

(No Model.)

G. F. SCHRADER.  
CYCLE SADDLE.

No. 584,795.

Patented June 22, 1897.

Fig. 1.

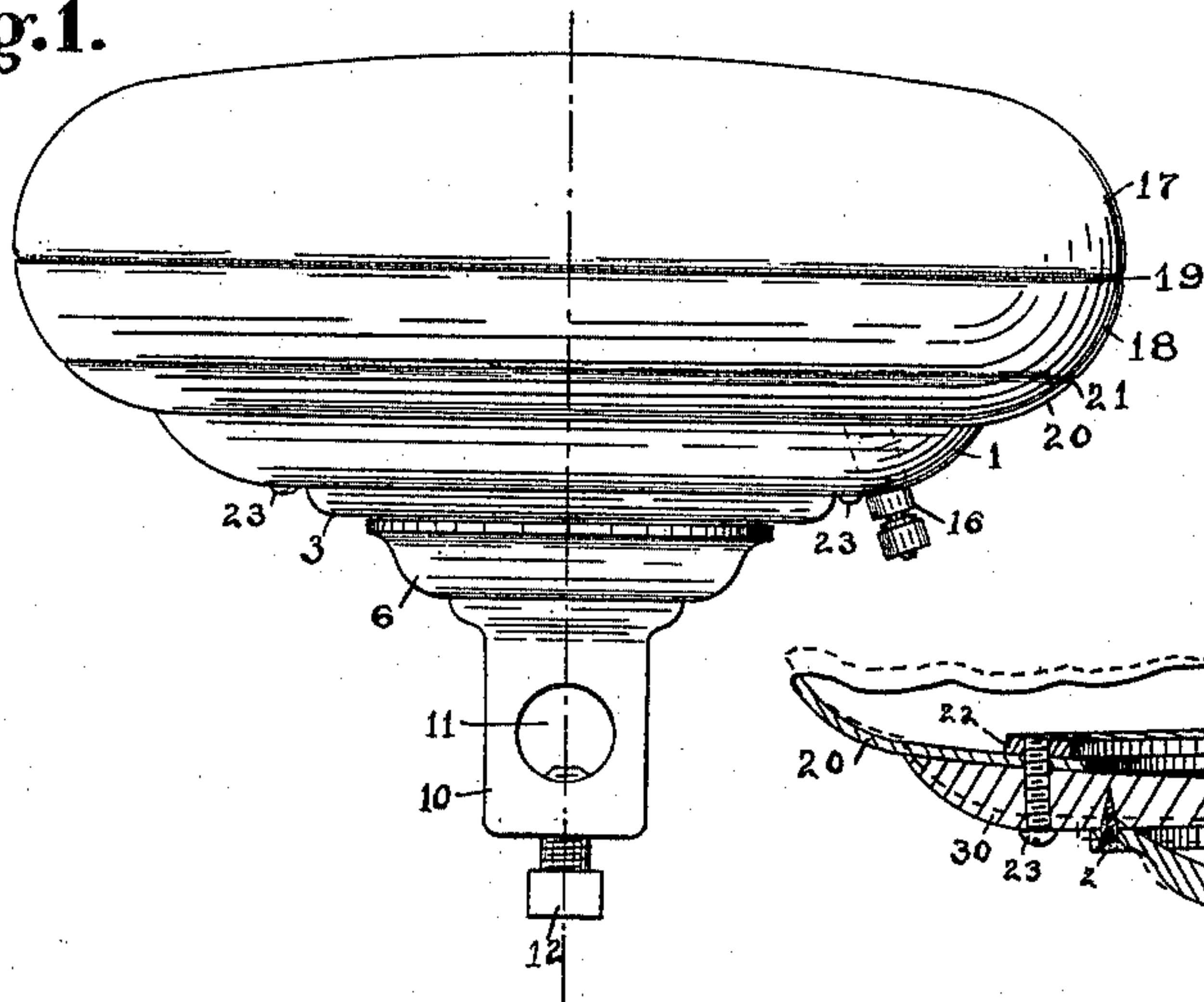


Fig. 4.

