

(No Model.)

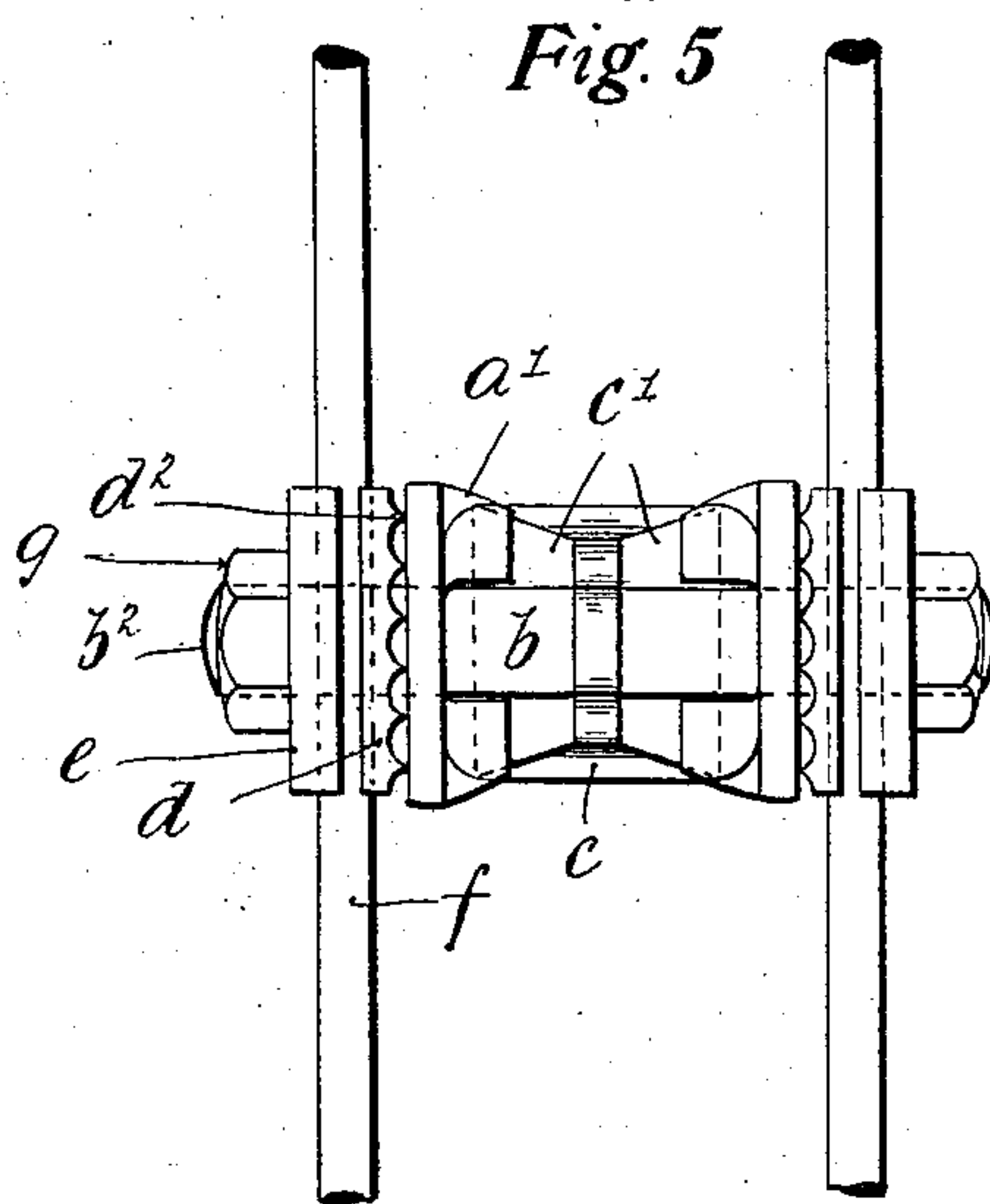
