

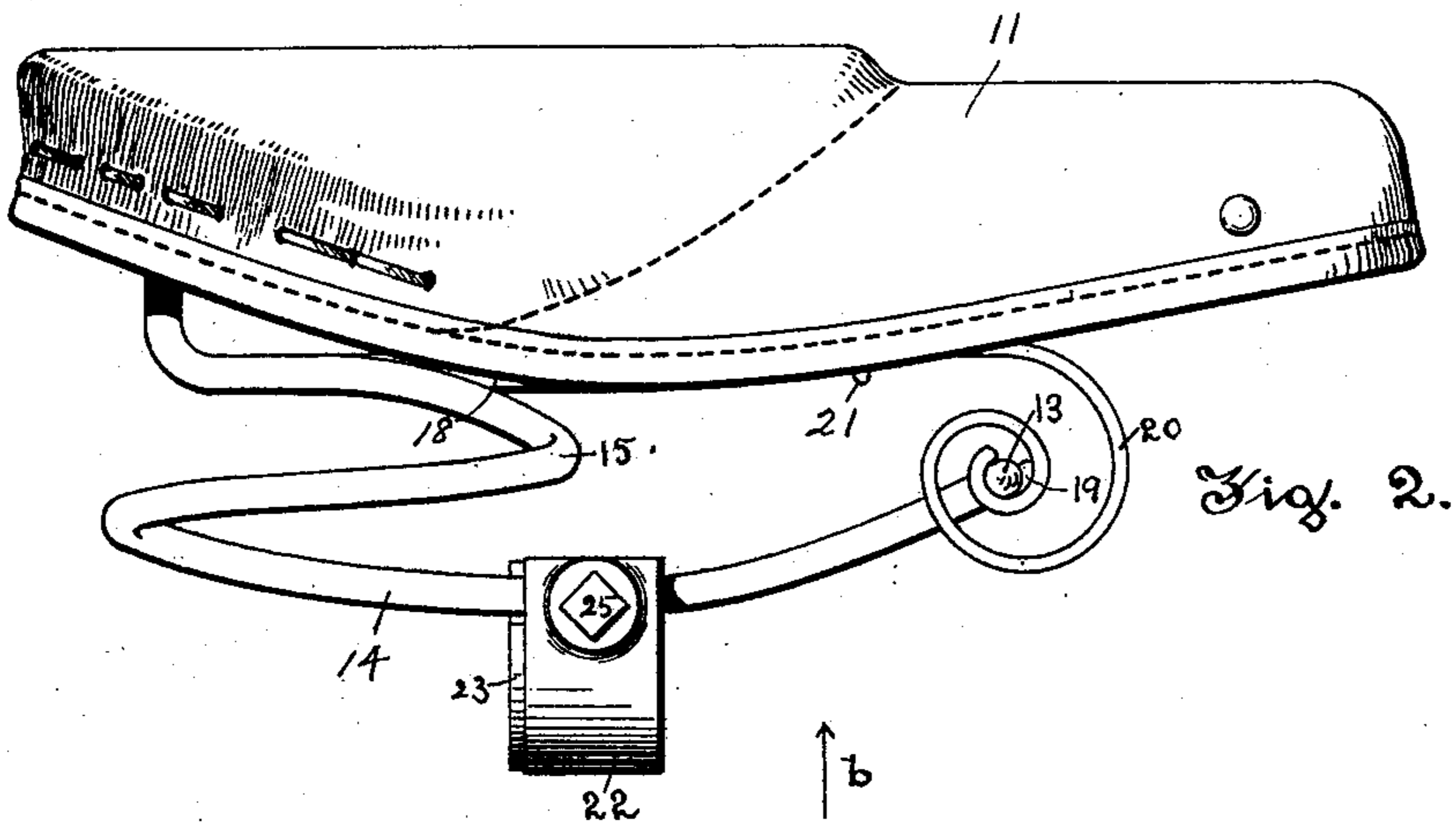
