

C. S. RUFF.
ADJUSTABLE AND COLLAPSIBLE AUTOCYCLE SEAT BACK.
APPLICATION FILED MAY 13, 1914.

1,113,833.

Patented Oct. 13, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

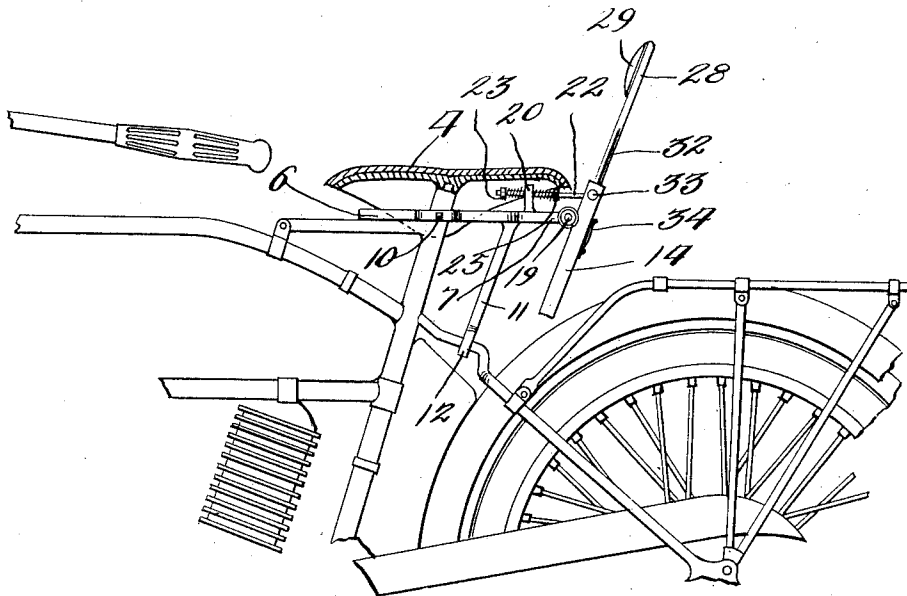
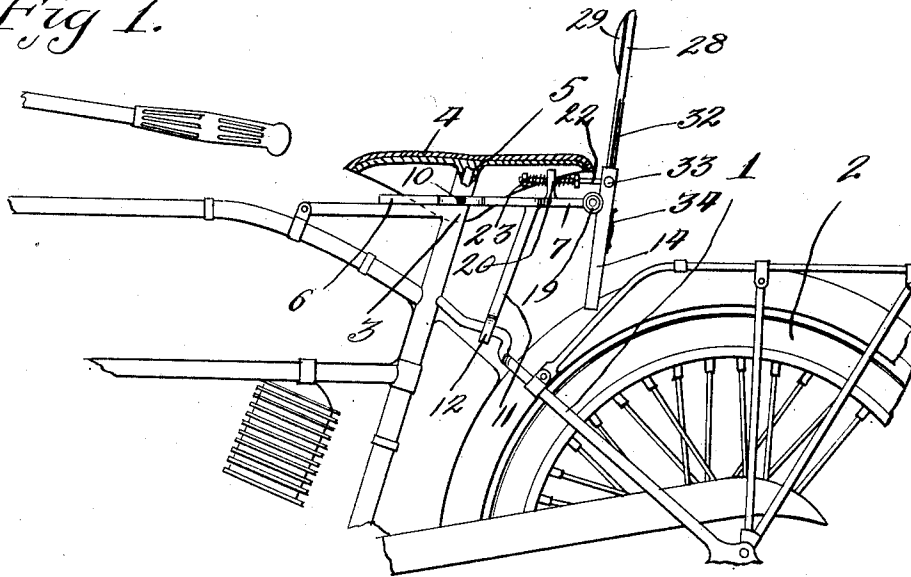


Fig. 2.

