

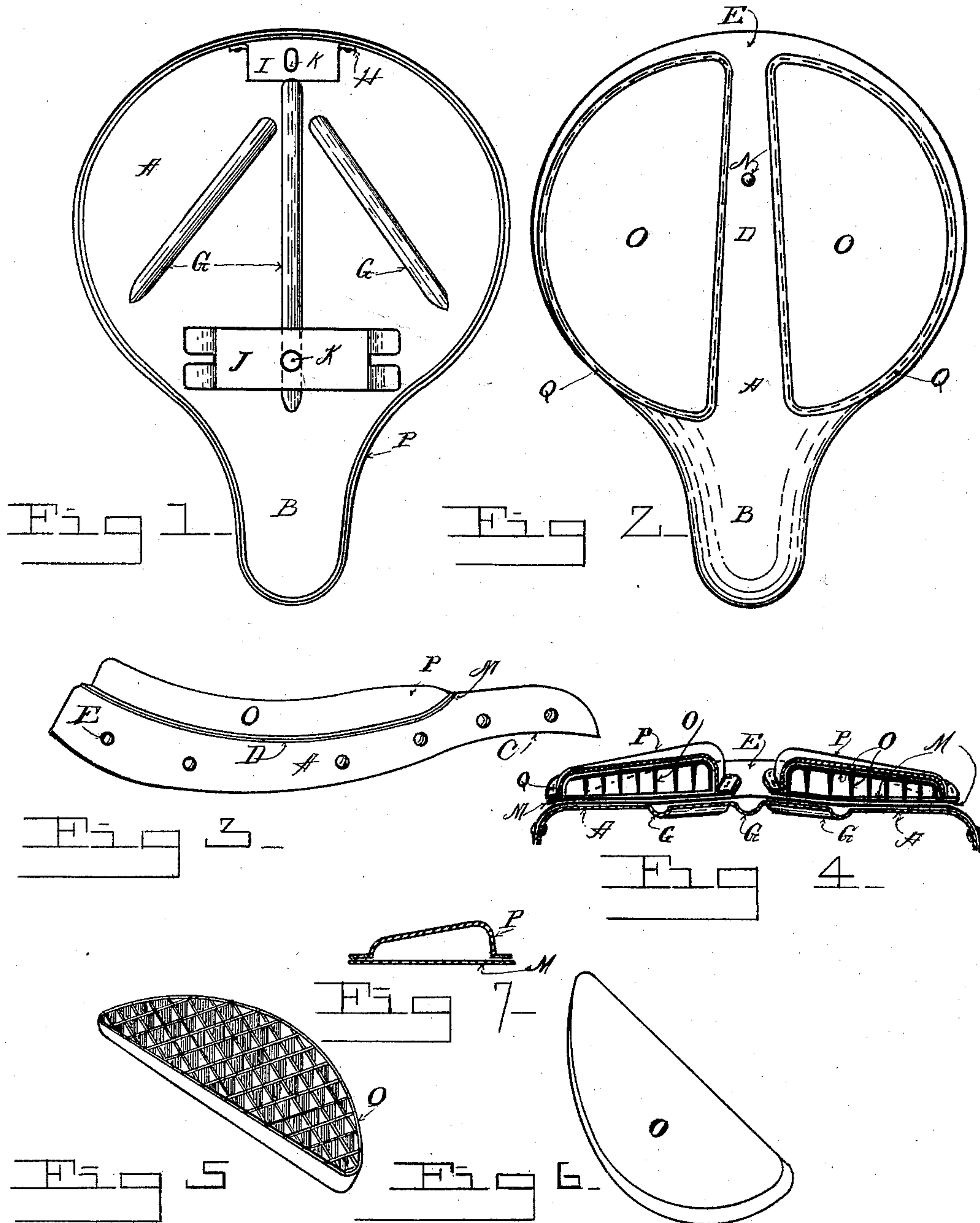
No. 609,944.

Patented Aug. 30, 1898.

C. E. PAGE.  
BICYCLE SADDLE.

(Application filed Jan. 11, 1897.)

(No Model.)



Witnesses

Carl A. Freeman

Richard M. Tarrant

By his Attorney

Inventor

Charles E. Page

H. S. Bailey



# UNITED STATES PATENT OFFICE.

CHARLES E. PAGE, OF DENVER, COLORADO, ASSIGNOR TO THE PAGE  
SADDLE COMPANY, OF SAME PLACE.

## BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 609,944, dated August 30, 1898.

Application filed January 11, 1897. Serial No. 618,773. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. PAGE, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Bicycle-Saddles; 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 of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bicycle-saddles; and the objects of my invention are, first, to provide a bicycle-saddle provided with two independent elastic seat-surfaces; second, to provide a saddle-base stamped from sheet metal and of peculiar contour and containing stiffening-ribs formed by pressing grooves in the metal, and, third, to provide elastic seat-plates of a form and contour especially adapted to the comfort of the rider. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 designates a bottom plan view of my improved saddle; Fig. 2, a top plan view of the same; Fig. 3, a side elevation; Fig. 4, a cross-section; Fig. 5, a perspective view of the bottom of the rubber pad; Fig. 6, a top perspective view of the same; and Fig. 7, a cross-section of the cover of the pad and of a piece of leather which, with the cover, is used to inclose the pad.

Similar letters of reference refer to similar parts throughout the several views.

