DESCRIPTION

Hinge Assembly for Furniture

Technical Field

The present invention relates to a hinge assembly for furniture, particularly to a hinge assembly connecting furniture member.

Background

Currently, the existing hinge structures primarily consist of a hinge head, a hinge arm, and a base, during installation, the hinge head and base are mounted onto the cabinet door and cabinet frame respectively, due to the single structure of adjusting the installation position of the hinge itself, it is difficult to meet usage requirements, consequently, the existing hinges demand high installation and positional accuracy, when the installation positions are deviated, the cabinet door and the cabinet frame cannot be installed at a predetermined position. This increases installation difficulty, prolongs work cycles, and reduces efficiency, therefore, some of the existing hinges are provided with an adjustment device, the hinge arm to be adjusted relative to the base in height adjustment in the up-down direction or the front-rear direction, or the left-right direction by adjustment device. However, in existing hinges, the process of adjusting the hinge arm solely in the up-down direction relative to the base and the process of adjusting solely in the left-right direction interfere with each other, for example, the height adjustment screw of the adjustment device only adjust the front end of the base upwards or downwards, when the front end of the base is raised to a specified position,the front end of the base is inclined towards the rear end and forms an angle with the hinge arm. In other words, during adjusting the height adjustment screw , the angle between the base and the hinge arm is changeable. this often leads to the cabinet door failing to close properly or close smoothly relative to the cabinet frame, such as a gap between the side where the cabinet door is closed and the cabinet frame, such as leaving a gap between one side of the closed door and the cabinet frame. So that it becomes necessary to adjust the front-rear adjustment screw(s) of the base and hinge arm to achieve the predetermined position

between the cabinet door and cabinet frame. this situation makes it prone to incorrectly adjusting both the height and front-rear position of the base relative to the hinge arm, exacerbating the difficulty of the adjustment process.

In addition, Chinese Patent Publication No. CN204691509U discloses《Buffer Hinge Having Parallel Adjustment Device》, comprising a hinge cup、a rocking arm,、a hinge base and a base assembly， the hinge cup, the rocking arm and the hinge base are sequentially hinged, the base assembly is mounted on the hinge base, the hinge base is provided with a height adjustment assembly capable of integrally controlling the parallel movement height of the base assembly relative to the hinge base, the height adjustment assembly runs through the hinge base and is fastened to the base assembly. Specifically, the height adjustment assembly includes a first height adjustment screw and a second height adjustment screw, and the first height adjustment screw and the second height adjustment screw are mounted on the hinge seat back and forth respectively.By means of the structural cooperation of the first height adjustment screw and the second height adjustment screw of the height adjustment assembly, the whole hinge base can be horizontal moved upwards or downwards to perform height adjustment, thereby ensuring that the hinge base can smoothly adjust the front and rear mounting positions relative to the base assembly on the horizontal plane. However, firstly, the height adjustment of the hinge base needs to be realized by a first height adjustment screw and a second height adjustment screw together, and the adjustment process is troublesome and difficult to adjust; generally, an operator first adjusts one of the adjustment screws and then adjusts the other adjustment screw, during the adjustment, the base assembly is actually rotated and swung forwards and backwards relative to the hinge base, and it is not achieved that the base assembly remains horizontal relative to the hinge base during the entire adjustment; secondly, when the height of the hinge base is adjusted, front and rear adjustment screws need to be operated, i. e. the height adjustment screws cannot be only adjusted to complete the height adjustment, and the height adjustment screws and the front and rear adjustment screws influence each other during the adjustment ; thirdly, when the height of the hinge base is adjusted, front and rear adjustment screws on the hinge base need to be loosened first, the hinge base is prone to wrong movement in the front-rear direction, resulting in positional deviation in the front-rear direction, increasing the difficulty of adjustment, and making the height adjustment of the hinge base more troublesome, In addition, this solution does not produce positive effects while adding adjustment steps.

For another example, the Chinese Patent Publication No. CN 10701023 disclosed 《a Door Hinge Arm having Quick Adjustment and Mounting Functions》 comprises: an inner arm and an outer arm, the adjustment mechanism and a movement adjustment device are provided between the inner

arm and the outer arm, the adjustment mechanism is used for adjusting the inclination angle between the outer arm and the inner arm. The movement adjustment device is used for installing and adjusting hinge arm which is used for forming a relative movement between the inner arm and the outer arm and for tilting an installation position of the adjusting door by automatically moving the outer arm forwards and backwards on the inner arm when an inclination angle between the outer arm and the inner arm changes. The hinge of the door can be adjusted by moving the adjustment device, so that the installation position of the door can be quickly adjusted. However, the adjustment mechanism changes the inclination angle between the outer arm and the inner arm during the adjustment, thus changing the minimum closing angle and the maximum opening angle of the hinge cup (the hinge head) relative to the base, i. e., changing the closing angle and the opening angle of the door on the furniture, which affects the user experience of opening and closing the door.

Summary

In order to solve the technical problems in existing hinge that the hinge base related to the base assembly independent height adjustment and independent front-rear adjustment influence each other when adjusting ,which resulting in high adjustment difficulty and trouble in adjustment, and affects the user experience when an angle of a switch door changes after height adjustment, the present invention disclosed a hinge assembly for furniture, comprising:

a first main body and a hinge head**,** the hinge head is rotatably connected to the first main body, and the hinge head is configured to connect a second member;

a base device, the base device is configured to connect a first member; the base device comprising at least a first adjustment assembly and at least a second adjustment assembly;

wherein the first adjustment assembly is provided with at least a first adjustment part, when the first adjustment part is independently adjusted, the first main body can parallel lift only in an up-down direction relative to the first adjustment assembly, so that the first main body can parallel lift only in the up-down direction relative to at least a part of the base device;

the second adjustment assembly is provided with a second adjustment part, when the second adjustment part is independently adjusted, the first main body can parallel move only in the front-rear direction relative to at least one part of the base devices.

In some embodiments, a first positioning part is formed on the first adjustment assembly, a second

positioning part cooperated with the first positioning part is formed on the first main body and/or the second adjustment assembly, the first positioning part and the second positioning part cooperate with each other to restrict the freedom of the first main body or the second adjustment assembly relative to the first adjustment assembly in the front-rear direction and the left-right direction, thus, when the first adjustment part is independently adjusted, so that the first main body can parallel lift only in the up-down direction relative to the first adjustment assembly.

In some embodiments, side surfaces of the first positioning part in the front-rear direction and the left-right direction match side surfaces of the second positioning part in the front-rear direction and the left-right direction, to restrict the freedom of the first main body or the second adjustment assembly relative to the first adjustment assembly in the front-rear direction and the left-right direction, so that the first main body can parallel lift only in the up-down direction relative to the first adjustment assembly.

