

(No Model.)

W. CLIFFORD.
CYCLE SADDLE.

No. 603,943.

Patented May 10, 1898.

Fig. 1.

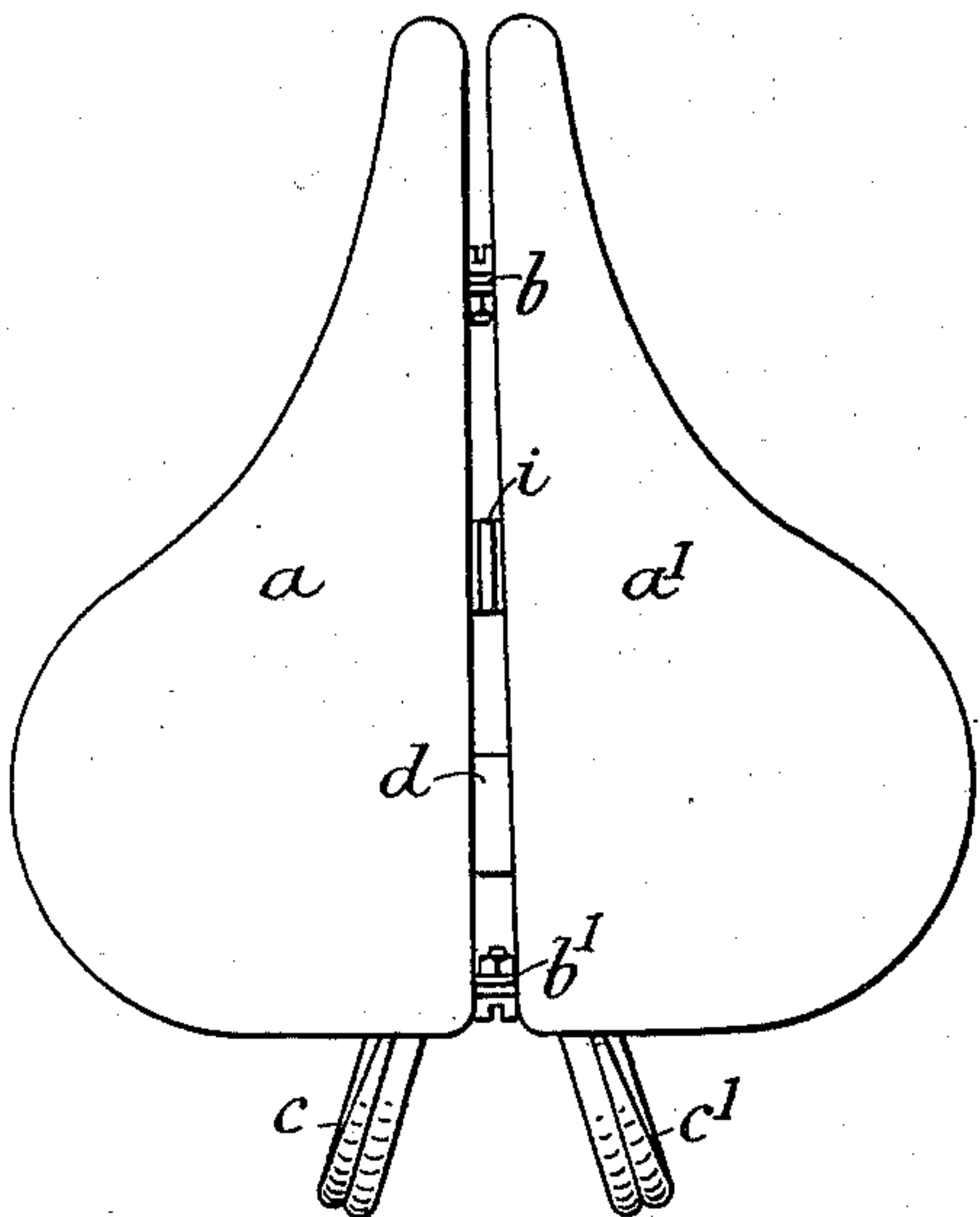


Fig. 2.

