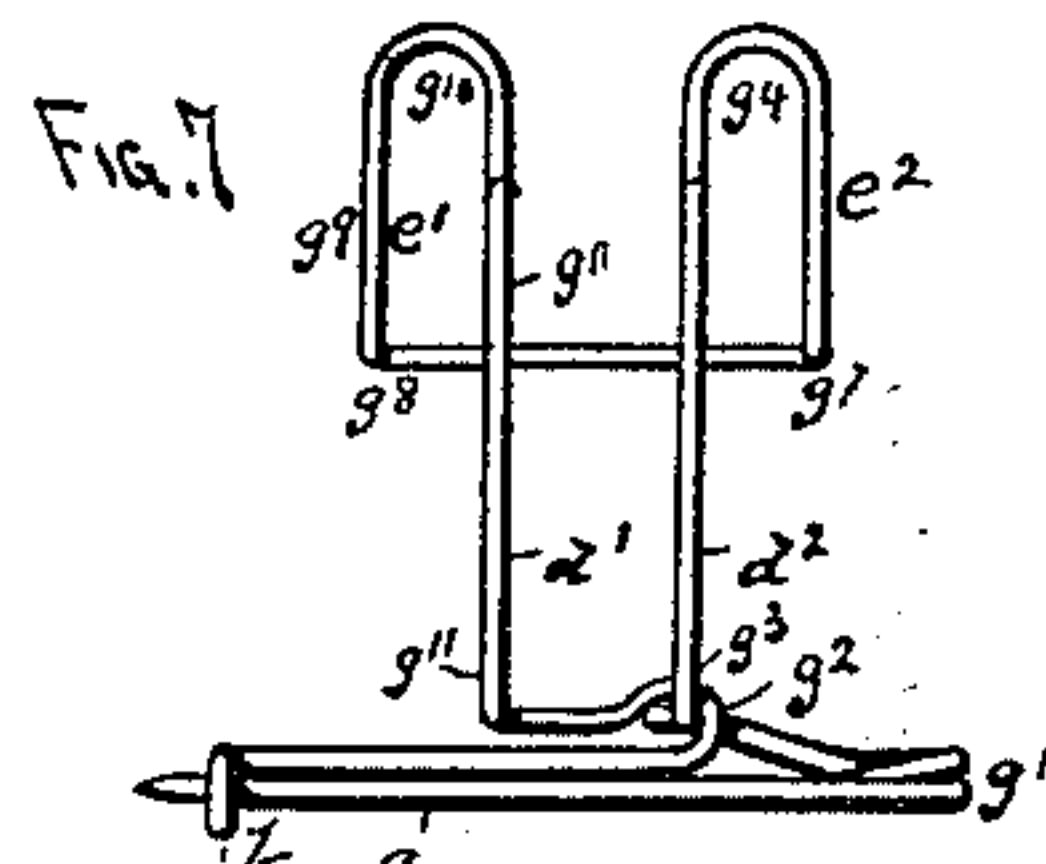
