



US00D377493S

# United States Patent [19]

Oda et al.

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[45] Date of Patent: \*\*Jan. 21, 1997

[54] PISTON

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[\*\*] Term: 14 Years

[21] Appl. No.: 46,477

[22] Filed: Nov. 15, 1995

### [30] Foreign Application Priority Data

May 16, 1995	[JP]	Japan	7-117555
Sep. 11, 1995	[JP]	Japan	7-26710
Sep. 11, 1995	[JP]	Japan	7-26711
Sep. 11, 1995	[JP]	Japan	7-26712
Sep. 11, 1995	[JP]	Japan	7-26713
Sep. 11, 1995	[JP]	Japan	7-26714
Sep. 11, 1995	[JP]	Japan	7-26715
Sep. 11, 1995	[JP]	Japan	7-233129

[52] U.S. Cl. D15/5; 123/193.6

[58] Field of Search D15/5, 6, 7, 8; 123/193.6, 193.4; 261/85

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- "News from Mitsubishi Motors," No. 2510, May 17, 1995, pp. 1-6 (an English language translation is provided).
- "Tech Briefs"—Automotive Engineering—Sep. 1995, pp. 25, 26 and 29.

Primary Examiner—Doris V. Coles  
Assistant Examiner—Frank Martinez

### [57] CLAIM

The ornamental design for a piston, as shown.

### DESCRIPTION

FIG. 1 is a perspective view showing a first embodiment of the piston showing our new design of a piston;  
 FIG. 2 is a front elevational view of the piston of FIG. 1;  
 FIG. 3 is a rear elevational view of the piston of FIG. 1;  
 FIG. 4 is a top plan view of the piston of FIG. 1;  
 FIG. 5 is bottom plan view of the piston of FIG. 1;  
 FIG. 6 is left-side elevational view of the piston of FIG. 1;  
 FIG. 7 is a right-side elevational view of the piston of FIG. 1;  
 FIG. 8 is a cross-sectional view taken along line A—A of FIG. 2;  
 FIG. 9 is a cross-sectional view taken along line B—B of FIG. 7;  
 FIG. 10 is a perspective view of a second embodiment of a piston showing our new design;  
 FIG. 11 is a front elevational view of the piston of FIG. 10;  
 FIG. 12 is a rear elevational view of the piston of FIG. 10;  
 FIG. 13 is a top plan view of the piston of FIG. 10;  
 FIG. 14 is bottom plan view of the piston of FIG. 10;  
 FIG. 15 is a left-side elevational view of the piston of FIG. 10;  
 FIG. 16 is a right-side elevational view of the piston of FIG. 10;  
 FIG. 17 is a cross-sectional view taken along line B—B of FIG. 11;  
 FIG. 18 is a cross-sectional view taken along line B—B of FIG. 16;  
 FIG. 19 is a perspective view of a third embodiment of a piston showing our new design;  
 FIG. 20 is a front elevational view of the piston of FIG. 19;  
 FIG. 21 is a rear elevational view of the piston of FIG. 19;  
 FIG. 22 is a top plan view of the piston of FIG. 19;  
 FIG. 23 is bottom plan view of the piston of FIG. 19;  
 FIG. 24 is a left-side elevational view of the piston of FIG. 19;  
 FIG. 25 is a right-side elevational view of the piston of FIG. 19;  
 FIG. 26 is a cross-sectional view taken along line A—A of FIG. 20;

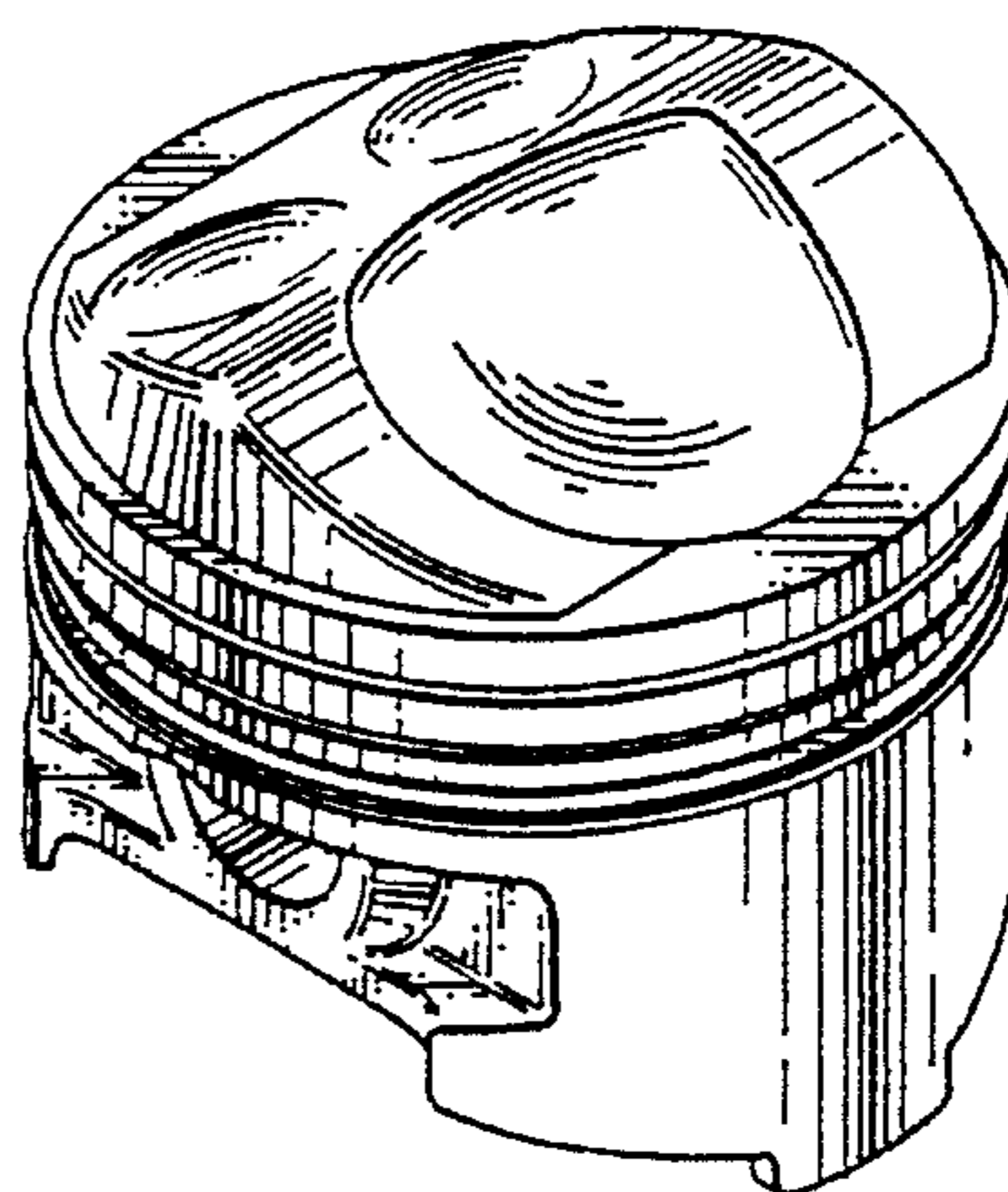
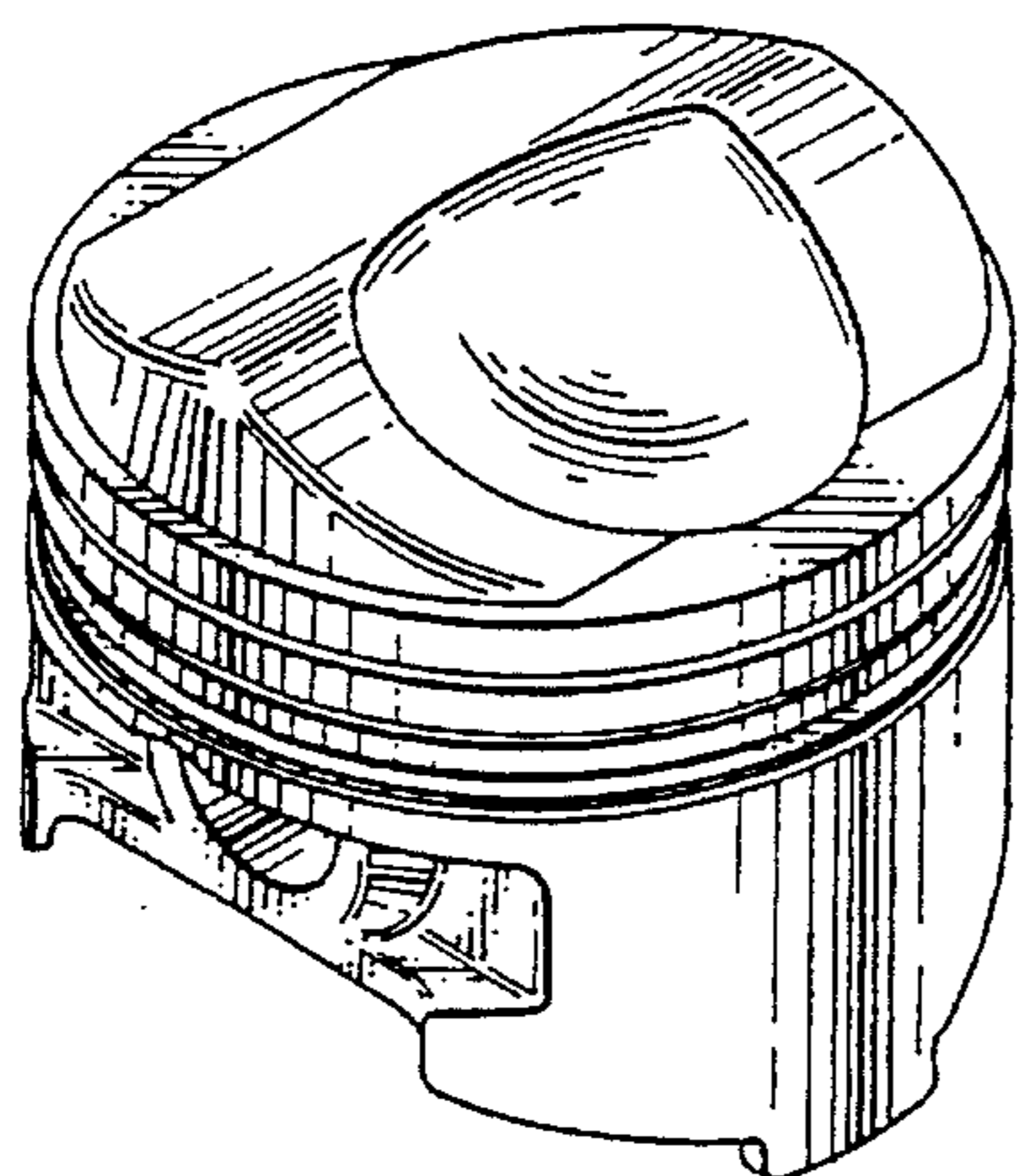


FIG. 27 is a cross-sectional view taken along line B—B of FIG. 25;

FIG. 28 is a perspective view of a fourth embodiment of a piston showing our new design;

FIG. 29 is a front elevational view of the piston of FIG. 28;

FIG. 30 is a rear elevational view of the piston of FIG. 28;

FIG. 31 is a top plan view of the piston of FIG. 28;

FIG. 32 is bottom plan view of the piston of FIG. 28;

FIG. 33 is a left-side elevational view of the piston of FIG. 28;

FIG. 34 is a right-side elevational view of the piston of FIG. 28;

FIG. 35 is a cross-sectional view taken along line A—A of FIG. 29;

FIG. 36 is a cross-sectional view taken along line B—B of FIG. 34;

FIG. 37 is a perspective view of a fifth embodiment of a piston showing our new design;

FIG. 38 is a front elevational view of the piston of FIG. 37;

FIG. 39 is a rear elevational view of the piston of FIG. 37;

FIG. 40 is a top plan view of the piston of FIG. 37;

FIG. 41 is a bottom plan view of the piston of FIG. 37;

FIG. 42 is a left-side elevational view of the piston of FIG. 37;

FIG. 43 is a right-side elevational view of the piston of FIG. 37;

FIG. 44 is a cross-sectional view taken along line A—A of FIG. 38;

FIG. 45 is a cross-sectional view taken along line B—B of FIG. 43;

FIG. 46 is a perspective view of a sixth embodiment of a piston showing our new design;

FIG. 47 is a front elevational view of the piston of FIG. 46;

FIG. 48 is a rear elevational view of the piston of FIG. 46;

FIG. 49 is a top plan view of the piston of FIG. 46;

FIG. 50 is bottom plan view of the piston of FIG. 46;

FIG. 51 is a left-side elevational view of the piston of FIG. 46;

FIG. 52 is a right-side elevational view of the piston of FIG. 46;

FIG. 53 is a cross-sectional view taken along line A—A of FIG. 47; and,

FIG. 54 is a cross-sectional view taken along line B—B of FIG. 52.

