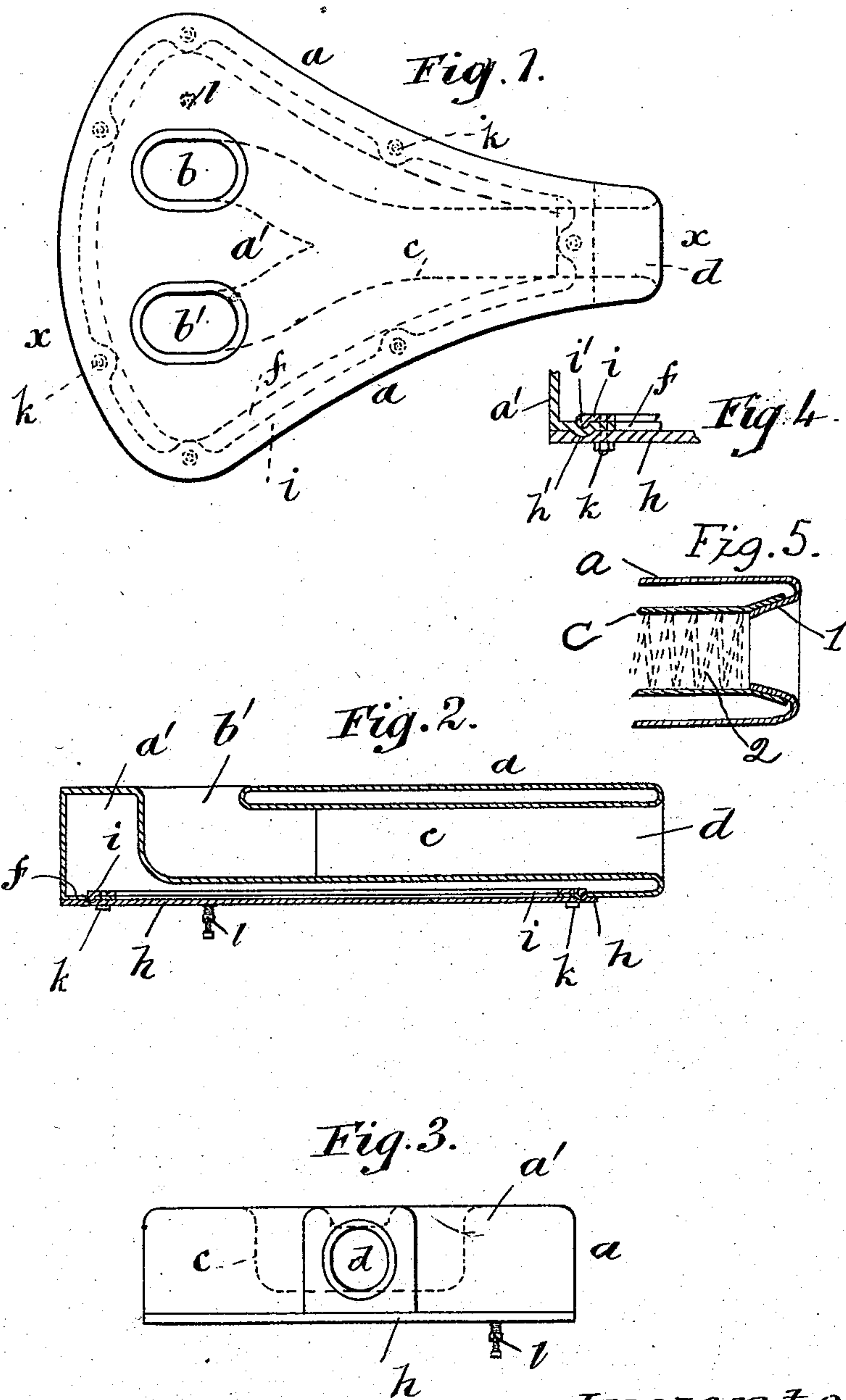


(No Model.)

J. CARROLL.
PNEUMATIC SADDLE FOR CYCLES.

No. 516,364.

Patented Mar. 13, 1894.



Witnesses:

E. R. Bolton

H. van Oortmarck

Inventor:

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By

his Attorneys.

UNITED STATES PATENT OFFICE.