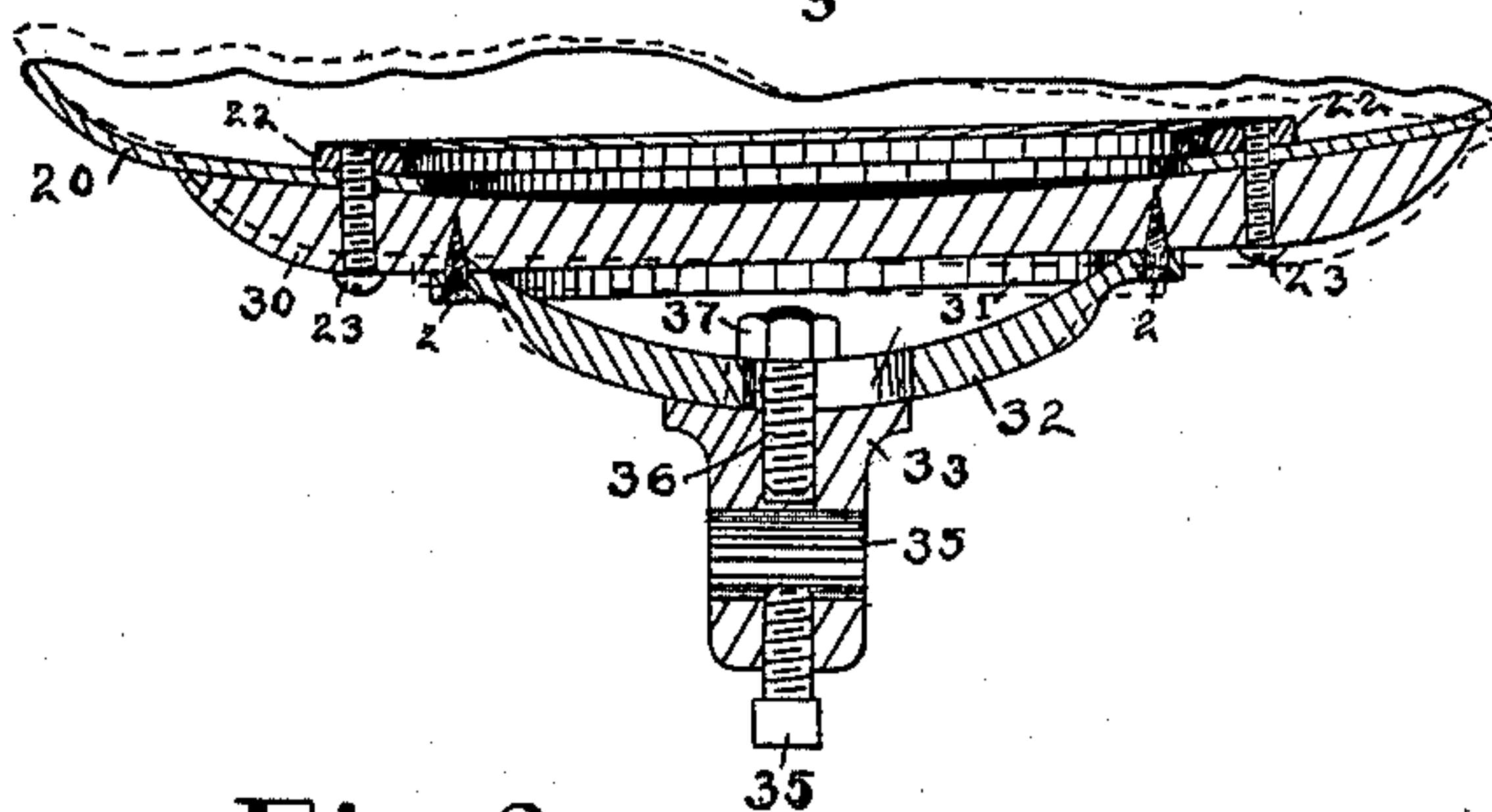


Fig. 2.

