



US00D523255S

(12) **United States Design Patent**
Dettmann et al.

(10) **Patent No.:** **US D523,255 S**
(45) **Date of Patent:** **** Jun. 20, 2006**

(54) **POSTURE CHAIR**

(75) Inventors: **Thomas Dettmann**, New Prague, MN (US); **Paul James**, Minneapolis, MN (US); **Diwa Ratnam**, Woodbury, MN (US); **Jodi Tuthill**, Waterville, MN (US); **Mark Reeves**, Mahtomedi, MN (US); **Terry Strand**, Owatonna, MN (US); **Patrick Weber**, Owatonna, MN (US)

(73) Assignee: **Wenger Corporation**, Owatonna, MN (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/235,830**

(22) Filed: **Aug. 5, 2005**

(51) **LOC (8) Cl.** **06-01**

(52) **U.S. Cl.** **D6/380**

(58) **Field of Classification Search** D6/334–336,
D6/370–373, 374–376, 379, 380, 500–502;
297/239, 296, 297, 445.1, 446.1, 448.1, 452.18,
297/452.2, 452.24

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | | | |
|-------------|---|---------|-------------------|-------|--------|
| D29,994 S | * | 1/1899 | Dennett | | D6/502 |
| D101,404 S | | 9/1936 | Salomon | | |
| 2,098,888 A | | 11/1937 | Schädler | | |
| D108,750 S | * | 3/1938 | Michelson | | D6/380 |
| 2,146,932 A | | 2/1939 | Boman | | |
| D146,347 S | | 2/1947 | Clairmonte et al. | | |
| 2,634,371 A | | 4/1953 | Masters | | |
| 2,745,468 A | | 5/1956 | Kramer | | |
| D181,241 S | * | 10/1957 | Swanson | | D6/374 |
| 2,874,755 A | | 2/1959 | Smith | | |
| 3,389,936 A | * | 6/1968 | Drabert | | D6/502 |

(Continued)

OTHER PUBLICATIONS

Comfor Tek Seating, Elan Series “Model ES122 Elan Stacker w/Tablet Arm”, undated.
Growth Chart for Chinese Children, www.fwcc.org./growth-chart.html, undated.
CDC Growth Chart: United States: Weight-for-age percentiles, Girls 2–20, undated.
CDC Growth Chart: United States: Weight-for-age percentiles, Boys 2–20, undated.
Clinical Growth Charts, National Center for Health Statistics, CDC, undated.
University of Michigan Health System, Ideal Weight Table for Men and Women, undated.
www.synapseadaptive.com/ergo/Thorsac.htm—The Two Part Seat and TherSac Advantage, undated.
BIFMA International “U.S. Economic Recovery Underway, Modest Office Furniture Industry Growth Expended in 2004”, News Release, Jan. 27, 2004.

(Continued)

Primary Examiner—Mimosa De

(74) *Attorney, Agent, or Firm*—Patterson, Thuente, Skaar & Christensen, P.A.

