

UNITED STATES PATENT OFFICE.

CHARLES BEW, OF ANGOLA, INDIANA.

BACK FOR VEHICLE-SEATS.

SPECIFICATION forming part of Letters Patent No. 415,017, dated November 12, 1889.

Application filed September 2, 1889. Serial No. 322,750. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BEW, a citizen of the United States, residing at Angola, in the county of Steuben and State of Indiana, have invented certain new and useful Improvements in Backs for Vehicle-Seats; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to vehicle-seats, and aims to provide a yielding back to increase the comfort of the occupant by taking up jars and jolts when the vehicle is passing over ruts, stones, &c.

The object of the invention is to simplify the construction of this class of seats and render the same more durable and compact and to devise a construction that will render the movements of the seat noiseless.

To these ends and such others as my invention appertains the improvement consists of the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view, parts being broken away, of a seat embodying my invention; Fig. 2, a central longitudinal section of the arm on an enlarged scale; Fig. 3, a side view of the connection between the back and the said arm on a larger scale, showing the stuffing-box, the spring, and the plunger; Fig. 4, a detail section on the line X X of Fig. 1.

The seat A, of ordinary construction, is provided with two corresponding pairs of side irons E E', which support the arms F, and with back-irons D, to which the back B is pivotally connected by the standards C, which have their lower ends bent at right angles and fitted in sockets in the ends of the irons D. The ends of the irons D have a cut-away portion which forms a recess *d* for the standard C to fit in, the movement of the latter being limited by the shoulders *d'* on each side of the said recess.

Both arms and their connections with the back and the seats are constructed alike;

hence a detailed description of one will answer for each. The front end F' of the arm curves down and terminates in a threaded stem *f*, which passes through an aperture in the end of the iron E, being secured in place by the nut *f'*. The rear end of the arm is supported on the post G, that has a threaded stem *g* at its lower end, which is inserted in an opening in the end of the iron E', and is held in place by the nut *g'*. The horizontal portion of the arm is tubular, and its rear end is internally threaded at *f*² to receive the externally-threaded flange *h* of the cap H. The sides of the cap and the sides of the arm are flush when the cap is screwed in the arm. The connection I between the back and the arm has its rear end bent vertically at *i* and laterally at *i'*, the end *i'* entering a socket *b* in the end of the back B. The front portion of the connection I passes through the cap H, and extends nearly the entire length of the tubular portion of the arm, and has its end *i*² threaded. The nut J, having the tubular threaded shank *j*, is mounted on the end of the connection I, and is adjustable thereon to vary the tension of the spring M, which is placed on the said connection I and held between the washers *k* and *l*, which are backed by the rubber blocks K and L, respectively. The rubber L, the washer *l*, and the inner end of the spring fit within the cap H. The rubber block K is larger than the washer and the nut J and keeps them from coming in contact with the sides of the tubular portion of the arm; hence the connection makes no noise in its movements in the arm. The arm may be suitably upholstered, as shown, to obtain a comfortable rest.

The operation of the device is manifest from the foregoing description, reference being had to the accompanying drawings.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the seat and the back, of the irons E and E', the arm having its front end curved down and secured to the iron E, and having its rear end supported on the iron E' by the post G, the connection I, having its rear end pivotally connected with the back and having its front portion working in the tubular portion of the arm, and the

spring placed on the connection and held between a stop on the arm and a stop on the said connection, substantially as described.

2. The combination, with the seat and back
5 and the tubular arms F, having their front ends F' curved down and their rear ends f^2 threaded, of the caps H, screwed on the threaded ends f^2 , the connection I, passing
10 through the cap H into arm F and having its front end i^2 threaded, the stop J, screwed on the threaded end i^2 and having rubber L, and the spring M on the inner end of the connection I, held between rubber K in cap H and rubber L on stop J, and having its tension
15 adjustable by adjusting stop J on the threaded end of connection I, substantially as set forth.

3. The combination, with the seat and the yielding back, of the irons D, secured to the seat and having sockets in their upper ends, 20 which ends are recessed to form shoulders or stops d' , and the standards C, having their bent ends inserted in said sockets and limited in their movements by the said shoulders d' , 25 substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES BEW.

Witnesses:

FRANK M. POWERS,
C. H. JACKSON.