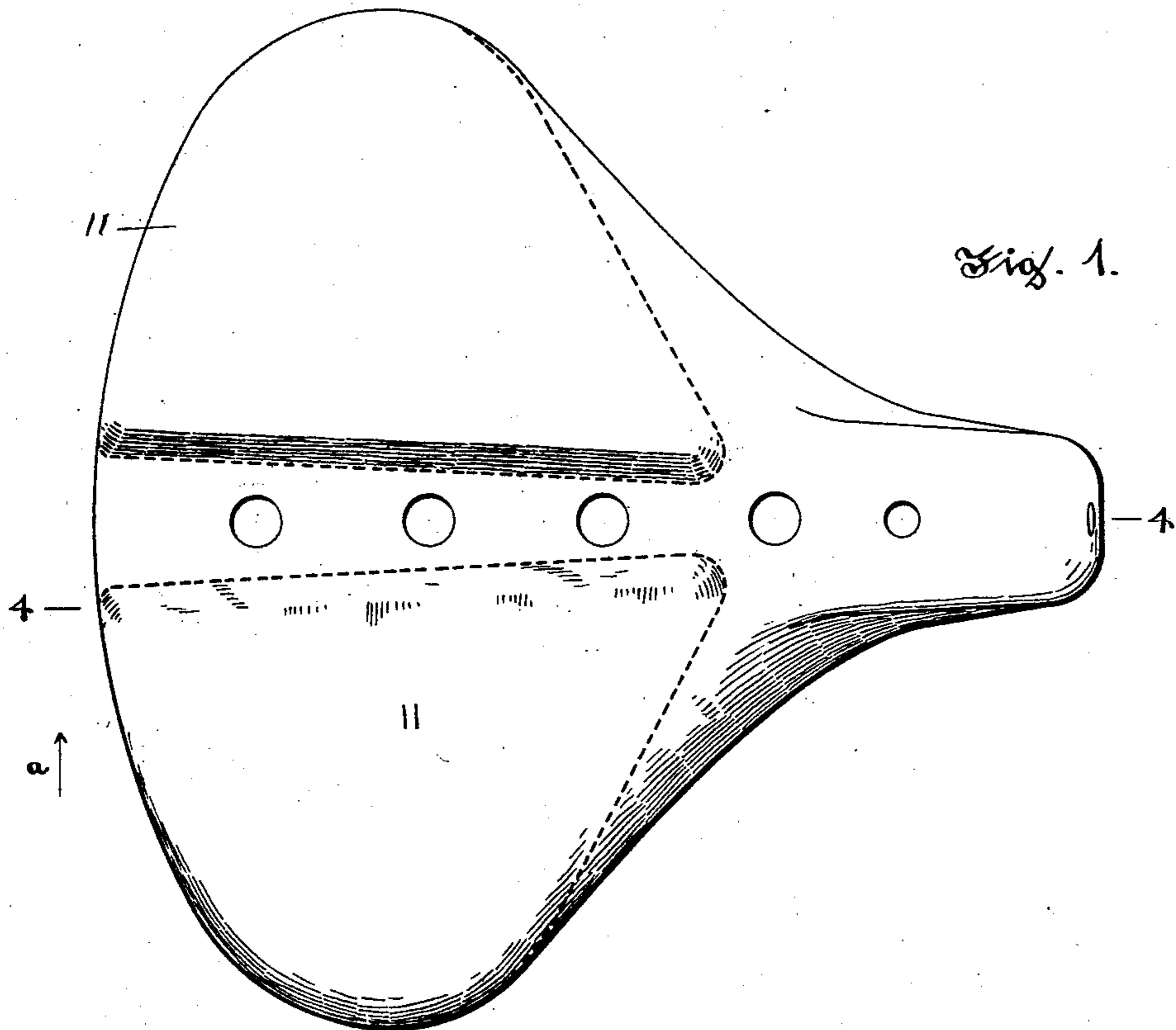
(No Model.)

