(No Model.)

J. C. GROUT.

BICYCLE SADDLE.

No. 586,997. Patented July 27, 1897.

Fig. 1.

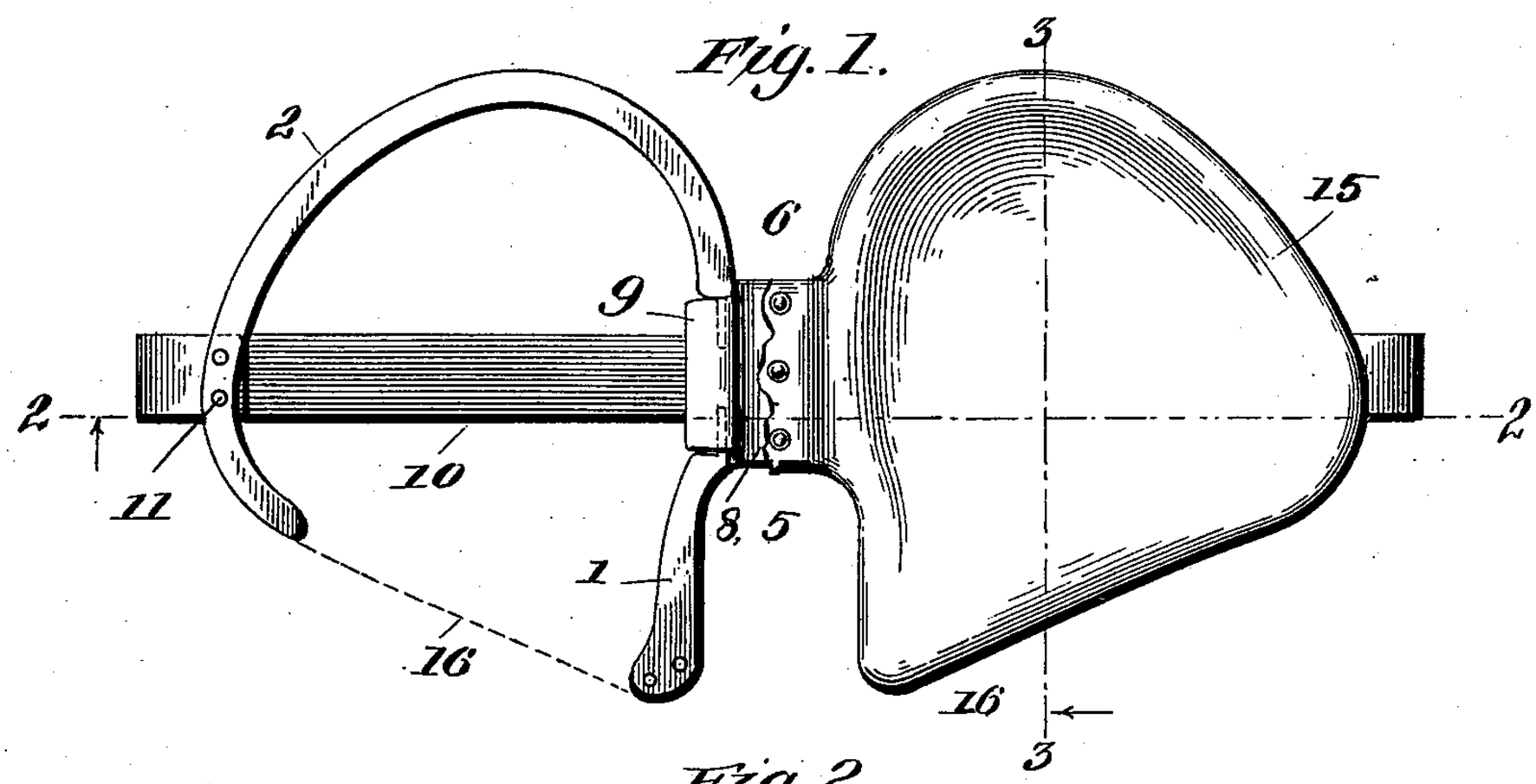


Fig. 2.

