(No Model.)

3 Sheets—Sheet 1.

# J. B. BROOKS.

## CYCLE SADDLE.

No. 589,243. Patented Aug. 31, 1897.

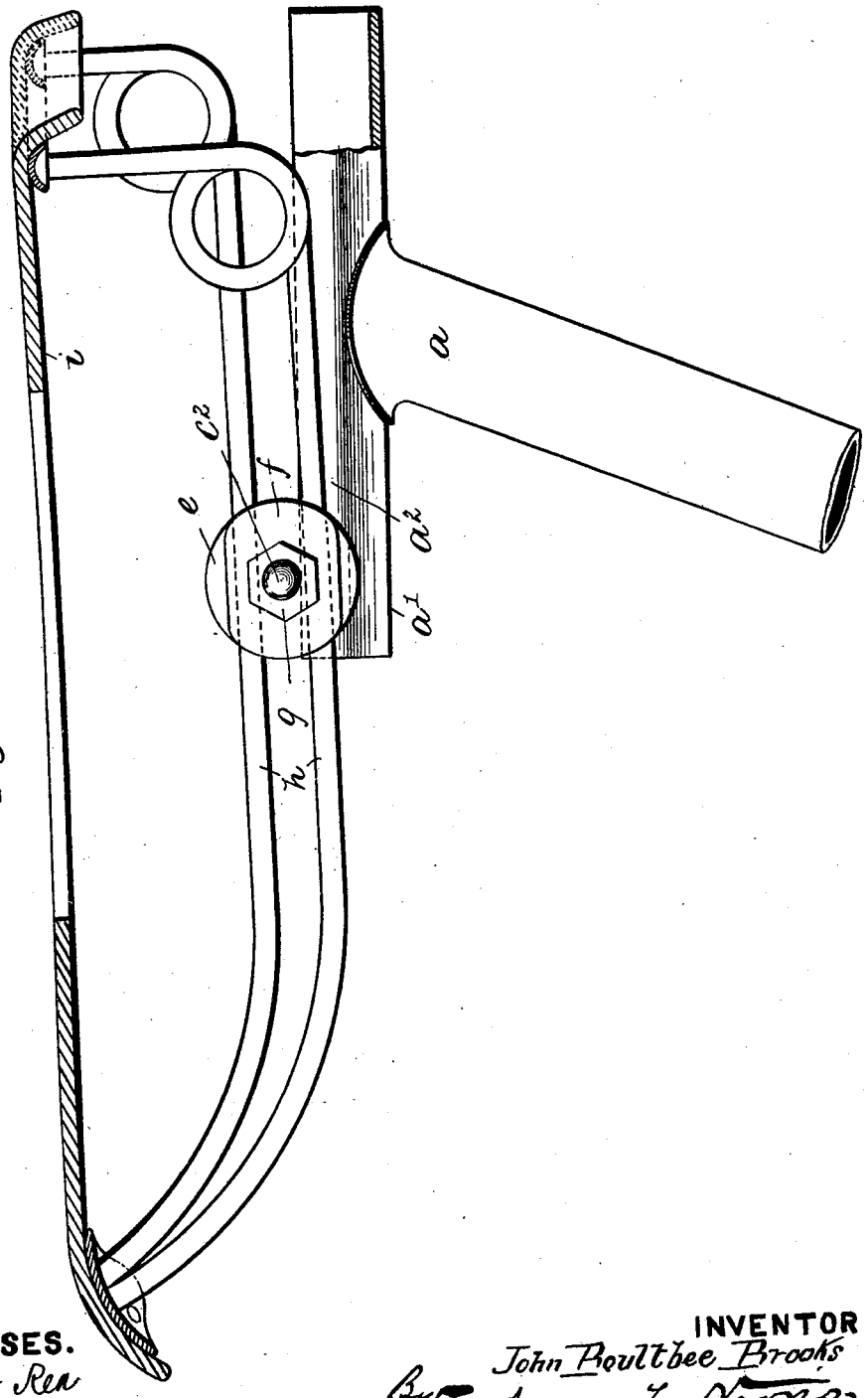



Fig. 1

WITNESSES.
Geo. H. Rea
Dennis Sumby.

INVENTOR
John Boultbee Brooks
By James L. Norris.
Atty.

