

No. 770,975.

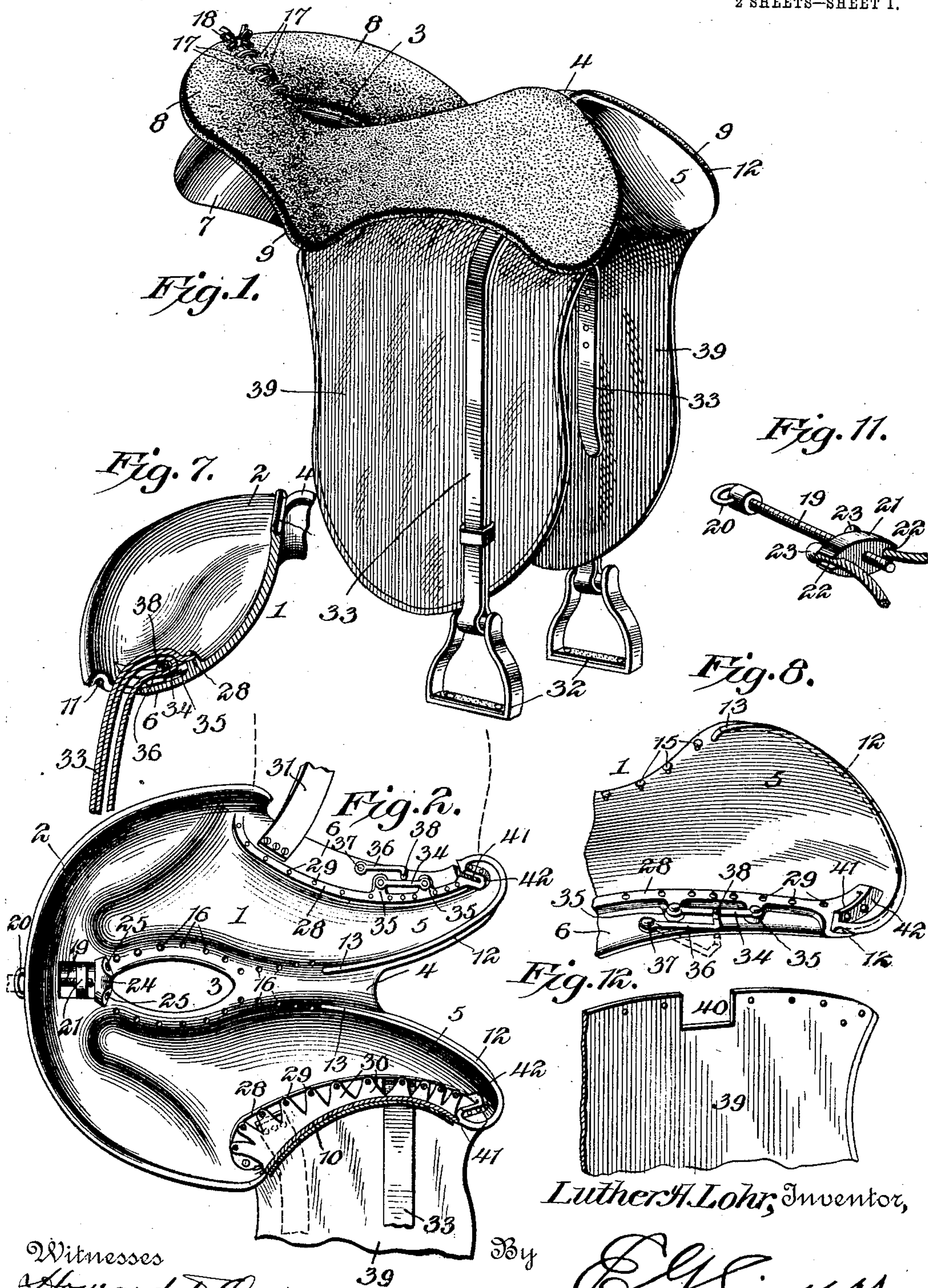
PATENTED SEPT. 27, 1904.

L. A. LOHR.
RIDING SADDLE.

APPLICATION FILED OCT. 15, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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Attorney

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2 SHEETS—SHEET 2.

Fig. 3.