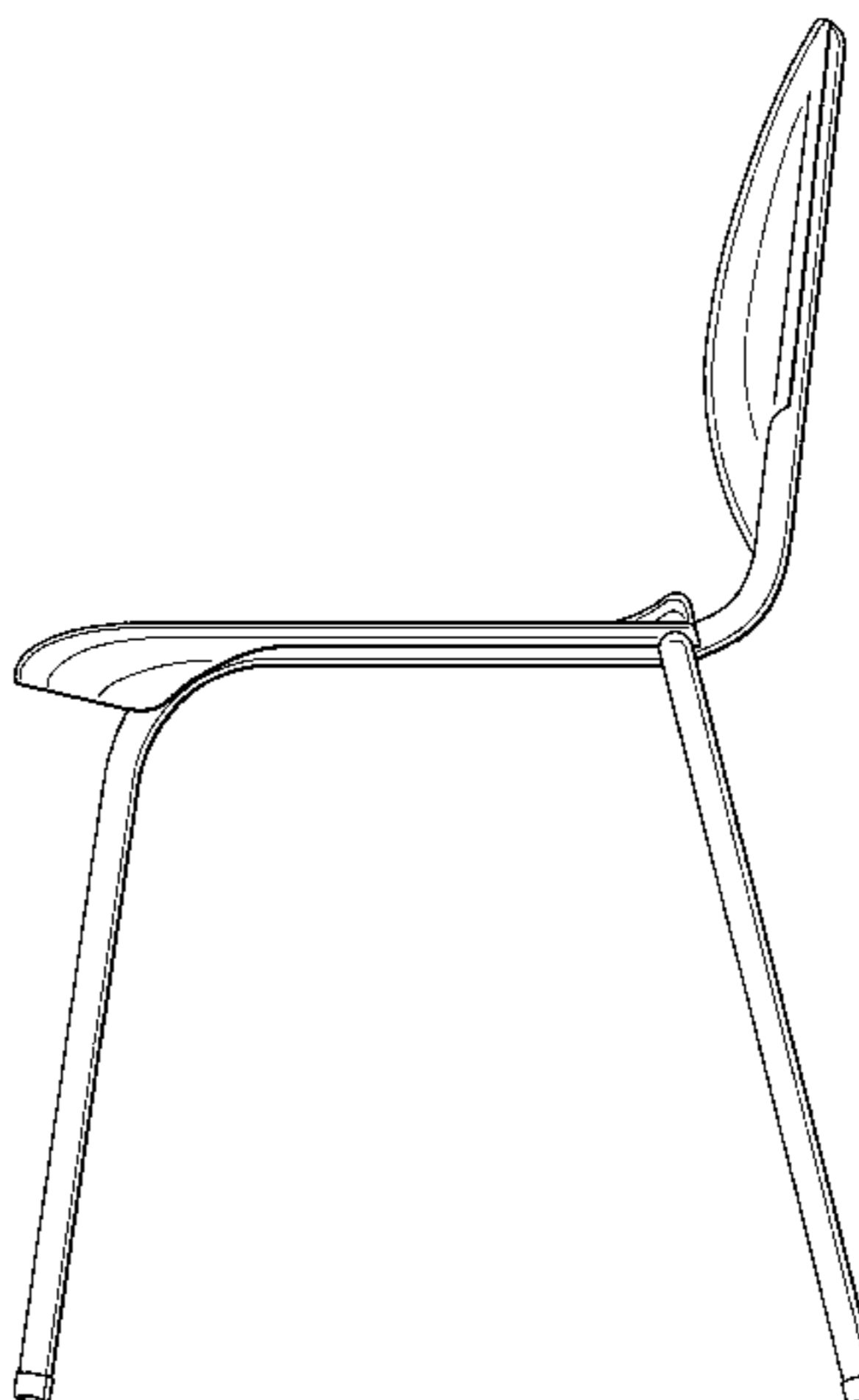
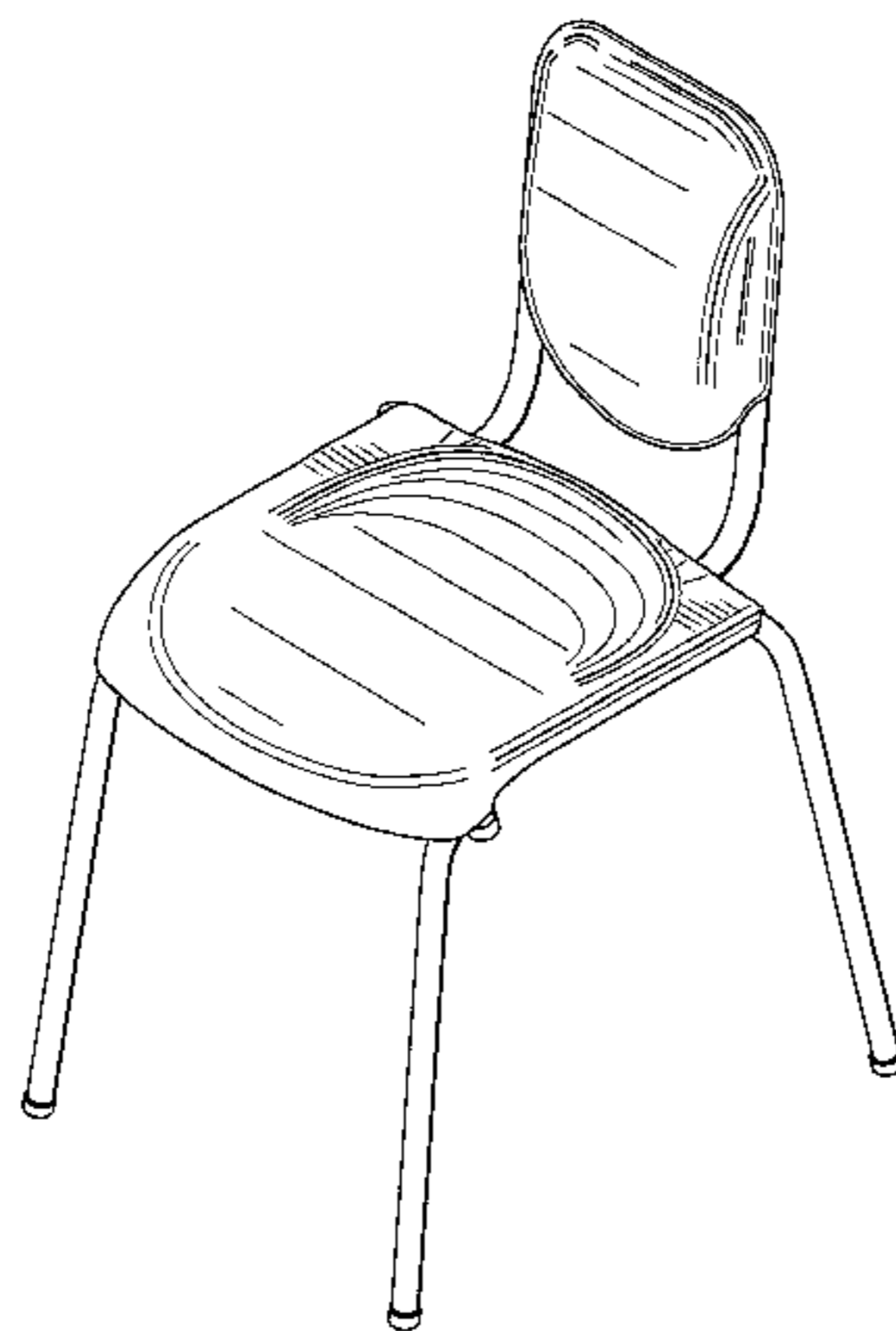
(57) **CLAIM**

