Claims

1. A folding bicycle, comprising:

a front wheel (1), a rear wheel (2), a handlebar (3), a main frame (4), a support frame (5), a pedal mechanism (6), a first safety clamp (453), and a second safety clamp (432);

wherein the front wheel (1) is connected to the handlebar (3), and the pedal mechanism (6) is connected with the rear wheel (2) via a chain (8) to drive the rear wheel (2) to rotate;

one end of the support frame (5) is provided thereon with a saddle (7), the other end thereof being connected with the pedal mechanism (6) through a through-hole (451) reserved in the main frame (4), and one end of the main frame (4) is connected with the handlebar (3), the other end thereof being connected with the pedal mechanism (6) via a first rotating shaft (61), such that movement of the support frame (5) along the through-hole (451) brings the pedal mechanism (6) to rotate along the first rotating shaft (61), thereby bringing the pedal mechanism (6) and the main frame (4) close to each other, the first safety clamp (453) being configured to secure relative position between the support frame (5) and the main frame (4); and

a second rotating shaft (41) is disposed between the through-hole (451) and the position where the main frame (4) joins with the handlebar (3), such that the main frame (4) may be bent along the second rotating shaft (41) to bring the front wheel (1) and the rear wheel (2) close to each other, the second safety clamp (432) being configured to secure the main frame (4) to a non-bent state,

wherein the main frame (4) comprises: a head segment (43) connected with the handlebar (3); a middle segment (44) connected with the head segment (43) via the second rotating shaft (41); and a tail segment (45) connected with the pedal mechanism (6),

and wherein, the tail segment (45) has a first socket (452) and is provided with a fastener (454) on a sidewall of the first socket (452), the middle segment (44) is inserted in the first socket (452), and an insertion depth of the middle segment (44) in the first socket (452) is adjustable via the fastener (454).

2. The folding bicycle of claim 1, wherein the front wheel (1) has a first wheel plate and a second wheel plate, the first wheel plate being foldable till a position parallel to the second wheel plate.

3. The folding bicycle of claim 1, wherein the rear wheel (2) has a third wheel plate and a fourth wheel plate, the third wheel plate being foldable till a position parallel to the fourth wheel plate.

4. The folding bicycle of claim 1, wherein the through-hole (451) is provided at the tail segment (45), and two first sockets (452) are provided and disposed at two sides of the through-hole (451), respectively;

wherein the middle segment (44) comprises at least two long rods (441) disposed corresponding to the first sockets (452), respectively.

5. The folding bicycle of claim 4, wherein the middle segment (44) is provided with a connecting platform (442) and a connecting tongue (443) projecting from the connecting platform (442);

the second rotating shaft (41) passes through the connecting tongue (443) to rotatably connect the middle segment (44) to the head segment (43); and

the second safety clamp (432) is disposed on the head segment (43), for fastening and securing the connecting platform (442).

6. The folding bicycle of claim 5, wherein the middle segment (44) further comprises a revolving member (444) that is connected on the connecting platform (442) via a revolving shaft (445), the long rods (441) being connected with the revolving member (444).

7. The folding bicycle of claim 1, wherein the support frame (5) comprises a female rod (52) and a male rod (51), the saddle (7) being disposed on the male rod (51); and

a second socket is provided on the female rod (52), wherein the male rod (51) is inserted in the second socket to connect with the female rod (52).

8. The folding bicycle of claim 7, wherein the female rod (52) comprise a rod base (521) and a rod upper portion (522);

the rod upper portion (522) is connected with the rod base (521) via a third rotating shaft (53), such that when the pedal mechanism (6) is brought flush against the main frame (4), the rod base (521) at least partially exposes the through-hole (451), enabling the rod upper portion (522) to flip relative to the rod base (521) via the third rotating shaft (53).

9. The folding bicycle of claim 7, wherein the male rod (51) is removable from the second socket.

10. The folding bicycle of claim 1, wherein the handlebar (3) comprises a grip portion and a T-section;

the T-section is connected with the front wheel (1) and the main frame (4); and

the grip portion is connected with the T-section via a fourth rotating shaft.

11. The folding bicycle of claim 1, wherein a second gear is provided coaxial with the rear wheel (2);

the pedal mechanism (6) comprises:

a first gear (62), a securing frame (64), and a pedal (63), wherein the pedal (63) is connected on the first gear (62);

the first gear (62) and the second gear are in transmission connection via the chain (8); and

two ends of the securing frame (64) are connected on the first gear (62) and the rear wheel (2), respectively, where the first rotating shaft (61) is disposed at a position on the securing frame (64) proximal to the second gear.