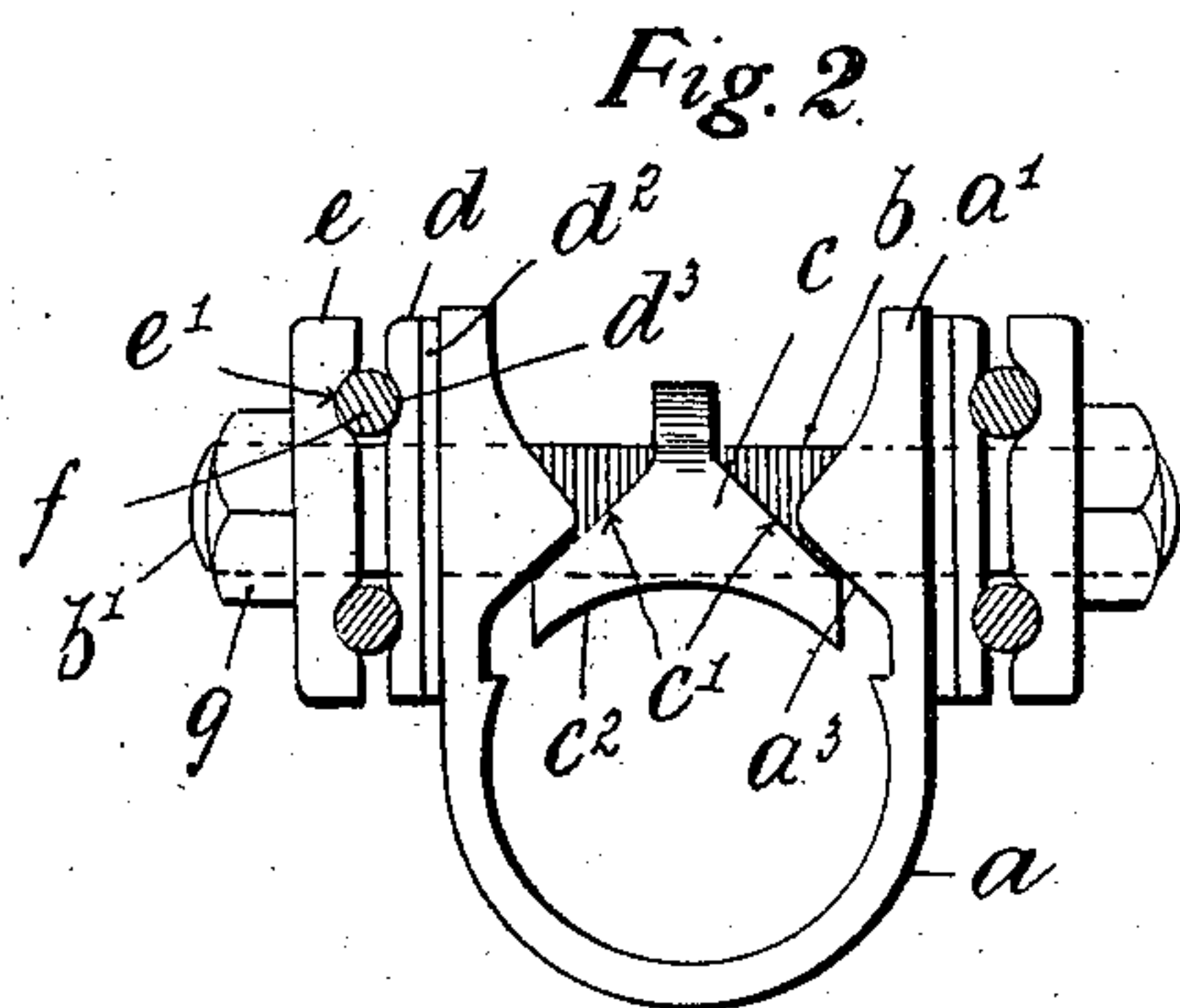
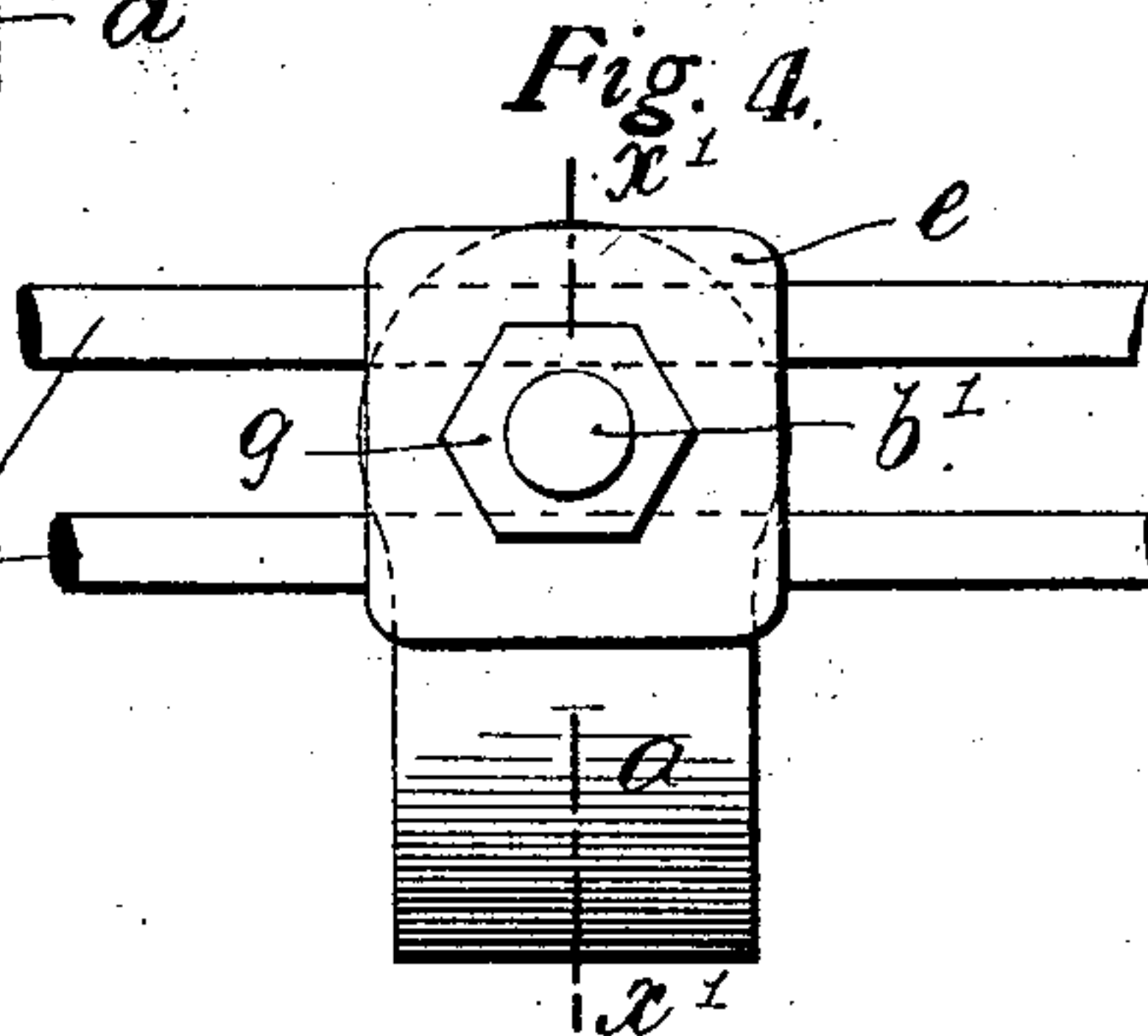
