

US0D1091291S

(12)

United States Design Patent

Leng

(10)

Patent No.:

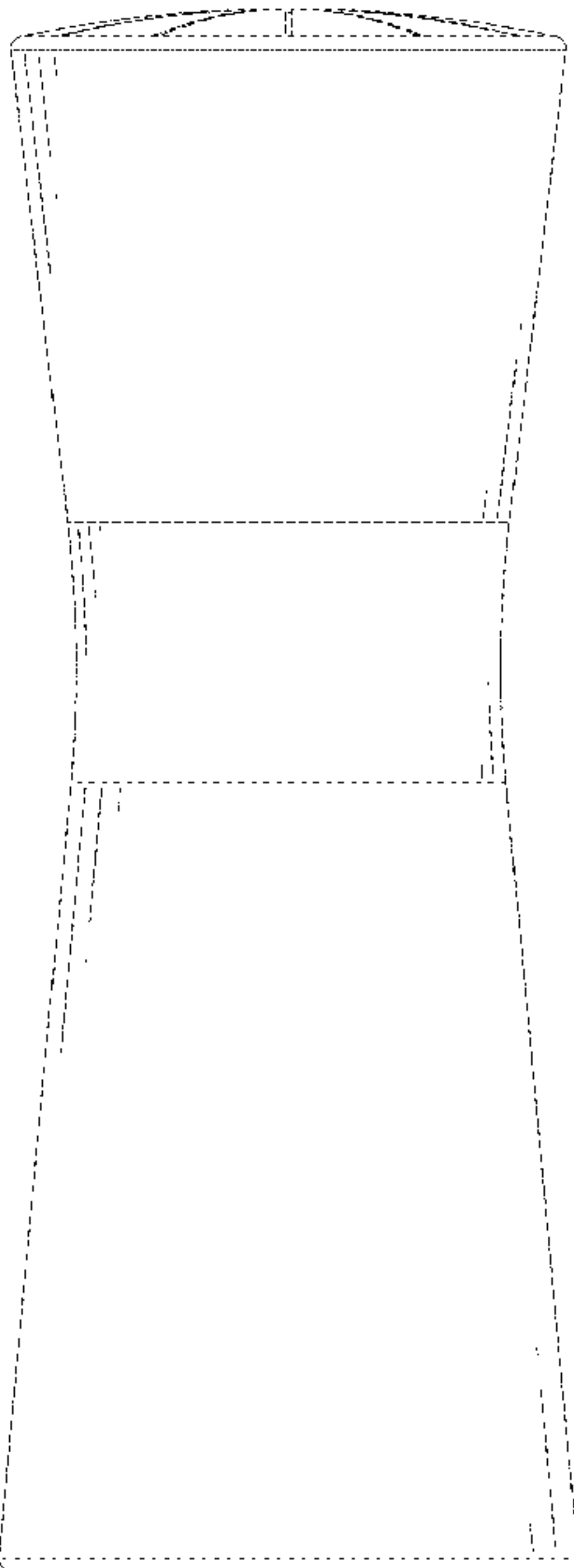
US D1,091,291 S

(45)

Date of Patent:

