

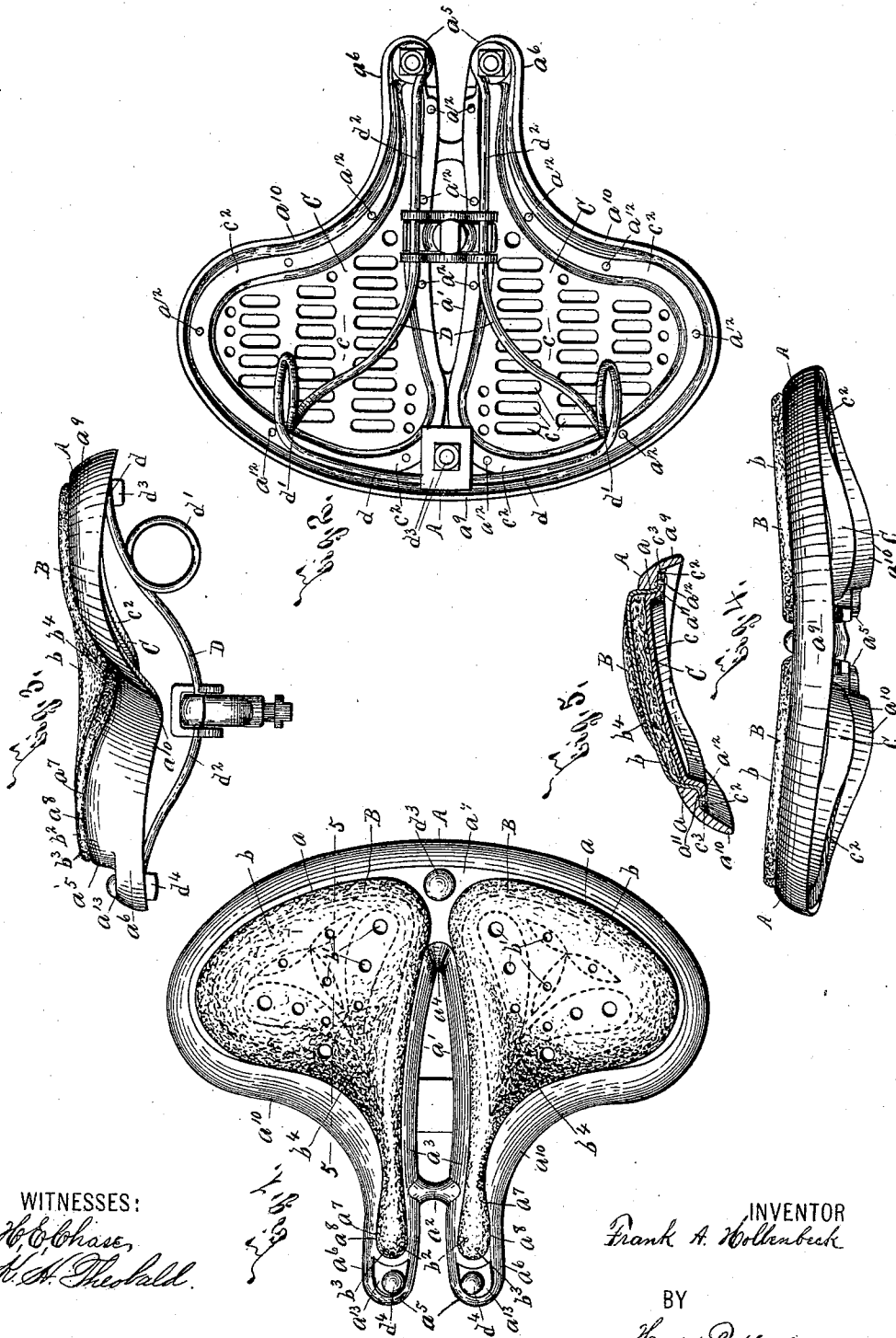
(No Model.)

F. A. HOLLENBECK.
SADDLE.

2 Sheets—Sheet 1.

No. 581,464.