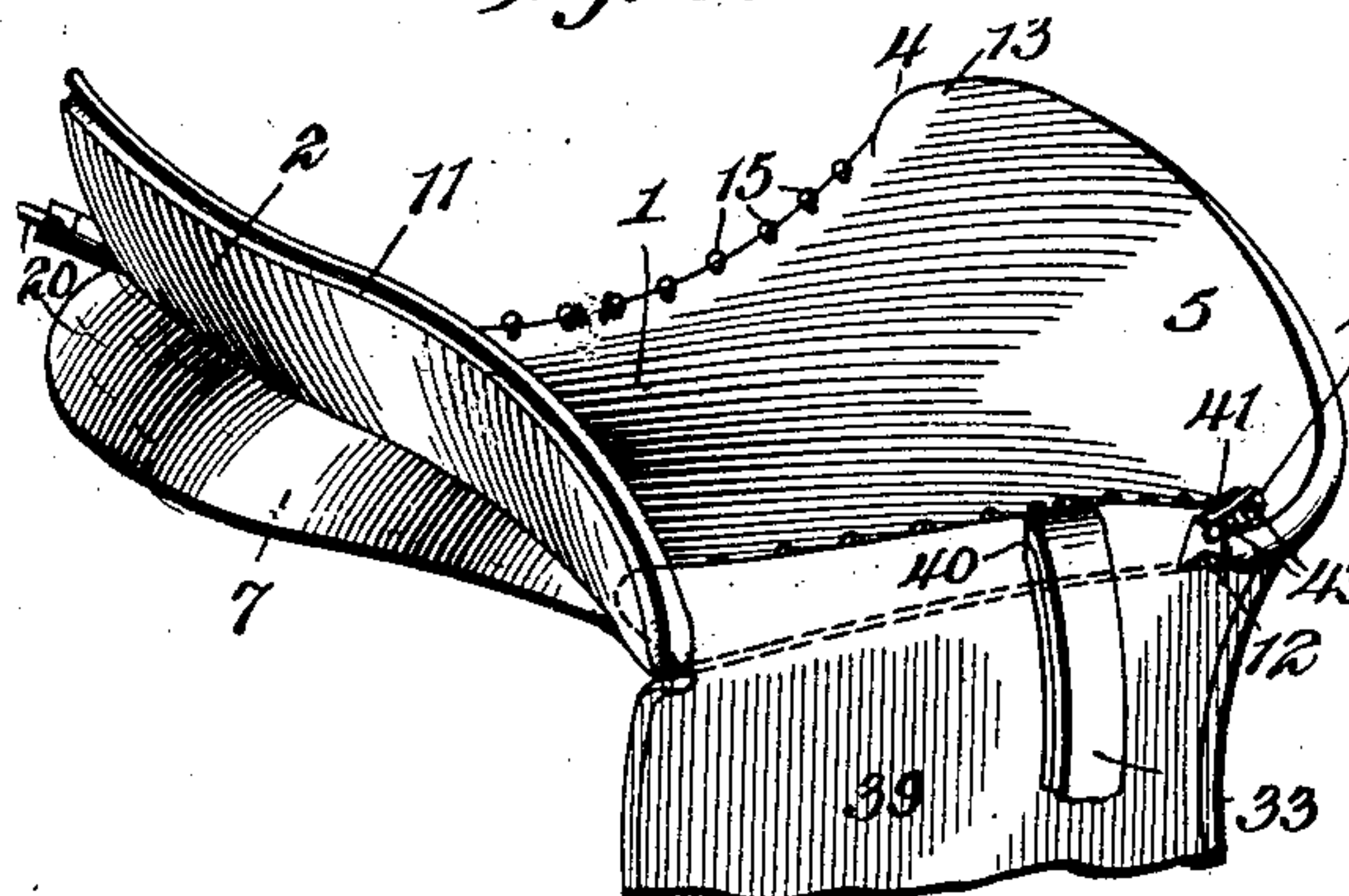


Fig. 4.

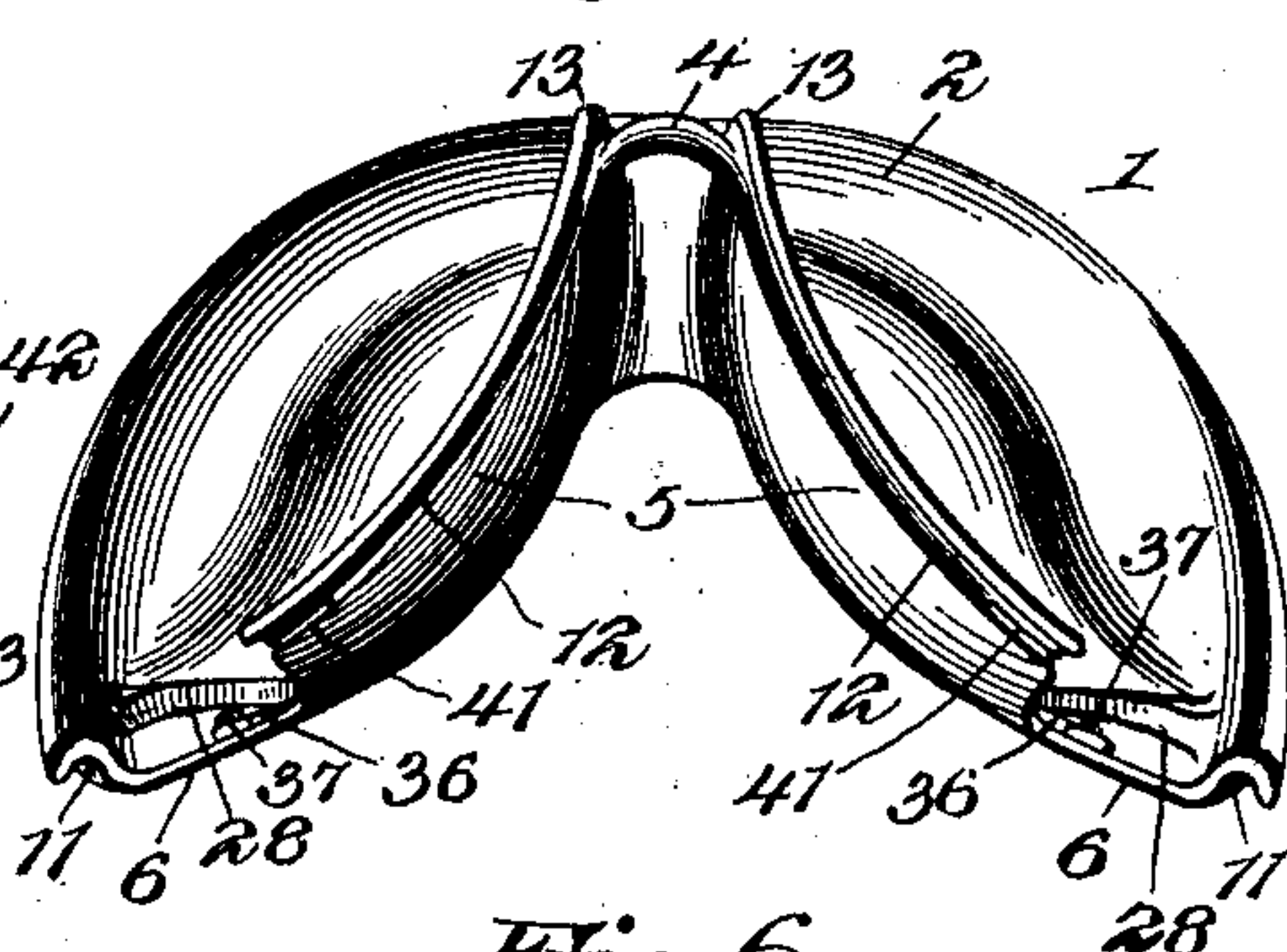


Fig. 6.