\*\* Sep. 2, 2025

|      |                                                                        |                                                                                       |         |               |                              |             |
|------|------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|---------------|------------------------------|-------------|
| (54) | SPRING MODULE                                                          | 5,632,473                                                                             | A *     | 5/1997        | Dias Magalhaes Queiroz ..... | F16F 3/023  |
| (71) | Applicant: <b>New-Tec Integration (Xiamen) Co., Ltd.</b> , Xiamen (CN) | 2007/0022538                                                                          | A1 *    | 2/2007        | Zschoch .....                | A47C 23/002 |
| (72) | Inventor: <b>Luhao Leng</b> , Xiamen (CN)                              | 2010/0301531                                                                          | A1 *    | 12/2010       | Delahousse .....             | A47C 27/065 |
| (73) | Assignee: <b>New-Tec Integration (Xiamen) Co., Ltd.</b> , Xiamen (CN)  | 2013/0031726                                                                          | A1 *    | 2/2013        | Demoss .....                 | A47C 27/064 |
| (**) | Term: <b>15 Years</b>                                                  | 2014/0373282                                                                          | A1 *    | 12/2014       | Mossbeck .....               | A47C 27/05  |
| (21) | Appl. No.: <b>29/901,791</b>                                           | 2021/0068553                                                                          | A1 *    | 3/2021        | Nygren .....                 | A47C 27/061 |
| (22) | Filed: <b>Sep. 5, 2023</b>                                             | 2022/0049733                                                                          | A1 *    | 2/2022        | Spickenheier .....           | F16B 5/025  |
| (30) | <b>Foreign Application Priority Data</b>                               | 2024/0215733                                                                          | A1 *    | 7/2024        | Leng .....                   | A47C 27/056 |
|      |                                                                        | 2024/0298811                                                                          | A1 *    | 9/2024        | Leng .....                   | A47C 27/07  |
|      |                                                                        | 2024/0423382                                                                          | A1 *    | 12/2024       | Leng .....                   | A47C 27/07  |
|      |                                                                        | * cited by examiner                                                                   |         |               |                              |             |
|      |                                                                        | <i>Primary Examiner</i> — Calvin E Vansant                                            |         |               |                              |             |
|      |                                                                        | <i>Assistant Examiner</i> — Benjamin L. Gray                                          |         |               |                              |             |
|      |                                                                        | (74) <i>Attorney, Agent, or Firm</i> — Cooper Legal Group, LLC                        |         |               |                              |             |
| (51) | <b>LOC (15) Cl.</b> .....                                              | <b>06-09</b>                                                                          |         |               |                              |             |
| (52) | <b>U.S. Cl.</b> .....                                                  | <b>D6/606</b>                                                                         |         |               |                              |             |
| (58) | <b>Field of Classification Search</b>                                  |                                                                                       |         |               |                              |             |
|      | USPC .....                                                             | D6/606; D8/349, 354, 373, 380                                                         |         |               |                              |             |
|      | CPC .....                                                              | A47C 27/06; A47C 27/065; A47C 27/064; A47C 7/025; A47C 23/002; A47C 23/04; F16F 1/373 |         |               |                              |             |
|      | See application file for complete search history.                      |                                                                                       |         |               |                              |             |
| (56) | <b>References Cited</b>                                                |                                                                                       |         |               |                              |             |
|      | U.S. PATENT DOCUMENTS                                                  |                                                                                       |         |               |                              |             |
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|      | 4,895,352                                                              | A *                                                                                   | 1/1990  | Stumpf .....  | A47C 27/065                  | 297/DIG. 8  |
|      |                                                                        | <b>1 Claim, 8 Drawing Sheets</b>                                                      |         |               |                              |             |