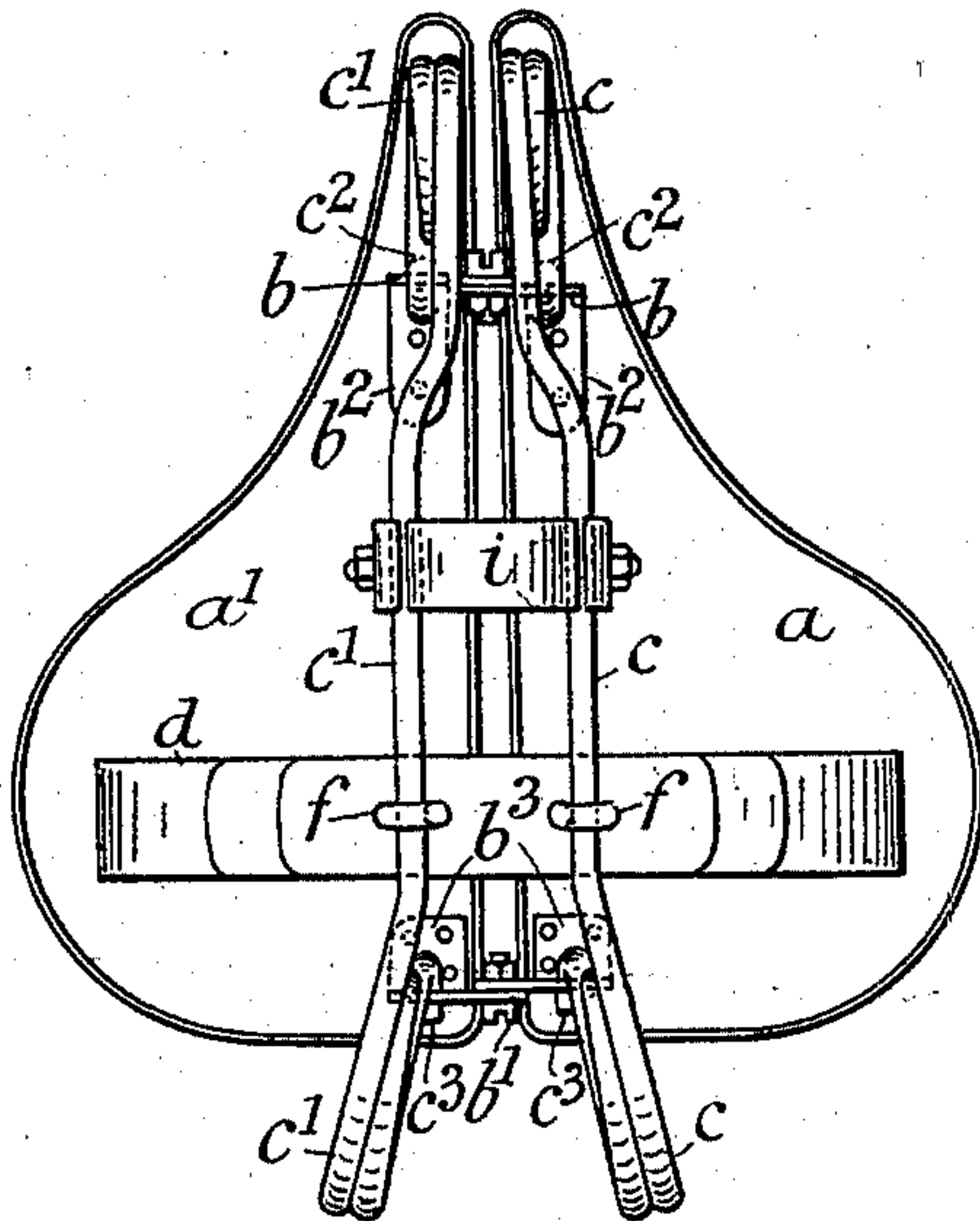


Fig. 3.