3 Sheets—Sheet 1.

J. A. HUNT.
BICYCLE SADDLE.

No. 605,673.

Patented June 14, 1898.



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By his Attorney
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(No Model.)

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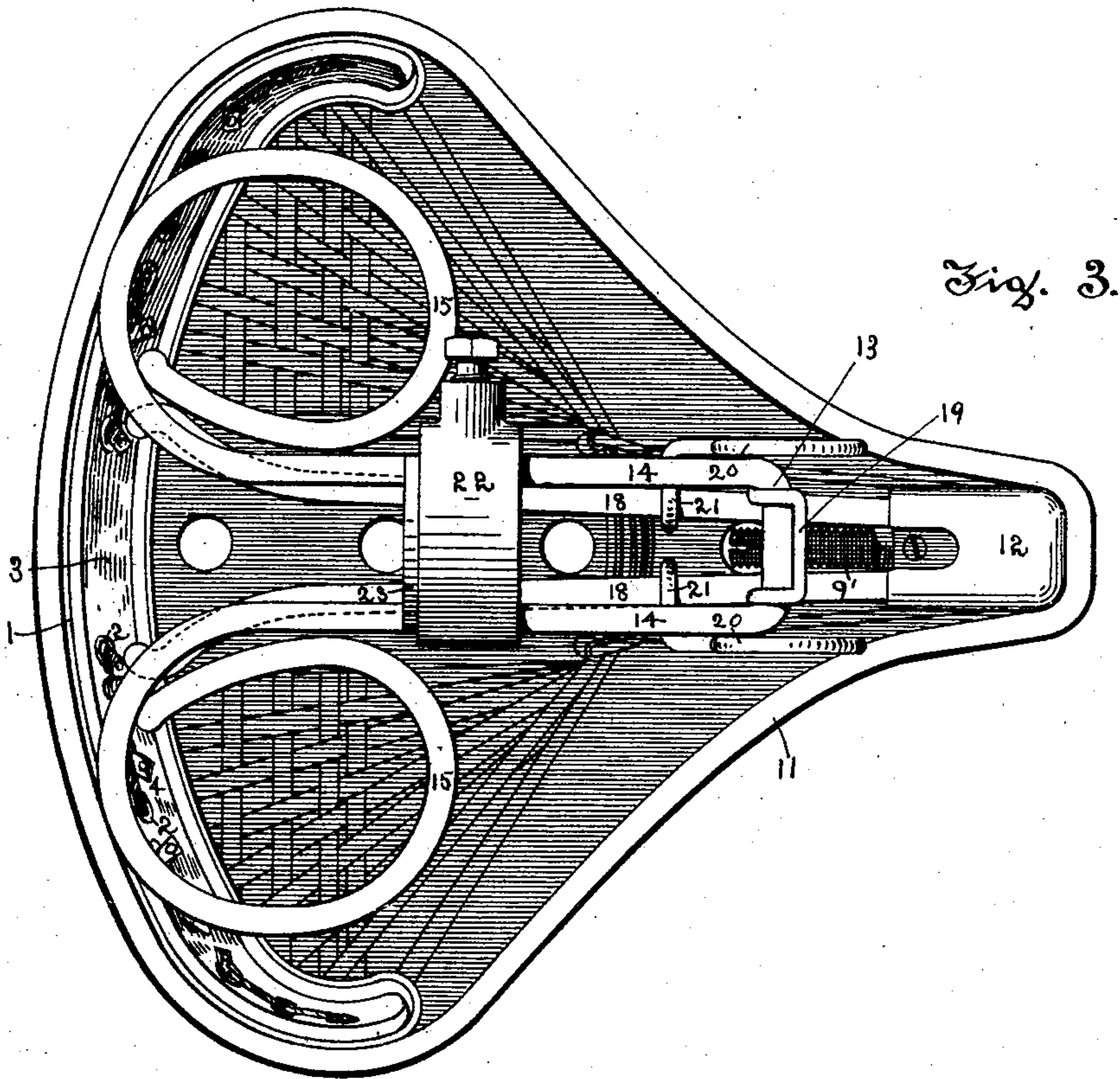


Fig. 3.