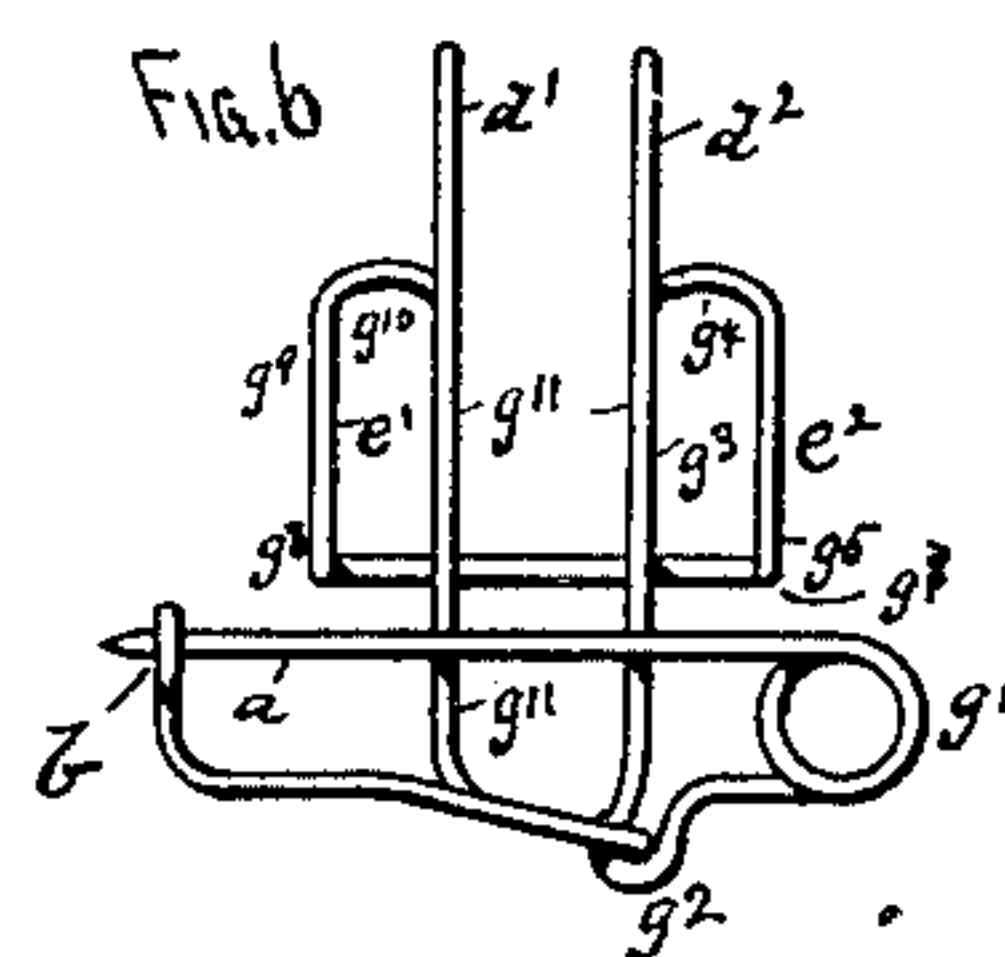
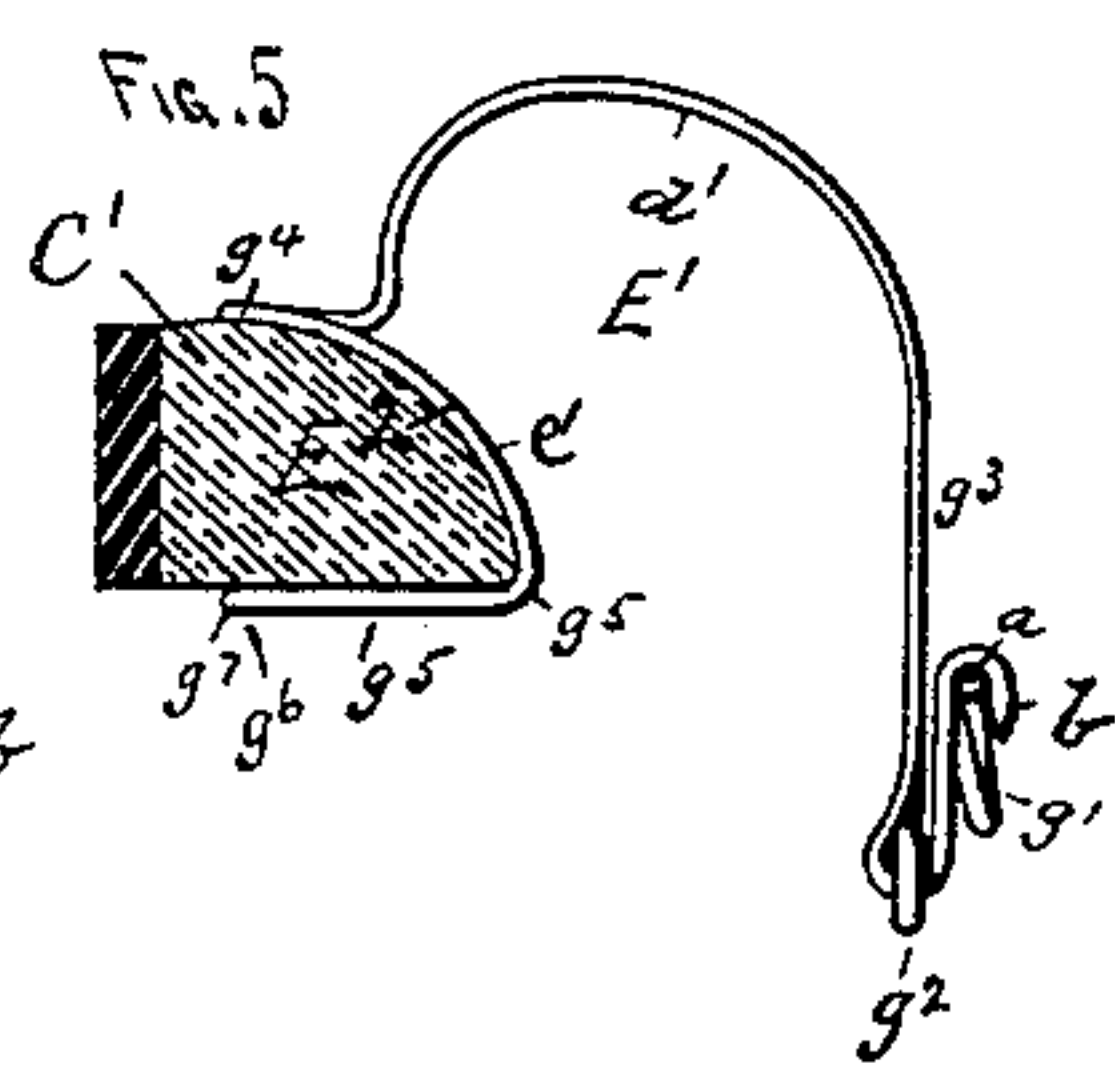
