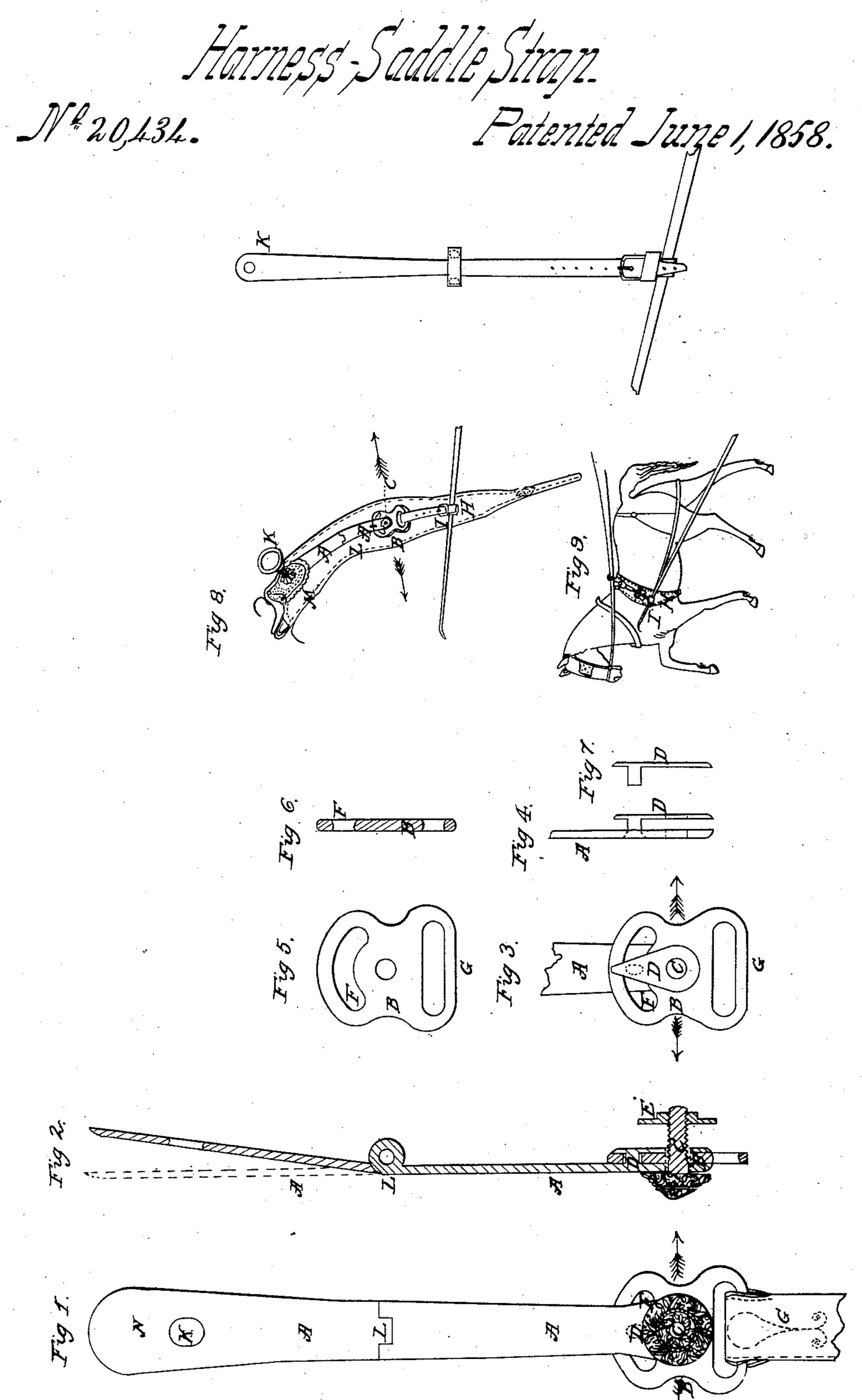
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## UNITED STATES PATENT OFFICE.

R. JANCOVIUS, OF NEWARK, NEW JERSEY.

## SELF-ADJUSTING AND VIBRATING BACK-BAND STRAP.

Specification of Letters Patent No. 20,434, dated June 1, 1858.