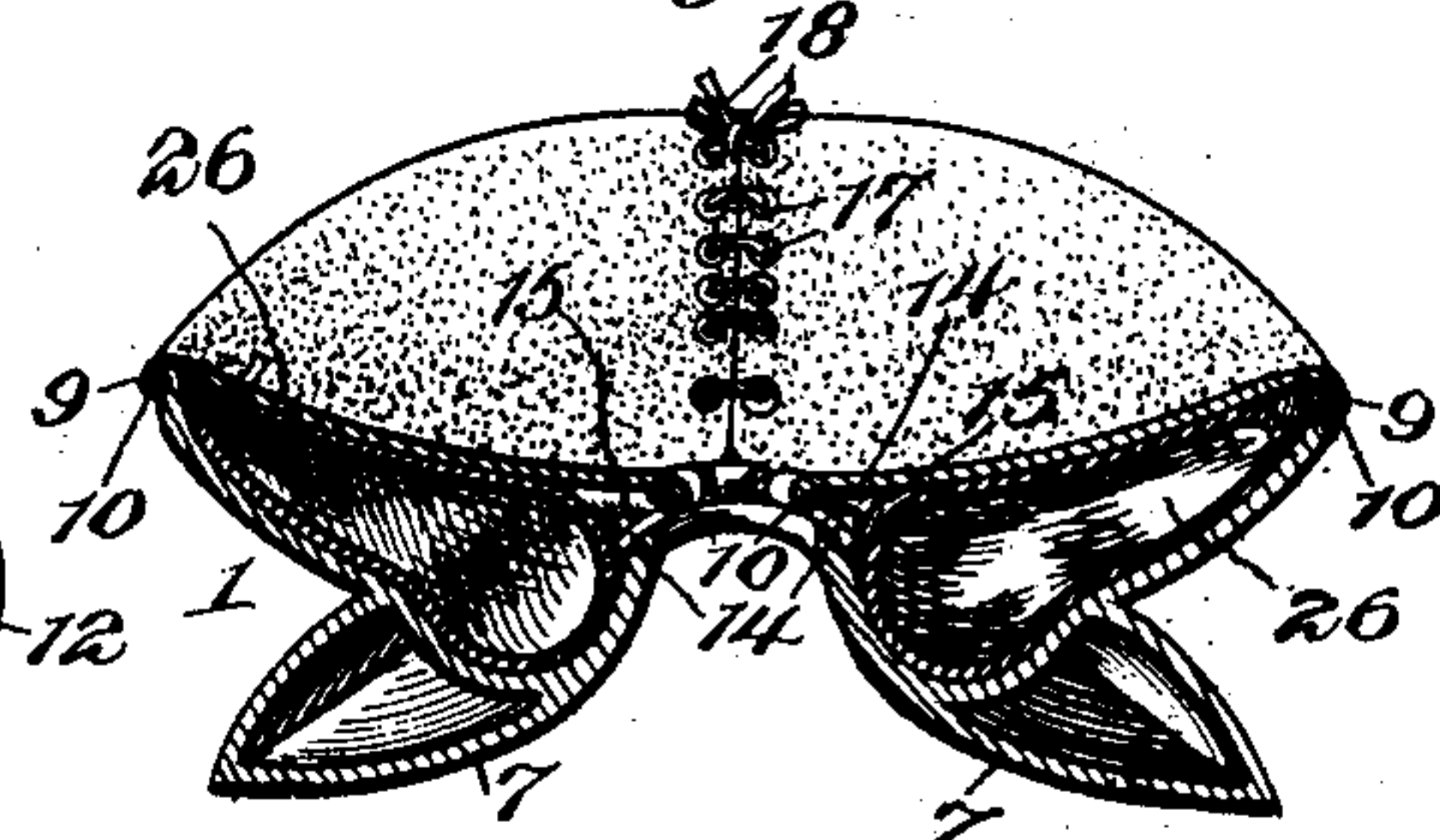


Fig. 10.