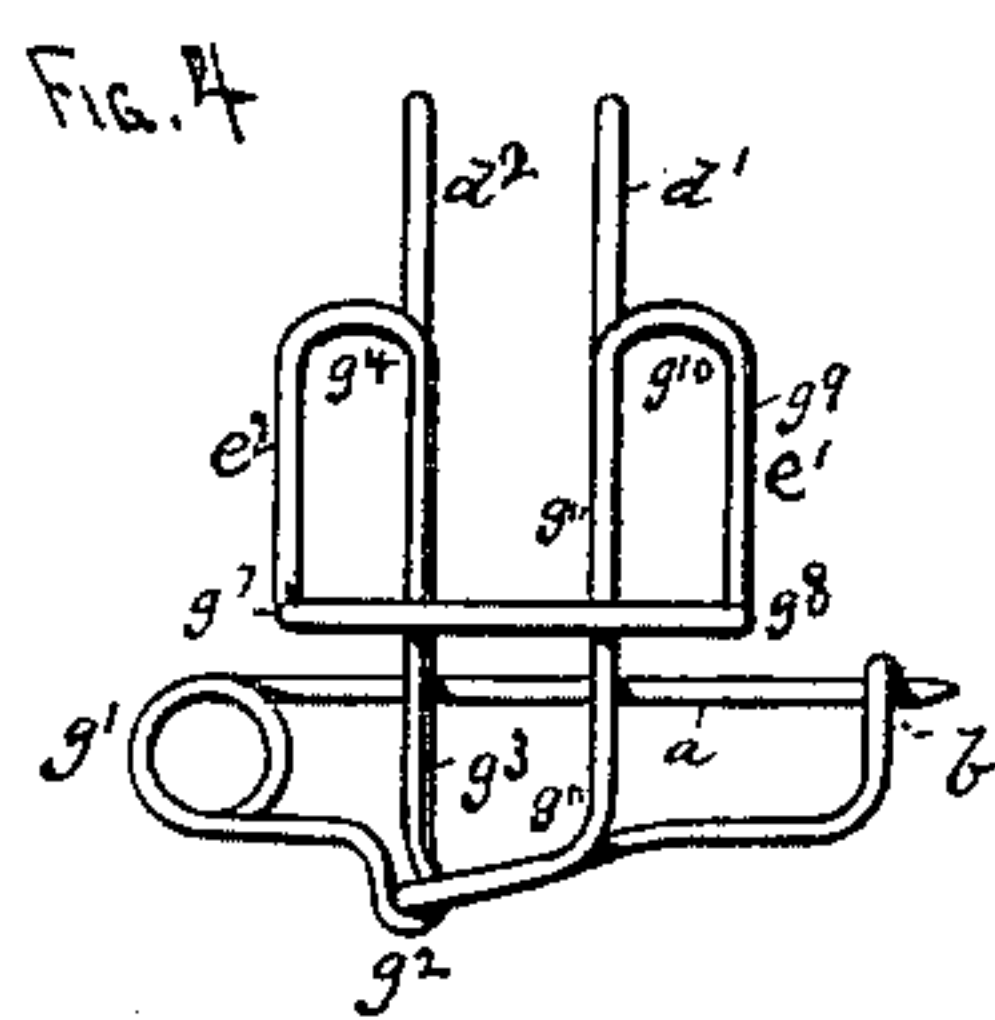
