

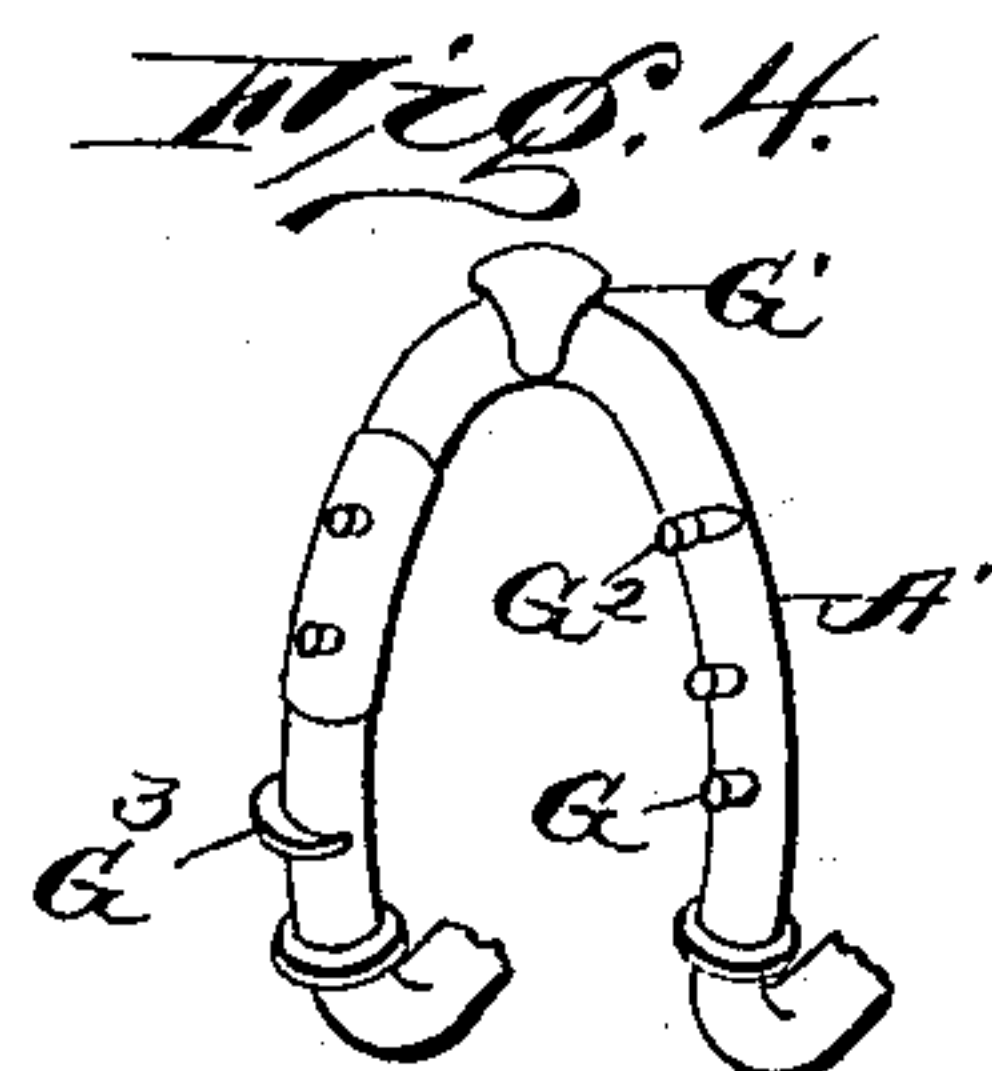