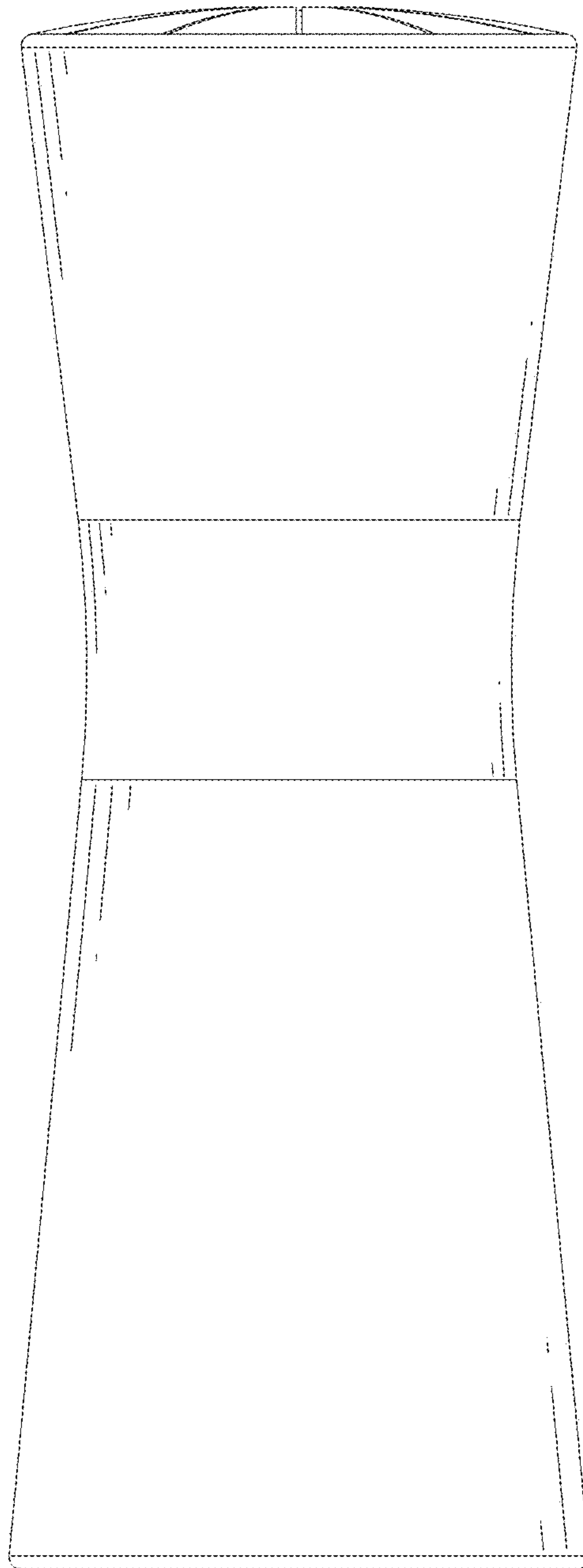


FIG. 1