We claim the ornamental design for a posture chair, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a posture chair of the invention;
FIG. 2 is a slightly enlarged front elevation view of a posture chair;
FIG. 3 is a slightly enlarged rear elevation view of a posture chair;
FIG. 4 is a slightly enlarged side elevation view of a posture chair;
FIG. 5 is a slightly enlarged top plan view of a posture chair; and,
FIG. 6 is a slightly enlarged bottom plan view of a posture chair.

1 Claim, 6 Drawing Sheets



U.S. PATENT DOCUMENTS

| | | | | |
|--------------|----|-----------|----------------|--------|
| 3,594,041 | A | 7/1971 | Rye | |
| 3,671,074 | A | 6/1972 | Bergstrom | |
| D236,862 | S | 9/1975 | Grosfillex | |
| 4,148,523 | A | 4/1979 | Brand et al. | |
| D252,904 | S | * 9/1979 | Springfield | D6/502 |
| 4,240,663 | A | 12/1980 | Locher | |
| 4,522,444 | A | 6/1985 | Pollock | |
| 4,595,234 | A | 6/1986 | Kjersem | |
| D290,070 | S | 6/1987 | Lange | |
| 4,671,570 | A | 6/1987 | Hockenberry | |
| D290,789 | S | 7/1987 | Lange | |
| 4,690,459 | A | 9/1987 | Ullman | |
| D294,319 | S | * 2/1988 | Troup et al. | D6/502 |
| 4,784,435 | A | 11/1988 | Leib | |
| 4,786,105 | A | 11/1988 | Sheehan et al. | |
| 4,787,672 | A | 11/1988 | Werner | |
| D323,943 | S | 2/1992 | Piretti | |
| 5,154,474 | A | 10/1992 | Desanta | |
| 5,167,436 | A | 12/1992 | Wu | |
| D336,795 | S | * 6/1993 | Rowe et al. | D6/380 |
| D340,812 | S | 11/1993 | Estomin et al. | |
| D352,185 | S | 11/1994 | Pagnon et al. | |
| D352,616 | S | 11/1994 | Meyer | |
| D353,270 | S | * 12/1994 | Locher | D6/372 |
| 5,383,712 | A | 1/1995 | Perry | |
| 5,511,855 | A | 4/1996 | Miles | |
| 5,599,068 | A | 2/1997 | Kelly et al. | |
| 5,868,469 | A | 2/1999 | Ming | |
| D408,660 | S | 4/1999 | Donnelly | |
| D411,382 | S | * 6/1999 | Graham | D6/380 |
| 5,997,094 | A | 12/1999 | Cvek | |
| 6,017,089 | A | 1/2000 | Mengshoel | |
| D423,805 | S | 5/2000 | Olson | |
| 6,056,361 | A | 5/2000 | Cvek | |
| D426,970 | S | * 6/2000 | Kolberg | D6/374 |
| D431,385 | S | * 10/2000 | Barile et al. | D6/380 |
| 6,125,851 | A | 10/2000 | Walker et al. | |
| D433,577 | S | 11/2000 | Donnelly | |
| D433,578 | S | 11/2000 | Saul | |
| D447,643 | S | * 9/2001 | Zemp | D6/380 |
| D469,970 | S | * 2/2003 | Molteni | D6/374 |
| 6,532,962 | B1 | 3/2003 | Walker et al. | |
| D485,085 | S | 1/2004 | Swy et al. | |
| 6,688,688 | B1 | 2/2004 | Uhlenbrock | |
| 6,722,735 | B1 | 4/2004 | Lucci et al. | |
| 2003/0090139 | A1 | 5/2003 | Kown | |
| 2003/0227210 | A1 | 12/2003 | Bosman et al. | |
| 2004/0104613 | A1 | 6/2004 | Bosman et al. | |