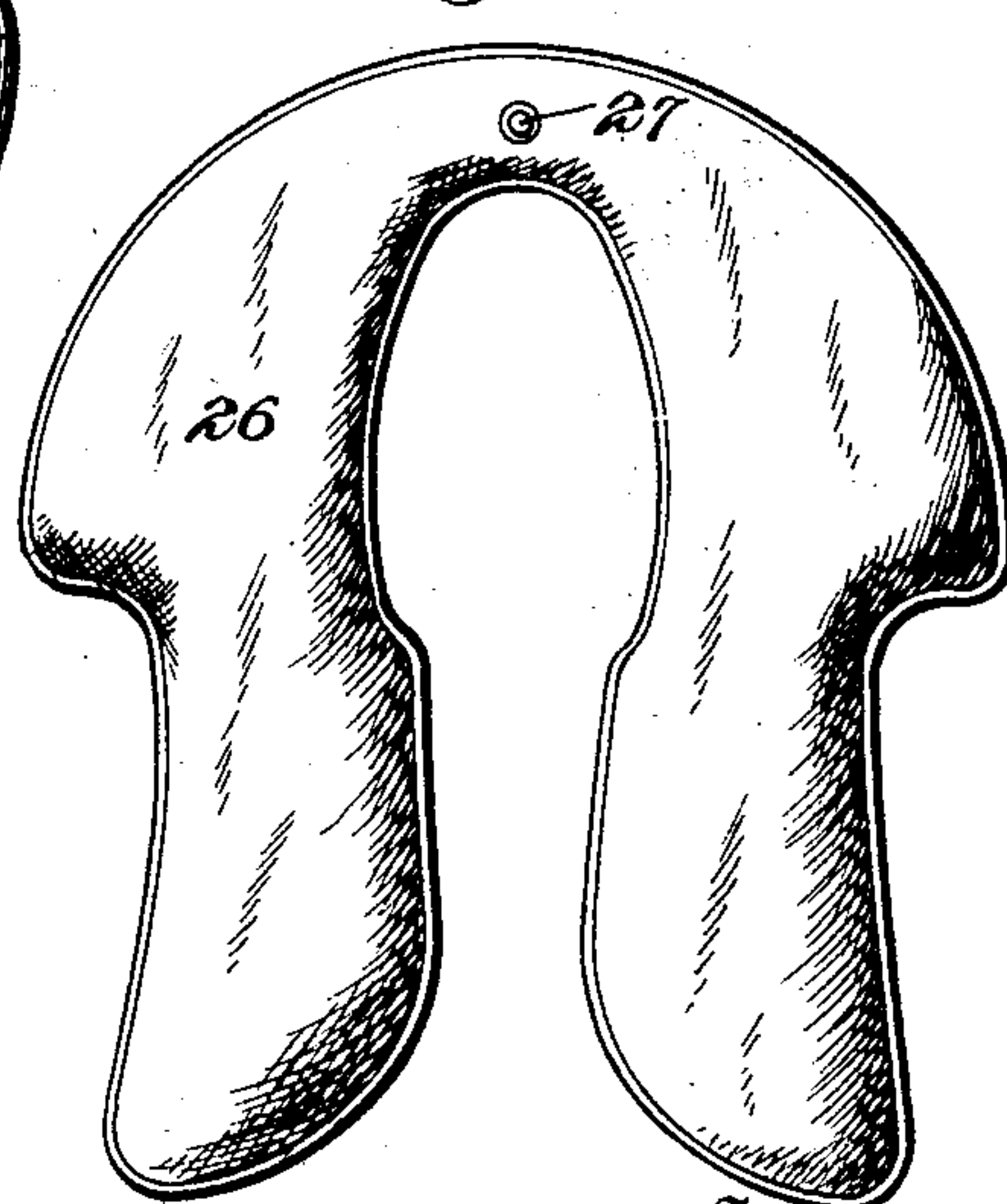


Fig. 9.

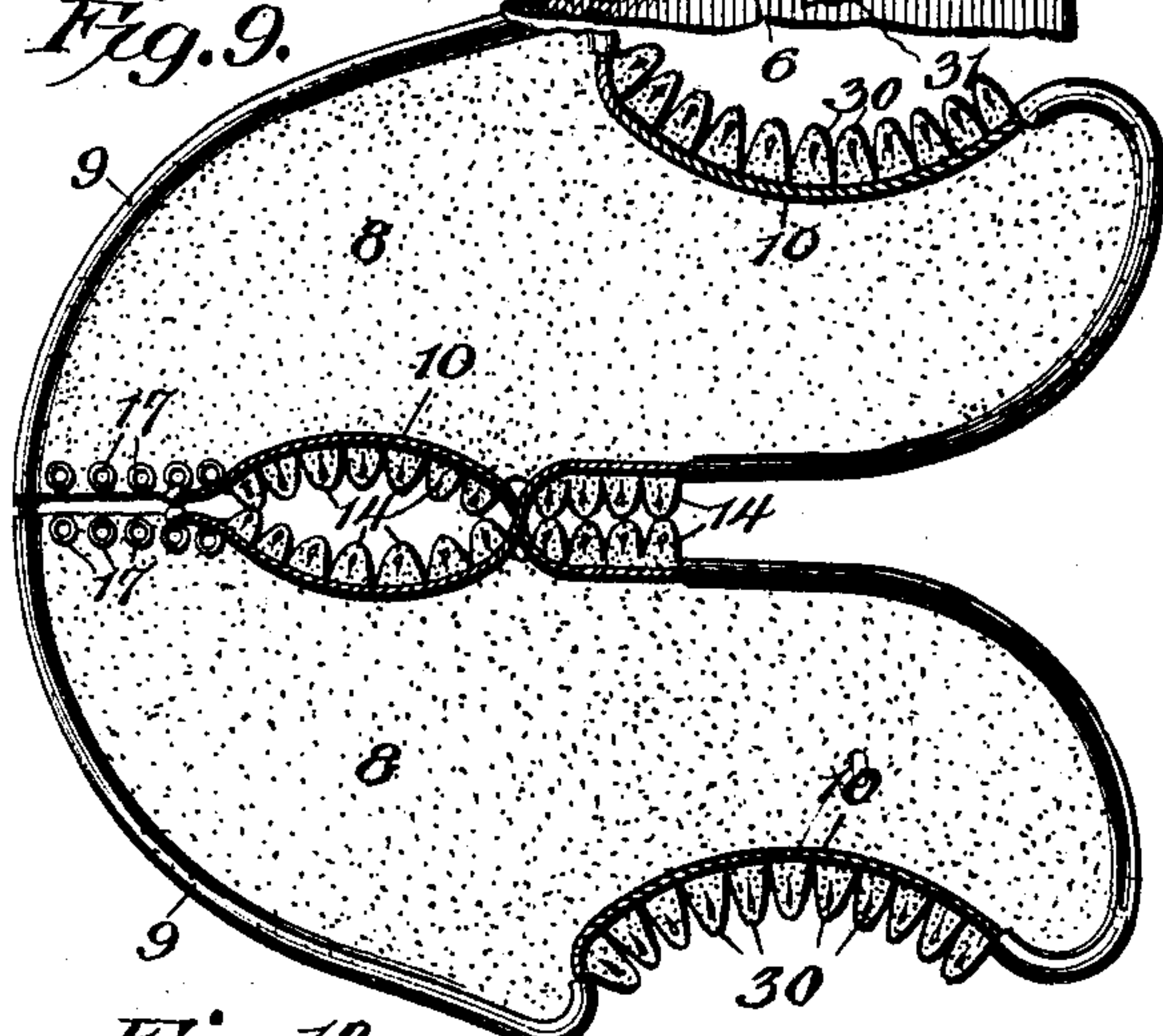
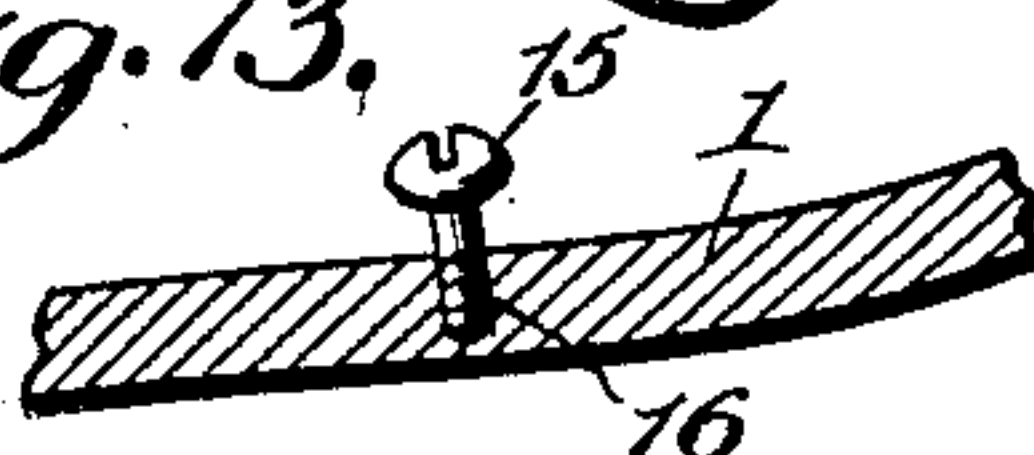