**1 Claim, 18 Drawing Sheets**

FIG. 1

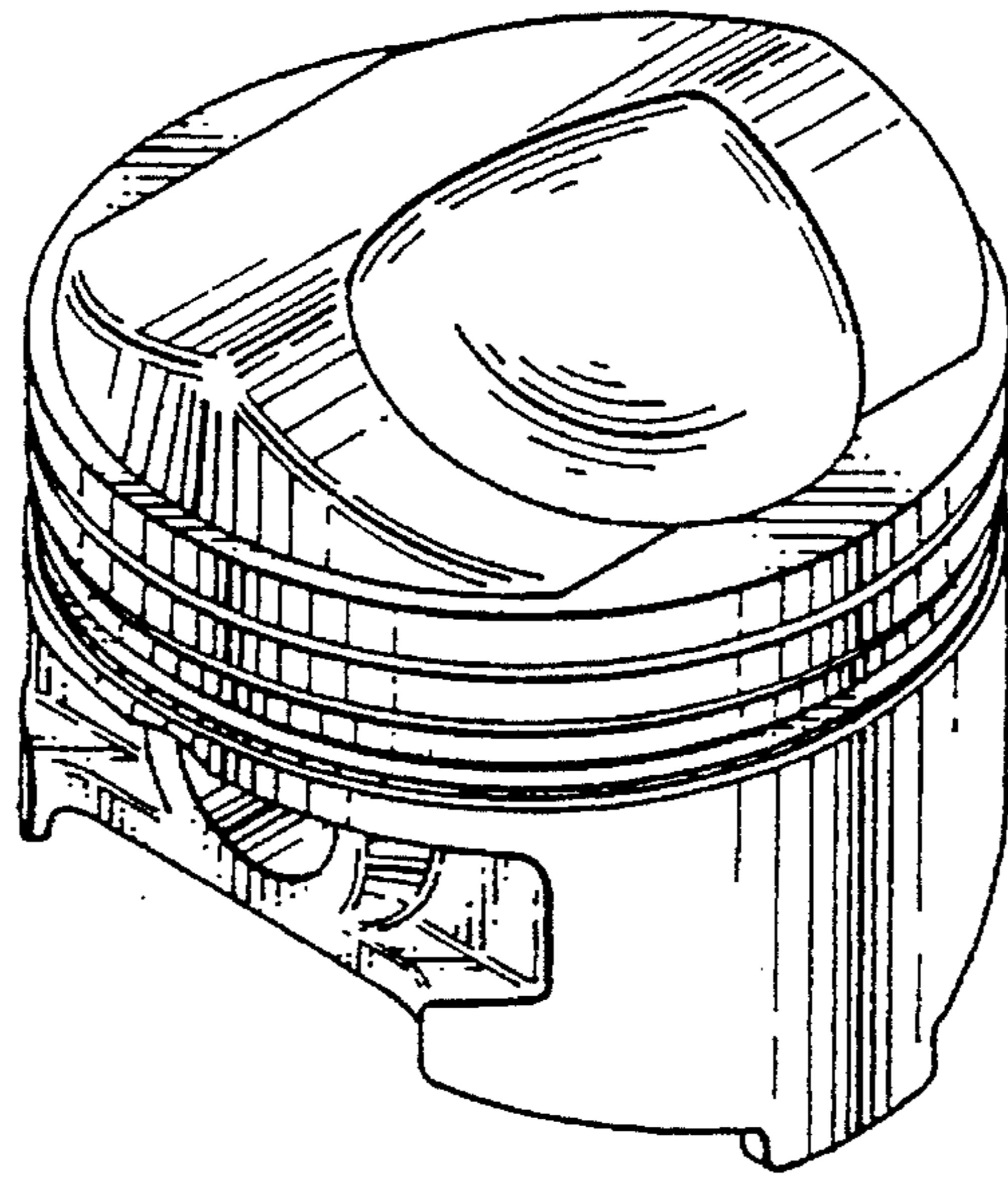


FIG. 2

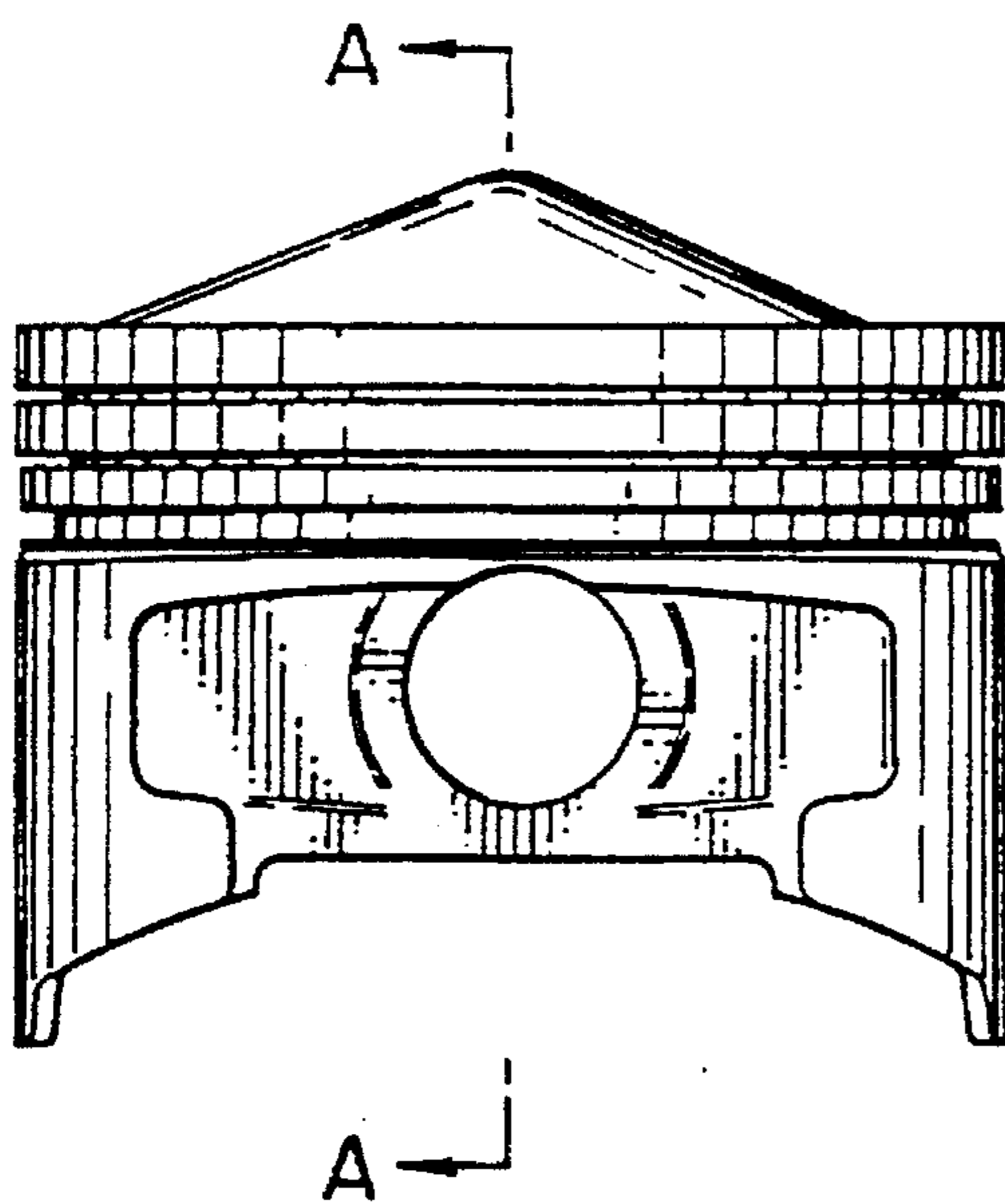


FIG. 3

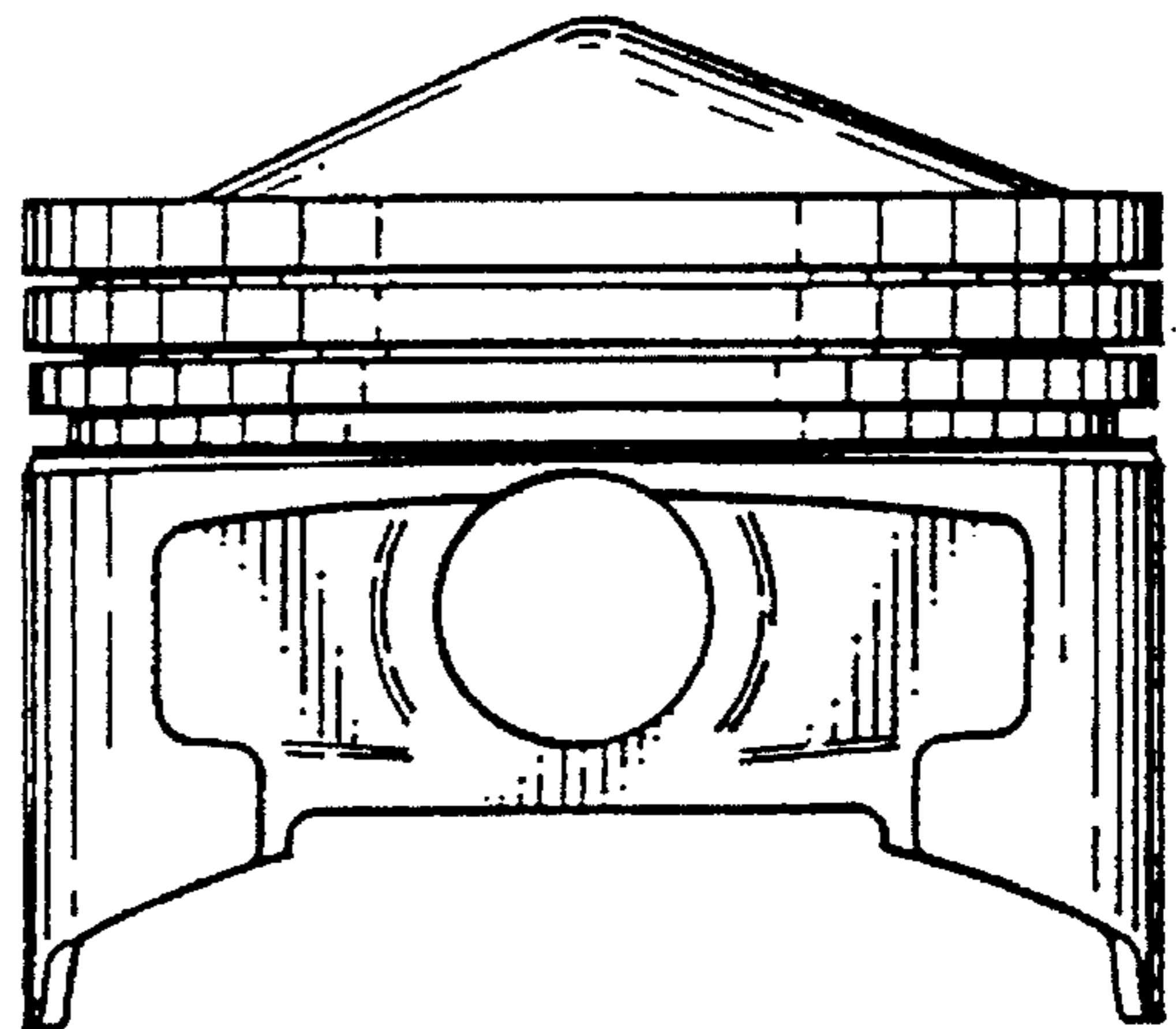


FIG. 4

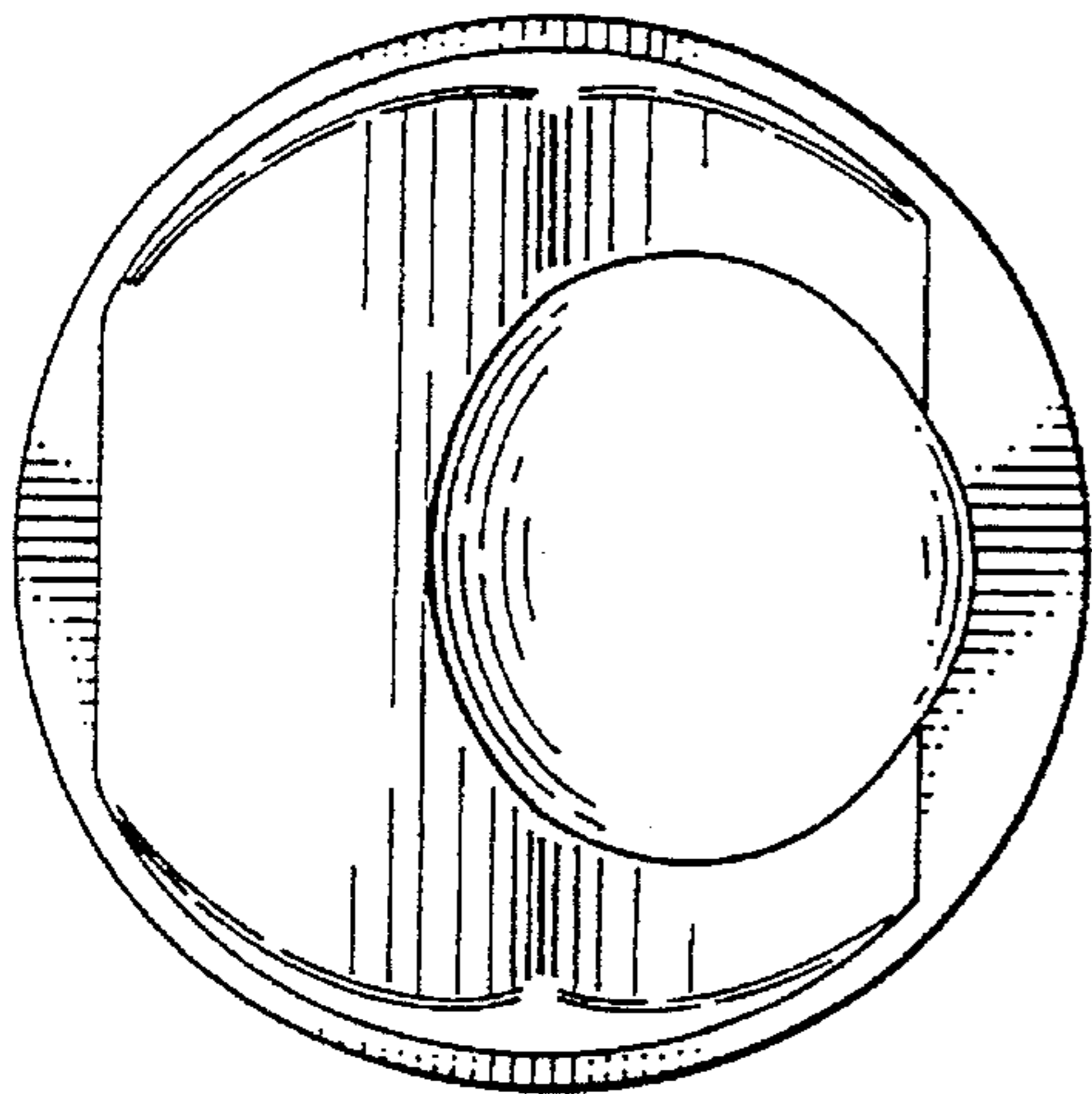


FIG. 5

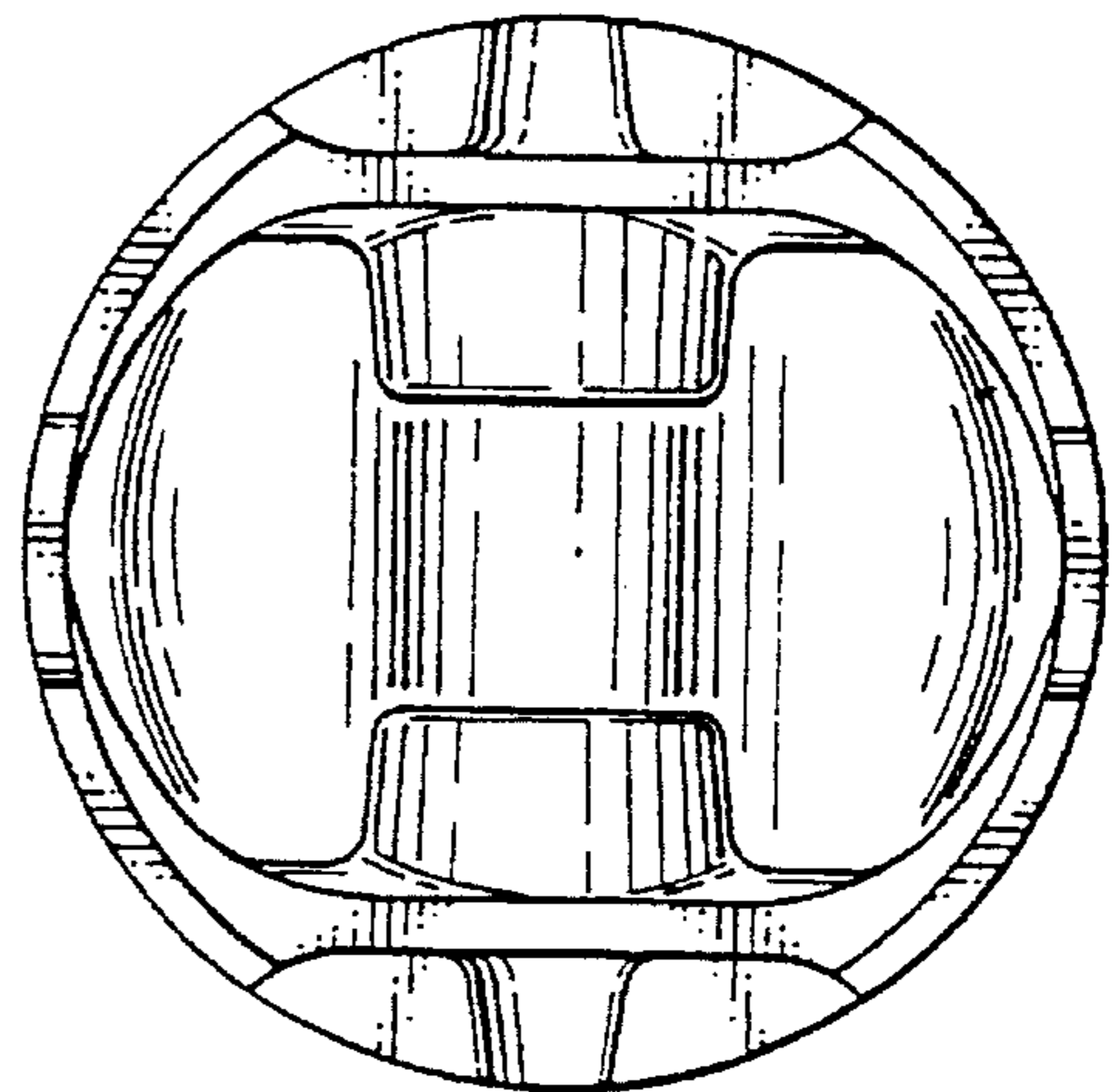


