be at least substantially parallel to seat tube **24**. Top tube **30** may, in some instances, drop to rest with tube slot **34** resting along the seat tube **24**. A fastener **58** (see FIG. **2**A) may secure top bar **30** to seat tube **24** when top tube **30** is in a dropped position.

Top tube **30** at first end **32** may include tube slot **34**, one example of which is seen in FIGS. **5** and **9**. Tube slot **34**, in one embodiment, may be an extension of and/or integrally formed part of tube **30**. Tube slot **34** may include an inner opening. Tube slot **34** may fit with receiver **35**. Receiver **35** may be a part of top tube **30**. Receiver **35** may be integrally formed and/or mated with top tube **30**. The inner opening in tube slot **34** may align with one or more openings in receiver **35**. A pin **31** may fit through the inner opening that is aligned with the openings in the tube slot **34** and receiver **35**, respectively. The pin **31**, by way of example, may be a locking quick release pin. The pin **31** may be tethered to the bike **10** by way of a tether **31'** so that when it is extracted from the receiver, it remains attached to the bike **10** and does not become prone to being lost.

Referencing generally FIGS. **6-8**, and **10-13**, the top tube **30** may include a hinge. Any type of hinged joint may be utilized at second end **40**. By way of example, a heim joint may be used to form a hinged joint. The heim joint may be integrally formed or mated with the top tube **30**. In one example of a heim joint, reference the exploded view of end **40** of FIG. **12**, the heim joint **43** may include a part that protrudes from or is attached to the top tube **30**. A connector **41** may interface with the heim joint. The heim joint provides for lateral and vertical play to provide easy lowering of the first end of the top tube **30**. The heim joint **43** may meet with sleeve **42**. A ball swivel of heim joint **43** may align with openings in the sleeve **42** with a securing element, by way of example, a bolt that interlocks the heim joint **43** within the sleeve **42**. If a more rigid hinge is desired, other forms of hinge joints may be utilized and are considered within the scope of the inventions. In some examples, a bolt may extend through openings in sleeve **42** and interlace through connector **41** to form a hinge joint in end **40**.

Examples of heim joint **43** may include a first nut **61** welded in place inside or attaching to top tube **30** tubing. The tubing may be rounded over for extra strength at the end. A shaft **70** of the joint may screw into the nut. There may be a second nut **62** and, in some embodiments, a third nut **63** along the shaft **70**. The joint can be tightened or loosened by turning the joint shaft. The shaft **70** may be locked in place by tightening both the nuts together against the tubing. The joint includes a head **68** on the joint shaft **70** with the head having an interior ball swivel **64** including a central opening.

The top tube **30** may include an adjustment factor wherein turning the top tube **30**, for example clockwise, may slightly shorten or lengthen the overall top tube length, and vice versa. This adjustment factor allows for custom, secure fit of the top tube **30** with the top tube being adjustable and foldable. In some examples, heim joint **43** is adapted with securing nuts that may be loosened to allow top bar **30** to be rotated to lengthen and counter rotated to be shortened and then retightened at the nut to produce a custom, slightly adjustable due to rotation, top bar with an augmented secure fit when in use in the horizontal position.

In certain embodiments, a bicycle **10** includes a top tube **30**. The top tube **30** includes two breaks along a top tube length. The two breaks may be spread apart toward the distal ends of top tube **30**. The two breaks are configured to work together to allow a portion of the top tube **30** to become misaligned and/or retracted to provide more step through space in the bicycle **10**. In some examples, the step through space is at least 6 inches greater than with conventional bicycles. In other examples, there is provided an increased step through space of at least 1 inch, and in some examples of more than 5 inches. In some examples, the bicycle **10** includes a lowered step through space relative to the barrier to mounting created by the top tube **30**.

Some examples of bicycle **10**, include a top tube **30**, the top tube **30** including a drop end. The top tube **30** including a drop end may increase the weight of the overall bicycle **10** by 20 or less ounces, in some embodiments. In some examples, the added weight of top tube **30** may be less than 2 lbs. This increased weight is far less than the additional 5-8 lbs. often added to provide stability in a step-through frame bicycle.

A top tube **30** including a drop end may be installed as an aftermarket part. A top tube including a drop end may be installed as original equipment with the bike frame.

In some examples, a top tube first end or second end may include a joint and the other of the first or second ends includes a separation and drops out of alignment with the other top tube portions. The movable portion may drop to decrease a step over height requirement lower than a step over height requirement when all the top tube portions are aligned. The step over height requirement may be greater when the top tube is in the first position than when the top tube is in the second position. A step over height requirement may be considered the height of a top tube in a first position or riding position, measured from the ground to the top of the top tube (for example, the clearance needed to mount a bicycle). While bicycle heights and sizes may vary, the measurements remain consistent proportionally as to any given bicycle.

Examples may include a bicycle **10** having a bicycle frame **12**. Referencing FIGS. **1-2**, the bicycle frame **12** may include a top tube **30** that is displaceable from the frame **12** in at least one place, the top tube **30** forming a riding plane P**1** in a first position and a mounting plane P**2** in a second position when the top tube **30** is displaced. The top tube **30**, in this example, alternates between the first position and the second position, and the mounting plane P**1** is lower on the bicycle frame **12** than the riding plane P**2**, forming a larger mounting space MS. A mounting space MS may be formed by a mountable area between the head tube **14**, down tube **18**, and seat tube **24**, with the top tube **30** forming an upper border of the mountable area along riding plane P**1** and determining the amount of the mountable space MS available to a bicycle rider. A larger mounting space MS may be available during mounting when the top tube **30** is in the second position.

In this example, a distance D**2** is formed between a ground plane P**3** and a mounting plane P**2**, D**2** equating to the distance between a ground surface (at P**3**) and the lowest available part of the mountable space MS (at P**2**). Embodiments may include a distance D**2** of between 12" to 15", and in other examples D**2** may be less than 16" and in other examples less than 15". Distance D**2** is reduced in examples of the invention when the top bar **30** is in the second position.

A distance D**1** is formed between riding plane P**1** and mounting plane P**2**. In some examples, distance D**1** may be at least 8" of increased mounting space MS available to a rider when the top bar **30** is in the second position. Some embodiments of the invention increase the mountable space MS by at least 4" and other embodiments increase the mountable space MS by at least 5" or more along D**1**.

In other embodiments, a bike **10** may include a top drop tube **30**, wherein the stack measurement for any given bike