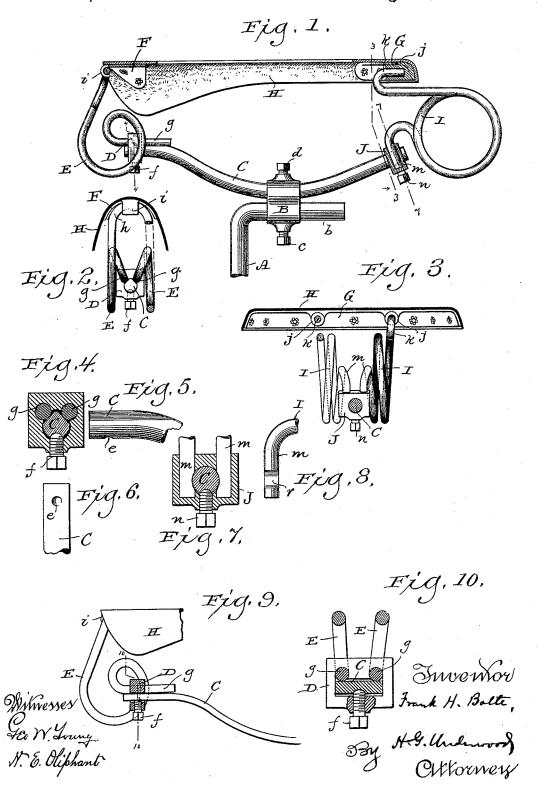
## F. H. BOLTE. VELOCIPEDE SADDLE.

No. 457,964.

Patented Aug. 18, 1891.



## United States Patent Office.

FRANK H. BOLTE, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO PARKER H. SERCOMBE, OF SAME PLACE.

## VELOCIPEDE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 457,964, dated August 18, 1891.

Application filed April 22, 1891. Serial No. 389,888. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. BOLTE, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Velocipede-Saddles; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings, and subse-

quently claimed.

In the drawings, Figure 1 represents a side elevation of a velocipede-saddle, partly in section, and embodying my improvements; Fig. 2, a front elevation of the same; Figs. 3 and 4, detail sections respectively taken on lines 3 and 4 4 of Fig. 1; Figs. 5 and 6, detail views of a portion of one form of reach forming part of the saddle; Fig. 7, a detail section on line 7 7 of Fig. 1; Figs. 8, a side view of a portion of a rear spring, shown as part of said 25 saddle; Fig. 9, a detail side elevation, partly in section, and illustrating another form of reach; and Fig. 10, a section taken on line 10 10 of Fig. 9.

Referring by letter to the drawings, A rep30 resents a velocipede-saddle post, and adjustably secured on the horizontal arm b of this post, by means of a set-screw c, is the usual block B, that engages the saddle-reach C, the latter being adjustably held in said block by

35 means of another set-serew d, as shown in Fig. 1. Adjacent to its front end the under side of the saddle-reach C is provided with a socket e for engagement with a set-screw f, that has its bearing in a cross-head D, slipped onto 40 said saddle-reach. The cross-head is provided

said saddle-reach. The cross-head is provided with longitudinal openings or guides that engage the lower rearwardly-extended portions g of springs E, these springs being preferably volute in form and having said portions g
 thereof offset from the coils, in order that the

5 thereof offset from the coils, in order that the latter may clear said cross head, as best illustrated in Fig. 2, and by this construction and arrangement of springs I obtain an increase of elasticity.

The volute springs E are preferably made I

from a single rod so bent as to form a yoke h, that engages a hook i on the pommel F of the saddle, this pommel and the cantle G being connected by a seat H, of leather or other suitable material, while at the same time said 55 cantle is connected in some manner to the rear portion of the reach C, above described, it being preferable to employ coil-springs I

for this purpose.

