

F. M. HUBBARD.

SPRING-SEAT.

No. 188,140.

Patented March 6, 1877.

Fig. 1.

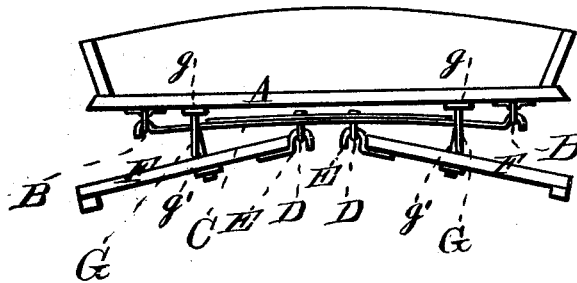


Fig. 2.

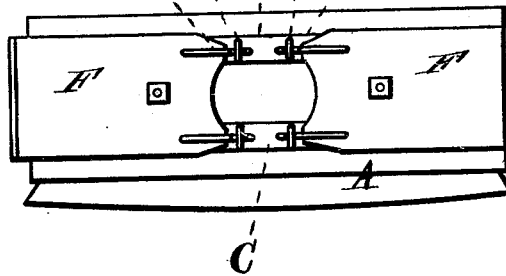
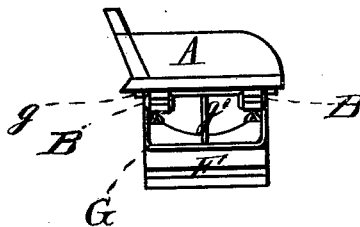


Fig. 3.



WITNESSES

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FRANCIS M. HUBBARD, OF NORA SPRINGS, IOWA.

IMPROVEMENT IN SPRING-SEATS.

Specification forming part of Letters Patent No. **188,140**, dated March 6, 1877; application filed November 4, 1876.

To all whom it may concern :

Be it known that I, FRANCIS M. HUBBARD, of Nora Springs, in the county of Floyd and State of Iowa, have invented a new and valuable Improvement in Spring-Seats for Wagons; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front elevation of my wagon-seat, and Fig. 2 is a bottom view of the same. Fig. 3 is a side elevation thereof.

This invention relates to wagon-seat springs; and consists in the construction and arrangement thereof, and of the devices attached thereto.

In the annexed drawings, A designates a wagon-seat of ordinary construction, to the bottom of which are attached four small loops or stirrups, B B, that support the ends of two plate-springs, C C, extending across the bottom of said seat, and at right angles to the line of draft. These plate-springs are slightly bent upward in the middle, so as to touch the under side of said seat, and they resist, by their elasticity, any effort to straighten them. On the under side of the middle of said springs are secured eyes or staples D D, which are adapted to receive hooks E E on the inner ends of broad levers or diverging supporting-bars F F. G G designate two metal fulcrums or pivot-frames, which are shaped like large staples, each being provided with an attaching-plate, *g*, that is secured to the under side

of said seat A, and with a central rod or bolt, *g'*, that passes down through one of the levers or supporting-bars F F, between the center and the inner end thereof, and is secured on the under side thereof.

The operation of the above-described devices is as follows: The weight of the occupant is transmitted, through fulcrums or pivot-frames G G, to levers or supporting-bars F F, flattening the same and drawing down the middle portions of springs C C, so as to straighten the same. Thus the entire strain comes finally upon said springs, which receive it very equally in all their parts, owing to their peculiar shape and attachment.

When the pressure is removed the springs regain their former position, drawing the inner ends of supporting-levers F upward, and causing them to turn upon fulcrums G, so as to assume the inclined and diverging position shown in Fig. 1.

What I claim as new, and desire to secure by Letters Patent, is—

The wagon-seat A, provided on its under side with the staples B B, and stirrup-fulera G G, having plates *g g* and rods *g'*, in combination with the springs C, hooked at their ends, and provided with staples D D, and the supporting-bars F, provided at their upper ends with hooks E, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FRANCIS M. HUBBARD.

Witnesses:

Z. C. TRASK,

A. W. BURGESS.