Patented Apr. 27, 1897.



WITNESSES:

W. C. Chase,
N. H. Thobald.

INVENTOR

Frank A. Hollenbeck

BY

Wey & Parsons

ATTORNEYS

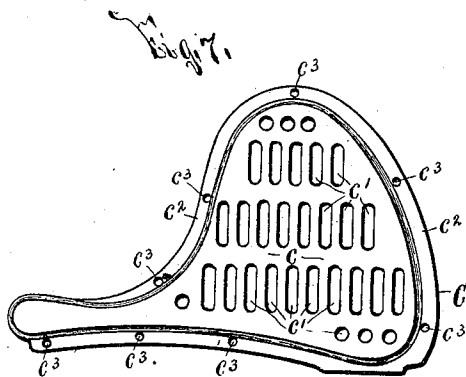
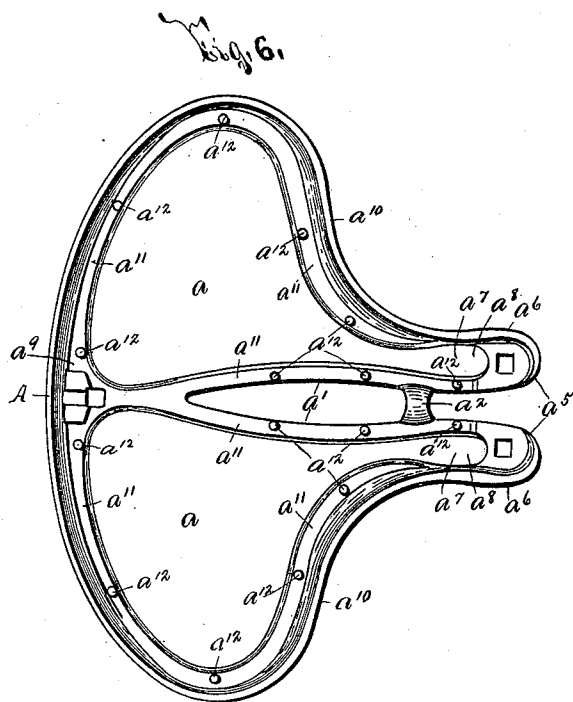
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F. A. HOLLENBECK.
SADDLE.

2 Sheets—Sheet 2.

No. 581,464.

Patented Apr. 27, 1897.



WITNESSES:

H. C. Chase
H. H. Thobald.

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Frank A. Hollenbeck

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UNITED STATES PATENT OFFICE.

FRANK A. HOLLENBECK, OF SYRACUSE, NEW YORK.

SADDLE.

SPECIFICATION forming part of Letters Patent No. 581,464, dated April 27, 1897.

Application filed November 29, 1895. Serial No. 570,340. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. HOLLENBECK, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Saddles, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an improved saddle particularly applicable for use on bicycles and other vehicles, and has for its object the production of a device which reduces to a minimum the inconvenience, chafing, and injury to which a rider is ordinarily subjected; and to this end it consists, essentially, in the general construction and arrangement of the component parts of the saddle, all as hereinafter fully described, and pointed out in the claim.

In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figures 1, 2, 3, and 4 are respectively top and inverted plans and side and rear elevations of my improved saddle. Fig. 5 is a transverse section taken on line 5 5, Fig. 1; and Figs. 6 and 7 are respectively an inverted plan of the detached main or top frame of the saddle and top plan of one of the detached supplemental or bottom frames thereof.

