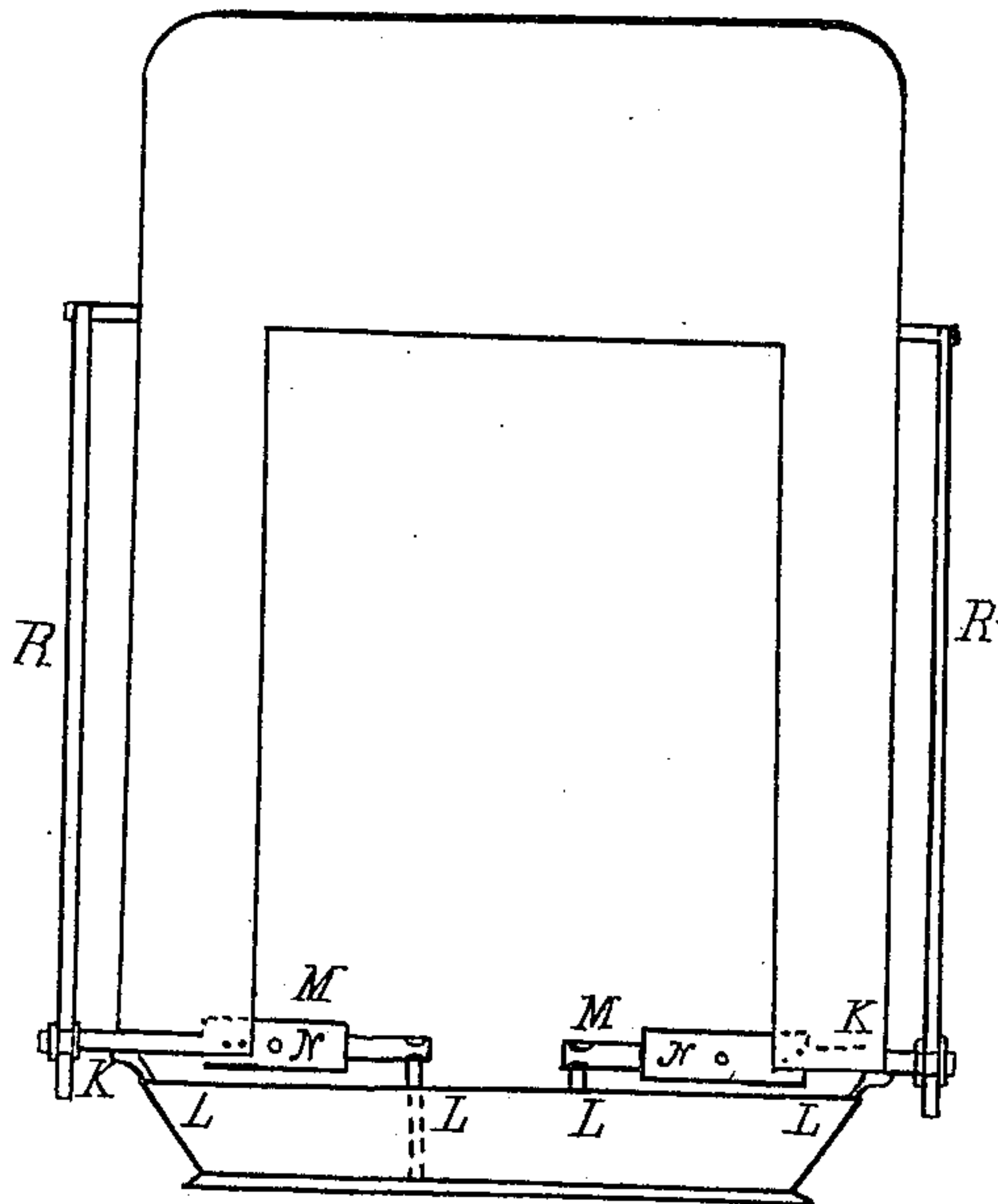


Fig. 7.