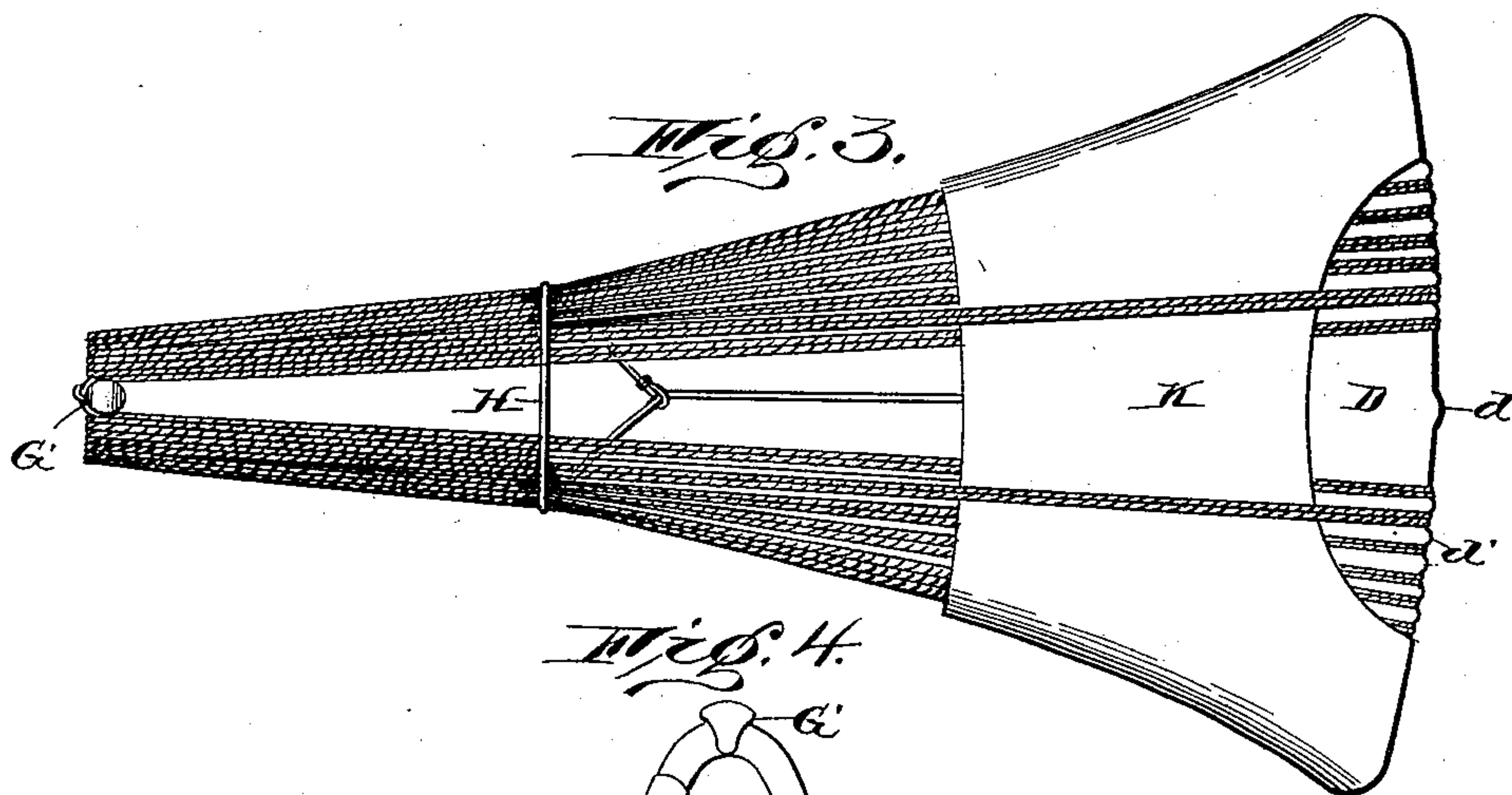
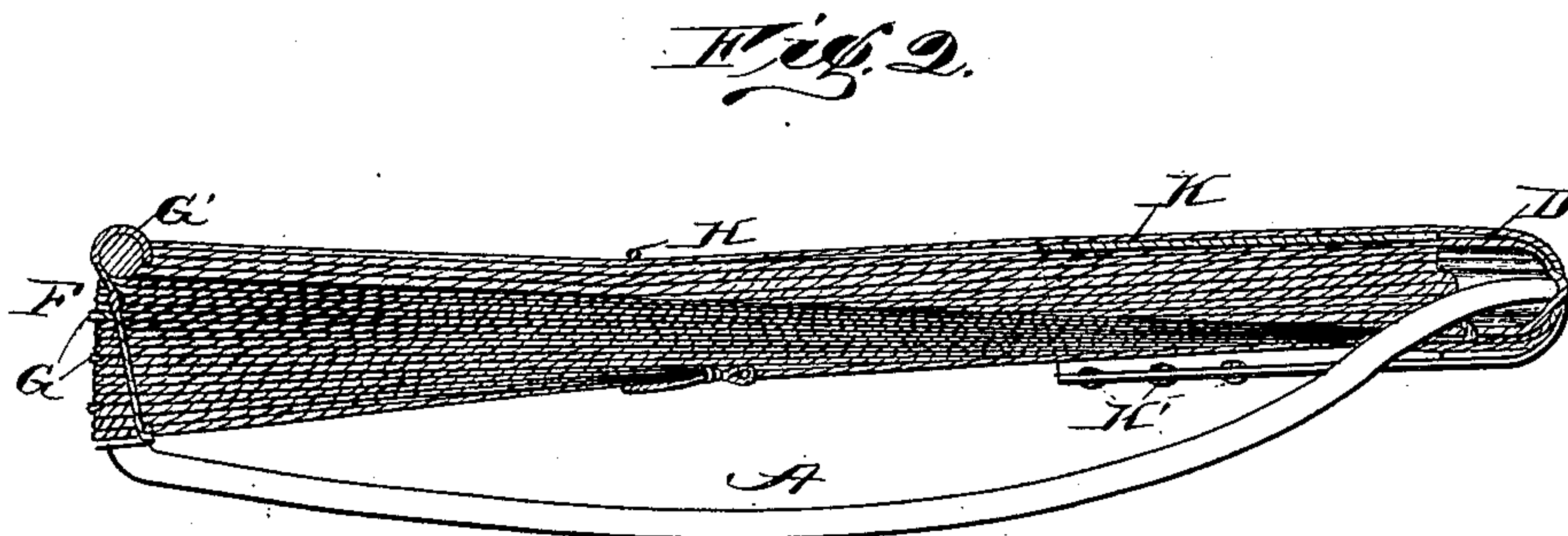
