

No. 806,353.

PATENTED DEC. 5, 1905.

G. LIPP.
ARCH SUPPORTER.
APPLICATION FILED MAR. 16, 1905.

Fig. 1.

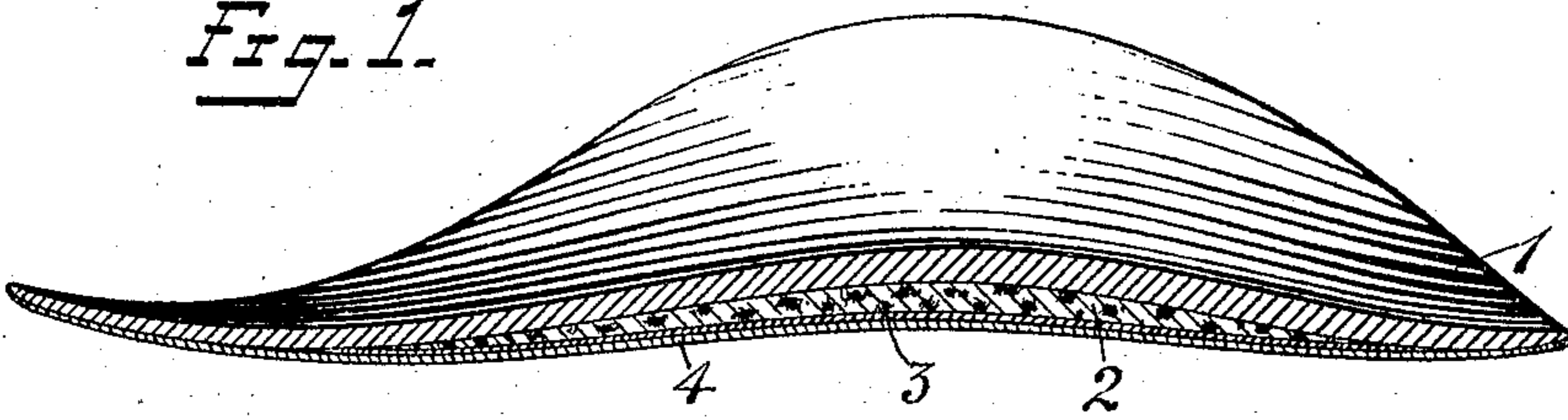


Fig. 2.