JOHN CARROLL, OF BELFAST, IRELAND.

PNEUMATIC SADDLE FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 516,364, dated March 13, 1894.

Application filed November 22, 1893. Serial No. 491,617. (No model.) Patented in England January 9, 1893, No. 411.

To all whom it may concern:

Be it known that I, JOHN CARROLL, flax-sorter, a subject of the Queen of Great Britain and Ireland, and a resident of the city of Belfast, Ireland, have invented certain new and useful Improvements in Pneumatic Saddles for Cycles and Like Vehicles, of which the following is a specification.

The invention has been patented in England, dated January 9, 1893, No. 411.

My invention relates to pneumatic saddles for cycles and like vehicles, and it has for its object to improve and simplify their construction.

In carrying out my invention I make my saddle with a ventilating tube lengthwise in the interior thereof said saddle being pneumatic in character. This tube communicates on the one hand with an inlet opening at the bow or peak of the saddle, and, on the other hand, with one or more outlet openings in the top or cover of the saddle. The openings are formed by internal flanges molded on and with the cover of the saddle but the air tube may more conveniently be molded separately from the cover and be affixed at each end to one or other of the flanges therein by means of rubber cement or any other adhesive material commonly used for such purposes. The mouths or ends of the air tube may be trumpet or bell shaped if necessary so as to fit over or into the flanged openings. I may fix in the air tube, according to a common practice, spiral wire which will prevent it from collapsing under pressure of the inflation of the saddle and from thus stopping the free passage of the ventilating current. I prefer to fasten the cover to the saddle plate on its upper or inner side by means of a bulbedged and pear-shaped frame which is placed within the cover on the top of its flange and is provided with snugs or lugs having bolts or screws attached to them which pass through corresponding perforations in the flange of the cover and in the saddle plate and force the flange into a groove made in the said plate for the reception of the bulb edge of the frame. In this manner a perfectly air tight joint is made. And in order that my said invention may be properly understood I have hereunto appended an explanatory sheet of drawings, whereon—

Figure 1 is a plan view of my pneumatic saddle. Fig. 2 is a longitudinal section of the saddle on the line $x-x$ Fig. 1. Fig. 3 is a front elevation of the saddle. Fig. 4 is an enlarged sectional detail view of the air tight joint. Fig. 5, is a detail view of a modification.

Referring to the drawings whereon the same reference letters and figures wherever repeated indicate the same parts, a is the pneumatic saddle the cover part a' of which is made with openings b, b' in it. Communicating with these openings and also with the opening d at the peak of the saddle is the internally fitted bifurcated air tube c . The ventilating air current passes in at c and out at the openings b, b' . If desired more than one ventilating tube may be fitted in the saddle.

In Fig. 4 the method of forming an air tight joint round the edges or flange of the cover is shown. The flange f is secured between the saddle plate h and the frame i . As will be seen the plate h is made with a groove h' and the frame i is made with a corresponding bulb i' . When the frame is tightly secured to the saddle plate, by means of the bolts k the bulb i' presses the rubber flange f into the groove h' and thereby makes an air tight joint.

In Fig. 5, I show the flared bell or trumpet mouth of the air tube at 1 and the spiral spring before mentioned is shown in dotted lines at 2.

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

1. A pneumatic saddle made with one or more internal ventilating tubes which extend lengthwise of the saddle, substantially as hereinbefore specified.

2. The combination in a pneumatic saddle of an opening made in the peak and one or more openings in the cover, and of a ventilating air tube which communicates with said openings, substantially as hereinbefore specified.

3. The combination with a pneumatic saddle having an internal ventilating tube arranged lengthwise therein and communicating between the peak and the cover, of a flange extending around the inner edge of

said cover and of a frame for securing said flange to the saddle plate, substantially as hereinbefore specified.

5 4. The combination with a pneumatic saddle having an internal ventilating tube arranged lengthwise therein, of a flange extending round the inner edge of the saddle cover, a supporting saddle plate having a groove therein and a frame having a bulb

formed on it for securing the flange air tight to said plate, substantially as hereinbefore specified.

Signed at Belfast, Ireland, this 7th day of November, A. D. 1893.

JOHN CARROLL.

Witnesses:

JOHN BALL,

JAMES BRADY.