As best illustrated in Fig. 4, the longitudi- 6c nal openings in the cross-head D communicate with the reach-opening of the latter, and consequently the portions g of the springs E in said cross-head impinge against the saddle-reach C, the latter, if made from a round 65 rod, being preferably slabbed where it opposes said portions of the springs. The setscrew f being turned in the proper direction, the cross-head D is drawn down to bind those portions of the springs therein firm against 70 the saddle-reach C; but in case it is desirable to adjust said springs in order to take up slack in the seat H said set-screw is run down far enough to loosen said cross-head, but not far enough to come out of engage- 75 ment with the socket e in said saddle-reach, after which the aforesaid springs are driven forward to attain the desired result, there being enough friction between the parts to prevent these springs from slipping back in 80 the intervals between blows of a hammer or other tool by which the driving operation is accomplished.

By the foregoing description it will be understood that the cross-head D is always held 85 at one place on the saddle-reach C, and that the pommel-supporting springs E are adjusted in said cross-head instead of being rigidly connected thereto and movable therewith, as is ordinarily the case in that class of 90 devices to which my invention relates.

If at any time the cross-head is to be detached from the saddle-reach, the set-screw f must be run down out of the socket e in said saddle-reach, and while I have thus far described the latter as a stiff rod it may be in the form of a spring-plate, as shown in Figs. 9 and 10, without departure from the spirit of my invention.

The cantle G of the saddle is shown as roo

preferably provided with sockets *j*, longitudinal of said saddle, and the upper ends of the coil-springs I are recurved toward the rear to form hooks *k*, that engage the sockets, as shown in Fig. 1. By means of the construction just described the draw of the saddle-seat is always against the hooks at the upper ends of the springs I, and consequently the latter are prevented from becoming distengaged from said cantle by the weight of the rider on said saddle-seat or the taking up of slack in this seat by the forward adjustment of the pommel F and its supporting-springs.

The lower ends of the cantle-supporting springs I are bent to form hooks m for engagement with vertically-disposed sockets in another cross-head J, the latter being provided with a set-screw n, that is run up in a socket in the saddle-reach C, before described.

The vertically-disposed sockets in the rear cross-head communicate with the reach-opening of the latter, and the lower hook ends of the springs I are ground out to form notches r, that engage the saddle-reach, as best illustrated in Figs. 7 and 8, whereby in the construction and arrangement of parts just described said springs are prevented from being accidentally disengaged from said cross-head.

The seat of a saddle such as I have described will yield only in a longitudinal and vertical direction, as the general construction and arrangement of the parts prevent lateral rocking of said seat on the reach—a fault common to many velocipede-saddles now in use.

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

A velocipede-saddle having its reach provided with a clamping cross-head stationary in a longitudinal direction and furnished with longitudinal guides that communicate with its reach-opening, in combination with pommel-supporting springs having extensions that engage the guides in the cross-head to impinge against said reach, substantially as set forth.

2. A velocipede-saddle having its reach pro-

vided with a clamping cross-head stationary in a longitudinal direction and furnished with 50 longitudinal guides that communicate with its reach-opening, in combination with voluted pommel-supporting springs having offset portions that engage the guides in the cross-head to impinge against said reach, substantially as set forth.

3. A velocipede-saddle comprising a reach, a clamping cross-head engaging the same and provided with longitudinal guides that communicate with the reach-opening, springs having portions thereof engaging the guides in the cross-head to oppose said reach, and a seat having its pommel supported by the springs and its cantle connected to the aforesaid reach, substantially as set forth.

4. A velocipede-saddle comprising a reach, a front cross-head engaging the reach and having longitudinal guides that communicate with the reach-opening therein, a rear cross-head also engaging said reach and provided 70 with vertical sockets in communication with its reach-opening, springs that engage the guides in the front cross-head, other springs having notched lower ends engaging the sockets in the rear cross-head, and a seat supported on the springs, substantially as set forth.

5. A velocipede-saddle comprising a reach having a cross-head provided with vertically-disposed sockets communicating with the reach-opening therein, coil-springs having hook-shaped and notched lower ends engaging said sockets and recurved upper ends, a seat having its cantle provided with sockets for the latter ends of the springs, and suitable means for connecting the pommel of the seat with said reach, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wis- 90 consin, in the presence of two witnesses.

FRANK H. BOLTE.

Witnesses:
N. E. OLIPHANT,
WM. KLUG.