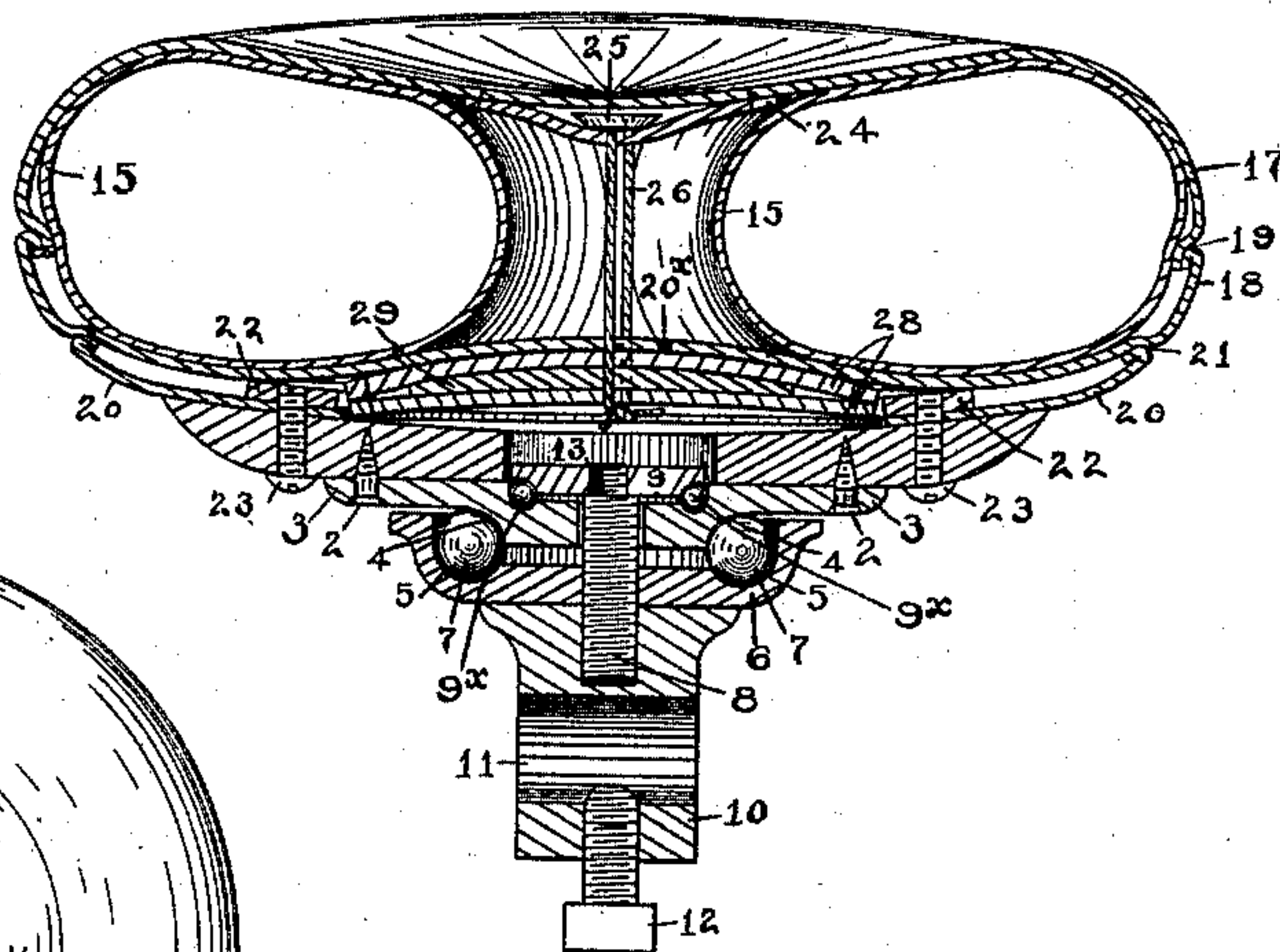
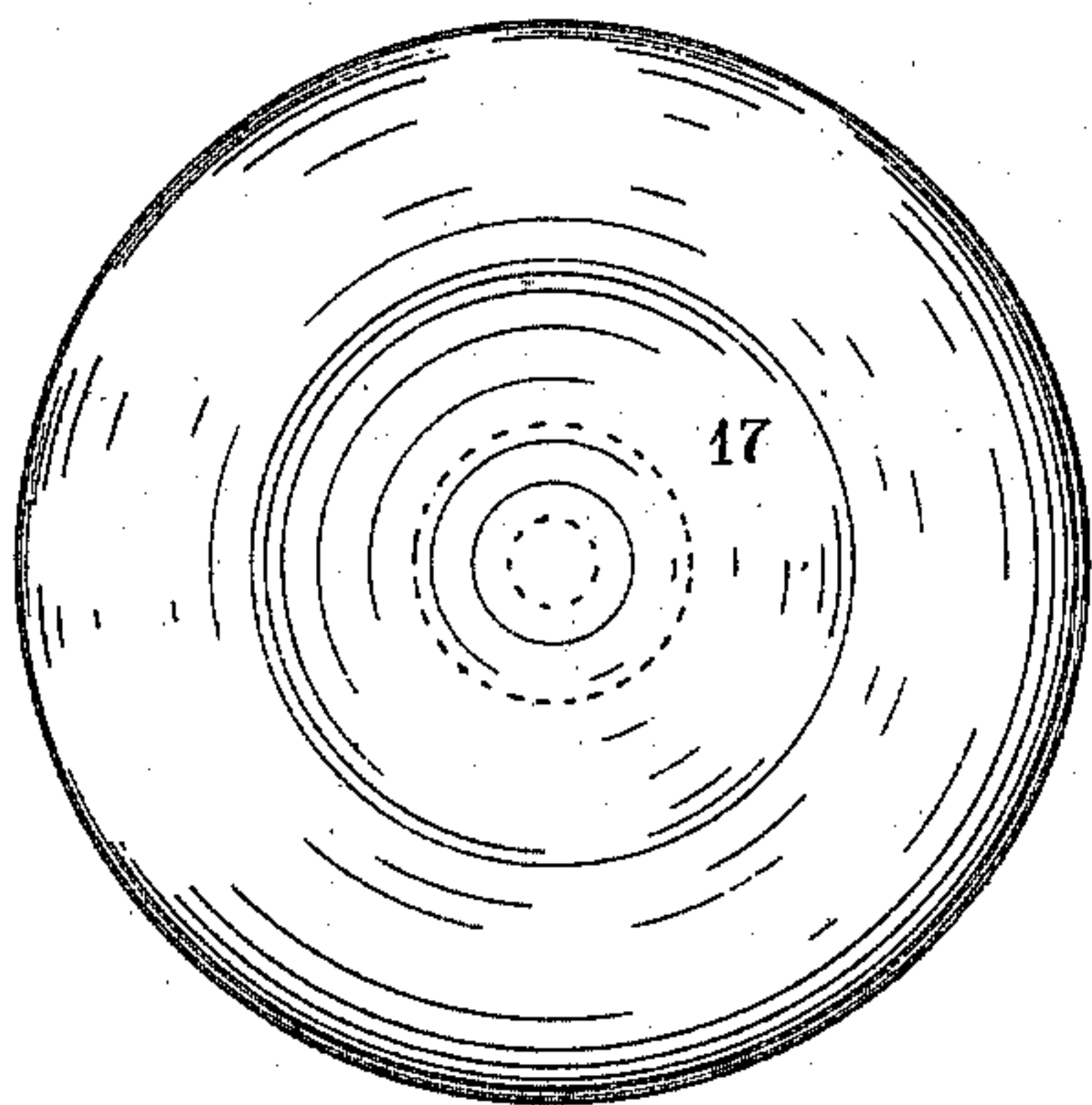