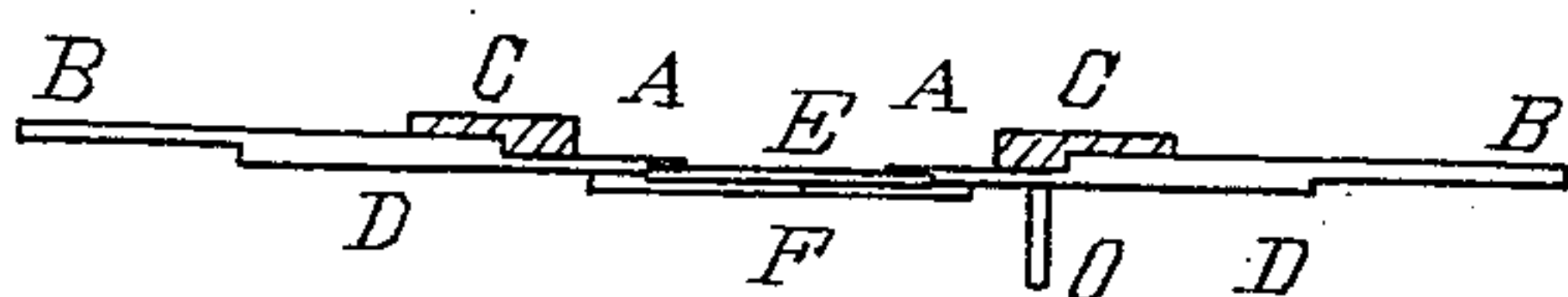


Fig. 3.

