No. 649,566. Patented May 15, 1900.

L. BURG.

BODY HANGER FOR VEHICLES.

(Application filed Mar. 8, 1900.)

(No Model.)

Fig. 1.

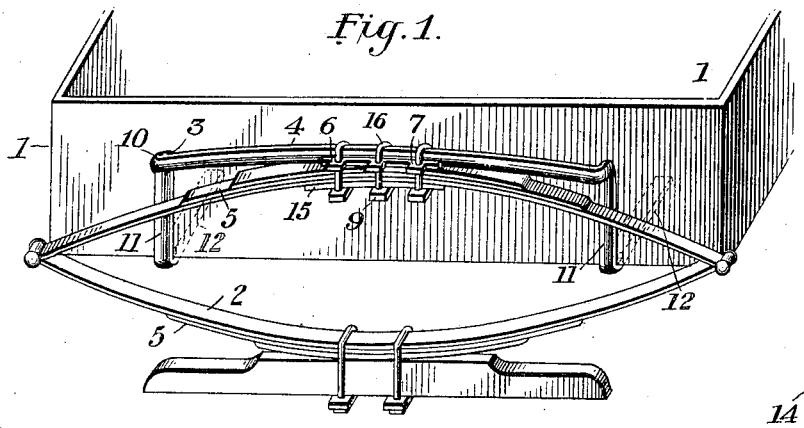


Fig. 2.

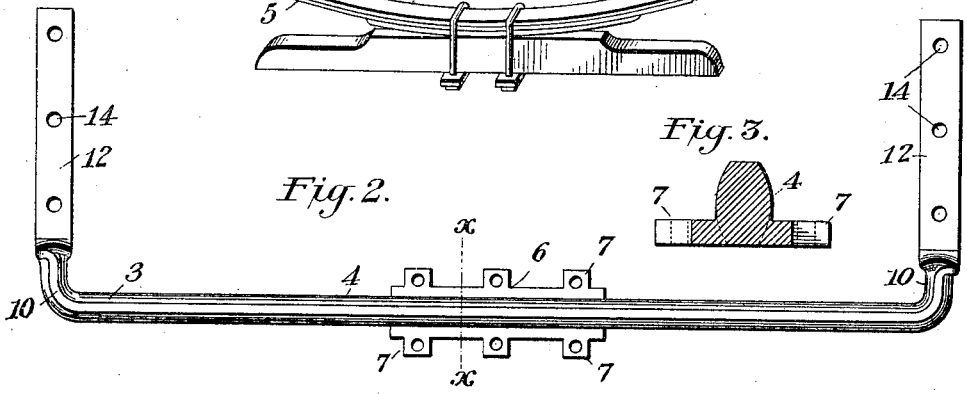


Fig. 3.

Fig. 4.

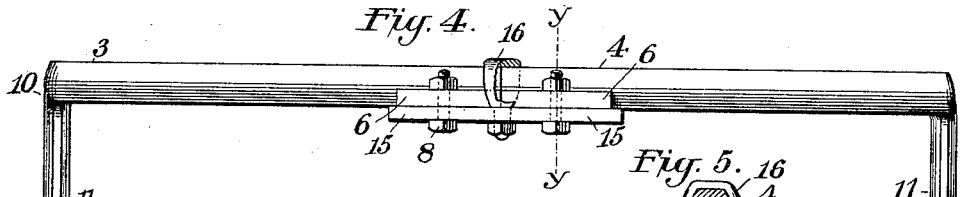


Fig. 5.

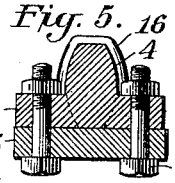


Fig. 6.