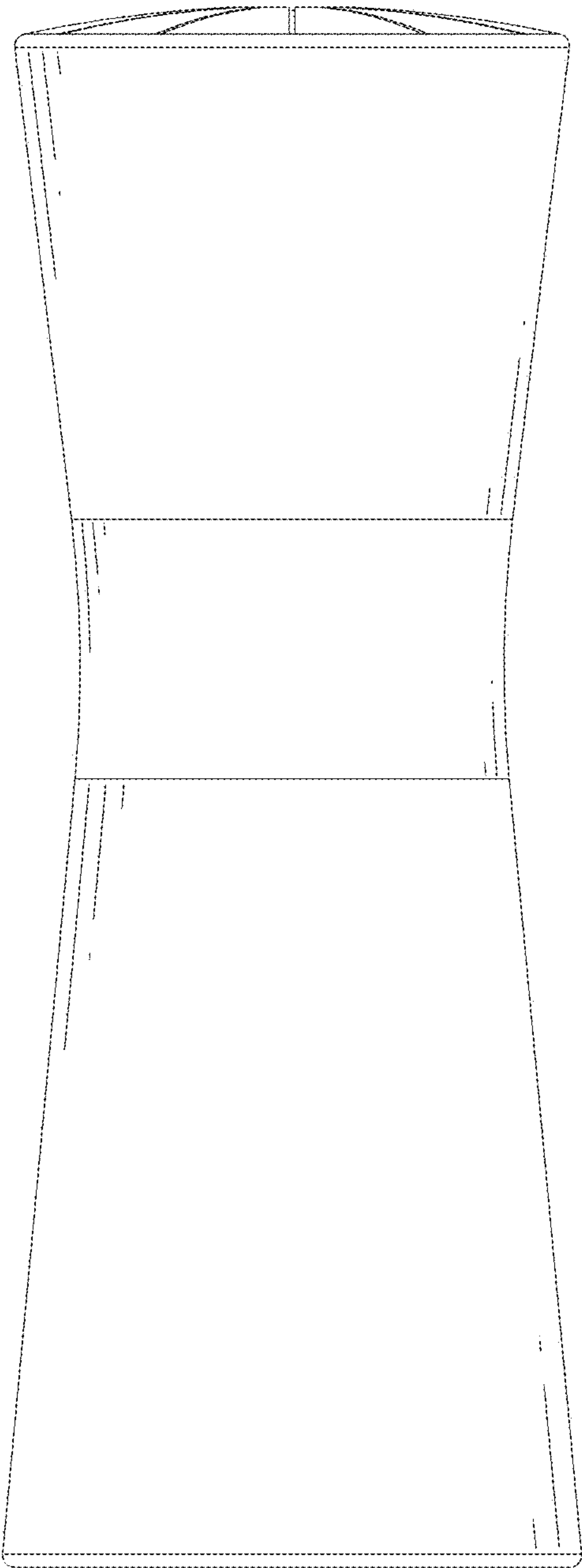


FIG. 2



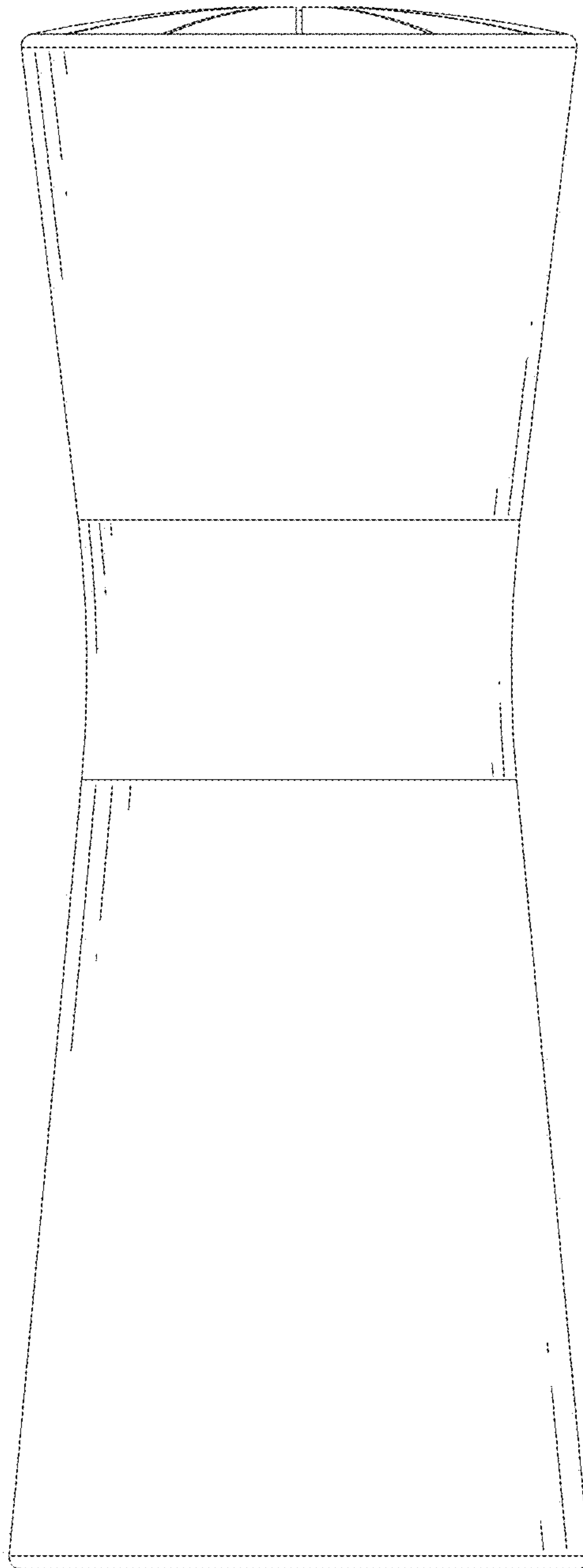