Fig. 13.



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UNITED STATES PATENT OFFICE.

LUTHER A. LOHR, OF NEWMARKET, VIRGINIA.

RIDING-SADDLE.

SPECIFICATION forming part of Letters Patent No. 770,975, dated September 27, 1904.

Application filed October 15, 1902. Serial No. 127,414. (No model.)

To all whom it may concern:

Be it known that I, LUTHER A. LOHR, a citizen of the United States, residing at Newmarket, in the county of Shenandoah and State of Virginia, have invented a new and useful Riding-Saddle, of which the following is a specification.

This invention relates to riding-saddles, and has for its object to dispense with the usual saddle-pads and at the same time to obviate chafing of an animal's back.

It is furthermore designed to provide for converting the saddle from a comparatively hard seat to a cushioned seat, and vice versa.

Another object is to provide improvements in the manner of connecting the cover to the tree without nailing the same together and to permit of the convenient removal thereof whenever desired.

Another object is to provide for tensioning and equalizing the strain upon the cover to any degree of tightness to suit the rider.

Another object is to provide an improved connection between each stirrup-strap and the saddle whereby said strap is free from buckles.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be herein-
after more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a saddle embodying the features of the present invention. Fig. 2 is a plan view of the tree with an edge portion of the cover secured thereto. Fig. 3 is a side elevation thereof. Fig. 4 is a front view of the tree. Fig. 5 is a central longitudinal sectional view of the saddle with the cover on. Fig. 6 is a transverse sectional view on the line 6 6 of Fig. 5. Fig. 7 is a detail transverse sectional view on the line 7 7 of Fig. 2 with the adjacent stirrup-strap in position. Fig. 8 is an enlarged detail perspective view of the forward end of one side of the pommel. Fig. 9 is an inverted plan view of the cover. Fig. 10 is a detail view of the pneumatic pad or cushion. Fig. 11 is a detail perspective view of the tension device for drawing the cover tightly upon the tree. Fig. 12 is a detail perspective view of the upper portion of one of the aprons which lies between the adjacent stirrup-strap and the sides of an animal. Fig. 13 is a detail sectional view showing one of the headed studs or buttons for connecting the cover to the tree.

Like characters of reference designate corresponding parts in all the figures of the drawings.

In carrying out the present invention I form the tree 1 of some light and strong sheet or cast metal—as, for instance, aluminium.

The rear end portion of the tree flares upwardly and rearwardly into a cantle 2, the opposite sides of which extend well forward, whereby the tree is considerably dished between its opposite sides and the usual elliptical or elongated opening 3, which is formed at the longitudinal center of the tree. The pommel 4 is hollow or dished upon its under side and rises to a height substantially level with the highest part of the cantle, while the body of the tree has the front extensions 5, which project well forward in advance of the pommel and also downwardly therefrom, the outer faces of said extensions being dished or concaved and the under side of the tree having a gradual convexed sweep longitudinally and transversely, so as to effectually fit the back of an animal. The under side of the metallic tree is without joints and smoothed or polished, whereby it does not stick, but slides freely, thereby giving the desired ventilation and obviating chafing of the animal's back. It will here be observed that besides giving a broad bearing to the knees of the rider the extensions 5 also afford a broad bearing upon the back of the animal, thereby to obviate twisting or turning of the saddle at the forward end thereof. This broad bearing feature is also carried out by extending the bars 6, so as to materially increase the width of the tree, and said bars are extended rearwardly beneath the cantle, as indicated

at 7, so as to give a broad bearing at the rear end of the saddle. As best indicated in Fig. 6, it will be seen that the extensions 7 of the bars are hollow, so as to be comparatively light, with their under sides convexed and merging gradually into the convex under face of the tree.

Over the top of the tree is stretched a cover formed in opposite duplicate sections 8, preferably formed of leather which is undressed upon its upper face, so as to prevent sliding of the rider in the saddle. The outer edge of each section is provided with a bead 9, inclosing a wire 10, preferably embodying strands, and this wired bead is adapted to be seated in the groove 11 in the back of the cantle and at its upper edge and also in the groove 12 in the front side of the extension 5, said groove running back for any suitable distance at the adjacent side of the pommel either to the opening 3 or terminated short thereof. The grooves at the opposite sides of the pommel are preferably formed by means of upstanding ribs 13, with the beaded edges of the cover-sections snugly embracing the same. As best shown in Fig. 9, it will be seen that the inner edge of the cover-section is provided with buttonhole-tabs 14, which embrace the adjacent portions of the wire 10 and detachably engage buttons or headed studs 15, carried by the tree and extending from the rear ends of the ribs 13 rearwardly at opposite sides of the opening 3. It being impossible to form the buttons or studs integral with the tree, the latter has been thickened somewhat at opposite sides of the opening 3 and forwardly at opposite sides of the pommel, and in these thickened portions are formed threaded sockets 16 for the screw-threaded terminal portions of the studs, as best shown in Fig. 13, the heads of the studs being elevated above the tree and the shank portions being smooth from the heads to the tree, so as to prevent cutting of the tabs by the sharp edges of the screw-threads. The intermediate portions of the inner edges of the covers are cut away to expose the opening 3 in the tree, and in rear of these cut-away portions are suitable eyelets 17 for the reception of a suitable string or lacing 18, whereby the cover-sections are detachably connected at their rear ends.

