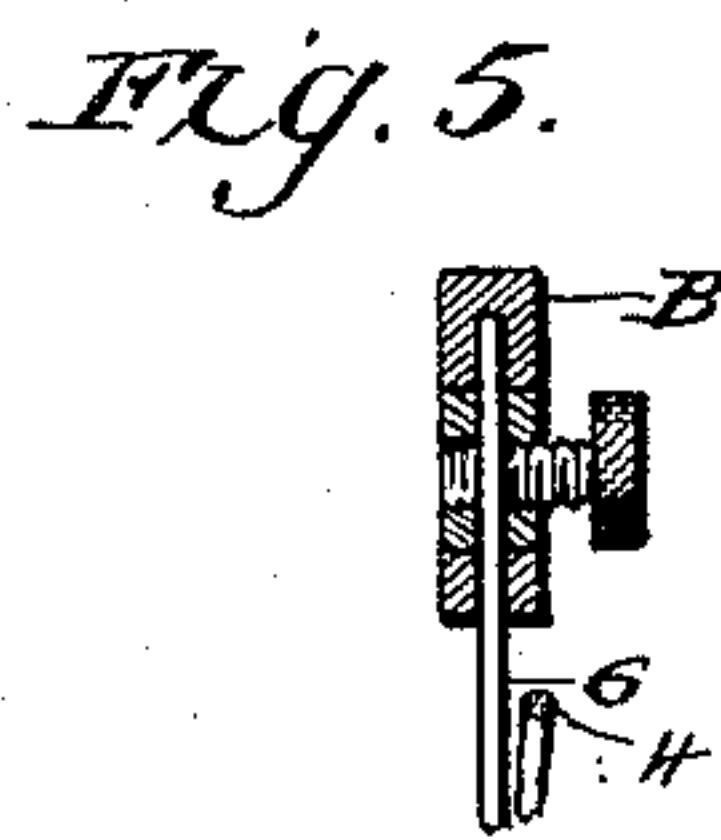
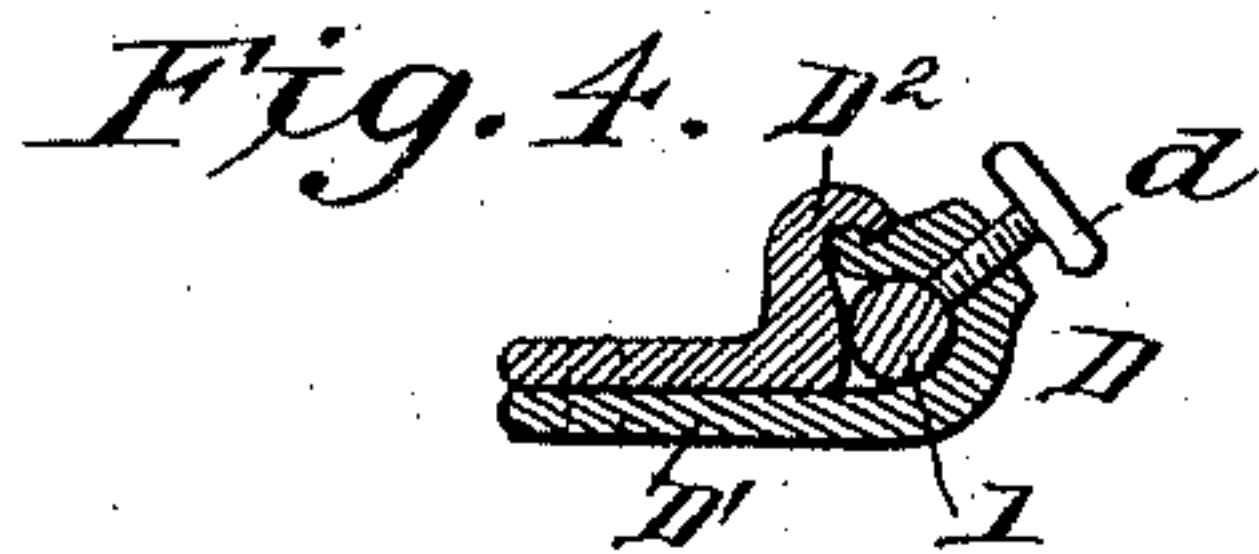