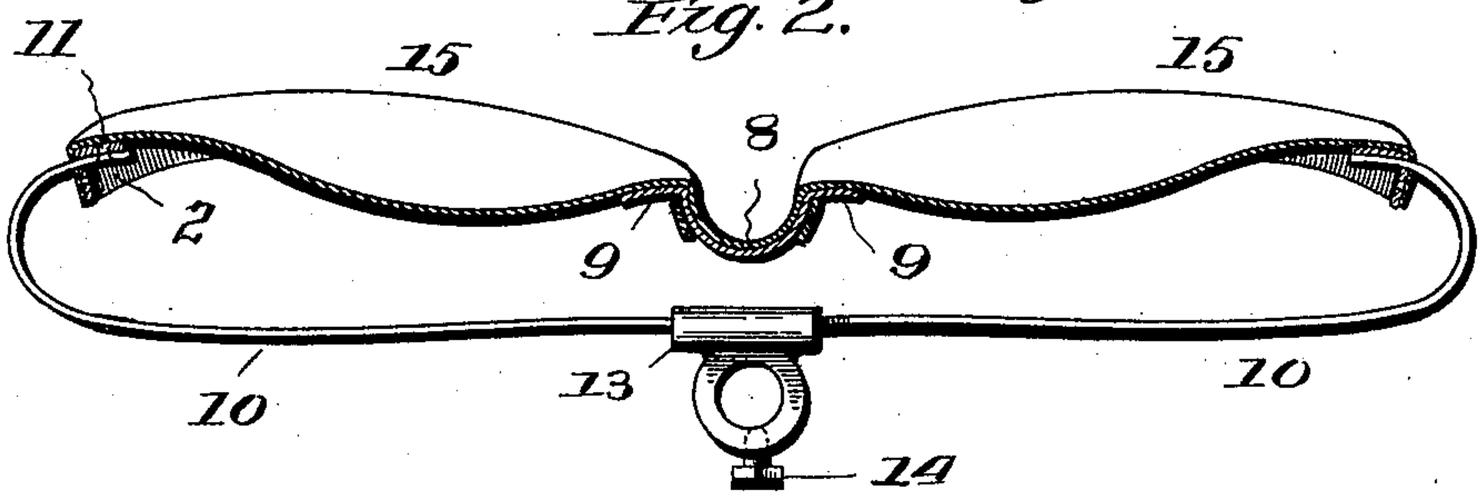


Fig. 3.

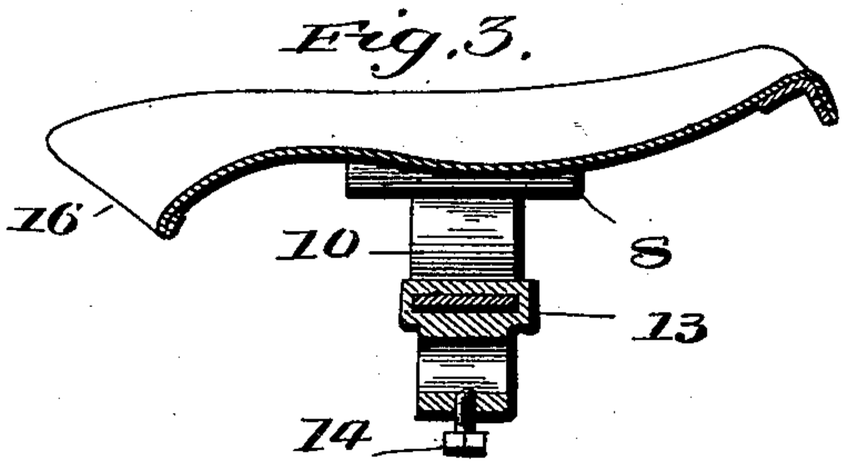


Fig. 4.