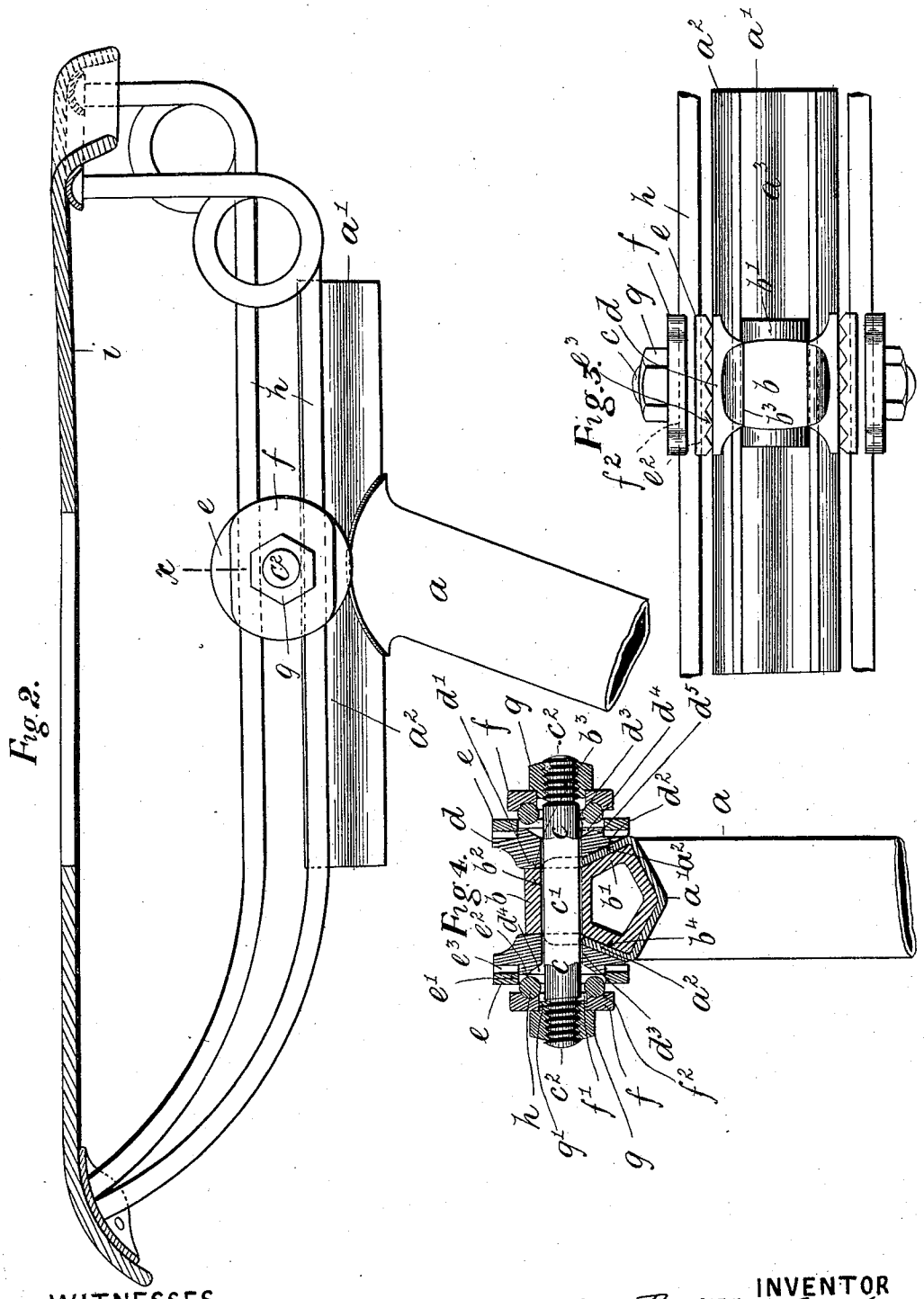
THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 3 Sheets—Sheet 2.

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(No Model.) 3 Sheets—Sheet 3.