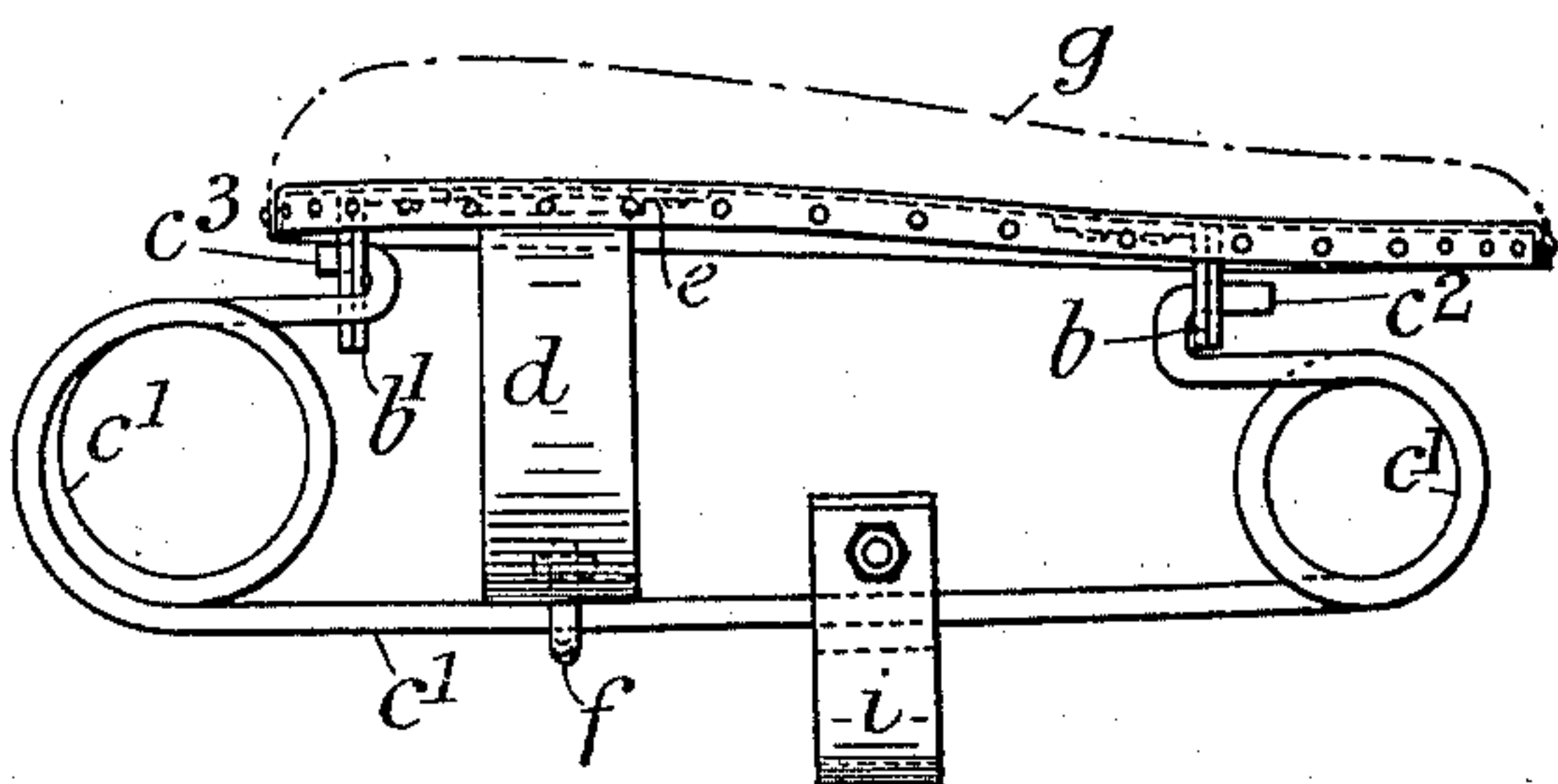


Fig. 4.

