(No Model.)

H. A. PORTER.

BICYCLE SEAT ATTACHMENT.

No. 603,735. Patented May 10, 1898.

Fig. 1.

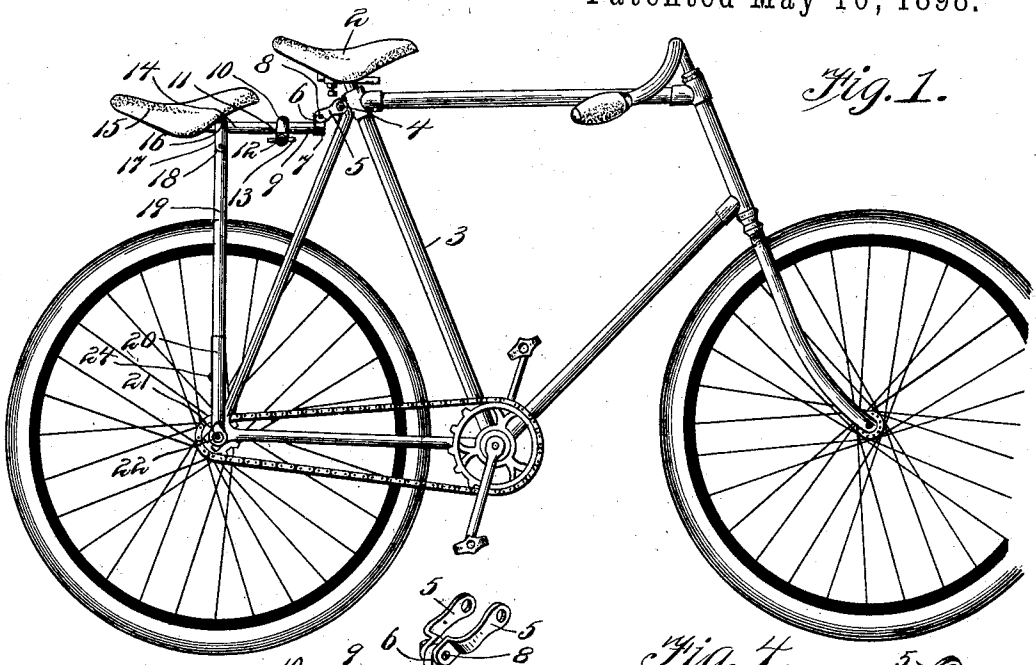


Fig. 4.

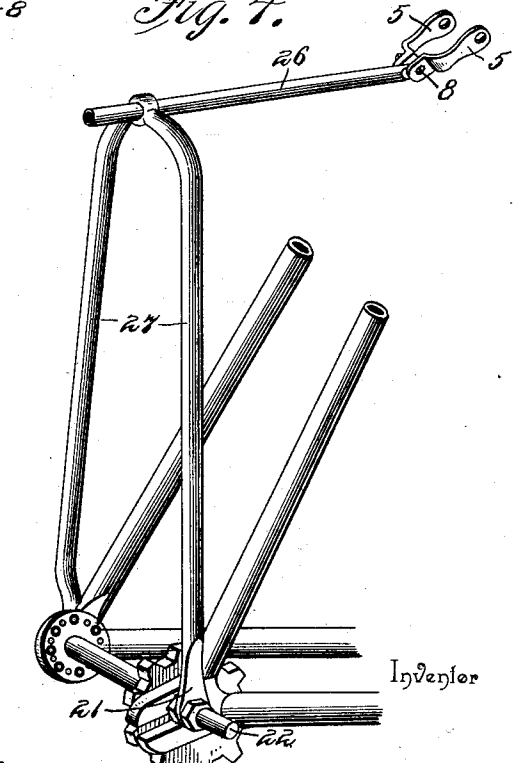


Fig. 2.

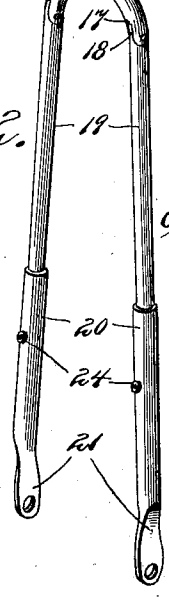
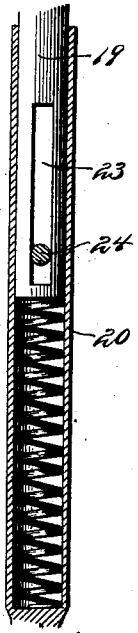


Fig. 3.



Witnesses

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BICYCLE-SEAT ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 603,735, dated May 10, 1898.

Application filed March 31, 1897. Serial No. 630,127. (No model.)

To all whom it may concern:

Be it known that I, HORATIO A. PORTER, a citizen of the United States, residing at Holyoke, in the county of Hampden and State of Massachusetts, have invented a new and useful Bicycle-Seat Attachment, of which the following is a specification.

This invention relates to improvements in bicycles, its object being to provide an attachment for safety-bicycles designed to afford a seat for a person in rear of the rider and which may be applied to safety-bicycles such as are at the present time in use without materially altering the construction or increasing the weight of the same and which will not interfere with the rider in mounting or dismounting or while he is riding.

With this and other objects in view my invention consists in the several details of construction and combination of parts hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a bicycle embodying my invention. Fig. 2 is a perspective of one form of the seat attachment detached. Fig. 3 is a sectional detail. Fig. 4 is a perspective view of a modified form of the attachment.