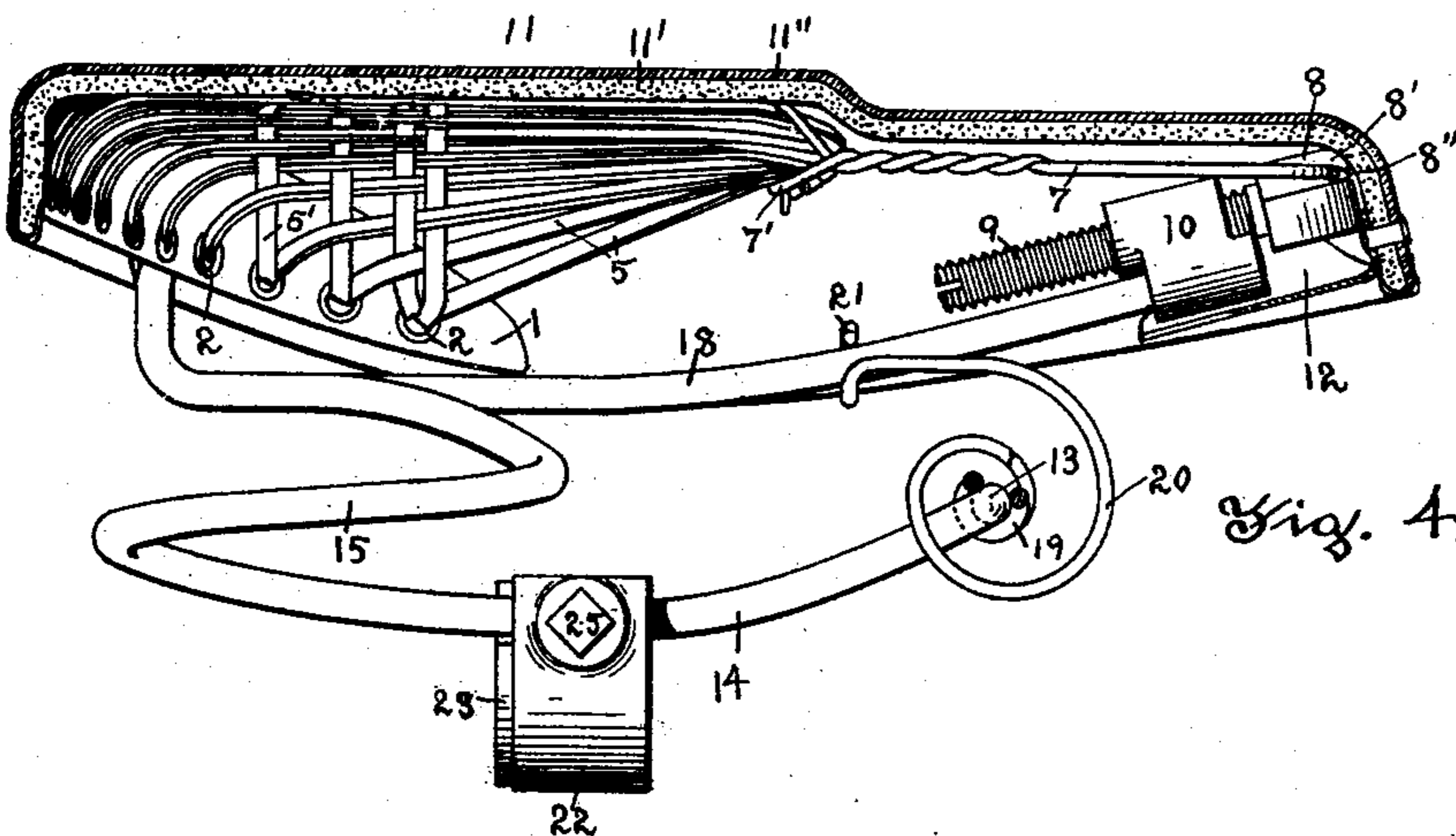


Fig. 4.