OTHER PUBLICATIONS

Human ErgoSystems, Inc., "Ergonomics Review", Jun. 5, 2004.

Ergonomics Review of Sitting and Movements, Rani Lueder, CPE, undated.

"Musculoskeletal Modeling As An Ergonomic Design Method", J. Rasmussen, et al., The AnyBody Group, Institute of Mechanical Engineering, Allborg University, Denmark, undated.

"Mismatch Between Classroom Furniture Dimensions and Student Anthropometric Characteristics in Three New Zealand Secondary Schools", S.J. Legg, et al., Faculty of Health Sciences, Universal College of Learning Palmerston North, New Zealand, undated.

"Balanced sitting posture on forward sloping seat", A.C. Mandal M.D., Copenhagen, www.acmandal.com, undated.

"A Technique for Musicians", Frank Pierce Jones, www.alexandertechnique.com, undated.

"The Life of Chairs: How Homo Sapiens became Homo Sedens—and at what cost", excerpt from E. Tenner, "Our Own Devices: Past and Future of Body Technology © 2002".

"New Concepts in Seating", J. Tiedeman, CSP, CIE, ARM, Ergonomics Consultant, undated.

"The Alexander Technique for Musicians" C. J. Stein, www.alexandertechnique.com, undated.

"The Alexander Technique in the world of design: posture and the common chair", G. Cranz; Journal of Bodywork and Movement Therapies, Apr. 2000.

"Bottoms Up", M. Downey, Ergonomics Center, News Story 193, May 22, 2002.

"Furniture prescription for the conservative management of low-back pain", E. Vollowitz, Topics in Acute Care and Trauma Rehabilitation, 1988:2(4):18-37, 188 Aspen Publishers, Inc.

"An Introduction to Body Mapping: Enhancing Musical Performance Through Somatic Pedagogy", H. Buchanan, On Voice, Choral Journal, vol. 45, Issue 7, undated.

"Supporting the Biomechanics of Movement", The science and research behind the Harmonic Tilt, H. Miller.

"The Art of Pressure Distribution", Ergonomic criteria for the design of adaptive suspension work chairs, H. Miller, undated.

"Stressing Prevention", J. Horvath advocates for injured musicians; Green Room, Mar.-Apr. 2004.

"Seat Height Revisited", R. Lueder, Humanics ErgoSystems, Inc. Rethinking sitting height, undated.

"A South Texas physician credits success to music", Idefonso Flores, The Beat Goes On, Southwestern Musician, May 2005.

"Dynamic Task Posture for the Seated Musician", Jack Hockenberry, Wenger Corp., D. Zacharkow, Mayo Clinic, undated.

"Harpist, Cellists, Short Musicians Unite!", J. Horvath, Minnesota Orchestra, 1997.

"Common Problems of Wind Instrumentalists", W. Dawson, Dec. 1977.

"Performance Injury Topic of Interest", N. Quarrier, PA Medicine Topic of Interest, undated.

"Upper-extremity Problems Caused by Playing Specific Instruments", W. Dawson, Medical Problems of Performing Artists, Sep. 2002.

"Achieving a Healthier Relationship with your Flute", J. Lunn, Hands On! Newsletter, Issue #6, undated.

"Medical Problems in Secondary School-aged Musicians", A. Lockwood, Dec. 1988.