Fig. 3.



Witnesses:

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George F. Schrader  
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# UNITED STATES PATENT OFFICE.

GEORGE F. SCHRADER, OF ROCHESTER, NEW YORK.

## CYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 584,795, dated June 22, 1897.

Application filed November 16, 1895. Serial No. 569,222. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. SCHRADER, of Rochester, in the county of Monroe and State of New York, have invented certain  
5 new and useful Improvements in Cycle-Saddles; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide an improved saddle for cycles which is simple in construction and which will permit the necessary movements to insure the  
15 greatest possible comfort to the rider or occupant; and it consists in certain improvements hereinafter described, the novel features being pointed out in the claims at the end of this specification.

In the drawings, Figure 1 is a rear elevation of a saddle constructed in accordance with my invention; Fig. 2, a longitudinal sectional view of the same; Fig. 3, a plan view; Fig.  
25 4, a sectional view of a modification.

Similar reference-numerals in the several figures indicate similar parts.

One feature of my invention lies in the construction of the saddle or support in such  
30 manner that the greatest range of movement caused by the movements of the rider is permitted, and I will first describe this portion before alluding to the particular cushion or pad forming the seat proper.

The base or main support of the saddle is composed of a circular saddle frame or base 1, preferably of wood, to the under side of which is attached, by means of screws 2, a circular bearing-plate 3, having a central aperture, and upon its lower side around said aperture a curved or conical bearing-surface 4, between which and a corresponding bearing-surface 5, on an adjustable collar or washer 6, are arranged a series of bearing-walls 7. The  
45 collar 6 is adjustable upon a central standard in the shape of a screw 8, passing loosely through the plate 3 and having upon its upper end a collar 9, secured rigidly to the screw and provided with a bearing-surface, between  
50 which and a corresponding surface formed on the upper side of the plate 3 is arranged a series of bearing-balls 9<sup>x</sup>, this arrangement

permitting the easy rotary adjustment of the saddle-frame 1 and allowing the rider to turn as desired, carrying the saddle with him. 55 While it is better to provide the bearing-balls, it will be understood that the collar and parts could be brought in direct contact without the balls, if desired.

