

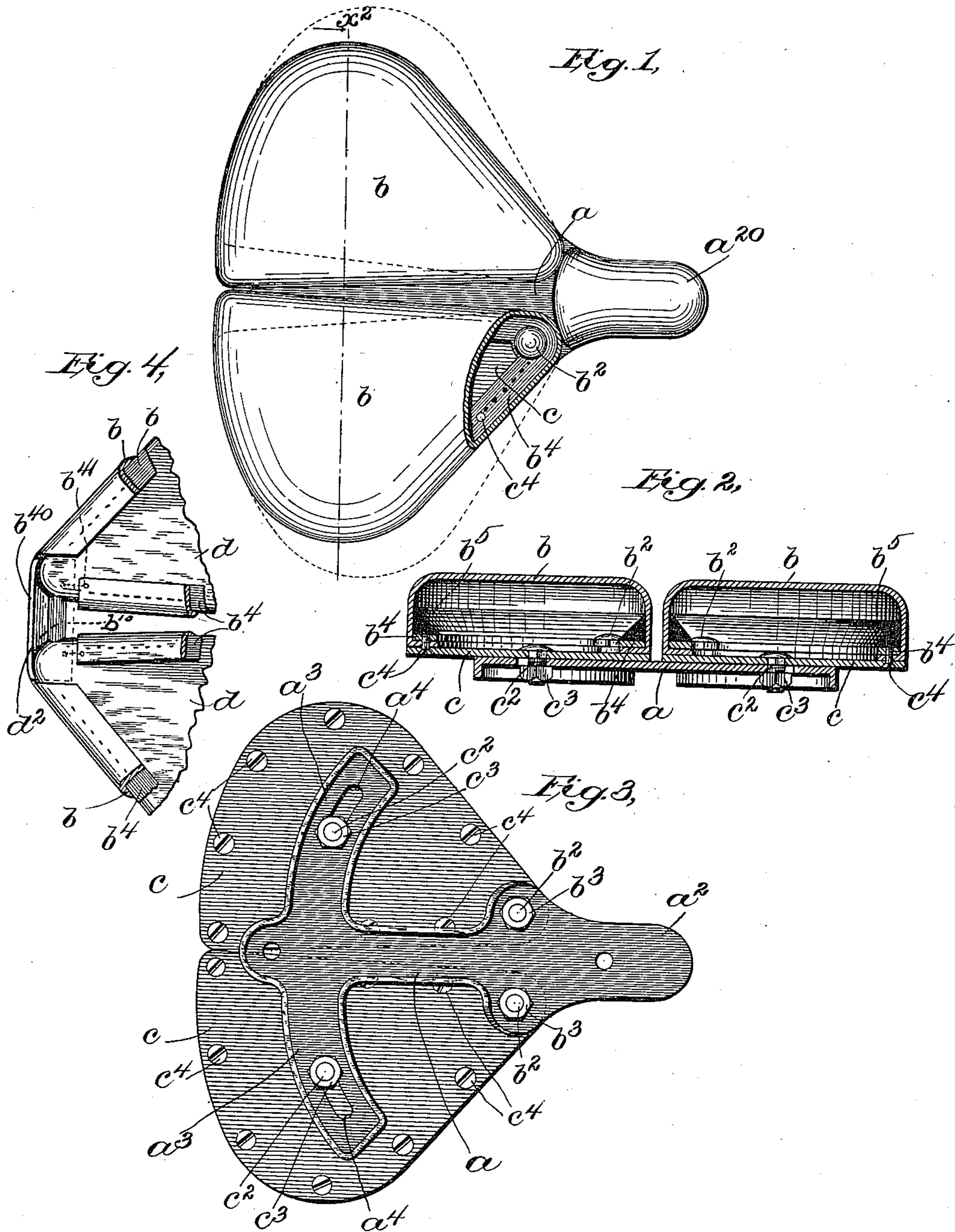
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W. H. CRAIG, Dec'd.  
H. E. CRAIG, Administratrix.  
BICYCLE SADDLE.

(Application filed Mar. 6, 1897.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

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ADMINISTRATRIX OF SAID WARREN H. CRAIG, DECEASED.

## BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 629,956, dated August 1, 1899.

Application filed March 6, 1897. Serial No. 626,182. (No model.)