FIG. 6

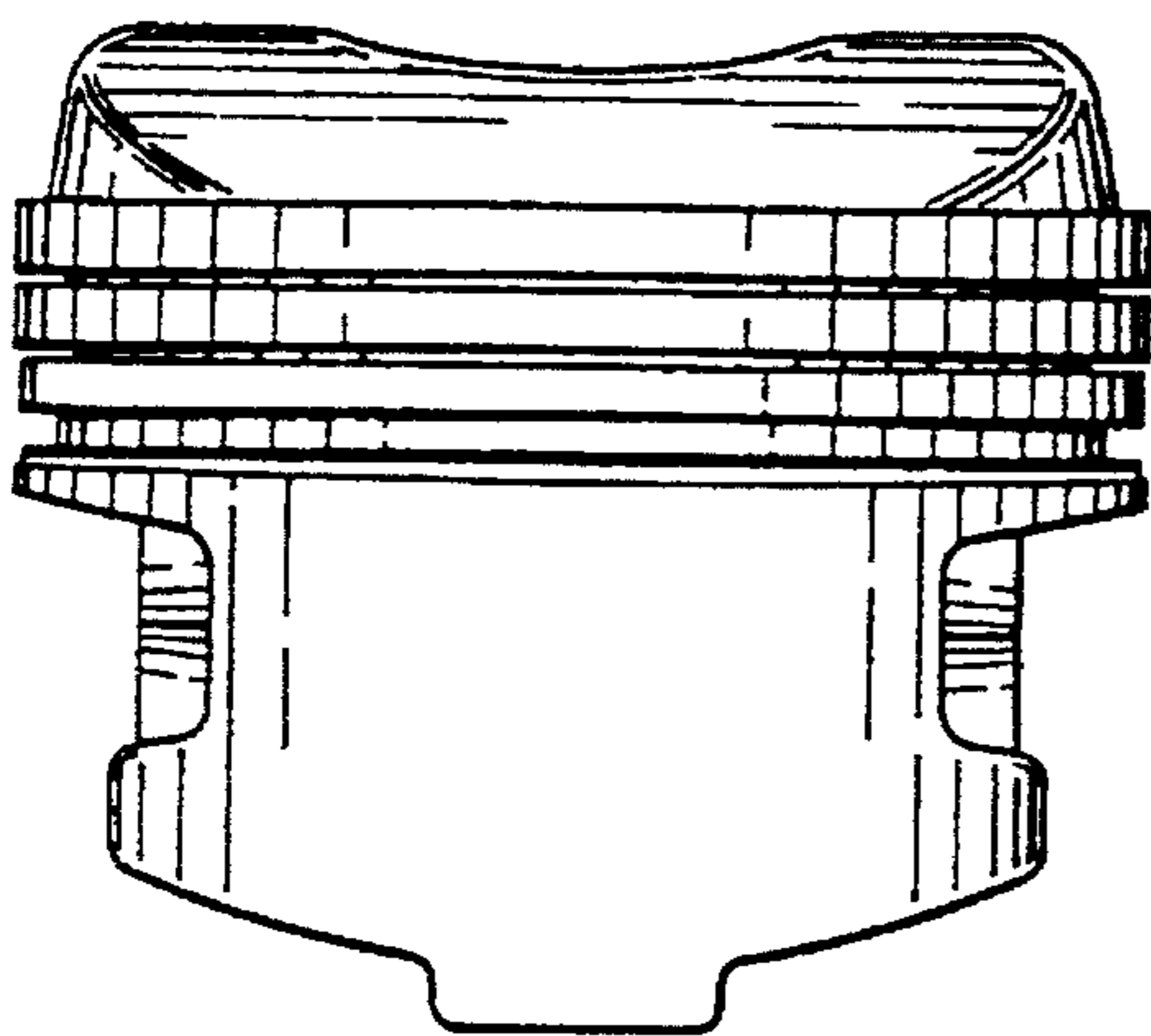


FIG. 7

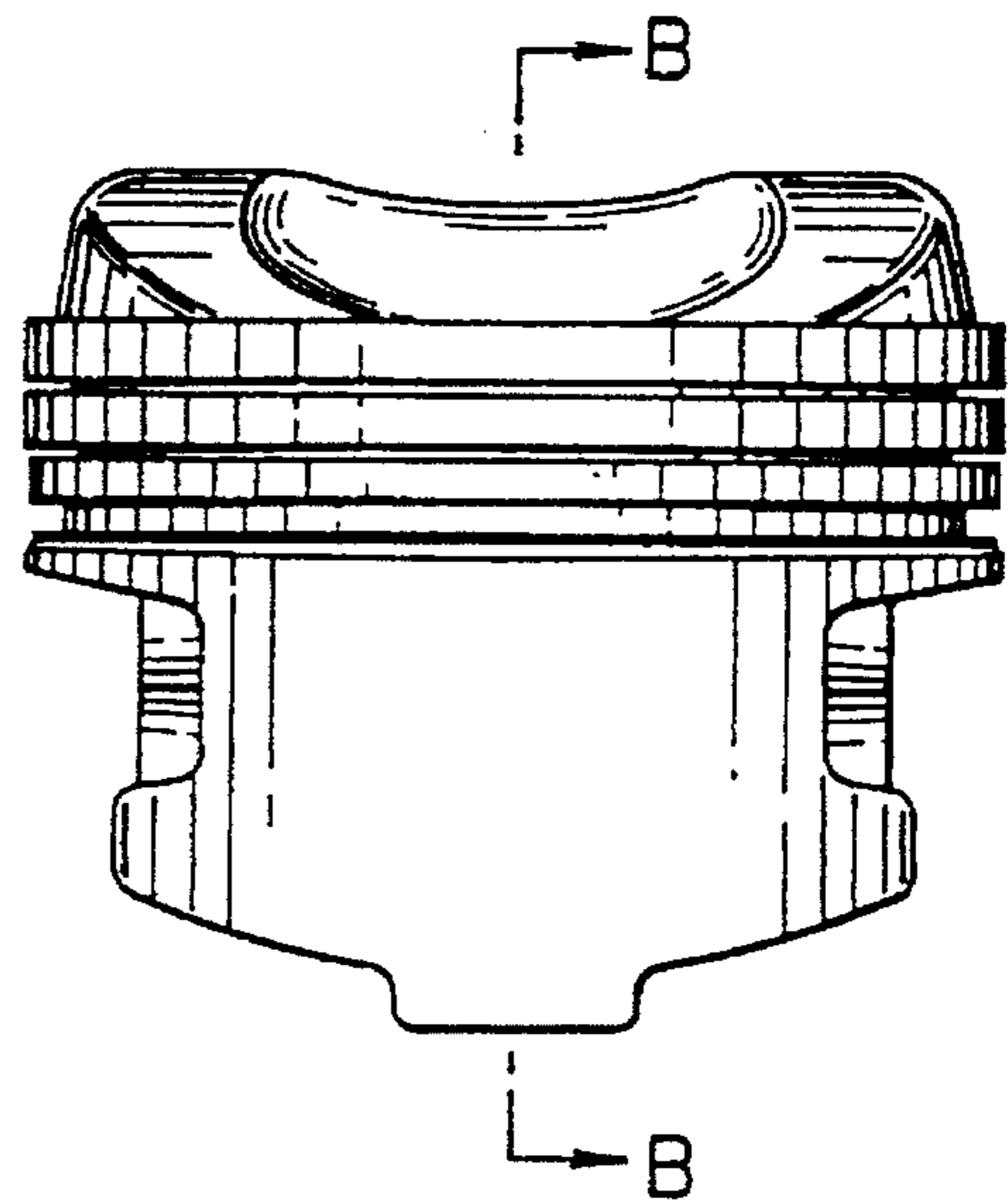


FIG. 8

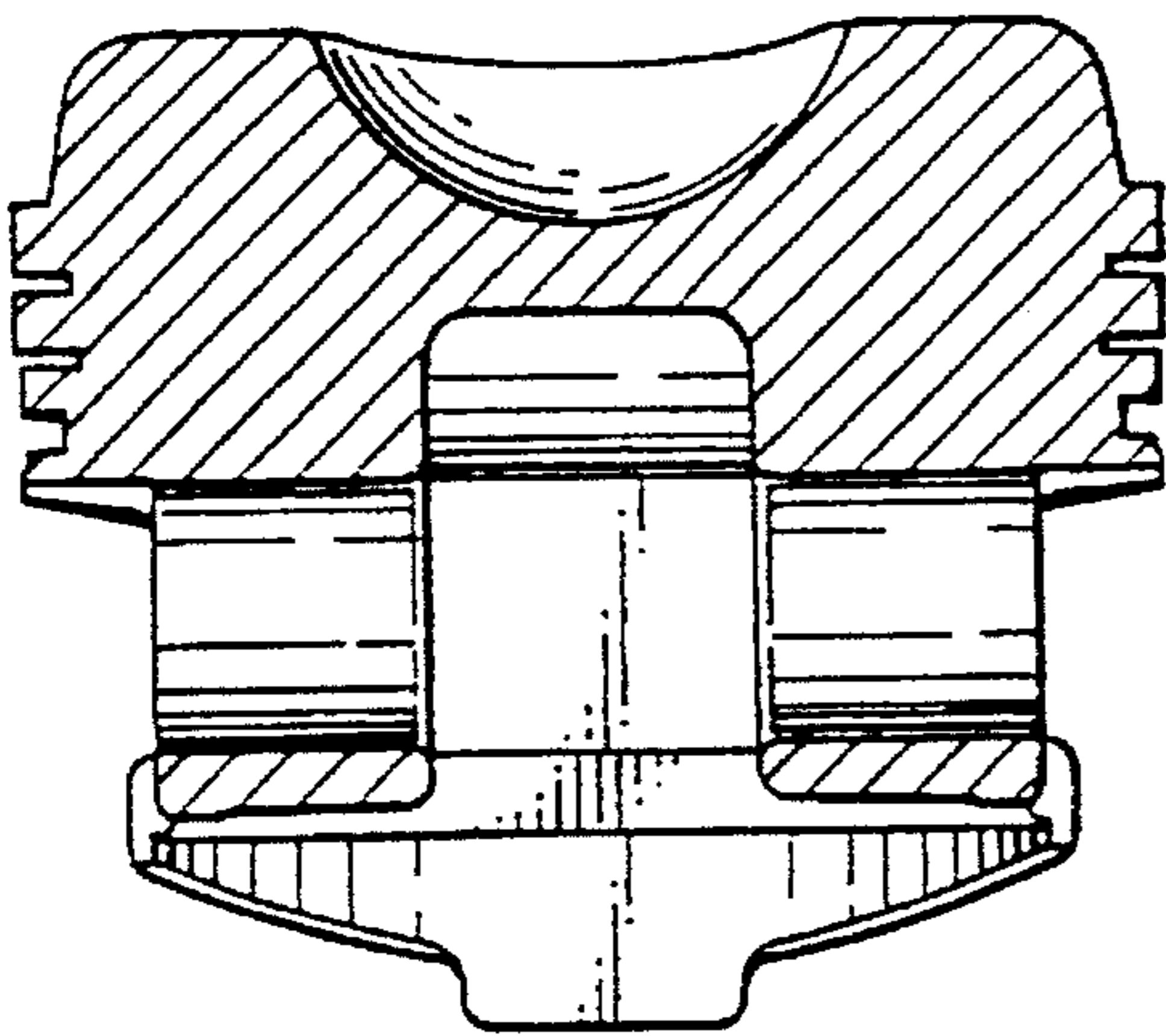


FIG. 9

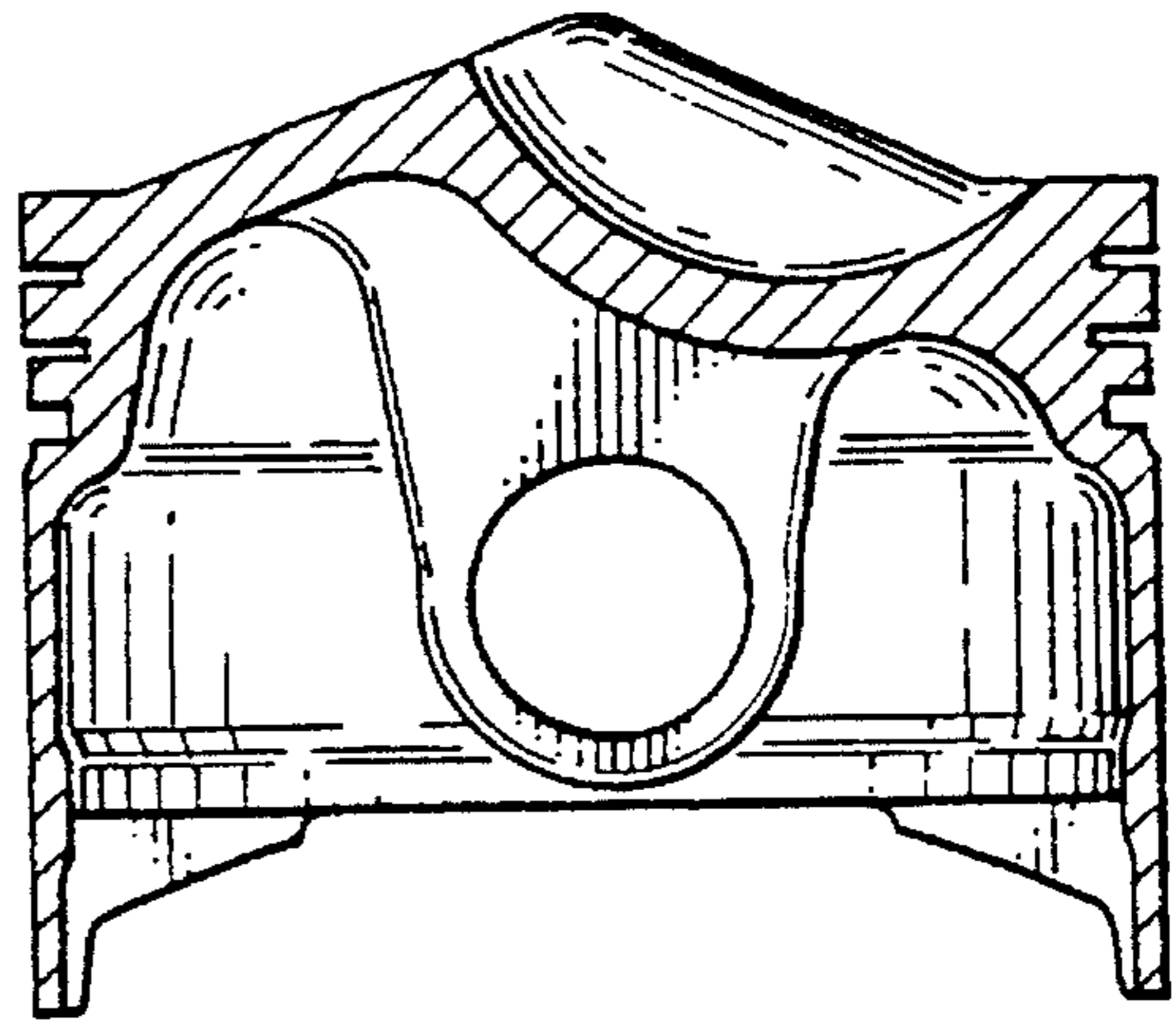


FIG. 10

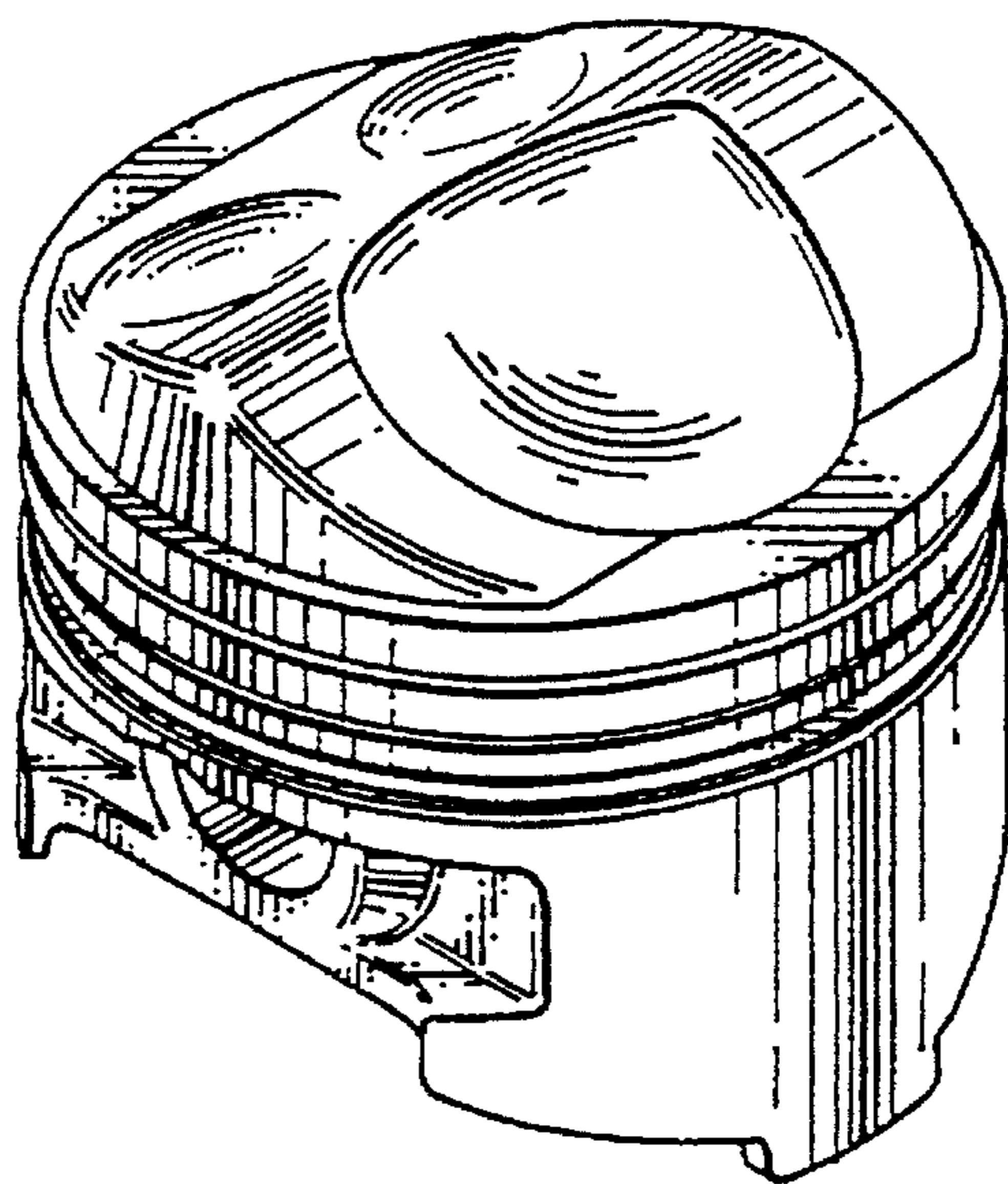


FIG. 11