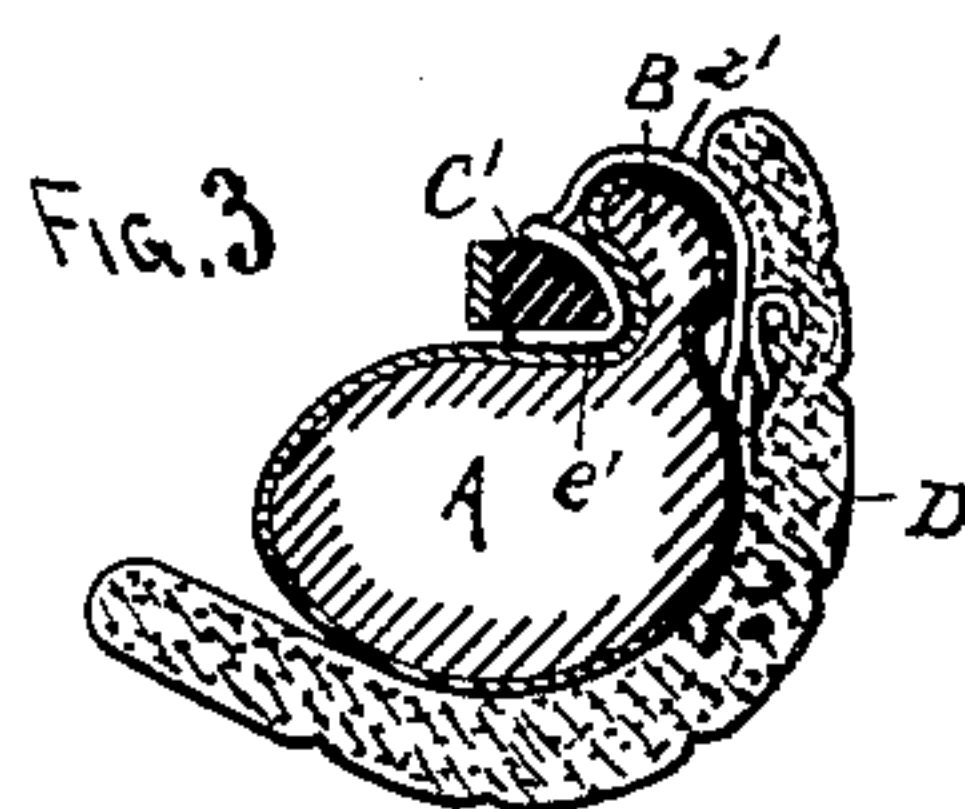
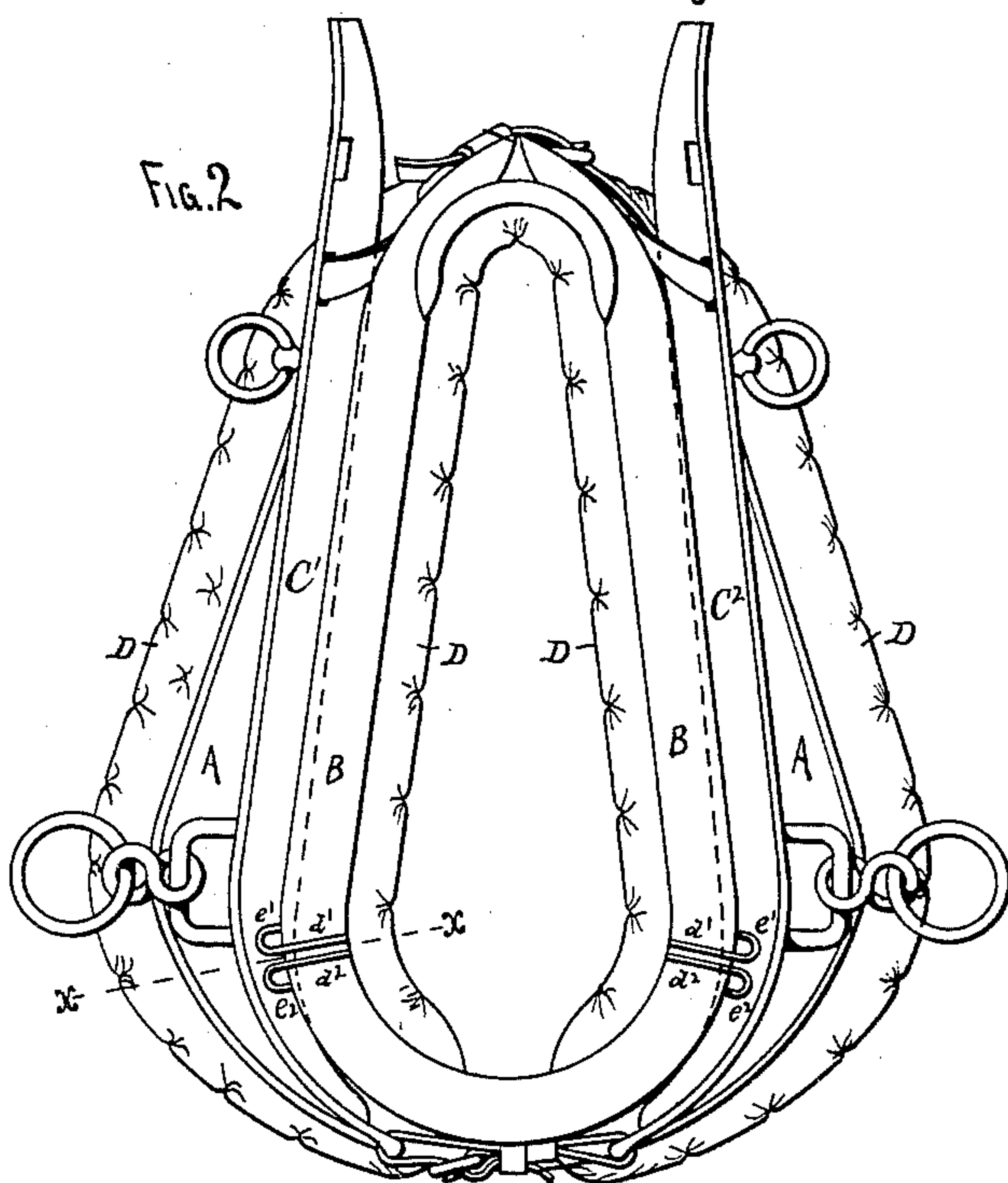