# J. B. BROOKS.

## CYCLE SADDLE.

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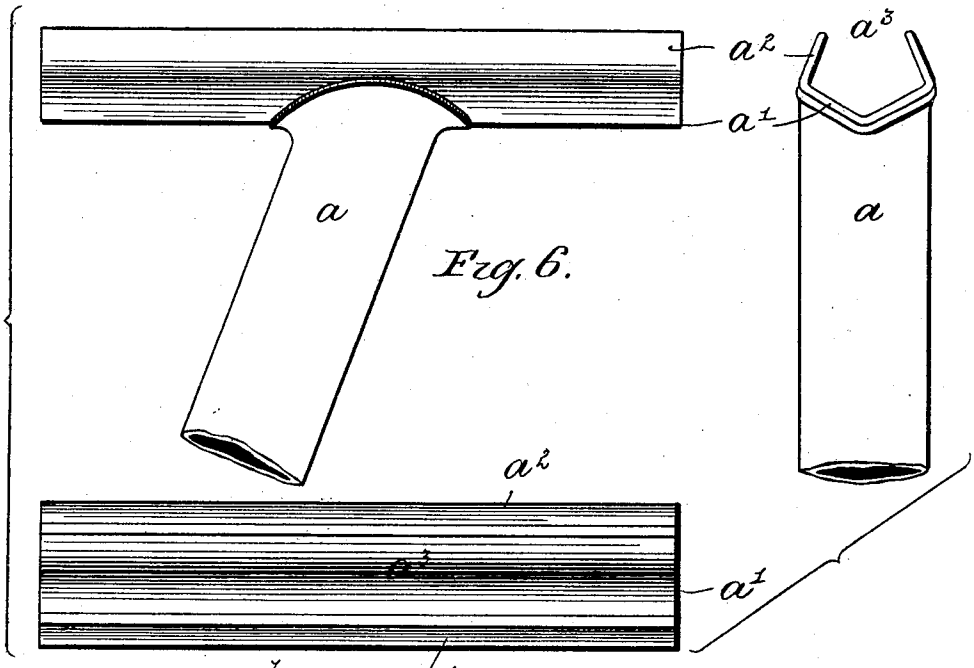



Fig. 6.

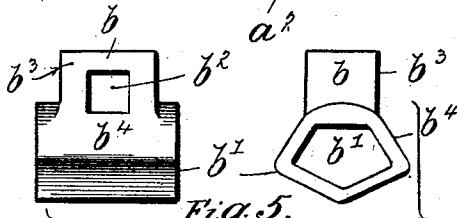



Fig. 5.

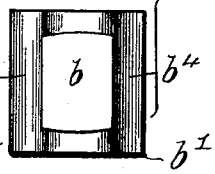
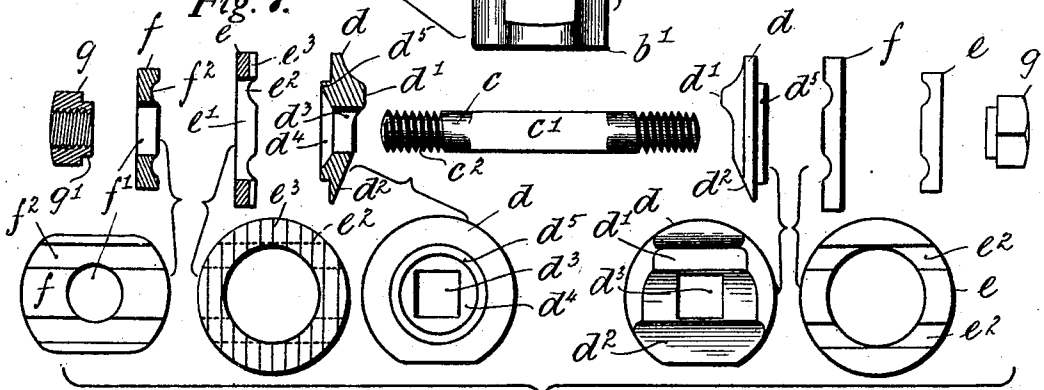



Fig. 7.




WITNESSES.

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INVENTOR.

By John Boultbee Brooks.

James L. Norris. Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

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

## CYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 589,243, dated August 31, 1897.

Application filed December 5, 1896. Serial No. 614,656. (No model.) Patented in England September 30, 1896, No. 21,605.

*To all whom it may concern:*

Be it known that I, JOHN BOULTBEE BROOKS, managing director of the J. B. Brooks & Company, Limited, 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-Saddles, of which the following is a specification, and for which invention I have obtained Letters Patent in Great Britain bearing date the 30th day of September, 1896, and numbered 21,605.

This invention relates to a combined support and securing attachment for cycle-saddles, whereby the boss is more directly associated with its support and is capable of making an uninterrupted horizontal traverse from end to end of the same.

Figure 1 of the accompanying drawings represents in side elevation, with the saddle-seat in section, a combined saddle-support and securing attachment or boss constructed, arranged, fitted, and working according to my invention. In this view the boss is shown at the extreme forward end of its support. Fig. 2 is a like view as Fig. 1, but with the boss coming midway between the two ends, showing how the same can traverse from end to end of the support uninterruptedly or without obstruction. Fig. 3 is a top side plan of Fig. 2, but with the seat broken away. Fig. 4 is a vertical section of the attachment upon the dotted line $x$, Fig. 2, showing the relative positions of the assembled component parts of the combined support and boss. Fig. 5 represents side and end elevations and a plan of the sliding block which constitutes the body of the boss and whose foot is of the same cross-section as the inside of the troughed support, which is shown separately in side and end elevations and plan in Fig. 6. Fig. 6 illustrates detached details.

The same letters of reference indicate corresponding parts in the several figures of the drawings.