Similar reference-numerals indicate similar parts in the several figures.

Referring to Figs. 1 and 2, 1 represents an ordinary safety-bicycle, in which 2 is the seat, 3 the seat-post, and 4 the bolt of the seat-post clamp.

5 represents two ears loosely pivoted at their upper ends on the bolt 4 and having their lower ends bent inwardly toward each other to straddle the lug 6 of a collar 7. The lower ends of the ears 5 are pivotally and loosely connected to the lug 6 by a bolt 8. The collar 7 is rigidly connected to one end of a split tube 9, which is provided at its opposite end with a split collar 10, having ears 11. A bolt 12 passes through these ears, and the stem of the bolt 12 is threaded at its end to receive the thumb-nut 13. A tube 14 fits within the split tube 9 and is adjustable therein and will be clamped in position by the collar 10. The other end of the tube 14 supports a seat 15. To the tube 14, intermediate its ends, is rigidly secured a short fork 16, the prongs of which extend downwardly and are bifurcated at their ends, as indicated at 17, to receive the upper ends 18 of two tubes 19, which are reduced for this purpose and hinged thereto. The lower ends of the tubes 19 fit into the tubes 20, and the latter are flattened at their lower ends, as indicated at 21, and perforated to fit over the outer ends of the rear axle 22 of the bicycle. The lower portions of the tubes 19 are provided with elongated slots 23, and screws 24 pass through the tubes 20 and the slots 23 to limit the vertical movement of the tubes 19 in the tubes 20.

Within the tubes 20 coiled springs 25 engage the lower ends of the tubes 19, thereby affording a yielding support for the seat 15.

From the foregoing description it will be seen that on account of the adjustability between the tubes 9 and 14 the seat 15 may be arranged in substantially vertical alinement with the rear axle 22, in which position the tubes 19 and 20 will be substantially vertical, or, if preferred, the tubes 19 and 20 may incline rearwardly at their upper ends, and thereby throw the seat 15 in a vertical plane to the rear of the axle 22. In practice, owing to the loose pivotal connection between the tube 9, the ears 5, and the main frame of the bicycle, the seat 15 will be enabled to have a limited movement in a substantially horizontal plane, which will prevent a sudden shock to the rider on the seat 15 in the event that the wheels of the bicycle strike any obstruction. This is important should a child be riding on the seat 15, as it would not be as liable to be thrown from the seat.

Referring to Fig. 4, instead of employing two tubes 9 and 14, adjustable one within the other, a solid tube 26 is employed, which is pivotally connected at its forward end to the depending ears 5, and these ears are pivotally connected to the main frame, as before described with reference to Figs. 1 and 2. Also instead of employing two tubes 19 and 20, fitting one within the other, solid tubes 27 are employed, and these are rigidly connected at their upper ends to the tube 26, and their lower ends are pivoted on the axle in the same manner as before described in connection with Figs. 1 and 2. The seat 15 is supported on the rear end of the tube 26. In this construction, therefore, the only yield-

ing movement of the attachment is in a horizontal plane, which yielding movement is permitted by the pivotal connection between the tube 26 and the ears 5 and the pivotal connection of the upper ends of the ears 5 to the main frame.

It will be seen that this attachment does not in any manner interfere with the rider in the propulsion of the bicycle, nor will it interfere with his mounting or dismounting in the usual manner. It is also obvious that the seat 15 may be used to support a child or an adult, as desired.

It will be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim is—

1. A seat attachment for a bicycle comprising a vertically-disposed fork member pivoted at its lower end to the rear axle of the bicycle, a horizontally-disposed member rigidly connected to the upper end of the fork member and carrying at its rear end the seat, and ears pivotally connected at their upper ends to the seat-post of the bicycle and at their lower ends to the front end of the horizontally-disposed member, substantially as described.

2. A seat attachment for a bicycle comprising a vertically-disposed fork member pivoted at its lower end to the rear axle, a horizontally-disposed member connected to the upper end of the fork member and carrying at its rear end the seat, said horizontal member consisting of two tubes adjustably connected together, a clamp to lock the two tubes in their adjusted position, and ears pivotally connected at their upper ends to the seat-post of the bicycle and at their lower ends to the front end of the horizontally-disposed member, substantially as described.

3. A seat attachment for a bicycle comprising a horizontally-disposed member pivotally connected at its front end to the seat-post of the bicycle and carrying the seat at its rear end, a short fork rigidly connected to said horizontal member intermediate its ends, tubes pivoted at their lower ends on the outer ends of the driving-wheel axle, tubes hinged at their upper ends to the fork on the horizontal member and their lower ends fitting within the tubes on the driving-wheel axle, springs within the lower tubes to engage the ends of the upper tubes, and a slot-and-pin connection between the upper and lower tubes to permit limited vertical movement between them, substantially as described.

4. A seat attachment for a bicycle comprising a vertically-disposed fork member pivoted at its lower end to the rear axle of the bicycle, a horizontally-disposed member rigidly connected intermediate its ends to the upper end of the vertically-disposed member, a seat supported on the rear end of the horizontal member, said horizontal member consisting of two tubes fitting one within the other, the outer tube being split and provided with a clamping-collar, a collar rigidly connected to the front end of said horizontal member and provided with an upwardly-extending lug, and ears pivotally connected at their upper ends to the bicycle seat-post and at their lower ends to the lug on said collar, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HORATIO A. PORTER.

Witnesses:
T. B. FLANDERS,
FRED. F. PARTRIDGE.