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tube. The draw latch toggle clamp may extend along the top tube **30** to the retainer **35** toward one end of the bike, for example, along a front end. In certain examples, a rider pulling down on a lever, a pressure may be exerted on the retainer, securing the retainer to the top tube.

The above summary was intended to summarize certain embodiments of the present disclosure. Embodiments will be set forth in more detail in the figures and description of embodiments below. It will be apparent, however, that the description of embodiments is not intended to limit the present inventions, the scope of which should be properly determined by the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

Embodiments of the disclosure will be better understood by a reading of the Description of Embodiments along with a review of the drawings, in which:

FIG. 1A is a side view of one example of a bicycle having a drop tube frame according to an embodiment of the disclosure;

FIG. 1B is another side view of one example of a bicycle having a frame with a movable top tube according to an embodiment of the disclosure;

FIG. 2A is a side view of one example of a bicycle having a top tube and showing an alternative positioning of the top tube in a drop position according to embodiments of the present disclosure;

FIG. 2B is a side view of one example of a bicycle having a top tube and showing an alternative positioning of the top tube in a drop second position according to embodiments of the present disclosure;

FIG. 2C is a side view of one example of a bicycle having a top tube and showing an alternative positioning of the top tube in a drop position, along with distances and planes along the bike frame according to embodiments of the present disclosure;

FIG. 3 is a close up side view of a portion of FIG. 1 showing an example of a bicycle frame according to one example of the disclosure;

FIG. 4 is a close up side view of a portion of FIG. 1 showing one example of a top tube in a drop position according to examples of the present disclosure;

FIG. 5 shows a close up side view of one example of a first end according to one embodiment of the present disclosure;

FIG. 6 shows a close up side view of one example of a second end according to one embodiment of the present disclosure;

FIG. 7 shows a close up top view of one example of a second end according to one embodiment of the present disclosure;

FIG. 8 shows an alternative top view of one example of a second end at a hinge joint according to one embodiment of the present disclosure;

FIG. 9 shows a perspective, close up view of a first end according to embodiments of the present disclosure;

FIG. 10 shows a side perspective view of a second end according to embodiments of the present disclosure;

FIG. 11 shows a close up side perspective view of a second end at the hinge joint according to embodiments of the present disclosure;

FIG. 12 shows an exploded view of one example of a second end at the hinge joint according to embodiments of the present disclosure; and

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FIG. 13 shows an isolated view of a portion of a hinge joint according to embodiments of the present disclosure.

DESCRIPTION OF EMBODIMENTS

In the following description, like reference characters designate like or corresponding parts throughout the several views. Also in the following description, it is to be understood that such terms as “forward,” “rearward,” “left,” “right,” “upwardly,” “downwardly,” and the like are words of convenience and are not to be construed as limiting terms.

Referring now to the drawings in general, it will be understood that the illustrations are for the purpose of describing embodiments of the disclosure and are not intended to limit the disclosure or any invention thereto.

In FIGS. 1A through 2C is shown a bicycle (“bike”) **10** having a frame **12**. The frame **12** may be a drop frame embodied according to the present disclosure. A drop frame, in some examples, may be a bicycle frame **12** with an adjustable top bar **30**. In some embodiments, the top bar **30** may be raised, lowered and/or moved sideways, or any direction out of alignment with the frame position as in use. A drop frame **12** may include a top bar **30** having a removable portion **30**. A drop frame **12** may generally include a top bar **30**, a head tube **14** adjoining a fork **16**, a down tube **18**, a seat tube **24** and/or seat stays **22**. The bicycle **10** may include a set of wheels, a seat **26**, chains, and handle bars.

Drop frame **12** may include a top tube **30**. Top tube **30** may be a folding top tube. Top tube **30** may be an articulating top tube. Top tube **30** may be a movable top tube. Top tube **30** may be a removable top tube. Top tube **30** may be a hinged top tube. Top tube **30** may, in some instances, retreat toward either a head tube **14** or toward a seat tube **24** in an accordion type structure and movement.

Top tube **30** may include a first end **32** and a second end **40**, reference FIGS. 3 and 4. Top tube **30** may be removable at both ends **32**, **40** or either end **32**, **40**. Top tube **30** may fold downward, for example in a motion M1, and alternate, from a substantially horizontal first position to a dropped second position and back. The top tube **30** may drop at one of the ends **32**, **40** to drop out of the way of a user mounting the bike. Top tube **30** may be secured back in the first position after the user has mounted the bike. The top tube **30** may be secured in the horizontal first position to provide a stable, secure ride, as with a non-movable top tube. Top tube **30** may include a front portion **30b**, a movable portion **30a**, and/or a back portion **30c**. In certain examples, top tube movable portion **30a** is located between front portion **30b** and back portion **30c**.

In one embodiment, top tube **30** may include a first end **32** and second end **40**, with second end **40** including a hinge and interfacing with an upper portion of the seat tube **24**. The first end may interface with the head tube **14** along an upper portion of the head tube and include a receiver **35**. A reversal of this configuration, with the hinged end at the first end **32** and the second end interfacing with the head tube **14** is considered within the scope of inventions of the present disclosure. The first end **32** and/or second end **40** may be considered, in some examples, a drop end.

By way of example, the top tube **30** may be hinged at the second end **40** and may drop from the horizontal, first position to the dropped, second position, shown in FIG. 3 and FIG. 4, the top tube **30** drops toward seat tube **24** when first end **32** is unsecured, along M1. Top tube **30** may drop to a vertical position where drop bar **30** may be dropped to