To all whom it may concern:

Be it known that I, Robert Jancovius, of Newark, in the county of Essex and State of New Jersey, have invented a new and 5 Improved Mode of Attaching Harness Saddles and Pads to Shafts of Carriages, Wagons, and other Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference be-10 ing had to the annexed drawings, making a

part of this specification, in which—

Figure 1 is a top view of a self adjusting and vibrating back band strap, vibrating sector and loop. Fig. 2 is a longitudinal 15 section of Fig. 1, showing the connection of the vibrating sector B, center bolt c, and pointed back support D to the back band A A. Fig. 3 is a view of the under side of Fig. 1, showing the position of the pointed 20 back support D. Fig. 4, is an edge view in section of Fig. 3, showing the mode of securing the pointed back support D to the lower end of back band A. Fig. 5, is a plan of the vibrating sector B. Fig. 6, is an edge 25 view in section of Fig. 5. Fig. 7 is an edge view of the pointed back support D previous to its being riveted fast to A. See Figs. 2 and 4. Fig. 8 is a view of one half of a saddle showing the location and position of 30 the above self adjusting and vibrating back band strap and tug H on shaft. Fig. 9 shows the mode of attaching the whole invention to a saddle on a horse with a shaft. Similar letters of reference indicate cor-

35 responding parts in the several figures. The nature of my invention consists in attaching the saddle to the shaft by means of the peculiar construction of the vibrating sector B, Fig. 5, having a curved groove or 40 slot F, through which is passed the pin D, connected with the pointed back support D, and working or vibrating on the center bolt C, causing an easy movement of the back band strap on the saddle and preventing the 45 strain edgewise, which in other cases invariably causes the stitching or sewing on the strap to give out or break away. The vibrating motion of the sector gives an easy and soft motion on the horse's back, at each 50 alternate step, either in running, walking or backing, thus preventing a sudden jar or jerk on the horse and the straining edgewise of the back band strap.

To enable others skilled in the art to fully understand and construct my invention, I 55 will proceed to describe it.

A, A represents a metalic back band strap, made with one, two or more hinges L, or with links of chain to produce the same effect.

B, Fig. 5, represents a sector with a center hole in it, a curved slot F, and a straight

slot at G.

D represents a pointed back support, Fig. 7, with a pin attached to it, which is put 65 through the slot F, Fig. 5, and riveted fast to the lower end of back band strap A A after which a bolt or screw is put through A and B at C, Fig. 2, through D, and lastly, the saddle, then secured by the nut E. A 70 strap or loop G is now sewed into the straight slot at the lower edge of sector B at G, which connects with the tug H on shaft Fig. 8, by means of the buckle I. The whole being now complete, it is put on the saddle 75 with the upper end of the back band strap A A at N put under a piece of leather called the jockey at M, Fig. 8, and secured to the top of saddle by the ring bolt or turret K'. Fig. 8, said bolt or turret being put 80 through the oblong hole K, Fig. 1, which firmly secures the upper end to the top of saddle, while the bolt C firmly secures the lower end of this, now complete, back band strap, to the middle of saddle.

The common back band strap is a piece of leather extending from the turret K, to shaft tug I. Figs. 8, 9, with a guide sewed over it about midway on saddle, as seen in sketch O.

My back band being now complete, I will explain its operation. Being attached to the saddle, it is placed on the horse's back, and the joints, hinge or link L now comes in active operation. If the horse is fat and full, 95 the back band assumes a concave position as seen at Fig. 2. If the horse is lean and lank, it assumes the position as seen in the dotted line, which prevents the chafing of the leather, or the horse's back, by readily con- 100 forming to the shape of the horse. Hence these hinges or links allow the saddle to open or close for the above purpose. Secondly, when the horse walks or runs or backs a strain is exerted on the back band 105 strap in the direction of the arrows, but

the strap A, being connected to the vibrating sector B, by the center bolt C, this said strain causes the strap G, to work the sector B on its center C, thus causing a soft vibrat-5 ing motion, which entirely prevents the chafing of any part of the saddle by the motion of the horse. Thirdly, if the center bolt C, should work loose, and come entirely out, the pin at D, passing through the curved 10 slot F, prevents the shaft from falling, starting the horse, and causing him to run away, which result would take place, while the pointed back support D, remains as a guard to prevent any lateral strain from separating 15 the sector B, from the back band strap A, the whole forming a useful combination, releasing the horse from sudden jerks, and preventing the sewing or stitching from

giving out and the chafing of other parts of the saddle.

I do not claim broadly, the joints, hinges, or chain links L; but

What I do claim and wish to secure by Letters Patent of the United States, is—

The peculiar construction of the vibrating sector B, provided with the slot F, the pointed back support D, with the pin D attached, the whole in connection with the several joints, hinges and link L, or their equivalents, for the object and purposes set 30 forth and described in the specification.

## ROBERT JANCOVIUS.

Witnesses:
Jno. Whitehead,
E. P. Higgins.