"A Survey of Musculoskeletal Problems Encountered in High-Level Musicians", P. Caldon, L. Calabrese, J. Clough, R. Lederman, G. Williams, J. Leatherman, Medical Problems of Performing Artists, Dec. 1996.

"Health Conditions, Attitudes Toward Study, and Attitudes Toward Health at the Beginning of University Study: Music Students in Comparison with Other Student Populations", C. Spahn, S. Strukley, A. Lehmann, Medical Problems of Performing Artists, Mar. 2004.

"Musculoskeletal Problems of Adolescent Instrumentalists", R. Manchester, Medical Problems of Performing Artists, Sep. 1997.

"Medical Problems of Brass Instrumentalists: Prevalence Rates for Trumpet, Trombone, French Horn and Low Bass", K. Chesky, K. Devroop, J. Ford, Medical Problems for Performing Artists, Jun. 2002.

“Medical Problems Among ICSOM Musicians: Overview of a National Survey”, M. Fishbein, S. Middlestadt, V. Ottati, S. Straus, A. Ellis, Medical Problems for Performing Artists, Mar. 1988.

“Survey of Performance-related Problems among High School and Junior High School Musicians”, D. Shoup, Medical Problems for Performing Artists, Sep. 1995.

“Fundamental Positions for Instrumental Musicians”, R. Tubiana, P. Chamagne, R. Brockman, Medical Problems for Performing Artists, Jun. 1989.

“Medical Problems of Orchestral Musicians According to Age and Stage of Career”, D. Smith, Medical Problems for Performing Artists, Dec. 1992.

“The Design of a Chair for Orchestral Musicians”, G. Conchubhair, Department of Industrial Design, Dublin, Ireland, undated.

“The Alexander Technique in the world of design: posture and the common chair”, G. Cranz, Journal of Bodywork and Movement Therapies, Apr. 2000.

“Ergonomics of seated movement—a review of the scientific literature”, R. Lueder, Humanics ErgoSystems, Inc., Jun. 2004.

“Preventing Musculoskeletal Injury (MSI) for Musicians and Dancers: A Resource Guide”, Safety and Health in Arts Production and Entertainment, Jun. 2002.

