(No Model.)

C. G., E. M. & M. T. RIDOUT.

CARRIAGE TOP.

No. 514,383. Patented Feb. 6, 1894.

Fig. 1.

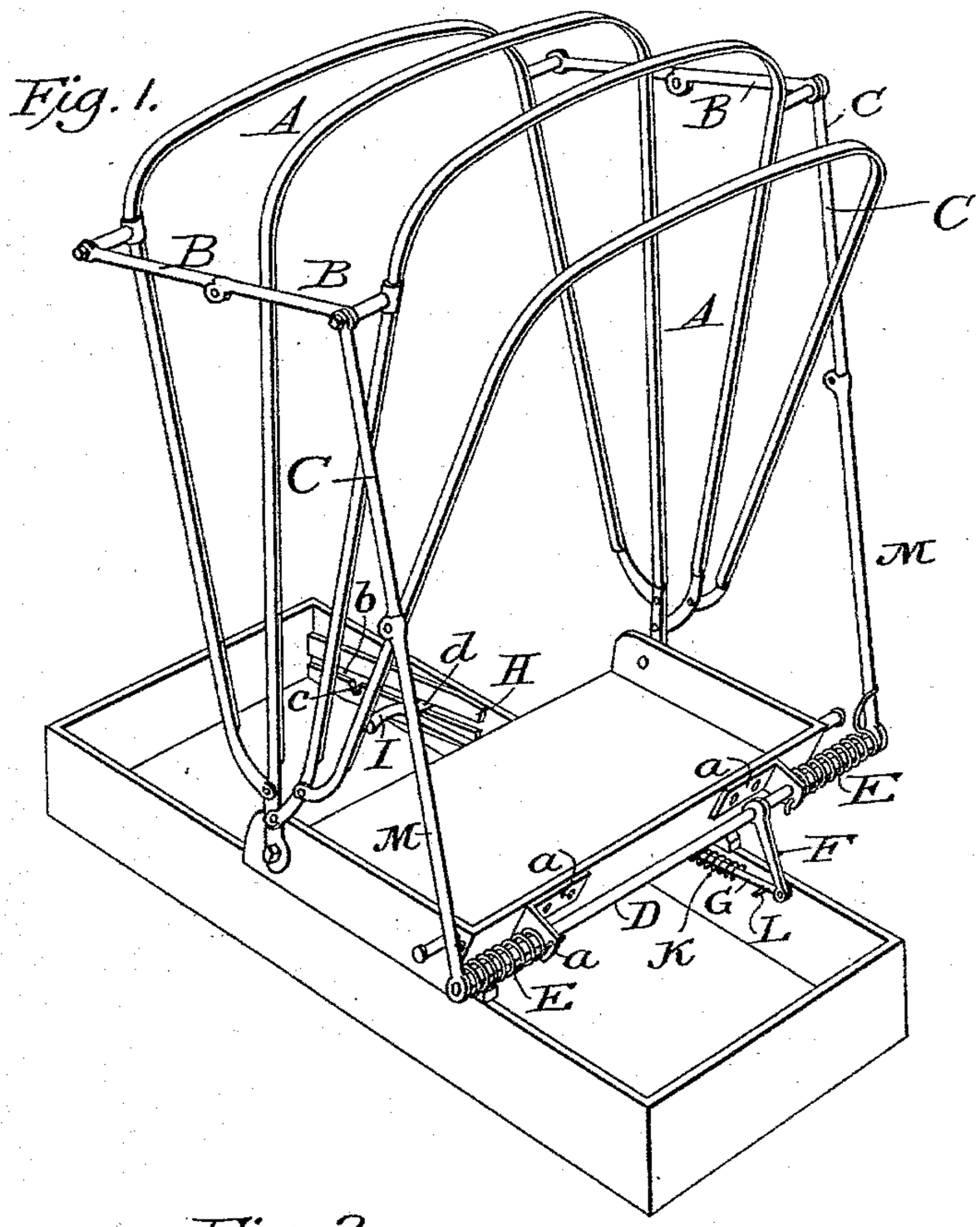
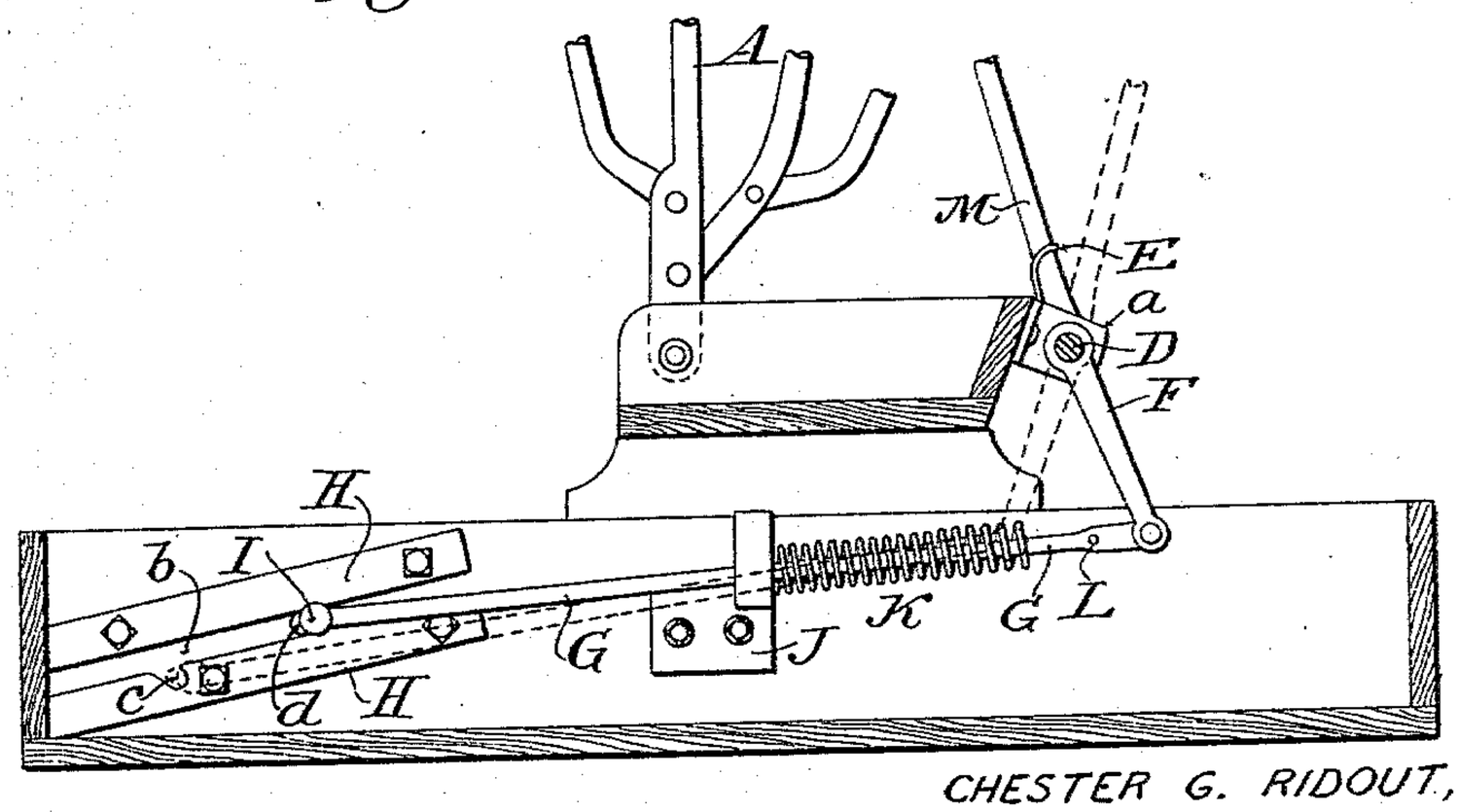