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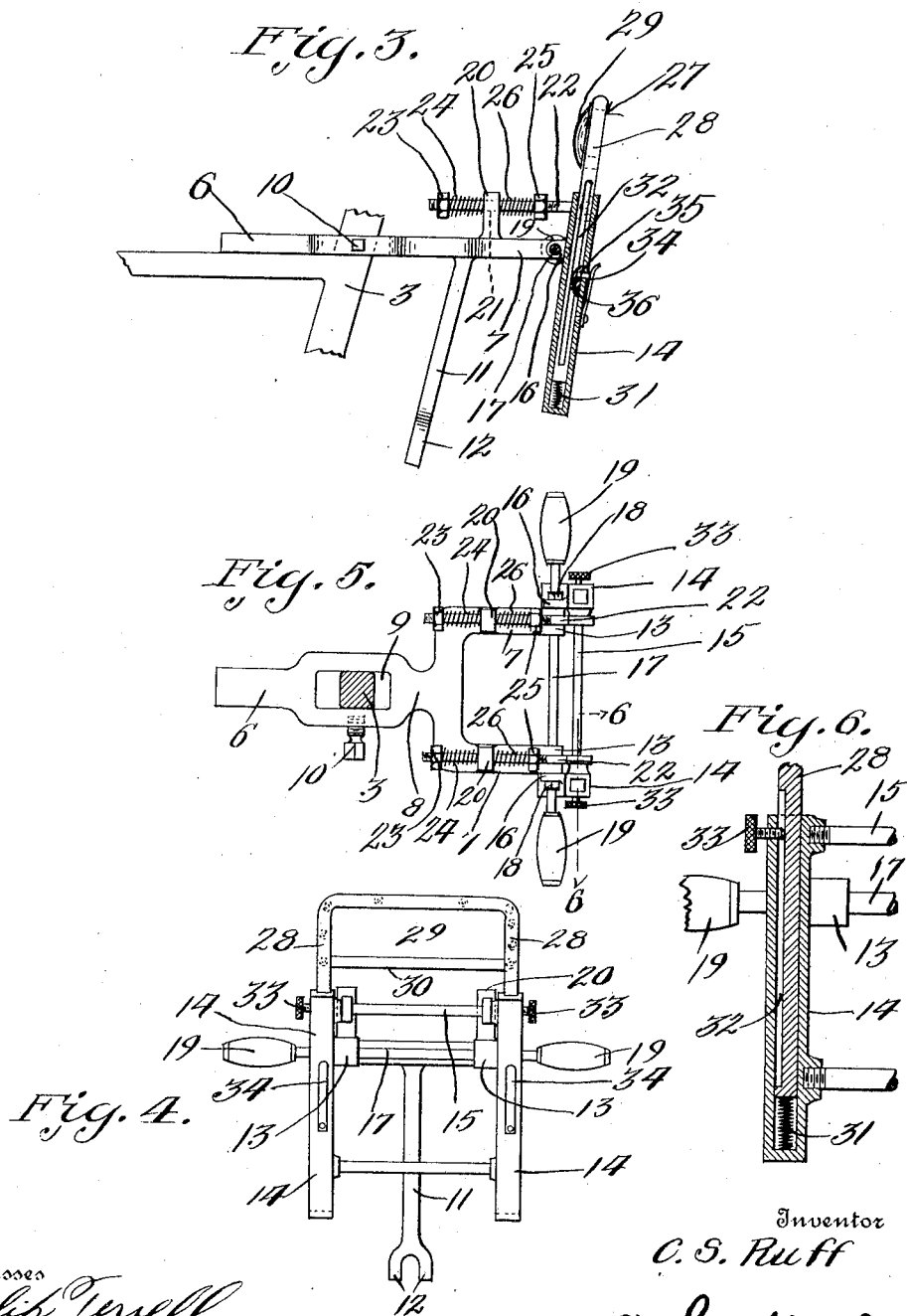
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UNITED STATES PATENT OFFICE.

CHRISTAIN S. RUFF, OF RIVERSIDE, NEW JERSEY.

ADJUSTABLE AND COLLAPSIBLE AUTOCYCLE SEAT-BACK.

1,113,833.

Specification of Letters Patent.

Patented Oct. 13, 1914.

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To all whom it may concern:

Be it known that I, CHRISTAIN S. RUFF, a citizen of the United States, residing at Riverside, in the county of Burlington and State of New Jersey, have invented a new and useful Adjustable and Collapsible Autocycle Seat-Back; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a new and useful auto cycle adjustable and collapsible seat back.

An object of the invention is to provide a simple and efficient structure of a device of this design having improved features of construction.

One of the features of the construction resides in the provision of a frame supported upon the seat post of the auto cycle, said frame including a supplemental frame hingedly connected to the first or dominant frame so as to swing backwardly and forwardly incident to the vibration of the auto cycle, said second frame or auxiliary frame comprising tubular members, in which the sides of the back telescope, so as to be adjusted at different heights.

In practical fields the details of construction may necessitate alterations, falling within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Figure 1 is a view in side elevation of the rear portion of an auto-cycle, showing the improved seat back as applied to the seat post, showing the back in a raised position. Fig. 2 is a view similar to Fig. 1 showing the back tilted against the action of springs. Fig. 3 is a view in side elevation and partly in section, showing the seat back lowered, and held lowered by a latch against the action of springs. Fig. 4 is a rear view of the seat back. Fig. 5 is a plan view of the supporting structure of the seat back. Fig. 6 is a sectional view on line 6—6 of Fig. 5.

Referring more especially to the drawings, 1 designates the rear portion of the frame of an auto cycle, or the like, which is of the usual construction as shown and provided with the rear wheel 2. Rising from the frame 1 is the usual seat post 3, on which

the seat 4 is mounted in the conventional manner, as shown at 5.