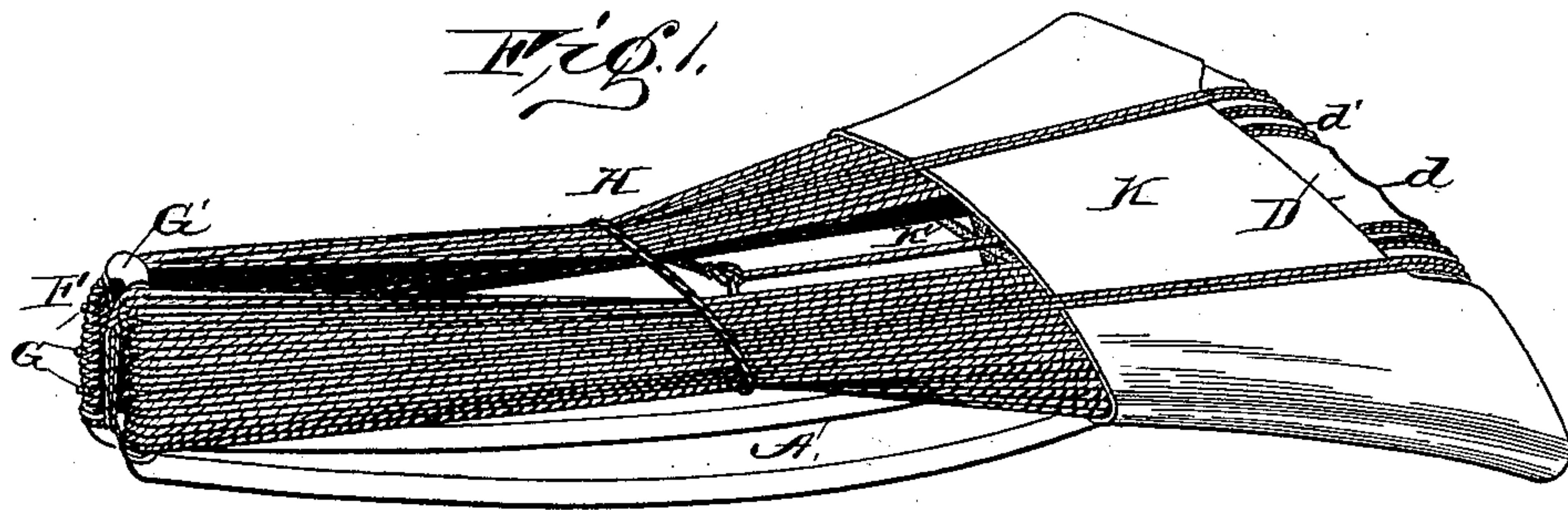
No. 607,191.