My improved saddle consists of a main or top frame A, provided with an aperture, a pad mounted in the aperture, and a supplemental or bottom frame C, fixed to the frame A and engaged with the pad B for holding the same in operative position. The main frame A is usually constructed of comparatively rigid and light material, as aluminium, wood, &c., is formed with a depressed central portion and elevated sides, Fig. 4, and is preferably provided with separated apertures a , arranged side by side and having their sides inclined toward each other from their lower edges. Mounted in the apertures a are two pads B, and interposed between the pads is a substantially central and comparatively narrow aperture a' , extending from front to rear of the frame A and having a depressed front end wall a^2 and side and rear end walls a^3 a^3 a^4 , inclining upwardly from

each other. A suitable bifurcated horn a^5 , provided with laterally-flaring enlargements a^6 at the outer end of its top face, projects from the front of the body A, and the apertures a are formed with branches a^7 , extending lengthwise of said horn and provided with laterally-flaring enlargements a^8 in proximity to its outer end. The horn a^5 , and particularly the laterally-flaring enlargements thereof, afford considerable support to the rider, and the bifurcation of said horn and the aperture a' prevent injury to his overlying parts.

The pads B are formed of any suitable material, as felt, are usually provided with a top facing b , of leather or other similar substance, and are formed with perforations b' and arms b^2 , arranged in the branches a^7 of the apertures a , and provided with laterally-flaring enlargements b^3 . The portion of the frame A at the rear of the pads B consists of a comparatively narrow rib or bar a^9 , having upwardly-extending ends, Fig. 4, and the portions of said frame in front of the main parts of the pads B consist of laterally-extending bars a^{10} , arranged beneath the plane of the bar a^9 and preferably disposed in concave planes and curved or inclined downwardly from their rear edges.

The pads B are each preferably formed with concavities or grooves b^4 , extending forwardly from their rear portions toward the bars a^{10} and increasing in depth and width toward their front edges. The described conformation of the bars a^{10} and the pads B causes the saddle to closely fit the rider's body and enables his legs to move freely and naturally when propelling a bicycle or other vehicle.

As previously stated, my improved saddle is preferably provided with two pads, and consequently I preferably use two frames C, arranged side by side and preferably formed of substantially the same contour as the apertures a . Each frame is provided with an elevated central portion c , preferably formed of spring or yielding material and having perforations c' , aligned with some of the perforations b' , and depressed engaging shoulders c^2 , projecting laterally from its edges beneath corresponding shoulders a^{11} on the lower face of the frame A, extending laterally from the

apertures a . The pads B are supported on the perforated central portions of the supplemental or bottom frames C, and the edges of their top faces b are firmly clamped between the shoulders c^2 a^{11} , Fig. 5.

The frames C may be fixed to the frame A in any suitable manner, but are preferably provided with perforations c^3 , extending through the shoulders c^2 , for receiving lugs a^{12} , which are usually formed integral with the frame A, depend from the shoulders a^{11} , and are riveted to the under faces of the frames C.

The frame A is preferably supported by a spring D, consisting of a transverse bar d , arranged at the rear of the aperture a' , coils d' d' , projecting forwardly from the opposite ends of the bar d , and separated forwardly-extending arms d^2 , arranged on opposite sides of the aperture a' . The central portion of the bar d' is secured to the frame A by any suitable clamp d^3 , and the outer ends of the arms d^2 are secured by clamps d^4 to depressed shoulders a^{13} , projecting from the front ends of the branches or forks of the horn a^5 .

The operation of my improved saddle will be readily understood upon reference to the foregoing description and the accompanying drawings, and it will be particularly noted that it closely fits the rider's person, prevents forward slipping and undue perspiration, is particularly easy in use, and obviates chafing and injury. It is obvious, however, that the

exact detail construction and arrangement of the parts of this saddle may be considerably varied without departing from the spirit of my invention, and hence I do not herein specifically limit myself to such exact detail construction and arrangement.

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

In a bicycle-saddle, the combination with a rigid frame formed with apertures having forwardly-extending branches or extensions, supplemental frames arranged beneath the rigid frame and having their outer edges secured to the rigid frame and their central portions elevated and formed of yielding material, and pads permanently secured within the apertures and mounted upon the yielding central portions of the supplemental frames, said pads being provided with forwardly-extending arms arranged in said branches or extensions, substantially as and for the purpose set forth.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 25th day of November, 1895.

FRANK A. HOLLENBECK.

Witnesses:

E. A. WEISBURG,
K. H. THEOBALD.