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YU, Jingliang

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Internal Address: \_\_\_\_\_

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City: XIAMEN

State: FUJIAN

Country: CHINA Zip: 361000

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Execution Date(s) December 10, 2008

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**4. Application or patent number(s):**

This document is being filed together with a new application.

A. Patent Application No.(s)

12/332,962

B. Patent No.(s)

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Kening Li, PINSENT MASONS LLP

Internal Address: c/o PM-IP USA, LLC

Street Address: P. O. Box 341426

City: West Bethesda

State: MD Zip: 20827

Phone Number: 202-560-1916

Fax Number: 86-21-63292696

Email Address: kening.li@pinsentmasons.com

**6. Total number of applications and patents involved: 1**

7. Total fee (37 CFR 1.21(h) & 3.41) \$40

- Authorized to be charged to deposit account
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- None required (government interest not affecting title)

**8. Payment Information**

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December 14, 2011  
Date

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**ASSIGNMENT BY INVENTORS**

**THIS ASSIGNMENT**, made by YU, Jingliang, a citizen of China, residing at No. 88 Xinglong Road, Huli District, Xiamen, Fujian 361000, China (hereinafter referred to as Assignor);

**WHEREAS**, Assignor has invented certain new and useful improvements in **A GRILL WITH ADJUSTABLE GRILLING SPACE**, set forth in an Application for Letters Patent in the United States, attached hereto; and

**WHEREAS**, TSANN KUEN (CHINA) ENTERPRISE CO., LTD., a corporation of the China, having a principal place of business at No. 88 Xinglong Road, Huli District, Xiamen, Fujian 361000, China, (hereinafter referred to as Assignee), are desirous of acquiring the entire right, title and interest in and to said inventions and said Application, and in and to any patent to be obtained therefor or based thereupon in the world.

**NOW, THEREFORE**, for good and sufficient considerations, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, their successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all patent in the United States, and reissues, reexaminations and extensions of said patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for their own use and benefit and the use and benefit of their successors, legal representatives and assigns, to the full end of the term or terms for which patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

**AND** for the same consideration, Assignors hereby represent and warrant to Assignee, their successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

**AND** for the same consideration, Assignors hereby covenant and agree to and with Assignee, their successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any patent and applications for patent for said inventions, without charge to Assignee, their successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of their successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said application for patent, or any proceeding in connection with any Patent or applications for Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Patent, or any reissue, reexamination or extension of any Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks of the United States to issue said Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, their successors, legal representatives and assigns.

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

08.12.10

Date



(Signature of Inventor)