* cited by examiner

Fig. 1

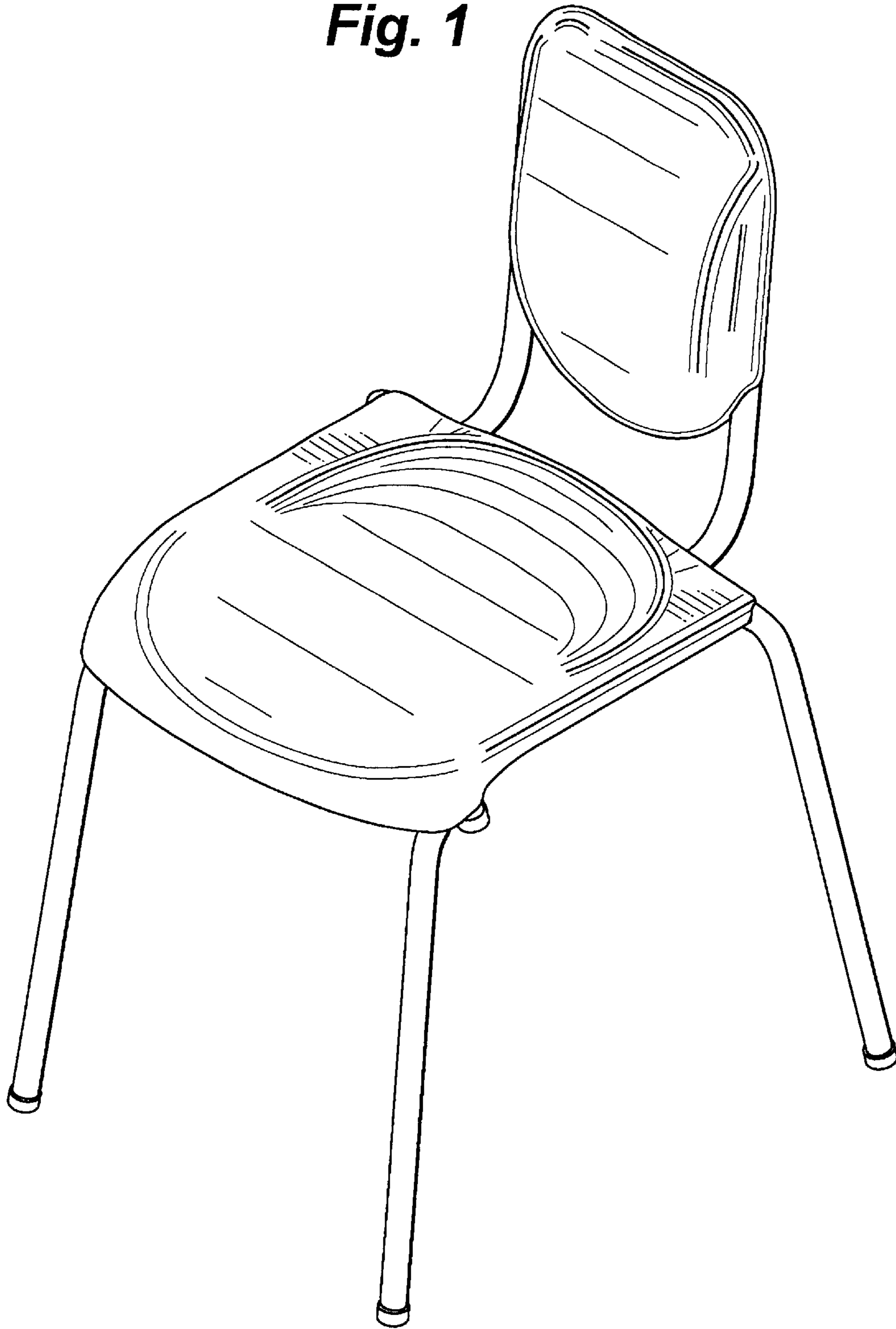


Fig. 2