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHESTER G. RIDOUT, EDGAR M. RIDOUT, AND MOSES T. RIDOUT, OF HUTCHINSON, MINNESOTA, ASSIGNORS OF ONE-FOURTH TO WARREN D. GRAHAM, OF SAME PLACE.

CARRIAGE-TOP.

SPECIFICATION forming part of Letters Patent No. 514,383, dated February 6, 1894.

Application filed April 24, 1893. Serial No. 471,653. (No model.)

To all whom it may concern:

Be it known that we, CHESTER G. RIDOUT, EDGAR M. RIDOUT, and MOSES T. RIDOUT, citizens of the United States, residing at Hutchinson, in the county of McLeod and State of Minnesota, have invented certain new and useful Improvements in Carriage-Tops, of which the following is a specification.

This invention relates to certain new and useful improvements in carriage tops of that class in which the top may be lowered by power.

This invention consists in connecting the bows on each side of the top with a rockshaft by means of suitable arms or levers so as to actuate the bows simultaneously and throw the top back, as more fully hereinafter set forth.

In the drawings,—Figure 1 is a perspective view of our improved device; and Fig. 2, a longitudinal sectional view.

A A indicate the bows of the top, provided with the usual jointed braces B and C. Secured to the rear of the seat by means of brackets *a a* is a cross shaft D, to the ends of which are rigidly secured the arms or levers M. Encircling the rockshaft between the bracket and the ends of said shaft, are coiled springs E E, the ends of which are secured respectively to the brackets and the arms M, the springs tending to hold the top in its elevated position.

F denotes an arm secured to the rockshaft, to the end of which arm is pivoted a rod G which passes under the seat to the forward part of the vehicle. The arm and rod are so placed that the rod is in close proximity to one side of the body of the vehicle.

Secured within the body, preferably to the side of the vehicle, is a plate or casting H, provided with a guideway *b*, which in turn is formed with a notch *c*, the guideway being adapted to receive a pin or lug *d* extending from the forward end of rod G. The lug is free to move in the guideway except when the lug is in the notch *c* and the parts are in the position shown in Fig. 2.

I indicates a foot lever, formed by bending laterally the forward end of the rod G. We do not wish, however, to limit ourselves to this exact construction of the foot lever, as it may be formed in many other obvious ways.

J denotes a bracket also secured to the side of the vehicle, and to which is attached one end of a coiled spring K, which latter encircles the rod G. Secured to the rod G, near arm F, is a stop or shoulder L adapted to bear against the buffer or spring K and put it under compression when the rod G is thrown forward to lower the top.

The parts being in the position shown in Fig. 1, and it being desired to lower the cover, the occupant of the vehicle presses the rod forward with the foot, thus rotating the rockshaft and through it the arms M M connected therewith, causing the braces and bows to fold up and the cover to close into the position shown by dotted lines in Fig. 2, in which position it will be maintained by reason of the lug *d* engaging with the notch *c* and thus held in opposition to the action of the springs E, E and K. Upon the release of the lug from the notch the cover will automatically open or rise. By our construction all vibration of the cover will be averted.

It will be noticed that during the forward movement of the rod G the springs E E are being put under tension, and that, as the rod nears the limit of its movement, the shoulder L on the rod begins to put the buffer or spring K under compression, which continues throughout the rest of the forward movement. This prevents the too sudden closing of the top and also aids in the raising of the top when the lug *d* is lifted out of the notch *c*.

Having thus described our invention, what we claim is—

1. In combination with the seat and the top thereon; a rockshaft journaled on the seat and operatively connected with the top; springs tending to hold the top in an open position; and a supplemental buffer-spring.

2. In combination with the seat and the top thereon; a rockshaft journaled on the seat; arms extending from the rockshaft and connected with the top; springs mounted on the rockshaft and tending to keep the top in an open position; an arm extending from the shaft; and a rod pivoted to the arm and extending forward to a position where it may be

conveniently actuated by the foot, whereby the top may be closed positively by the actuation of the foot lever.

3. In combination with the seat and the top thereon; a rockshaft journaled on the seat; arms extending from the rockshaft and connected with the top; springs mounted on the rockshaft and tending to keep the top in an open position; an arm extending from the shaft; a rod pivoted to the arm, and provided with a foot lever and catch at its forward end; a buffer spring mounted on the rod; and a guideway for the rod.

4. In a vehicle, the combination of the seat and the top thereon; a rockshaft journaled on the seat; arms extending from the rockshaft and connected with the top; springs mounted on the rockshaft and tending to keep the top in an open position; an arm extending from the shaft; a rod pivoted to the arm and provided with a shoulder near the arm, a foot lever and a lug at its forward end; a bracket secured to the vehicle; a buffer spring connected to the bracket and encircling the rod; and a guide plate also secured to the body of the vehicle and provided with a notch for the reception of the lug on the rod.

5. In combination with the seat and the top thereon; a rockshaft journaled on the seat; arms extending from the rockshaft and connected with the top; springs mounted on the rockshaft and tending to keep the top in an open position; an arm extending from the shaft, and a rod pivoted to the arm and provided with a foot lever and catch at its forward end whereby the top may be positively closed by the actuation of the foot lever.

In witness whereof we hereunto set our hands in the presence of two witnesses.

CHESTER G. RIDOUT.
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MOSES T. RIDOUT.

Witnesses:
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