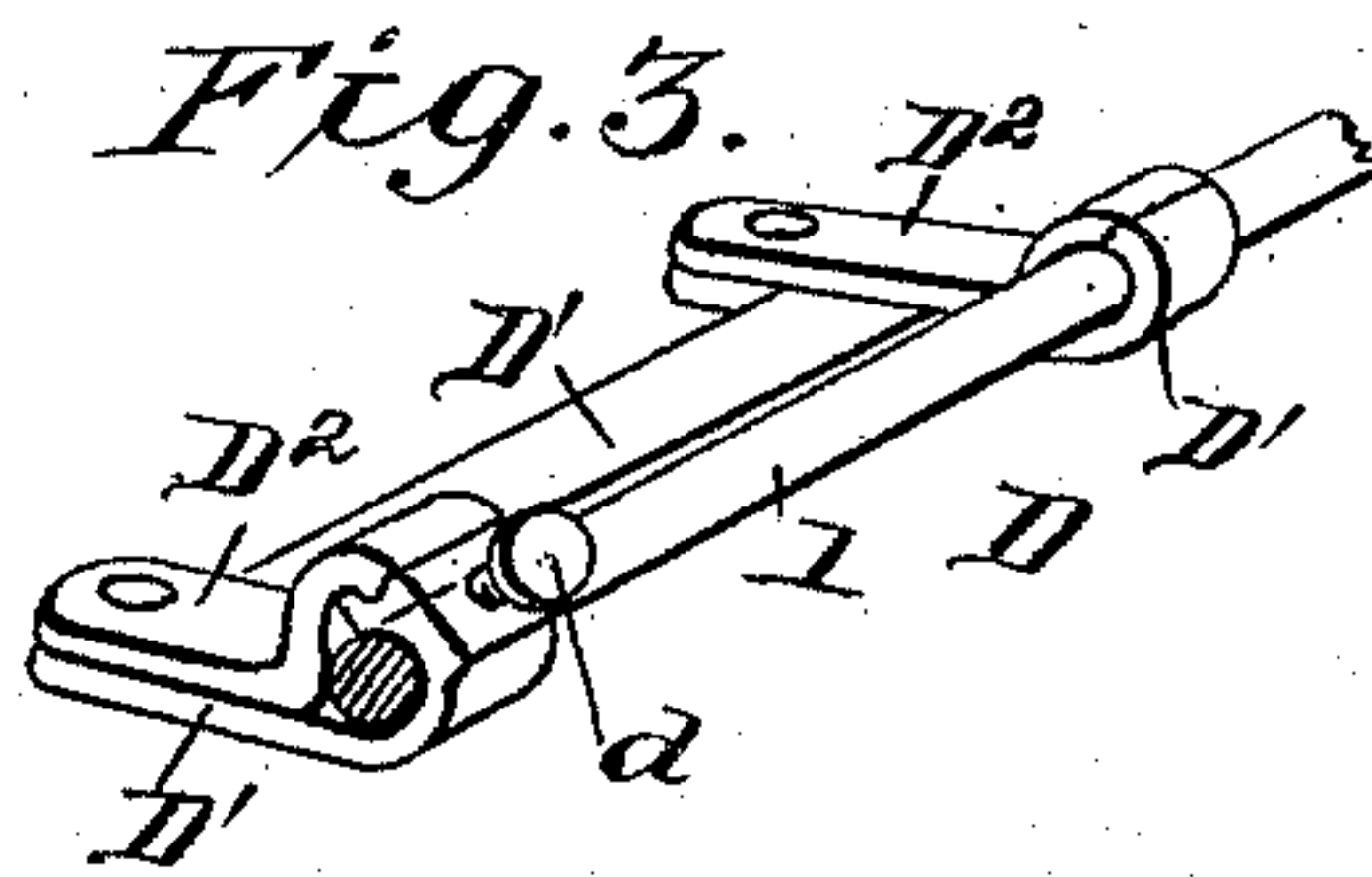