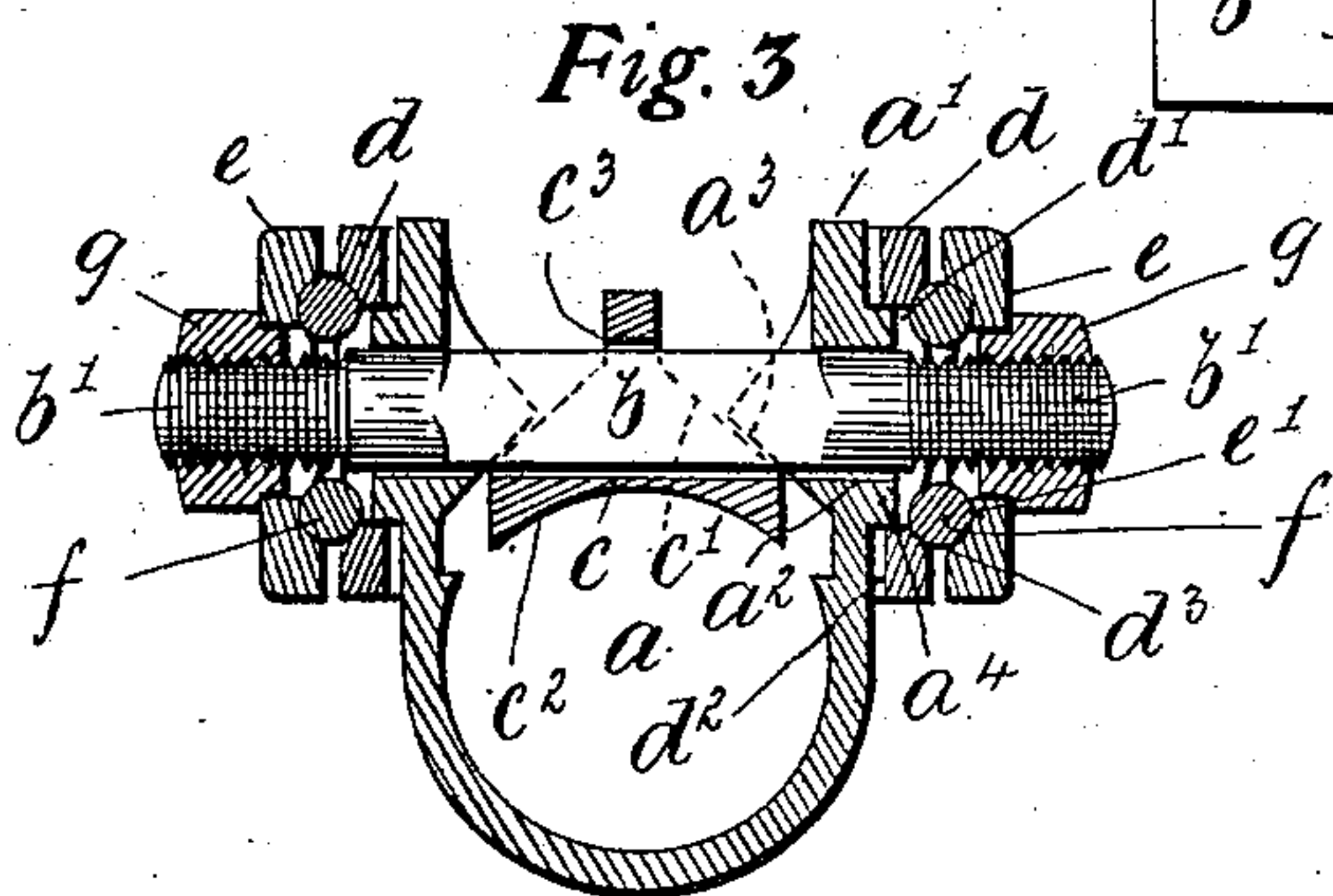