FIG. 3



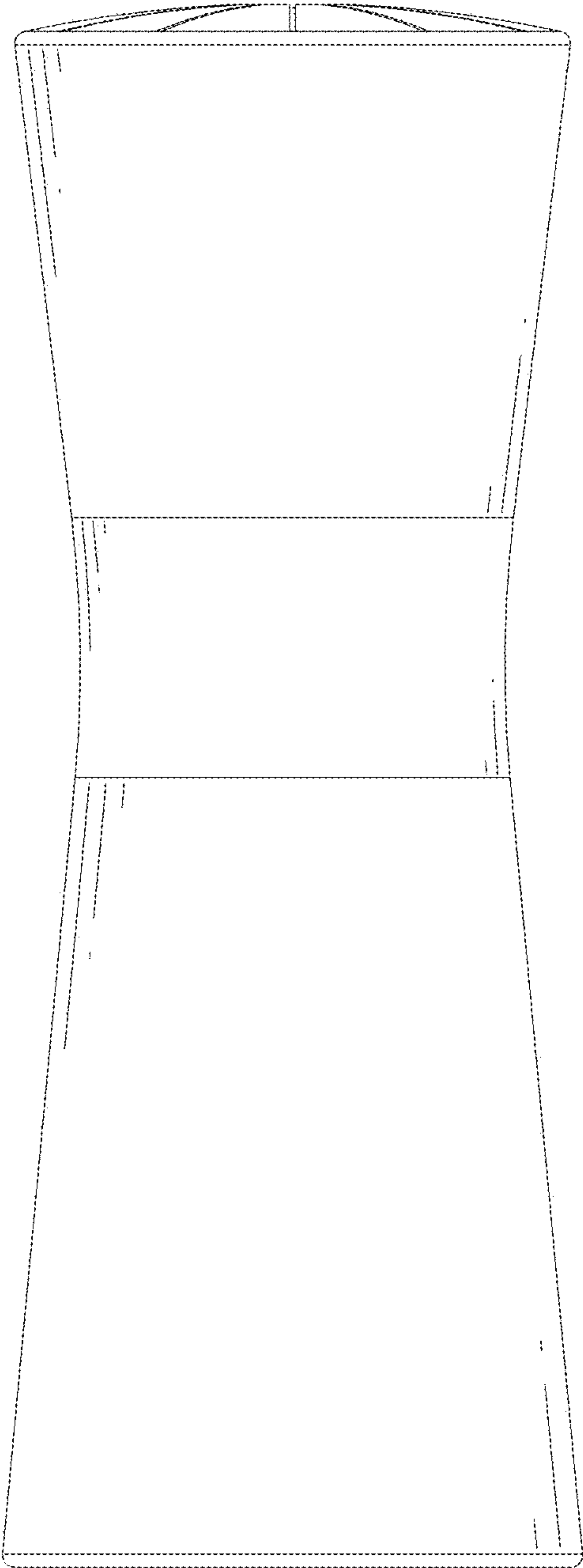


FIG. 4