In some embodiments, the first positioning part comprises the first adjustment part and a first abutting part, the second positioning part comprises a fixing part and a second abutting part, the first adjustment part is cylindrical, and the first adjustment part is rotatably arranged on the fixing part, and side surfaces of the first adjustment part along a front-rear direction and a left-right direction are in one-to-one correspondence with side faces of the fixing part along the front-rear direction and the left-right direction, to restrict the freedom of the first main body or the second adjustment assembly relative to the first adjustment assembly in the front-rear direction and the left-right direction;

The first abutting part and the second abutting part abut against each other to restrict the first adjustment part from driving other components of the first adjustment part to rotate relative to the first main body or the second adjustment part to rotate relative to the first adjustment part when the first adjustment part is rotating.

The number of the fixing part is not limited. The number of the fixing part may be one or more, the first adjustment assembly may also be provided with one or more cylindrical shape parallel to the first adjustment part , the first positioning part comprises the cylindrical shape, and the cylindrical shape cooperates with other fixing parts to limit the degree of freedom of the first main body or the second adjustment assembly relative to the first adjustment assembly in the front-rear direction and

the left-right direction.

Other technical solutions of the present invention are the same as the technical solutions recorded in claim 5 to claim 20, and are not further described herein.

Compared with the prior art, the described hinge assembly for furniture of the present invention has at least the following beneficial effects:

the hinge head is mounted on the second member (for example the second member may be a cabinet door), and the base device is mounted on the first member (for example the first member may be a cabinet side plate), since the base device comprises a first adjustment assembly and a second adjustment assembly, the first main body can be driven to parallel lift only in the up-down direction relative to the first adjustment assembly by independently adjusting a first adjustment part on the first adjustment assembly, and the first main body is not inclined or moved relative to the first adjustment assembly or the second adjustment assembly in the left-right direction or the front-rear direction, thus, the first body can be parallel lift in the up--down direction relative to at least a part of the base device, assuring that the position of the second member is adjusted only in the right-left direction relative to the first member.

In addition, by separately adjusting the second adjustment part on the second adjustment assembly, the first main body can be driven to move only in the front-rear direction relative to at least one part of the base device, and the first main body cannot move in the up-down direction or the left-right direction relative to the base device, so as to adjust the position of the second member in the front-rear direction relative to the first member. The first adjustment part adjusts the first main body relative to the base device to parallel lift only in the up-down direction , and the second adjustment part adjusts the first main body relative to the base device to only move in a front-rear direction, it is ensure that the first main body does not affect or interfere with each other in the adjustment of the up-down direction and the front-rear direction , which reduce the adjustment difficulty, and improve the accuracy and convenience of position adjustment of the cabinet door relative to the cabinet body.

In addition, during the adjustment of the first adjustment part and/or the second adjustment part, the inclination angle of the hinged head relative to the base does not change, i.e. the minimum closing angle and the maximum opening angle of the hinge head relative to the base device (or the first member) remain unchanged over any adjustment range of the first adjustment part and/or the second adjustment part, so that the user does not change experience by adjusting the first adjustment

part and the second adjustment part while using the first member and the second member.

Illustration of the drawings

Fig. 1 is a schematic diagram of a structure in which a first member and a second member are connected by a hinge assembly according to some embodiments of the present invention, and the up-down direction, the left-right direction, and the front-rear direction in the figure all are direction of the hinge assembly;

Fig. 2 is a connection state of the sectional view of Fig. 1, wherein the up-down direction and the front-rear direction in the figure are directions of a hinge assembly, and the left-right direction is directions of a first member and a second member;

Fig. 3 is another connection state of the sectional view of Fig. 1, wherein the up-down direction and the front-rear direction in the figure are directions of the hinge assembly, and the left-right direction is a direction of the first member and the second member;

Fig. 4 is a sectional view of a first structure of the hinge assembly of the present invention;

Fig. 5 is a splitting schematic diagram showing a second structure of a hinge assembly of the present invention;

Fig. 6 is a cross-sectional view of the hinge assembly of Fig. 5 in a connected state;

Fig. 7 is a sectional view of a third structure of the hinge assembly of the present invention;

Fig. 8 is a sectional view of a fourth structure of the hinge assembly of the present invention;

Fig. 9 is a sectional view of a fifth structure of the hinge assembly of the present invention;

Fig. 10 is a sectional view of a sixth structure of the hinge assembly of the present invention;

Fig. 11 is a splitting schematic diagram showing a seventh structure of the hinge assembly of the present invention;

Fig. 12 is a sectional view of the hinge assembly of Fig. 11 in a connected state;

Fig. 13 is a splitting schematic diagram showing an eighth structure of the hinge of the present invention;

Fig. 14 is a sectional view of the hinge assembly of Fig. 13 in a connected state;

Fig. 15 is a splitting schematic diagram showing a ninth structure of the hinge assembly of

the present invention;

Fig. 16 is a splitting schematic diagram showing a tenth structure of the hinge assembly of the present invention;

Fig. 17 is a sectional view of an eleventh embodiment of the hinge assembly of the present invention;

Fig. 18 is a splitting schematic diagram showing a twelfth hinge assembly of the present invention;

Fig. 19 is a sectional view of the hinge assembly of Fig. 18 in a connected state;

Fig. 20 is a splitting schematic diagram showing a thirteenth structure of the hinge assembly of the present invention;

FIG 21 is a sectional view of the hinge assembly of FIG. 20 in a connected state;

Fig. 22 is a sectional view of a fourteenth structure of the hinge assembly of Fig. 21;

Fig. 23 is a splitting schematic diagram showing a fifteenth structure of the hinge assembly of the present invention;

Fig. 24 is a splitting schematic diagram showing a sixteenth structure of the hinge assembly of the present invention;

Fig. 25 is a sectional view of the hinge assembly of Fig. 24 in a connected state;

Fig. 26 is a connection diagram showing a seventeenth structure of the hinge assembly of the present invention;

Fig. 27 is a splitting schematic diagram of Fig. 26;

Fig. 28 is a connection diagram of an eighteenth structure of the hinge assembly of the present invention;

Fig. 29 is a splitting schematic diagram of Fig. 28;

Fig. 30 is a connection diagram showing a nineteenth structure of the hinge assembly of the present invention;

Fig. 31 is a splitting schematic diagram of Fig. 30;

FIG 32 is a sectional view of a twentieth structure of the hinge assembly of the present

invention;

Fig. 33 is a connection diagram showing a twenty-first structure of the hinge assembly of the present invention;