For stretching the cover tightly across the tree after its edges have been secured thereto there is provided a tension-screw 19, which pierces a thickened portion of the cantle in line with the opening 3, the outer end of the screw being provided with a handle 20 and its forward end provided with a nut or follower 21, which has a screw-threaded opening, so that by turning the screw the follower may be fed forwardly or rearwardly, as may be desired. The opposite end portions of the wire 10 are connected with the follower by being received within seats or notches 22 in

the opposite sides of the follower and provided at their extremities with enlargements or heads 23 to lie against the rear side of the follower, so that when the latter is drawn rearwardly the opposite ends of the wire will be drawn in the same direction, thereby stretching the cover tightly across the tree. In front of the tension-screw is a shoulder 24, formed integrally upon the tree at the rear end of the opening 3 and having a pair of perforations 25 for the reception of the respective end portions of the wire, so as to guide the latter to the follower. As best indicated in Fig. 6, it will be seen that the cover is stretched from the outer elevated edge portions of the cantle and the forward extensions of the tree, and thereby conforms somewhat to the concaved shape of the tree, but does not touch the latter except at its outer and inner edges, whereby, although the cover may be stretched to a taut condition, it will still yield slightly, thereby presenting a comparatively hard seat, which is also somewhat yieldable.

Beneath the cover and fitting the general concavity of the tree is a pneumatic cushion or pad 26, which is substantially U-shaped, so as to extend around the opening in the tree, and is provided with a suitable inflation-valve 27, which may be located at any part of the cushion, although indicated in Fig. 5 as being disposed beneath the lacing 18. When the cover is in a taut condition, the pneumatic cushion is ordinarily deflated, and when a cushioned seat is desired the cover is loosened somewhat and the cushion inflated, so as to bear against the cover and thereby cushion the same.

As each bar 6 is without a groove for the reception of the beaded edge of the cover, it is provided at its inner edge with an integral rib 28, having screw-threaded sockets 29 for the reception of headed studs similar to the studs 15, the corresponding edge portion of the cover being provided with buttonhole-tabs 30, which embrace the adjacent portion of the wire and are buttoned upon the headed studs or buttons. In addition to forming a support for the studs the rib 28 stiffens and strengthens the extended bar portion. Suitable girth-straps 31 are secured to the extended portions of the bars 6 at the rear ends of the bars and upon their upper faces.

Any suitable stirrups 32 may be used in connection with the present saddle; but I provide an improved adjustable connection between the stirrup-straps 33 and the saddle. As best indicated in Fig. 7, one end of the strap is permanently secured to the adjacent rib 28 by means of screw-threaded fastenings, from which it passes downwardly to the stirrup, thence upwardly to the saddle and downwardly through a loop formed by a bar 34, which is disposed substantially longitudinally near the forward end of the bar 6 and is

spaced therefrom by suitable enlargements 35, formed integrally upon the bar 6 and also projected laterally outward from the rib. At the outer side of the bar 34 is a hook 36, which has its rear end pivoted to the tree, as at 37, with its free hooked end provided with an upstanding stud or projection 38, which is designed to engage with one of a plurality of perforations in the free end of the stirrup-strap and also adapted to bear against the outer side of the bar 34 to hold the strap against slipping in an endwise direction. It will here be observed that all of the strain is taken by the projection 38 and the loop or bar 34, and the hook 36 serves merely as a movable carrier or support for the pin or projection 38. By disengaging the free end of the stirrup-strap from the projection and again engaging it with another perforation therein the stirrup may be adjustably raised and lowered to suit the rider. The usual form of apron 39 is placed at the inner side of the stirrup-strap and is connected to the saddletree by means of the headed studs or buttons which connect the cover to the rib 28, the upper edge of the apron being provided with a notch 40 to receive the loop 34 and the hook 36, whereby the latter is exposed for convenient access without necessitating the removal of the apron. The upper end of the front edge of the apron is received within a slot or notch 41, formed in the lower edge of the adjacent extension 5 of the tree, said notch being partially surrounded by a forward extension 42 of the rib 28 and provided with perforations for the reception of fastenings 43, (shown in Fig. 3,) which pierce the apron and support the forward upper end thereof.

A very important feature of the present saddle resides in the fact that after the wire 10 leaves the groove 11 at the forward end of the cantle it takes an inward sweep and then engages the groove 12 at the front end of the tree, whereby when the screw 19 is turned to stretch the wire the bowed portion thereof in the interval between the cantle and the forward end of the tree tends to become straight, thereby tensioning the cover in radial direction from the bowed portion of the wire, which results in the cover taking substantially the concaved shape of the upper side of the tree. Another important feature resides in the fact that the loop or handle 20 at the outer end of the screw 19 is also designed for engagement by the crupper-strap for the purpose of preventing the saddle from working forward and in addition thereto prevents accidental turning of the screw and a consequent loosening of the tension or strain upon the cover.

What is claimed is—

1. A saddletree, the upper face of which is concaved from front to rear and also transversely in opposite directions from its longi-

tudinal center with its under face correspondingly convexed, a flexible cover stretched on the tree and forming flexible cushions at opposite sides thereof, and peripherally-disposed means for placing a tension on the cover in all directions, substantially as described.

2. A saddletree, the upper face of which is concaved from front to rear and also transversely in opposite directions from its longitudinal center, with its under face correspondingly convexed, the side bars being extended in rear of the cantle and bowed inwardly to the longitudinal center of the tree, and the forward portions of the tree at opposite sides of the pommel being extended downwardly and in front thereof and also concaved upon their upper faces and a flexible cover stretched on the tree and forming cushions at opposite sides thereof.