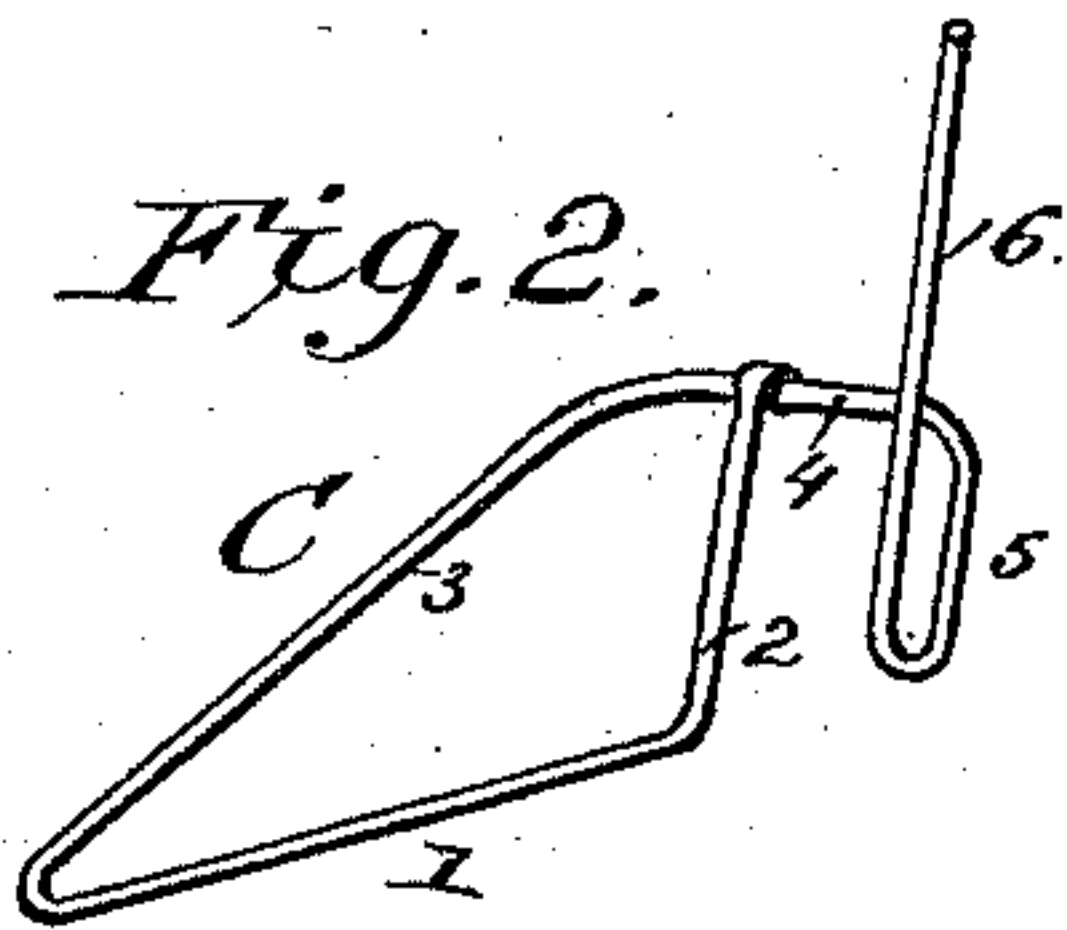
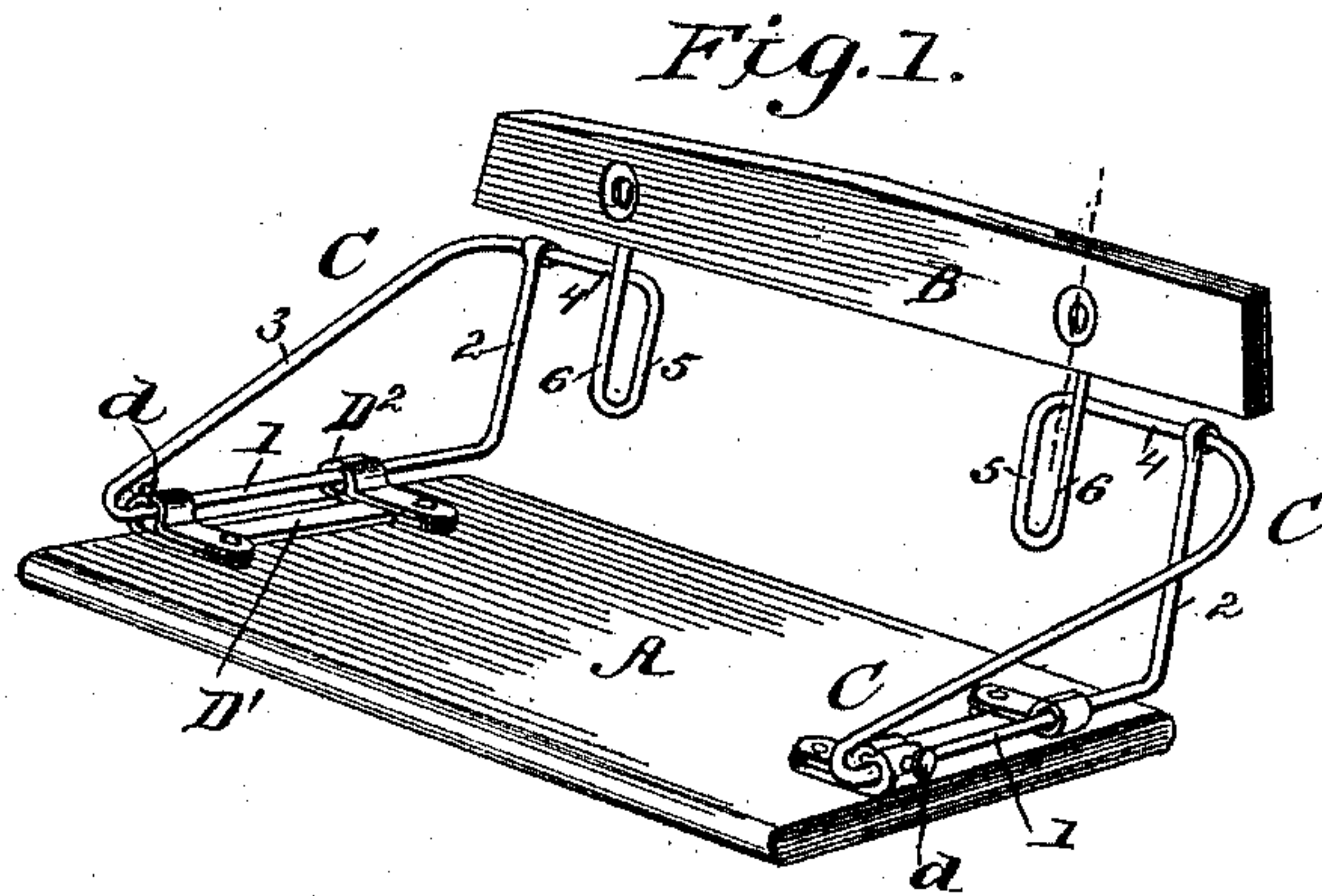


