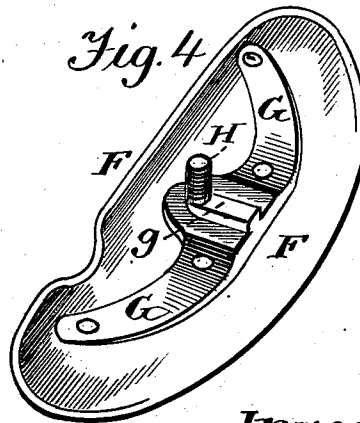
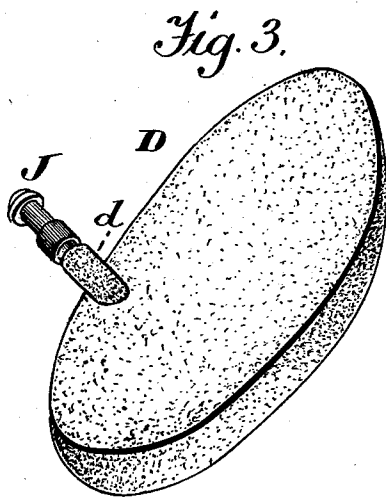
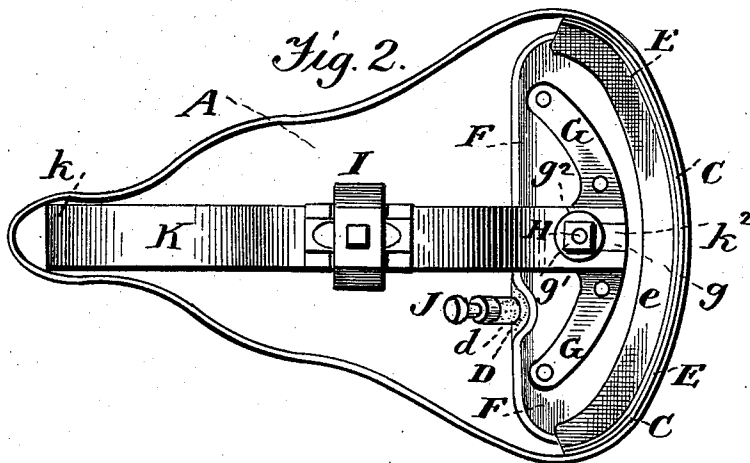
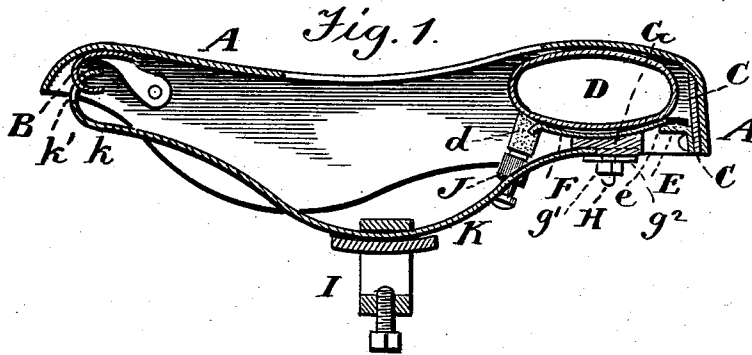


(No Model.)

L. L. RICHMOND.
BICYCLE SADDLE.

No. 533,921.

Patented Feb. 12, 1895.



Witnesses.
A. Ruppert.
A. B. Richmond

Inventor.

Louis L. Richmond

UNITED STATES PATENT OFFICE.

LOUIS L. RICHMOND, OF MEADVILLE, PENNSYLVANIA.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 533,921, dated February 12, 1895.

Application filed May 28, 1894. Serial No. 512,649. (No model.)

To all whom it may concern:

Be it known that I, LOUIS L. RICHMOND, a citizen of the United States, residing at Meadville, in the county of Crawford and State of Pennsylvania, 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.

The special object of the invention is to improve my bicycle-saddle described in the United States Patent No. 502,017 granted to me, where a longitudinal steel spring is combined with a transverse air-cushion at the rear. What I aim to accomplish is a more full and natural play as regards the resiliency of the air-cushion so that, as the buttocks alternately change position slightly at the propelling stroke of the legs, the cushion may follow and yield alternately, thus preventing all rear impact and enabling the cyclist to ride a long distance from place to place without feeling uncomfortable in the saddle.

Figure 1 of the drawings is a longitudinal vertical section, and Fig. 2 a bottom plan view. Fig. 3 is a detail view of the air-bag and Fig. 4 a detail view of the plate which supports the air-bag.

In the drawings, A represents the leather seat which has under the front end a hook B secured thereto, and, around the inside of the rear down-turned edge, a curved plate C against which bears the air-cushion D on which rests the rear of the leather seat. To this plate and the rear of the leather seat is riveted the angle-plate E, one of whose sides projects out horizontally as shown at *e*. On this shelf *e* is supported a plate F which is loose or unattached and is concaved on the upper side to receive the air-cushion D which lies transversely or at right angles to the seat, and has, on the lower side, the metallic strip

G which carries the down-screw H and guide rib *g*, the said screw and rib being preferably but not necessarily in one piece.

The practical advantages in this saddle arise mainly from arranging the transverse cushion independently between the flexible seat-cover and the unattached plate F, so that the air may freely change place with the motions of the rider, yielding to pressure and by its elasticity following the position of the rider. The cushion rests securely in the concave plate while it freely expands at front and rear as well as up and down. When the spring is loosened, the cushion may be readily removed and blown up by the mouth of the driver.

K is a longitudinal plate-spring having the downwardly turned end *k* apertured at *k'* to receive the hook B and the open end-slot *k*² in which fits the rib *g*. By clamping the nut *g'* and washer *g*² on the slotted end *k*² at any desired adjustment on the rib *g*, the tension of the steel-spring K may be regulated to suit the rider.

I represents a clamp of a well known construction for adjustably securing the seat on the seat-bar, while J is the valve arranged in the rubber neck *d* of the air-cushion.

What I claim as new, and desire to protect by Letters Patent, is—

In bicycle-saddles, the leather-seat A and angle-plate E riveted together on the vertical side of the latter while the horizontal side forms a shelf *e*, in combination with the loose, transverse air-cushion, the plate F supporting said cushion and resting with its rear edge loosely upon the shelf *e*, and the longitudinal plate spring K, the latter supporting the plate F with one end while the other is fastened to the front of the seat-leather substantially as shown and described.

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

LOUIS L. RICHMOND.

Witnesses:

A. B. RICHMOND,
CHAS. E. RICHMOND.