Surmounting the seat-pillar $a$ is a horizontal and trough-sectioned support bar or bed $a'$, having overhanging and yielding sides $a^2$, and within which a like-sectioned foot $b'$ of a sliding carrier-block or body part $b$ of the boss longitudinally traverses or slides uninterruptedly from end to end of the said troughed section support or bar. The upper end of this said body part, which is of a breadth about equal to that of the open top $a^3$ of the trough, is transversely pierced with a square hole $b^2$, wherethrough the square body $c'$ of a central screw-ended pin $c$ passes, with the ends $c^2$ overhanging the inclined sides of the said support or bed, and upon each of which a gripping-cheek $d$, an inside frame-wire-gripping washer $e$, and an outside frame-wire-gripping washer $f$ are strung and are brought together and against the side of the solid body part $b$ by a screw-nut $g$. Now the gripping-cheeks $d$ have inwardly-projecting bearing ribs or lugs $d'$, which impinge upon the opposite side faces $b^3$ of the body part $b$, and inclined lower bearing-surfaces $d^2$, which impinge against the outsides of the inclined or overhanging and yielding walls $a^2$ of the support $a$, which parts $a^2$ are forced slightly inward and against the inclined sides $b^4$ of the foot $b'$ of the said body $b$ on the nuts $g$ on the ends of the pin $c$ being screwed up. These cheeks $d$ have central square eyes $d^3$ of a depth rather greater than that of the pin, so as to admit of the same slightly rocking upon the lugs as centers, in order to allow the lower bearing-surfaces $d^2$ to follow up the slight change of angle or plane which occurs in the overhanging sides $a^2$ when the same are pressed inward upon the foot of the block.

The outer faces of the gripping-cheeks have rocking clearances $d^4$ and collars $d^5$, upon which latter the frame-gripping washers $e$, having holes $e'$ through them and keep-grooves $e^2$ upon their outer faces for the reception of the frame-wires $h$ of the saddle, take and are capable of rotation thereon. The inner faces of these washers $e$ have hardened teeth $e^3$, which embed themselves when forced home into the softer metal of the opposed faces of the gripping-cheeks.

The outer frame-washers $f$, which have holes $f'$ through their middles, have keep-grooves $f^2$ upon their inner faces for the reception of the frame-wires $h$ and take and rotate upon collars $g'$ of the nuts $g$.

When the parts of the boss and its support are assembled, as in Figs. 1, 2, 3, and 4, with one or both of the nuts $g$ slackened, the boss

can be slid or made to uninterruptedly traverse from end to end or to any part of the bed-support $a'$, and any desired tilt can be given to the saddle $i$, carried by the frame-rods $h$. By now screwing up either one or other or both of the nuts $g$ the distance between them is diminished and the whole of the assembled parts threaded upon the pin are drawn together with the frame-rods $h$ firmly clamped between the opposed faces of the pairs of washers $e$ and $f$, while the teeth of the washers $e$ are embedded into the outer faces of the gripping-cheeks $d$, which in their turn are forcibly impressed against the two opposite sides of the solid body part $b$ and the inclined lower bearing-surfaces against the outward-presented faces of the yielding sides $a^2$ of the bed-rest $a'$. By now further screwing up the nut or nuts the gripping-cheeks are made to slightly turn inward upon their lugs as centers and so forcibly press inward their lower parts, whereby the said sides are gathered in and nipped between the lower surfaces of the gripping-cheeks and the foot of the block. Thus by one operation the frame-wires are secured to the body of the boss and the boss to the supporting bar or bed.

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

1. A support and attachment-boss for cycle-saddles consisting of a seat-pillar surmounted by a trough-sectioned bed having yielding sides and fitted with an internal support in the form of a sliding block or body or other part of the attachment-boss and with gripping-cheeks, strung upon a pin or equivalent and taking a bearing upon the outer sides of the said bed, the said yielding sides being thus nipped and clamped between the internal block or support and the outer gripping-cheeks, substantially as and for the purpose described and set forth.

2. A support and attachment-boss for cycle-saddles consisting of a seat-pillar, surmounted by a trough-sectioned bed, having yielding sides and fitted with an internal support in the form of a sliding block or body or other part of the attachment-boss, and with gripping-cheeks strung upon a pin or equivalent and taking a bearing upon the outer sides of the said bed, which are thus nipped and clamped between the internal block or support and the outer gripping-cheeks, and with a frame-clamping washer or washers and a securing nut or nuts also taking upon the ends of the pin or equivalent, substantially as described and set forth.

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

JOHN BOULTBEE BROOKS.

Witnesses:
ALBERT NEWEY,
ARTHUR T. SADLER.