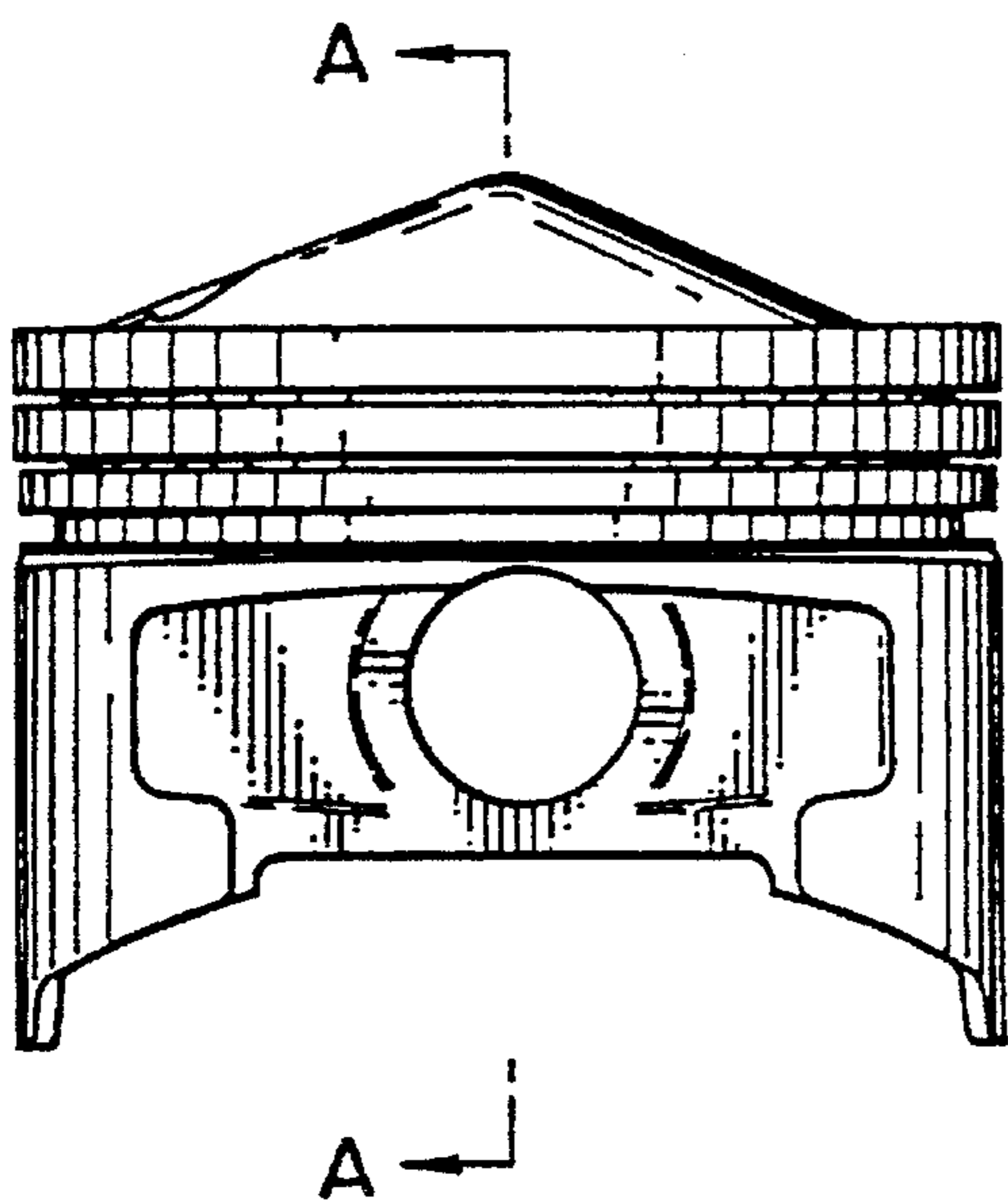


FIG. 12

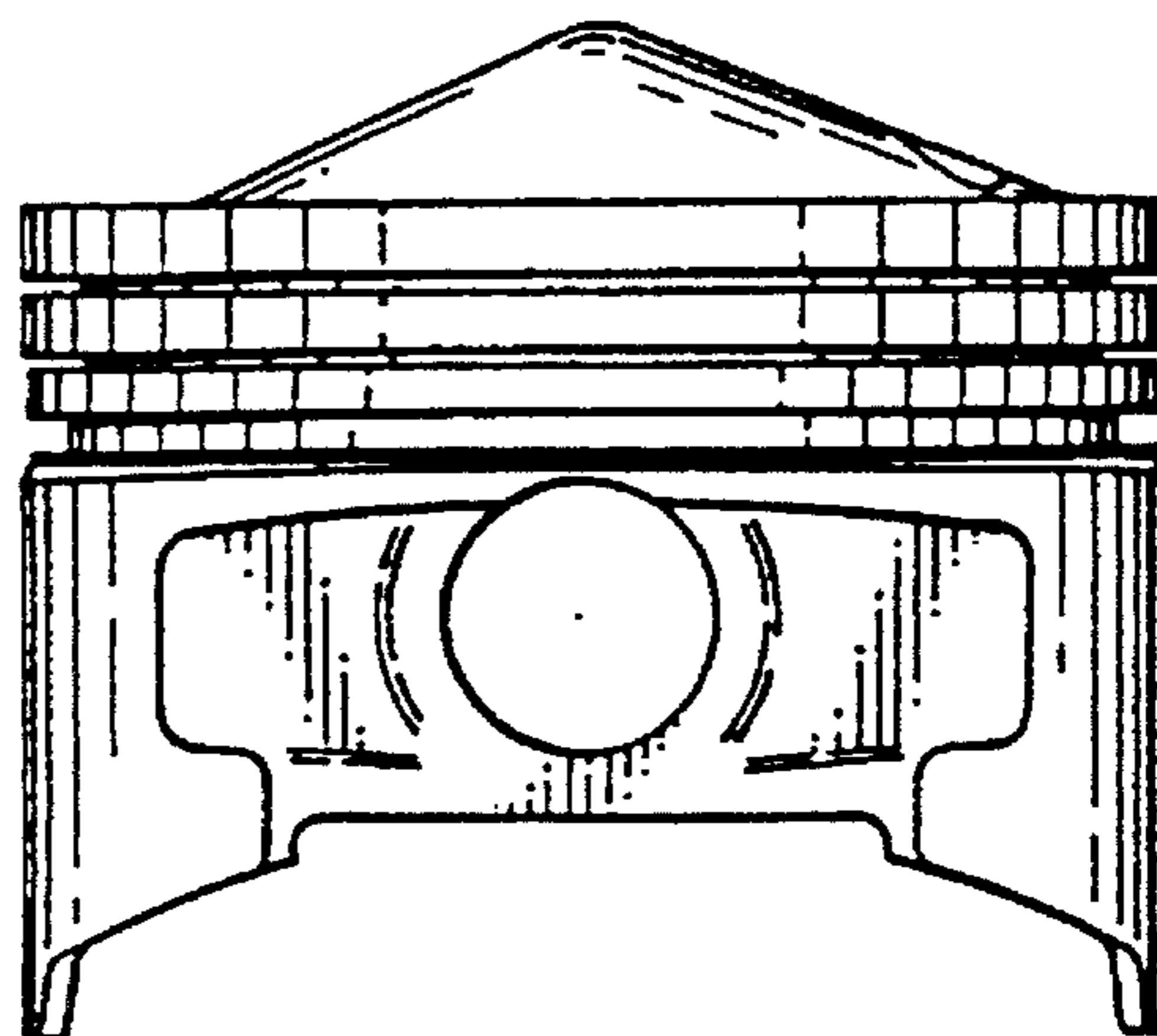


FIG. 13

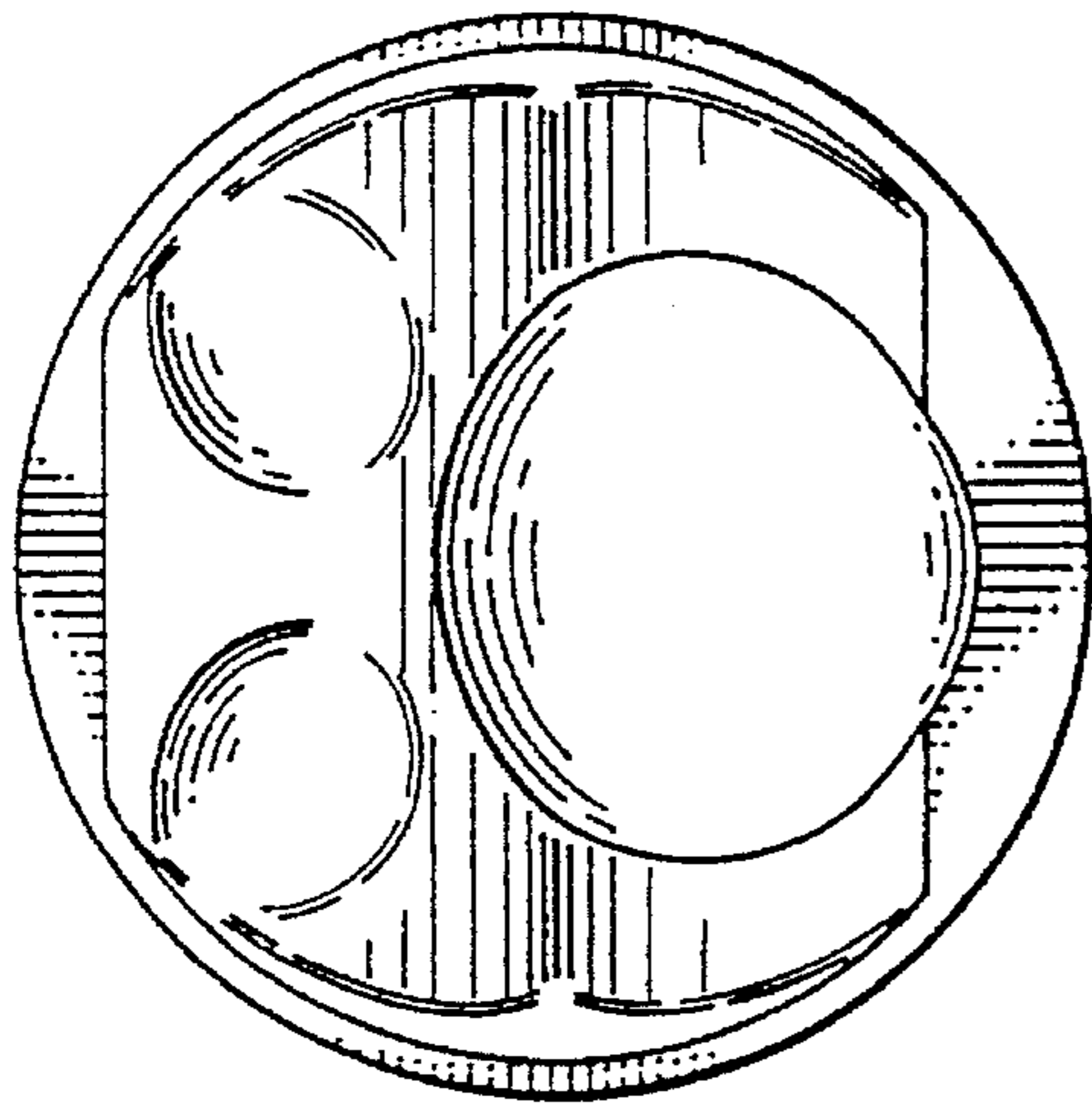


FIG. 14

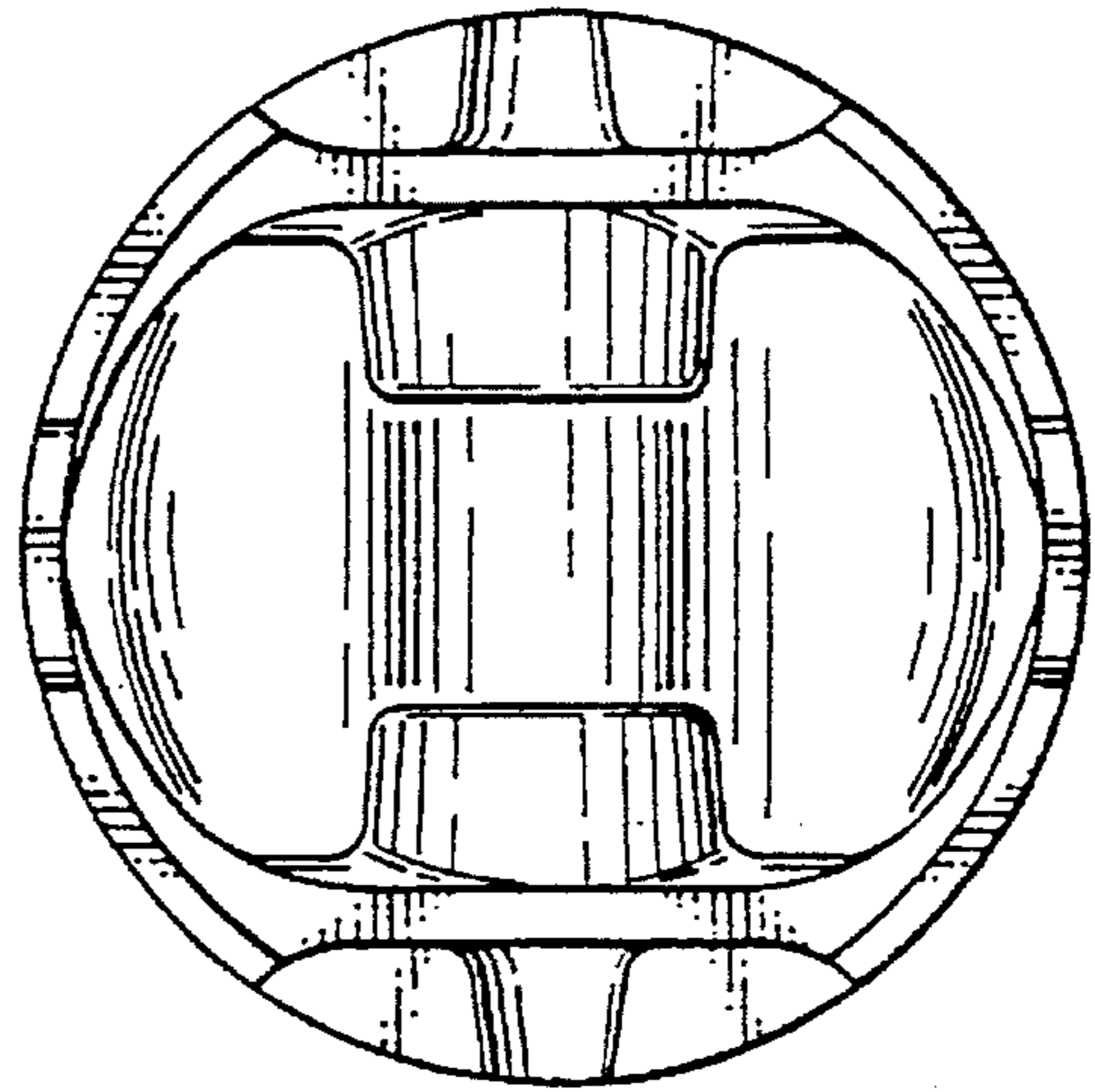


FIG. 15

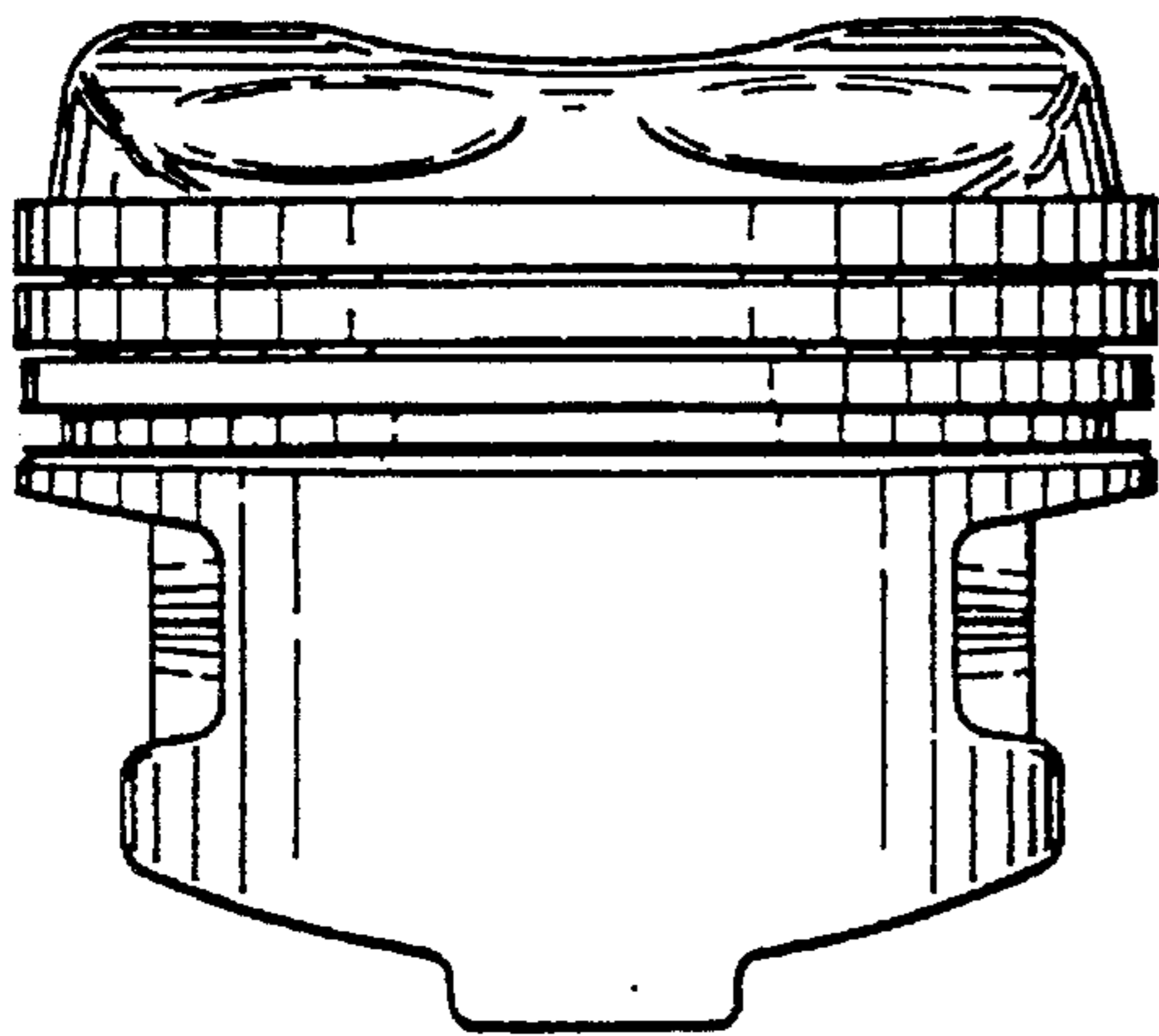


FIG. 16

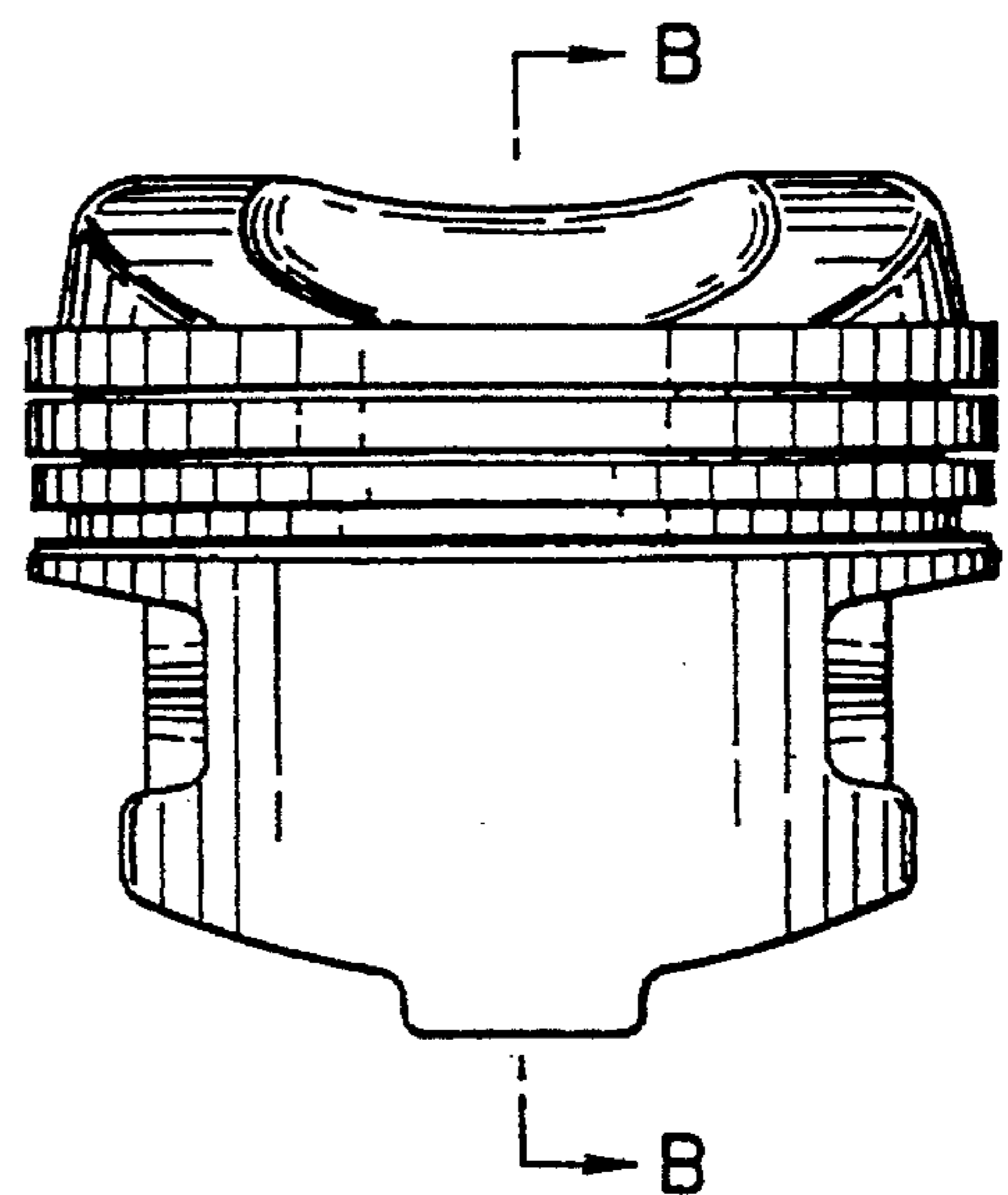