(No Model.)

T. J. KERSTETTER.
VEHICLE SEAT.

No. 445,853.

Patented Feb. 3, 1891.



WITNESSES:

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THOMAS J. KERSTETTER, OF EAST BRADY, PENNSYLVANIA.

VEHICLE-SEAT.

SPECIFICATION forming part of Letters Patent No. 445,853, dated February 3, 1891.

Application filed May 17, 1890. Serial No. 352,251. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. KERSTETTER, of East Brady, in the county of Clarion and State of Pennsylvania, have invented a new and useful Improvement in Vehicle-Seats, of which the following is a specification.

My invention is an improvement in vehicle-seats; and it consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improved seat. Fig. 2 is a detail view of one of the back-supports. Figs. 3 and 4 are detail views of the clamp, and Fig. 5 is a detail view showing the screw-clamp for securing the back-bar in its different adjustments.

The seat A and back-bar B may, in general respects, be of any suitable construction and may be upholstered to suit.

The bar-supports C, which form an important part of my invention, are formed of rods of spring metal bent to form the base portion 1, the upright brace 2, rising from the rear end of the base 1, the side-arm portion 3 extended back from the front end of base 1 and held and braced at its rear end by upright brace 2, the horizontal spring portion 4, the coil 5, and the vertical spring portion 6, such portions 4 and 6 being connected by the coil 5. This coil 5 is formed with a vertical portion bent down from the inner end of the horizontal portion 4 and the vertical portion which projects up and across the part 4 and extends upward to form the spring part 6. This spring part 6 is the main-spring portion and supports the back-bar. The horizontal portion 4 forms a re-enforcing spring and is arranged to form a stop for the part 6, so that in case of a sudden jerk or extraordinary back-pressure on the back-bar the part 6 will bear against the part 4, and the latter will then serve as a re-enforcing spring.