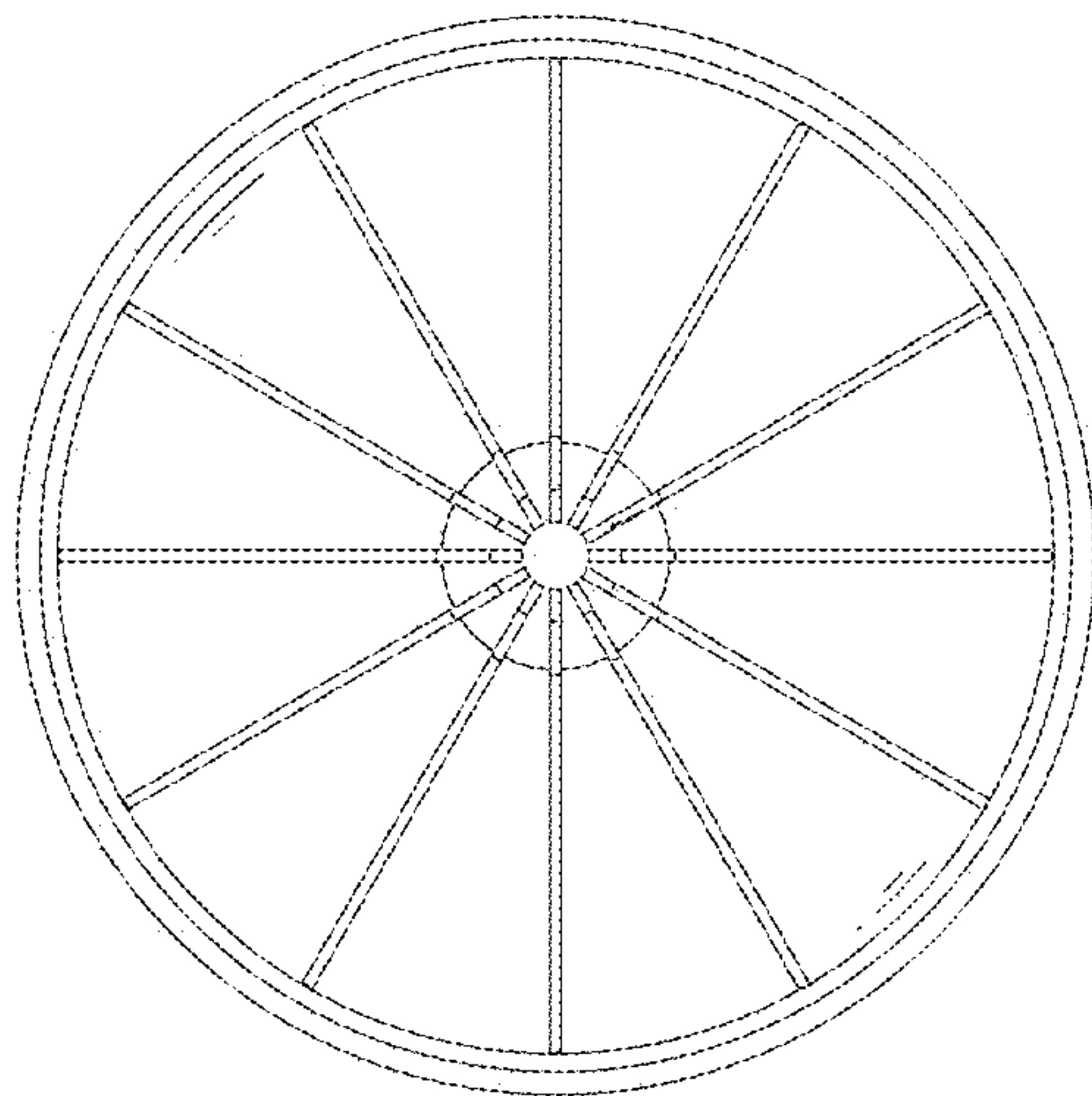


FIG. 5