FIG. 17

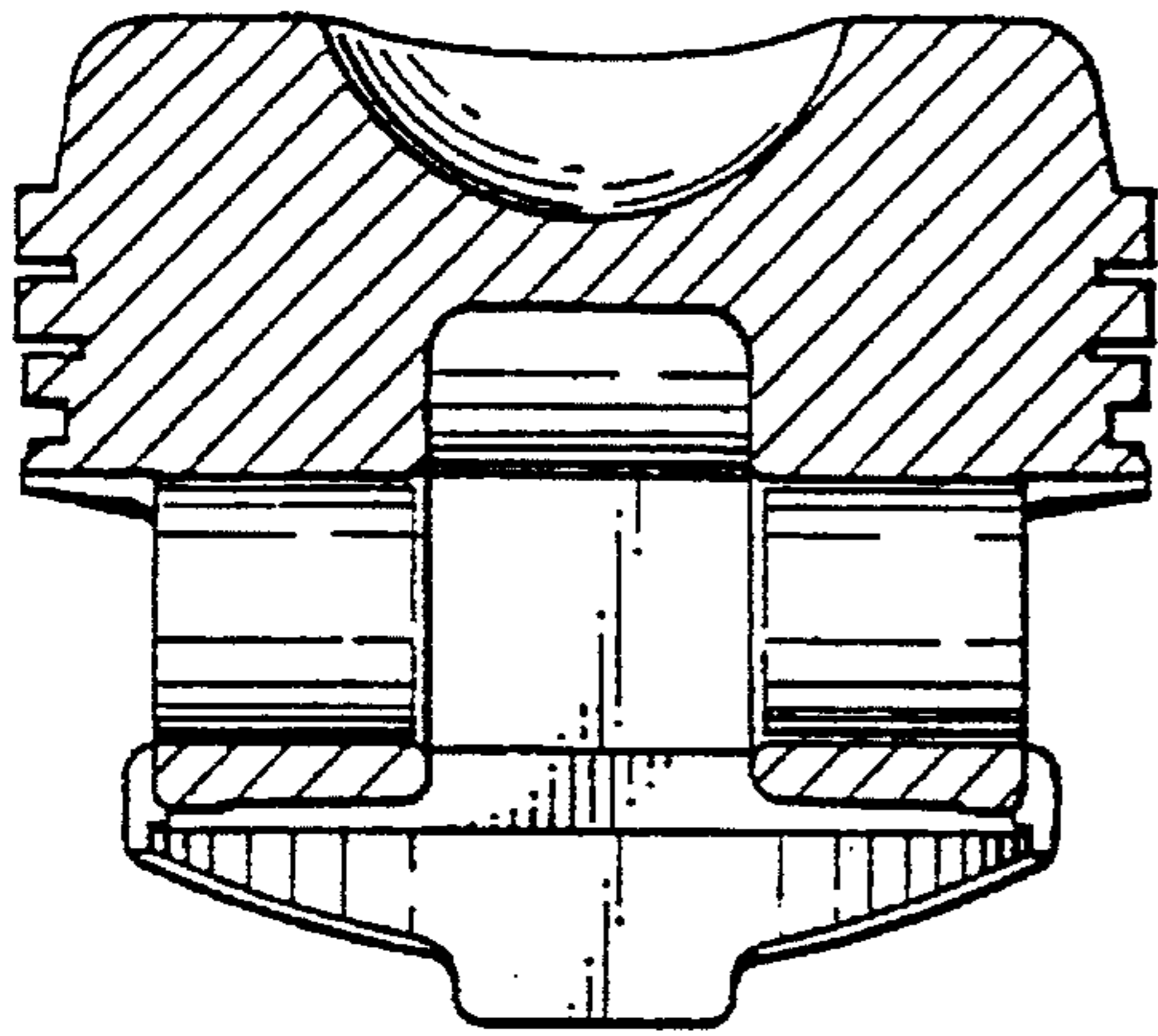


FIG. 18

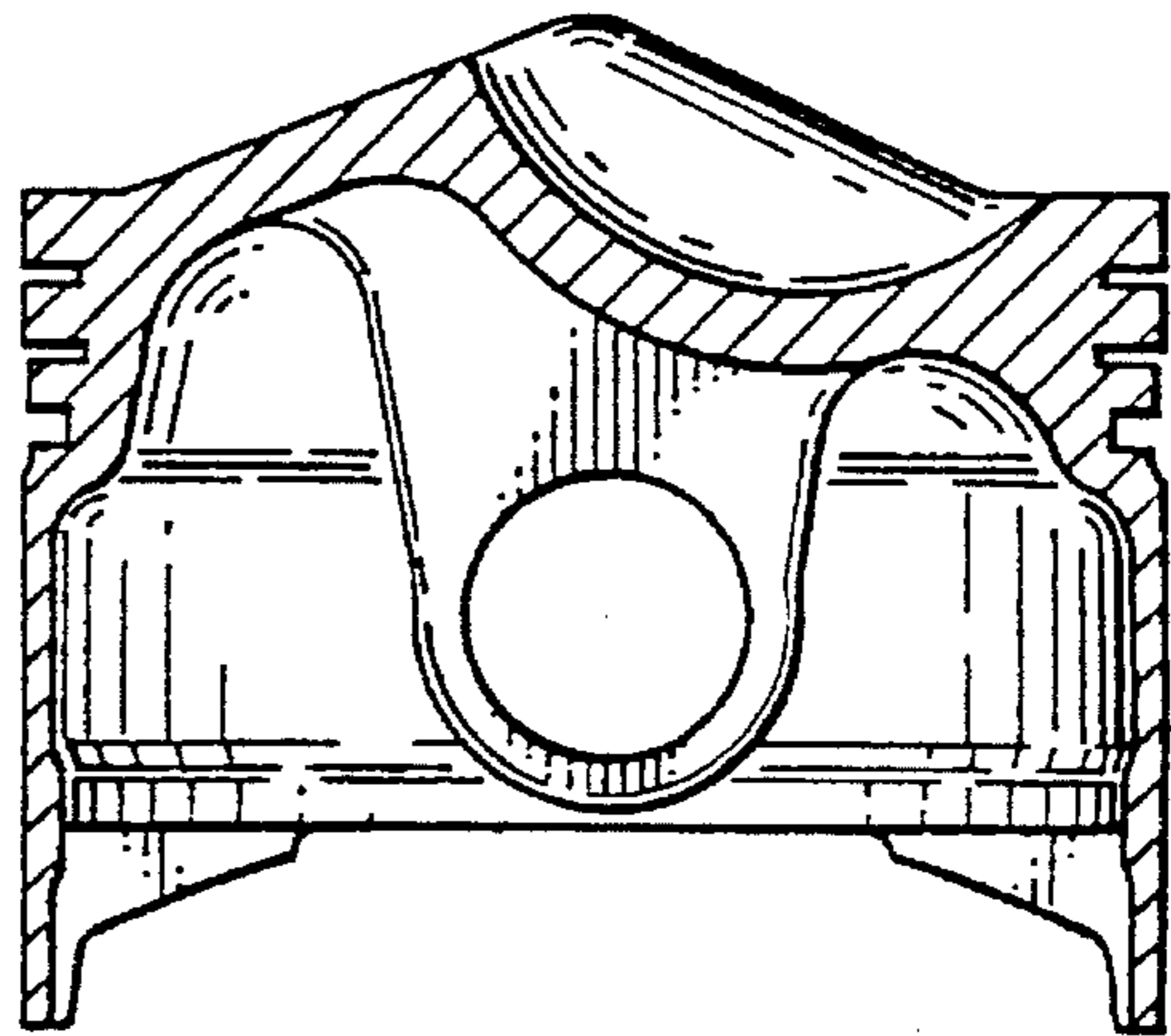




FIG. 19

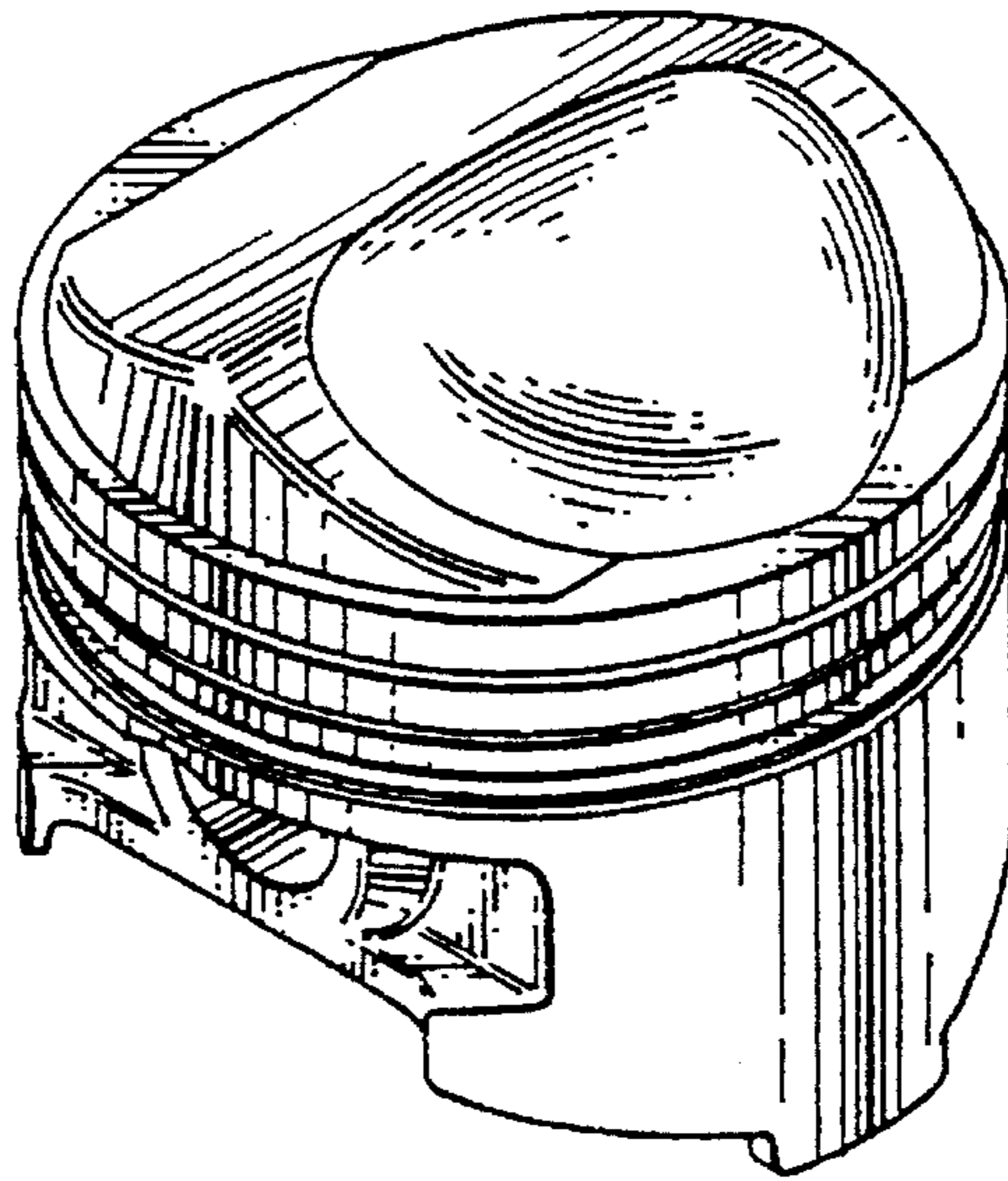


FIG. 20

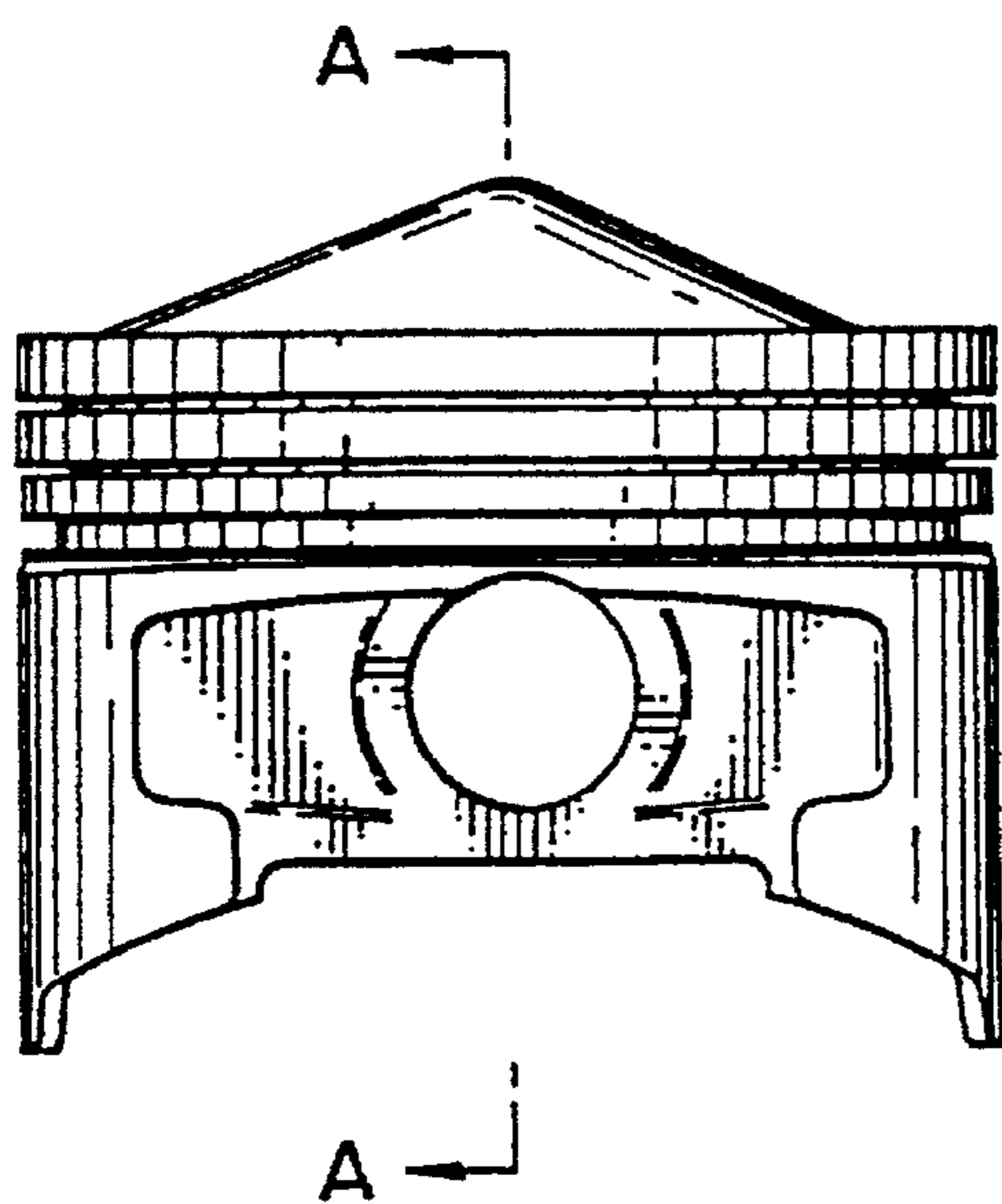


FIG. 21

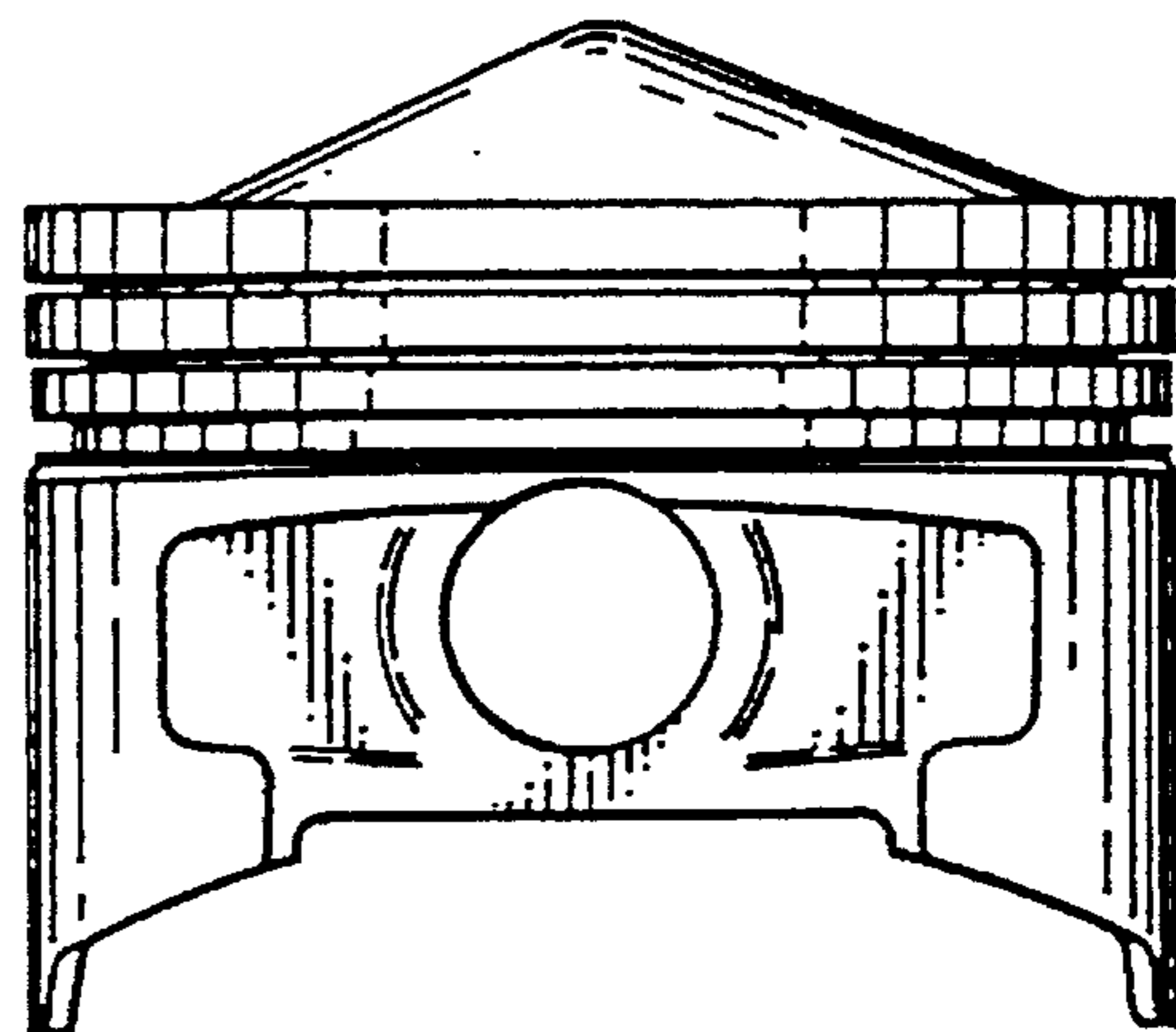