*To all whom it may concern:*

Be it known that I, WARREN H. CRAIG, of Lawrence, county of Essex, and State of Massachusetts, have invented an Improvement in Bicycle-Saddles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The present invention relates to a bicycle-saddle, and is embodied in a novel construction and arrangement whereby the main seat or cushion portion may be adjusted for width without correspondingly altering the width or shape of the front of the seat portion. It is frequently desirable to adjust the main seat portion of the saddle so as to get greater or less width in order to obtain the most comfortable seat; but it is obviously undesirable to materially alter the shape or size of the front portion of the saddle or to widen the pommel, which should be, so far as is possible, out of contact with the rider's person.

The present invention has for its object to afford means for accomplishing the desired adjustment of the seat proper without altering the width or shape of the pommel and without materially changing the shape or contour of the front portion of the saddle. To this end the saddle embodying the invention is provided with two seat portions separated from each other by a space along the longitudinal median line of the saddle, and the said seat portions are pivotally secured to the saddle at their forward ends, so that the rear ends thereof are capable of being drawn together or separated, thus narrowing or widening the seat proper, the said seat portions, however, being adjustable entirely independently of the pommel, while the method of adjusting them is such that the shape or width of the front portion of the saddle apart from that of the pommel proper is not materially changed in the adjustment.

Figure 1 is a top plan view, partly in section, of a saddle embodying the invention; Fig. 2, a section on line  $x^2$  of Fig. 1, showing the preferred construction of the cushion-casings; Fig. 3, an underneath plan view of the saddle complete, but without the usual supporting spring and clip, which do not in-

clude any feature of the invention and which have consequently been omitted for the sake of simplicity; and Fig. 4, a modification of the front of the saddle, being an underneath plan view with the seat-supports removed.

The main or base portion  $a$  of the saddle is shown as consisting of a frame or supporting-plate, preferably of metal, having a forward extension  $a^2$ , adapted to support the pommel, and two lateral rearward extensions  $a^3$ , adapted to underlie and support the adjustable seat portions  $b$  of the saddle. The said seat portions  $b$  are pivotally secured at their forward ends to the said base portion  $a$ , as by means of a bolt  $b^2$  and nut  $b^3$ , so that the said portions are capable of being moved as indicated in full and dotted lines, Fig. 1, the pivots upon which the said portions swing being at the rear of the pommel  $a^{20}$ , which is therefore independent thereof so far as relates to the adjustment of the saddle. It is evident, therefore, that the width of the seat may be varied to a considerable extent without corresponding variation in the width or shape of the pommel and, as shown in dotted lines, Fig. 1, without materially altering the width or shape of the front portion of the seat, where any additional width would be objectionable.

The seat portions may be constructed and supported in any suitable or usual way to afford the pivotal movement described above, but are herein shown as mounted on separate supports or plates  $c$ , (see Fig. 2,) each adapted to conform to the shape of one of the said portions, the said plates being directly connected with the base-plate  $a$  of the saddle by means of the bolts  $b^2$  and nuts  $b^3$ , while the said plates are provided with supplemental locking-bolts  $c^2$ , movable in the slots  $a^4$  in the plate  $a$ , the said plates  $c$  being adapted to be locked in any desired position by means of the nuts  $c^3$ . The said slots  $a^4$  are arranged on the arc of a circle, of which the pivotal connection at  $b^2$  is the center, and the plate  $a$  is shown as provided with the lateral projections  $a^3$ , in which said slots are cut, the said projections being adapted to support the seat portions of the saddle.

The seat portions  $b$  may be provided, as



usual, with leather cushion-casings adapted to contain cushioning material or pneumatic pads, the construction herein shown in Fig. 4 being particularly adapted for a pneumatic cushion of the kind shown and described in my Letters Patent of the United States No. 540,725, dated June 11, 1895, in which two substantially separate cushions are connected together by a restricted passage, since it is obvious that the said restricted passage may extend across from one cushion to the other at the forward end thereof, where the distance between the cushions is not altered by the adjustment thereof for width. It is obvious, however, that the cushion-casings may be separate, as shown in Figs. 1 and 3, and provided with any suitable cushioning material—such, for example, as felt—and in order that the cushioning material or the pneumatic pads, as the case may be, may be readily inserted the said casings are herein shown as open at the bottom, the edges of the leather being turned under and suitably secured to a frame  $b^4$ , so that the cushioning material may be inserted in the casing, the said frame, with the leather cushion-casing secured thereto and the cushioning material contained therein, being afterward secured to the cushion-support  $c$  by means of screws  $c^4$ . The cushions thus prepared and mounted on the cushion-supporting plates are then secured to the base-plate  $a$  by means of the bolts  $b^2$  and  $c^2$ , it being obvious that the width of the saddle may be easily adjusted by loosening the said bolts and swinging the cushion-plates upon their pivotal supports until the proper adjustment is reached and then tightening the nuts  $b^3$  and  $c^3$ , the said nuts, with their bolts, constituting fastening devices to maintain the seat properly adjusted.