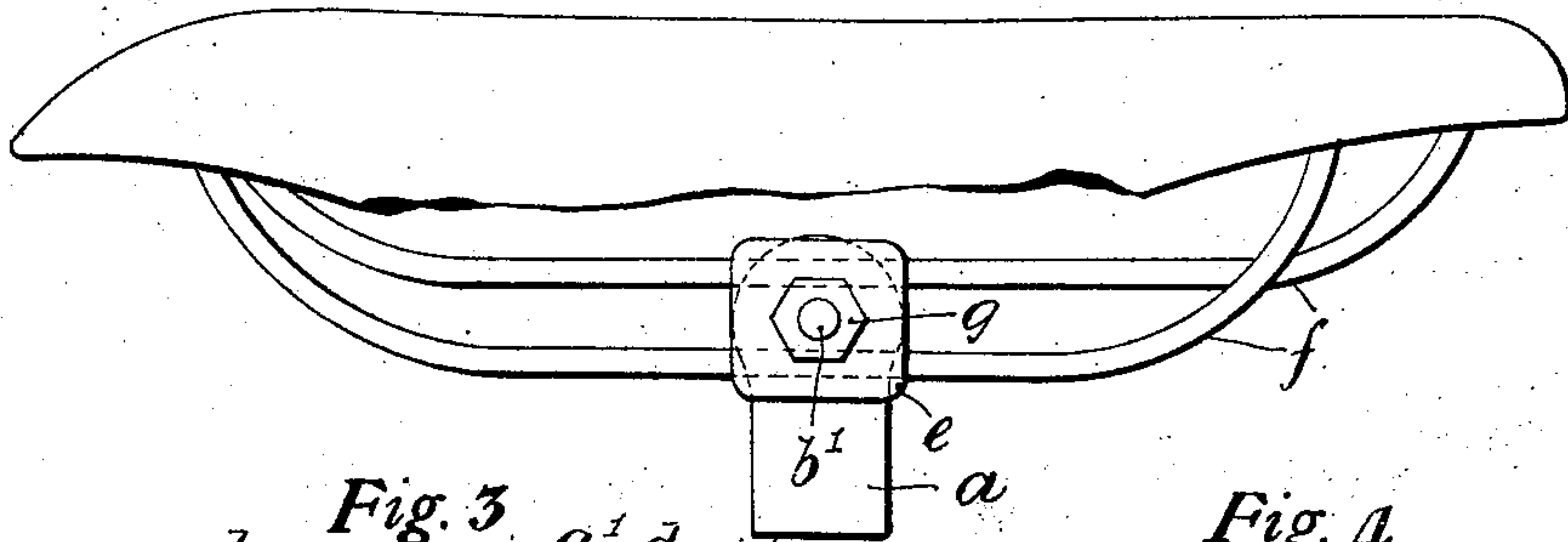
3 Sheets—Sheet 1.