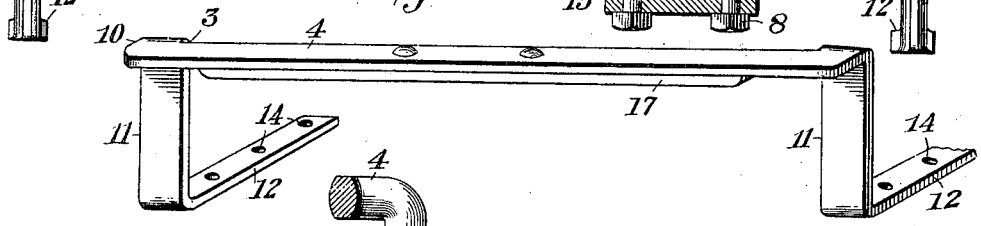
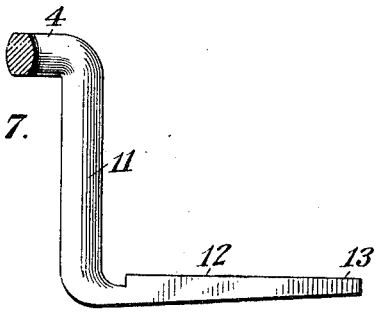


Fig. 7.



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UNITED STATES PATENT OFFICE.

LEWIS BURG, OF DALLAS CITY, ILLINOIS.

BODY-HANGER FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 649,566, dated May 15, 1900.

Application filed March 8, 1900. Serial No. 7,883. (No model.)

To all whom it may concern:

Be it known that I, LEWIS BURG, a citizen of the United States, residing at Dallas City, in the county of Hancock and State of Illinois, have invented certain new and useful Improvements in Body-Hangers for Carriages; and I do hereby 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, which form part of this specification.

My invention relates to improvements in body-hangers for carriages, and has for its object to provide a device so constructed as to rest centrally over the spring and extend laterally to near its ends before being bent to connect with the carriage-body and to form a securing-plate integral with the hanger to prevent tilting or drawing over of the spring to one side and is constructed as hereinafter described, and more particularly pointed out in the claims.

In making body-hangers heretofore they have been formed in connection with a plate extending back from the edge of the hanger, by means of which the hanger is secured to an elliptic spring by means of bolts passing through the plate and spring or by clips around the leaves of the spring and plate of the hanger. With such a construction of body-hanger attached to the side of the spring by its rearwardly-projecting plate it has been found that all of the strain of the hanger being on the carriage-body side and at the side of the center of the spring the upper portion of the spring is tilted over toward the carriage-body, bringing great strain upon the bolts connecting the upper and lower leaves and drawing the upper leaves of the spring out of position, thereby destroying the usefulness of the spring on account of its twisted condition. To overcome this defect, my device is arranged to bring the strain and weight of the carriage-body directly down upon the top of the spring.

Referring to the drawings, Figure 1 is a perspective view of my improved body-hanger attached to the spring and body of a carriage. Fig. 2 is a plan view of the body-hanger in connection with a securing-plate made in the same piece therewith. Fig. 3 is a cross-sectional view on the line $x\ x$ of Fig. 2. Fig. 4 is a rear view showing the bearing-arm of the body-hanger made in two separate pieces, with securing-plates and a supplemental plate for holding them in position on the spring. Fig. 5 is a cross-sectional view on the line $y\ y$ of Fig. 4. Fig. 6 is a slightly-modified form showing the body-hanger made of a flat single piece of steel, with a reinforcing spring-leaf beneath the bearing-arm. Fig. 7 is a cross-sectional view of the body-hanger near the depending arms, showing the foot-piece.

Like figures of reference indicate corresponding parts in each figure of the drawings.

1 represents the body of an ordinary buggy, and 2 an elliptical spring used on a running-gear upon which the body is supported.

3 refers to my improved body-hanger for supporting the weight of the buggy-body upon the spring in such a manner as to prevent the tilting of the spring toward the body.

In constructing my device the bearing-arm 4 of the body-hanger is made to rest upon and directly over the spring and is formed conical in shape to give it additional strength. The bearing-arm is made of sufficient length to extend over the spring beyond the ends of the supplemental leaves 5. On the under side of the center of the bearing-arm 4 a securing-plate 6 is formed integral therewith, the under side of the plate and arm being on the same plane. The securing-plate 6 has lateral lugs 7, in which bolts 8 or clips 16 are placed in attaching the hanger to the spring. When clips are used, as shown in Fig. 1, they extend over the conical portion of the long bearing-arm 4 and are secured in the ordinary way after passing through bars 9 on the under side of the leaves of the upper portion of the spring. The lateral lugs 7 of the securing-plate may be made of sufficient strength, if desired, so that the hanger can be secured to the spring by simple bolts 8, passing through the lugs of the plate and the cross-bars 9, below the leaves of the spring, in place of clips passing over the top of the bearing-arm.