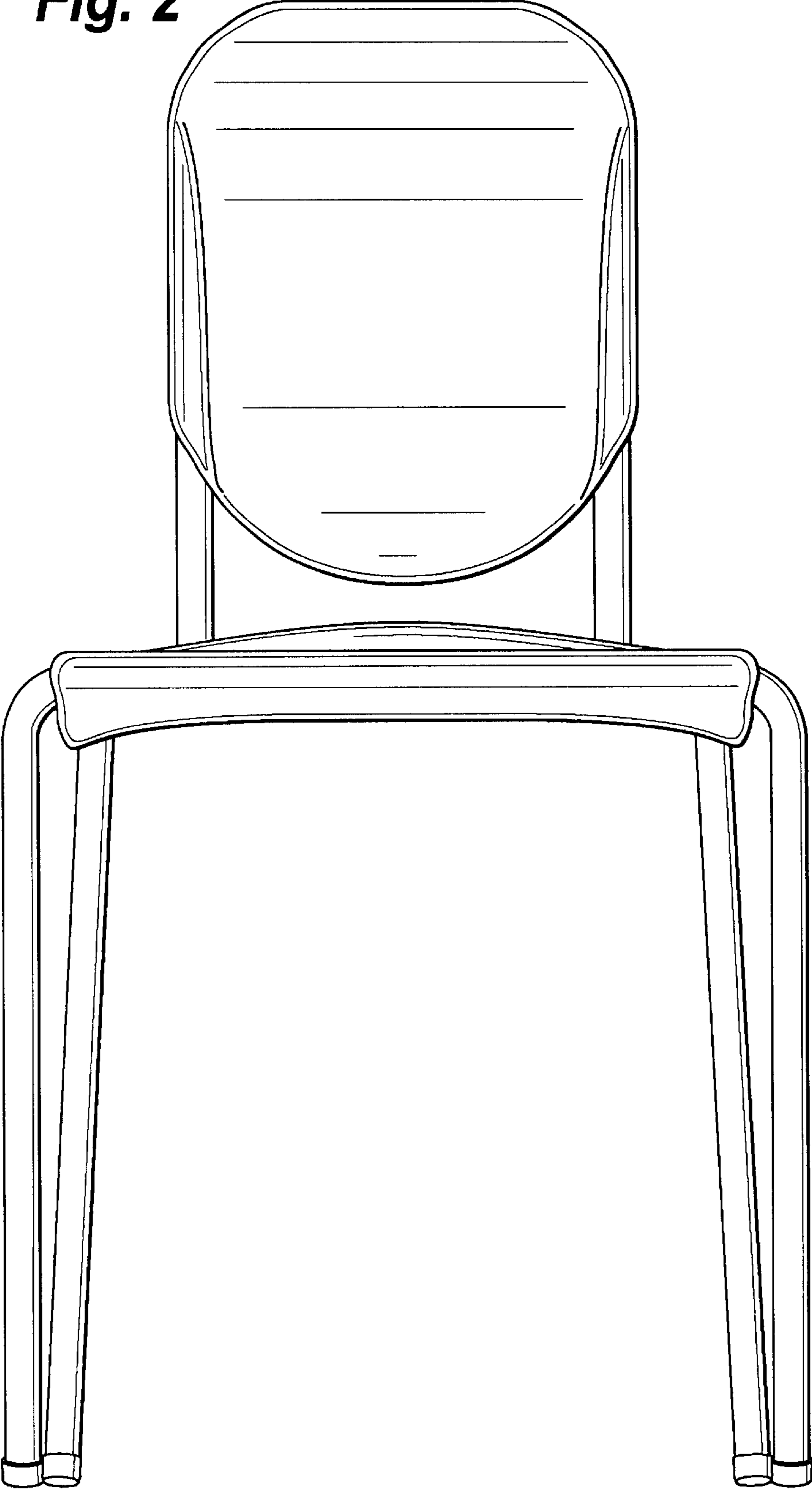


Fig. 3

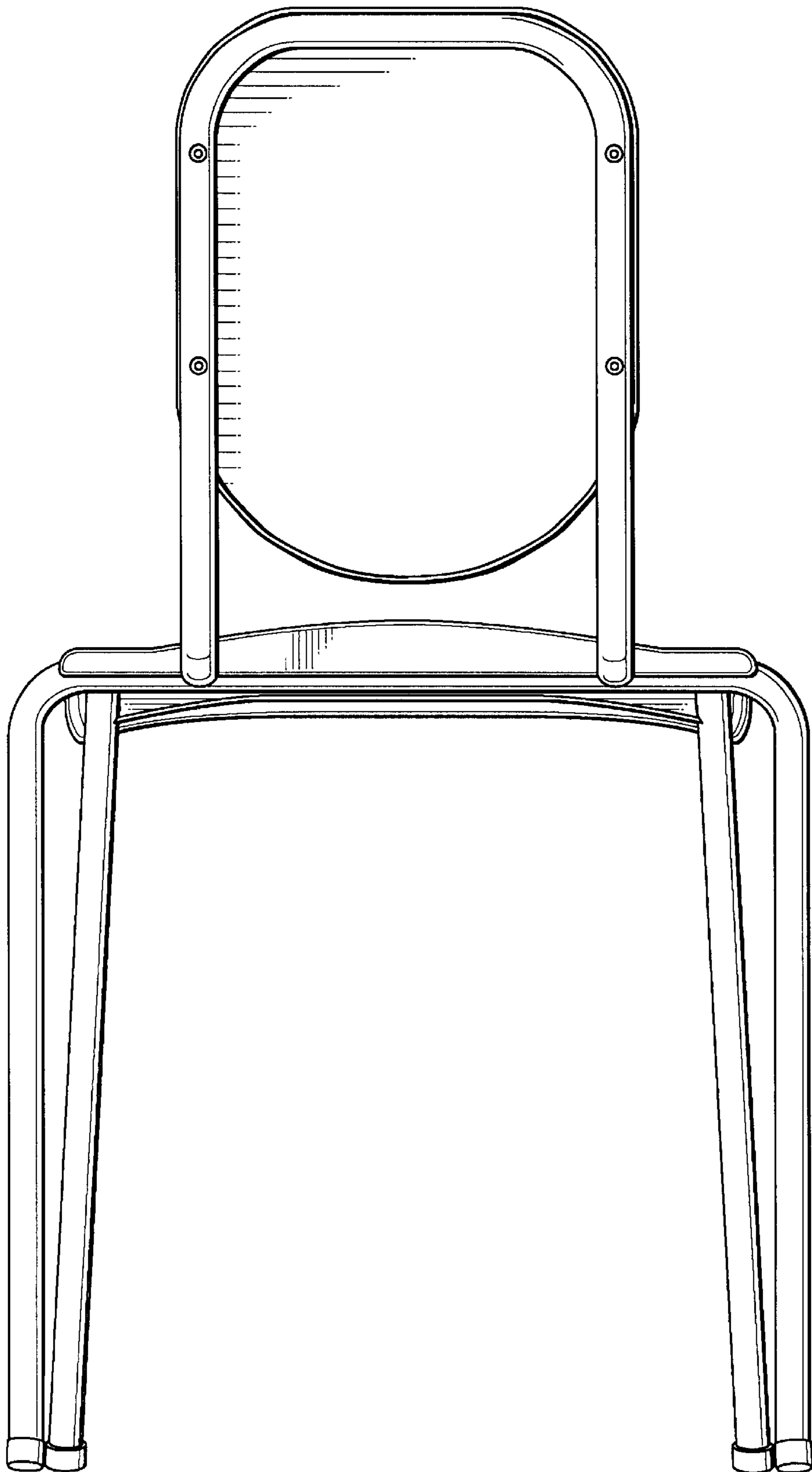