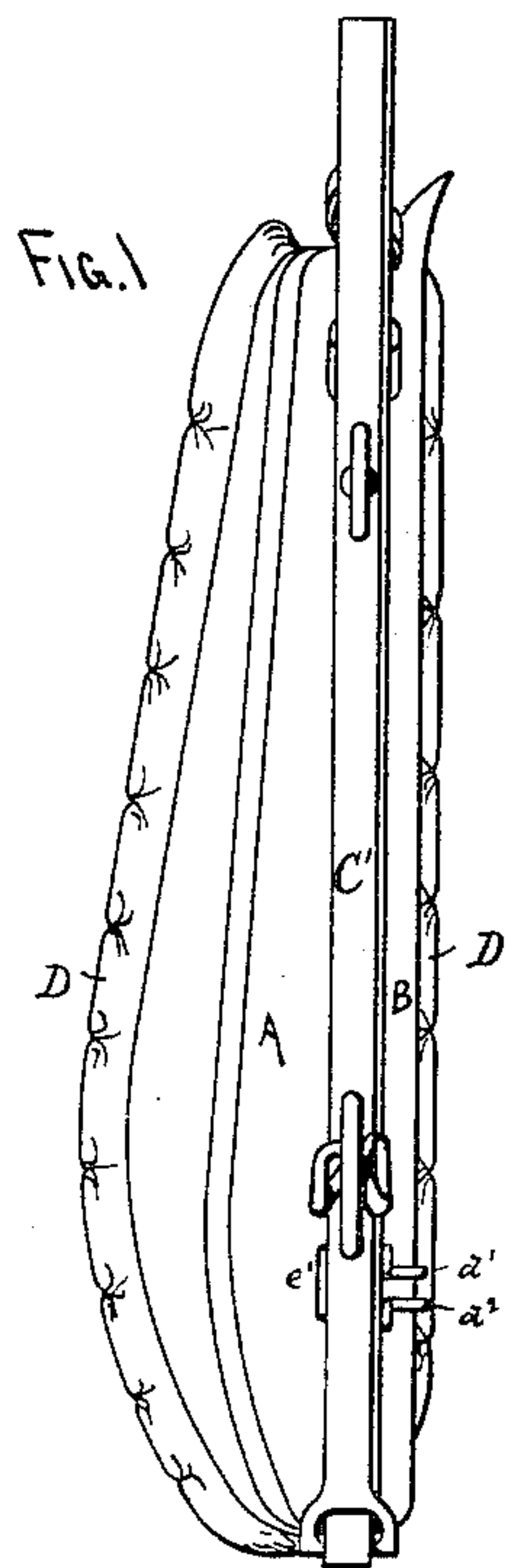