While the cushion-casings may obviously be made entirely separate and independent, it is desirable, as shown in Fig. 4, to connect them together at their forward end by a strip or tube of leather  $b^{10}$  to fill in the space just at the rear of the pommel  $a^{20}$ , it being obvious that if the pneumatic cushion hereinbefore alluded to is used the connecting-passage between the two chambers may be inclosed by the said leather tube  $b^{10}$ , which in any event adds to the appearance of the saddle and fills up the objectionable space between the pommel and the cushions.

The saddle constructed as hereinbefore described possesses all the advantages of the so-called "hygienic" or "padded" saddle, since the seat or cushion portion is substantially above and independent of the pommel, thus affording adequate support for the rider, the seat portion at the same time being readily adjustable to increase or lessen the width thereof without materially changing the shape of the front portion of the saddle, where additional width is objectionable.

In Fig. 2 the lower edge of the cushion-casing is shown as reinforced by a ring or band

$b^5$ , preferably of sponge-rubber or other flexible material, adapted to support said walls and prevent the same from collapsing near the point of connection with the seat-supports.

To adapt the cushion-casings for use with the pneumatic cushions described in my prior patent hereinbefore referred to, the frames  $b^4$  instead of being in the form of rings may be, as shown in Fig. 4, in the form of loops open at their forward ends, so as to afford a space between the said ends for the insertion of the connecting-pipe  $d^2$  between the two air-chambers. In this instance both cushion-casings are preferably made of a single piece of leather, which is originally substantially the shape of the entire seat portion of the saddle, but cut longitudinally, so as to form the downward extensions which underlie the frames  $b^4$  along the longitudinal median line of the saddle. The outer edge of the piece of leather is cut, as shown in Fig. 4, so as to form the flap  $b^{40}$ , adapted to be bent aside, as shown in full lines, for the insertion of the cushions and afterward drawn under, as shown in dotted lines, and fastened, as by lacings or other fastening devices  $b^{41}$ , to support the forward end of the cushions. After the cushions are inserted and the flap  $b^{40}$  fastened the said cushions are secured to the supporting-plates, as above described, it being obvious that the adjustment may then be effected as before, the distance between the forward ends of the cushions where the connecting-tube runs across remaining substantially the same.

The flap  $b^{40}$  is shown in full lines, Fig. 4, as turned aside to admit the connecting-tube  $d^2$  of the pneumatic-cushion chambers  $d$ , the dotted lines indicating said flap closed and fastened. It is not, however, intended to limit the invention to the specific construction herein shown and described, since modifications may obviously be made which might be embodied in structures clearly within the scope of the invention.

I claim—

1. In a bicycle-saddle, the combination of the pommel portion with a seat portion comprising parts which are extensible at the rear edge of the saddle on arcs whose centers are substantially coincident with the inner end of the pommel portion.

2. A bicycle-saddle comprising a supporting-plate having at the forward end thereof a fixed pommel portion, a movable seat-support at each side of the longitudinal median line of the saddle, and a pivotal connection between each of said seat-supports and the said main supporting-plate at the rear of said pommel portion, substantially as described.

3. The combination with the main supporting-plate; of the independent seat-supports, one for each side of the saddle, a pivotal connection between said main supporting-plate and each of said seat-supports at the forward end thereof, a cushion-casing adapted to contain cushioning material mounted on each of



said seat-supports, said cushion-casings being connected at the forward end thereof, substantially as and for the purpose described.

4. The combination with the main support-  
5 ing-plate, of the seat-supports having a pivotal connection therewith at their forward ends, slots in said supporting-plate on the arc of a circle having the point of said pivotal connection as a center, and fastening devices  
10 permanently connected with said seat-supports and movable in said slots, whereby said

seat-supports may be secured after having been swung on their pivots to the desired position, substantially as described.

In testimony whereof I have signed my 15  
name to this specification in the presence of two subscribing witnesses.

WARREN H. CRAIG.

Witnesses:

CORA E. HUTCHINSON,  
WILBUR E. ROWELL.