Patented July 12, 1898.

H. C. PHILLIPS.
BICYCLE SADDLE.

(Application filed Apr. 28, 1897.)

(No Model.)



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UNITED STATES PATENT OFFICE.

HERBERT C. PHILLIPS, OF NEW CASTLE, PENNSYLVANIA.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 607,191, dated July 12, 1898.

Application filed April 28, 1897. Serial No. 634,272. (No model.)

To all whom it may concern:

Be it known that I, HERBERT C. PHILLIPS, of New Castle, in the county of Lawrence and State of Pennsylvania, have invented certain
5 new and useful Improvements in 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
10 to the letters of reference marked thereon.

This invention relates to improvements in saddles designed, primarily, for bicycles, and has for its object to provide an exceedingly simple, light, self-adjusting saddle, to which
15 ends it consists, primarily, in a saddle having a base formed of metallic rods bent up into shape, with the forward portion of said rods doubled to form a pommel around which the seat material may be passed, with a cantle-
20 plate supported on the rear ends of said rods.

The invention further consists in certain novel details of construction and combinations and arrangements of parts, all as will be now particularly described, and pointed out
25 in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of a saddle embodying my present improvements. Fig. 2 is a longitudinal section through the same.
30 Fig. 3 is a top plan view of the saddle. Fig. 4 is a detail perspective view of a pommel, showing different forms of lacing-retaining projections.

Like letters of reference in the several figures indicate the same parts.

In carrying this invention into practice in the preferred form I construct the frame proper of the saddle of metallic rods or, more properly, a single metallic rod, (lettered A in the accompanying drawings,) which rod is
40 doubled centrally and the doubled portion bent upwardly in the form of a pommel A', the particular shape of which is immaterial and may be made to conform to the particular ideas of the manufacturer. The two
45 branches of the frame extend backwardly from this pommel in a relatively long curve, becoming more and more sharp as the rear end of the saddle is approached, and at the
50 extreme rear end of the saddle the two arms or branches of the frame are preferably

brought together and rounded off to form a smooth bearing.

The cantle or rear plate D is mounted transversely on these frame extensions, preferably
55 being struck up of sheet metal substantially U-shaped in cross-section, as shown in Fig. 2, and having a rearwardly-extending socket or bearing *d* for the reception of the ends of the frame. The cantle curves forwardly to
60 a slight extent on each side of this bearing, and the tension of the seat material strained between the cantle and pommel serves to hold the cantle firmly in place and at the same
65 time allowing the rear portion of the saddle to automatically adjust itself to the motions of the rider. The cantle is provided on each side of the center with transverse grooves or
70 corrugations *d'*, preferably extending around the same from edge to edge and adapted to receive and hold the seat material in place against transverse displacement, and in the
75 preferred construction this seat material is formed of cords or lacing drawn back and forth and around the pommel and cantle or rear plate, as shown. The lacing on each
80 side of the center is preferably independent, and the ends are first secured in any preferred manner, as shown, by doubling the lacing in the form of a loop F, Fig. 1, which
85 is caught around the pommel, the two ends of the lacing being thence carried back over the pommel and back and forth around the cantle or rear plate and pommel, the extreme
90 ends being passed through openings in the cantle-plate and secured by knots or enlargements tied therein. Such construction permits of a ready and convenient readjustment
95 of the seat material by drawing up the lacing on either side of the center and forming a new knot or enlargement in the end, preventing the release or loosening of the lacing, which
100 will be readily understood.