YU, Jingliang

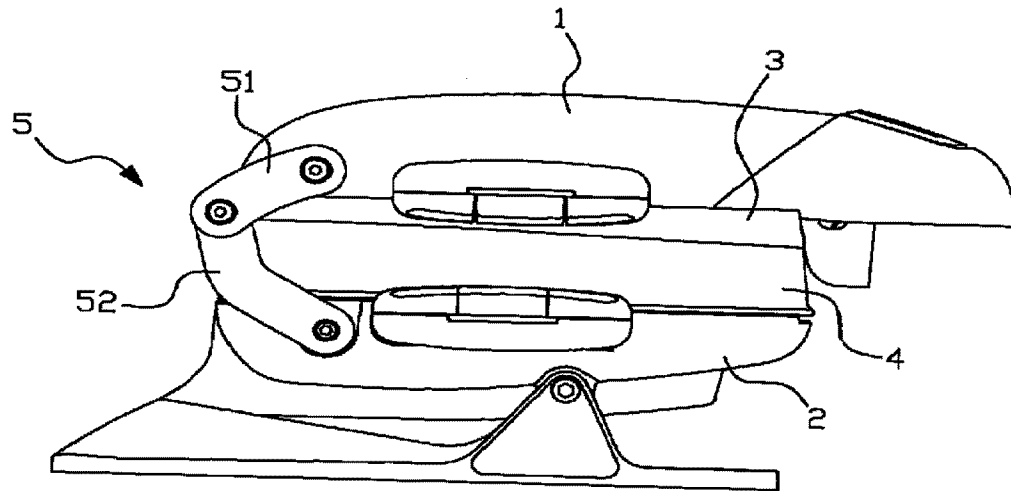


FIG. 1

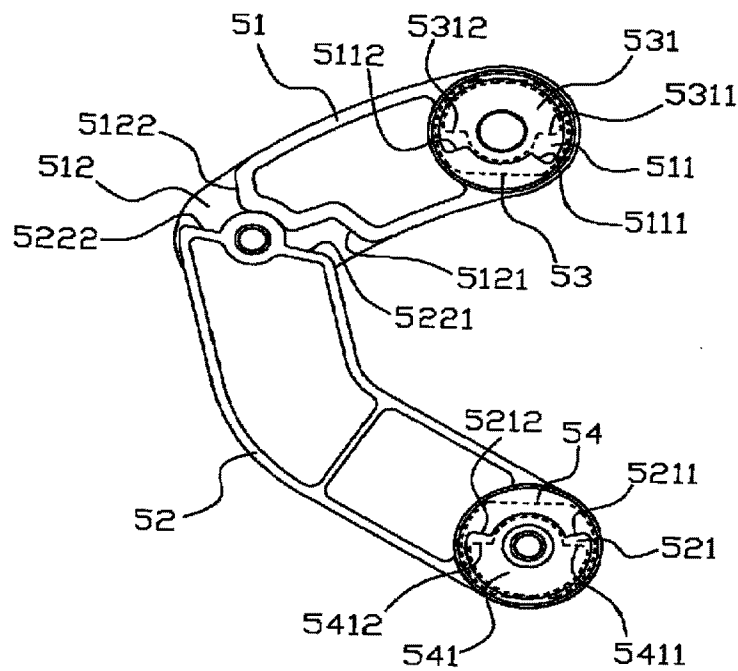


FIG. 2

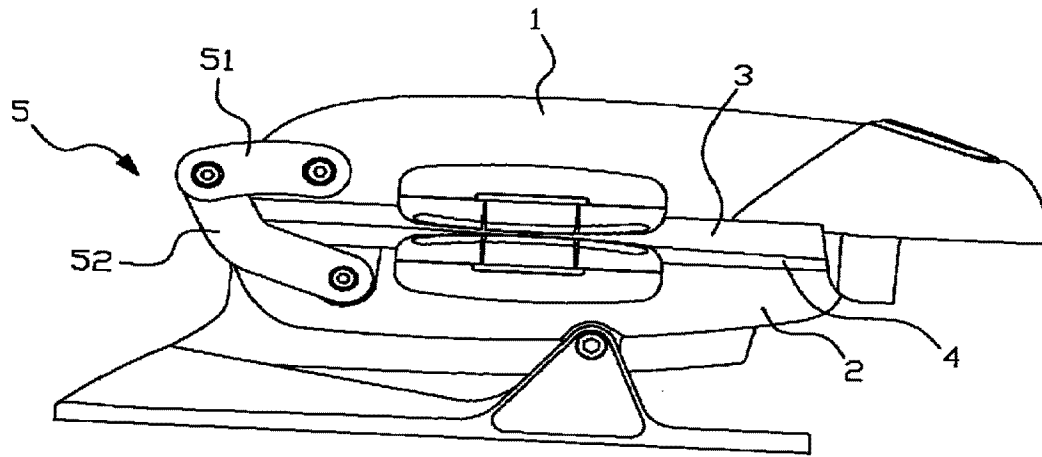


FIG. 3

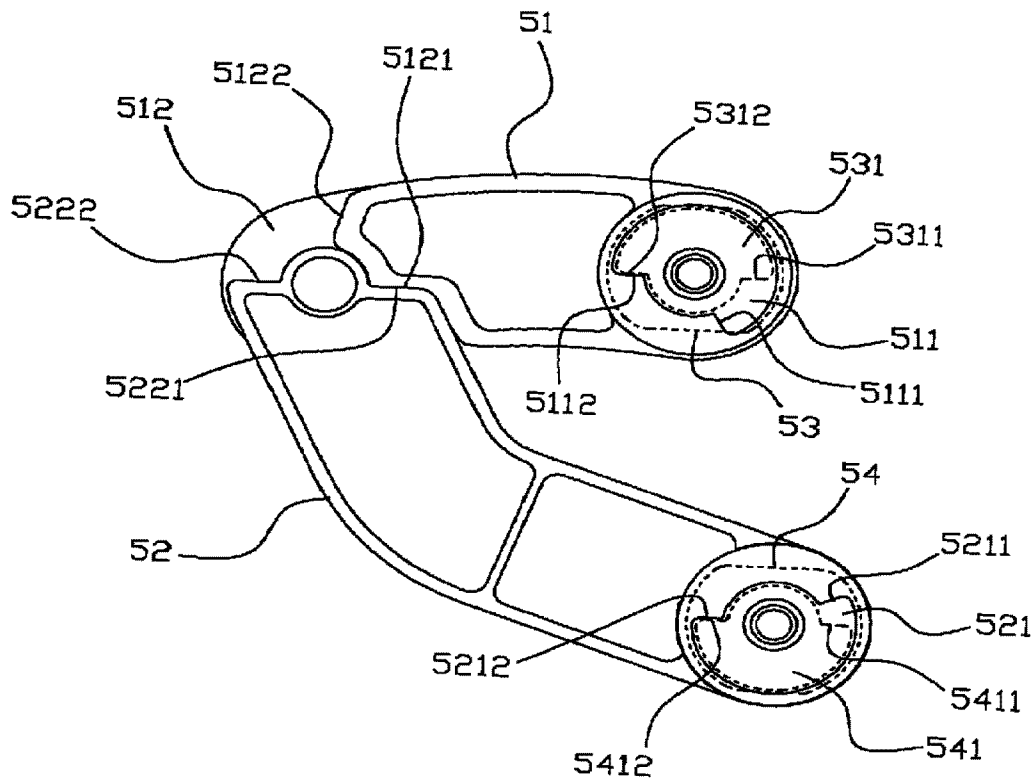


FIG. 4

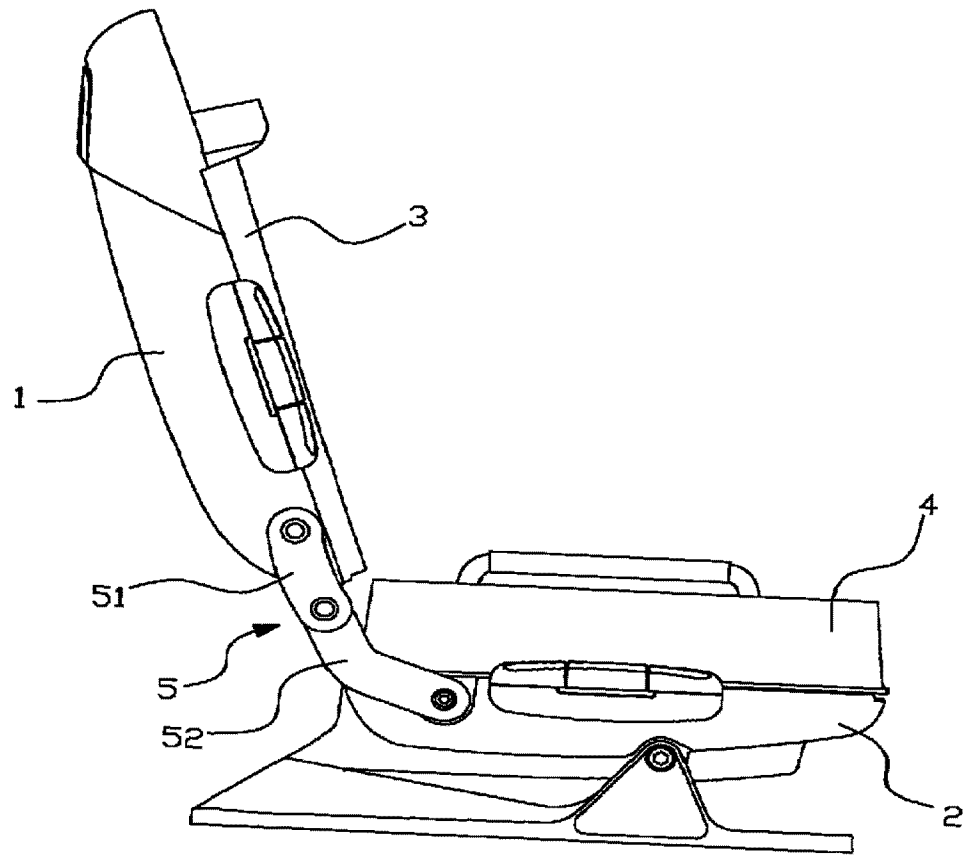


FIG.5

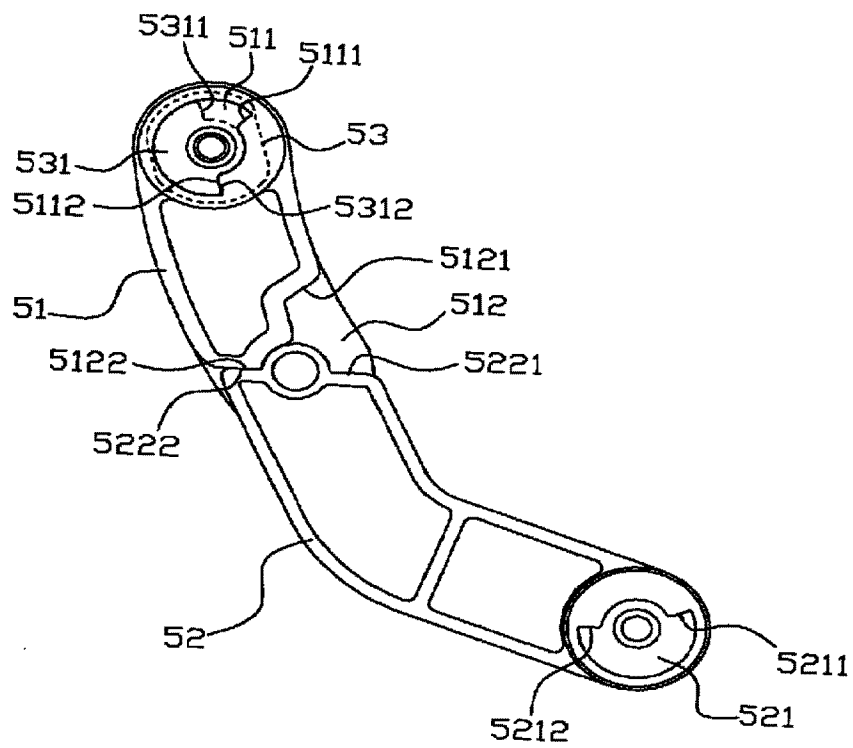


FIG. 6

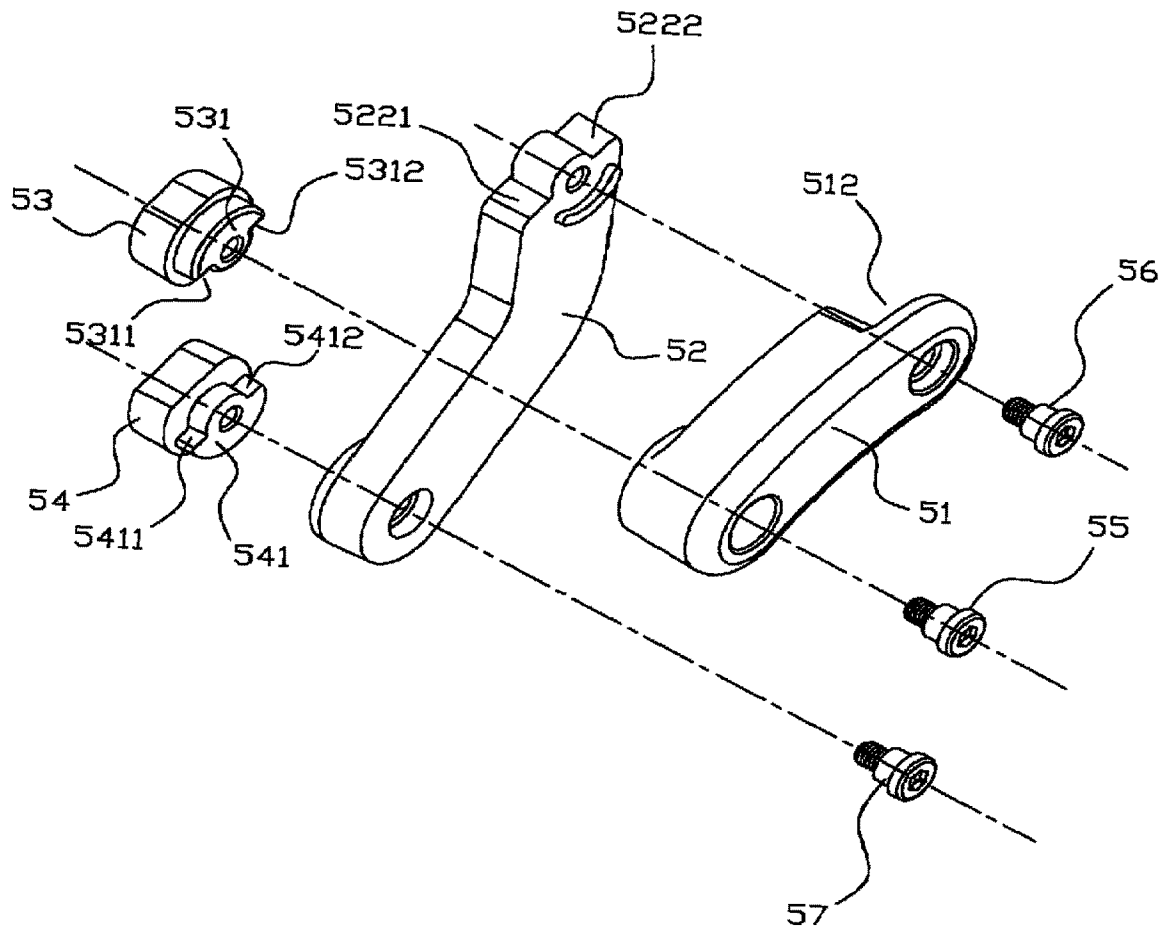


FIG. 7



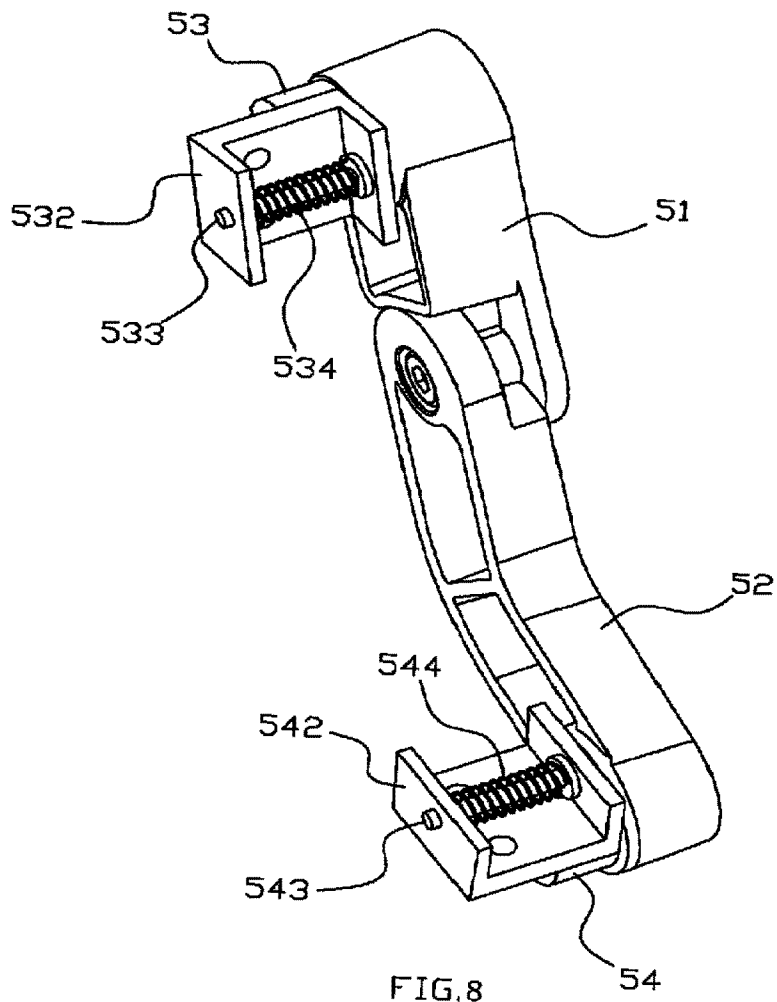


FIG.8

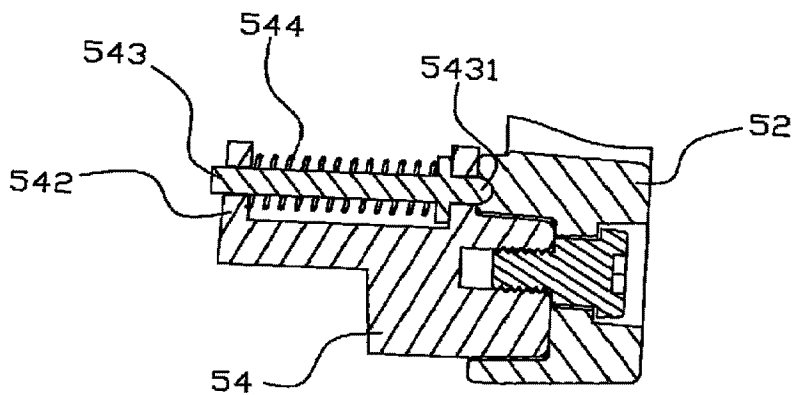


FIG.9

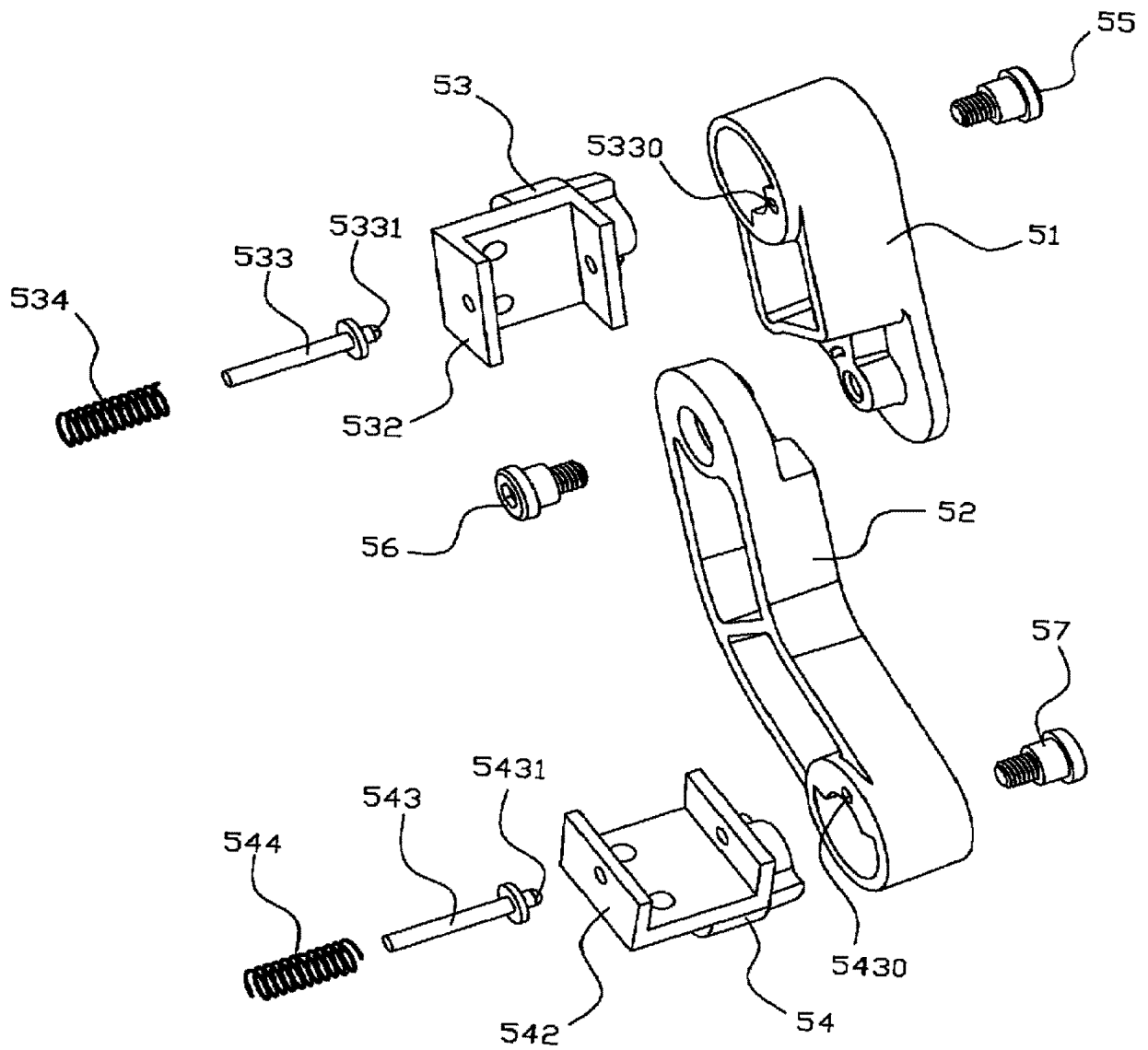


FIG. 10

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## A GRILL WITH ADJUSTABLE GRILLING SPACE

### FIELD OF THE INVENTION

[0001] The present invention relates to a grill, more particularly to a grill with adjustable grilling space.

### RELATED ART

[0002] Common grill usually comprises an upper grill pan and a lower grill pan that is pivoted to the upper grill pan. The food is laid between the two grill pans to be cooked. Such a grill is acceptable for grilling lamellar foods. But when thick food or lumpish food are placed between the two grill pans, the front side of the upper grill pan will incline upwards, and as a consequence the two grill pans will form an angle, resulting in the rear part of the food item to be burnt due to being clamped too tightly while the front part of the food is undercooked due to not being clamped firmly.