J. B. BROOKS.  
CYCLE SADDLE ATTACHMENT BOSS.

No. 575,542.

Patented Jan. 19, 1897.

Fig. 1.



WITNESSES

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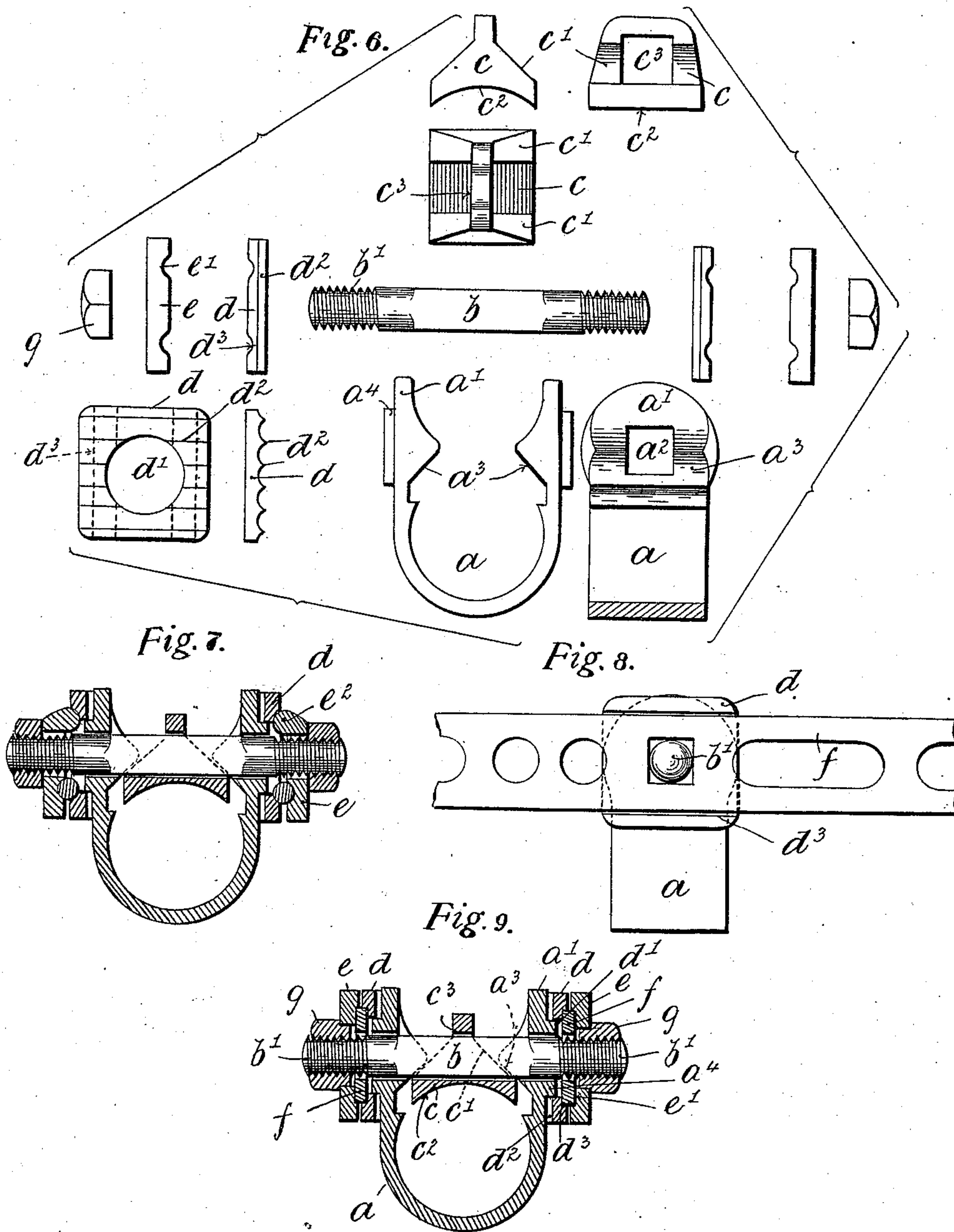
(No Model.)

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J. B. BROOKS.  
CYCLE SADDLE ATTACHMENT BOSS.

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(No Model.)

