

(No Model.)

T. J. KIRKPATRICK.
BICYCLE SADDLE.

No. 605,689.

Patented June 14, 1898.

Fig. 1

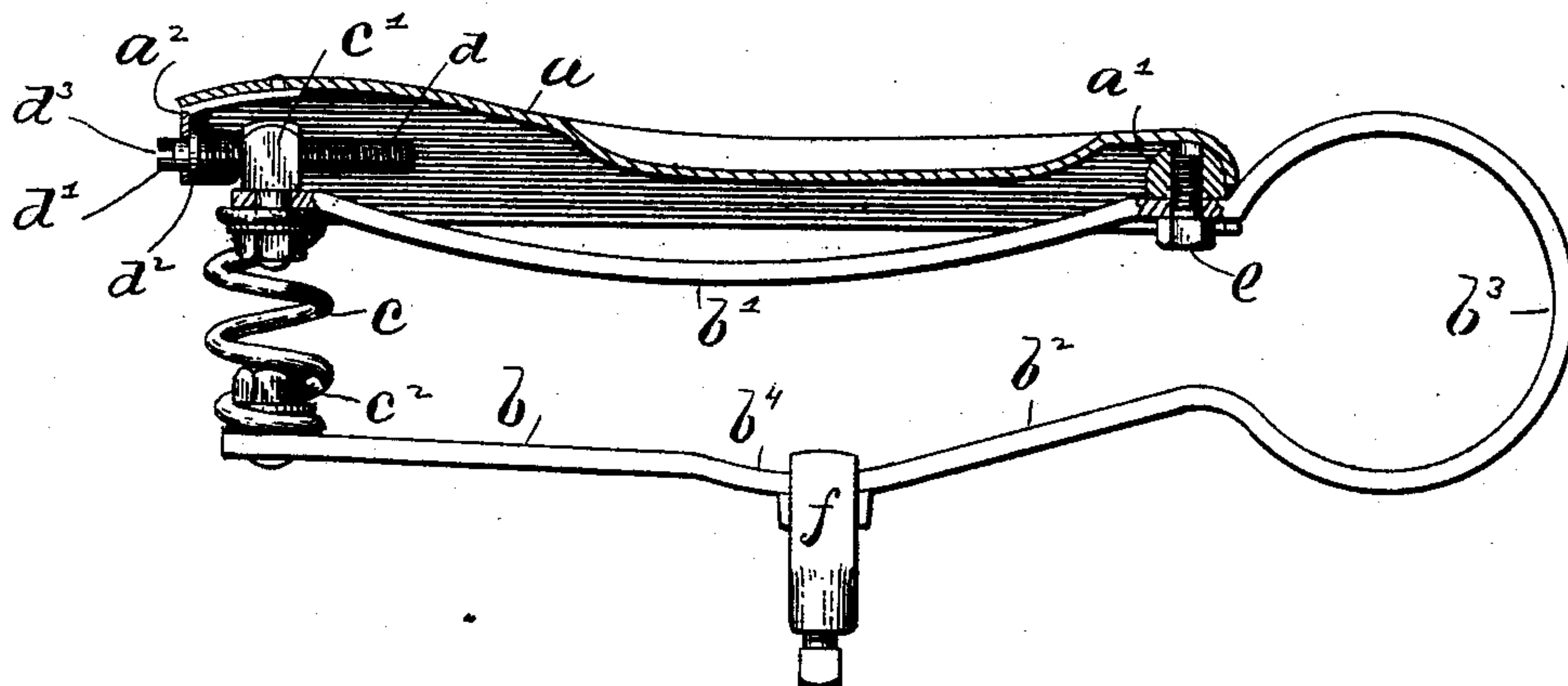
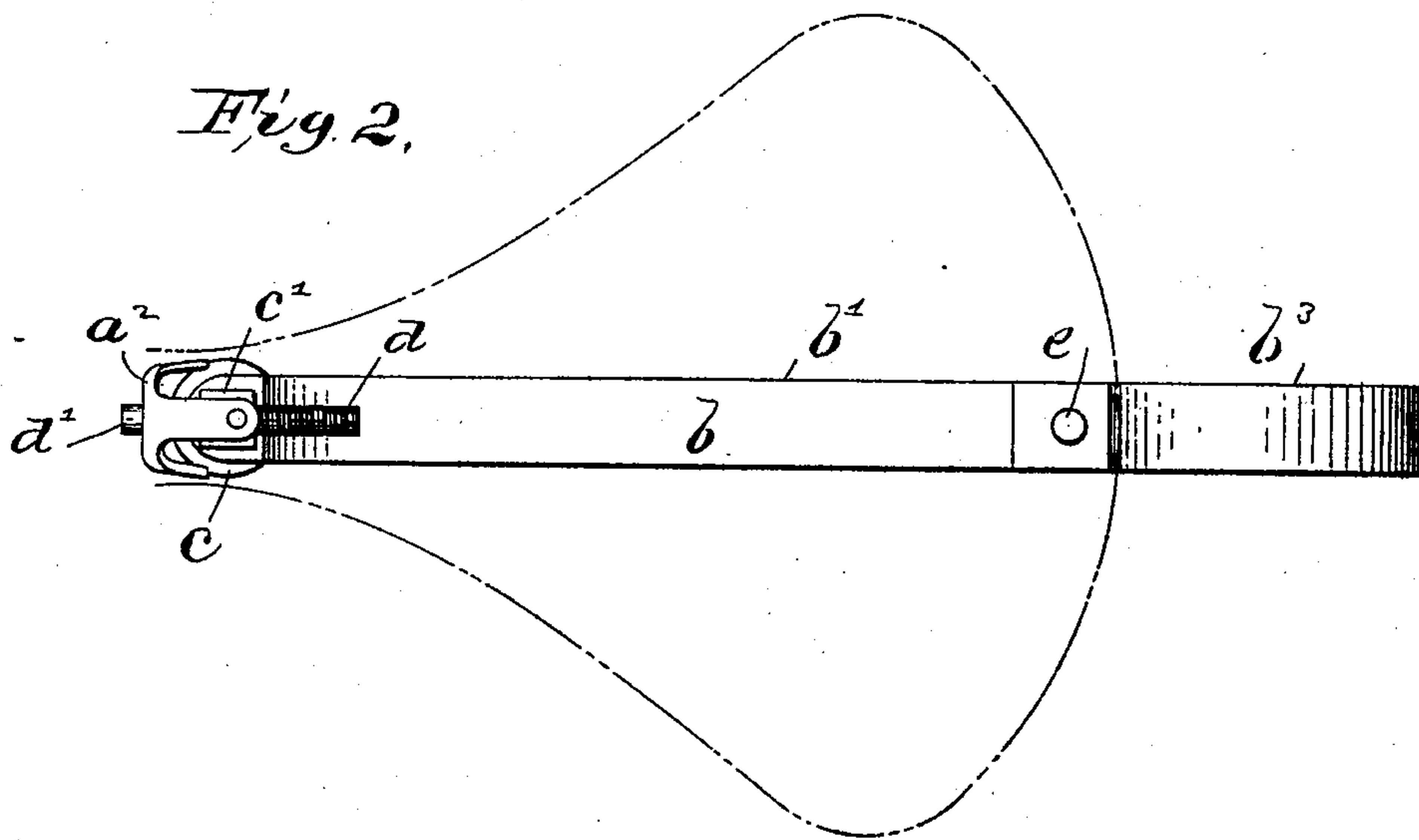