[0003] To overcome the problem, grills have been designed with adjustable distance between the upper grill pan and the lower grill pan. A common design for this type of grills uses a U-shaped pan support on the lower grill pan, wherein the rear ends of the two side poles of the pan support are pivoted to the two rear corners of the lower grill pan; the front side pole of the grill pan forms a handle; the middle of the two sides of the upper grill pan is pivoted to the insides of the middle of the two side poles of the U-shaped pan support; and the upper grill pan can turn relatively to the pan support by the axis of the connecting line between the two pivot points. The U-shaped pan support can move up and down following the changing distance between the upper grill pan and the lower grill pan, yet the upper grill pan remains parallel to the lower grill pan by turning relatively to the U-shaped pan support. Grills of the above design, however, still have many disadvantages. For example, when the distance between the upper grill pan and the lower grill pan increases, although the upper grill pan can remain parallel with the lower grill pan, the lower grill pan is moved off its vertical position. The bigger the distance between the upper grill pan and the lower grill pan, the greater the displacement of the upper grill pan off its vertical alignment with the lower grill pan. In other words, in order to accommodate thicker food times, vertical alignment between the upper grill pan and the lower grill pan is sacrificed.

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[0004] The present applicant has also filed a Chinese patent application, number 200520125193.X, entitled "A grill with liftable top cover," which discloses a grill that comprises an upper shell, a lower shell, an upper grill pan embedded into the lower surface of the upper shell and a lower grill pan embedded into the upper surface of the lower shell. The back side of the lower shell has a connecting piece that can move up and down. The upside of the connecting piece protrudes above the lower shell and is pivoted to the back side of the upper grill pan. The lower shell has an elevator mechanism that is connected to the connecting piece and drives the connecting piece to move up and down as well. The distance between the upper grill pan and lower grill pan can be adjusted by the elevator mechanism. However, the elevator mechanism has high production cost, and the elevator mechanism tends to breakdown easily under the weight of the upper grill pan.

[0005] Furthermore, with the same grill, users may need to change different grill pans with different depths for adjusting grilling space. If the distance between the upper grill pan and the lower grill pan can't be adjusted or the upper grill pan and the lower grill pan can't be aligned at vertical direction after adjusting, the different grill pans with different depths will not be able to be changed.