FIG. 22

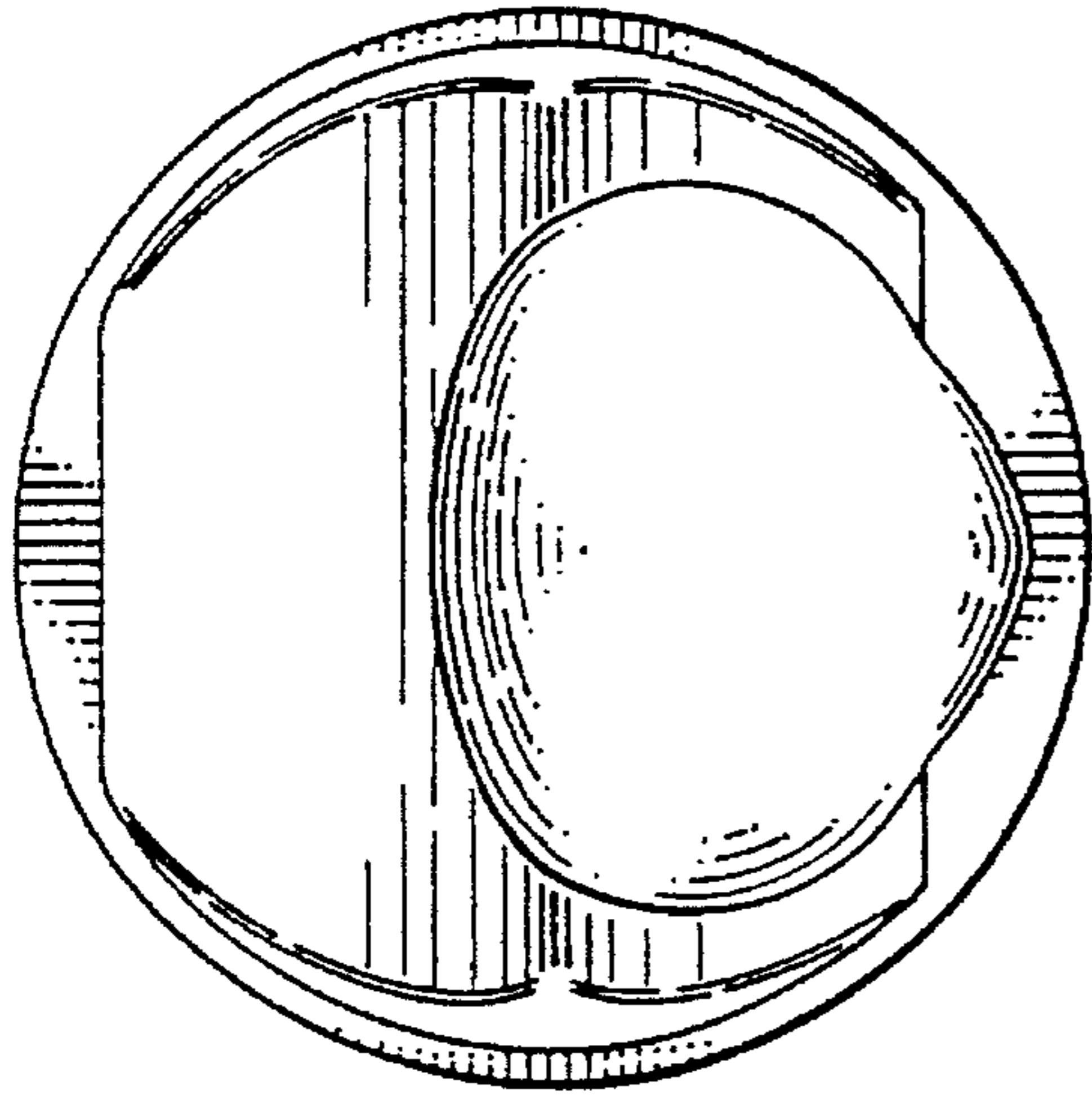


FIG. 23

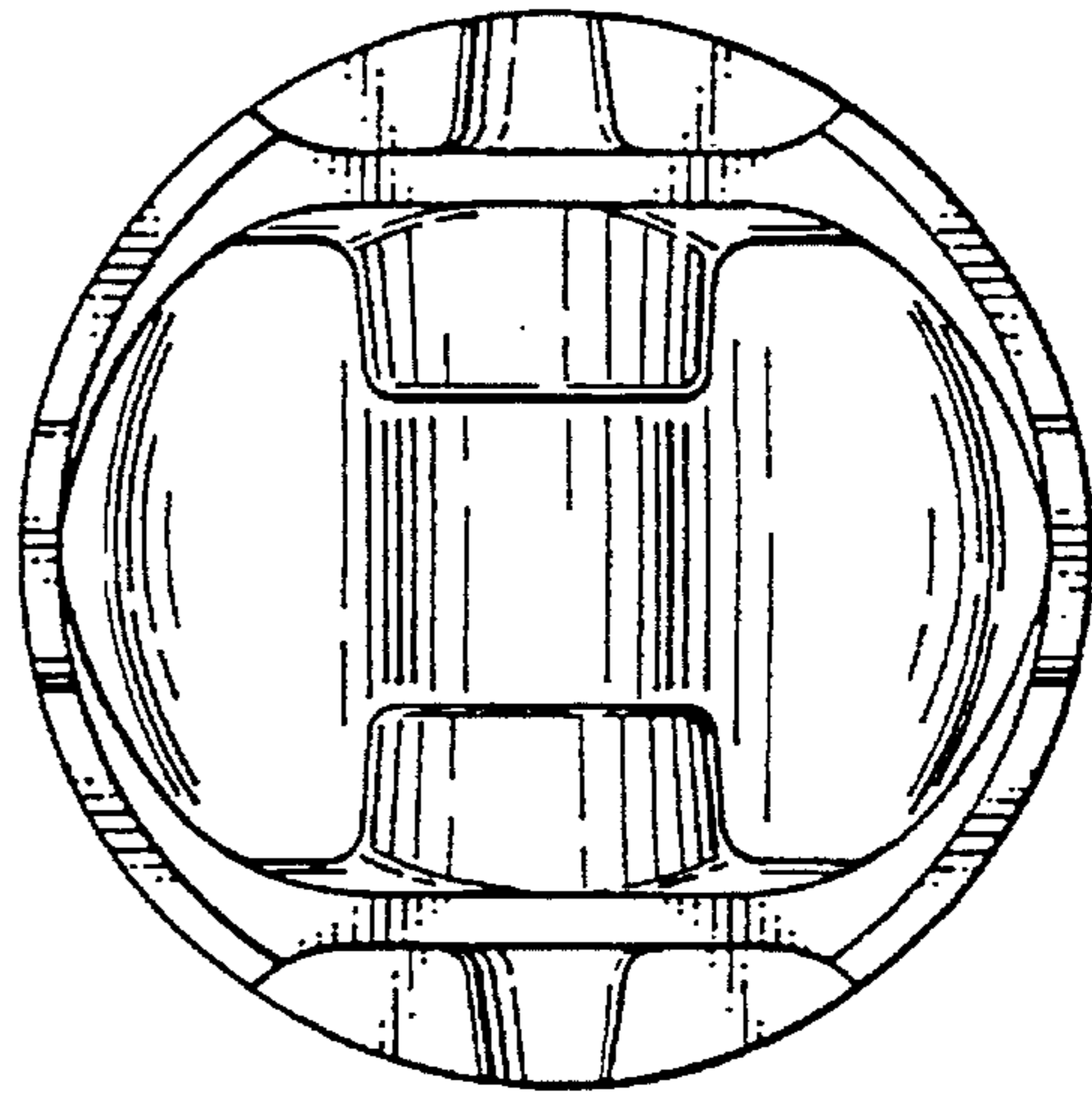


FIG. 24

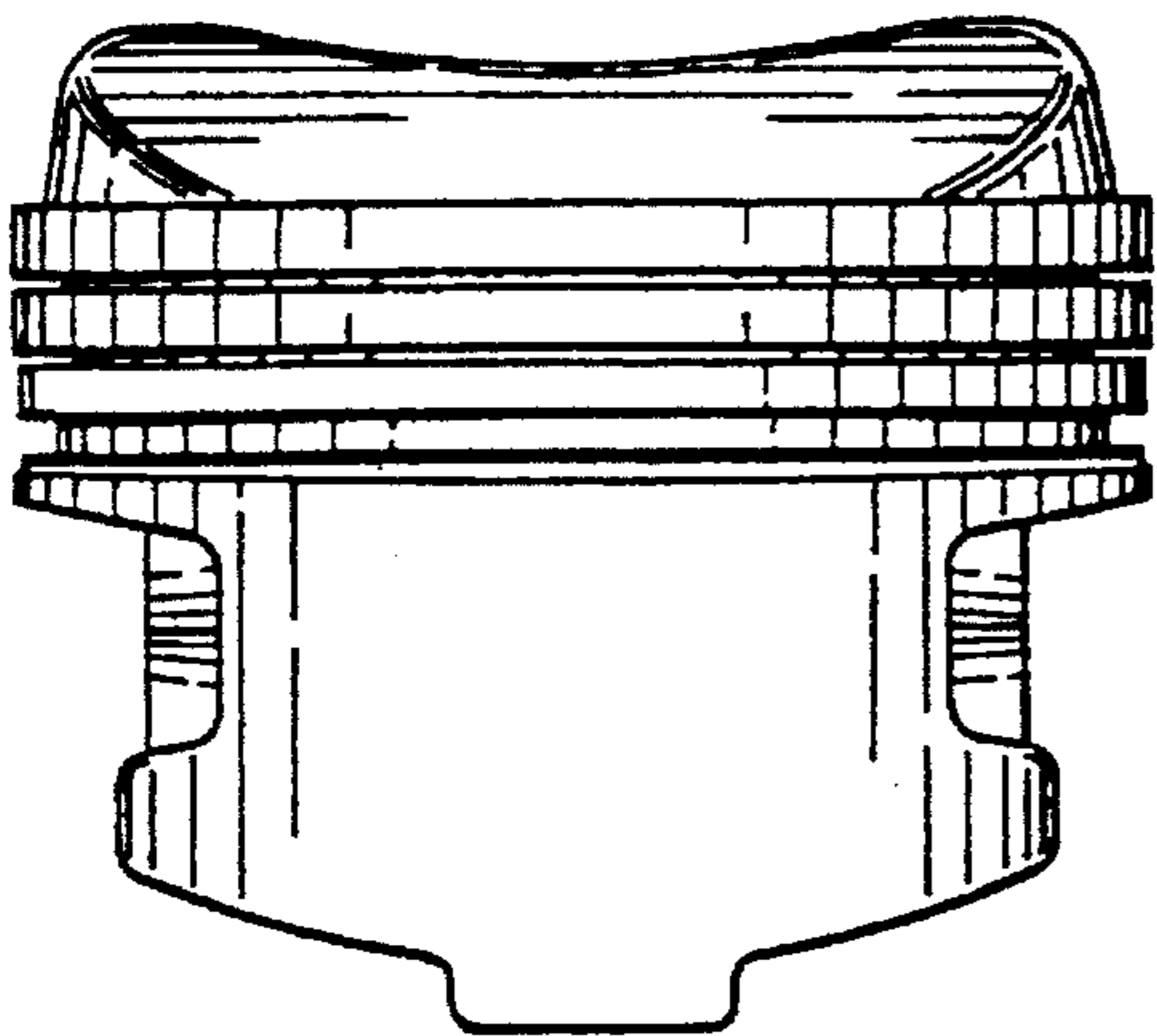


FIG. 25

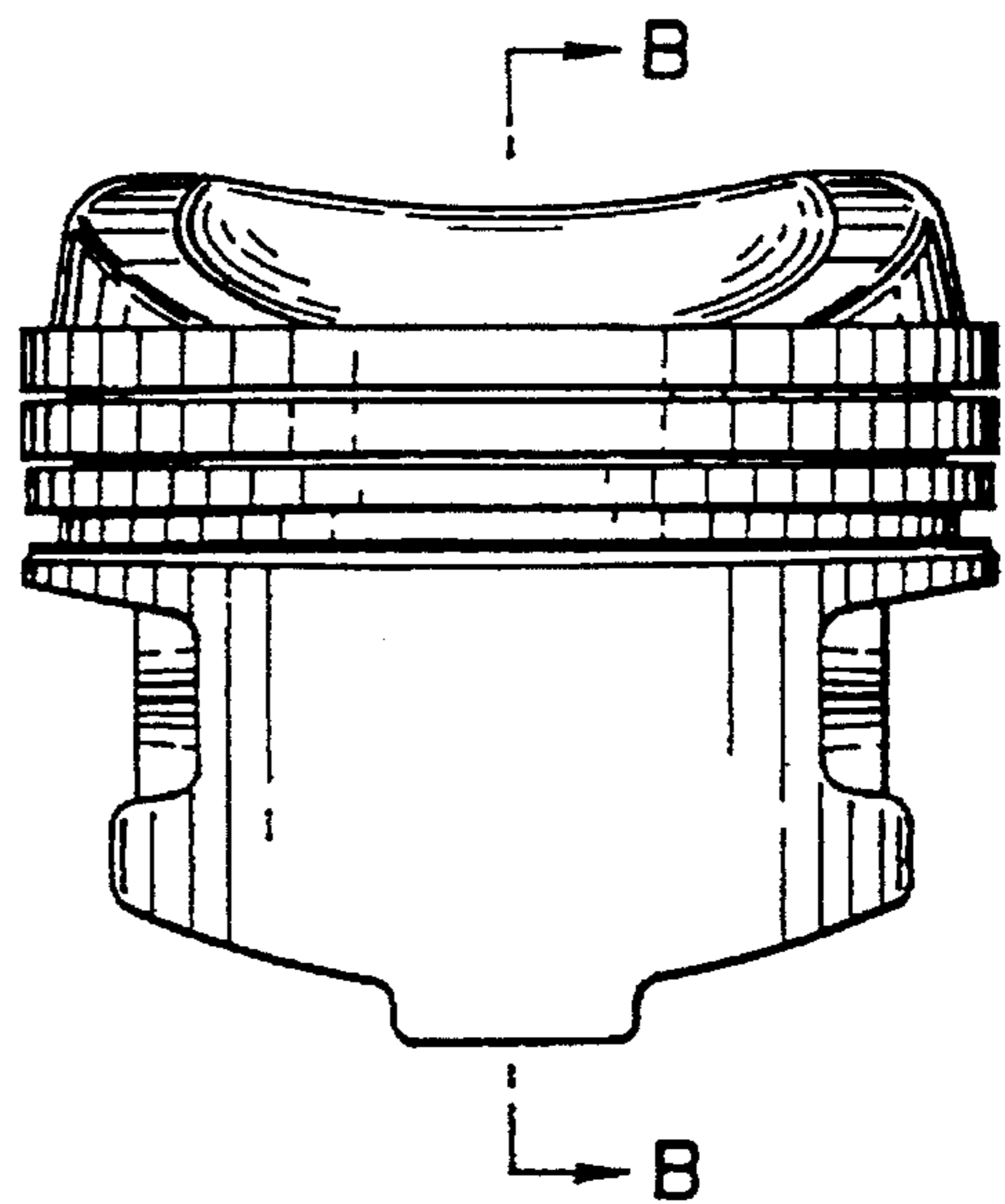


FIG. 26

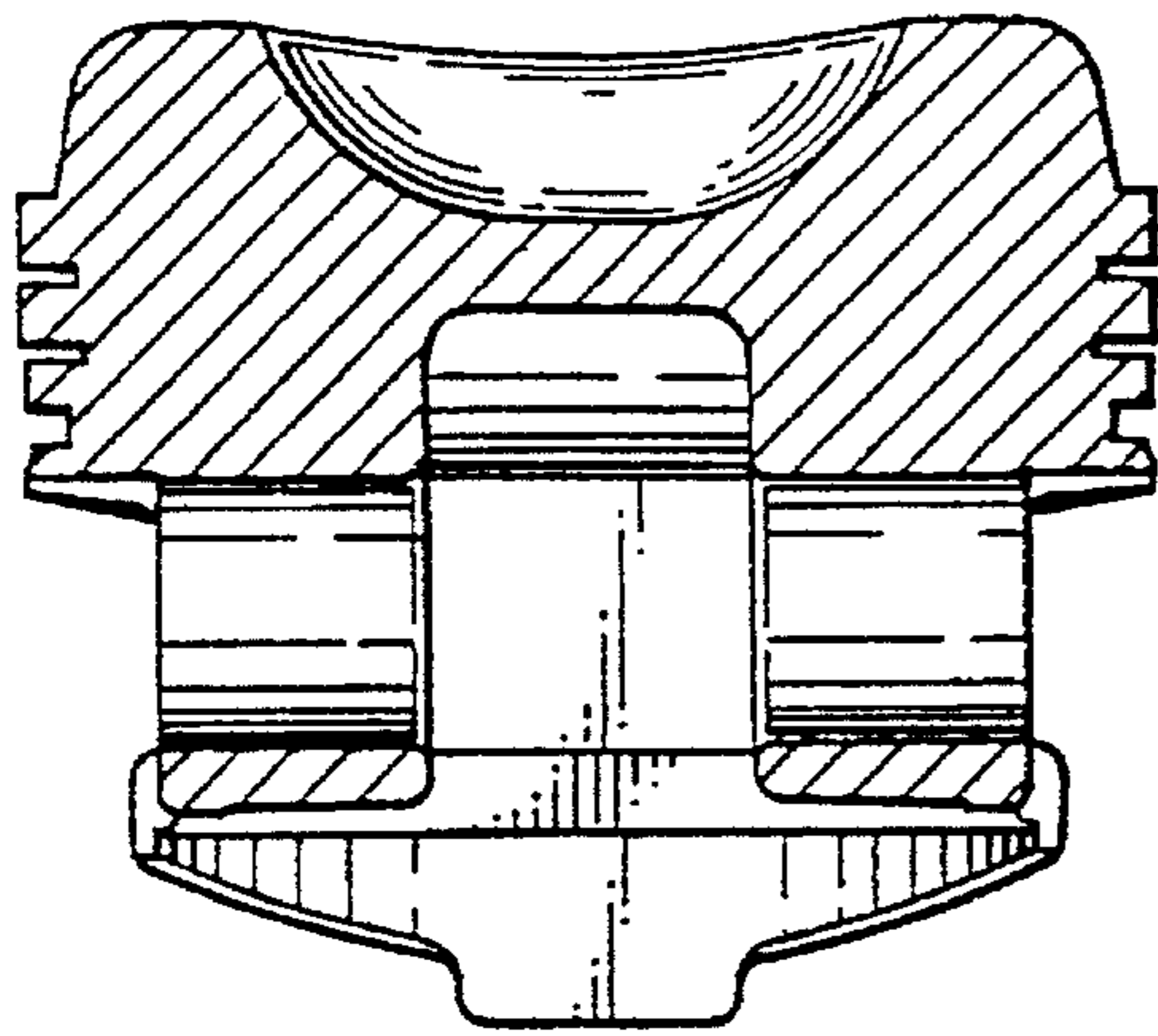


FIG. 27

