

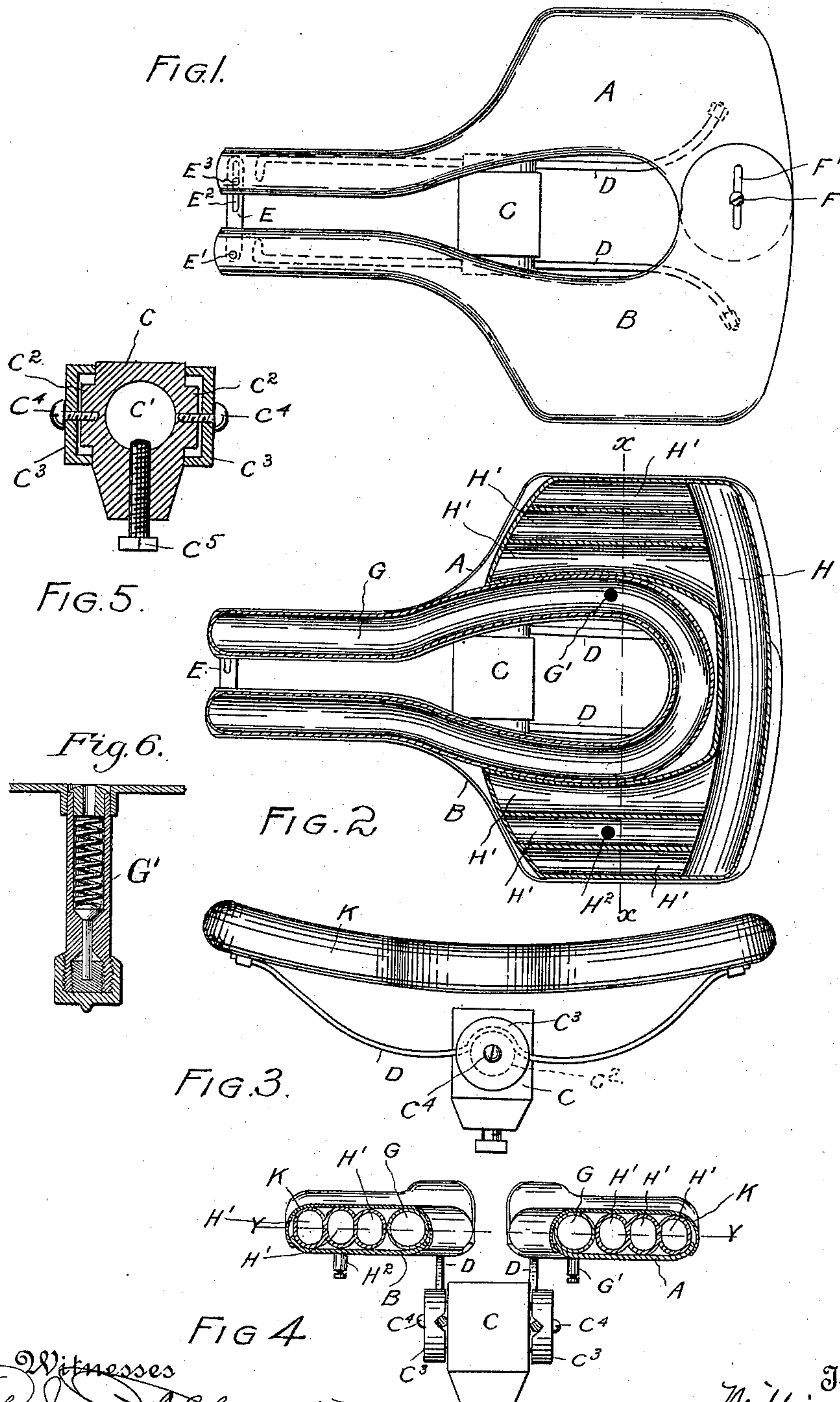
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Patented Oct. 18, 1898.

W. B. STANDEFORD.
PNEUMATIC BICYCLE SADDLE.

(Application filed Mar. 18, 1896.)

(No Model.)



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UNITED STATES PATENT OFFICE.

WILLIAM B. STANDEFORD, OF DENVER, COLORADO.

PNEUMATIC BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 612,552, dated October 18, 1898.

Application filed March 18, 1896. Serial No. 583,707. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. STANDEFORD, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Pneumatic 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 an improvement in pneumatic bicycle-saddles; and the object is to provide a saddle which will give to the rider the greatest ease by dividing the pneumatic cushion into two independent sections and inflating them separately and to such an extent as to conform as nearly as possible to the comfort of the rider and at the same time be strong, light, and durable.