Somewhat beyond the ends of the supplemental leaves 5 of the spring the bearing-arm part of the body-hanger is bent at right angles and twisted at 10 upon itself to form

vertical arms 11, which extend down by the side of the spring to the desired distance for holding the body of the buggy when the arms are turned at right angles toward the buggy-body to form feet 12, which extend under and support the buggy-body. The foot-pieces 12 are made slightly tapering from the downwardly-extending arms 11 to their points 13 for the purpose of more closely fitting them up to and binding them on the under side of the box in holding the buggy-body in position when secured by bolts or rivets through the holes 14 in the foot-pieces.

It has been found desirable in some instances to make the body-hanger 3 in two separate pieces for the purpose of economizing labor in manufacturing and space in shipping, as well as rendering them more easy of application when applied to buggies. In making the hanger in two separate parts, as shown in Fig. 4, the bearing-arms 4 are united over the center of the spring. In this construction the securing-plate 6 is also divided, each section of the bearing-arm having half of the plate integral therewith underneath its uniting end. In applying this form of hanger a supplemental plate 15 is used underneath the securing-plate 6, either on top or below the upper part of the spring, for holding the two sections of the bearing-arm together. These sections are secured to the spring by means of bolts 8 and a T-bolt or spring saddle-clip 16, which is passed over the top of the conical hanger at the point where the two arms are united and through the cross-bars 9 or through the supplemental plate 15, when it is used below the upper part of the spring, in the same manner as those are secured when the hanger is not divided in two sections.

In Fig. 6 I have shown a somewhat modified form of body-hanger 3, which is for use more especially in the construction of single-seated or very light buggies. In this form of hanger the device is made from a single piece of flat spring-steel of substantially the same length as those hereinbefore described, with its bearing-arm 4 extending beyond the ends of the supplemental leaves 5 of the spring, at which point the arm 4 is bent at right angles and twisted upon itself to form arms 11, that extend downward by the side of the spring and then forward to form foot-pieces 12 for supporting the body of the vehicle. In this form of hanger the bearing-arms 4 over the spring are reinforced by a supplemental flat steel spring 17 underneath the bearing-arm, which rests on top of the spring and extends to within a short distance of the arms 11 of the hanger. This construction may be secured to the spring in the same manner as those before described or by bolts passing directly through the leaves of the spring or in any other way most convenient.

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

1. In a body-hanger for carriages, the combination with a bearing-arm resting on the spring directly over and extending beyond the supplemental leaves, of a securing-plate formed integral with the bearing-arm, the under side of the plate and arm being on the same plane and the plate extending on each side of the arm forming lateral lugs for securing the hanger to the spring, as and for the purpose set forth.

2. In a body-hanger, the combination with downwardly-extending arms and foot-pieces for supporting the carriage-body, of a conical bearing-arm resting on the spring directly over and extending beyond the ends of the leaves of the spring, of a securing-plate formed integral with and on the same plane with the under side of the bearing-arm, the said plate having lateral lugs on each side for securing the arm to the spring, as and for the purpose set forth.

3. In a body-hanger, the combination with downwardly-extending arms with foot-pieces for supporting the carriage-body, of the bearing-arm made in two sections, the ends of the sections being united over the center of the spring and their outer ends extending over and beyond the supplemental leaves of the spring, securing-plates formed integral with and on the under side of adjoining ends of the sections and lateral lugs on the sides of the plates, as and for the purpose set forth.

4. In a body-hanger, the combination with the bearing-arm made in two sections and united over the center of the spring, the outer ends of the sections extending over and beyond the supplemental leaves of the spring, securing-plates formed integral with and on the under side of the adjoining ends of the sections, the plates having lateral lugs extending on each side of the spring, a supplemental plate beneath the securing-plate, and the united ends of the sections secured by a saddle-clip, as and for the purpose set forth.

In testimony whereof I have signed my name in presence of two witnesses.

LEWIS BURG.

Witnesses:
E. G. DENMAN,
G. W. HARBAUGH.