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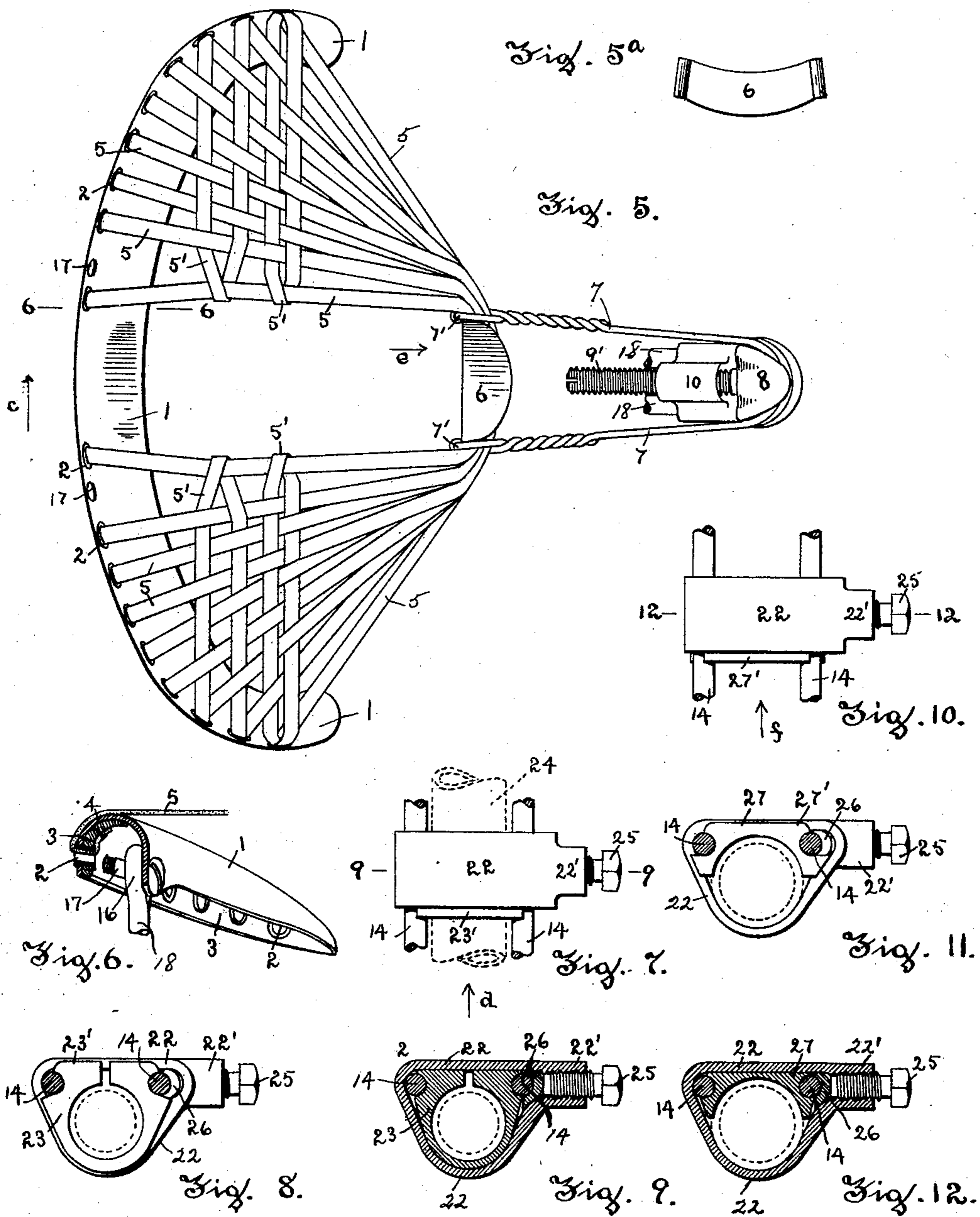
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UNITED STATES PATENT OFFICE.

JONATHAN A. HUNT, OF WESTBOROUGH, MASSACHUSETTS.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 605,673, dated June 14, 1898.

Application filed August 21, 1897. Serial No. 649,040. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN A. HUNT, a citizen of the United States, residing at Westborough, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Bicycle-Saddles, of which the following is a specification.

My invention relates to bicycle-saddles, and more particularly to an improved construction of what are termed "cushion" or "padded" saddles; and the object of my invention is to make a saddle of the class referred to of improved construction, and also a spring and clamp of improved construction which may be combined with the saddle-seat.

My invention consists in certain novel features of construction of my bicycle-saddle, spring, and clamp, as will be hereinafter fully described.

Referring to the drawings, Figure 1 is a plan view of a saddle embodying my improvements. Fig. 2 is a side view looking in the direction of arrow *a*, Fig. 1. Fig. 3 is a bottom view looking in the direction of arrow *b*, Fig. 2. Fig. 4 corresponds to Fig. 2, but a part of the top or cover is removed at a point indicated by line 4 4, Fig. 1. Fig. 5 is a top view of the saddle with the top or cover removed. Fig. 5^a is a detached view of the strand-holder, looking in the direction of arrow *e*, Fig. 1. Fig. 6 is a section through the cantle end of the saddle at a point indicated by line 6 6, Fig. 5, looking in the direction of arrow *c*, same figure. Fig. 7 is a plan view of the clamp. Fig. 8 is a side view looking in the direction of arrow *d*, Fig. 7. Fig. 9 is a section on line 9 9, Fig. 7, looking in the direction of arrow *d*, same figure. Fig. 10 is a plan view of a modified construction of the clamp shown in Figs. 7 and 8. Fig. 11 is a side view of the clamp shown in Fig. 10, looking in the direction of arrow *f*, same figure; and Fig. 12 is a section on line 12 12, Fig. 10, looking in the direction of arrow *f*, same figure.

In the accompanying drawings, 1 is the cantle-plate, which in this instance is made of sheet metal pressed into the shape shown in the drawings to form a hollow or partially tubular cantle.