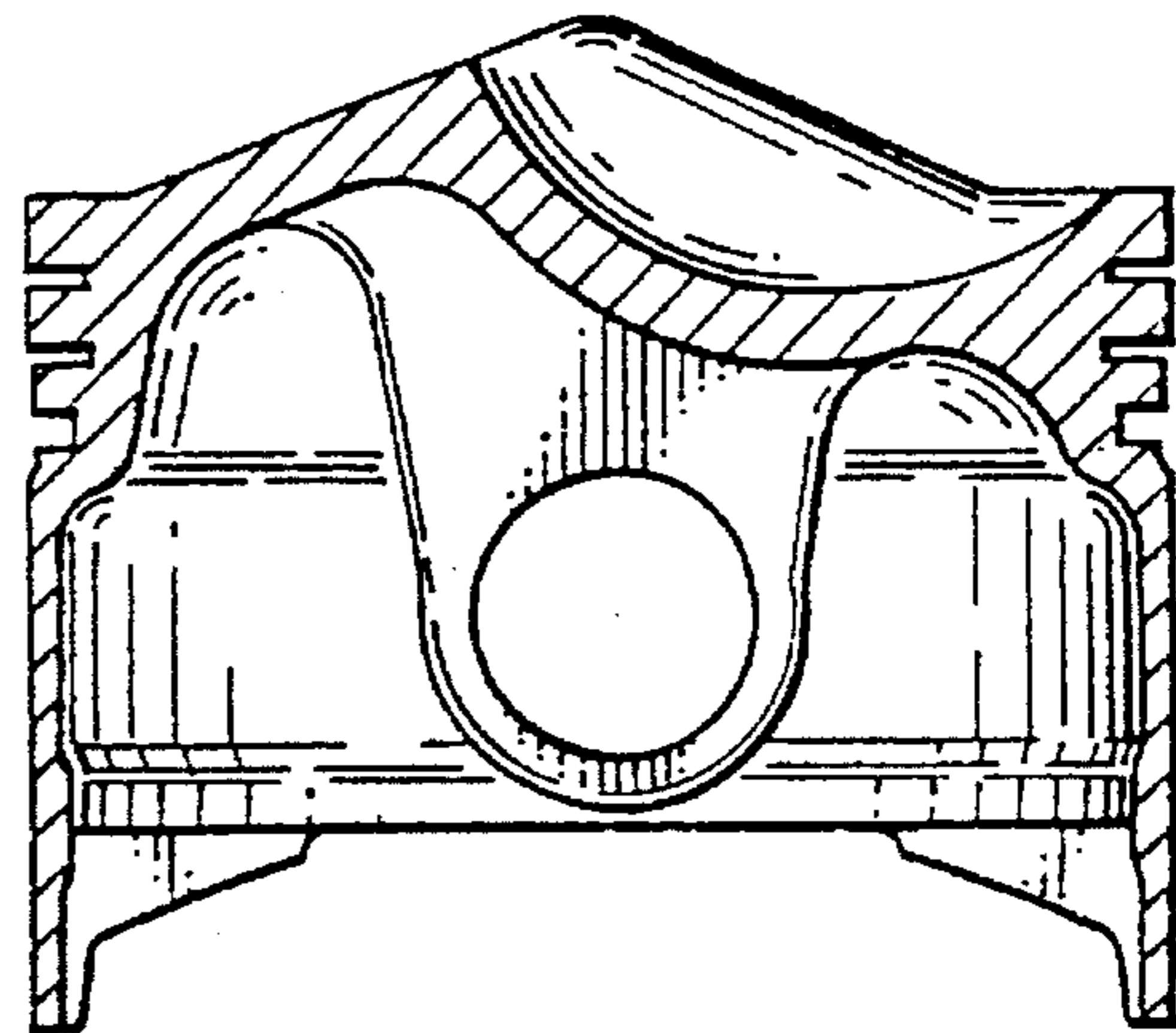


FIG. 28

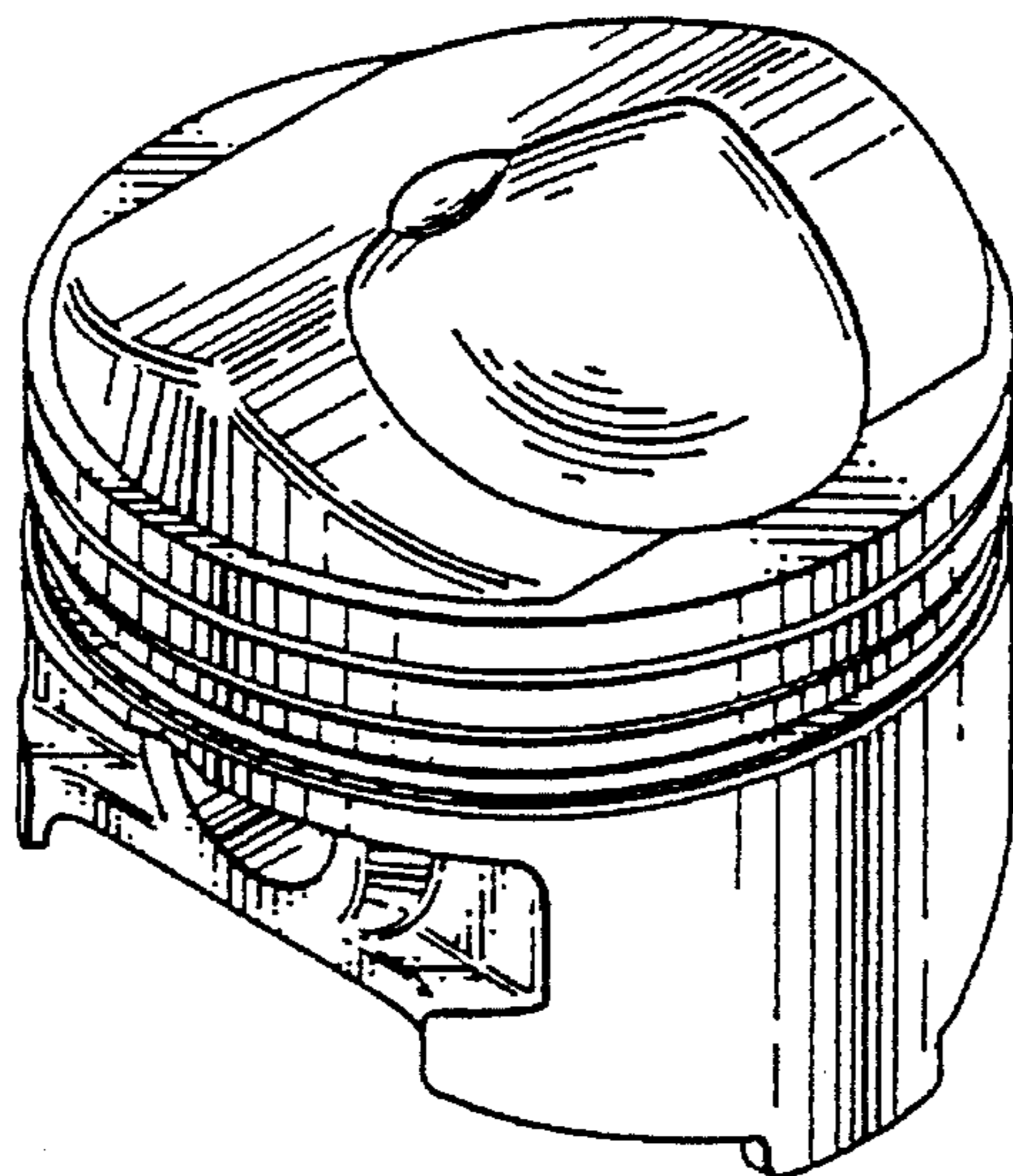


FIG. 29

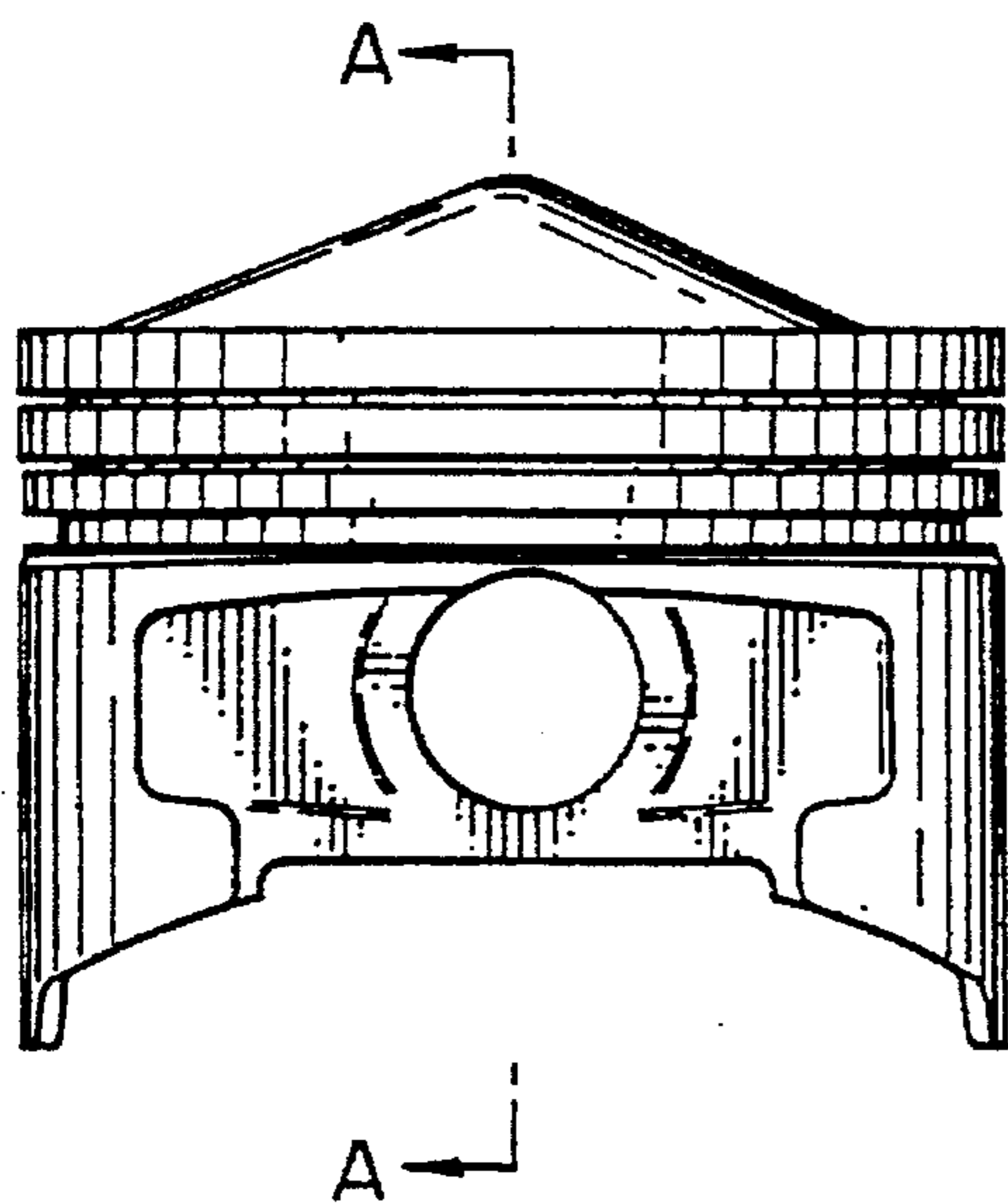


FIG. 30

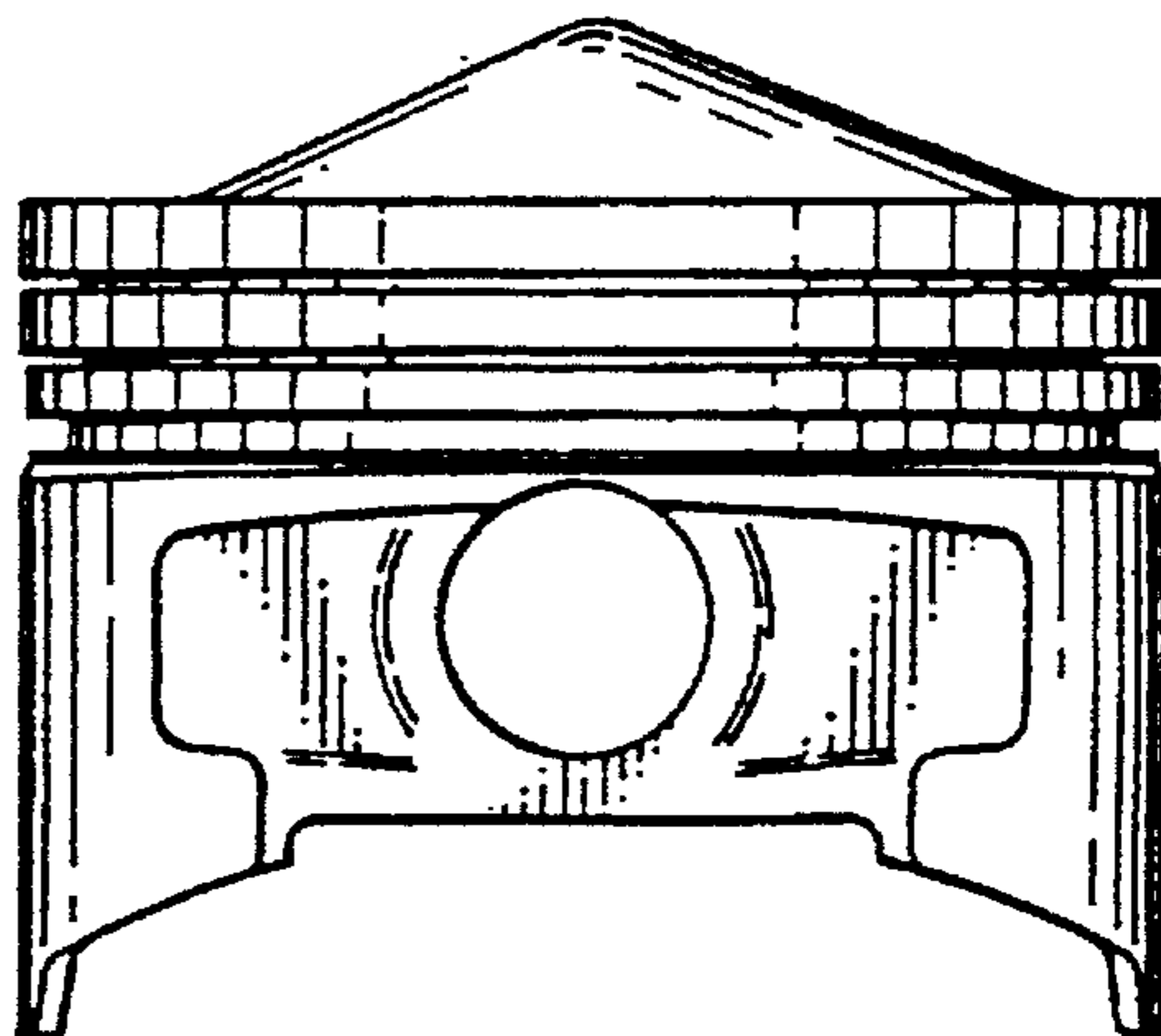


FIG. 31

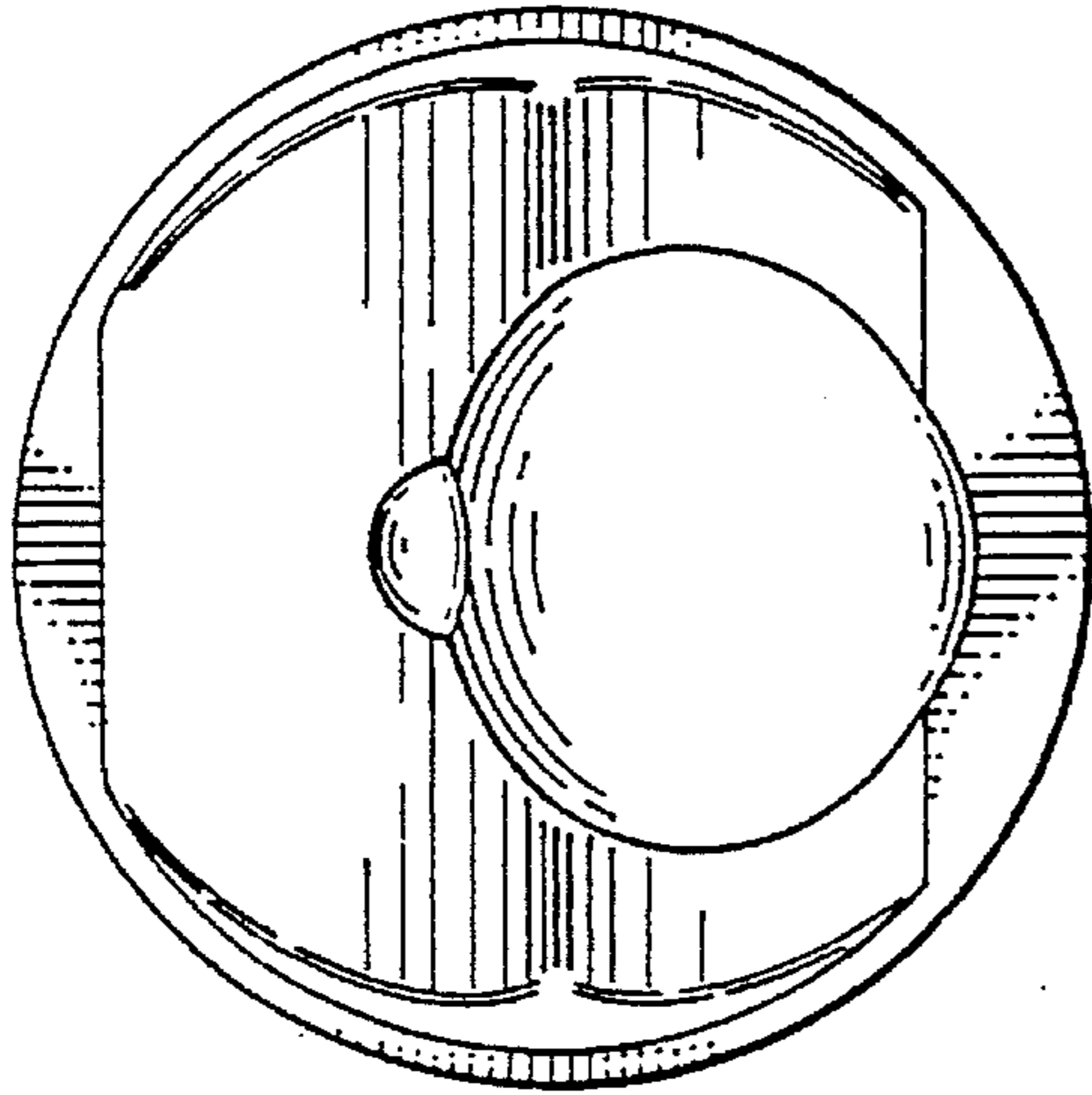


FIG. 32

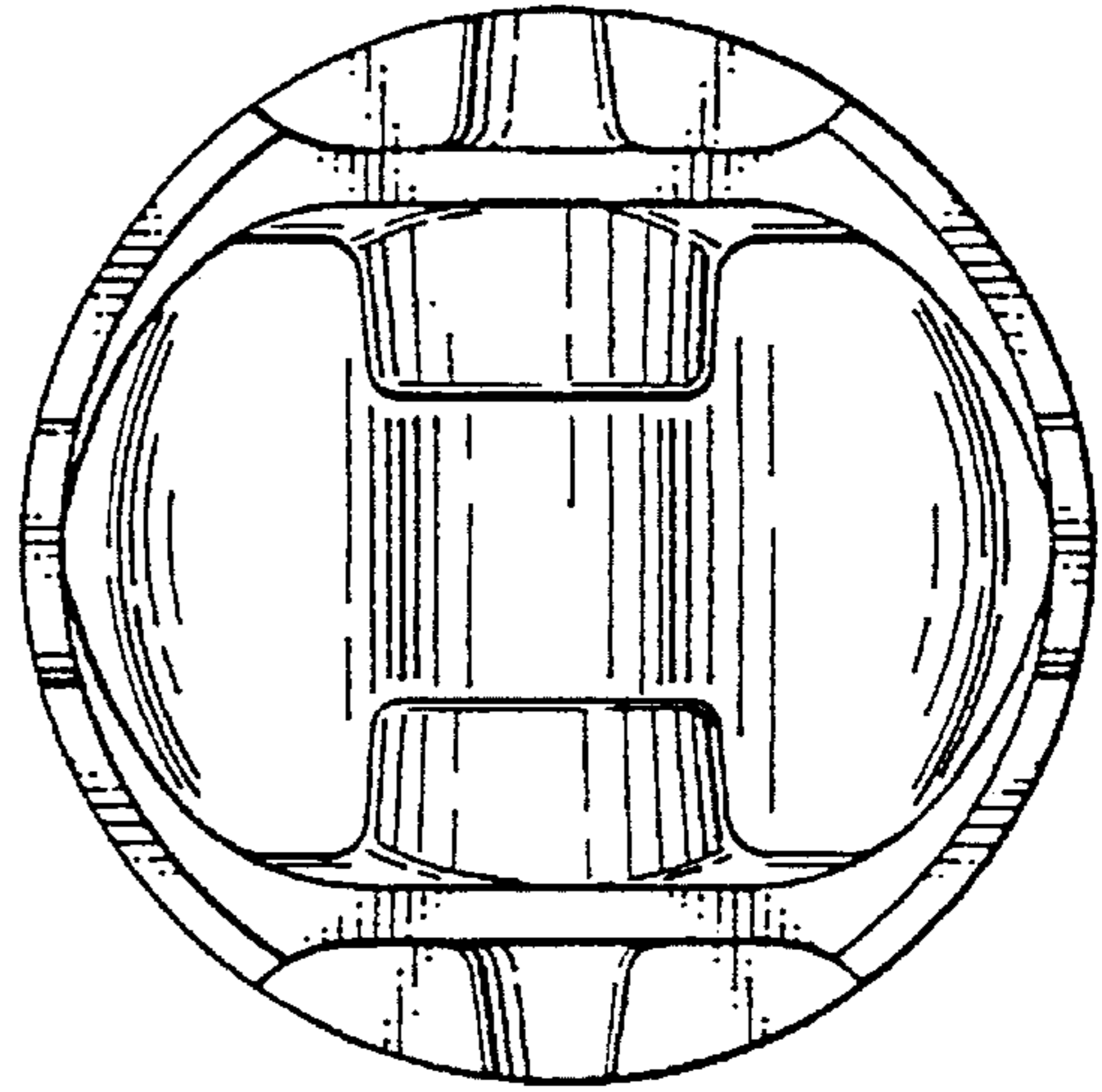