#### SUMMARY OF THE INVENTION

[0006] The present invention provides a grill with adjustable grilling space, whose primary object is to overcome the disadvantages of known grills which cannot adjust the distance between the upper grill pan and the lower grill pan, or of the unsatisfactory adjusting mechanisms of known grills.

[0007] The present invention adopts the following technical solution. A grill with adjustable grilling space comprises an upper shell, a lower shell, an upper grill pan that is disposed on the bottom surface of the upper shell and a lower grill pan that is disposed on the top surface of the lower shell. The upper shell is connected to the lower shell by hinge mechanisms. The hinge mechanism comprises an upper oscillating rod and a lower oscillating rod. The adjacent ends of the upper oscillating rod and the lower oscillating rod are pivoted to each other, and the removed

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ends of the upper oscillating rod and the lower oscillating rod are pivoted to the upper shell and lower shell respectively.

[0008] In one embodiment of the grill with adjustable grilling space, the removed ends of the upper oscillating rod and the lower oscillating rod are connected to the upper shell and the lower shell by an upper shaft seat and a lower shaft seat respectively. The upper shaft seat and the lower shaft seat are fixed to the upper shell and the lower shell respectively. The removed ends of the upper oscillating rod and the lower oscillating rod are pivoted to the upper shaft seat and the lower shaft seat respectively.

