

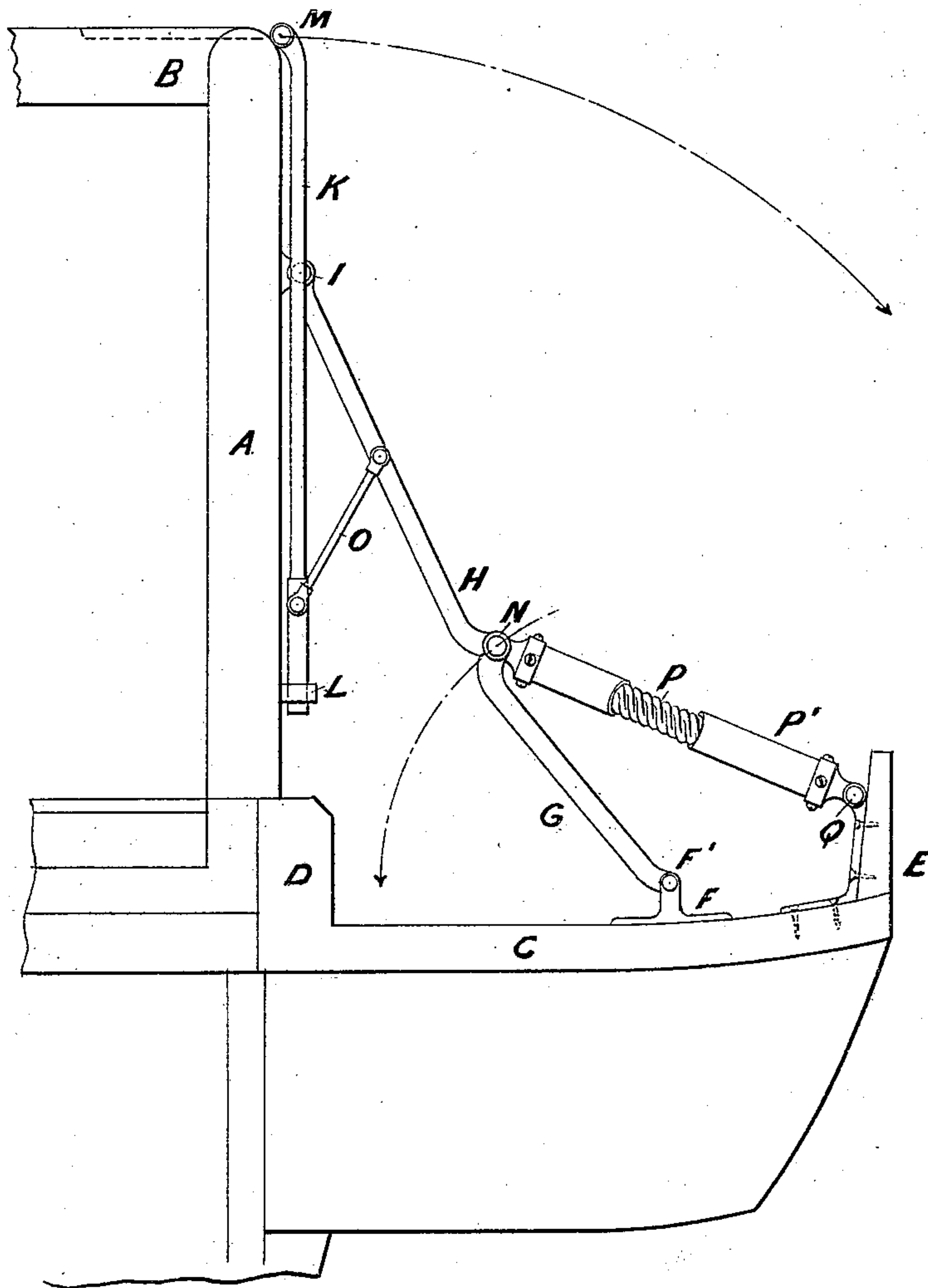
(No Model.)

G. N. & W. HOOPER.

DEVICE FOR OPERATING FOLDING HEADS OF CARRIAGES.

No. 356,470.

Patented Jan. 25, 1887.



Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE NORGATE HOOPER AND WILLIAM HOOPER, OF WESTMINSTER,
LONDON, ENGLAND.

DEVICE FOR OPERATING FOLDING HEADS OF CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 356,470, dated January 25, 1887.

Application filed October 25, 1886. Serial No. 217,138. (No model.) Patented in England May 5, 1885, No. 5,545.

To all whom it may concern:

Be it known that we, GEORGE NORGATE HOOPER and WILLIAM HOOPER, both of 113 Victoria street, Westminster, London, England, carriage-builders, have invented new and useful Improvements in Apparatus for Opening and Shutting Carriage Folding Heads, (for which we have obtained a patent in England, May 5, 1885, No. 5,545,) of which the following is a specification.

The improvements consist in hinging or pivoting to the cant-rail a sliding rod made to slide through an eye or guide down the back of the pillar-top, such rod acting on a short lever pivoted to it and to the inside head-joint, for the purpose of striking or depressing the latter and allowing the head to be lowered, the sliding rod being actuated by raising the cant-rail. For the purpose of assisting in raising the head, a tension-spring is attached to the back rail and to the inside head-joint in such fashion that on the head being raised the tension of the spring pulls up the head-joint. At the same time, by means of the short lever-rod pivoted to it, the sliding rod is raised and the cant-rail brought to its normal or closed position.

The invention further consists in curving the two halves of the inside head-joint, so as to permit of the tension-spring lying between the two halves when the head is open.

So far the description applies to a landau, a landalette, or carriage of those kinds; but the invention is applicable to any carriage with a folding head by modifying the cant-rail action to suit the hoop-sticks, which can be conveniently done by pivoting a curved transverse metal rod to or on the front hoop-stick. The various parts are most conveniently made in metal, and the spring may be of metal or rubber. When of metal it is preferably covered with india-rubber.

The drawing hereunto annexed will serve to illustrate a convenient and practical mode of performing the invention when applied to a landau or landalette, such drawing representing a side view.

A is the pillar-top; B, the cant-rail; C, the elbow; D, the pillar; E, the top back rail; F, elbow-hinge bracket or plate; F', lower pivot of inside head-joint; G, lower limb or half of inside head-joint, and H upper limb or half of same, both halves curved, as shown, to receive the spring P when the head is open; I, upper pivot of said joint; K, sliding rod; L, eye or guide; M, cant-rail hinge or pivot; N, stop knuckle-joint and spring-pivot; O, short rod pivoted to rod K and inside head-joint H; P, metal spring; P', covering for same; Q, spring-hinge.

When opening the head, the apparatus is put into action by lifting the cant-rail and pushing back the pillar-top, when the sliding rod K is depressed and the inside head-joints bent inward by means of the striking rod.

We claim—

The curved inside head-joints, G H, combined with the sliding rod K and the striking-rod O, together with the spring P and their accessories, all substantially as herein described and illustrated, and for the purposes set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

GEORGE NORGATE HOOPER.

WILLIAM HOOPER.

Witnesses to signature of George Norgate Hooper:

SILAS JOHN BOREHAM,
JEREMIAH EDWARDS.

Witnesses to signature of William Hooper:

GEORGE H. BROWN,
WILLIAM ABRAHAM.