Application for United States Design Patent

TITLE: Table Tennis Ball Rebounder

INVENTOR(S): Ayaan Furtado-Tiwari

BACKGROUND

This invention is a device used to play Ping Squash. The game provides an alternative to miniature table tennis. A full-sized table tennis table requires larger storage, and miniature table tennis is significantly harder to play for the average consumer, as the ball and paddles are also smaller.

BRIEF SUMMARY OF THE INVENTION

The invention is a backboard for "ping squash", a ball and paddle game. In the game, the ball is hit at the area under the bottom panel and in between the two side barriers. Additionally, the score is kept by flipping numbers (not pictured) that are attached to the scorekeepers.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1. Figure 1 is an isometric view of the present design;

Figure 2. Figure 2 is a front elevation view thereof;

Figure 3. Figure 3 is a rear elevation view thereof;

Figure 4. Figure 4 is a right elevation view thereof;

Figure 5. Figure 5 is a left elevation view thereof;

Figure 6. Figure 6 is a top plan view thereof;

Figure 7. Figure 7 is a bottom plan view thereof;

Figure 8. Figure 8 is an exploded view thereof;

Figure 9. Figure 9 is a drawing sheet of part 1 (labeled in FIG. 8);

Figure 10. Figure 10 is a drawing sheet of part 2 (labeled in FIG. 8);

Figure 11. Figure 11 is a drawing sheet of part 3 (labeled in FIG. 8);

Figure 12. Figure 12 is a drawing sheet of part 4 (labeled in FIG. 8);

Figure 13. Figure 13 is a drawing sheet of part 5 (labeled in FIG. 8);

Figure 14. Figure 14 is a drawing sheet of part 6 (labeled in FIG. 8);

Figure 15. Figure 15 is a drawing sheet of part 9 (labeled in FIG. 8);

Figure 16. Figure 16 is a drawing sheet of part 10 (labeled in FIG. 8); and,

Figure 17. Figure 17 is a drawing sheet of part 11 (labeled in FIG. 8).

DETAILED DESCRIPTION AND BEST MODE OF IMPLEMENTATION

This invention consists of twelve types of parts, as shown in FIG. 8. Part 1 (depicted in FIG. 9) is the side panel, which is 10.5 in. x 1.5 in. x 0.5 in., and is made of Douglas Fir MDF plywood. Additionally, the side panels have six holes, which are ∅ 0.250 in. through holes with ∅ 0.375 in. x 90.0° countersink. These holes are centered horizontally and spaced 1.167 in. from the top and bottom edges; there is a 1.167 in. space between holes in each pair; between pairs, there is a 2.333 in. space. There are two of these parts in the invention.

Part 2 (depicted in FIG. 10) is the middle backboard panel, which is 28.000 in x 3.500 in. x 1.500 in., and is made of poplar wood. Additionally, the panel has 0.1 in. x 45° chamfers on the four longest edges. This component has four blind holes, which are ∅0.250 in. and 0.500 in. deep: two on the left side and two on the right. Each hole is centered horizontally and is 1.167 in. from its closest edge—top or bottom—and 1.167in. from its closest hole. There is one of this part in the invention

Part 3 (depicted in FIG. 11) is the bottom backboard panel, which is 28.000 in x 3.500 in. x 1.500 in., and is made of poplar wood. Additionally, the panel has 0.1 in. x 45° chamfers on the two longest edges that are hidden on the bottom face, as shown in FIG. 7. This component has eight holes in total: two on the left side, two on the right, and four on the front face. For the blind holes on the sides, which are ∅0.250 in. and 0.500 in. deep, each hole is centered horizontally and is 1.167 in. from its closest edge—top or bottom—and 1.167in. from its closest hole. For the holes on the front, which are ∅0.250 in. through holes with a ∅0.375 in. x 90.0° countersink, each hole is 1.000 in. from the closest vertical edge, and 1.167 from the closest horizontal edge and other hole. There is one of this part in the invention.