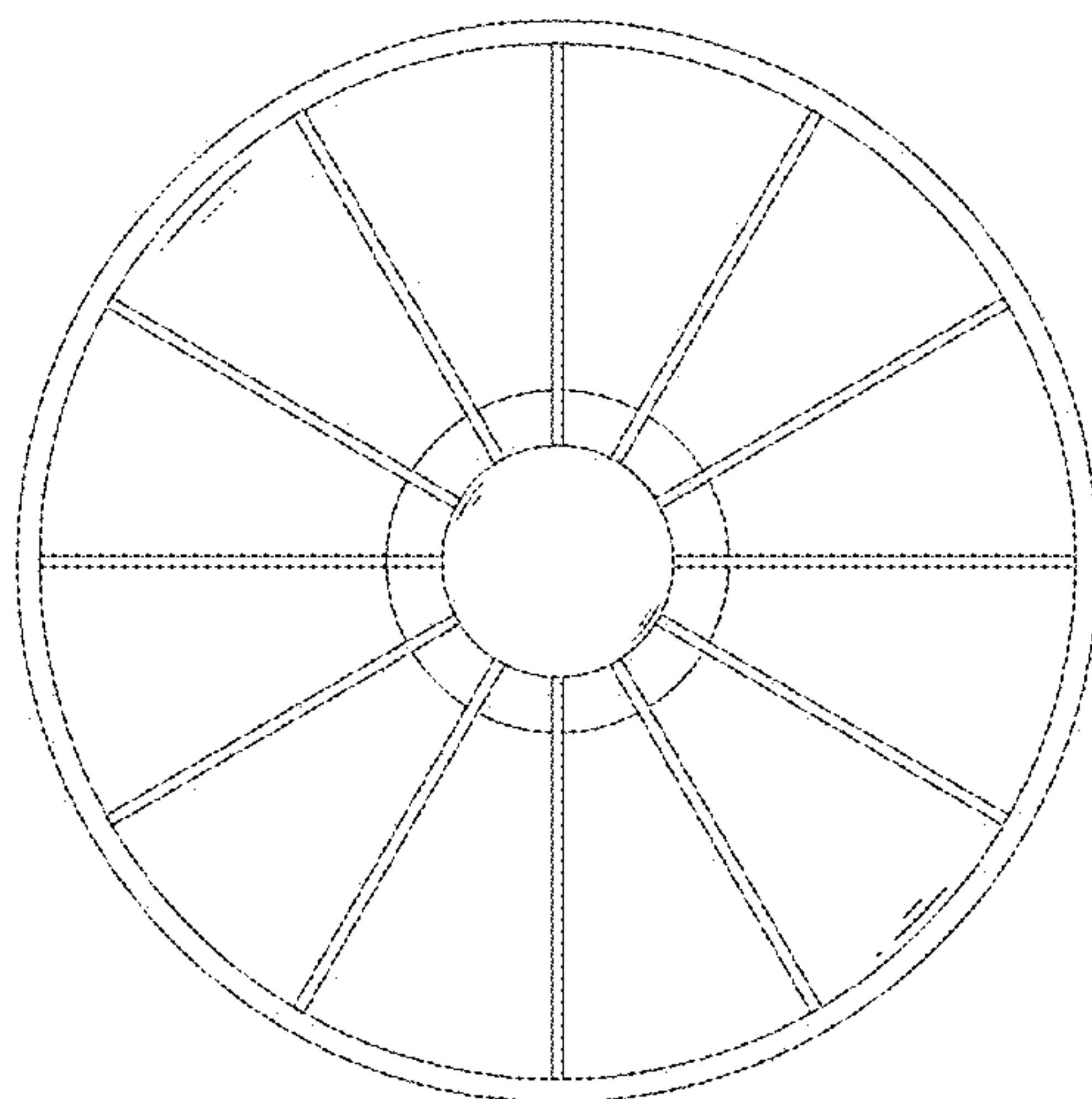


FIG. 6



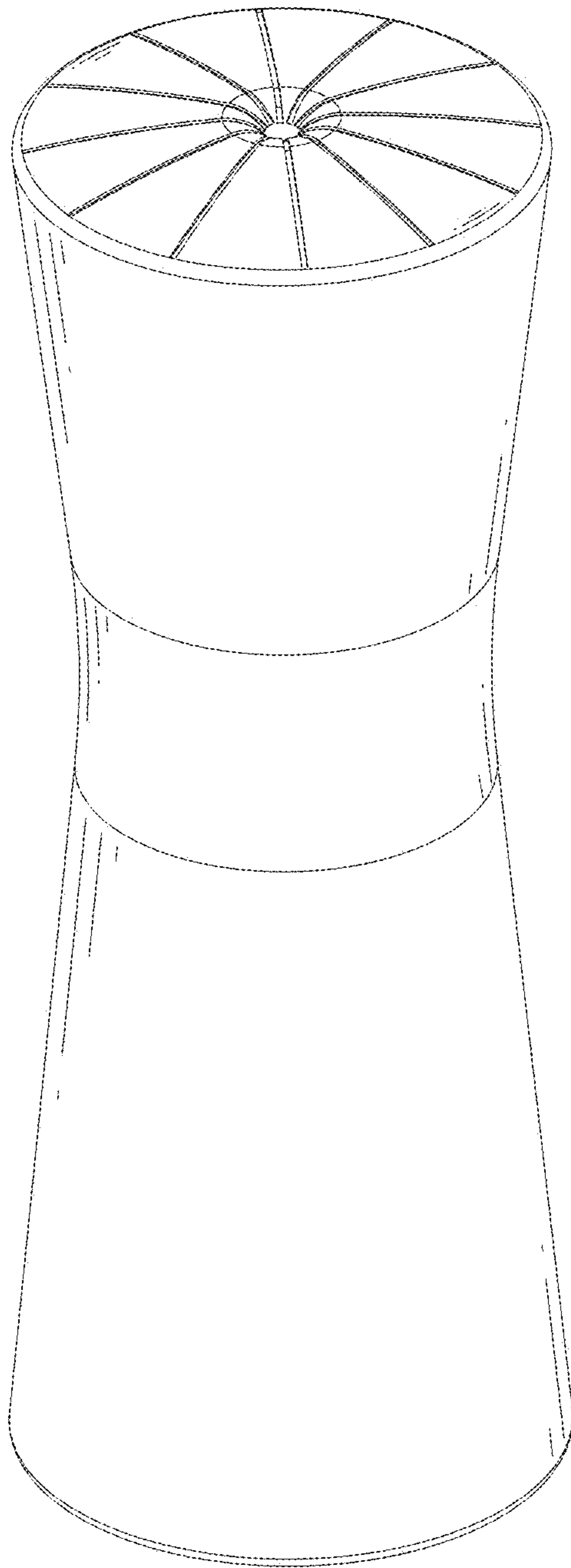