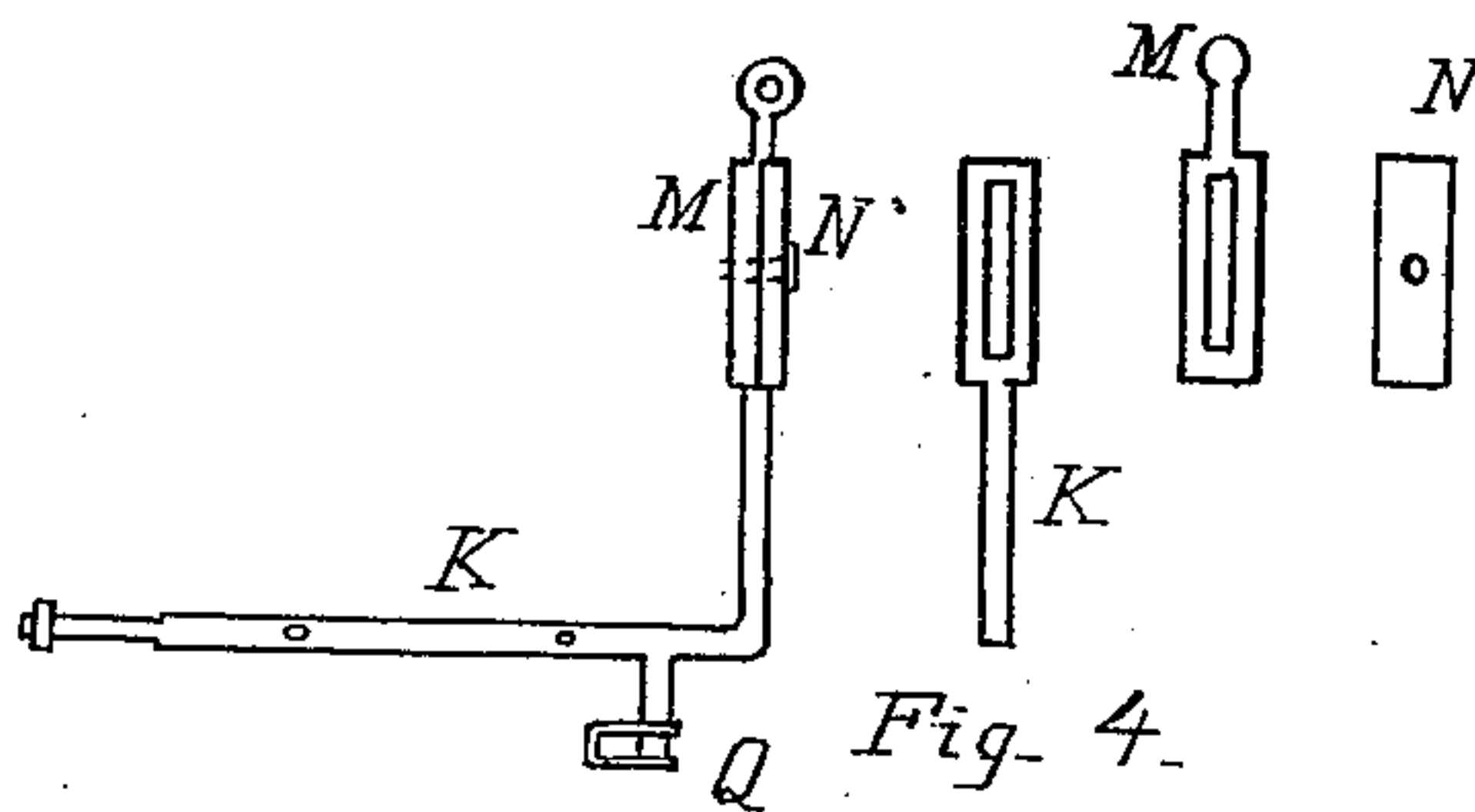


Fig. 4.

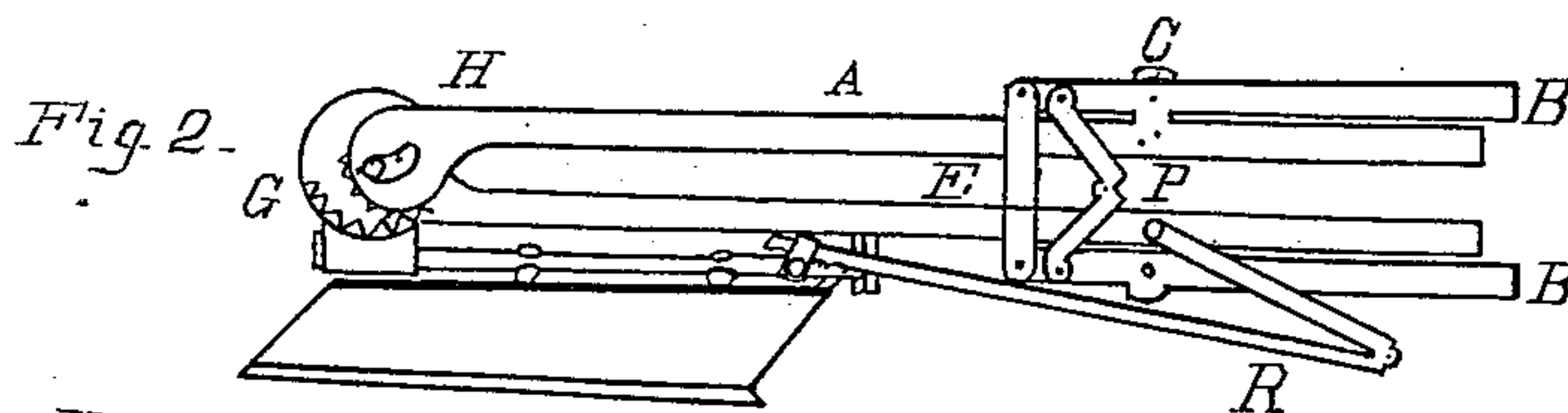


Fig. 2.

