(No Model.)

C. H. VEEDER.

Saddle.

No. 239,629. Patented April 5, 1881.

FIG. I.

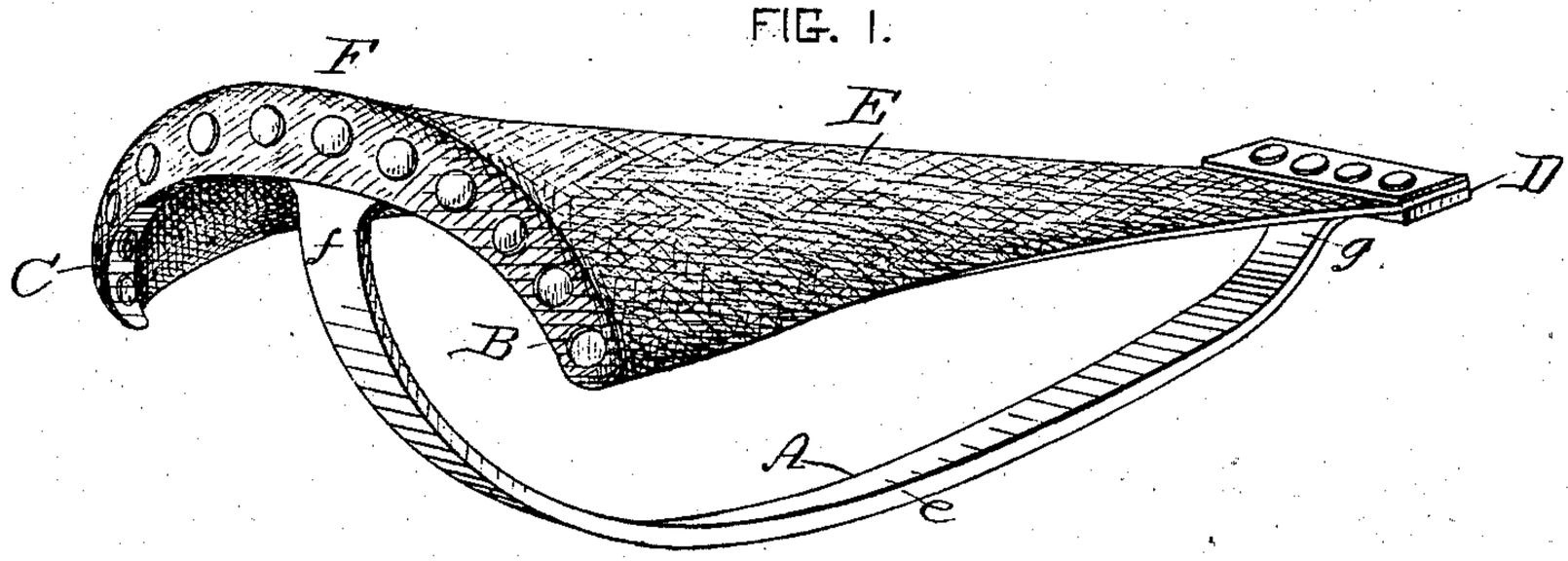
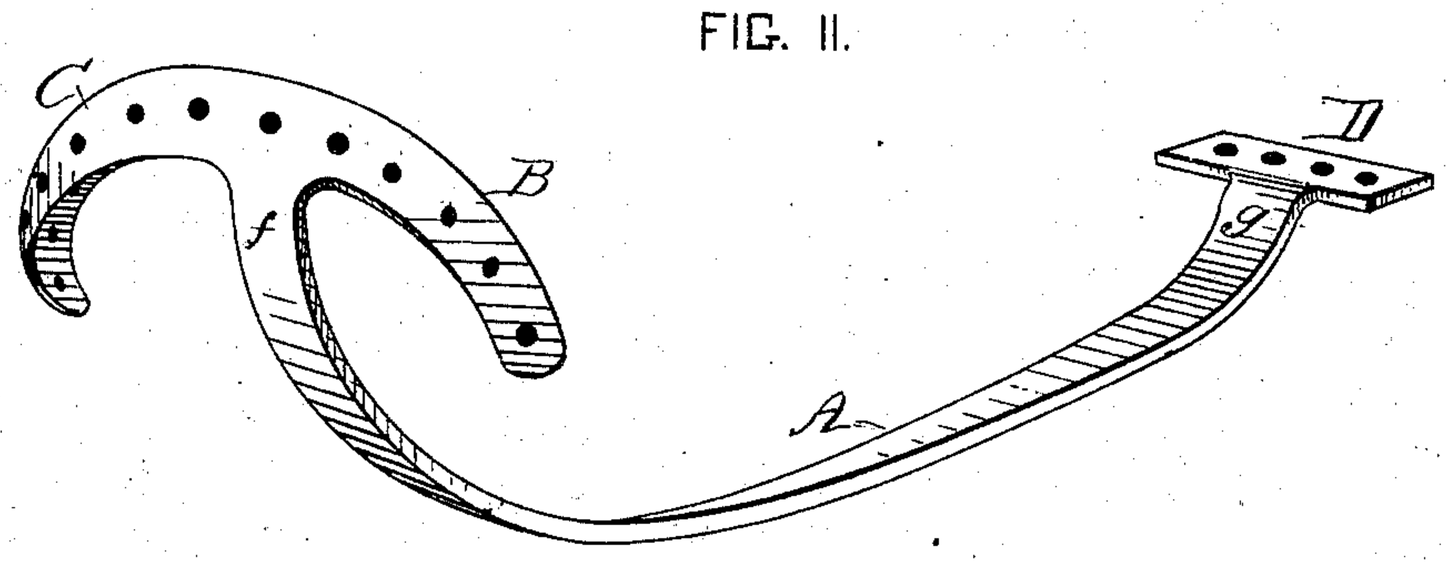


FIG. II.