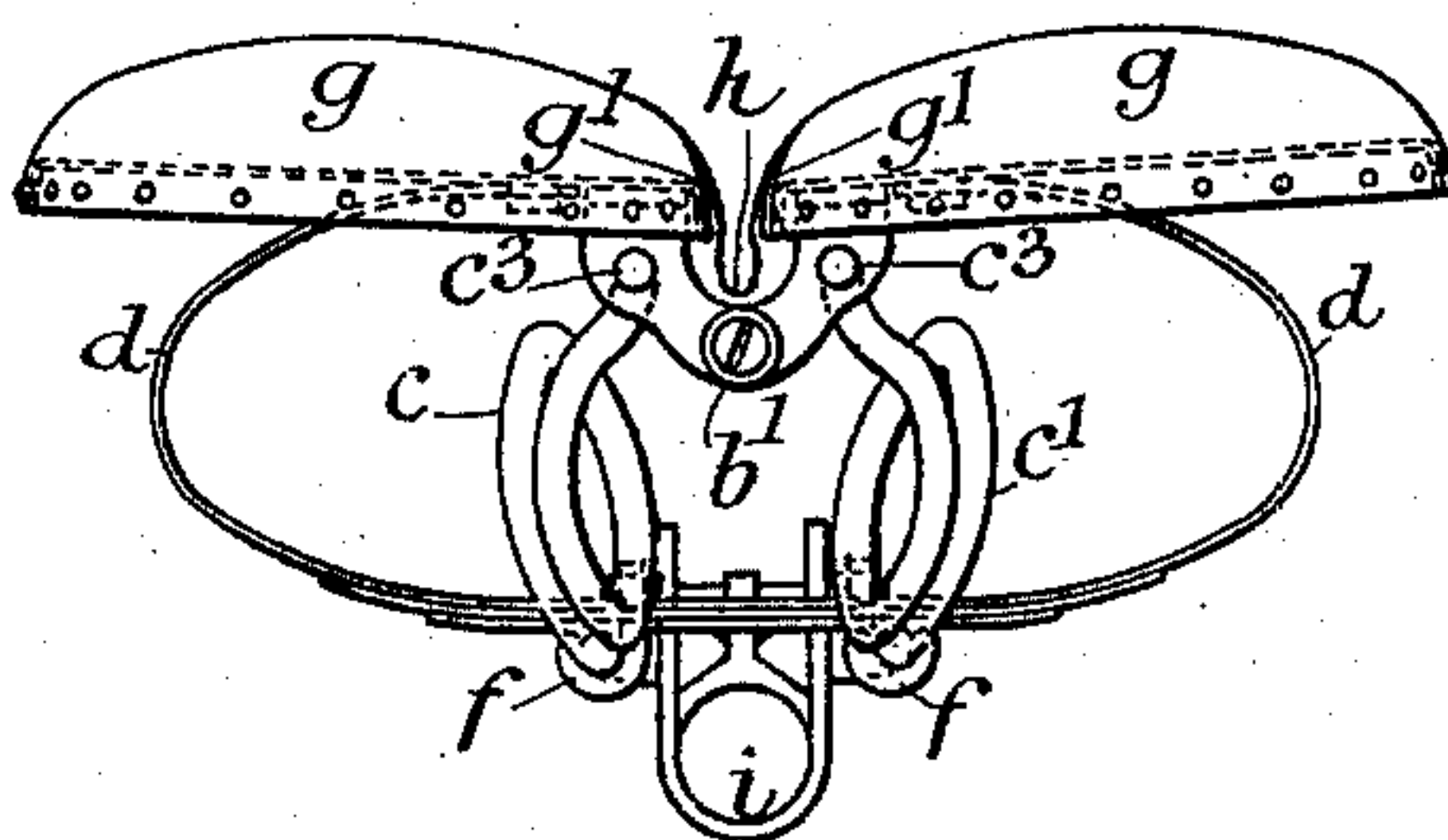


Fig. 6.