3. A saddletree having its side bars extended rearwardly beneath the cantle, said extensions being hollow with their under sides convexed and merging into the convexed under face of the tree, substantially as described.

4. A riding-saddle concaved upon its upper face and comprising a concaved tree, a cover stretched over the tree and secured to its peripheral edge, the intermediate portion of the cover lying above and out of contact with the concave portions of the tree, a cord connected with the peripheral edge of the cover, and a tension device for adjusting the cord, substantially as described.

5. A riding-saddle comprising a tree, the upper face of which is concaved from front to rear and also transversely in opposite directions from its longitudinal center, the sides being inclined downward to elevate the longitudinal center and the latter being inclined at its ends and merging into the cantle and the pommel, and a cover stretched over the tree and secured to the same at the said longitudinal center and at the peripheral edge of the tree, the intermediate portions of the cover between such points lying above and out of contact with the tree, substantially as described.

6. A riding-saddle comprising a tree, the upper face of which is concaved from front to rear and also transversely in opposite directions from its longitudinal center, the latter being elevated and a cover stretched over the tree with its peripheral edge connected to the peripheral edge of the tree and its longitudinal central portion connected to the elevated longitudinal central portion of the tree, the remaining portions of the cover lying above and out of contact with the tree.

7. A riding-saddle comprising a tree having an elevated longitudinal center and provided with inclined concaved faces at opposite sides of the same, a cover stretched over the tree and secured to the peripheral edge thereof and supported by the elevated longitudinal

center of the tree with its intermediate portion lying above and out of contact with the tree, and means for placing a tension upon the cover.

5 8. A riding-saddle which is concaved upon its upper face, and comprising a concaved tree, a cover stretched over the tree and secured to its peripheral edge, the intermediate portion of the cover lying above and out of contact
10 with the tree, the peripheral edge of the cover being beaded, a cord run loosely through the bead, and a tension device secured to the opposite ends of the cord.

15 9. A riding-saddle comprising a tree which is concaved upon its upper face and is provided with a peripheral groove, a cover stretched over the tree and having a beaded peripheral edge seated in the groove of the tree, the intermediate portion of the cover
20 lying above and out of contact with the tree, a cord run loosely through the bead, and a tension device connected to the opposite ends of the cord.

25 10. A riding-saddle comprising a tree which is concaved upon its upper face and provided with a peripheral groove, a cover stretched over the tree and provided with a beaded peripheral edge seated in the groove, the intermediate portion of the cover lying above and
30 out of contact with the tree, a cord run loosely through the bead, a tension-screw carried by the tree, and a nut or follower carried by the tension-screw and connected to the opposite ends of the cord.

35 11. A riding-saddle comprising a tree which is concaved from front to rear upon its upper face and also transversely in opposite directions from its elevated longitudinal center, a cover stretched over the tree and connected
40 to the peripheral edge thereof and also to its longitudinal center, the peripheral edge of the cover being beaded, a cord run loosely through the bead with its opposite ends extended rearwardly beneath the longitudinal
45 center of the cover, and a tension device carried by the rear of the tree and connected to the opposite ends of the cord.

50 12. A riding-saddle which is concaved from front to rear upon its upper face and also transversely in opposite directions from its elevated longitudinal center, the peripheral edge of the tree being grooved, opposite longitudinal sets of buttons at the longitudinal center of the tree, a cover formed in longitudinal sections,
55 the inner edges of which are provided with buttonhole-tabs engaged with the buttons, the peripheral outer edges of the cover-sections being beaded and seated in the groove of the tree, a cord run loosely through the bead
60 with its opposite end portions loosely embraced by the buttonhole-tabs, and a tension device connected to the opposite end of the cord.

65 13. A riding-saddle comprising a tree the upper face of which is concaved from front to

rear and also transversely in opposite directions from its elevated longitudinal center, the back of the cantle having a peripheral groove, the front of the tree at opposite sides of the pommel being grooved in its front face, a longitudinal series of buttons upon each side bar of the tree, two longitudinal sets of buttons at the elevated center of the tree, a cover formed in two longitudinal sections, each section being beaded at its front and rear and fitted in the corresponding front and rear grooves of the tree, and also provided at its outer and inner edges with buttonhole-tabs detachably engaged with the adjacent buttons, the intermediate portion of each cover-section lying
70 above and out of contact with the tree, a cord run loosely through the beaded portions of the cover-sections and loosely embraced by the buttonhole-tabs, and a tension device connected to the cord. 75

80 14. A riding-saddle comprising a tree which is concaved upon its upper face, a cover secured to the peripheral edge of the tree and provided with an opening at its longitudinal center, a cord loosely carried by the peripheral edge of the opening in the cover and means connected to the cord for contracting the opening and thereby stretching the cover. 85

90 15. A riding-saddle comprising a tree which is concaved upon its upper face, a cover secured to the peripheral edge of the tree and having an opening at its longitudinal center, a cord intermediately connected to the tree and loosely carried by the peripheral edge of the opening in the cover and means connected
95 to the opposite ends of the cord for stretching the same and thereby contracting the opening and stretching the cover. 100

105 16. A riding-saddle comprising a tree which is concaved from front to rear and transversely in opposite directions from its elevated longitudinal center, two longitudinal sets of buttons at opposite sides of the longitudinal center of the tree, a cover stretched over the tree with its peripheral edge connected to the peripheral edge of the tree, and provided at its center with an opening having buttonhole-tabs at its edge detachably connected to the buttons, a cord intermediately connected to the tree with its opposite portions loosely embraced by the tabs, and means connected to the opposite ends of the cord for stretching the same to contract the opening and thereby stretch the cover. 110

115 17. A riding-saddle comprising a tree which is concaved from front to rear and also transversely in opposite directions from its elevated longitudinal center, the latter being provided with a longitudinal opening, a cover stretched over the tree and connected to the peripheral edge thereof with an opening at the center corresponding to the opening in the tree, the edges of the opening being folded underneath the cover and secured to the tree, a cord intermediately connected to the tree with its op-
120 125 130

posite portions loosely embraced by the folded-under portions of the cover, and means connected to the opposite ends of the cord for stretching the same to contract the opening in the cover and thereby stretch the latter.