Extending within the cantle upon the inner rear surface or edge thereof, and in this instance secured thereto by metal eyelets 2, is a

strip of leather or other flexible material 3. The rear ends of longitudinal strips of leather or other suitable material 5, which in connection with the interwoven transverse strands 5' form the laced seat of the saddle, are passed through the eyelets 2 in the cantle and secured to the cantle by tacks 4, which are driven from the inside of the cantle through the leather 3 and clenched against the metal back of the cantle, as shown in Fig. 6.

The longitudinal strips of lacing 5 are looped around the transverse metal holder 6, as shown in Fig. 5, which is downwardly curved or depressed on its top surface, as shown in Fig. 5^a.

The holder 6 is secured at each end to a vertical eye or loop 7', formed in each end of the wire loop 7 by intertwisting the free ends of the wire loops 7 with the body thereof, as shown in Figs. 4 and 5. The front end of the wire loop 7 extends over a hook or projection 8' and into a recess 8'', formed in the movable nose-piece 8, which is supported on the end of the adjusting-screw 9, mounted to turn in the pommel-plate 10, secured to the front free ends of the two upper rods of the spring.

The top of the vertical eyes or loops 7' of the wire loop 7 extends above the plane of the loop 7 and the nose-piece 8 and in substantially the same horizontal plane as the top of the cantle-plate 1, as shown in Fig. 4.

The top or cover 11 is preferably made of two thicknesses of material, one thickness, 11', of felt and the other thickness, 11'', of leather, stitched together, and extends over the saddle, and is secured at its rear end to the cantle-plate 1 by lacing or otherwise, and at its front end is in this instance provided with a metal holder or case 12, which fits over the adjustable nose-piece 8 and pommel 10, as shown in Figs. 3 and 4.

The top or cover 11 is pressed up at its rear portion to form two elevated or raised portions, as shown, with a recessed or depressed portion between them, as shown in Fig. 1.

The front ends of the raised portions of the top or cover 11 rest upon and are held up to keep their shape by the top of the eyes 7' of the loop 7 at the front end of the saddle, as shown in Fig. 4.

The downward curvature in the top of the holder 6 and the downward curvature in the

top of the cantle-plate 1, as shown in Fig. 5, allow for a depression of the saddle top or cover between the two raised portions or cushions.

5 I have shown in the drawings, combined with the saddle above described, a spring the main portion of which is preferably made out of one piece of wire, which is bent at its central portion to form a loop 13 at the forward end of the saddle. From said loop two
10 wires extend back substantially parallel to each other to form the lower pair of rods 14, which extend through and are secured in the clamp, to be hereinafter described.

15 The pair of rods 14 are bent outwardly to form two spiral springs 15, extending in a horizontal plane, and are then bent to form attaching-eyes 16, extending in a vertical plane, which are secured to the front edge of the
20 cantle-plate 1 by screws 17, passing through the front edge of the cantle-plate, as shown in Fig. 6, and screwed into the rear edge thereof. From the eyes 16 the two wires extend substantially parallel to each other to
25 form the upper pair of parallel rods 18, the free ends of which are secured in the pommel-plate 10.

In connection with the main spring I preferably use a second or supplemental spring, which is preferably made out of one piece of
30 wire bent at its middle portion to form a loop 19, which is looped around or interlocked into the loop 13 of the main spring, as shown in Figs. 3 and 4, and then bent to form two
35 vertical spiral springs 20, extending upon the outside of the lower rods 14 of the main spring and having the free ends bent around the upper pair of rods 18 to form an eye or loop 21 to slide thereon.

40 I will now describe the clamp, which in this instance is shown combined with the spring to clamp the same to the saddle-post.

The clamp consists of the solid or unsplit external shell or casing 22, through which
45 the horizontal support of the saddle-post and the rods of the saddle-spring extend, and said shell is preferably of triangular shape and has a screw-threaded boss or extension 22' on one side thereof for the clamping-bolt 25 or
50 other clamping device. Within the external shell 22 is an internal split clamp shell or device 23. The clamp-shell 23 is split or divided through its upper side or surface only and encircles the horizontal support 24 (see
55 dotted lines, Fig. 7) of the saddle-post. (Not shown.) The upper outer edges of the split clamp-shell 23 have recesses to receive the two rods 14 of the saddle-spring, and said recesses, the split portion of the clamp-shell 23,
60 and clamping-bolt 25 are all in the same horizontal plane. The clamping-bolt 25 turns in the threaded boss 22', and its inner edge bears in this instance against a follower 26, between which and one edge of the split clamp-
65 shell 23 one of the rods 14 extends, as shown in Fig. 9. By turning the bolt 25 inwardly the follower 26 bears against the rod 14, and