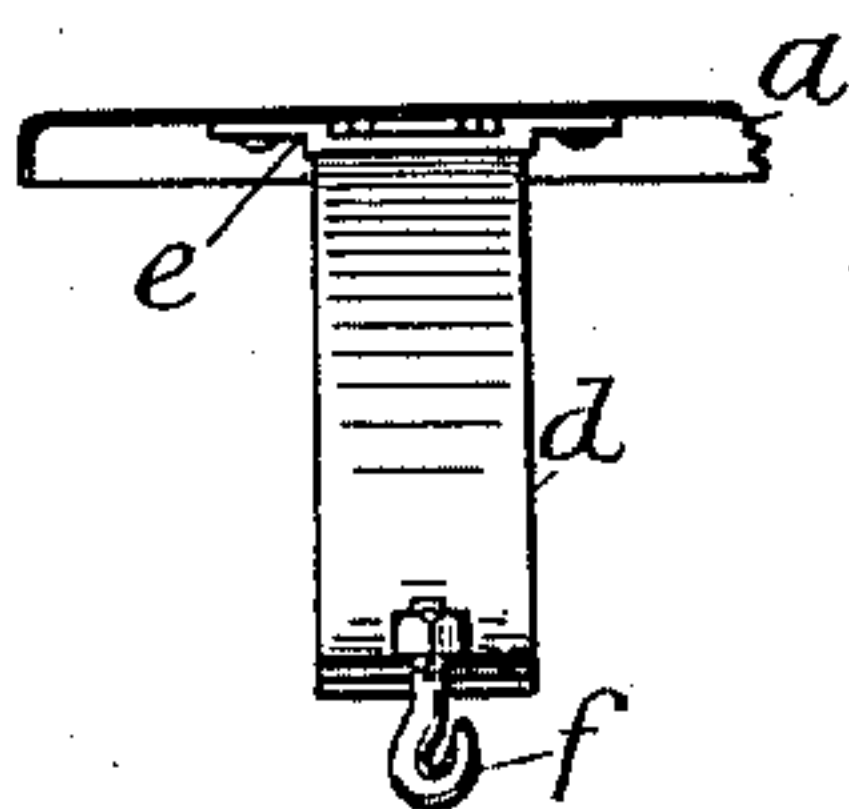


Fig. 5.