3 Sheets—Sheet 3.

J. B. BROOKS.  
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Fig. 10.

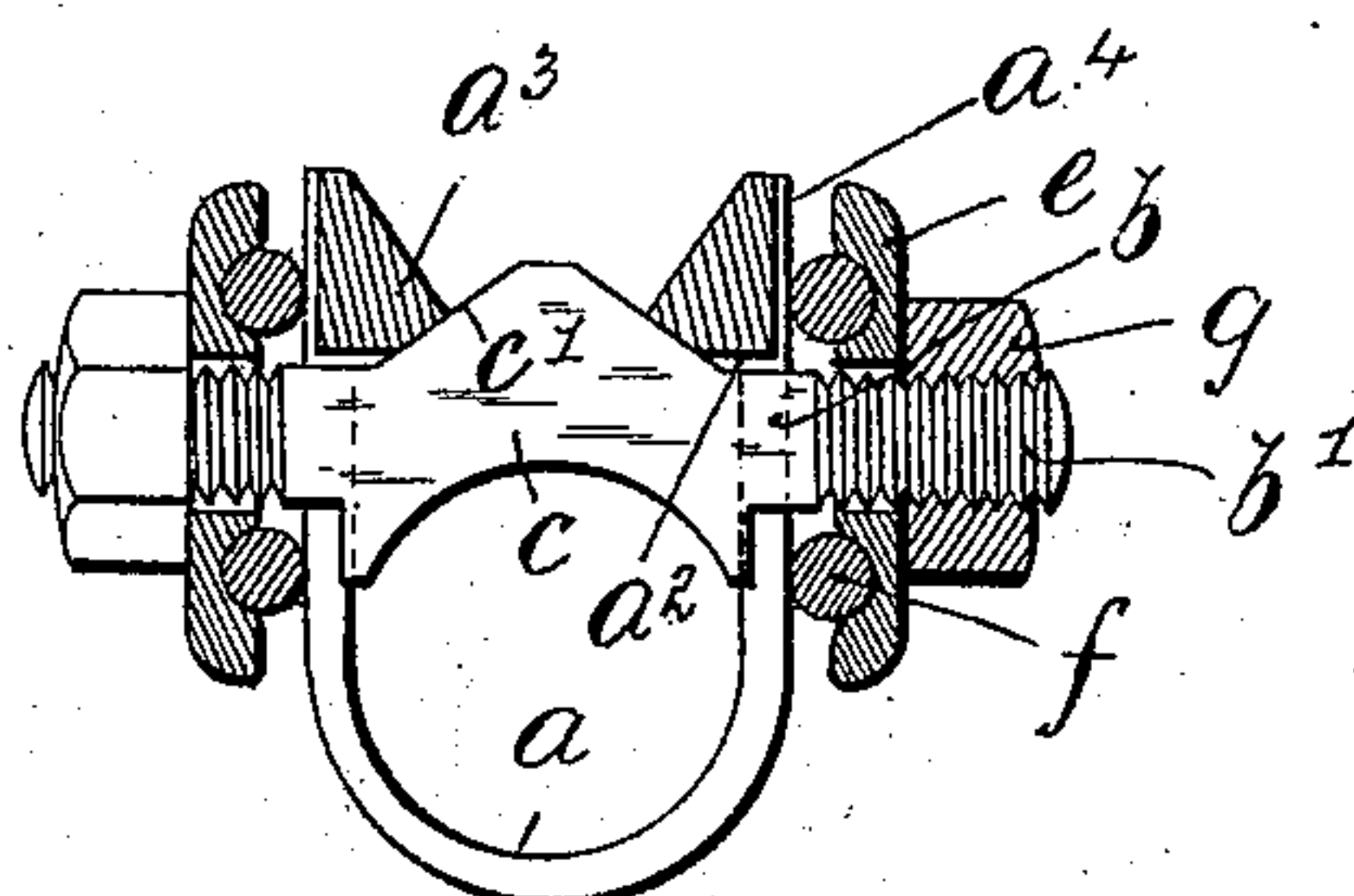
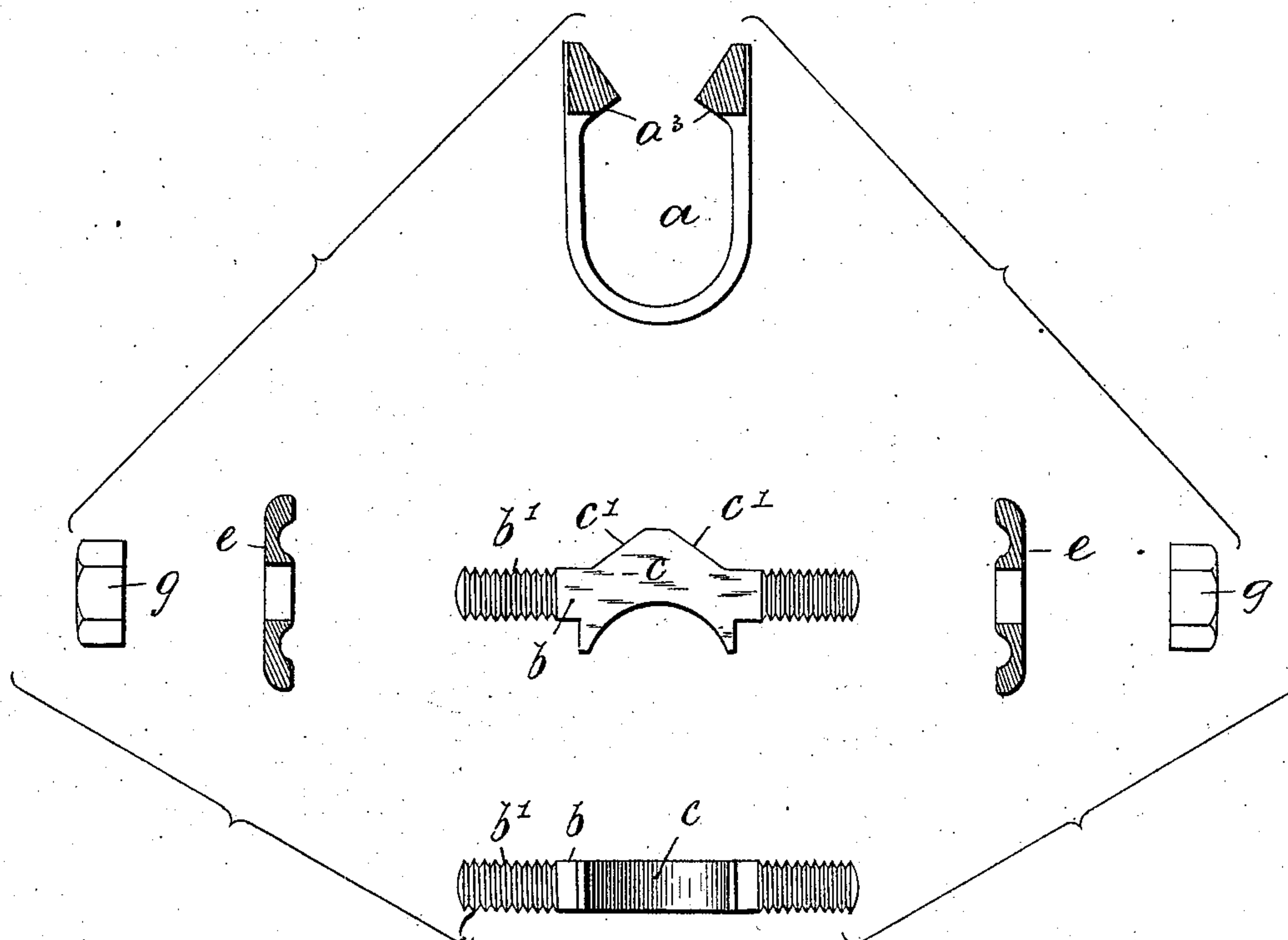