FIG 34 is a splitting schematic diagram of FIG. 33;

Fig. 35 is a splitting schematic diagram showing a twenty-second structure of the hinge assembly of the present invention;

FIG 36 is a sectional view of the hinge assembly of FIG. 35 in a connected state;

Fig. 37 is a structure diagram view of the first body of Fig. 35;

Figure 38 is a schematic of Figure 37 from another angle;

Fig. 39 is a splitting schematic diagram showing a twenty-third structure of the hinge assembly of the present invention;

Fig. 40 is a cross-sectional view of the hinge assembly of Fig. 39 in a connected state;

In the figures,

1. First main body; 11. Connecting plate; 12. Left side plate; 13. Right side plate; 14. mounting groove; 2. hinged headt; 3. Base device; 31. First adjustment assembly;311, first left side plate; 312, first right side plate; 314, fourth main body; 32, second adjustment assembly; 324, fifth main body; 325, connecting part ;33. first adjustment part; 34. second adjustment part; 35. third adjustment assembly; 4. first positioning part; 42. first abutting part;5. second positioning part; 51. stabilizing part; 52. second abutting part; 61. second left side plate; 62. second right side plate; 7. second folded part;10: detaching device 100: first member 200: second member.

Specific Embodiment Manners

2. Accompanying drawings and embodiments, present invention will be further described to the specific embodiments manners. The following embodiments are used to illustrate the present invention, but not to limit the scope of the present invention.

In the description of the present invention, what need to understand are the terms "center"、"longitudinal"、"transverse"、"length"、 "width"、"thickness"、"upper"、"lower"、"front", "Orientation or position indicated by "back", "left", "right", "vertical", "horizontal", "top"、"bottom"、"inner"、"outer"、"clockwise"、"counterclockwise"etc the relationship is based on the orientation or positional relationship shown in the drawings, and is only for the convenience of describing the

present invention and simplifying the description, rather than indicating or implying that the referred device or element must have a specific orientation, be constructed and operated in a specific orientation, therefore It should not be construed as a limitation of the present invention.

In addition, the terms "first"、"second" are only used to describe the purposes, and cannot be construed as indicating or implying relative importance or implicitly specifying the quantity of indicated technical features. Thus, a feature defined as "first"、"second" may explicitly or implicitly include one or more of these features. In the description of the present invention, "plurality" means two or more, unless otherwise specifically defined.

In the present invention, unless otherwise clearly specified and limited, the terms such as "installation"、"connection"、"connection" and "fixation" should be understood in a broad sense, for example, it can be a fixed connection or a detachable connection, or integrated; it can be mechanically connected or electrically connected; it can be directly connected or indirectly connected through an intermediary, and it can be the internal communication of two components or the interaction relationship between two components. Those of ordinary skill in the art can understand the specific meanings of the above terms in the present invention according to specific situations.

In the present invention, unless otherwise clearly specified and limited, a first feature being "on" or "under" a second feature include direct contact between the first and second features, and also include the first and second features not in direct contact but through another characteristic contact between them. Moreover, "above"、"on" and "up" the first feature on the second feature include that the first feature is directly above and obliquely above the second feature, or simply means that the first feature is horizontally higher than the second feature. "Below", "beneath" and "under" the first feature to the second feature include that the first feature is directly below and obliquely below the second feature, or simply means that the first feature has a lower level than the second feature.

In the present invention, as well as 《the Soft Close Hinge with Parallel Adjustment Device》 as disclosed in Chinese Patent Publication No. CN204691509U and 《the Door Hinge Arm with Quick Adjustment and Installation Function》 as disclosed in Chinese Patent Publication No. CN10701023A have the technical problems as disclosed in the background art.

As shown in figures 1-40, the present embodiment discloses a hinge assembly for furniture, comprising a first main body 1 and a hinge head 2, the hinge head 2 is rotatably connected to the first main body1, and the hinge head 2 is configured to connect a second member 200; the base device 3 is configured to connect a first member 100 ; the base device 3 comprising at least a first adjustment assembly 31 and at least a second adjustment assembly 32 ; wherein the first adjustment assembly 31 is provided with at least a first adjustment part 33, when the first adjustment part 33 is independently adjusted, the first main body 1 can parallel lift only in an up-down direction relative to the first adjustment assembly 31, so that the first main body 1 can parallel lift only in the up-down direction relative to at least a part of the base device 3; the second adjustment assembly 32 is provided with a second adjustment part 34. When the second adjustment part 34 is independently

adjusted, the first main body 1 can move only in the front-rear direction relative to at least one part of the base device 3.

Wherein the first member 100 and the second member 200 may be members boards of furniture products, and may be made of wood, plastic, metal, or other synthetic materials. The first member 100 may be, for example, a cabinet door of the cabinet, the second member 200 may be, for example, a cabinet side plate of the cabinet, and the first member 100 and the second member 200 rotate relative to each other via the hinge assembly of this embodiment.

It should be understood that, when the first adjustment part 33 is independently adjusted, the first main body 1 can parallel lift only in an up-down direction (the up-down direction may generally be a height direction) relative to the first adjustment assembly 31, That is, in the up-down direction, each part of the first main body 1 move the same height distance relative to the base device 3 in a unit time period, so that the first main body 1 does not incline or move in the left-right direction or the front-rear direction relative to the first adjustment assembly 31 and/or the second adjustment assembly 32, thus, it is ensured that the degree of freedom of the first main body 1 only in the up-down direction changes,and make sure the position adjustment of the first main body 1 in the front -rear direction relative to the base device 3. by the first adjustment part 33 adjusting the first main body 1 relative to the base device 3 to only parallel lift only in the up-down direction , and the second adjustment part 34 adjusting the first main body 1 relative to the base device 3 to only move in a front-rear direction, it is ensure that the first main body 1 does not affect or interfere with each other in the adjustment of the up-down direction and the front-rear direction , which reduce the adjustment difficulty, and improve the accuracy and convenience of position adjustment of the cabinet door relative to the cabinet body.

It should be noted that the term "independently adjust" briefly describes that the first main body 1 moves only in the up-down direction relative to the base device 3 when the first adjustment part 33 is adjusted, and the first main body 1 moves only in the front-rear direction relative to the base device 3 when the second adjustment part 34 is adjusted;

It also indicates that when the first adjustment part 33 is adjusted, the first member 100 and the second member 200 are not have position movement in other directions except the up-down direction relative to the connecting surface of the base device 3; or, when the second adjustment part 34 is adjusted, the first member 100 and the second member 200 are not have position movement in other directions except the front-rear direction relative to the connecting surface of the base device 3;

It also indicates that when adjusting the first main body 1 moving in the up-down direction relative to the base device 3 , just need to adjusting the first adjustment part 33 , and no need to adjust the second adjustment part 34 or other parts; Alternatively, when adjusting the first main body 1 moving in the front-rear direction relative to the base device 3 , just need to adjusting the first adjustment part 34 , and no need to adjust the second adjustment part 33 or other parts .