[0009] Both the adjacent ends of said upper oscillating rod and said lower oscillating rod have front locating surfaces and back locating surfaces. When the upper shell and the lower shell are closed, the front locating surfaces of the upper oscillating rod and the lower oscillating rod abut against each other. When the upper shell and the lower shell are open, the back locating surfaces of the upper oscillating rod and the lower oscillating rod abut against each other.

[0010] Further, a side of the end that is connected to the lower oscillating rod of said upper oscillating rod forms an arc gap; two end surfaces of the arc gap form said front locating surface and back locating surface. The corresponding connecting end of the lower oscillating rod is embedded into the arc gap; the shape of the connecting end is matched with the arc gap.

[0011] The end that is connected to the upper shaft seat of said upper oscillating rod has a front abutting surface and a back abutting surface, correspondingly the upper shaft seat has a front abutting surface and a back abutting surface that abut against the front abutting surface and the back abutting surface of the upper oscillating rod. When the upper shell and the lower shell are closed or the upper shell and the lower shell are opened to the most, the back abutting surfaces of the upper oscillating rod and the upper shaft seats abut against each other.

[0012] Further, the end that is connected to the upper shaft seat of said upper oscillating rod has a circular arc groove. Two end surfaces of the circular arc groove form said front abutting surface and back abutting surface. Said upper shaft seat forms a raised part that is used to being inserted into the groove; the shape of the raised part is matched with the groove.

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- [0013] The end that is connected to the lower shaft seat of said lower oscillating rod has a front abutting surface and a back abutting surface, correspondingly the lower shaft seat has a front abutting surface and a back abutting surface that abut against the front abutting surface and the back abutting surface of the lower oscillating rod. When the upper shell and the lower shell are closed, or the upper shell and the lower shell are opened to the most, the back abutting surfaces of the lower oscillating rod and the lower shaft seats abut against each other.
- [0014] Further, the end that is connected to the lower shaft seat of said lower oscillating rod has a circular arc groove. Two end surfaces of the circular arc groove form said front abutting surface and back abutting surface. Said lower shaft seat forms a raised part that is used to being inserted into the groove; the shape of the raised part is matched with the groove.
- [0015] Further, the removed ends of the upper oscillating rod and the lower oscillating rod are connected to the upper shaft seat and the lower shaft seat by interference fit; the adjacent ends of the upper oscillating rod and the lower oscillating rod are connected to each other by clearance fit.
- [0016] Further, there are two said hinge mechanisms, which are disposed at the rear ends of left sides and the right sides of the upper shell and the lower shell respectively.
- [0017] Further, there are pre-tension mechanisms between the upper shaft seat and the upper oscillating rod and between the lower shaft seat and the lower oscillating respectively. The pre-tension mechanism comprises a sliding rod that is disposed in the upper shaft seat or the lower shaft seat slidably, a spring that makes the sliding rod protrude towards the upper oscillating rod or the lower oscillating rod and a locating groove that is matched with the protruding part of the sliding rod and is disposed in the upper oscillating rod or the lower oscillating rod.
- [0018] As shown in above-mentioned descriptions and compared with the related art, the present invention has advantages as follows. Firstly, the upper shell is connected to the lower shell by adjustable hinge mechanisms, and the distance between them is adjustable, so it can adjust the grilling space between the upper grill pan and the lower grill pan by changing grill pans with different depths, at the same time it can assure that the upper grill pan is aligned with the lower grill pan in vertical direction. Secondly, in grilling thick food, the distance between the

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upper grill pan and the lower grill pan can be adjusted to fit the food by adjusting hinge mechanisms that are connected to the upper shell and the lower shell. Thirdly, the hinge mechanisms have simple structure, are not broken easily and have low cost.

#### BRIEF DESCRIPTION OF THE DRAWINGS

- [0019] FIG. 1 is a side view of embodiment 1 when a deep grill pan is used.
- [0020] FIG. 2 is a side view of hinge mechanism of embodiment 1 when a deep grill pan is used.
- [0021] FIG. 3 is a side view of embodiment 1 when a flat grill pan is used.
- [0022] FIG. 4 is a side view of hinge mechanism of embodiment 1 when a flat grill pan is used.
- [0023] FIG. 5 is a side view of embodiment 1 when the upper grill pan and the lower grill pan are open.
- [0024] FIG. 6 is a side view of hinge mechanism of embodiment 1 when the upper grill pan and the lower grill pan are open.
- [0025] FIG. 7 is an explosive view of hinge mechanism of embodiment 1.
- [0026] FIG. 8 is a perspective view of hinge mechanism of embodiment 2.
- [0027] FIG. 9 is a cutaway view of the connection of the lower oscillating rod of hinge mechanism and the lower shaft seat of embodiment 2.
- [0028] FIG. 10 is an explosive view of hinge mechanism of embodiment 2.

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## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0029] The present invention will be further described according to the drawings and the embodiments.

**Embodiment 1**

[0030] Referring to FIGS. 1 and 3, a grill with adjustable grilling space, comprises an upper shell 1, a lower shell 2, an upper grill pan 3 that is disposed on the bottom surface of the upper shell 1 and a lower grill pan 4 that is disposed on the top surface of the lower shell 2. The upper shell 1 is connected to the lower shell 2 by hinge mechanisms 5. The hinge mechanism 5 comprises an upper oscillating rod 51 and a lower oscillating rod 52. The adjacent ends of the upper oscillating rod 51 and the lower oscillating rod 52 are pivoted to each other, and the removed ends of the upper oscillating rod 51 and the lower oscillating rod 52 are pivoted to the upper shell 1 and lower shell 2 respectively. There are two hinge mechanisms 5, which are disposed at the rear end of both the left side and the right side of the upper shell 1 and the lower shell 2 respectively. FIG. 1 and FIG. 3 are side views, so there is only one hinge mechanism 5 shown.