Fig. 11.



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# UNITED STATES PATENT OFFICE.

JOHN BOULTBEE BROOKS, OF BIRMINGHAM, ENGLAND, ASSIGNOR TO J. B. BROOKS & CO., LIMITED, OF SAME PLACE.

## CYCLE-SADDLE ATTACHMENT-BOSS.

SPECIFICATION forming part of Letters Patent No. 575,542, dated January 19, 1897.

Application filed September 19, 1896. Serial No. 606,390. (No model.) Patented in England September 24, 1894, No. 18,090.

*To all whom it may concern:*

Be it known that I, JOHN BOULTBEE BROOKS, manufacturer, trading as J. B. BROOKS & COMPANY, a subject of the Queen of Great Britain, residing at Criterion Works, Great Charles Street, in the city of Birmingham, England, have invented certain new and useful Improvements in Cycle-Saddle Attachment-Bosses, of which the following is a specification, and for which I have obtained Letters Patent of Great Britain bearing date the 24th day of September, 1894, and numbered 18,090.

This invention relates to the attachment-bosses of cycle-saddles, and has for its object more efficient means of securing the saddle-framing to the boss and the boss to the L-pin or seat-pillar of a machine by one operation.

Figure 1 of the accompanying drawings represents a cycle-saddle with the framing fitted with a boss made according to my invention. Fig. 2 represents an end elevation of the boss with the framing sides of the saddle in section. Fig. 3 is a vertical section of Fig. 2 upon the dotted line '. Fig. 4 is a side elevation of Fig. 2, and Fig. 5 is an under side plan of Fig. 2. Fig. 6 represents elevations and sections of the separated component parts of the boss. Fig. 7 shows my invention applied to single-sided wire framings. Figs. 8 and 9 represent front and side elevations of my improved boss applied to a saddle having a pierced sheet-metal frame. Fig. 10 represents a modified form of my invention. Fig. 11 shows the component parts of the same separated.