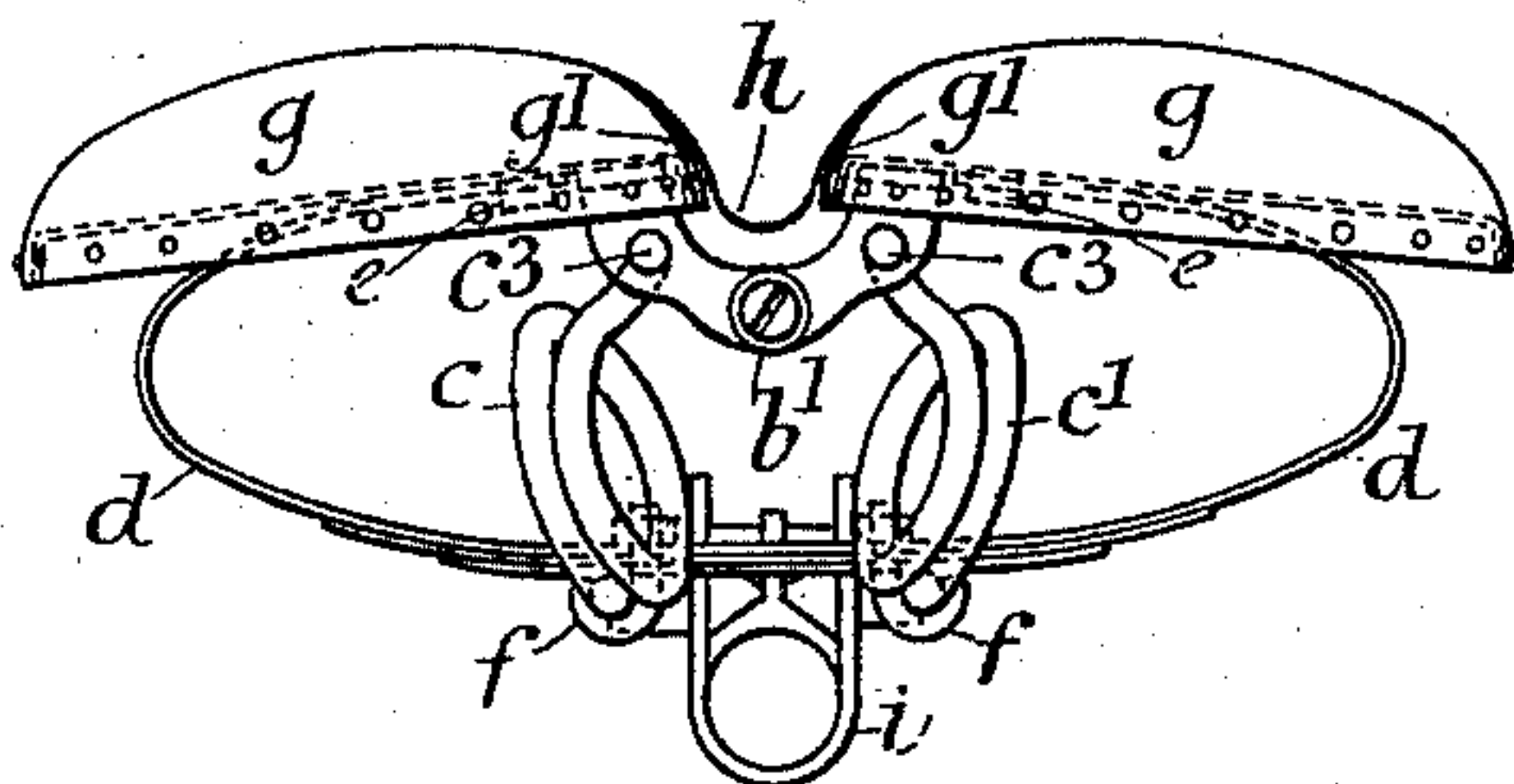
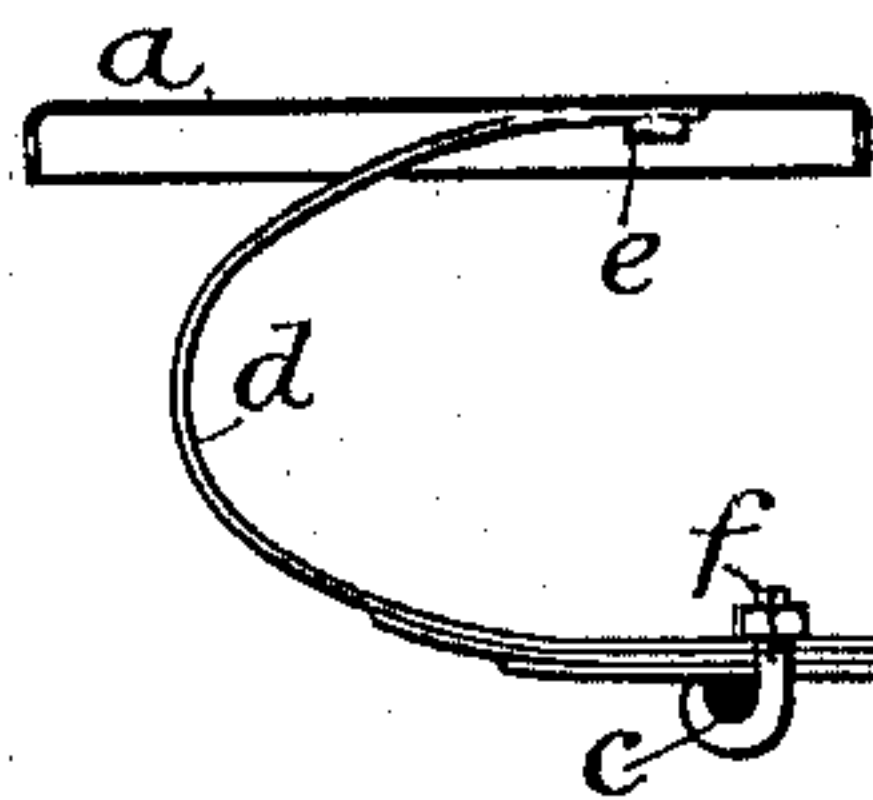