The base A comprises an integral plate of steel stamped into the required form and contour from sheet metal. In plan view it consists of a horn portion B, which is rounded from the top down to the lower edge C. In longitudinal contour the center D of the saddle is lower than the horn, and this central portion is formed by a slight downward curve which extends longitudinally of the saddle from the end of the cantle to the horns and front sides of the saddle. The rear part of the saddle is curved very slightly upward to form a cantle E, but is in side elevation sub-

stantially a flat cantle, and its edge is on a horizontal line with the top of the horn. It offers no support whatever to the rider, as the seat-plates extend above it. The front sides of the base curve also upward from the center to the horn. The base is made solid through the center and is very thin, and in transverse section, as shown in Fig. 4, it is substantially a horizontal plane, and in order to stiffen it sufficiently to maintain its contour under the rider's weight I form several ribs G, three being sufficient. One extends along the center of the saddle, and the other two branch off from the center rib toward the sides of the saddle. The outer edge of the base is pressed down all around and forms a bordering-flange. At the center of the cantle, to the inside edge of the flange, I secure a clip H, which has a projecting portion I extending over the base, and to the under side of the base, near the horn, I secure a second clip J. This clip J has a central portion which is raised above the base, and both this clip and the aforesaid clip are provided with holes K. These clips are used to secure the seat to a common form of saddle-spring.

The elastic seat portions comprise each a cast-rubber plate C of substantially semicircular form in plan and of irregular wedge shape in thickness. These rubber plates have cast into one side of them a series of cells which extend into them from one side to within about one thirty-second of an inch of the opposite side, while the surface of the opposite side presents a smooth plain surface, as shown in Figs. 5 and 6. One end of these seat-plates is thicker than the other, and the curved side is also a little thinner than the straight side, as shown in Fig. 4. The thick end is placed at the cantle end of the saddle, and to near the edge of the cantle the thin end of the seat-plates tapers off with a round curve to the lower side of the plates, forming substantially a thin edge at the forward end of the seat-plates. The curved side of the pads is also rounded from the top surface of the plates to the bottom side and, with the front end, is placed close to the outside edges of the side of the saddle and also close to the horn portion, where it blends into the seat portions and gives a tapering sloping surface



for the rider's legs on its downward stroke to cushion on. I cover the top of the metal base with a piece of leather, riveting it to the flange by rivets F and at the center by a rivet N. I  
 5 then take a piece of leather M, larger than the seat-plates, and place it on a board and place a seat-plate upon it and then lay another piece of leather over the seat-plate, and this second piece of leather is enough larger than  
 10 the seat-plate to make a cover for it. The cup-shaped covers for the seat-plates are then made by means of a suitable cup-shaped die, which is of exactly the same shape as the seat-plate, by pressing this top piece of leather,  
 15 with the die, over the seat-plate. The die is pressed down until it rests firmly on the piece of leather M and forms the flange portion of the cup. I then cut through both pieces of leather, following the die around, or, if preferred,  
 20 the die can be removed and the piece of leather cut through at a little distance from the sides of the cover, which leaves a narrow marginal flanged edge all around the cover and the piece below larger than the seat-plate.  
 25 I then place some glue on the bottom side of the piece of leather M, upon which the seat-plate rests, and place them and the seat-plates and covers in their proper position on the leather covering of the base before it is placed  
 30 on the metal base of the saddle and allow the piece of leather M to dry on the leather covering of the base, after which the leather piece M and the cover P are sewed through the marginal flanged edge of the cap and the  
 35 edge of the piece M to the leather covering of the base, the glue between the piece M and the leather covering of the base holding them against moving from their correct positions on the cover of the base while they are being  
 40 sewed together. After the seat-plates are sewed to the leather covering of the base I rivet it to the base, as described. The additional piece of leather M, which I place under the seat-plate, acts as a stiffener and as  
 45 a supporting-base to the partitions of the cells. The seat-plates are arranged on the leather covering with their ends which are adjacent to the horn diverging from the longitudinal center of the saddle and farther  
 50 apart than their opposite ends. When the plates are in place, they are curved from the cantle and horn down into the center of the saddle and form a curved hollow in the central portion of each plate for the tuber ischii  
 55 of the rider to rest in, as well as a curved and inclined terminal slope for the rider's leg on the downward stroke.

Having described my invention, what I

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

The combination in a saddle of a base stamped from sheet metal having a horn and a substantially flat cantle arranged on substantially a horizontal level with said horn and the seat portions curved downward below  
 60 said cantle and horn with a slight curve extending from the top of said cantle to the horn and transversely across the center of the saddle in approximately a horizontal line, a downwardly-turned marginal edge all around  
 65 the base and three stiffening-ribs formed in the base by depressing a narrow concaved groove in desired positions, a covering of leather stretched over said base and riveted to its marginal flange and at the saddle's center  
 70 with an independent piece of leather glued to said leather covering over each seat portion of the metal base and with rubber seat-plates resting on said piece of leather and on said leather covering directly over each seat portion  
 75 of the metal base of the saddle and of substantially semicircular form and approximately wedge-shaped in thickness and adapted to rest in the downward-curved central seat portions of the base with their thinnest  
 80 edges toward the horn and having said seat-plates provided with a series of open cells extending into them from their bottom side to within a short distance of its top surface, leaving a thin partition and its thickest end  
 85 resting on the cantle and its thinnest end extending approximately even with the flanged edge of the base and at its side adjacent to the horn, and having the border edge of said independent glued piece of leather of the  
 90 same shape as the said seat-pads, a leather cup-shaped cover fitting tightly over said seat-plates and provided with a right-angled flanged edge adapted to be sewed to the edges of said independent piece of leather on which  
 95 said seat-plates rest, and also to be sewed with said independent piece of leather to the leather covering of the base, whereby said rubber seat-plates, their covers and the independent piece of leather and the leather covering of  
 100 the base are integrally secured together but are loose and free from the metal base of the saddle at its seat portions and are free to give, expand and stretch in all directions independent of it, substantially as set forth.  
 110

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

CHARLES E. PAGE.

Witnesses:

CARL A. FREEMAN,  
 RICHARD W. TARRANT.