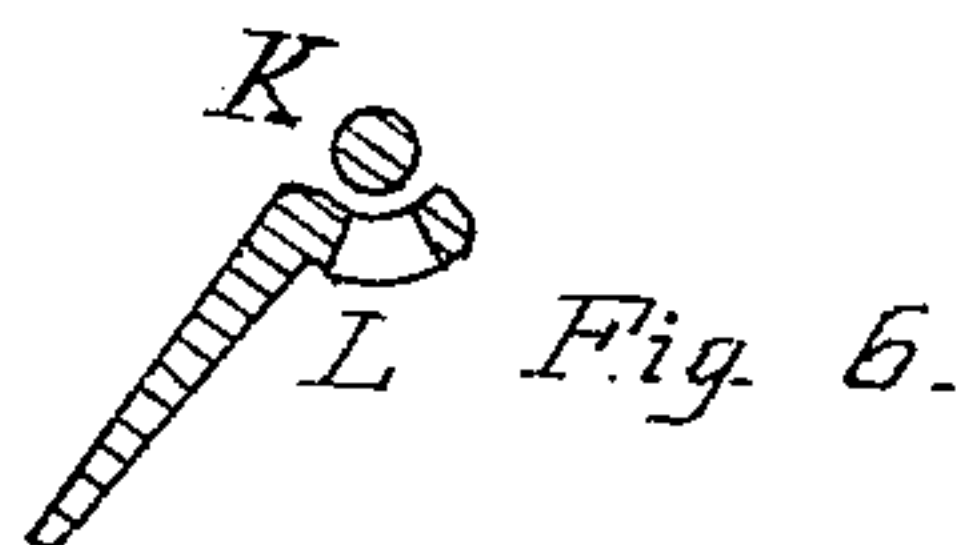


Fig. 6.

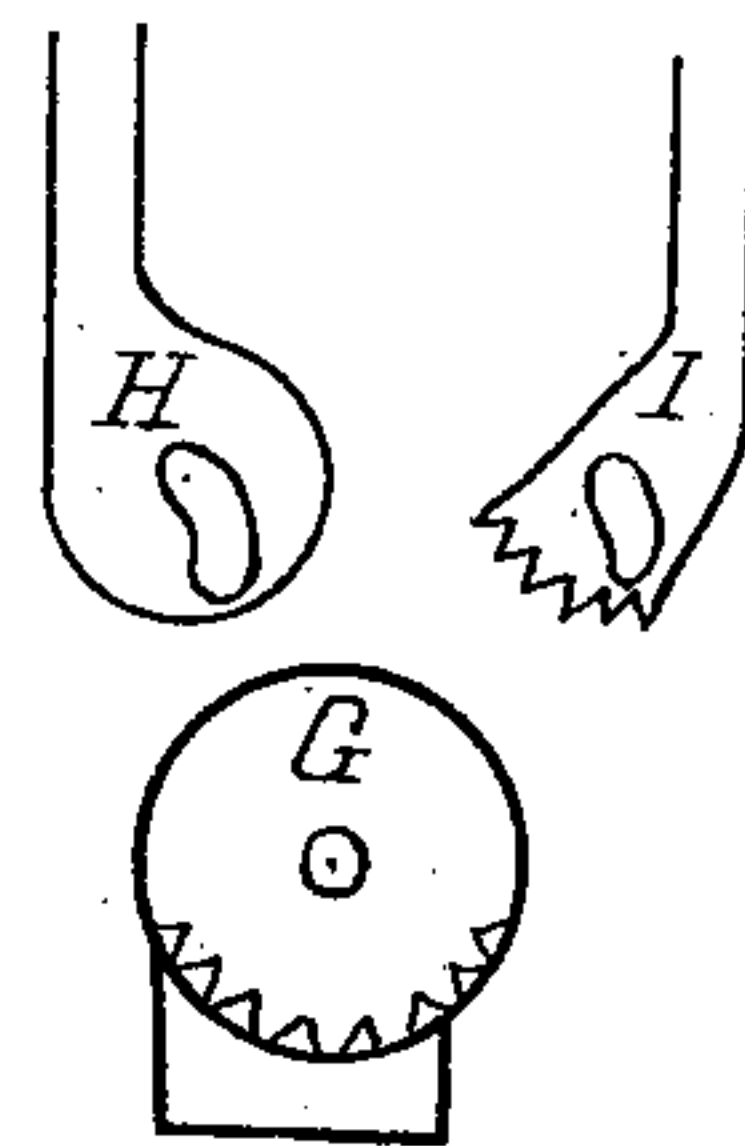


Fig. 5.

Witnesses:

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R. Runge

Inventor:

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att'y

(No Model.)

