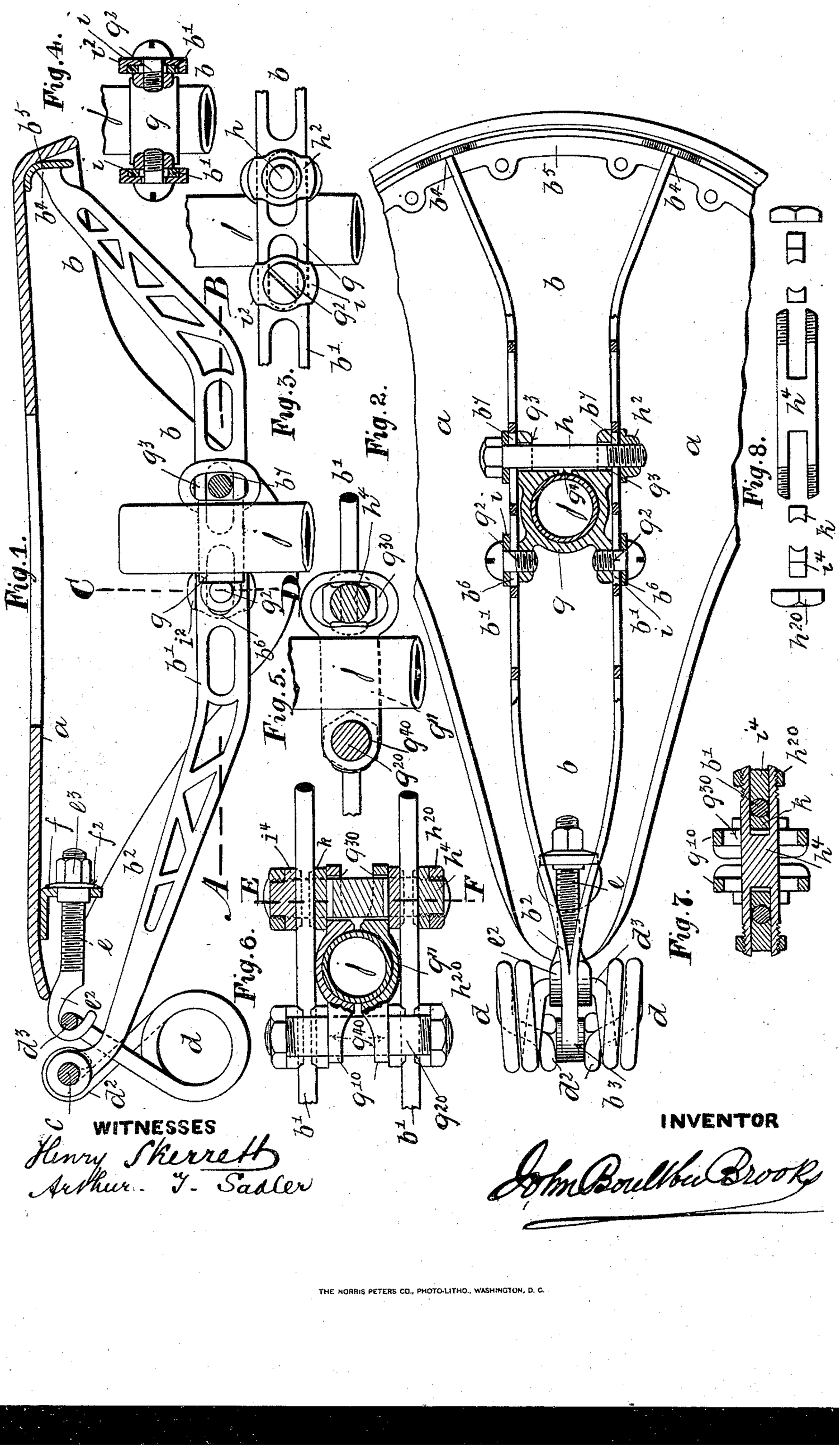
(No Model.)

J. B. BROOKS.

CYCLE SADDLE.

No. 567,882. Patented Sept. 15, 1896.



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CYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 567,882, dated September 15, 1896.

Application filed March 1, 1893. Serial No. 464,224. (No model.) Patented in England May 4, 1892, No. 8,394, and July 28, 1892, No. 13,733; in France December 13, 1892, No. 226,361, and in Germany January 10, 1893, No. 74,268.

To all whom it may concern:

Be it known that I, JOHN BOULTBEE BROOKS, manufacturer, a subject of the Queen of Great Britain, residing at Great Charles Street, in the city of Birmingham, England, have invented certain new and useful Improvements in Cycle-Saddles; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification, and for which invention Letters Patent have been granted in Great Britain, No. 8,394, dated May 4, 1892, and No. 13,733, dated July 28, 1892; in France, No. 226,361, dated December 13, 1892, and in Germany, No. 74,268, dated January 10, 1893.

My invention has relation to the metallic under and supporting framings, and also to the connection-clips and to the mounting of the seats of cycle-saddles.

Figure 1 of the accompanying drawings represents in longitudinal vertical section, with some of the parts in elevation, a hammock cycle-saddle made and fitted according to my invention. Fig. 2 represents an under side plan of the same with the connection-clip in section and upon dotted lines A B, Fig. 1. Fig. 3 represents an elevation of a portion of the middle part of the under framing and pillar. Fig. 4 is a transverse vertical section upon the dotted lines C D, Fig. 1, looking from left to right. Fig. 5 represents a modification of the clip *g* as applied to rod-framings. Fig. 6 is a part horizontal section of the same. Fig. 7 is a cross-section on the dotted line E F. Fig. 8 is a central longitudinal section of one of the cross-pins and of the nuts and washer-cotters separated therefrom.