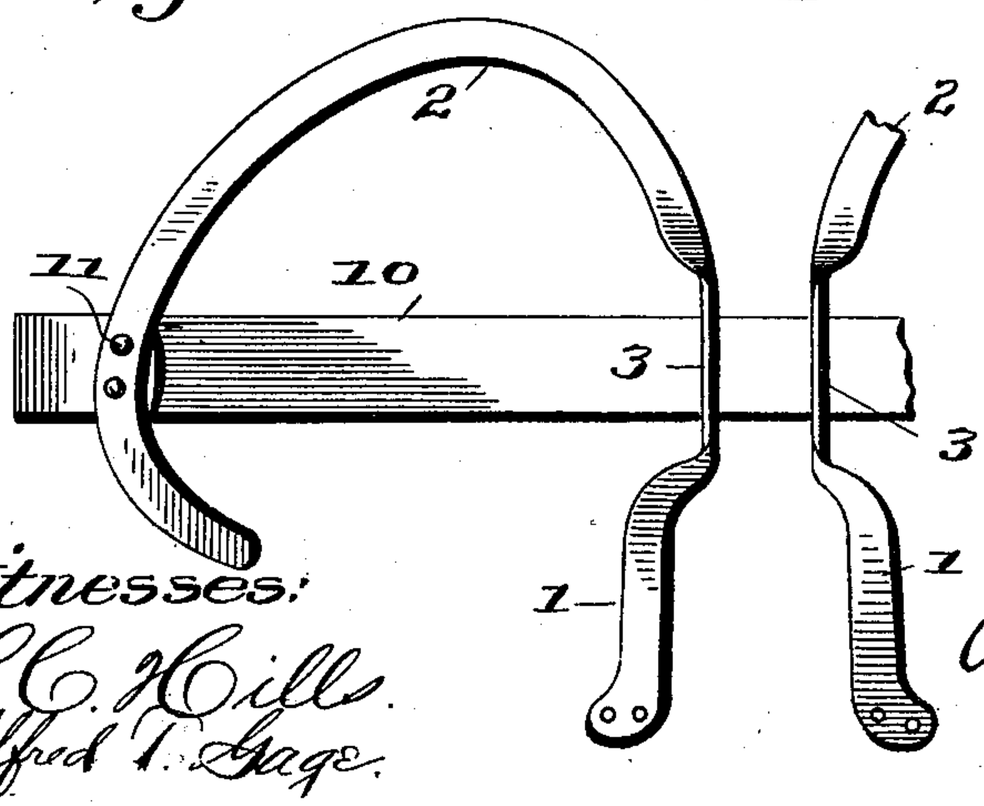
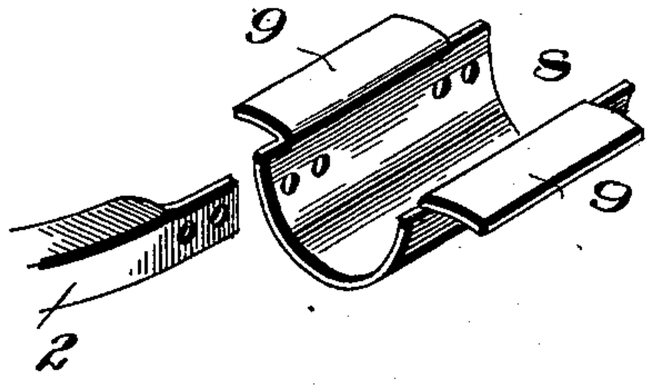


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN C. GROUT, OF BROOKLYN, NEW YORK.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 586,997, dated July 27, 1897.

Application filed August 18, 1896. Serial No. 603,134. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. GROUT, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to saddles designed more particularly for use on bicycles, and which, while adapted for either men or women, is, owing to its form, particularly well adapted for women.

It has for its object to provide such a saddle of an improved form or shape which will afford the greatest comfort and ease to the rider and at the same time guard against injury to the user, the construction being such as to relieve portions of the human anatomy from pressure ordinarily existing in saddles as heretofore constructed.

It has, further, for its object to provide improved features in the construction and arrangement of the several parts of the saddle-frame.

To the accomplishment of the foregoing and such other objects as may hereinafter appear the invention consists in the form of the saddle-seat and in the construction and arrangement of the several parts entering into the formation of the saddle, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a plan view of the saddle with a portion of the covering to the seat removed. Fig. 2 is a vertical section on the line 2 2 of Fig. 1. Fig. 3 is a vertical section on the line 3 3 of Fig. 1, showing the saddle-post clip in section. Fig. 4 is a plan view of one form of the frame with portions broken away, and Fig. 5 is a detail perspective of parts of the frame.