In addition, "the first main body 1 does not incline or move in the left-right direction or the front-rear direction relative to the first adjustment assembly 31 and/or the second adjustment assembly 32" or "the first main body 1 does not move in the up-down direction or the left-right direction relative to the base device 3" is a description manner for describing the relative position of the front- rear, up-down positions, and does not indicate that there is absolutely no error or deviation;for example, in realistic production and installation, deviations frequently occur in the dimensions between parts. For example, when the first adjustment assembly 31 and the first main body 1 or the second adjustment assembly 32 are adjusted in the up-down direction, and one end point of the first adjustment assembly 31 and the other end point of the first main body 1 or the second adjustment assembly 32 are position movement by within 15 degrees in the front-rear or left-right direction due to adjustment, we still consider that this is a production and installation error, which still falls within the scope of protection of the present patent; The same applies during the adjustment of the second adjustment assembly 32.

In addition, it should be noted that, for example, as shown in Figure 1 to Figure 3, the up-down direction of the hinge assembly in this embodiment refers to a direction in which a side surface of the base device 3 connected to the first member 100 faces the base device 3, and when the first member 100 is a cabinet side plate and the second member 200 is a cabinet door, the up-down direction of the hinge assembly is a direction in which the cabinet door is adjusted left -right direction relative to the cabinet body (i. e. a left right direction in Figure 2 or Figure 3). the front-rear direction of the hinge assembly refers to a direction in which the hinged head 2 faces the first main body 1, when the first member 100 is a cabinet side plate and the second member 200 is a cabinet door, the front-rear direction of the hinge assembly is a direction in which the cabinet door is adjusted in the front-rear direction relative to the cabinet body. the left-right direction of the hinge assembly refers to a direction perpendicular to the up-down direction and the front-rear direction, and when the first member 100 is a cabinet side plate and the second member 200 is a cabinet door, the left-right direction of the hinge assembly is a direction in which the cabinet door is adjusted in up and down direction relative to the cabinet body.

The present embodiment does not limit the positional relationship among the first main body 1, the first adjustment assembly 31 and the second adjustment assembly 32. In some embodiments, as

shown in Figure 4-25 and 35-40, at least one part of the first main body 1 is located above the base device 3, the first main body 1, the first adjustment assembly 31 or the second adjustment assemble 32 are connected from top to bottom, for example, the first main body 1, the first adjustment assembly 31 and the second adjustment assembly 32 are arranged sequentially from top to bottom, or the first main body 1, the second adjustment assembly 32 and the first adjustment assembly 31 are arranged sequentially from top to bottom. In some other embodiments, as shown in Figure 26 to Figure 29 and Figure 50 to Figure 52, at least one part of the base device 3 is located above the first main body 1, the first adjustment assembly 31 or the second adjustment assembly 32 and the first main body 1 are connected from top to bottom, for example, the first adjustment assembly 31, the second adjustment assembly 32 and the first main body 1 are arranged sequentially from top to bottom, or the second adjustment assembly 32, the first adjustment assembly 31, and the first main body 1 are arranged sequentially from top to bottom. In some other embodiments, as shown in Figure 30-31 and 33-34, at least one part of the base device 3 is located on a side of the first main body 1, the first adjustment assembly 31 or the second adjustment assembly 32 is connected to the first main body 1 along a left-right direction or a right-left direction, for example, the first adjustment assembly 31, the second adjustment assembly 32 and the first main body 1 are arranged sequentially from left to right, or the second adjustment assembly 32, the first adjustment assembly 31 and the first main body 1 are arranged sequentially from left to right.

In some embodiments, a first positioning part 4 is formed on the first adjustment assembly 31, a second positioning part 5 cooperated with the first positioning part 4 is formed on the first main body 1 and/or the second adjustment assembly 32, the first positioning part 4 and the second positioning part 5 cooperate with each other to restrict the freedom of the first main body 1 or the second adjustment assembly 32 relative to the first adjustment assembly 31 in the front-rear direction and the left-right direction, so that the first main body 1 can parallel lift only in the up-down direction relative to the first adjustment assembly 31. For example the second positioning part 5 may be located on the first main body 1, and the first adjustment assembly 31 and the first main body 1 can limit the degree of freedom of the first main body 1 in the front-rear direction and the left-right direction relative to the first adjustment assembly 31 by the cooperation of the first positioning part 4 and the second positioning part 5, when the first adjustment part 33 is independently adjusted, it is ensured that the first body 1 parallel lift only in the up-down direction relative to the first adjustment assembly 31. For another example, the second positioning part 5 may be located on the second adjustment assembly

32, and the first adjustment assembly 31 and the second adjustment assembly 32 can limit the degree of freedom of the second adjustment assembly 32 in the front-rear direction and the left-right direction relative to the first adjustment assembly 31 through cooperation between the first positioning part 4 and the second positioning part 5, when the first adjustment part 33 is independently adjusted, it is ensured that the second adjustment assembly 31 parallel lift only in the up-down direction relative to the first adjustment assembly 31,in this embodiments, the second adjustment assembly 32 is connected to the first main body 1, so that the first main body 1 can parallel lift only in the up-down direction relative to the first adjustment assembly 31.

Further, in some embodiments, in order to make the first positioning part 4 and the second positioning part 5 cooperated each other to limit the degree of freedom of the first main body 1 or the second adjustment assembly 32 in the front-rear direction and the left-right direction relative to the first adjustment assembly 31, side surface of the first positioning part 4 in the front-back direction and the left-right direction match side surface of the second positioning part 5 in the front-rear direction and the left-right direction respectively, For example, the first main body 1 or the second adjustment assembly 32 can be positioned matching by abutting or fitting to limit the degree of freedom of the first main body 1 or the second adjustment assembly 32 in the front-rear direction and the left-right direction relative to the first adjustment assembly 31, when the first adjustment part 33 is independently adjusted, the first main body 1 can only parallel lift in the up-down direction relative to the first adjustment assembly 31.

