CLAIMS

1. A transformable yo-yo comprising: two rotators, a connecting device and a connecting shaft for connecting together the two rotators each having a back side and a front side, wherein a through hole, into which the connecting shaft is inserted from two directions is provided in the middle of each of the rotators, and the connecting device configured to connect and secure the connecting shaft to the rotators is provided in the through hole; wherein upon moving the connecting device, the connecting shaft is released from the rotators so that the rotators are separated from the connecting shaft; wherein the back sides of the two rotators can be oppositely connected to the connecting shaft through the connecting device to assemble the yo-yo of a first form; and alternatively wherein the front sides of the two rotators can be oppositely connected to the connecting shaft through the connecting device to assemble the yo-yo of a second form; wherein the connecting device comprises a clamping structure or a screwing structure, the screwing structure comprises internal threads provided on the through hole and external threads provided at two ends of the connecting shaft, the internal threads and the external threads working together to connect and secure the connecting shaft to the rotators; and wherein the clamping structure comprises clamping sites provided on the two ends of the connecting shaft and clamping members provided in the rotators, and wherein after inserting the connecting shaft into the through hole from the front side of each of the rotators or from the back side of each of the rotators, the clamping sites on the connecting shaft are automatically clamped and secured with the clamping members in the rotators.

2. The transformable yo-yo according to claim 1, wherein the clamping members in the rotators are elastic clamping members, and wherein by pressing the elastic clamping members to release the clamping between the elastic clamping members and the clamping sites of the connecting shaft, the rotators are separated from the connecting shaft.

3. The transformable yo-yo according to claim 1, wherein the connecting shaft comprises a post having threads at both ends of the post, a bearing sleeved in the middle of the post, and two bushings screwed on the threads at both ends of the post; and the clamping sites are formed at the front end of the bushings.

4. The transformable yo-yo according to claim 3, wherein the clamping sites are annular groove sites or pin holes formed on the bushings, and the clamping members are clamping plates clamped into the annular grooves or plug pins inserted into the pin holes.

5. The transformable yo-yo according to claim 3, wherein each of the rotators comprises a disk and a shell; the disk butt-jointed to the shell and connected and secured by screws; each of the clamping members arranged in the disk; and each of the bushings of the connecting shaft extend into the disk wherein the clamping sites on the bushings are clamped with the clamping members.

6. The transformable yo-yo according to claim 5, wherein a through hole, is arranged in the middle of each disk and shell; the bushing inserted into the through hole on the disk to be connected to the clamping member to assemble the yo-yo of the first form; and the bushing inserted into the through hole on the shell to be connected to the clamping member to assemble the yo-yo of the second form.

7. The transformable yo-yo according to claim 6, wherein hexagonal hole seats are provided on inner sides of the through holes on both the disk and the shell, and rear ends of the bushings are hexagonal columns; and the hexagonal columns and the hexagonal hole seats synchronously work together to enable the rotators to rotate along with the connecting shaft.

8. The transformable yo-yo according to claim 6, wherein circular grooves are concavely provided in positions close to the through holes, on outer sides of both the disk and the shell, and withdrawing rings which facilitate the withdrawing of a string of a yo-yo are provided in the circular grooves.

9. The transformable yo-yo according to claim 2, wherein each of the elastic clamping members comprises a pair of ⊏-shaped clamping plates and a compression spring provided at a front end of a front crossbar of the clamping plate, and the clamping sites on the connecting shaft are circular grooves; the two clamping plates work together to press a front end of the compression spring of one clamping plate onto a front edge of a rear crossbar of

the other clamping plate; and wherein after the two clamping plates are mounted into the rotators due to compression by the compression springs, rear edges of the front crossbars of the two clamping plates are clamped into the circular grooves of the connecting shaft.

10. The transformable yo-yo according to claim 9, wherein two symmetrical through openings are formed on side walls of the rotators; the two clamping plates are mounted in a direction of the through openings, and rear ends of the rear crossbars of the two clamping plates are both extended from the through openings of the rotators to form two pressing ends; wherein pressing the two pressing ends by fingers so that the rear edges of the front crossbars of the clamping plates move to be relatively separated from each other, the clamping plates release the clamping to the circular groove thereby separating the rotators from the connecting shaft.

11. The transformable yo-yo according to claim 1, wherein a balance weight ring is provided in each rotator.