In the drawings the numeral 1 designates the two pommels of the saddle, and 2 the two rear cantles. The pommels and rear cantles may be made separate from each other, as indicated in Fig. 1 of the drawings, or the pommels may be formed integral with the rear cantles by connecting-bars 3, as indicated in Fig. 4 of the drawings. The pommels are made to diverge from each other, as indicated in Figs. 1 and 4 of the drawings, so as to form at the front of the saddle a recess 5, as indicated in Figs. 1 and 4, and the rear cantles are made to diverge from each other, so as to form a recess 6 at the rear of the saddle, as indicated in the same figures, the rear cantles being then curved forwardly and having their ends terminating at or about on a line drawn centrally through the seat or two wings forming the saddle, as indicated. Each pommel and rear cantle forms the frame for one wing of the seat, and between the two winged frames is left a space 7, in which is fitted a depressed member 8, which I will designate for convenience as a "central neck," and which may be made of wood, metal, or other material, as preferred. If the pommels and rear cantles are made separate from each other, they will be joined to this central neck by bolts or rivets passing through the ends of the pommels and rear cantles and into the central neck, as indicated by the perforations illustrated in Fig. 5 of the drawings, and if the pommels and rear cantles be made integral with each other the central neck will be joined to the connecting-bars 3 of the pommels and rear cantles by bolts or rivets passed through perforations in the central cantle and corresponding perforations made in the connecting-bars. The pommels and rear cantles are preferably made in the form of angle-bars, as illustrated by the section in the left of Fig. 2 of the drawings, and the central neck is formed with inclined or beveled lips or flanges 9, as indicated clearly in Figs. 2 and 5 of the drawings, so that these lips will form an easy incline toward each wing of the saddle at the central portion thereof.

The two wings of the saddle are connected by a transverse spring 10, whose ends are turned inwardly and passed through slots in the flanges of the rear cantles adjacent to the forward ends, as indicated in the left of Fig. 2, and to prevent the spring from springing out of the slots pins or rivets 11 will pass through the inner flange of the cantles and through the end of the spring, as indicated in

Fig. 2 of the drawings. The supporting-spring 10 passes through the saddle-clip 13, which latter is provided with a set-screw 14 for securing it to the saddle-post.

The pommels and rear cantles sustain the leather 15 of the seat, which is riveted or otherwise secured to the flanges of the pommels and rear cantles and also riveted or otherwise secured to the central neck, so as to conform to the depression in the central neck and preserve the recesses 5 and 6 at the front and rear of the saddle. The leather is also preferably extended from the outer ends of the rear cantles to the forward ends of the pommels in such manner as to form the curvature or recesses 16 at the front of the two wings of the saddle, although this curvature 16 is not so essential as the recesses 5 and 6 and the central depression made by the central neck. The outer ends of the two wings of the seat are elevated to some extent, so as to compress somewhat the buttocks, which rest upon the wings, thus throwing them toward each other and taking the strain from off the rectum and giving to the rider the position and sensation of a sitting rather than that experienced from a straddling position. The recess 5 at the front of the saddle and recess 6 at the rear thereof receive certain parts of the anatomy—for instance, the recess 6 receives the base of the spine and, in the case of women, the recess 5 receives the vagina, and the two recesses thus relieve the parts from the pressure experienced in most saddles, and the depression made by the central neck relieves the pressure on the rectum, so that the weight of the body is practically thrown upon the fleshy part of the buttocks, which rest upon the two wings of the saddle. These several features contribute not only to the comfort of the rider, but also produce a saddle which may be said to be hygienic in its features of construction, and it possesses the necessary rigidity to contribute to the comfort and endurance of the rider, while enabling him to reach the highest speed with the minimum loss of power of propulsion.

I prefer to make the pommels and cantles of steel stamped into form, and also prefer to have the same made in the shape of angle-bars, but do not confine the invention to such features, as other features of the invention may be employed, while modifications are made in such parts.

Having described my invention and set forth its merits, what I claim is—

1. A bicycle-saddle composed of a skeleton frame consisting of two curved rear cantles and two pommels, the forward ends of the pommels being spaced from the forward ends of the cantles and each set of cantles and pommels spaced from the other set, an intermediate depressed neck placed in the space between each set of cantles and pommels, and connecting one set with the other, said parts being arranged to form the spaces 5 and 6, a covering applied to the frame to span the space inclosed by each set of cantles and pommels and so as to leave the spaces 5 and 6 uncovered, and a curved spring extending transversely beneath the saddle and having its ends connected to the opposite sides of the skeleton frame, substantially as and for the purposes described.

2. A bicycle-saddle composed of a skeleton frame consisting of two curved rear cantles and two pommels formed of angle-bars, each set of cantles and pommels being spaced from the opposite set, an intermediate depressed neck placed in the space between each set of cantles and pommels and formed with outwardly-extending lips, said parts being arranged to form the spaces 5 and 6, a covering applied to the frame to span the space inclosed by each set of cantles and pommels and leave uncovered the spaces 5 and 6, and the transversely-extending loop-spring having inwardly-turned ends secured to the skeleton frame, substantially as and for the purposes described.

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

JOHN C. GROUT.

Witnesses:
CHAS. J. RICH,
WRIGHT P. EDGERTON.