Further, in some embodiments, as shown in Figure 15-16, the first positioning part 4 includes a first adjustment part 33 and a first abutting part 42, the second positioning part 5 comprises a fixed part 51 and a second abutting part 52, the first adjustment part 33 is cylindrical, and the first adjustment part 33 is rotatably arranged on the fixed part 51, for example, the first adjustment part 33 can be rotatably arranged on the fixing part 51 by means of riveting, concave-convex fitting or screw-tooth fitting, so that the first adjustment part 33 becomes a part of the first main body 1 or the second adjustment assembly 32, and the first adjustment part 33 rotates relative to the first main body 1 or the second adjustment assembly 32; side surface of the first adjustment part 33 in the front-back direction and the left-right direction match side surface of the fixed part 5 in the front-rear direction and the left-right direction respectively, For example, the first main body 1 or the second adjustment

assembly 32 can be positioned matching by abutting or fitting to limit the degree of freedom of the first main body 1 or the second adjustment assembly 32 in the front-rear direction and the left-right direction relative to the first adjustment assembly 31, when the first adjustment part 33 is independently adjusted, the first main body 1 can only parallel lift in the up-down direction relative to the first adjustment assembly 31; the first abutting part 42 and the second abutting part 52 abut against each other to limit when the first adjustment part 33 is rotating, the first adjustment part 33 driving other part of the first adjustment assembly 31 to rotate relative to the first main body 1, or the second adjustment assembly 32 rotating relative to the first adjustment assembly 31, it is make sure just the first adjustment part 33 rotate, so that the first main body 1 can only parallel lift in the up-and-down direction relative to the first adjustment assembly 31.

In some embodiments, as shown in figures 35-38, the first adjustment assembly 31 comprises a first left side plate 311 and/or a first right side plate 312, and the first main body 1 or the second adjustment assembly 32 comprises a second left side plate 61 and/or a second right side plate 62; the first left side plate 311 and/or the first right side plate 312 is provided with at least one first bent part (not shown in the figure), and the first positioning part 4 comprises a first bent part; one end of the first folding part is connected to the first left side plate 311, and one side surface of the left and right side faces of the first left side plate 311 is closely adhered to one side surface of the left and right side faces of the second left side plate 61, the first bent part passes over the second left side plate 61 and abuts on the other side surface of the second left side plate, the second left side plate 61 and the first bent part cooperate with each other to restrict the second left side plate 61 from moving in at least one of a left-right direction and a front-rear direction; and/or ,one end of the first bent part is connected to the first right side plate 312, one side surface of the left and right side surfaces of the first right side plate 312 is closely adhered to one side surface of the left and right side surfaces of the second right side plate 62, the first bent part passes over the second right side plate 62 and abuts on the other side surface of the second right side plate 62, the second right side plate 62 and the first bent part cooperate with each other to restrict the second right side plate 62 from moving in at least one of a left-right direction and a front-rear direction. wherein the location of the first left side plate 311 corresponds to the location of the second left side plate 61, and the location of the first right side plate 312 corresponds to the location of the second right side plate 62, For example, when the first adjustment assembly 31 comprises a first left side plate 311, the second adjustment assembly 32 comprises a second left side plate 61, the first left plate 311 abuts against the second left plate 61, and the second left plate 61 and the first bent part cooperate with each other to restrict the movement of the second left plate 61 in at least one of the left-right direction and the front-rear direction, to limit the degree of freedom of the first main body 1 or of the second adjustment assembly 32 relative to

the first adjustment assembly 31 in the front-rear direction and/or in the left-right direction, thus, the first main body 1 can be one parallel lift in up- down direction relative to the first adjustment assembly 31 .

The first bent part may be, for example, a column structure, and one end of the first bent part is inserted in the first left side plate 311 or the first right side plate 312. The first bent part may be, for example, a bulge or a bump or a bulge structure, and one end of the first bent part and the first left side plate 311 or the first right side plate 312 may form an integrated structure. The number of the first bent parts may be one or more, for example, the number of the first folding parts is at least two, and the at least two first bent parts respectively restrain the first adjustment assembly 31 from moving in the front-rear direction relative to the first main body 1 or the second adjustment assembly 32. For example, two first bent parts are respectively located at two ends of the first left side plate 311 or the first right side plate 312 along the front-rear direction, and the two first bent parts are respectively fitted with and abut against or closely attached to the second left side plate 61 or the second right side plate 62, so that the first adjustment assembly 31 is restrained from moving along the front-rear direction relative to the first main body 1 or the second adjustment assembly 32.

In other embodiments, as shown in figures 35-38, the first adjustment assembly 31 comprises a first left side plate 311 and/or a first right side plate 312, and the first main body 1 or the second adjustment assembly 32 comprises a second left side plate 61 and/or a second right side plate 62; at least one second bent part 7 is provided on the second left side plate 61 and/or the second right side plate 62, and the second positioning part 5 comprises a second bent part 7; one end of the second bent part 7 is connected to the second left side plate 61, and one side surface of the left and right side surfaces of the second left side plate 61 is closely adhered to one side surface of the left and right side surfaces of the first left side plate 311, the second bent part 7 passes over the first left plate 311 and abuts against the other side surface of the first left plate 311, The first left plate 311 and the second bent part 7 cooperate with each other to restrict the first left plate 311 from moving in at least one of the left-right direction and the front-rear direction; and/or one end of the second bent part 7 is connected to the second right side plate 62, and one side surface of left and right side surfaces of the second right side plate 62 is closely adhered to one side face of left and right side faces of the first right side plate 312, The second bent part 7 passes over the first right side plate 312 and abuts against the other side surface of the first right side plate 312, the first right side plate 312 and the second bent part 7 cooperate with each other to restrict the movement of the first right side plate 312 in at least one of the left-right direction and the front-rear direction. The structure and principle of the second bent part 7 are the same as the structure and principle of the first bent part, and will not be elaborated

here.

The number of the second bent part 7 may be one or more, for example, the number of the second bent part 7 is at least two, and the at least two second bent part 7 restrain the first adjustment assembly 31 and the first adjustment part 33 from moving in the front-rear direction relative to the first main body 1 or the second adjustment assembly 32 and the second adjustment part 34 respectively. For example, two second bent parts 7 are respectively located at two ends of the second left side plate 61 or the second right side plate 62 along the front-rear direction, and the two second bent parts 7 respectively cooperate with and abut against the first left side plate 311 or the first right side plate 312, thereby limiting the first adjustment assembly 31 to move along the front-rear direction relative to the first main body 1 or the second adjustment assembly 32.