Figure 1 is a plan view of the seat, (cushion removed.) Fig. 2 is a horizontal section through air-cushion along Y Y in Fig. 4. Fig. 3 is a side elevation. Fig. 4 is a cross-section taken along line X X in Fig. 2. Fig. 5 is a vertical section through clamp. Fig. 6 is an air-valve.

Letters in the different figures represent the same parts.

A and B are metal parts forming base of saddle.

C is a clamp for fastening saddle to bicycle-post.

D D are springs supporting saddle.

E is an adjustable fastener for A and B at pommel of saddle.

F and F' show screw and slot forming a hinge for the overlapping base A and B at rear of saddle.

G is the inside air-cushion.

H and H' is the outer air-cushion and laterals connected with same.

G' and H² are air-valves through which the separate sections are inflated.

K is a covering for the entire top of saddle, preferably of leather.

My device consists of a saddle-base of sheet metal in two parts A and B, Fig. 1, which overlap each other at the rear of saddle, the up-

per piece being provided with slot F', through which screw F passes and enters a threaded hole in under plate. Screw F has a head sufficiently large to extend beyond the width of slot F', by means of which A and B may be worked back and forth as a hinge, or the rear of saddle may be broadened or lessened to the extent of slot F', and when screw F is tightened clamps the two pieces firmly together. The front of saddle-base has a similar adjustable fastening, Fig. 1.

E is a hasp securely screwed or riveted to B at E', while the other end of hasp is securely fastened to base-plate A by means of screw E³.

E² is a slot in hasp E, by means of which the pommel of saddle may be broadened or narrowed in the same manner as has already been described for rear of saddle.

The saddle-base A and B is supported by two springs D D, which are securely attached to the under side of base, as shown in Fig. 1. Springs D D in turn are supported by passing between C² and C³ of clamp C, as shown in Fig. 5 and in the manner shown more clearly in Fig. 3, permitting the saddle to tilt backward and forward to suit the pleasure of rider and held in position by tightening of screw C⁴.

C⁵ is a set-screw for securing clamp to bicycle-post. While I prefer this method of support for saddle, the springs, clamps, and their adjustment are no part of my invention, and for them I disclaim anything new.

The top of saddle-base is covered with a series of air-chambers made of rubber in two independent sections, the first, G, being a round chamber beginning at the pommel of saddle and running nearly the length of the saddle-frame, broadening to an oval shape at the broad part of saddle, thence returning in same shape, as shown in Fig. 2. The second section H consists of a main air-chamber running across the rear of the saddle, to which is attached and connected three short dependent air-chambers on each side of the first section running at right angles to the main air-chamber and of such size and length as to conform to the shape of the saddle-frame, as shown in Fig. 2.

In order to inflate chamber G, a valve G' of any suitable construction is provided,

while the inflatable chamber H and its dependents H' is also provided with valve H², as shown in Fig. 4. The simplest form of air-valve is shown here, (a small dependent rubber tube from each chamber provided with a thread and screw-cap at outer end, to which a pump may be attached when cap is removed;) but the air-valve is no part of my invention, and I disclaim anything new in that connection.

The top of frame, including air-chambers, will be incased in leather, as shown in Fig. 3.

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

1. A bicycle-saddle having an inflatable air-cushion made in two independent sections; the inside section describing nearly an oval shape and running almost the length of the saddle, the outside section running along the rear of saddle with three short dependent air-chambers projecting at right angles to it on either side of inside section, either or both sections being inflated at will by means of air-valves, substantially as described.

2. In a bicycle-saddle, the combination of an inflatable air-cushion made in two independent sections; the inside section describing nearly an oval shape and running almost

the length of the saddle; the outside section running along the rear of the saddle with three short dependent air-chambers projecting at right angles to it on either side of inside section; either or both sections being inflated at will by means of air-valves; and a sheet-metal saddle-frame made in two parts hinged at the rear end and fastened together in front by means of a hasp and bolt, substantially as described.

3. In a bicycle-saddle, the combination of an inflatable air-cushion made in two independent sections; the inside section describing nearly an oval shape and running almost the length of the saddle; the outside section running along the rear of the saddle with three short dependent air-chambers projecting at right angles to it on either side of inside section, either or both sections being inflated at will by means of air-valves; a sheet-metal saddle-frame made in two parts, hinged at the rear end and fastened together in front by means of a hasp and bolt; and a leather covering, substantially as described.

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Witnesses:

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