(No Model.)

B. F. RICE.
SWEAT PAD FASTENER.

No. 318,505.

Patented May 26, 1885.



WITNESSES
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UNITED STATES PATENT OFFICE.

BENJAMIN FRANKLIN RICE, OF STILLWATER, MINNESOTA.

SWEAT-PAD FASTENER.

SPECIFICATION forming part of Letters Patent No. 318,505, dated May 26, 1885.

Application filed November 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN FRANKLIN RICE, a citizen of the United States, and a resident of Stillwater, in the county of Washington, in the State of Minnesota, have invented certain new and useful Improvements in Sweat-Pad Fasteners, of which the following specification is a full, clear, and exact description, reference being also had to the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 is a front elevation, of a horse-collar with a pair of hames and a sweat-pad attached thereto and my improved fastener arranged thereon. Fig. 3 is a cross-section of the collar, hames, and pad on the line $x x$ of Fig. 2. Fig. 4 is a front view, Fig. 5 is a side view, Fig. 6 is a rear view, and Fig. 7 is a plan view, of the combined hook and clamp detached and enlarged.

This invention relates to the fastenings by which sweat-pads are connected to horse-collars; and it consists in the construction and arrangement of parts, substantially as hereinafter shown and described, and then sought to be defined by the claims.

This clamp is so constructed that it may be readily and easily connected to or disconnected from the sweat-pad, and at the same time form a means for connecting the hames to the collar and the pad to the collar, so that all three parts are firmly held in place.

In the drawings, A represents the body and B the rim of the collar, $C C^2$ the hames, and D the sweat-pad, all formed in the ordinary manner.