Part 4 (depicted in FIG. 12) is the top backboard panel, which is 28.000 in x 3.500 in. x 1.500 in., and is made of poplar wood. Additionally, the panel has 0.1 in. x 45° chamfers on the four longest edges. This component has seven holes in

total: two on the left side, two on the right, and three on the top face. For the blind holes on the sides, which are ∅0.250 in. and 0.500 in. deep, each hole is centered horizontally and is 1.167 in. from its closest edge—top or bottom—and 1.167in. from its closest hole. For the blind holes on the top, which are ∅0.250 in. and 0.375in. deep, each hole is centered vertically, and the center hole is centered horizontally as well. Additionally, the two other holes are 5.25 in. in either direction. There is one of this part in the invention.

Part 5 (depicted in FIG. 13) is the side barrier, which is 14.000 in x 3.500 in. x 1.500 in., and is made of poplar wood. This component has two holes on its right side. For the blind holes on the sides, which are ∅0.250 in. and 0.500 in. deep, each hole is 1.000 in. from the left edge—when looking at the right plane—and is 1.167 in. from its closest edge—top or bottom— and 1.167in. from its closest hole. There are two of these parts in the invention.

Part 6 (depicted in FIG. 14) is the bottom panel, which is 28.500 in x 5.500 in. x 1.500 in., and is made of poplar wood. There is one of this part in the invention. Part 7 is a flat countersunk (100) machine screw #10-32 x 0.75 in. made of stainless steel. There are 12 of these parts in the invention. Part 8 is a flat countersunk head (100) machine screw #10-32 x 2 in. made of stainless steel. There are 4 of these parts in the invention.

The Score Keeper is made up of three parts. Part 9 (depicted in FIG. 15) is the Score Keeper larger block, which is 3.000 in. x 3.500 in. x 1.000 in., and is made of poplar wood. It has one ∅0.400 in. through hole, which is centered horizontally and is 2.800 in. from the bottom edge, when viewed from the right plane. There is one of this part in the invention. Part 10 (depicted in FIG. 16) is the Score Keeper rod, which is a cylindrical prism that is ∅0.390 in. and 13.500 in. long, made out of poplar wood. There is one of this part in the invention. Part 11 (depicted in FIG. 17) is the Score Keeper smaller block, which is 1.500 in. x 3.500 in. x 1.000 in., and is made of poplar wood. It has one ∅0.400 in. through hole, which is centered horizontally and is 2.800 in. from the bottom edge, when viewed from the right plane. There are two of these parts in the invention. Part 12 is a taper pin #4 x 0.75 in. made out of stainless steel. There are three of these parts in the invention.

When assembling, the backboard is built first, so parts 2,3, and 4 are connected together by part 1 with part 7. Then, part 5 is attached to part 3 with part 8, so it appears as seen in FIG. 6. Then, part 12 is used to connect part 4 to parts 9 and 11. Finally, part 10 is inserted through the hole in parts 9 and 11, and part 6 is laid on top of part 5, so it is touching the backboard.

DEFINITIONS

Ping Squash is a ball and paddle game that is played on a table using a backboard, namely that a table tennis ball is hit against the backboard, so that it

rebounds, similar to the game of squash, hence rebounder. In context, it is the game that this invention is the backboard for.

FEATURE DESCRIPTION:

The Ping Squash backboard provides a surface for the ball to bounce off when playing the game, and its side barriers and bottom panel also set the boundaries for the game. Additionally, it tracks points through the game by employing the Score Keeper. The invention as a whole is comprised of twelve types of parts and three types of materials: poplar wood, douglas fir wood, and stainless steel. The use of poplar wood also speaks to its durability, as it is a hardwood that will not sustain significant damage, when a ping pong ball is hit against it.

CLAIMS

What is claimed is:

1. The ornamental design for a Table Tennis Ball Rebounder, as shown.