Fig. 2.



Witnesses

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By his Attorney

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UNITED STATES PATENT OFFICE.

THOMAS J. KIRKPATRICK, OF SPRINGFIELD, OHIO.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 605,689, dated June 14, 1898.

Application filed July 15, 1897. Serial No. 644,739. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. KIRKPATRICK, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Bicycle-Saddles, of which the following is a specification.

My invention relates to bicycle or velocipede saddles; and the object of my invention is to provide a saddle of the suspension type which embodies a spring-frame capable of a vertical vibration and at the same time having a soft or yielding pommel. I attain this object by the construction shown in the accompanying drawings, in which—

Figure 1 is a side elevation, with the seat in section, of a device embodying my invention. Fig. 2 is a plan view of the same, showing the seat portion in dotted lines.

Like parts are represented by similar letters of reference in both views.

In the accompanying drawings, *a* represents a flexible seat, preferably of leather, provided at the rear with a suitable cantle *a'* and at the front with a hook or clip *a''*. The saddle-frame consists, preferably, of a single flat bar of metal *b*, which is formed into the shape shown, so as to embody two flat plates *b'* *b''*, which, while not of the identical formation, are nevertheless substantially parallel one with the other and are joined at the rear by the circular spring portion *b''*, the upper and lower parts of which extend above and below the respective plates *b'* *b''*, or that portion thereof which joins the circular spring portion *b''*, so that the connecting portion between the plates *b'* *b''* and the spring portion *b''* stands within the circumference of the spring portion or on lines which if continued parallel would form secants to the circle or circumference of the spring portion.

The plates *b'* *b''* are connected together at the front ends by a coil-spring *c*, the ends of which are connected to the respective ends of the plates *b'* *b''* by bolts *c'* *c''*. The bolt *c'* is preferably perforated at its head, which perforation is screw-threaded and adapted to receive a screw-threaded adjusting pin or rod *d*, having a head *d'* and a collar *d''*, the head *d'* being adapted to project through the opening in the hook or clip *a''*, which rests against the collar *d''*, the head *d'* being also prefer-

ably provided with a slot *d'''* to receive a screw-driver by means of which the rod may be turned so as to draw the collar *d''* against the hook *a''* and thus serve to adjust the flexible seat on the plate *b'*, the rear end of said seat being also secured to said plate *b'* by means of a bolt or screw *e*, which passes through the plate *b'* near the point where it joins the spring portion *b''* and is screwed into the cantle *a'*. It will be seen that by this construction the plate *b'* forms substantially the saddle frame or tree, while the plate *b''* forms the supporting-base, to which the saddle proper is connected by means of the spring portion *b''* and the coil-spring *c*. The plate *b''* is preferably formed with a curved portion *b'''*, to which a clip *f* is applied, which clip is of the usual construction and adapted to secure the saddle to the saddle-post of the ordinary velocipede or bicycle, the curved portion serving the usual purpose of adjusting the inclination of the saddle.

By having the spring portion *b''* of this saddle-frame *b*, and the substantially parallel connecting parts which form the saddle frame or tree and the supporting-base, respectively, and having the coil-spring between the free ends of these parts and at the front or pommel end of the saddle, I provide a suspension-saddle which is capable of a vertical movement and which at the same time has no projecting portion at the front, but has a flexible spring capable of a large amount of compression, which will permit the pommel end of the saddle to be depressed so as to get away from the rider in the event of meeting sudden obstructions, with the weight of the rider well forward.

The saddle thus described is not only simple in construction, but it furnishes an extremely easy spring suspension-saddle for the rider who sits upright and brings his weight equally on the two springs. At the same time it furnishes a saddle having a flexible pommel with no obstructions or projections in front of the same, which pommel will yield suddenly in meeting obstructions, and thus furnishes a spring-saddle especially easy to the rider who leans forward and brings his weight on the pommel of the saddle.

Having thus described my invention, I claim—

1. The combination in a saddle such as described having a flexible seat, of a spring-frame formed of two substantially parallel plates connected by a circular body which
5 lies substantially in the same vertical plane with both of said plates but which projects above and below the points of connection with said plates, and a coil-spring connecting the
10 free ends of said plates, said coil-spring being arranged beneath the pommel end of said seat, substantially as specified.

2. The combination with the flexible seat, a spring-frame having two substantially parallel plates each forming the entire saddle-
15 tree and supporting-base, respectively, said plates being formed integral with a circular

spring portion, a cantle for said seat secured to one of said plates adjacent to said circular body, and a hook or clip adjustably connected to the opposite end of said plate, and a flex- 20
ile seat extending from said hook or clip to said cantle, and a coil-spring connecting the free ends of said plates, said coil-spring being arranged beneath the pommel end of said
25 saddle, substantially as specified.

In testimony whereof I have hereunto set my hand this 3d day of July, A. D. 1897.

THOMAS J. KIRKPATRICK.

Witnesses:

CHARLES I. WELCH,
G. M. GRIDLEY.