2 Sheets—Sheet 2.

W. B. SALES.

CARRIAGE TOP.

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Fig. 8.

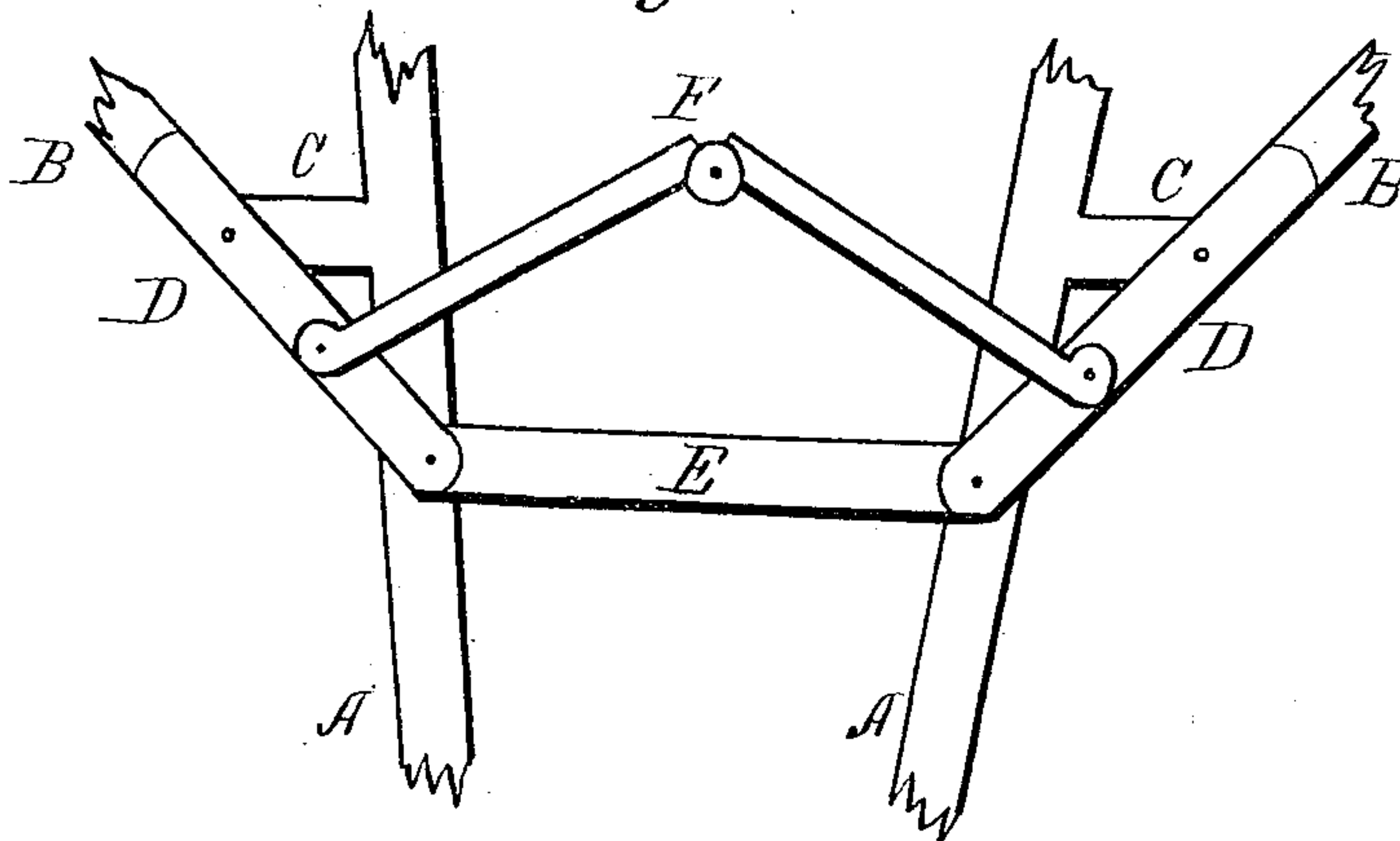


Fig. 9.