A dominant frame 6 is provided, which comprises the forks 7 extending rearwardly and the forward extension or portion 8, which is in the form of a rod having an eye 9, for the reception of the seat post 3, there being a set screw 10 threaded in the wall of the eye engaging the seat post, to hold the dominant frame in position, angularly to the seat post, or at right angles thereto. The eye 9 is a trifle larger in diameter than the diameter of the seat post in cross section, so as to allow for this angular adjustment. At the junction of the rod or extension 8 and the rearwardly extending forks 7, the dominant frame is provided with a downwardly extending projection 11, terminating at its lower end in a fork 12, which engages the frame 1 of the auto cycle. The rearwardly extending forks 7 terminate in eyes 13, as shown. The auxiliary frame comprises the side tubular members 14, which are rectangular in cross section, braced or reinforced relative to one another by the transverse rod 15. The tubular members 14 are provided with eyes 16, which are arranged to register with the eyes 13 at the rear ends of the forks 7, there being a rod 17 extending through said registering eyes, and on which rod are nuts 18 to prevent endwise movement of the same. This rod beyond the nut terminates in handles 19. By the provision of the rod it will be noted that the auxiliary frame is pivotally connected to the dominant frame. Rising upwardly from the forks 7 are lugs 20 having eyes 21, through which rods 22 extend, the rear ends of which are pivotally connected to the uppermost transverse brace 15. The forward ends of the rods 22 are provided with nuts 23, between which and the eyes 21 coil springs 24 are interposed. Interposed between the opposite sides of the eyes 21 and nuts 25 on the rods 22 are counterpoised springs 26. The nuts 23 and 25 may be adjusted, to regulate the action of the springs 24 and 26.

The seat back proper 27 comprises the side bars 28, the back rest 29, and a transverse brace 30. The side bars 28 are rectangular in cross section to correspond with and fit the tubular member 14, there being springs 31 interposed between the lower closed ends of the tubular members 14, and the lower

ends of the side bars 28, thereby acting to throw the seat back proper upwardly. One face of each side bar 28 is provided with an elongated groove 32, into which a thumb screw 33 extends, and with the extremity of the shank of which the lower shoulder of each groove 32 contacts, to limit the seat back proper in its upward movement. Each tubular member 14 has a spring device or latch 34 with a lug 35 at its free end, passing through the wall of the tubular member, to engage a depression 36 in one of the faces of each side bar 28, to hold the seat back proper in its lowermost position against the action of each spring 31. A rider when first mounting the auto cycle, lowers the seat back proper, so that the spring devices or latches will hold the same lowered. After starting, the rider if he so desires may reach back and release the spring devices or latches and by virtue of the action of the springs 31, the seat back will instantly rise to its proper position, thereby enabling the rider to comfortably rest his back. It will be observed that the springs 24 and 26 are of such a nature as to permit the seat back to yield incident to the vibration of the auto cycle or the vibration or backward and forward movement of the rider, but at the same time will lend sufficient amount of stability and rigidity, in order that the seat back will give rest and comfort to the rider. Moreover, the main or dominant frame may be adjusted at slight angles.

The invention having been set forth, what is claimed as new and useful is:—

1. In combination with a seat post of the frame of an auto cycle or the like, a main or dominant frame fastened to the seat post and provided with means engaging said frame of the cycle, an auxiliary frame having pivotal and yieldable connections with the dominant frame, and a seat back proper telescoping the auxiliary frame.

2. In combination with a seat post of the frame of an auto cycle or the like, a main or dominant frame fastened to the seat post and provided with means engaging said frame of the cycle, an auxiliary frame hav-

ing pivotal and yieldable connections with the dominant frame, and a seat back proper telescoping the auxiliary frame, means in the auxiliary frame acting to throw the seat back proper upwardly, and devices for holding the seat back proper down against the action of the second means.

3. In combination with a seat post of the frame of an auto cycle or the like, a main or dominant frame adjustably connected to the seat post, said dominant frame having rearwardly extending forks terminating in eyes, an auxiliary frame having eyes, means passing through the eyes for connecting the auxiliary and dominant frame pivotally, said auxiliary frame having counterpoised resilient connections with the dominant frame, to permit the auxiliary frame to respond to the vibration of the cycle, and a yieldably mounted seat back telescoping the auxiliary frame.

4. In combination with a seat post of the frame of an auto cycle or the like, a main or dominant frame adjustably connected to the seat post, said dominant frame having rearwardly extending forks terminating in eyes, an auxiliary frame having eyes, means passing through the eyes for connecting the auxiliary and dominant frame pivotally, said auxiliary frame having counterpoised resilient connections with the dominant frame, to permit the auxiliary frame to respond to the vibration of the cycle, said auxiliary frame comprising tubular members having their lower ends closed, a seat back comprising side bars telescoping said tubular members, resilient means interposed between the lower ends of the side bars and the lower closed ends of the tubular members acting to force the back upwardly, devices for holding the back down against its resilient means, and means for holding the back in vertical adjusted position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHRISTAIN S. RUFF.

Witnesses:

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