In Figs. 1 to 6,  $a$  is a band-clip whose free ends  $a'$  are bossed and formed with eyes or holes  $a^2$ , wherethrough the transversely-directed pin  $b$ , having a middle bearing-block  $c$  threaded upon it, passes, while the inner faces of the said ends  $a'$  are formed with inclined planes  $a^3$ , which impinge upon like inclined planes  $c'$  of the pressure-block  $c$ , whose bearing-face  $c^2$  is concaved to the general contour of the L-pin or seat-pillar, and the eye  $c^3$ , wherethrough the pin  $b$  passes, has a clearance to admit of the advancement of the block onto the L-pin or seat-pillar.

$d$  are inner washers threaded upon the pin  $b$  and coming on the opposite side of the clip and with the holes  $d'$  in the same taking over

the set collars  $a^4$  on the outer faces of the said clip ends, while the hardened teeth or serrations  $d^2$  on the inner faces of the said washers are adapted to be embedded into the softer metal of the adjacent faces of the clip when the same is tightened up.

$d^3$  are keep-grooves between which and opposed keep-grooves  $e'$ , made across the faces of the outer washers  $e$ , also threaded on the respective ends of the pin  $b$ , the frame wires or rods  $f$  come and are there secured by the screwing up of nuts  $g$  on the wormed outer ends  $b'$  of the said pin.

It will be observed that the keep-grooves in the opposed washers run in a direction at right angles to the teeth  $d^2$  on the inner faces of the inside washers  $d$ .

To secure the framing to the boss and the boss to the L-pin or seat-pillar, rotate one or other of the nuts  $g^2$  on the ends of the pin  $b$ , when the free ends  $a'$  of the clip are gradually closed and the inclined planes  $a^3$  on their inner faces are made to impinge upon the inclined planes  $c'$  of the pressure or bearing block  $c$  and bring the same down by a wedge action upon the L-pin or seat-pillar embraced by the clip  $a$ , and on the tightening up of the said nuts the frame sides  $f$  are gripped between the opposed washers  $d$  and  $e$ , which are capable of rotating to admit of the universal tilting adjustment of the framing-wires of the saddle clamped between them.

When the parts of the boss are loose, the framing-wires admit of tilt adjustment by rotating with the gripping-washers, and also of longitudinal adjustment relative to the clip by sliding between the said washers, and, further, the clip can be bodily moved along the L-pin or up and down the seat-pillar, and after the framing and parts of the boss have been adjusted to their required positions the framing is secured to the boss and the boss to the L-pin or seat-pillar by the single operation of screwing up one of the nuts  $g$ .

In Fig. 7 the outer washers  $e$  each have a foot  $e^2$ , which takes into one of the keep-grooves of the inner washer  $d$ , and thus retain the said washers parallel when a single frame-wire only is employed at each side.

Figs. 8 and 9 are marked with the same letters of reference as Figs. 1 to 6.

In Figs. 10 and 11 the pressure-bearing



block is made integral with the pin. Thus  $a$  is the clip, with the free wedge-shaped ends  $a^3$  impinging upon the inclined planes  $c'$  of the pressure-block  $c$ , formed at the middle of  
5 and integral with the cross-pin  $b$ , which passes through holes  $a^2$  in the free ends of the clip, whose outer faces are serrated at  $a^4$  and are opposed to keep-grooved washers  $e$ , and between the faces  $a^4$  and washers  $e$  the  
10 frame-rods  $f$  come and are clamped by the screwing up of nuts  $g$  on the wormed ends  $b'$  of the pin.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—  
15

1. In a cycle-saddle attachment, the combination of the band-clip  $a$  provided upon the inner adjacent faces of its free ends with inclined planes  $a^3$ , the cross-pin  $b$  passing  
20 through said ends of the clip and provided with nuts tapped over its ends for drawing the ends of the clip toward one another, means for attaching a saddle-frame to said clip, and a pressure-block  $c$  carried by said  
25 cross-pin and provided with inclined planes  $c'$  which are engaged by the inclined planes  $a^3$  when the ends of the clip are clamped and

the pressure-block thereby caused to grip the saddle-support, substantially as described.

2. In a cycle-saddle attachment, the combination of the band-clip  $a$  provided upon the inner adjacent faces of its free ends with inclined planes  $a^3$ , the cross-pin  $b$  passing through said ends of the clip, a pressure-block  $c$  carried by said cross-pin and provided with  
35 inclined planes  $c'$  which are engaged by the inclined planes  $a^3$  on the clip, washers arranged on the opposite ends of the cross-pin and grooved on their adjacent faces for grasping the saddle-frame and nuts tapped over  
40 the threaded ends of said cross-pin outside said washers and operating when screwed up to cause said washers to grasp the saddle-frame and cause the inclined planes to force the pressure-block against the saddle-support  
45 in the clip, substantially as described.

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

JOHN BOULTBEE BROOKS

Witnesses:

ALBERT NEWEY,

ARTHUR T. SADLER.