In some embodiments, as shown in figures 4-19, 30-36, 39-40, the second adjustment assembly 32 is connected to the first adjustment assembly 31, and the first adjustment assembly 31 is connected to the first body 1. The position relationship among the first main body 1, the first adjustment assembly 31 and the second adjustment assembly 32 is not limited in the present embodiment, as long as the first main body 1 can parallel lift only in the up-down direction relative to the first adjustment assembly 31 after the first adjustment part 33 is independently adjusted. For example, the first main body 1, the first adjustment assembly 31, and the second adjustment assembly 32 are connected in sequence from top to bottom, or for example, the first main body 1 and the first adjustment assembly 31 are connected in sequence from top to bottom, and the first adjustment assembly 31 is located inside the second adjustment assembly 32, or for example, the second adjustment assembly 32, the first adjustment assembly 31, and the first main body 1 are connected in sequence. By adjusting the first adjustment part 33 individually, the first body 1 can be parallel lift in up-down direction relative to the first adjustment assembly 31.

Furthermore, in some embodiments, as shown in Figures 4 to 12, the second adjustment assembly 32 further includes a connecting part 325. The connecting part 325 may be composed of a single component or at least two components connected detachably or non-detachably, which is not limited here, at least one part of the connecting part 325 is fixedly connected to the first member 100, for example, by fastening the connecting part 325 to the first member 100 using bolts or screws, the first adjustment assembly 31 includes a fourth main body 314, the second adjustment part 34 connects the connecting part 325 and the fourth main body 314, when the second adjustment part 34 is individually adjusted, the fourth main body 314 can move relative to the connecting part 325 along the front-rear direction. Here, a part of the second adjustment part 34 may, for example, be an eccentric component or a sheet-shaped body in the shape of a Reuleaux triangle, another part of the second

adjustment part 34 is rotatably provided on the connecting part 325, the fourth main body 314 is formed with a mating part, during the rotation of the second adjustment part 34 relative to the connecting part 325, it drives the fourth main body 314 to slide relative to the connecting part 325 along the front-rear direction, thereby enabling the fourth main body 314 to move relative to the connecting part 325 along the front-rear direction. For instance, the second adjustment part 34 may be a fastener with external threads, and the fourth main body 314 is formed with a sliding groove extending along the front-rear direction, the second adjustment part 34 passes through the sliding groove and is threadedly connected to the connecting part 325, when the second adjustment part 34 is loosened relative to the fourth main body 314, the fourth main body 314 and the connecting part 325 can move along the front-rear direction.

In some embodiments, the first adjustment part 33 connects the fourth main body 314 and the first main body 1, when the first adjustment part 33 is individually adjusted, the first main body 1 can parallet lift relative to the fourth main body 314 only along the up-down direction, thereby enabling the first main body 1 to parallel lift relative to the connecting part 325 only along the up-down direction,thus, the first main body 1 can parallel lift relative to at least one part of the base device 3 only along the up-down direction.

Specifically, in some embodiments, the first adjustment part 33 has a cylindrical structure with at least a part of its outer or inner wall being threaded, one end of the first adjustment part 33 is threadedly connected to the first main body 1, and the other end is connected to the fourth main body 314, alternatively, one end of the first adjustment part 33 is threadedly connected to the fourth main body 314, and the other end is connected to the first main body 1, when the first adjustment part 33 is driven to rotate relative to the fourth main body 314, the first main body 1 can parallel lift relative to the fourth main body 314 only along the up-down direction, thereby enabling the first main body 1 to parallel lift relative to the connecting part 325 only along the up-down direction, wherein, the first adjustment part 33, for example, cooperates side-by-side with the fixed part 51 in the front-rear and left-right directions to restrict the degrees of freedom of the first main body 1 or the second adjustment assembly 32 relative to the first adjustment assembly 31 along the front-rear and left-right directions.

In some embodiments, the first main body 1 includes a connecting plate 11, a left side plate 12, and a right side plate 13, the connecting plate 11, left side plate 12, and right side plate 13 enclose to form a mounting groove 14, the connecting plate 11, left side plate 12, and right side plate 13 may be formed as an integrated structure through bending or casting processes, at least a part of the fourth main body 314 is located within the mounting groove 14, or at least a part of the fourth main body 314 is located below the first main body 1. at least a part of the connecting part 325 is located within

the mounting groove 14, or at least a part of the connecting part 325 is located below the fourth main body 314, at least one of the left and right side surfaces of the fourth main body 314 is in close contact with an outer or inner side surface of the mounting groove 14, during the individual adjustment of the first adjustment part 33, the left or right side surface of the fourth main body 314 and the outer or inner side surface of the mounting groove 14 mutually restrict to prevent the first main body 1 from moving relative to the fourth main body 314 or the connecting part 325 in the left-right direction, thereby ensuring that the first main body 1 parallel lift relative to the connecting part 325 only along the up-down direction.

In some embodiments, the first main body 1 includes a connecting plate 11, a left side plate 12, and a right side plate 13, the connecting plate 11, left side plate 12, and right side plate 13 enclose to form a mounting groove 14, wherein, the connecting plate 11, the left side plate 12, and the right side plate 13 can be formed as an integrated structure through a bending process or a casting process, at least a part of the fourth part 314 can be located within the mounting groove 14 or below the first main body 1, at least a part of the connecting part 325 can be located within the mounting groove 14 or below the first main body 1,and, at least one of the left and right side surfaces of the connecting part 325 is in close contact with an outer or inner side surface of the mounting groove 14, during the individual adjustment of the first adjustment part 33, the left or right side surface of the fourth main body and the outer or inner side surface of the mounting groove 14 mutually restrict to prevent the first main body 1 from moving relative to the fourth main body 314 and the connecting part 325 in the left-right direction, thereby ensuring that the first main body 1 parallel lift relative to the connecting part 325 only along the up-down direction.

In some embodiments, as shown in Figures 20 to 32, the first adjustment assembly 31 and the second adjustment assembly 32 are connected, and the second adjustment assembly 32 is connected to the first main body 1. This embodiment does not limit the positional relationship among the first main body 1, the first adjustment assembly 31, and the second adjustment assembly 32, the first main body 1 is connected to the first adjustment assembly 31 via the second adjustment assembly 32, after individually adjusting the first adjustment part 33, the first main body 1 can parallel lift relative to the first adjustment assembly 31 only along the up-down direction.

Furthermore, in some embodiments, as shown in Figures 22 to 23, the second adjustment assembly 32 further includes a fifth main body 324, and the first adjustment assembly 31 further includes a fourth main body 314, at least a part of the fourth main body 314 may be used for fixed connection to the first member 100, for example, by fastening the fourth main body 314 to the first member 100 using bolts or screws, the fifth main body 324 can parallel lift relative to the fourth main

body 314 along the up-down direction, thereby enabling the first main body 1 to parallel lift relative to the fourth main body 314 along the up-down direction, thus, the first main body 1 can parallel lift relative to at least a part of the base device 3 only along the up-down direction.

