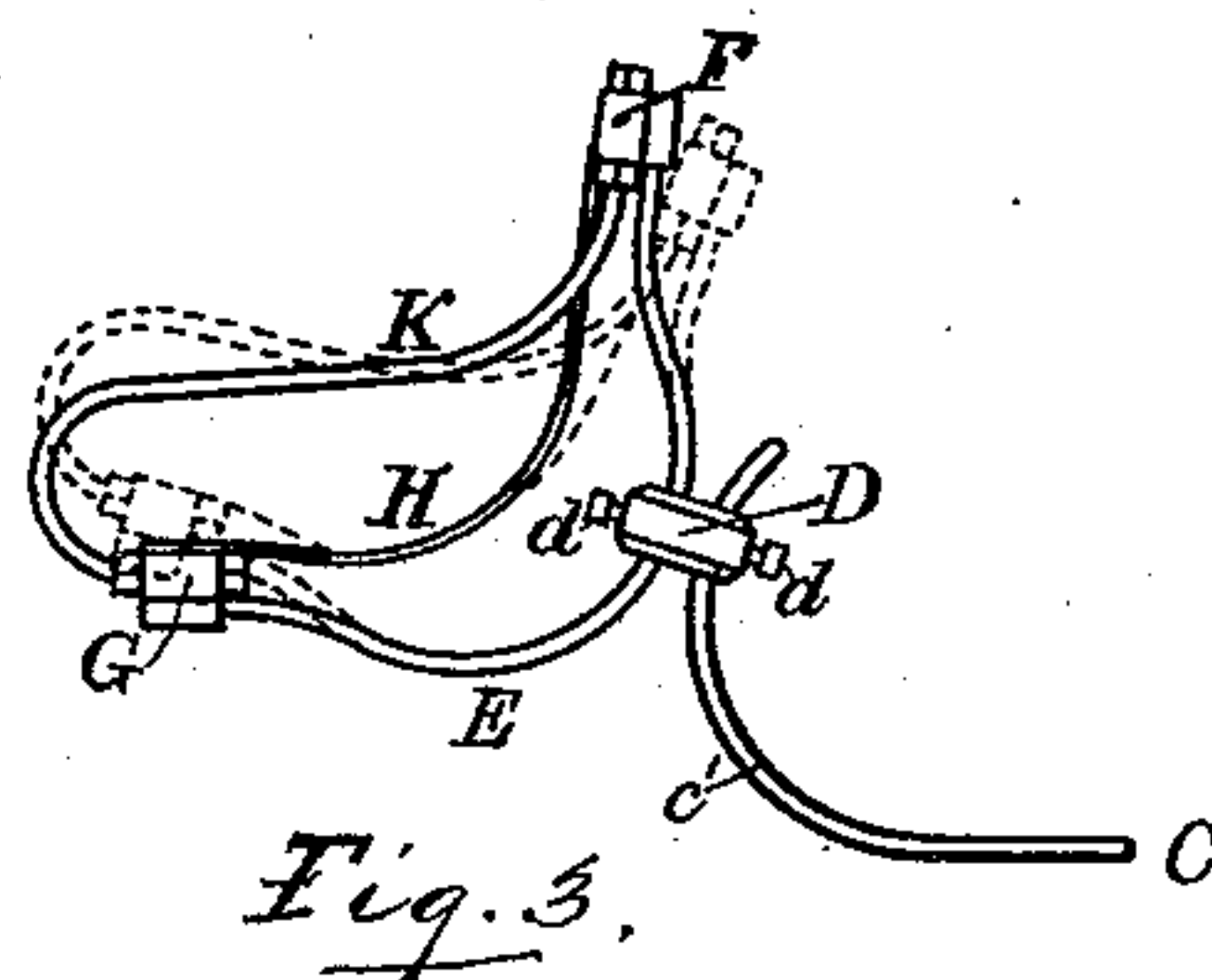
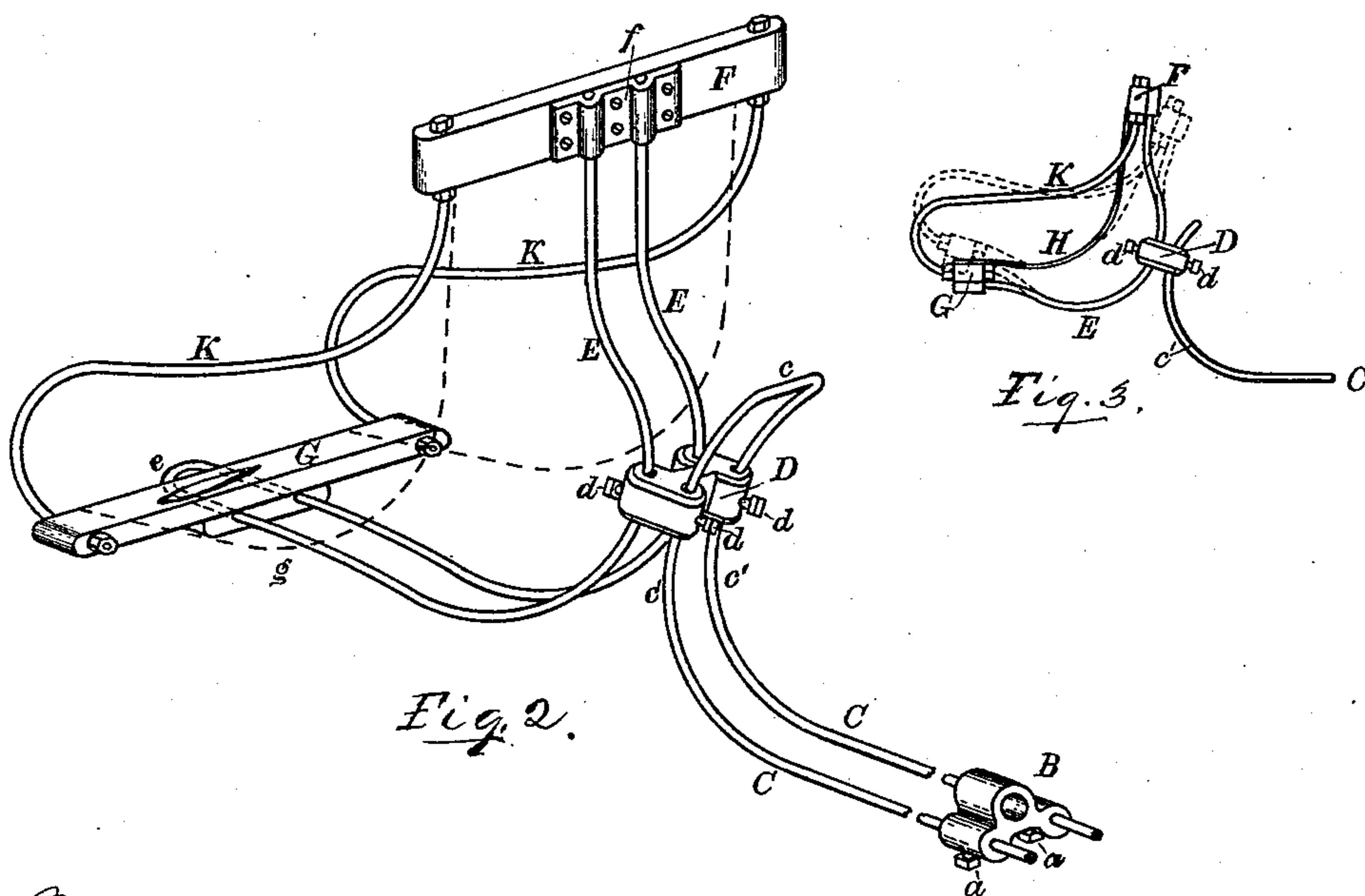