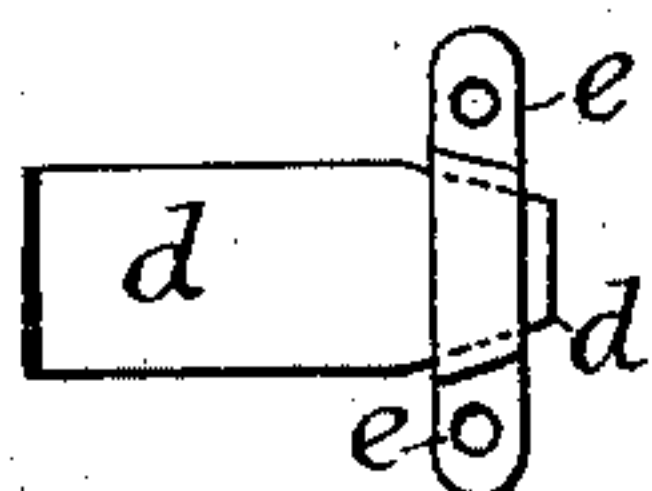
Fig. 7.



Witnesses:

F. B. Keefe
Geo. W. Rea

Fig. 8.



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UNITED STATES PATENT OFFICE.

WALTER CLIFFORD, OF LONDON, ENGLAND.

CYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 603,943, dated May 10, 1898.

Application filed January 5, 1897. Serial No. 618,046. (No model.) Patented in England September 11, 1896, No. 20,142.

To all whom it may concern:

Be it known that I, WALTER CLIFFORD, a subject of the Queen of Great Britain and Ireland, residing at London, England, have invented new and useful Improvements in Cycle-Saddles, (for which I have obtained a patent in Great Britain, dated September 11, 1896, and numbered 20,142,) of which the following is a specification.

10 This invention relates to an improved cycle-saddle (of the ordinary or peaked type) formed of two corresponding parts or halves situated side by side and connected together and to their supporting-springs in such a manner
15 that either of them can move independently of the other to adjust itself to the movements of the rider, thus overcoming the anatomical objections to peaked saddles as usually constructed.

20 In order that my invention may be readily understood, I will describe the same fully with reference to the accompanying drawings, in which—

25 Figure 1 is a plan of the saddle-plates or seat with the pad or cover removed. Fig. 2 is an under side view of the same. Figs. 3 and 4 are side and rear elevations, respectively, with the pad or cover attached. Fig. 5 is a similar view to Fig. 4, showing the saddle in a position it would assume when depressed by the action of the rider in working the machine. Figs. 6, 7, and 8 show detail views of a certain part of the improved saddle.

35 According to my invention the two corresponding similar and equal parts or halves $a a'$ of the saddle-plate or seat are formed of sheet metal, preferably with turned-down edges or rims, and are connected near their front and rear ends by lugs or arms $b b'$, pivoted together by screw-pins and nuts, so forming hinges. Integral with these arms are small plates $b^2 b^3$, bent at right angles there-
40 to to enable said arms to be firmly secured by riveting or otherwise to the under side of the saddle-plates. Each part or half of the saddle, also on its underside, is provided with a longitudinal spring $c c'$, preferably coiled at its front and rear ends and terminating in
45 hooks $c^2 c^3$, by means of which they are secured or sprung into holes in the arms $b b'$, so as to form a pivotal connection with the

plates constituting the saddle. In addition to these springs I provide a transverse spring d , of **C** or bow shape, which I arrange near the rear of the saddle and on the under side thereof, such spring being common to both parts or halves and adapted to further support them, while permitting their up or down movement. Said spring d is arranged to engage with its two ends into loops e , secured to the under side of the plates $a a'$, and is prevented from disengagement or lateral movement by cutting away the edges at such ends, as shown in Fig. 8.