In some embodiments, when the second adjustment part 34 is individually adjusted, the first main body 1 can move relative to the fifth main body 324 only along the front-rear direction, thereby enabling the first main body 1 to move relative to the fourth main body 314 only along the front-rear direction.

Specifically, in some embodiments, the first adjustment part 33 has a cylindrical structure with at least a part of its outer or inner wall being threaded, one end of the first adjustment part 33 is threadedly connected to the fifth main body 324, and the other end is connected to the fourth main body 314. alternatively, one end of the first adjustment part 33 is threadedly connected to the fourth main body 314, and the other end is connected to the fifth main body 324, when the first adjustment part 33 is driven to rotate relative to the fourth main body 314, the fifth main body 324 can parallel lift relative to the fourth main body 314 along the up-down direction, thereby enabling the first main body 1 to parallel lift relative to the fourth main body 314 along the up-down direction, consequently, the first main body 1 can parallel lift relative to at least a part of the base device 3 only along the up-down direction. here, the first adjustment part 33, for example, cooperates side-by-side with the fixed part 51 in the front-rear and left-right directions to restrict the degrees of freedom of the first main body 1 or the second adjustment assembly 32 relative to the first adjustment assembly 31 along the front-rear and left-right directions.

In some embodiments, as shown in Figures 11 to 12, 20 to 21, 23 to 25, and 32, the interior of the first main body 1, and/or the interior of the first adjustment assembly 31, and/or the interior of the second adjustment assembly 32, and/or between the first main body 1 and the second adjustment assembly 32, and/or between the first adjustment assembly 31 and the second adjustment assembly 32, and/or between the first adjustment assembly 31 and the first main body 1, connection or separation is achieved via a detachment device 10. The detachment device 10 may be a sliding detachment device, a press-type detachment device, or other forms of detachment devices, the specific structure of the detachment device 10 is conventional in this technical field, for example, a press-type detachment device 10 includes a button and a spring, one end of the button is provided with a buckle, and by pressing the other end of the button, the engagement or release of the buckle is controlled, thereby achieving connection or separation among the aforementioned components. The spring is used to drive the pressing member to reset automatically.

In some embodiments, as shown in Figure 18, the base device 3 includes a third adjustment assembly 35, the third adjustment assembly 35 is located inside the first main body 1, and/or inside the first adjustment assembly 31, and/or inside the second adjustment assembly 32, and/or between the first main body 1 and the second adjustment assembly 32, and/or between the first adjustment assembly 31 and the second adjustment assembly 32, and/or between the first adjustment assembly 31 and the first main body 1,the third adjustment assembly 35 includes a third adjustment part, when the third adjustment part is individually adjusted, the first main body 1 can move relative to at least a part of the base device 3 along the left-right direction. The structure of the third adjustment part is the same as or similar to that of the second adjustment part 34 in this embodiment, for details, please refer to the description of the second adjustment part 34, which will not be repeated here. By adding the third adjustment assembly 35 and the third adjustment part, three-dimensional adjustment of the hinge assembly in this embodiment is achieved, improving adjustment convenience and installation position accuracy.

In the description of this specification, references to terms such as "one embodiment," "some embodiments," "illustrative embodiment," "example," "specific example," or "some examples" mean that specific features, structures, materials, or characteristics described in connection with the embodiment or example are included in at least one embodiment or example of the present invention. In this specification, schematic expressions of the above terms do not necessarily refer to the same embodiment or example. Moreover, the specific features, structures, materials, or characteristics may be combined in any suitable manner in one or more embodiments or examples.

Although the embodiments of the present invention have been shown and described, those of ordinary skill in the art can understand that various changes, modifications, substitutions, and variations can be made to these embodiments without departing from the principles and purpose of the present invention, the scope of the present invention is defined by the claims and their equivalents.

Claim

1、A hinge assembly for furniture, comprising:

a first main body and a hinge head**,** the hinge head is rotatably connected to the first main body, and the hinge head is configured to connect a second member;

a base device, the base device is configured to connect a first member; the base device comprising at least a first adjustment assembly and at least a second adjustment assembly;

wherein the first adjustment assembly is provided with at least a first adjustment part, when the first adjustment part is independently adjusted, the first main body can parallel lift only in an up-down direction relative to the first adjustment assembly, so that the first main body can parallel lift only in the up-down direction relative to at least a part of the base device;

the second adjustment assembly is provided with a second adjustment part, when the second adjustment part is independently adjusted, the first main body can parallel move only in the front-rear direction relative to at least one part of the base devices.

2、The hinge assembly for furniture according to claim 1, wherein a first positioning part is formed on the first adjustment assembly, a second positioning part cooperated with the first positioning part is formed on the first main body and/or the second adjustment assembly, the first positioning part and the second positioning part cooperate with each other to restrict the freedom of the first main body or the second adjustment assembly relative to the first adjustment assembly in the front-rear direction and the left-right direction, thus, when the first adjustment part is independently adjusted, so that the first main body can parallel lift only in the up-down direction relative to the first adjustment assembly.

3、The hinge assembly for furniture according to claim 2, wherein side surfaces of the first positioning part in the front-rear direction and the left-right direction match side surfaces of the second positioning part in the front-rear direction and the left-right direction, to restrict the freedom of the first main body or the second adjustment assembly relative to the first adjustment assembly in the front-rear direction and the left-right direction, so that the first main body can parallel lift only in the up-down direction relative to the first adjustment assembly.

4、 The hinge assembly for furniture according to claim 3, wherein the first positioning part

comprises the first adjustment part and a first abutting part, the second positioning part comprises a fixing part and a second abutting part, the first adjustment part is cylindrical, and the first adjustment part is rotatably arranged on the fixing part, and side surfaces of the first adjustment part along a front-rear direction and a left-right direction are in one-to-one correspondence with side faces of the fixing part along the front-rear direction and the left-right direction, to restrict the freedom of the first main body or the second adjustment assembly relative to the first adjustment assembly in the front-rear direction and the left-right direction;

The first abutting part and the second abutting part abut against each other to restrict the first adjustment part from driving other components of the first adjustment part to rotate relative to the first main body or the second adjustment part to rotate relative to the first adjustment part when the first adjustment part is rotating.