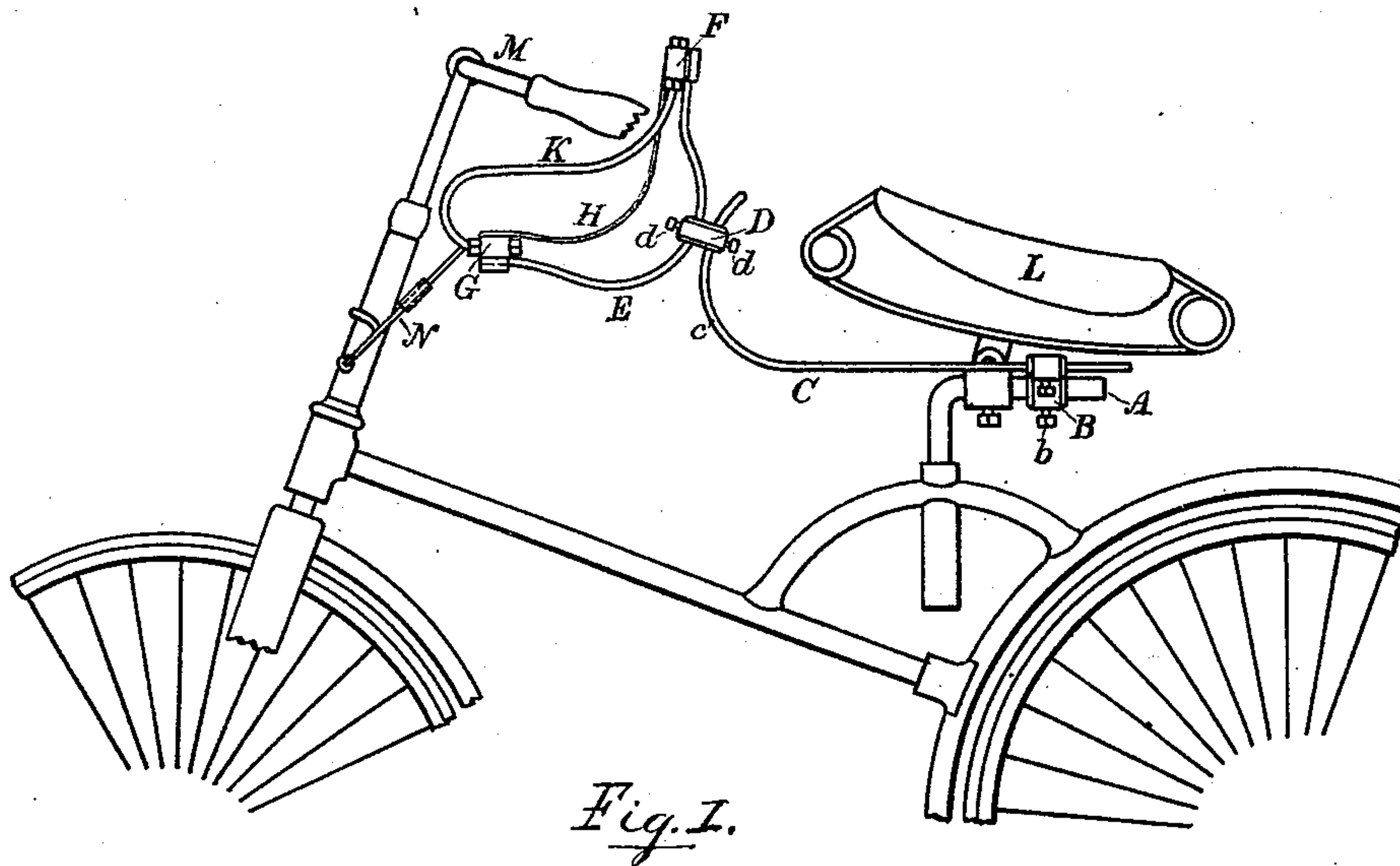