Attached to the pad D at suitable points are bent steel or other wire clamps, constructed, as shown in Figs. 4, 5, 6, and 7, with a spring-pin, a , hook portion b , beneath which the end of the pin catches, a loop portion, $d' d^2$, adapted to encompass the rim B, and a triangular-shaped loop portion, $e' e^2$, adapted to encompass the inner portion of the hames $C C^2$, as shown.

The "clamp" is formed in one piece of wire as follows: From the point of the pin a the wire runs back to a loop, g' , and from thence back again toward the pin-point and bent downward into a loop at g^2 , and thence upward and outward at g^3 , and thence bent around at g^4 , and backward and downward again at g^5 , and

thence outward into a horizontal line at right angles to the pin a to a point, g^6 , and thence off at right angles to a point, g^7 , and thence back again parallel with the part $g^5 g^6$ to a point, g^8 , and thence upward and outward at g^9 parallel with the part g^5 , and thence turned at g^{10} and upward, backward, and downward at g^{11} through the loop g^2 , and thence to the hook b , beneath which the point of the pin a catches. By this means a spring-pin is formed, by which the clamp may be connected to the pad D, and a curved section, E' , running therefrom and adapted to rest over the rim B, and a triangular-shaped section, E^2 , attached to the section E' and adapted to receive the hames $C C^2$, as shown.

The clamp will be attached as follows: The pin a will be forced through the outer covering of the pad, and also through as much of the hair filling as it is possible to inclose with it, and then the point of the pin bent beneath the hooked end b , by which means the clamp is connected to the pad. Two of these clamps will usually be attached to each pad near their lower ends; but four or more may be used, if desired. The pad with the clamps attached is then placed inside the collar, with the curved sections $E' E'$ resting over the rim B. The hames $C C^2$ are then set in place, with their inner edges into the sections $E' E^2$, and drawn together at the top and bottom in the ordinary manner. By this means the hames press the clamps down into the hollows between the body A and rim B, and firmly hold the clamps to the rim and collar, while at the same time the loops $g^9 g^{10}$ hold the hames down upon the body A and prevent them slipping off the rim B. The clamps thus perform two functions—hold the pad to the collar, and also hold the hames to the rim.

One important feature of this invention is the fact that by reason of the loop g^2 being below the line of the pin a the pressure of the pad against the collar forms a leverage between the loop-section E' and the pin, so that the pad is held between the parts of the rear of the loop E' and the pin a , and the strain removed very largely from the pin.

By clamping the fastener fast to the rim and body of the collar by the hames all movement of the fastener upon the rim is prevented,

thereby avoiding all danger of the wrinkling of the pad by "working" between the horse's neck and the collar.

Much difficulty has heretofore been experienced by reason of the movement of the pad between the collar and the horse's neck, causing soreness and chafing; but by firmly clamping the pad fast to the collar all such tendencies are prevented.

The fastener, as before stated, can be attached to the pad at any point and adjusted as desired to adapt it to any desired draft.

Another important advantage gained by this fastener is, that being formed of round wire no sharp edges exist to cut or abrade the collar or pad, and being clamped fast to the collar by the hames no friction ensues between the fastener and the collar or between the fastener and hames.

Having described my invention and set forth its merits, what I claim is—

1. The combination, with a horse-collar, hames, and sweat-pad, of a fastener consisting of a pin and hook section, whereby it is con-

nected to the pad, a curved section, E', partially encompassing the rim of the collar, and a triangular section, E², fitting into the cavity between the body and rim of the collar, and adapted to partially encompass the hames, substantially as and for the purpose described.

2. A fastener for the sweat-pads of horse-collars, consisting of a spring-pin and hook-section, a curved loop-section, E', and a triangular section, E², all formed in one piece of bent wire, said loop-section being connected to said pin-section at a point below the line of said pin, whereby a portion of the substance of the pad may be clamped between said pin and said curved section, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

BENJAMIN FRANKLIN RICE.

Witnesses:

CHAS. G. SCHMIDT,

LOUIS FEESER, Sr.