Fig. 4



Fig. 5

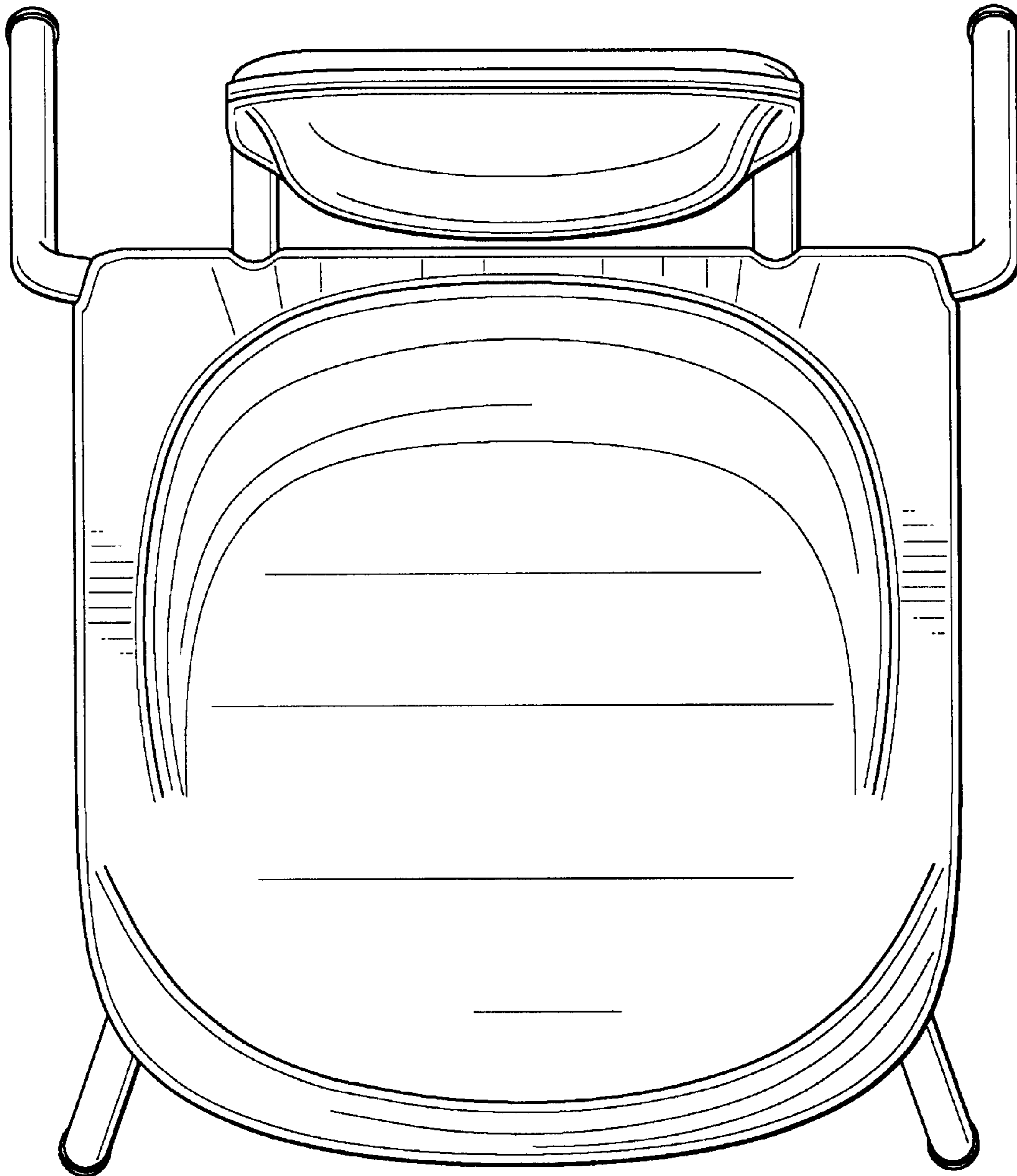


Fig. 6