(No Model.)

J. H. SAGER.
SEAT FOR BICYCLES.

No. 479,845.

Patented Aug. 2, 1892.



Witnesses:
S. P. Moore
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Atty

UNITED STATES PATENT OFFICE.

JAMES H. SAGER, OF ROCHESTER, NEW YORK, ASSIGNOR TO RICH & SAGER,
OF SAME PLACE.

SEAT FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 479,845, dated August 2, 1892.

Application filed October 19, 1891. Serial No. 409,224. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. SAGER, a citizen of the United States, and a resident of the city of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Supplementary Seats for Bicycles, of which the following is a specification, reference being had to the accompanying drawings, in which—
10 Figure 1 is a side elevation of part of a bicycle, showing my device attached thereto. Fig. 2 is a perspective view of the framework of my device. Fig. 3 is a side elevation of my device, showing in full and in dotted lines different
15 positions which may be given to the seat.

Like letters refer to like parts in the several views.

My device relates to the improvements hereinafter described and claimed; and the objects
20 of my invention are to provide a convenient, easy, and adjustable supplementary seat for bicycles.

A represents the saddle-post of the bicycle, to the horizontal portion of which my device is
25 preferably attached, as by a clamp B, having a central perforation fitting upon said saddle-post and fixed thereto by means of a binding-screw *b*. By the use of a suitable clamp of other form my device may, however, be at-
30 tached to any other suitable part of the main frame of the bicycle. The clamp B has two parallel side perforations in which are adjustably fixed, as by set-screws *a a*, two parallel bars C C of spring metal, constituting
35 the spring-support for the seat. These bars I prefer to join together by making the two of one bar by bending the same from points on either side of the central part *c*, then bending the two ends in parallel curves *c' c'* of
40 suitable length and shape, preferably, however, in regular curves, and leaving the remainders of the two ends straight and still parallel. The clamp B is fixed at any point upon these straight portions by the set-screws
45 *a a*. On the curved portions is adjustably fixed a clamp D, having perforations there-through for the bars C C and also perforations for the rods E E, hereinafter described. Set-screws *d d* serve to fasten the clamp D at
50 any suitable point on the bars C or on the rods E. The seat has a back cross-piece F