65 The longitudinal springs $c c'$ pass underneath the transverse spring d and are connected to the latter by hooks f , having screw-threaded ends and nuts for tightening the parts together, thus insuring great flexibility and steadiness for the saddle.

The parts or halves $a a'$ are each provided with a pad or cover g , riveted to the edges or rims of said halves, and the padding or stuffing material is by preference placed directly upon such parts or halves. The pads are connected by a flexible web h , which is preferably provided with perforations for ventilating purposes. This web may either consist of a separate strip sewed to the pads g or it may be in one and cut out with the covering material, in which latter case it will be advantageous to stitch additional strips g' inside that part of the cover for securing the latter to the rim of the parts or halves $a a'$. The object of this flexible web is to enable the two parts or halves of the saddle to yield independently of each other to the movements of the legs of the rider, to prevent perineal pressure, and to afford ventilation. When the saddle is in its normal position, as indicated by Fig. 4, the web h folds down between the two parts $a a'$, but stretches out somewhat, as indicated by Fig. 5, when the said parts are depressed.

95 i is a saddle-clip of any ordinary construction, in which the longitudinal springs $c c'$ are held and also by which the saddle is secured in position on the **T** or **L** pillar of the machine.

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

1. A cycle-saddle divided longitudinally into

two similar and equal parts or halves pivotally connected together and supported by longitudinal springs, and by a transverse spring common to both parts or halves, substantially
5 as and for the purposes described.

2. In a cycle-saddle, the combination with a seat divided longitudinally into two equal parts or halves, of a spring arranged longitudinally under each said part or half and pivotally connected near the peak and rear thereto, and a transverse spring arranged beneath said parts or halves and adapted to support the same in their up or down movements, substantially as described.

15 3. In a cycle-saddle, the combination with a seat divided longitudinally into equal parts or halves, of a spring arranged longitudinally under each said part or half and pivotally connected near the peak and rear thereto, a
20 transverse spring arranged beneath said parts or halves to support them in their movements, and means for securing the said springs together to cause them to work in unison, substantially as described.

25 4. In a peaked cycle-saddle, the combination of two independent parts or halves, means for connecting the same, longitudinal springs to which said parts or halves are pivotally connected near their inner or adjacent
30 edges, and a transverse spring for permitting said parts to move up or down so as to accommodate themselves to the movements of the rider, substantially as described.

35 5. In a cycle-saddle, the combination of two independent parts or halves, means for connecting the same, longitudinal springs to which said parts or halves are pivotally connected near their inner or adjacent edges, a

transverse spring for permitting said parts to move up or down so as to accommodate themselves to the movements of the rider, and a
40 flexible web attached along its edges to the said saddle parts or halves, and having its middle portion normally lying between and depending below the saddle parts to provide
45 for sufficient play of the latter, substantially as described.

6. In a peaked cycle-saddle having a seat divided longitudinally into equal parts or halves and hinged together by suitable lugs
50 or arms secured to said halves, the combination therewith of longitudinal springs pivotally connected to each of said parts and terminating in hooks at front and rear adapted to engage in holes formed in the lugs or arms
55 of the pivotal or hinged connections of the saddle parts or halves, substantially as described.

7. In a peaked cycle-saddle, the combination of two equal and similar parts or halves
60 provided with hinges for securing the same together, longitudinal springs pivotally connected to said parts or halves near their inner or adjacent edges, a transverse spring for supporting the said parts or halves in their up
65 and down movements, and means for securing the extremities of the transverse spring to the halves of the saddle, substantially as described.

In witness whereof I have hereunto signed
70 my name in the presence of two subscribing witnesses.

WALTER CLIFFORD.

Witnesses:

H. ASHLEY NORRIS,
W. M. HARRIS.