The construction of the back-bar supports is such that the back-bar is supported to yield both back and laterally, rendering the seat comfortable and greatly reducing the discomfort of riding on rough roads.

The back-bar has openings to receive the portions 6 and may be adjusted up or down thereon, being also provided with clamping-

screws *b* by which it may be held in any suitable vertical adjustment.

The back-bar supports are secured to the seat A by means of the holding frames or clamps D, which preferably are formed, as shown, of main portions D' and caps D². The clamps have horizontal eyes, in which the base parts 1 fit, and may be moved back and forth to set the back-bar forward or back, as may be desired, and may be secured in any suitable adjustment back and forth by means of clamp-screws *d*. The eyes are preferably provided by forming the main portion D' with hooks *d'*, into which part 1 may be slipped laterally, and providing the cap-plates D² for closing the said hooks, as will be understood.

I do not in this application seek to cover, broadly, the provision of holding-frames secured to the seat and provided with adjustable securing devices for the spring-arms and the spring-arms secured to said seats, nor broadly the combination of seat, back-bar, holding-frames secured to the seat and provided with the clamp devices, and the arms supporting the back-bar and held by the clamp devices of the holding-frame, for the reason that such constructions form part of the subject-matter of a separate application for patent filed by me October 17, 1889, Serial No. 327,360.

Having thus described my invention, what I claim as new is—

1. A seat-back support formed from a rod of metal bent to form the base part, the side rail, the portion connected with the back, and the upright brace arranged to brace the portion which connects with the back-bar, all substantially as and for the purposes set forth.

2. A seat-back support comprising an upright main-spring portion arranged to support the seat-back, and a re-enforcing spring portion arranged to serve as a stop for engagement by the said upright main-spring portion, all substantially as and for the purposes set forth.

3. A seat-back support comprising the base portion, the upright brace extended from the rear end of such base, and the side-rail portion extended from the front end of the base and connected with the upper end of the upright brace, all substantially as and for the purposes set forth.

4. A seat-back support having a metal rod bent to form the horizontal back portion, the vertical portion bent down from the inner end of said horizontal portion, and the standard-like rod bent upward from the lower end of said downwardly-bent part and extended in front of and across the horizontal portion, all substantially as set forth.

5. A seat-back support having its spring portion formed with horizontal and vertical arms or portions connected by a coil, the vertical arm crossing in front of and approximately at right angles to the horizontal arm, substantially as set forth.

6. A seat-back support formed of a rod of spring metal and bent to provide the side arm and the spring portion for connection with the back-bar, the spring portion being arranged at the rear end of the side arm, all substantially as and for the purposes set forth.

7. A seat-back support formed of a spring-metal rod bent to provide the base part, the upright brace at the rear end of such base part, the side arm extended back from the front end of the base and connected with the upper end of the upright brace, and the horizontal and vertical spring portions connected by a coil, all substantially as and for the purposes set forth.

8. The combination, with the seat and the back-supports having base portions, of the clamps consisting of main portions secured to the seat and having hook-like portions to receive the base portions of the back-supports, and the cap-plates for securing the base portions in said hooks, the cap-plates being lapped over and upon the hooks, all substantially as and for the purposes set forth.

9. The combination of the seat, the back-supports secured to said seat and adjustable back and forth, whereby the back-bar may be set forward or back, and the back-bar connected with and adjustable vertically on its supports, all substantially as and for the purposes set forth.

10. The combination of the seat, the clamps thereon having horizontal eyes and clamp-screws, the back-support having a base portion fitting and adjustable back and forth in said eyes and arranged to be secured by the clamp-screws, and also having vertical spring portions, and the back-bar having openings to receive said spring portions, and clamping-screws for securing the back-bar to the said spring portions, all substantially as and for the purposes set forth.

11. The combination, with the seat and the back-bar, of the back-bar supports formed of spring-metal rods secured to the seat and bent to provide the side arms, and the spring portions connected with the back-bar, all substantially as and for the purposes set forth.

12. The combination, substantially as herein described, of the seat, the clamps, the back-bar supports having base portions held by said clamps, side-arm portions, upright brace portions and horizontal and vertical spring portions connected by a coil, and the back-bar adjustable vertically on the upright spring portions, all substantially as and for the purposes set forth.

THOMAS J. KERSTETTER.

Witnesses:

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