the rod 14 bears against the upper side of the split clamp-shell 23 and clamps the rod between the follower 26 and said clamp-shell, 70 and also forces the upper portion of the clamp-shell 23 against the other rod 14 to clamp said rod and at the same time to press or bind the split clamp-shell 23 on the support 24 to secure the same within the clamp-shell. The
75 two rods 14 and the split portion of the clamp-shell and the follower 26 all being in substantially the same horizontal plane with the clamping-bolt 25 a direct pressure is transmitted from the clamping-bolt through the
80 follower 26 and clamp-shell 23 to the rods 14.

In case it is desired to use a post of large diameter a modified construction of the split clamp-shell 23 may be used, as shown in Figs. 10, 11, and 12. In these figures the clamp
85 block or device 27 does not encircle the horizontal support of the saddle-post, but extends only over the top thereof and is recessed upon its lower surface to receive the saddle-support and upon its outer edges to receive the
90 rods of the saddle-spring, as shown. It will be seen that the screwing in of the bolt 25 will force the follower 26 against the rod 14 and the rod 14 against the clamp-block 27 to clamp the rod 14 and at the same time will
95 force the clamp-block 27 against the other rod 14 to clamp said rod and will force the clamp-block 27 down upon the top of the support 24 to clamp said support between said clamp-block 27 and the lower portion of the clamp-
100 shell 22. The clamp device 23 and the clamp device 27 are each preferably provided on one edge with a projecting flange or lip 23' and 27', which lap over the edge of the casing or shell 22.

105 It will be understood that the details of construction of my saddle may be varied from what is shown and described, if desired, and other styles of springs and clamps may be used, if desired.

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

1. In a saddle for bicycles, the combination with the cantle-plate, the pommel-plate, a
115 spring intermediate the cantle and pommel, and a nose-piece supported on the end of an adjusting-screw turning in the pommel-plate, of a wire loop connected at its front end to the nose-piece, and provided at its rear end
120 with vertically-extending eyes, the tops of which extend above the plane of said loop, and a transverse holder attached to said eyes, and strands of leather or lacing extending from the cantle-plate and looped around said
125 holder, and a top or cover having two elevated or raised portions, the front ends of which rest upon and are held up by the top of the vertical eyes in the loop at the front end of the saddle, substantially as shown and
130 described.

2. In a bicycle-saddle, the combination with the pommel-plate, and the metal cantle-plate of curved or partial tubular shape in

cross-section, of a spring made out of one piece of wire, and forming two pairs of integral rods, one pair below the other, and the forward free ends of the upper pair secured
5 to the pommel-plate, and vertical attaching-eyes formed at the rear ends to extend within the cantle-plate, and be secured thereto, and horizontal spiral coils intermediate the two pairs of rods at their rear ends, and a
10 loop at the front ends of the lower pair of rods, substantially as shown and described.

3. In a bicycle-saddle, the combination with the pommel-plate, and the metal cantle-plate of curved or partial tubular shape in
15 cross-section, of a spring made out of one piece of wire, and forming two pairs of integral rods; one pair below the other, and the forward free ends of the upper pair secured to the pommel-plate, and vertical attaching-
20 eyes formed at the rear ends to extend within the cantle-plate, and be secured thereto, and horizontal spiral coils intermediate the two pairs of rods at their rear ends, and a loop at the front ends of the lower pair of rods, said

loop connected with the upper pair of rods by 25 a supplemental spring, and said supplemental spring, substantially as shown and described.

4. In a clamp for bicycle-saddle springs, &c., the combination with the external solid or unsplit shell or casing of substantially tri- 30 angular shape, and having a threaded boss or extension on one side thereof, and a bolt or clamping device for said boss, of a clamp shell or device extending within the external shell, and having an opening therethrough to 35 receive the horizontal support of the saddle-post, and centrally split or divided through its upper portion only above said opening, and having recesses in its outer edges to receive the rods of the spring, said recesses and 40 the split or divided portion of the clamp-shell, and the clamping-bolt being in the same horizontal plane, substantially as shown and described.

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Witnesses:

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