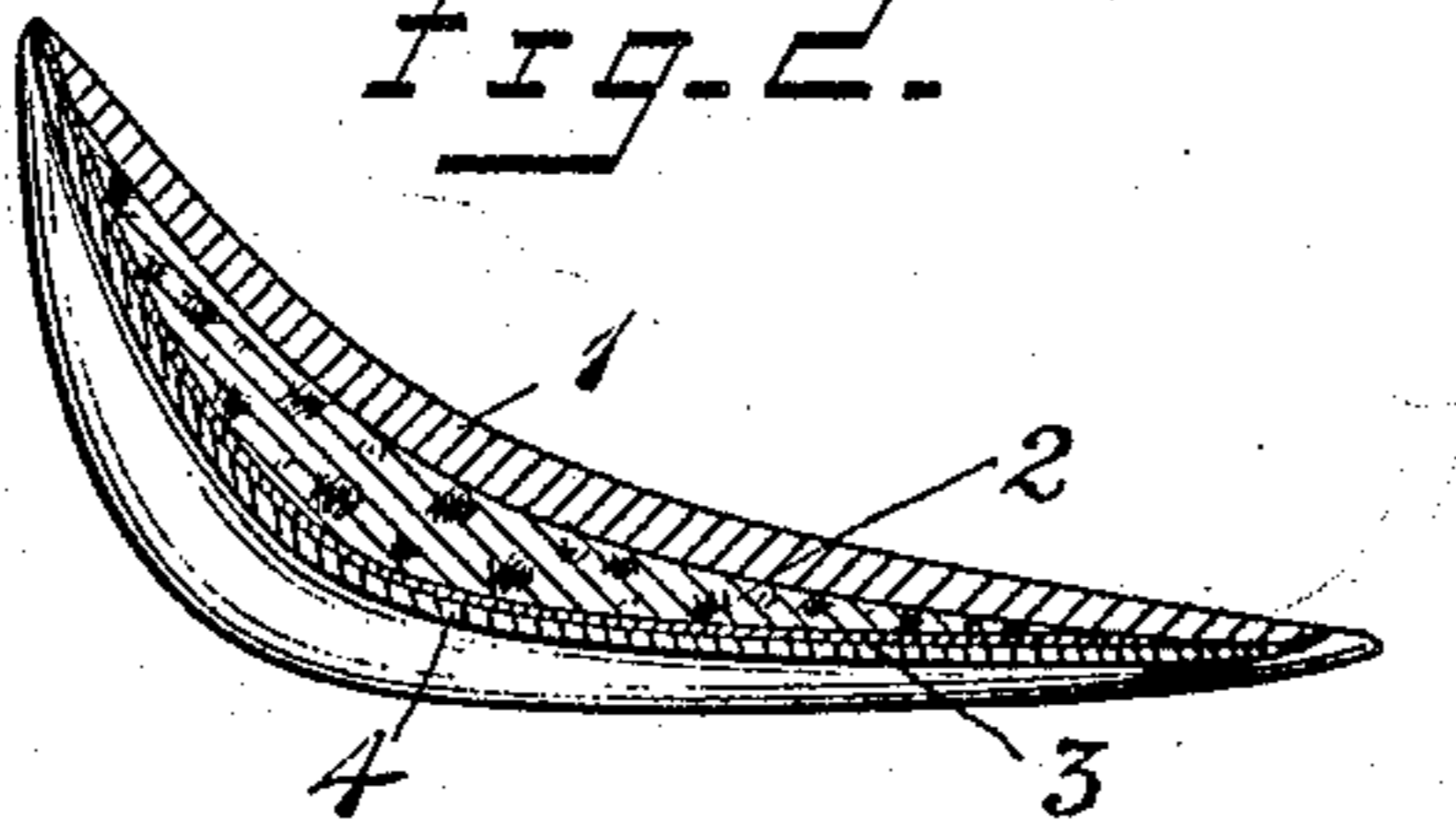


Fig. 3.