The saddle-seat *a* is mounted or slung upon a skeleton or trussed framing *b*, composed of side members *b'*, converging and coming together at their fore ends b^2 and terminated at b^3 by a bracket or eyed end, wherethrough a pin or pivot *c* passes, around which pin the outwardly-disposed looped ends d^2 of a swinging spring or springs *d* pass, while the inner looped end d^3 of the said swinging spring *d* is looped onto or takes over the hooked end e^2 of the tension-screw *e*, which passes through a plain hole f^2 of a fixed depending bracket *f*, connected to the front under side of the said saddle-seat and with a collared nut e^3, taking upon the end of the screw and into the hole f^2 in the bracket for tensioning. The other ends of the solid latticed-work sides *b'* are branched or open out and have their respective terminal ends b^4 b^4 riveted or connected to the back plate b^5, fixedly connected to the back under side of the saddle-seat. Thus the saddle-seat is supported by an open-work frame and the front part slung from a swinging spring connection, with the levering arms of the same crossing each other, so that as pressure is put upon the seat the said arms open out and the loop-coils are contracted.

The middle of the under framing *b* is fitted with a split bracket-clip *g*, mounted on one side upon pins or pivots g^2 and at the other side by a cross screw-pin *h*, having a top and bottom flanged nut h^2 at one end and with the said pin taking through arcuate-shaped slots g^3 of the split bracket *g* to admit of the plane of the seat of a saddle being changed or to admit of a tilt adjustment, so as to elevate either the back or front, as may be desired. Fitted upon the said pivots g^2 are clip-washers *i*, coming upon the outer sides of the framing and with their returned ends i^2 embracing the upper and lower edges of the said framing, and by which means the said washers are prevented from rotating on the screwing home of the pivots and pin. The flanges of the said nut h^2 are like those of i^2 around the pins g^2, so that the said nut h^2, besides taking upon the wormed end of the pin, embraces that side of the saddle-frame and is thereby prevented from rotating.

j is a tubular pillar carried by a machine and to which the saddle is adapted to be connected.

The pivots g^2 and the pin *h* take through slots b^6 b^7 of the side framing, so that by the loosening of the said pivots and pin longitudinal and lengthwise adjustment is admissible. Thus the pivots g^2 are the centers upon which the clip *g* turns radially for giving tilt adjustment, which is limited by the vertical extent of the slots g^3, and after the necessary adjustment, both horizontal and tilt, has been obtained then the saddle is securely clamped or affixed to the pillar *j* by the screwing up

of the pin h by its head, whereby the division or split g^4 is closed, the said clip forcibly drawn around the said pillar, and the frame sides drawn tightly against the clip, hence the rigid connection of the saddle to it.

g^{11} is a split or sectional clip composed of sectional parts g^{10}, brought together by slotted cross-pins g^{20} and h^4, the former passing through round holes g^{40} and the latter passing through long or arcuate-shaped holes g^{30}, (best seen in Fig. 5,) so as to admit of the angular adjustment of the saddle. The ends of the said pin g^{20} h^4 are slotted, wherein portions of inside-disposed cotter-washers k, having concaved seatings, take, while taking within the outer ends of the said slots are also cotter-washers i^4, provided with inwardly-presented concaved seatings, and between the said seatings of the respective pairs of cotter-washers frame-rods b' come, so that on the screwing up of the nuts h^{20} upon either side, after either horizontal or tilt adjustment, the sectional parts g^{10} of the clip are closed upon the tubular pillar j and the cotter-washers are slid inward within the grooves of the pins, and at the same time the clip attachment of the saddle is rigidly clamped both to the said pillar and to the saddle-framing. Instead of the side-framing members b' being open-worked they may be left or remain unpierced.

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

1. In a cycle suspension-saddle, the combination with the saddle-supporting pillar and side framings, of a split clip embracing said pillar, having at one end holes and at the other end vertical slots, with bolts passing respectively through said holes and slots and drawing the clip together and securing it to the side framings, substantially as described.

2. In a cycle suspension-saddle the combination with a pillar lengthwise and tiltwise adjustable, side framings and a clip attaching the frame to the pillar; of a saddle and a slung or swinging loop-coiled spring having one end attached to said framing so as to hang below the same and the other end attached to the saddle, the ends of said spring being formed into pivot-eyes which embrace and turn loosely on their bearing, substantially as described.

3. In cycle-saddles, the combination with the seat of the under side framings attached at the rear end to the seat, a hook-ended bracket attached to the forward end of the seat, and a slung or swinging loop-coiled spring hooked or hung upon said bracket and attached at its ends to the side framing with the coils suspended below the framing, the ends of said spring being formed into pivot-eyes which embrace and turn loosely on their bearing, substantially as described.

4. In a pillar-clip of a cycle-saddle, a split or divided body part g, pivotally connected to the side framings of the saddle and lengthwise adjustable at one end and both lengthwise and tiltwise adjustable at the other end, substantially as described.

5. In the framing of cycle-saddles, the combination with the framings b', b', of a split or divided bracket g, having vertical slots at one end and bolt-holes at the other end and pivotally and adjustably connected to the side framing by bolts g^2, h, respectively, one of said bolts passing through horizontal slots in the side framing, whereby both horizontal, tilt and clamping adjustment are obtained, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of January, 1893.

JOHN BOULTBEE BROOKS.

Witnesses:
HENRY SERRETT,
ARTHUR T. SADLER.