

T. FLEMING.
VEHICLE-SEAT.

No. 172,618.

Patented Jan. 25, 1876.

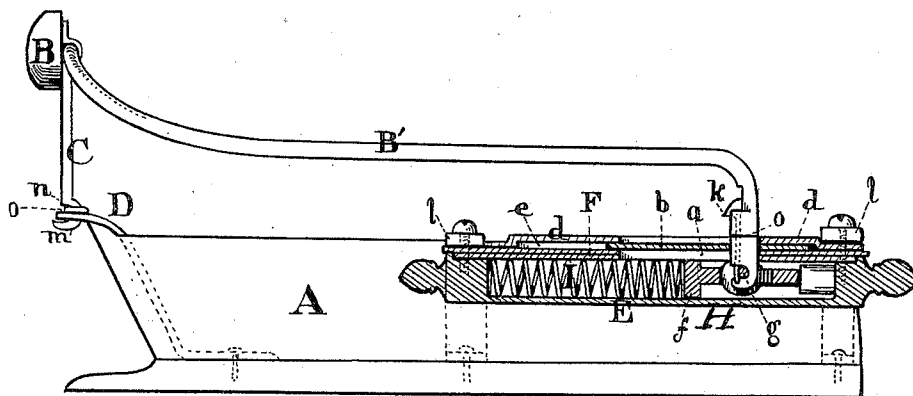


Fig. 1.

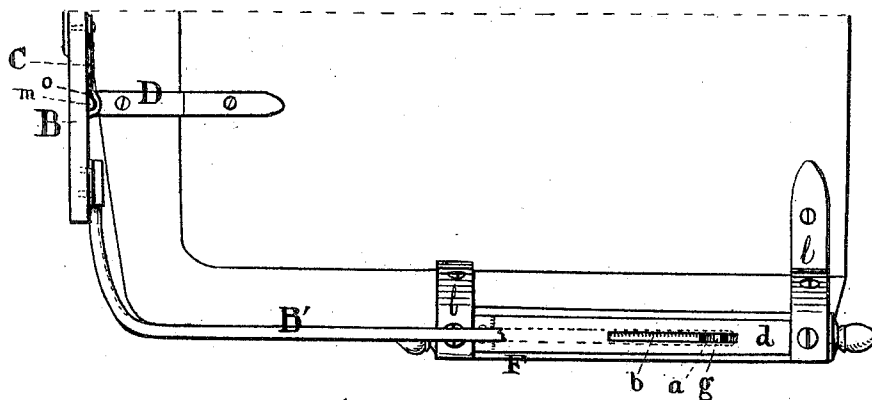


Fig. 2.
(The front end of Arm (B') removed.)

Scale, $\frac{1}{2}$ in. to 1 foot

Witnesses
Clarence Thurlow
J. F. Adams.

Thomas Fleming
by E. Thurlow his atty.
in fact

UNITED STATES PATENT OFFICE.

THOMAS FLEMING, OF WYOMING, ILLINOIS.

IMPROVEMENT IN VEHICLE-SEATS.

Specification forming part of Letters Patent No. **172,618**, dated January 25, 1876; application filed May 31, 1875.

To all whom it may concern:

Be it known that I, THOMAS FLEMING, of Wyoming, in the county of Stark, in the State of Illinois, have invented an Improvement in Spring-Backs for Vehicle-Seats; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a side view of the seat, with a vertical longitudinal section through center of the spring-case; Fig. 2, plan of half of seat, with front end of arm-rest removed.

This invention consists, first, in incasing the spring which dissipates the jar or shake within a box or case made nearly impervious to dust and dirt; second, in doing away with the unsightly prominence of such springs, which are mounted immediately upon the arm-rest or between this and a standard, &c.; third, in making the back removable from the seat-braces by the use of adjustable connections of the front of the arm-rest to the slide of the spring, and the use of a rubber bumper between the shoulder of the rear supports of the back and the seat-braces.

I am aware that these springs have been let into the wood-work of a seat, but they cannot be so placed where the wood-work is often thin; and, again, the back cannot be removed, as they must be fixtures, and if, by accident, the spring breaks, the wood-work is scarred, and the paint and varnish at the junction of the slotted plate is broken and defaced in removing the latter to supply a new spring. I attach a tubular spring-case to the side braces of the seat.

In the drawings, A represents the seat; B, the detachable back and arm rests B' B'. The arm-rests are pivoted in the usual mode to the back-piece B, the latter provided with supports C C, each ending in a hook, *m*, curved backward, by means of which the same are attached to the seat-braces D D by means of eyes in the latter, which abut against rubbers *o* placed between them and a shoulder, *n*, above the hook. E represents a horizontal case, which guards the spring I, one on each side of the seat, made tubular in form, with closed ends,

and divided lengthwise into two parts—the upper, F, slotted for about one-third of its length upon its upper surface, to admit the end of the seat-arm B', and at the junction of the two parts for the edge of the slide H. To exclude dirt I add above the slot *a*, first mentioned, a sliding cover, *b*, which clasps the neck of the forward end of the arm B', where it enters the case, and above this plate a recessed plate, *d*, is set to cover the sliding plate *b*, but is provided with a slot in its center corresponding with the lower slot *a*. I also attach the sliding cover *b* in a different manner to that described—viz., by placing it below the slot *a*, so as to ride upon the slide H in the case E F. A screw, passing through holes in the respective braces *l l* on the seat, enters the plate *d*, cover F, and case D, and confines them together. H represents the spring-slide, to which the point of the arm B' is removably connected by means of a recess in the end of said point, which is received by a slot in said slide, and is retained upon a pin or cross-piece, *g*, and is prevented from escape by means of a key, *k*, which slides in a vertical socket in the point of said arm B', so as to include the pin in a recess on the edge of said point. The spring I is placed between the slide H and the rear of the case E F, so as to meet the backward pull of the back B' B'.

The advantages of this spring-back are, first, the back is easily and instantaneously removable from the seat when desired by simply withdrawing the keys *k k* in the points of the arms B' B', and turning the arms up until the hooks *m m* release themselves from the braces D D, to substitute another seat; second, that the spring can be replaced, if broken, readily by removing the two screws; third, no dirt, comparatively, can enter or pass the slide *b*; fourth, the addition of the rubbers *o o*, to prevent jar, and injury to dresses.

What I claim as my invention is—

1. The combination, with the shoulders *n* and the braces D, of the rubber bumpers *o o* between the parts, to prevent noise and to keep the rider's dress from being ground or torn, as described.

2. The removable seat-arm B', having a sliding collar or slot-cover, *b*, socket for the re-

movable key-pin *k*, and recess for the pin *g* of the block H, as described.

3. The combination, with the removable seat-arm B', its shoulder *o*, and pin *k*, and the pin *g* of the block H, of the dirt-excluding tube E, block H, and spring I, as described.

In testimony that I claim the foregoing ve-

hicle-seat back, I have hereunto set my hand this 24th day of May, 1875.

THOMAS FLEMING.

Witnesses:

JAMES M. MORSE,

H. W. WELLS.