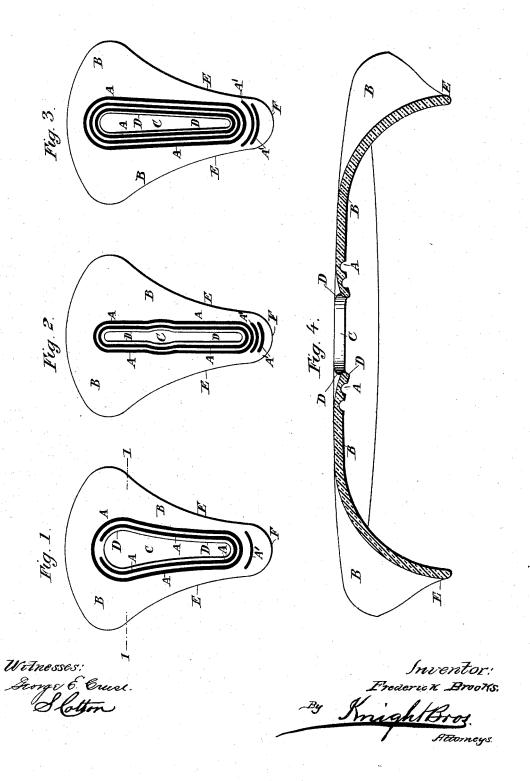
### F. BROOKS. VELOCIPEDE SADDLE.

No. 456,792.

Patented July 28, 1891.



# UNITED STATES PATENT OFFICE,

FREDERICK BROOKS, OF BIRMINGHAM, ENGLAND, ASSIGNOR TO THOMAS MIDDLEMORE, OF SAME PLACE.

## VELOCIPEDE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 456,792, dated July 28, 1891.

Application filed April 13, 1891. Serial No. 388,739. (No model.) Patented in England September 12, 1888, No. 13,203.

To all whom it may concern:

Be it known that I, FREDERICK BROOKS, a subject of the Queen of Great Britain, residing at 73 Leebank Road, Edgbaston, Birmingham, in the county of Warwick, England, have invented certain new and useful Improvements in Velocipede-Saddles, (for which I have received Letters Patent in England, No. 13,203, dated September 12, 1888;) and I 10 do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

I will describe my invention with reference 15 to the accompanying drawings, and to the

letters marked thereon.

In the present form of velocipede-saddle it is usual to cut out a central portion of the leather seat to secure flexibility, ease, and ventilation; 20 and my invention consists in forming grooves or hollows in the under side of the leather around the opening or openings therein. Either one or more of these grooves may be used, as may be desired. The advantages of 25 thus grooving the under side of the leather are those of obtaining greater flexibility and of reducing the friction and chafing, as by reason of the grooves or hollows on the under side of the saddle-leather the sharp edges 30 of the leather around the opening or openings cut therein do not rab or chafe inconveniently against the thighs of the rider, the grooves or hollows allowing the leather around such opening or openings to fall slightly in-35 ward, and thereby obviate the friction hitherto caused by the edges of the leather around such opening or openings.

In the accompanying drawings, Figures 1, 2, and 3 represent under side views of a ve-40 locipede saddle leather provided with various arrangements of grooves, hollows, or corrugations, according to my invention; and Fig. 4 represents a transverse section, full size, drawn on the line 1 1 of Fig. 1.

A A represent grooves, hollows, or corrugations cut or grooved in the under surface of the saddle-leather B around the central opening or openings C therein. These grooves, hollows, or corrugations, which may be of 50 any desired and suitable number, give the saddle-leather a certain flexibility or resiliency not otherwise obtainable.

In saddle-leathers having a central opening C cut therein, but without my grooves or hollows in the under side thereof around such 55 opening, it has been found that the sharp edges D of the leather around such opening have a tendency to rise and consequently to rub or chafe against the inner sides of the thighs of the rider by reason of the pressure 60 of the thighs on the outer flaps E of the saddle, combined with the stiffness of the leather, thereby causing him much inconvenience; but by the use of grooves, hollows, or corrugations, according to my invention, the edges 65 of the leather around such opening are caused to fall slightly inward and so create greater flexibility, obviate the friction caused by the rubbing or chafing of the edges of the leather around the central opening against the thighs 70 of the rider and avoid undue perineal pressure. I also obtain a great advantage by running a groove or grooves, hollows, or corrugations A' round the nose F or fore part of the saddle, which has the effect of rendering the 75 leather at that part flexible and easy, which is a most important feature. To obtain a groove of the same depth and evenness throughout, it is necessary to hold the grooving tool or plow perpendicularly to the leather, 80 so that there may be uniformity throughout in the groove and no danger of cutting through the leather.

Having fully described my invention, what I desire to claim, and secure by Letters Pat- 85 ent, is-

1. A saddle for velocipedes, constructed with a central opening C and surrounding grooves, corrugations, or hollows A, substantially as and for the purpose herein set forth. 90

2. A saddle for velocipedes, constructed with a central opening C, surrounding grooves, corrugations, or hollows A, and grooves, corrugations, or hollows A' around the nose F, substantially as and for the purpose set 95 forth.

#### FREDERICK BROOKS.

#### Witnesses:

THOMAS GROSVENOR LEE, Solicitor, Birmingham, England. F. PERCIVAL EVERS, His Clerk.