The pommel is arranged substantially vertical, and the lacing from the sides of the cantle is passed around the base, while that from
95 the center of the cantle is passed around the top of the pommel. The result of this arrangement is that when the weight of the rider is placed on the saddle the elasticity of
100 the frame will cause the upper end of the pommel to swing in more rapidly than the

lower portion, and the center strands being relaxed more than the side strands the weight is borne mainly by the sides of the saddle, a result which is highly desirable.

5 To hold the lacing in place and smoothly and to give a proper conformation to the forward end of the saddle, the pommel is provided with spacers, in the preferred construction in the form of simple projections or pins
10 G on the forward side of the pommel, with a central spacer or projection G' at the apex. Obviously the particular form of these spacers or retainers is immaterial, and in Fig. 4 I have shown three forms, that lettered G being a
15 simple pin, while G² is a projection in the form of a pin struck out from the body of the frame itself, and that lettered G³ is in the form of a flange extending partially around the pommel and secured thereto by solder or
20 formed thereon in any well-known manner.

To provide for lateral adjustment of the seat material intermediate the ends of the saddle, I confine the seat material by means of an adjustable loop H, preferably formed
25 by a cord having a slip-noose at one end inclosing the seat material and having its other end secured to the cantle or rear plate by being passed through openings therein, whereby said loop or slip-noose may be adjusted to
30 any point intermediate the ends of the saddle to confine the seat material, and it will automatically adjust itself to the desired size, inasmuch as the slip-noose of necessity grows smaller or larger as it is moved away from or
35 toward the cantle or rear plate.

To afford additional comfort to the rider, I preferably inclose the lacing at the rear portion of the saddle by a leather cap or casing K, formed to fit approximately the ends of
40 the cantle-plate and portion of the lacing adjacent thereto, said leather cap or casing being held in place and adjustable as to width by a transverse lacing K' on the under side of the saddle.

45 The strands of the lacing, it will be observed, pass around both the cantle and pommel. Thus there is a double length of lacing to yield when pressure is applied to the seat, making the flexibility, therefore, equal to that
50 of a strand double the length of the saddle, each strand being free to move over the curved bearing at the end of the saddle.

When desired, the leather casing may be removed readily and the lacing alone will

then form a most comfortable and universally- 55 adjustable seat which may be easily and quickly adjusted to any desired tension without the use of screws, wrenches, or other tools ordinarily required. The weight of the saddle may also be reduced to the minimum, as 60 there are no heavy metallic parts necessary or heavy seat material required for maintaining the saddle in its proper shape.

Having thus described my invention, what I claim as new is— 65

1. In a cycle-saddle, the combination with the frame, provided with substantially vertical parallel side portions and a cantle supported directly on the rear end of said frame, of divided seat material connected with the 70 cantle and passing around the substantially vertical sides of the pommel, the seat material from the sides of the cantle passing around the lower portions of said vertical sides and the seat material from the center of the pommel passing around the upper portions of said 75 sides whereby the elasticity of the frame will allow the center portion of the seat to relax more quickly and with less pressure than that at the sides and thereby support the major 80 weight of the rider on the side portions of the saddle; substantially as described.

2. In a saddle, the combination with the frame formed of a rod doubled at the center and bent upwardly to form a pommel and 85 having its rear ends brought together and rounded to form a pivot-bearing, of a cantle having a socket for the reception of the rounded ends of the frame forming a universal joint and curving forwardly from said socket 90 on each side, of seat material strained around said cantle and at the forward end passing through and strained around the pommel whereby the cantle is pivotally supported; 95 substantially as described.

3. In a saddle, the combination with the frame, pommel cantle and lacing passed back and forth between the pommel and cantle, of a leather cap, or casing inclosing said lacing 100 at the rear end and transverse lacing uniting the edges of the leather on the under side of the saddle whereby the same may be adjusted in width; substantially as described.

HERBERT C. PHILLIPS.

Witnesses:

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