FIG. 7



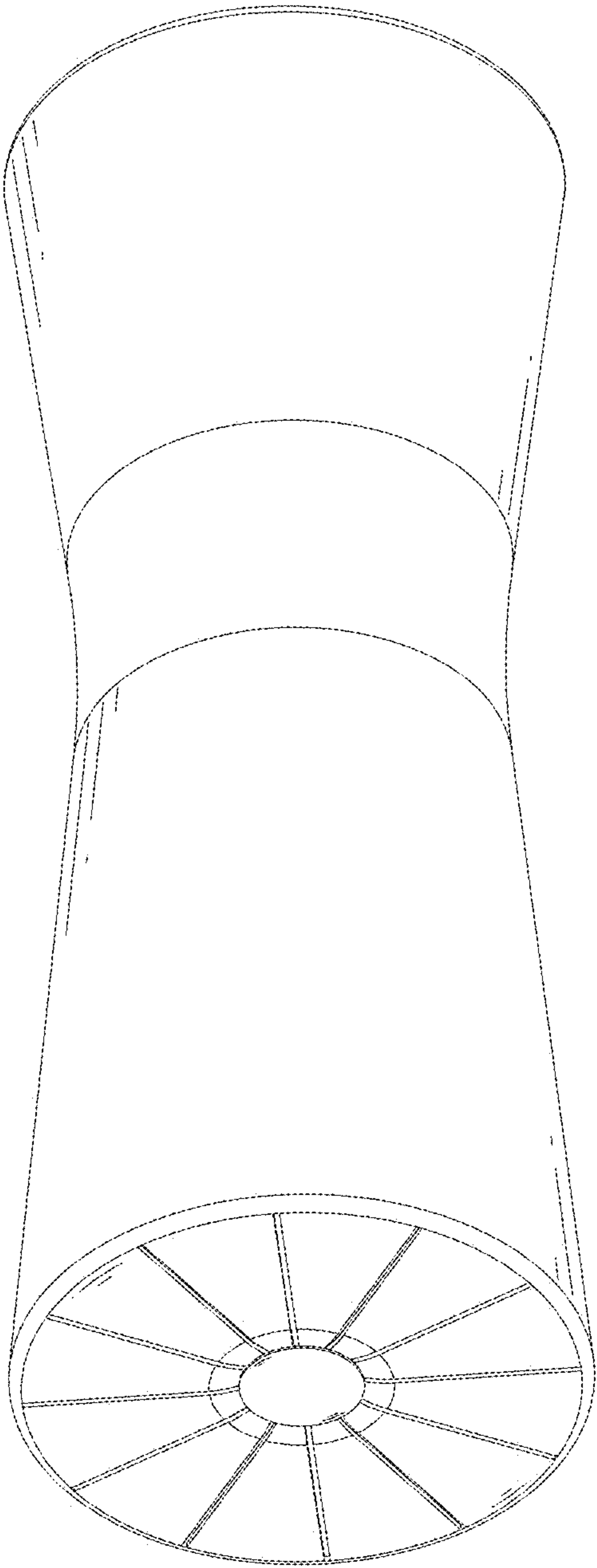


FIG. 8