Upon the lower end of the screw 8 is mounted the block 10, provided with a lateral aperture 11 for the usual saddle-holding arm of a cycle-frame and a securing-screw 12. This block serves not only as a support for the whole saddle and permits its attachment to  
65 a cycle-frame, but also as a lock-nut for the adjustable collar 6 in position on the screw 8 after its movement to adjust the ball-bearings described, the block then being screwed up tightly. While I have shown the upper collar 9 as secured to the screw 8 by a threaded connection and a key 13 for preventing their relative movement, it is obvious that other forms of connection could be employed.

In the present embodiment of my invention the cushion or pad on which the rider is seated embodies a rubber and canvas or rubber air bag or tube 15, having a nipple and valve 16 of the ordinary construction and contained in a sack or covering which is secured to the frame or base 1. This covering  
80 or sack is preferably composed of two pieces of leather 17 and 18, connected by sewing at 19, the seam being on the inside, as shown, the outer part 17, being imperforate, forming a smooth surface, and the inner part 18 having a slit 20<sup>x</sup>, through which the air-tube 15 may be withdrawn when it is collapsed and the cushion removed from the frame 1.

An annular securing-flap 20 is fastened at  
90 21 by sewing to the lower portion of the tube-containing sack 17 18, and the inwardly-projecting edge is fastened to the frame 1 by means of an annular plate 22, placed above it and held to the support 1 by screws 23, passing through the support, flap, and plate, as in Fig. 2. 95

From the appearance of the seams it will be seen that the parts 17, 18, and 20 are sewed together while turned inside out, and when  
100 in the position shown, with the air bag or tube inside, the pad as a whole can be fastened to the support 1 by the screws 23 and plate 22 and readily removed for repairs, if desired.



In order that the shape of the saddle can be changed slightly, if desired, I secure to the under side of the part 17 of the sack a piece 24 of leather, between which and the part 17 is a button 25, and through the eyes of the latter passes an adjustable cord 26, also passing through a pad beneath the sack and composed, preferably, of two pieces 28 of leather with a filling 29 of felt between them. This pad not only forms a holding-ground for the cord, but covers the aperture in the support 1, and in the event of the collapse of the air-tube the rider will have a reasonably comfortable seat until the tube can be repaired. By adjusting the cord 26 after the removal of the parts from the frame 1, as described, the rider can make the cushion flatter or more rounded, as desired.

In Fig. 4 I have shown another form of support in which instead of making the saddle-frame 30 rotarily adjustable it is provided with a plate 31, secured to its under side, having the curved bridge 32, and the block 33, having the aperture 34, and screw 35 is also provided with a curved support at the top fitting the bridge, and a screw 36, secured to the block, passes through a slot in the bridge and has upon its upper end a nut 37, with a curved lower side, which can be adjusted on opposite sides of the bridge, as shown. This device enables the support 30 and saddle to be adjusted by tilting, as in dotted lines.

The construction of the pneumatic cushion described is simple, and by reason of its shape and adjustability is admirably adapted for the purpose, the rider being permitted to change his position and to ride long distances with little fatigue and no chafing.

I claim as my invention—

1. In a cycle-saddle, the combination with

a saddle-frame, and the bearings above and below it, of the vertical screw, the upper stationary collar, the lower adjustable collar, and the block having the aperture and arranged upon the screw and engaging the lower collar forming a lock-nut therefor, substantially as described.

2. In a cycle-saddle, the combination with the saddle-frame, of the air-tube, the sack for completely inclosing it and having the annular flap in addition, adjusting devices connected to the inner portion of the upper side of the sack and to the lower side thereof, and securing devices for attaching the annular flap to the saddle-frame, substantially as described.

3. In a cycle-saddle, the combination with the frame, of the air-tube, the sack for containing it having the slit for the removal of the tube, and otherwise closed at top and bottom, the pad covering the lower central portion of the sack, the adjusting-cord connected to the inner part of the upper side of the sack and to the pad, and securing devices for holding the sack on the saddle-frame, substantially as described.

4. In a cycle-saddle, the combination with the saddle-frame having the central aperture, of the air-tube, the sack for containing it, having the annular securing-flap, the pad arranged over the aperture in the saddle-frame, adjustable connections between said pad and the upper side of the sack, and connecting means for securing the annular flap to the saddle-frame, substantially as described.

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Witnesses:

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