[0031] Referring to FIG. 7, the removed ends of the upper oscillating rod 51 and the lower oscillating rod 52 are connected to the upper shell 1 and the lower shell 2 by an upper shaft seat 53 and a lower shaft seat 54 respectively. The upper shaft seat 53 and the lower shaft seat 54 are fixed to the left sides and the right sides of the upper shell 1 and the lower shell 2 respectively. The removed ends of the upper oscillating rod 51 and the lower oscillating rod 52 are pivoted to the upper shaft seat 53 and the lower shaft seat 54 respectively, and the pivot shaft are bolts 55 and 57. The pivot shaft of the adjacent ends of the upper oscillating rod 51 and the lower oscillating rod 52 is bolt 56.

[0032] Referring to FIGS. 2, 4, 6 and 7, a side of the end that is connected to the lower oscillating rod 52 of the upper oscillating rod 51 forms an arc gap 512; the center of the arc gap 512 is the bolt 56. Two end surfaces of the arc gap 512 form a front locating surface 5121 and a back locating surface 5122. The corresponding connecting end of the lower oscillating rod 52 is embedded into the arc gap 512; the shape of the connecting end is matched with the arc gap 512.

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The lower oscillating rod 52 has a front locating surface 5221 and a back locating surface 5222 that are matched with the front locating surface 5121 and the back locating surface 5122. Referring to FIGS. 3 and 4, when the upper shell 1 and the lower shell 2 are closed, the front locating surface 5121 of the upper oscillating rod 51 and the front locating surface 5221 of the lower oscillating rod 52 abut each other. Referring to FIGS. 5 and 6, when the upper shell 1 and the lower shell 2 are open, the back locating surface 5122 of the upper oscillating rod 51 and the back locating surface 5222 of the lower oscillating rod 52 abut each other. Referring to FIGS. 1 and 2, when deep grill pan is adopted or when the upper grill pan 3 and the lower grill pan 4 are parallel and there is some distance between them, the front locating surfaces 5121 and 5221 or the back locating surfaces 5122 and 5222 do not abut each other.

[0033] Referring to FIGS. 2, 4, 6 and 7, the end of the upper oscillating rod 51 that is connected to the upper shaft seat 53 has a circular arc groove 511 with the center being the bolt 55. Two end surfaces of the circular arc groove 511 form a front abutting surface 5111 and a back abutting surface 5112. The upper shaft seat 53 forms a raised part 531 that is used to being inserted into the groove 511; the shape of the raised part 531 is matched with the groove 511. The raised part 531 has a front abutting surface 5311 and a back abutting surface 5312 that are matched with the front abutting surface 5111 and the back abutting surface 5112 of the groove 511. Referring to FIGS. 3 and 4, when the upper shell 1 and the lower shell 2 are closed, the back abutting surface 5112 of the upper oscillating rod 51 abuts against the back abutting surface 5312 of the upper shaft seat 53. Referring to FIGS. 5 and 6, when the upper shell 1 and the lower shell 2 are opened to the most, the back abutting surface 5112 of the upper oscillating rod 51 abuts against the back abutting surface 5312 of the upper shaft seat 53 as well.

[0034] Referring to FIGS. 2, 4, 6 and 7, the end that is connected to the lower shaft seat 54 of the lower oscillating rod 52 has a circular arc groove 521 with the center being the bolt 57. Two end surfaces of the circular arc groove 521 form a front abutting surface 5211 and a back abutting surface 5212. The lower shaft seat 54 forms a raised part 541 that is used to being inserted into the groove 521; the shape of the raised part 541 is matched with the groove 521. The raised part 541 has a front abutting surface 5411 and a back abutting surface 5412 that are matched with the front abutting surface 5211 and the back abutting surface 5212. Referring to FIG 4, when the upper shell 1 and the lower shell 2 are closed, the back abutting surface 5211 of

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the lower oscillating rod 52 abuts against the back abutting surface 5411 of the lower shaft seat 54; when the upper shell 1 and the lower shell 2 are opened to the most, the back abutting surface 5211 of the lower oscillating rod 52 abuts against the back abutting surface 5411 of the lower shaft seat 54 as well.

[0035] Further, the removed ends of the upper oscillating rod 51 and the lower oscillating rod 52 are connected to the upper shaft seat 53 and the lower shaft seat 54 by interference fit; the adjacent ends of the upper oscillating rod 51 and the lower oscillating rod 52 are connected to each other by clearance fit. So in normal state, the upper oscillating rod 51 cannot turn relatively to the upper shell 1 and the lower oscillating rod 52 cannot turn relatively to the lower shell 2. Only when grill pans with different depths are changed, relative angles between the upper oscillating rod 51 and the upper shell 1 and the lower oscillating rod 52 and the lower shell can be adjusted.

### Embodiment 2

[0036] Referring to FIGS. 8 and 10, the embodiment has a similar structure to embodiment 1. The difference is that there are pre-tension mechanisms between the upper shaft seat 53 and the upper oscillating rod 51 and between the lower shaft seat 54 and the lower oscillating rod 52.

[0037] The pre-tension mechanism between the lower shaft seat 54 and the lower oscillating rod 52 is illustrated below as an example. Referring to FIGS. 8 and 10, the pre-tension mechanism comprises a sliding rod 543 disposed slidably in the lower shaft seat 54, a spring 544 that makes the sliding rod 543 protrude towards the lower oscillating rod 52 and a locating groove 5430 that is matched with the protruding part 5431 of the sliding rod 543 and is disposed in the lower oscillating rod 52.

[0038] When there is some distance between the upper grill pan 3 and the lower grill pan 4, just as shown in FIG. 1, the protruding part 5431 of the sliding rod 543 is matched with the locating groove 5430 of the lower oscillating rod 52 to ensure that the lower oscillating rod 52 is located relatively to the lower shaft seat 54. The lower shaft seat 54 has an integrative U-shaped piece 542. The sliding rod 543 gets through and is disposed slidably between the two side walls of the U-shaped piece 542. The spring covers the sliding rod 543.