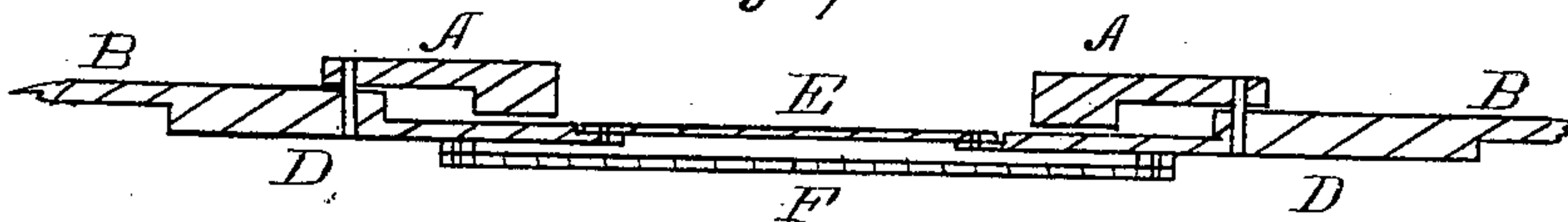


Fig. 10.

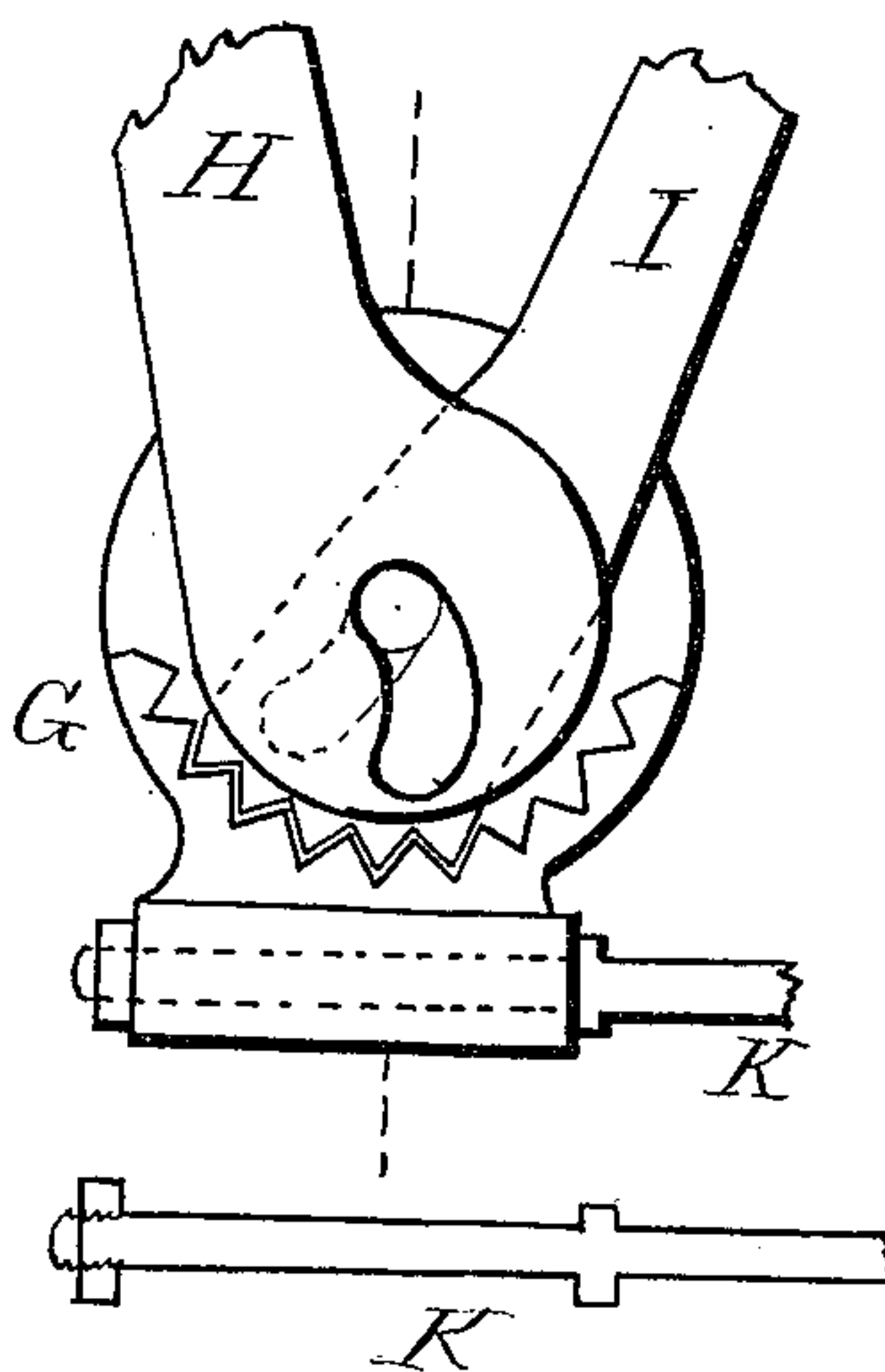
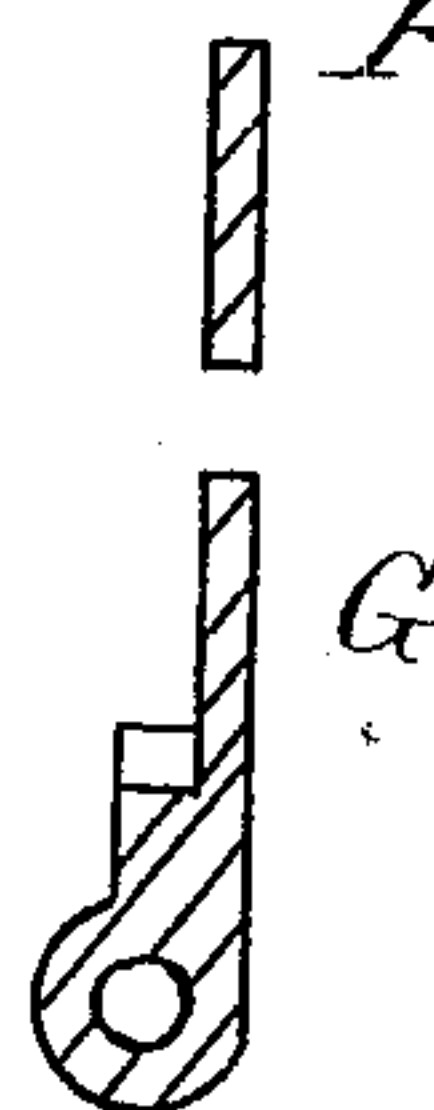