18. A riding-saddle comprising a tree which is concaved from front to rear and also transversely in opposite directions from its elevated longitudinal center, the latter being provided with a longitudinal opening, a cover stretched over the tree and provided with a beaded peripheral edge, the tree having a peripheral groove with the beaded edge of the cover seated therein, said cover also having a central opening corresponding to the opening in the tree with the edge of said opening turned under and secured to the tree, a cord run loosely through the bead with its opposite end portions loosely embraced by the turned-under portion of the cover, and means carried by the tree and connected to the end of the cord for stretching the same to contract the opening in the cover and thereby stretch the latter.

19. In a riding-saddle, the combination of a tree, which is concaved from front to rear and also transversely in opposite directions from its elevated longitudinal center, and is provided with a peripheral groove which extends back at opposite sides of the pommel, a cover formed in opposite longitudinal sections, each cover-section having an outer peripheral bead seated in the adjacent portion of the groove of the tree, the inner edges of the sections having corresponding cut-away portions in rear of the pommel and forming an opening in the cover, a lacing connecting the inner edge portions of the cover-sections in rear of the opening, a cord run loosely through the beaded edges of the cover-sections, the cut-away edge portions of the sections being turned under and secured to the tree, with the opposite end portions of the cord loosely embraced by said turned-under portions, and a tension-screw piercing the back of the tree and connected to the opposite ends of the cord.

20. A riding-saddle comprising a tree having a concave upper face, a cover stretched over the tree, and means located in rear of the cantle and above the lower portion of the tree for placing a tension on the cover, substantially as described.

21. In a riding-saddle, the combination of a tree, the upper face of which is concaved longitudinally and also transversely in opposite directions from its elevated longitudinal center, a cover stretched over the tree and secured to the peripheral edge thereof and also to the longitudinal center of the tree, the remaining portions of the cover lying above and out of contact with the tree, and a substantially U-shaped pneumatic cushion interposed between the tree and the cover.

22. In a riding-saddle, the combination with

a concaved tree, of a cover stretched over the tree and secured to the peripheral edge thereof with intermediate portions lying above and out of contact with the tree, means to vary the tension of the cover on the tree, and a pneumatic cushion interposed between the tree and the cover and provided with an inflation-valve.

23. A saddle comprising a tree, a cover secured to the cantle and the front of the tree and provided with a corded edge, the corded portions between the front ends of the cantle and the front of the tree being curved inwardly, and means for placing a tension upon the cord, whereby the tendency of the curved portions of the cord is to become straight and thereby tension the cover.

24. A saddle comprising a tree which is concaved upon its upper face and has an upwardly-flared cantle, a cover secured to the cantle and the front of the tree with those edge portions between the cantle and the front of the tree folded under and secured to the tree, the remaining edge portions of the cover being beaded, a cord run through the beaded portion of the cover and also run through the folded portions thereof with an inward sweep, and means for placing a tension upon the cord.

25. A saddle, comprising a tree, a cover having its marginal edge secured to the tree, the opposite portions of the cover between the cantle and the front end of the tree being folded under and secured to the tree, said folded portions being bowed or curved inwardly, a cord fitted in the folded portions of the cover and conforming to the curved shape thereof, and means to place a tension upon the cord to stretch the cover in radial directions from the folded portions thereof.

26. A saddle, comprising a tree which is concaved from front to rear and also transversely in opposite directions from its elevated longitudinal center, said longitudinal center having an opening therein, a cover formed in opposite longitudinal sections, each section having its front and rear end portions beaded, the inner edge portion about the opening in the tree being folded under and buttoned to the tree, that edge portion of the cover between the front and rear beaded portions being folded under and buttoned to the bar of the tree and having an inward curve, a cord run through the beaded portions and also the inner and outer folded edge portion, and means to place a tension upon the cord to strain the cover.

27. A riding-saddle, comprising a tree, a cover stretched over the tree and provided at its longitudinal center with an opening having curved edges, and having opposite edge portions curved inwardly between the cantle and the front of the tree, a cord loosely carried by and conforming to the shape of the outer peripheral edge of the cover and also extending around the peripheral edge of the opening, and means for tensioning the cord.

28. A riding-saddle, comprising a tree having curved seats at opposite sides of the pommel, a cover stretched over the tree and provided at its longitudinal center with an opening having curved edges, with opposite outer edge portions of the cover curved inwardly between the cantle and the front edge of the tree, a cord secured to the back of the tree and loosely carried by the outer curved edges of the cover and also by the curved edges of the opening therein, intermediate portions of the cord between the outer curved edges of the cover and the opening working loosely in the seats of the tree, and means for placing a tension upon the cord.

29. A riding-saddle, comprising a tree having a curved groove across the back of the cantle and also provided with grooves in the front of the tree at opposite sides of the pommel, each of these grooves extending forwardly alongside of the pommel and then curved outwardly around the front of the tree and thence rearwardly but terminating short of the cantle, a cover stretched over the tree with its outer peripheral edge beaded and fitted in the grooves of the tree, the outer edge portions of the cover being curved inwardly between the front of the cantle and

the pommel, the cover also having an opening at its longitudinal center with beaded curved edges, a cord loosely fitted in the beaded portions of the cover and conforming to the shape of the peripheral edge thereof, the opposite end portions of the cover lying in the beads at the opposite edges of the opening in the cover and projected in rear thereof, and means carried by the tree and connected to the ends of the cord to strain the same and thereby tension the cover.

30. A saddle comprising a tree having a concave peripheral edge, a cover conforming to the configuration of the peripheral edge of the tree, a cord connected with the edge of the cover and curved to conform to the same, and means for placing a tension on the cord, whereby the straightening of the same at the concave edge of the tree will operate to stretch the cover, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LUTHER A. LOHR.

Witnesses:

JOHN H. SIGGERS,
S. GEORGE TATE.