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[0039] Referring to FIGS. 8 and 10, the pre-tension mechanism between the upper shaft seat 53 and the upper oscillating rod 51 has the same structure with the pre-tension mechanism between the lower shaft seat 54 and the lower oscillating rod 52. Corresponding parts are the sliding rod 533, the protruding part 5331, the spring 534, the U-shaped piece 532 and the locating groove 5330.

[0040] The foregoing description of the exemplary embodiments of the invention has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed. Many modifications and variations are possible in light of the above teachings. All changes that come within the meaning and range of equivalency of the claims are to be embraced within their scope.

2907204-033000  
636576-07026**What is claimed is:**

1. A grill with adjustable grilling space which comprises an upper shell, a lower shell, an upper grill pan disposed on the bottom surface of the upper shell and a lower grill pan disposed on the top surface of the lower shell, wherein the upper shell is connected to the lower shell by hinge mechanisms comprising an upper oscillating rod and a lower oscillating rod, which are arranged such that one end of the upper oscillating rod is adjacent to one end of the lower oscillating rod, and the other end of the upper oscillating rod is removed to the other end of the lower oscillating rod, wherein the adjacent ends of the upper oscillating rod and the lower oscillating rod are pivoted to each other, and the removed ends of the upper oscillating rod and the lower oscillating rod are pivoted to the upper shell and lower shell respectively.
2. The grill according to claim 1, wherein the removed ends of the upper oscillating rod and the lower oscillating rod are connected to the upper shell and the lower shell by an upper shaft seat and a lower shaft seat respectively; the upper shaft seat and the lower shaft seat are fixed to the upper shell and the lower shell respectively; the removed ends of the upper oscillating rod and the lower oscillating rod are pivoted to the upper shaft seat and the lower shaft seat respectively.
3. The grill according to claim 2, wherein both the adjacent ends of said upper oscillating rod and said lower oscillating rod have front locating surfaces and back locating surfaces, configured such that when the upper shell and the lower shell are closed, the front locating surfaces of the upper oscillating rod and the lower oscillating rod abut against each other, and when the upper shell and the lower shell are open, the back locating surfaces of the upper oscillating rod and the lower oscillating rod abut against each other.
4. The grill according to claim 3, wherein a side of the end that is connected to the lower oscillating rod of said upper oscillating rod forms an arc gap; two end surfaces of the arc gap form said front locating surface and back locating surface; the corresponding connecting end of the lower oscillating rod is embedded into the arc gap; and the shape of the connecting end is matched with the arc gap.

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5. The grill according to claim 2, wherein the end that is connected to the upper shaft seat of said upper oscillating rod has a front abutting surface and a back abutting surface, correspondingly the upper shaft seat has a front abutting surface and a back abutting surface that abut against the front abutting surface and the back abutting surface of the upper oscillating rod, such that when the upper shell and the lower shell are closed and the upper shell and the lower shell are opened to the most, the back abutting surfaces of the upper oscillating rod and the upper shaft seats abut against each other.
6. The grill according to claim 5, wherein the end that is connected to the upper shaft seat of said upper oscillating rod has a circular arc groove; two end surfaces of the circular arc groove form said front abutting surface and back abutting surface, respectively; and wherein said upper shaft seat forms a raised part insertable into the groove, and wherein the shape of the raised part is matched with the groove.
7. The grill according to claim 2, wherein the end that is connected to the lower shaft seat of said lower oscillating rod has a front abutting surface and a back abutting surface, correspondingly the lower shaft seat has a front abutting surface and a back abutting surface that abut against the front abutting surface and the back abutting surface of the lower oscillating rod, such that when the upper shell and the lower shell are closed or when the upper shell and the lower shell are opened to the most, the back abutting surfaces of the lower oscillating rod and the lower shaft seats abut against each other.
8. The grill according to claim 7, wherein the end that is connected to the lower shaft seat of said lower oscillating rod has a circular arc groove; two end surfaces of the circular arc groove form said front abutting surface and back abutting surface; wherein said lower shaft seat forms a raised part that is insertable into the groove; and wherein the shape of the raised part is matched with the groove.
9. The grill according to claim 2, wherein the removed ends of the upper oscillating rod and the lower oscillating rod are connected to the upper shaft seat and the lower shaft seat by interference fit; the adjacent ends of the upper oscillating rod and the lower oscillating rod are connected to each other by clearance fit.

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10. The grill according to claim 1 , wherein the two hinge mechanisms are disposed at the rear end of the left and right sides of the upper shell and of the lower shell respectively.
11. The grill according to claim 2 , further comprising pre-tension mechanisms between the upper shaft seat and the upper oscillating rod and between the lower shaft seat and the lower oscillating respectively.
12. The grill according to claim 11, wherein said pre-tension mechanism comprises a sliding rod slidably disposed in the upper shaft seat or the lower shaft seat , a spring that makes the sliding rod protrude towards the upper oscillating rod or the lower oscillating rod, and a locating groove that is matched with the protruding part of the sliding rod and is disposed in the upper oscillating rod or the lower oscillating rod.

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636576-07026**ABSTRACT OF THE DISCLOSURE**

A grill with adjustable grilling space comprises an upper shell, a lower shell, an upper grill pan that is disposed on the bottom surface of the upper shell and a lower grill pan that is disposed on the top surface of the lower shell. The upper shell is connected to the lower shell by hinge mechanisms. The hinge mechanism comprises an upper oscillating rod and a lower oscillating rod. The adjacent ends of the upper oscillating rod and the lower oscillating rod are pivoted to each other, and the removed ends of the upper oscillating rod and the lower oscillating rod are pivoted to the upper shell and lower shell respectively. The upper shell is connected to the lower shell by adjustable hinge mechanisms, and the distance between them is adjustable, so it can adjust the grilling space between the upper grill pan and the lower grill pan by changing grill pans with different depths, while assuring that the upper grill pan is aligned with the lower grill pan in the vertical direction. For frying thick food, the distance between the upper grill pan and the lower grill pan can be adjusted to be fit for the food by adjusting hinge mechanisms that are connected to the upper shell and the lower shell.

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