Fig. 11.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM B. SALES, OF FORT ATKINSON, WISCONSIN.

CARRIAGE-TOP.

SPECIFICATION forming part of Letters Patent No. 273,766, dated March 13, 1883.

Application filed December 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, W. B. SALES, a citizen of the United States, residing at Fort Atkinson, in the county of Jefferson and State of Wisconsin, have invented a new and useful Improvement in Carriage-Tops, of which the following is a specification.

My invention relates to folding carriage-tops, which are sold to be attached to the seat of any vehicle; and the objects of my improvement are to provide a top which may be readily attached to any ordinary seat and may be readily folded or fastened securely in position.

It consists of a method of attaching the bows to one another, a hinge for them to swing in, and devices for locking in position or unlocking, a method of attaching to seat, and an adjustable means of attaching and stretching the back-stay.

In the drawings, Figure 1 represents the top extended; Fig. 2, the top folded; Fig. 3, cross-section of bows, top view; Fig. 4, top view of seat-rail and parts; Fig. 5, enlarged pieces of joint, and Fig. 6 enlarged section of seat-foot; Fig. 7, the back view of the top; Figs. 8, 9, 10, and 11, enlarged detail views, to be hereinafter referred to.

Similar letters refer to similar parts throughout.

The frame for the top consists of two main bows, A A, extending around from one side of the seat to the other, and attached to the seat-rail and to one another at their ends by a joint, hereinafter described, and two short bows, B B, extending forward and backward from the long bows A A, Fig. 1. On the inside of the bows A A are lips C C, to which are pivoted the short bows B B. Longer plates, D D, Figs. 2, 3, and 9, are attached to the short bows B B, and extend beyond them. The ends of the plates D D are connected by a rod, E, to which they are jointed. At a distance from the ends of the plates D D a knee-joint, F, is placed, opening upward, and when extended having the center of the joint below the center-line of the bows. By this arrangement I am able to use wooden bows, all bent on the same curve, and by breaking up the knee-joint the bows A A are brought together, and the short bows actuated by the rod E, and, moving on

the lip C, are folded up to them without lapping by or shutting over one another.

My hinge consists of a circular plate and a sleeve cast in one piece, Figs. 5 and 11, G. The seat-rail passes through the sleeve and retains the plate in a perpendicular position. The circular plate has a hole through at the center and a flange around the lower half, on the inner periphery of which are teeth projecting inward.

The forward bow-plate, H, is a circular plate smaller than G, having an arm extending to attach the bow, and from its center downward a slot. The back bow is attached to a similar piece, I, Fig. 5, having a similar slot, the two slots being cut so that they coincide when the bows are parallel, and the lower ends shut by each other when extended. This plate I, Fig. 5, has teeth on its lower edge corresponding to the teeth in the plate G.

The peculiar combination of the plate G and the two slotted plates H and I is such that when the bows are parallel the slots coincide, and they move along on the bolt, which holds them to plate G, disengaging the teeth and leaving the whole bow-frame free to swing in any desired position, while when the bows are extended the slots in the plates H and I shut by each other, and force the teeth on said plates I and G to engage and retain the top in whatever position it may be, when they are locked by the knee-joint F, Figs. 1 and 8.

The seat-rail is a right-angled bar, passing through the sleeve of G, having two perpendicular holes for bolts on the side, and ending with a slot on the back, K, Figs. 1, 4, and 10. To attach it to seats of various widths and inclinations of rail, I bolt it to feet having at their upper ends a concave support and a wedge-shaped slot in the form of a segment of a circle struck from the center of the seat-rail, which permits a bolt to pass at various angles of inclination, L, Fig. 6. I also attach to a similar foot on the back of the seat a plate, M, Fig. 4, having a slot corresponding to the slot in the end of rail K, and to them I bolt a block of wood, N, the bolt passing through both slots and retaining the whole in position. The object of this device is to render the length of the back of the rail adjustable, and to attach the wood in

any desired position to correspond with the line of the back-stay of the top for different widths of seats, and to this block is fastened the back-stay. To draw the back and top
5 tight I attach studs O, Fig. 1, to the rear bow A and to the seat-rail at P, Fig. 4. To the stud O, I hinge a rod, R, having a knee-joint, and on the stud P, I place a clip, Q, around the rod, leaving it free to revolve on the stud.
10 The rod has along the back a series of concave notches corresponding to the size of the stud, one of which is held on the stud P by the clip Q, and by means of this clip and the series of notches the length of the rod is rendered ad-
15 justable.

I claim as my invention and desire to secure by Letters Patent—

1. The combination of the bows B B, piv-
20 oted upon ears C, plates D D, bar E, and joint-
ed brace F, substantially as herein shown and described, and for the purpose specified.

2. The combination of the bows B B, piv-
oted upon ears C, plates D D, bar E, jointed
brace F, and jointed rod R, substantially as and
for the purpose herein shown and described. 25

3. The combination of the bows B B, piv-
oted upon ears C, plates D D, bar E, jointed
brace F, jointed rod R, having concave notches,
and the stud and clip for rendering said rod
adjustable, substantially as and for the pur- 30
pose herein shown and described.

4. The combination, with a seat-rail in two
parts, and having coincident slots, of a block
and bolt to adjust to length of seat and at-
tach the back-stay of top, substantially as de- 35
scribed.

WILLIAM B. SALES.

Witnesses:

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