and a front cross-piece G, to which the seat proper H is attached. In Fig. 2 this seat proper is indicated by dotted lines. I prefer to make it of flexible material, such as cloth. 55
The back and front pieces F G are connected by two rods E E, which pass through perforations in the clamp D. These rods are rigidly fastened to the back piece F by a suitable device—such as the plate *f*, Fig. 2—screwed to the
60 back of said back piece and from which they extend parallel downward and outward, then in suitable parallel curves around the back of the seat proper, and forward underneath the same to the front piece G, to which they are
65 rigidly fastened by a suitable clamp—such as the plate *g*—screwed to the bottom of said front piece. These two rods E E may be conveniently made of one rod by bending the same at the middle point *e*, Fig. 2, and so that
70 the two parts shall be a proper distance apart, and then further bending the two on the proper parallel curves. The rods E E constitute the seat-support.

It is evident that a single flat bar may be 75
used instead of the pair of bars C C or a pair of bars E E, in which case suitable slots are made in the clamps B and D. The flat bar or a pair of bars are preferably used to resist twisting strains. I consider a pair of bars to
80 be the most efficient in use. Rods K K may also join the back and front pieces F G to give additional strength, and they may be so formed as to serve as arms for the seat or chair. 85

This supplementary seat is particularly adapted to the Safety bicycle, and is preferably attached to the saddle-post of the same and so as to be situated between the saddle L and the handle-bars M. I attach to the front
90 piece G a foot-rest N, preferably of the form shown in my patent, No. 453,212, dated June 2, 1891.

This supplementary seat is adjustable to and from the support A by reason of the 95
straight parts of the bars C C being movable in the perforations in the clamp B and being horizontal, or nearly so. It is adjustable for height by reason of the clamp D being movable upward and downward on the bars C C
100 or on the rods E E, and the pitch of the seat proper is changeable, as shown in Fig. 3, by

reason of the clamp being movable on the curved parts of the bars C C or rods E E. My device is thus adjustable to bicycles of different patterns and sizes, so that the relative positions of the seat with reference to the saddle and to the handle-bars may be properly adjusted. The bars C C, being of spring metal and having the long straight parts and the upwardly-curved parts, form sustaining-springs for the seat, which make it easy in use. The strain on the curved parts of the bars C C tends to straighten them and to bring their elasticity into action, and this form of sustaining-spring is found to be particularly efficient in promoting the ease of the rider. The elasticity of the bars C C may be adjusted to the weight to be borne in the seat, according as they are set to be long or short from the points where they are fastened in the clamp B.

What I claim is—

1. The combination, with a bicycle, of a spring-support consisting of a bar or bars partly straight and partly bent in a regular curve, means of adjustably clamping said straight part horizontally, or nearly so, to the frame of the bicycle, a seat, and means of adjustably fastening the same to said curved part, substantially as and for the purposes set forth.

2. The combination, with a bicycle, of a spring-support consisting of a pair of parallel bars having straight portion and portions bent in a regular curve, means of adjustably fastening said straight parts horizontally, or nearly so, to the frame of the bicycle, a seat, and means of adjustably fastening the same to said curved portions, substantially as and for the purposes set forth.

3. The seat herein described, consisting of a back cross-piece and a front cross-piece, a seat connecting the same, a seat-support connected to said back and front pieces and pass-

ing underneath and back of said seat, and suitable means of attaching the same to a bicycle, substantially as set forth.

4. The seat herein described, consisting of a back cross-piece and a front cross-piece, a seat connecting the same, a seat-support consisting of a pair of parallel rods connected to said back and front pieces and passing underneath and back of said seat, and suitable means of attaching the same to a bicycle, substantially as set forth.

5. In a supplementary seat for bicycles, the combination of a back cross-piece, a front cross-piece, a seat connecting the same, rods connecting said back and front pieces outside of said seat, and a spring-support attached to the main frame of the bicycle and to said rods, substantially as set forth.

6. In a supplementary seat for bicycles, the combination of a back cross-piece, a front cross-piece, a seat connecting the same, parallel curved rods connecting said back and front pieces and passing underneath and back of said seat, and a spring-support attached to the main frame of the bicycle and to said rods, substantially as set forth.

7. In a supplementary seat for bicycles, the combination of a back cross-piece, a front cross-piece, a seat connecting the same, a pair of parallel curved rods connecting said back and front pieces and passing underneath and back of said seat, and a spring-support consisting of a pair of parallel bars in part straight and in part bent in a regular curve, means of attaching said straight part to the main frame of the bicycle, and means of attaching said curved part adjustably to said rods and movable with reference to the same, substantially as set forth.

JAMES H. SAGER.

Witnesses:

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