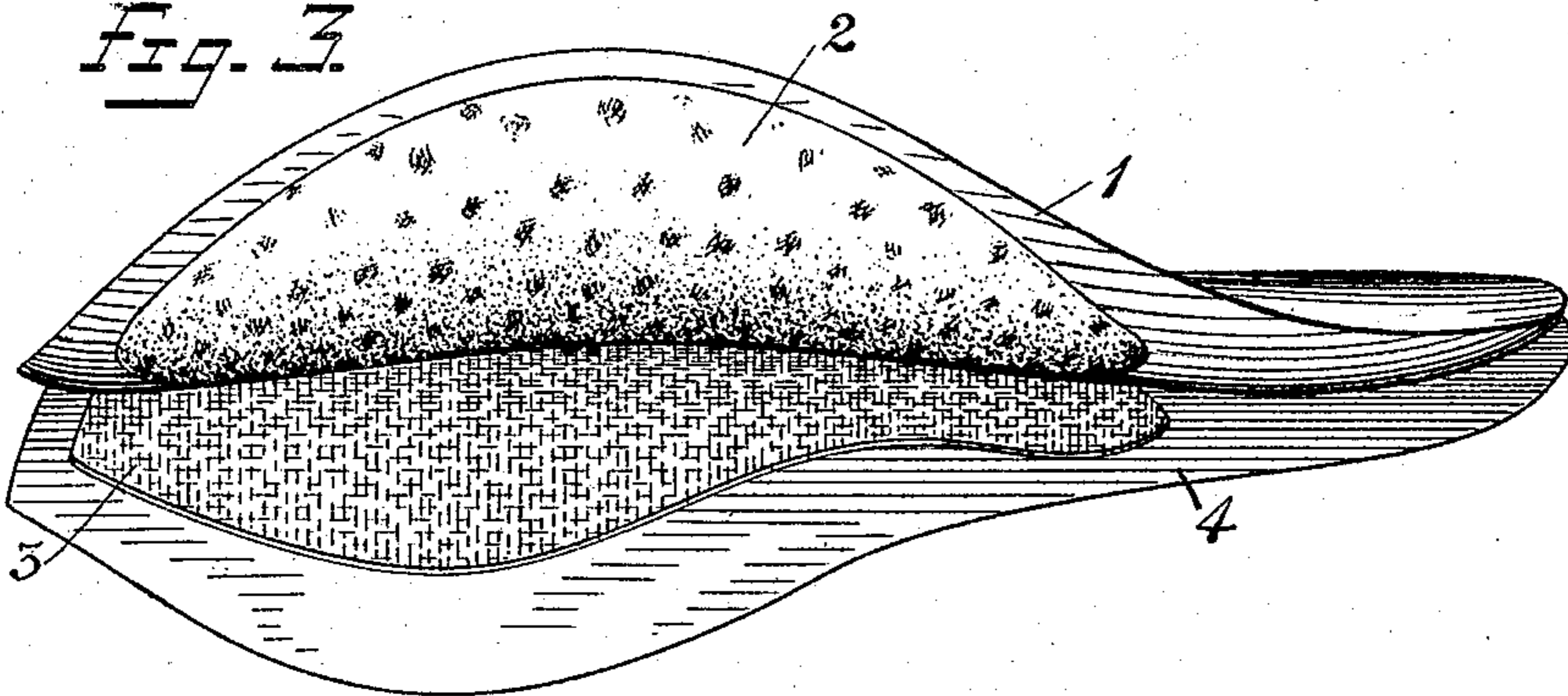
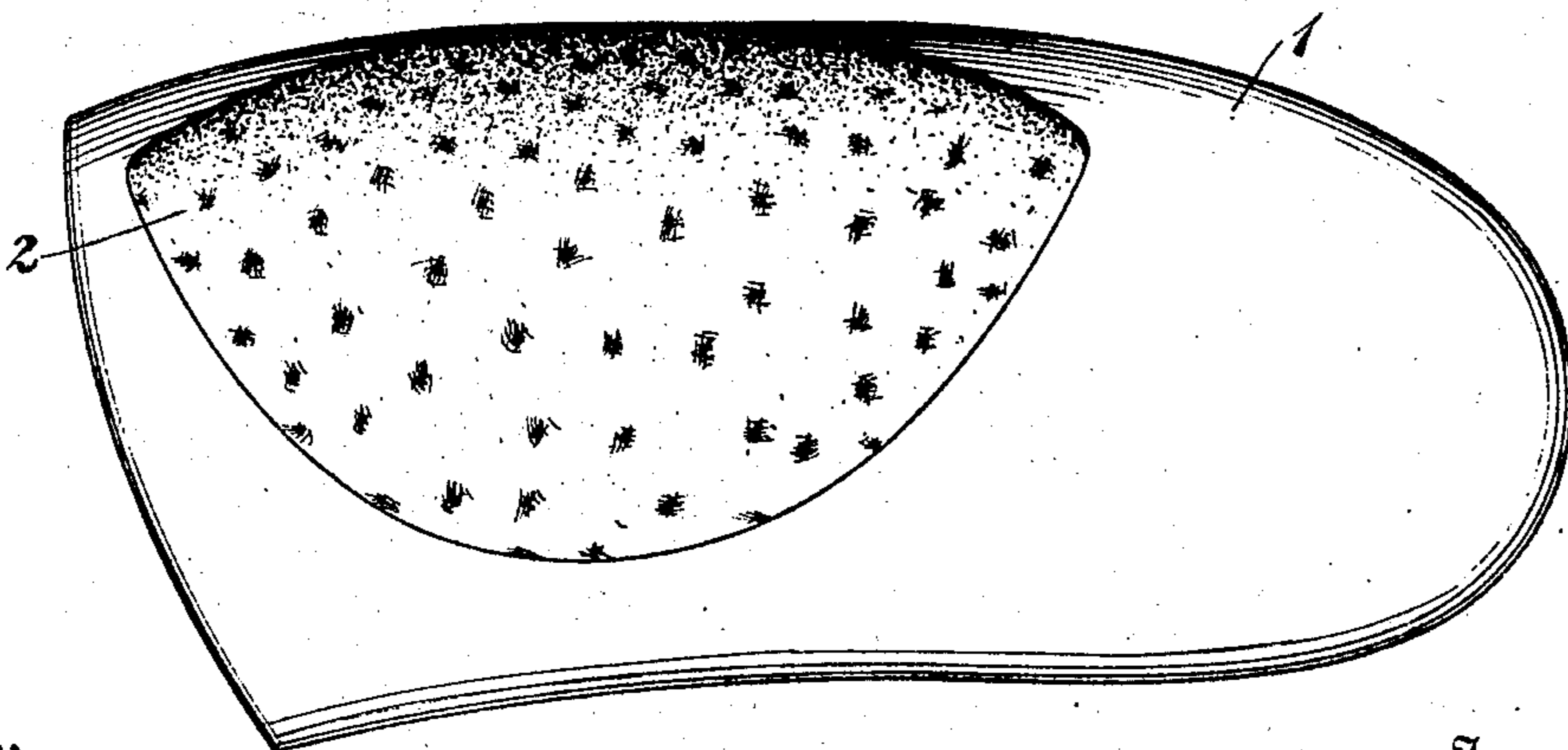


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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ARCH-SUPPORTER.