5、Hinge assembly for furniture according to claim 3, wherein the first adjustment assembly comprises a first left side plate and/or a first right side plate, and the first main body or the second adjustment assembly comprises a second left side plate and/or a second right side plate;

the first left side plate and/or the first right side plate are provided with at least one first bent part, and the first positioning part comprises the first bent part;

one end of the first bent part is connected to the first left side plate, one side surface of the left and right side surfaces of the first left side plate is closely adhered to one side surface of the left and right side surfaces of the second left side plate, the first bent part passes over the second left side plate and abuts on the other side surface of the second left side plate, the second left side plate and the first bent part cooperate with each other to restrict the second left side plate from moving in at least one of a left-right direction and a front-rear direction; and/or ,

one end of the first bent part is connected to the first right side plate, one side surface of the left and right side surfaces of the first right side plate is closely adhered to one side surface of the left and right side surfaces of the second right side plate, the first bent part passes over the second right side plate and abuts on the other side surface of the second right side plate, the second right side plate and the first bent part cooperate with each other to restrict the second right side plate from moving in at least one of a left-right direction and a front-rear direction.

6、The hinge assembly for furniture according to claim 5, wherein the number of the first bent parts is at least two, and the at least two first bent parts respectively restrict the first adjustment assembly to move in front-rear direction relative to the first main body or the second adjustment assembly.

7、Hinge assembly for furniture according to claim 3, wherein the first adjustment assembly comprises a first left side plate and/or a first right side plate, and the first main body or the second adjustment assembly comprises a second left side plate and/or a second right side plate;

at least one second bent part is provided on the second left side plate and/or the second right side plate, and the second positioning part comprises the second bent part;

one end of the second bent part is connected to the second left side plate, one side surface of the left and right side surface of the second left side plate is closely adhered to one side surface of the left and right side surfaces of the first left side plate, the second bent part passes over the first left side plate and abuts on the other side surface of the first left side plate, the second left side plate and the second bent part cooperate with each other to restrict the first left side plate from moving in at least one of a left-right direction and a front-rear direction; and/or ,

one end of the second bent part is connected to the second right side plate, one side surface of the left and right side surfaces of the second right side plate is closely adhered to one side surface of the left and right side surfaces of the first right side plate, the second bent part passes over the first right side plate and abuts against the other side surface of the first right side plate, the first right side plate and the second bent part cooperate with each other to restrict the first right side plate from moving in at least one of a left-right direction and a front-rear direction.

8、The hinge assembly for furniture according to claim 7, wherein the number of the second bent parts is at least two, and the at least two second bent parts respectively restrict the first adjustment assembly to move in front-rear direction relative to the first main body or the second adjustment assembly.

9、 The hinge assembly for furniture according to claim 1, wherein the second adjustment assembly is connected to the first adjustment assembly, and the first adjustment assembly is connected to the first main body.

10、The hinge assembly for furniture according to claim 9, wherein the second adjustment assembly further comprises a connecting part, and at least a part of the connecting part is fixedly connected to the first member; the first adjustment assembly comprises a fourth body;

the second adjustment part connects to the connecting part and the fourth body, when the second adjustment part is independently adjusted, the fourth body is moving only in the front-rear direction relative to the connecting part.

11、The hinge assembly for furniture according to claim 10, wherein the first adjustment part connects with the fourth main body and the first main body; when the first adjustment part is independently adjusted, the first main body can parallel lift only in the up-down direction relative to the fourth main body, so that the first main body can parallel lift only in the up-down direction relative to the connecting part.

12、The hinge assembly for furniture according to claim 11, wherein one end of the first adjustment part is threadedly connected to the first main body, and the other end of the first adjustment part is connected to the fourth main body, or one end of the first adjustment part is threadedly connected to the fourth main body, and the other end of the first adjustment part is connected to the first main body;

when the first adjustment part is driven to rotate relative to the fourth main body, the first main body can only parallel lift in the up-down direction relative to the fourth main body , so that the first main body can only parallel lift in up-down direction relative to the connecting part ;

13、The hinge assembly for furniture according to claim 10, wherein the first main body comprises a connecting plate, a left side plate and a right side plate, the connecting plate, the left side plate and the right side plate are enclosed to form a mounting groove;

at least a part of the fourth main body is located in the mounting groove or below the first main body; at least a part of the connecting part is arranged below the fourth main body; and at least one of a left side surface and a right side surface of the fourth main body is closely adhered to an inner side surface of the mounting groove.

14、The hinge assembly for furniture according to claim 10, wherein the first main body comprises a connecting plate, a left side plate and a right side plate, and the connecting plate, the left side plate and the right side plate are enclosed to form a mounting groove;

at least one part of the connecting part can be located in the mounting groove; and at least one of the left side surface and the right side surface of the connecting part is closely adhered to the inner side surface of the mounting groove.

15、The hinge assembly for furniture according to claim 1, wherein the first adjustment assembly is connected to the second adjustment assembly, and the second adjustment assembly is connected

to the first main body.

16、The hinge assembly for furniture according to claim 15, wherein the second adjustment assembly further comprises a fifth main body, the first adjustment assembly further comprises a fourth main body, and at least one part of the fourth main body is fixedly connected to the first member;

the fifth body is can parallel lift in the up-down direction relative to the fourth body, so that the first body can parallel lift in the up-down direction relative to the fourth body.

17、The hinge assembly for furniture according to claim 16, wherein when the second adjustment part is independently adjusted, the first main body is move only in the front-rear direction relative to the fifth body, so that the first main body is moving only in the front-rear direction relative to the fourth main body

18、The hinge assembly for furniture according to claim 17, wherein one end of the first adjustment part is threadedly connected to the fifth main body, and the other end of the first adjustment part is connected to the fourth main body, or one end of the first adjustment part is threadedly connected to the fourth main body, and the other end of the first adjustment part is connected to the fifth main body;

when the first adjustment part is driven to rotate relative to the fourth main body, the fifth main body can parallel lift only in an up-down direction relative to the fourth main body, so that the first main body can parallel lift only in the up-down direction relative to the fourth main body.

19、A hinge assembly for furniture according to claim 1, wherein the interior of the first main body 、and/or the interior of the first adjustment assembly、and/or the interior of the second adjustment assembly、and/or between the first main body and the second adjustment assembly, and/or between the first adjustment assembly and the second adjustment assembly, and/or between the first adjustment assembly and the first main body, connecting or seperating by a dismounting device .

20、The hinge assembly for furniture according to claim 1, wherein at least one part of the first main body is located above the base device, and the first main body is connected to the first adjustment assembly or the second adjustment assembly from top to bottom; or ,

at least one part of the base device is located above the first main body, and the first adjustment assembly or the second adjustment assembly is connected to the first main body from top to bottom; or ,

at least one part of the base device is located on a left side or a right side of the first main body, and the first adjustment assembly or the second adjustment assembly is connected to the first main body along a left-right direction or a right-left direction.