WITNESSES:

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INVENTOR

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UNITED STATES PATENT OFFICE.

CURTIS H. VEEDER, OF PLATTSBURG, NEW YORK.

SADDLE.

SPECIFICATION forming part of Letters Patent No. 239,629, dated April 5, 1881.

Application filed August 28, 1880. (No model.)

To all whom it may concern:

Be it known that I, CURTIS HUSSEY VEEDER, of Plattsburg, in the county of Clinton and State of New York, have invented a new and useful Improvement in Saddles; and I do hereby declare the following to be full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure I is an elevation, in perspective, of a saddle embodying my invention. Fig. II is a similar view, the leather or seat having been removed.

Like letters refer to like parts wherever they occur.

My invention relates to the construction of that class of saddles known as spring-saddles, and while generally applicable to all riding-saddles, is especially so to saddles for bicyles, velocipedes, &c.

The object to be obtained is to suspend the seat, that it can yield readily, both longitudinally and laterally, to accommodate itself to the rider and compensate for jars, &c., and also to avoid the use of springs beneath the seat, thus obtaining a simple, durable, and easy-riding saddle.

To this end it consists, mainly, in a frame consisting of a curved longitudinal central carrying-spring, which terminates in curved transverse arms rigidly secured to the longitudinal central carrying-spring, the extremities of the transverse arms being free, so as to be capable of spring-action, and the leather or seat being attached in front to the front end of the longitudinal central carrying-spring, and at the rear to the curved spring-arms, whereby the seat may yield both longitudinally and laterally, as will hereinafter more fully appear.

I will now proceed to describe my invention more specifically, so that others skilled in the art to which it appertains may apply the same.

In the drawings, A indicates the central longitudinal carrying-spring, which is preferably of flat spring-steel, and is bent or curved so as to present its concavity upward or toward the seat of the saddle. To the rear end of this central spring, A, is secured transversely a curved cross-spring forming the arms B C, this spring being likewise made of flat spring-steel, and arranged with its concavity to the front, as shown in the drawings.

The connection between the longitudinal curved spring A and the arms B C should be rigid, and the ends of the arms B C should be practically unconfined, in order that their spring-action may be obtained.

The front end of the spring A, or that part corresponding to the pommel of the saddle is provided with a short cross-piece, D, for the attachment of the leather or seat.

E indicates the seat, which may be of leather, canvas, or other suitable material. This seat is stretched across the longitudinal spring A and secured at the front to the cross-piece D, and at the rear to the curved spring-arms B C.

I have found good results secured by making the spring-frame of the following width and thickness of metal, but do not propose or intend to be limited thereto. Longitudinal central spring, A, may be one and one-fourth by three-sixteenths inch at the center *e*, tapering to seven-eighths by three-sixteenths of an inch at the back end, *f*, and to three-fourths by one-eighth of an inch at the front end, *g*. The arms or cross-piece B C may be five-eighths by one-eighth of an inch at the center, tapering to one-half by three thirty-seconds of an inch at the extremities, which will allow of a five thirty-seconds of an inch hole for attaching the leather E by rivets or otherwise.

In case the saddle is to be used as a general riding-saddle, it may be finished below the spring-frame in manner well known to manufacturers of spring-seat saddles, excepting that the extremities of the arms B C must not be so confined as to cripple their spring-action; but in case it is to be used with a velocipede or bicycle the longitudinal spring A may be clamped to the "back-bone" of the bicycle, and the saddle will require no other finish than that shown in the drawings.

The operation of the devices will be as follows: When weight is put on the saddle E, the ends D F of the longitudinal spring A spring up or approach, causing the seat to accommodate itself to the weight of the rider and form a perfect spring-seat. When the occupant of the saddle straightens out his legs the spring-arms B C yield or approach, permitting the

leather E to accommodate itself to the leg, at the same time giving a perfect support.

It will be seen from the foregoing description that the construction of the spring-frame is such that, while fully accomplishing all the functions common to the construction now used for spring-saddles, it has the further advantages of enabling the seat to accommodate or adapt itself perfectly, both laterally and longitudinally, to the rider, and is extremely simple and durable.

Where the above-described saddle is used with a bicyle, the seat is at least two (2) inches lower than the ordinary seat, whereby a wheel four (4) inches more in diameter may be used and proportionately greater speed obtained.

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

In a spring-saddle, the combination of the longitudinal curved spring provided with the curved spring-arms rigidly attached thereto at its rear end, the extremities of the spring-arms being unconfined, and the suspended seat secured at the front to the end of the longitudinal curved spring and at the rear to the spring-arms, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand.

CURTIS HUSSEY VEEDER.

Witnesses:

GEO. W. WATSON,

A. GUIBORD.