No. 806,353.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed March 16, 1905. Serial No. 250,436.

To all whom it may concern:

Be it known that I, CHARLES LIPP, a citizen of the United States, residing at New York, N. Y., have invented certain new and useful
5 Improvements in Arch-Supporters, of which the following is a full, clear, and exact description.

My invention relates to improvements in arch-supporters.

10 The object of the invention is to construct an arch-supporter for use in boots and shoes which shall be light in weight, strong and durable, and perfectly safe in use.

15 The invention consists in improvements the principles of which are illustrated in the accompanying single sheet of drawings.

20 The supporter is shaped to correspond with the proper curvature of the arch of the foot. It is constructed of leather and cork shaped and permanently united by a process which insures the retention of shape through all ordinary conditions of wear and yet permitting of sufficient flexibility for comfort.

25 Figure 1 is a longitudinal section of an arch-supporter embodying the improvements of my invention. Fig. 2 is a cross-sectional view of the same. Fig. 3 is a side view showing the parts of the construction partially separated, but in their proper relative positions. Fig. 4 is a view of the under side of
30 the principal leather member with the cork reinforcement secured thereto.

1 indicates the main body of the supporter, which is formed of leather. This is cut to
35 the proper outline and preferably thinned off from the center toward the edges. It is shaped by soaking it in water and working and drying it on a last of the proper curvature. 2 indicates the cork member, which is much smaller
40 and cut to the proper outline to conform with the more pronouncedly arched portion of the supporter. This is thinned down from the center toward the edges, softened in hot water, and then worked on a last to give it the
45 proper curvature. While this is still flexible and soft the pores of the cork are filled with hot glue. When this is set, the cork member becomes firm and unbreakable under all ordinary usage.

50 3 is a canvas binding member, which is preferably slightly larger than the cork member 2 and attached to it while the glue in the cork is still tacky. This binds the under surface of the cork together and serves as an additional reinforcement to the supporter.

4 is a bottom member, which is preferably

formed of soft pliable leather—for instance, chamois—cut to the outline of the main upper member 1.

When the glue in the cork member is completely set and thoroughly dried, Vienna paste
60 is applied to unite the cork member to the upper leather member 1 and to secure the bottom leather member to the cork member or to the canvas, so that the whole becomes
65 permanently united.

These arch-supporters are not intended to be permanently secured in a shoe, but simply to be slipped in and held in place by a proper fit. The slightly-roughened surface of the
70 bottom member 4 assists in preventing the supporter from slipping about, while the smooth surface of the upper leather 1 permits such movement of the foot as is necessary, depending, of course, upon how snugly the
75 boot or shoe fits the foot.

I am aware that insteps or shanks have been provided made up of leather and permanently secured in a shoe and that some have been reinforced with steel or metal
80 strips. I am also aware that insoles have been built up of layers of leather. I therefore make no claim to such constructions.

What I do claim, however, and desire to secure by Letters Patent, is—

85 1. As an article of manufacture, an arch-supporter comprising an upper member of stiff leather, permanently longitudinally and transversely arched, a cork reinforce, similarly arched and secured beneath the shank of
90 said upper member, means for holding said cork permanently in shape, a canvas binding for said leather and cork members, and a soft leather bottom, all permanently secured together.

95 2. As an article of manufacture, an arch-supporter comprising an upper member of stiff leather permanently longitudinally and transversely arched at the shank portion, a cork reinforce of smaller size, similarly and
100 permanently arched and permanently secured beneath the shank portion of said upper member, and a leather bottom member substantially the size of said upper member, and permanently secured beneath the same, covering
105 said cork member.

3. As an article of manufacture, an arch-supporter comprising an upper member of stiff leather permanently arched longitudinally and transversely at the shank portion
110 and a cork reinforce permanently arched and secured to the under side of the shank por-

tion, and having its pores filled with a reinforcing stiffening and binding substance for the purpose described.

4. As an article of manufacture, an arch-
5 supporter comprising a main member of stiff
leather permanently arched longitudinally
and transversely at the shank portion, a cork
reinforce permanently arched and secured to
the shank portion of said main member and
10 having its pores filled with a reinforcing stiff-

ening and binding substance such as glue,
and a binding member larger than the cork
member and attached to it and to said main
member.

Signed at New York city, New York, this 15
13th day of March, 1905.

CHARLES LIPP

Witnesses:

GEORGE WOLF,
ADOLF ROEGENER.