

J. SHIRE.
Velocipede.

No. 216,231.

Patented June 3, 1879.

Fig. 1

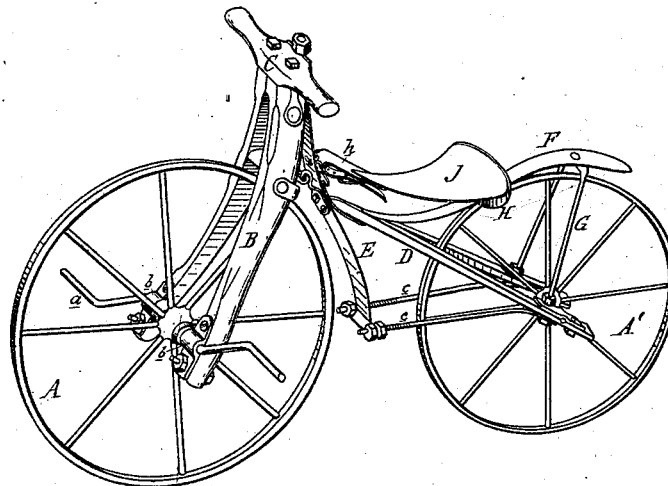
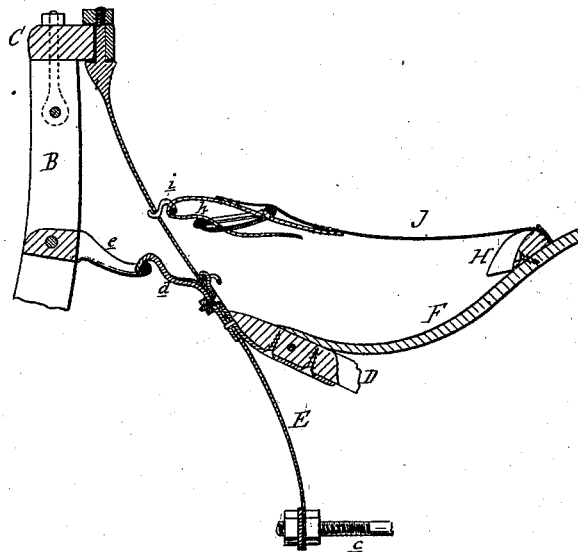


Fig. 2



Attest:

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UNITED STATES PATENT OFFICE.

JOHN SHIRE, OF DETROIT, MICHIGAN.

IMPROVEMENT IN VELOCIPEDES.

Specification forming part of Letters Patent No. **216,231**, dated June 3, 1879; application filed May 6, 1879.

To all whom it may concern:

Be it known that I, JOHN SHIRE, of Detroit, in the county of Wayne and State of Michigan, have invented an Improvement in Velocipedes, of which the following is a specification.

The nature of my invention relates to an improvement in the construction of that class of velocipedes known as "bicycles;" and the invention consists, first, in the peculiar construction and application of the spring; second, in the construction and adaptation of the seat, so that it is brought into close proximity to the driving-wheel, thus allowing a wheel of greater diameter to be used than when constructed in the ordinary manner; and in the peculiar construction and arrangement of the various parts, all as more fully herein-after described.

Figure 1 is a perspective view of my improved velocipede. Fig. 2 is a sectional view through the standard, seat, and spring, enlarged.

In the accompanying drawings, which form a part of this specification, A represents the forward or driving wheel, mounted upon a double-crank shaft, *a*, journaled in bearings *b* at or near the lower end of the forked standard B, across the top of which is secured the head or handle C.

The rear wheel, A', is suitably journaled between the ends of the bifurcated frame D. The forward end of this frame or standard is rigidly secured to the metallic spring E at or about the center thereof, the lower end of said spring being connected to the frame or standard D by means of the brace-rods *c*.

The upper end of the spring is pivoted in any proper manner to the head of the standard B.

The spring is still further connected to the forward standard by means of the hook *d*, which engages with an eye, *e*, secured to the standard, and projecting rearward therefrom for that purpose.

Secured to the top of the frame D, and extending rearward over the wheel A', is a fender, F, the rear end of which rests upon and is se-

cured to a forked frame or standard, G, which rises from the rear end of the frame D. To the top of this fender F is rigidly secured a seat-block, H, to which is secured one end of the adjustable hammock-seat J, the opposite end of which is provided with a strap and buckle, *h*, to engage with a loop, *i*, projecting from the rear face of the spring.

By this construction, it will readily be seen that the elasticity is derived entirely from the metallic spring E, and that the torsional strain upon the rear frame incident to the ordinary manner of construction is entirely avoided, while at the same time a much more elastic and yielding support or seat for the operator is obtained.

It will further be seen that by the use of an adjustable hammock-seat, as described, the seat may be brought into closer proximity to the driving-wheel than when constructed in the ordinary manner, which will admit the use of a driving-wheel of greater diameter.

What I claim as my invention is—

1. In a velocipede, the combination, with the driving-wheel standard B and seat-frame D, of the leaf-spring E, connecting the said standard and frame, substantially as described and shown.

2. In a velocipede, the adjustable hammock-seat J, substantially as set forth.

3. The combination, with the forward standard driving-wheel of a velocipede, of the spring E, standard D, and suitable braces *c*, substantially as described.

4. A velocipede consisting of the driving-wheel A, standard B, head C, spring E, pivoted to the head of the standard B, and connecting said standard with the frame D, wheel A', hammock-seat J, adjustably secured to the spring E and to the block H, fender F, resting upon the standards G, and the braces *c*, constructed, arranged, and operating substantially as and for the purposes set forth.

JOHN SHIRE.

Witnesses:

H. S. SPRAGUE,
CHAS. J. HUNT.