FIG. 33

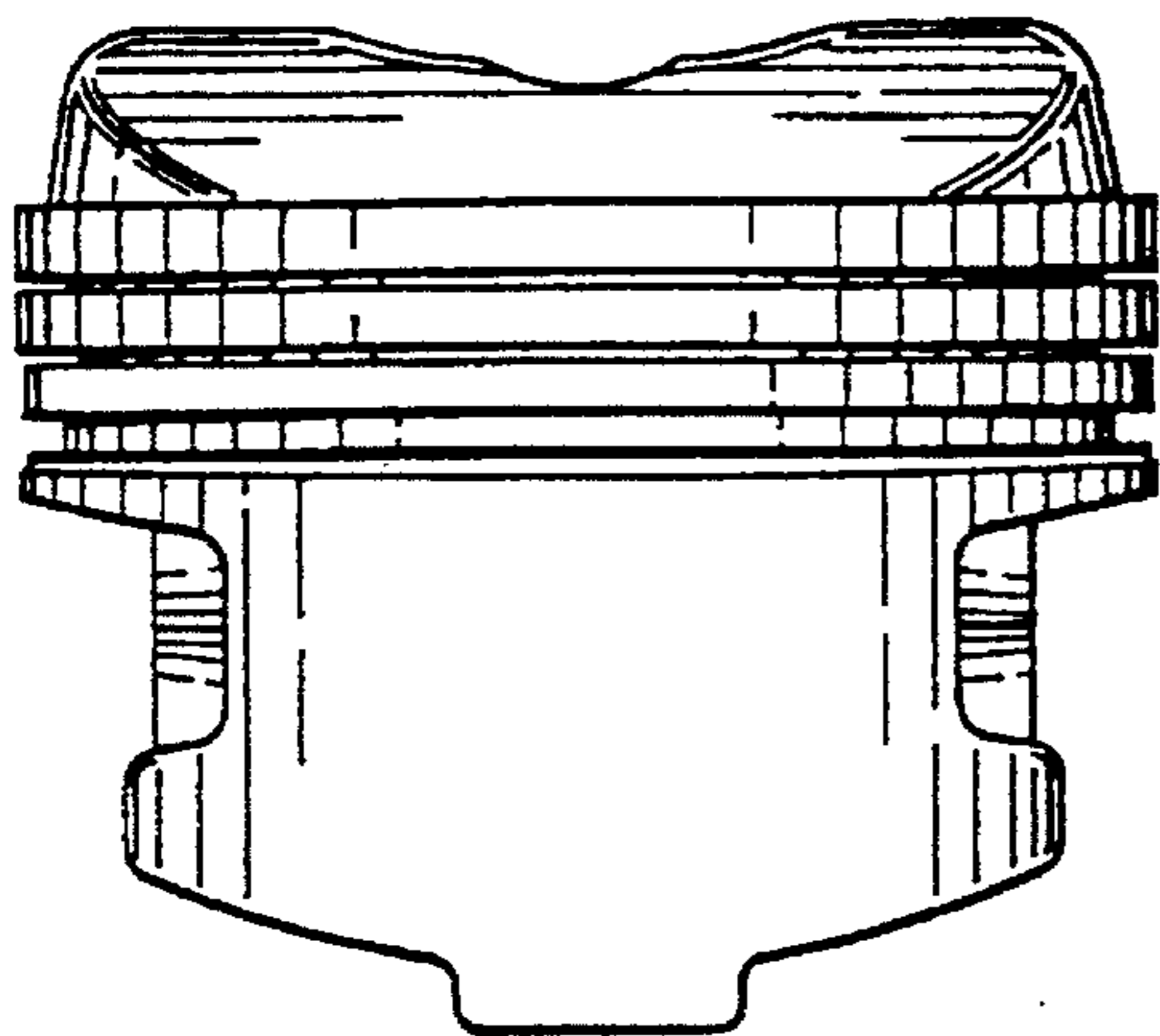


FIG. 34

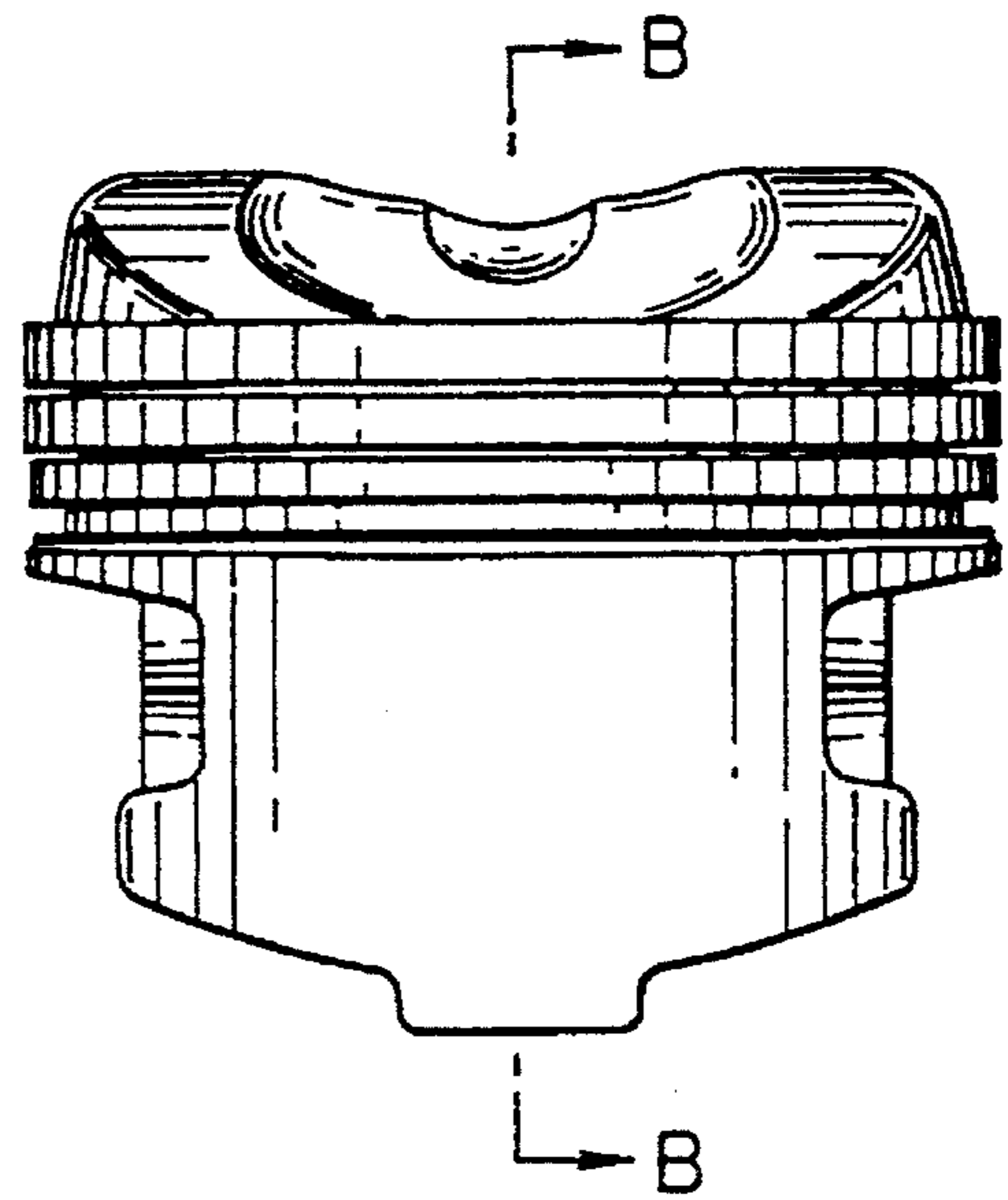


FIG. 35

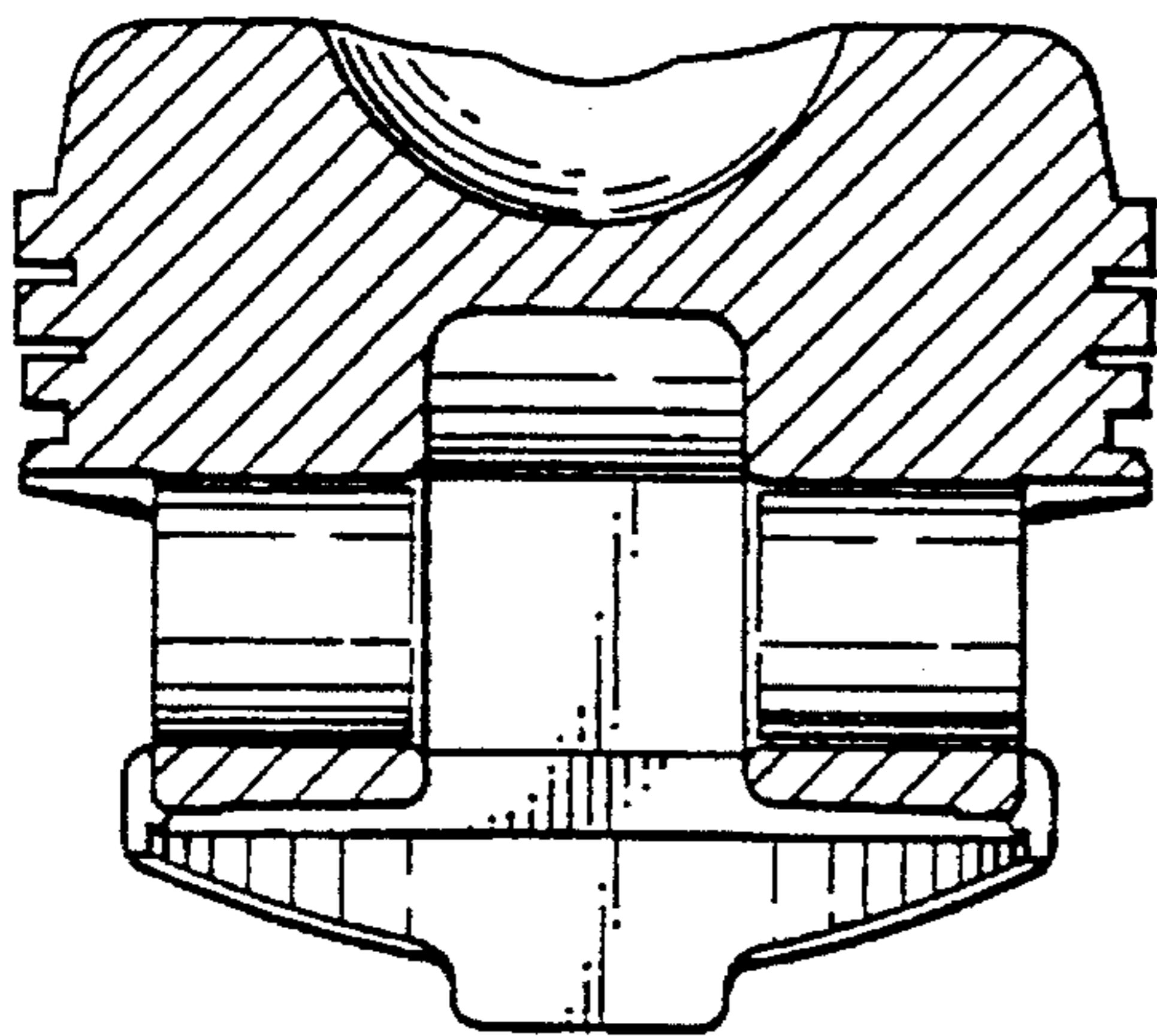


FIG. 36

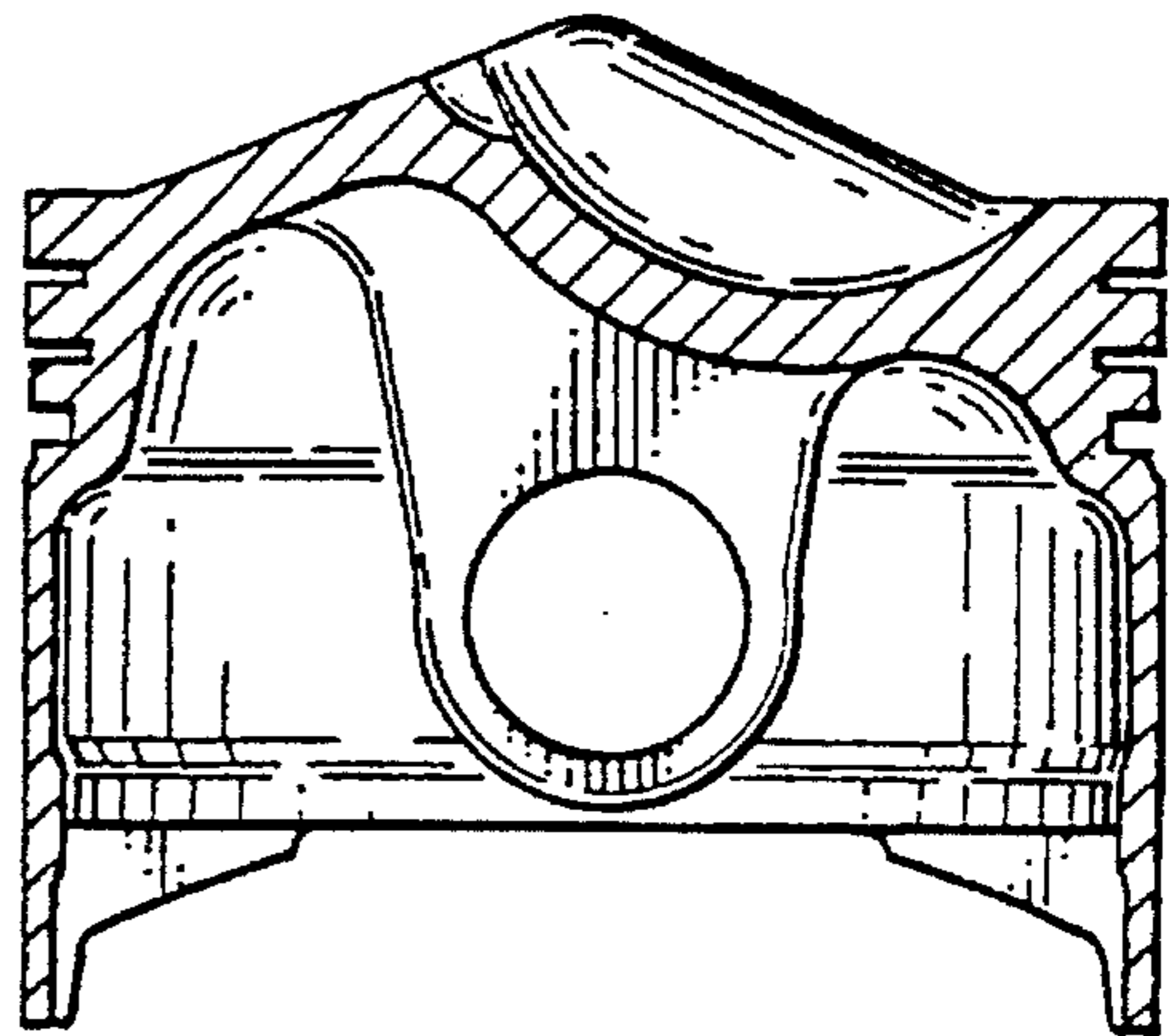


FIG. 37

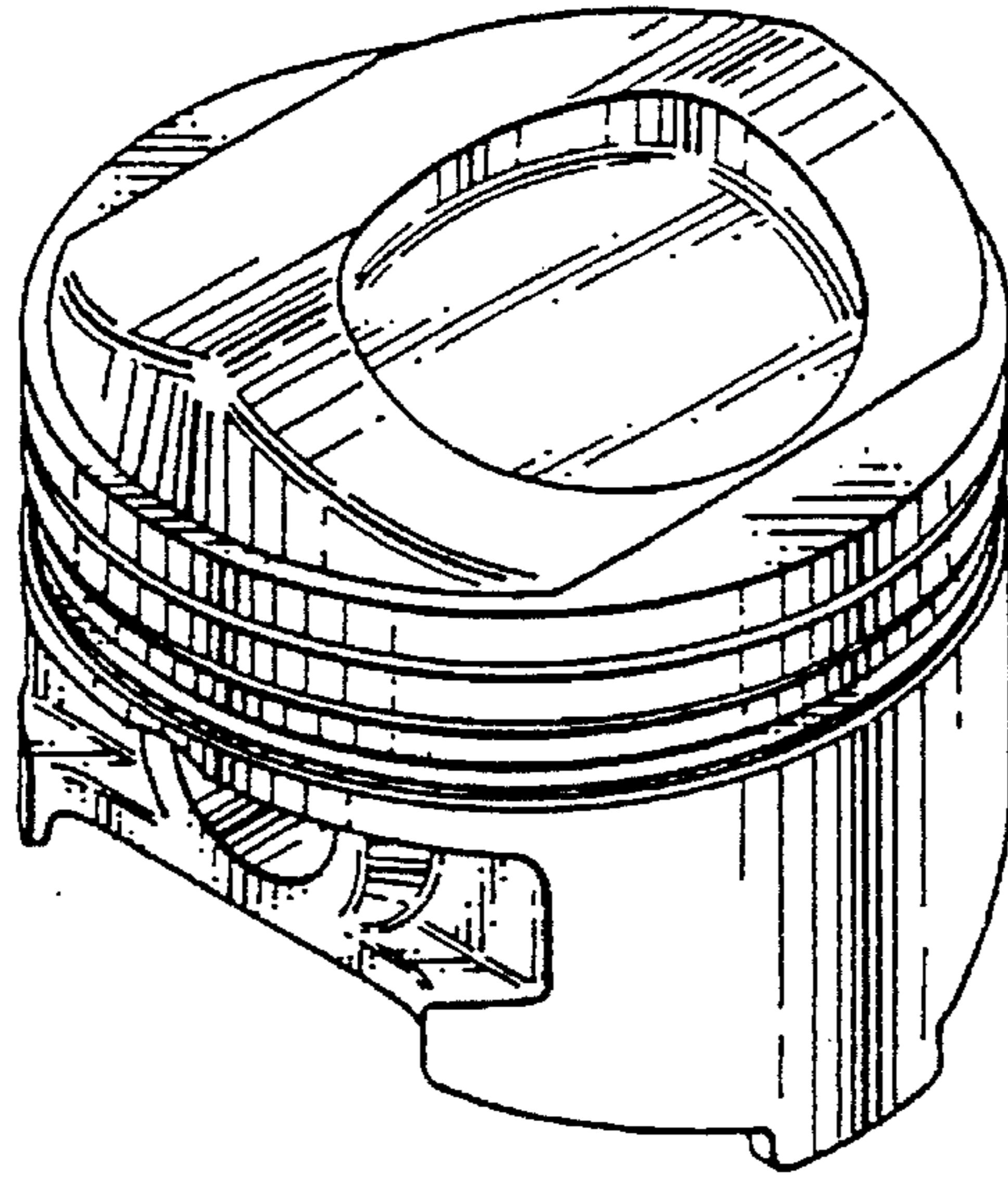


FIG. 38

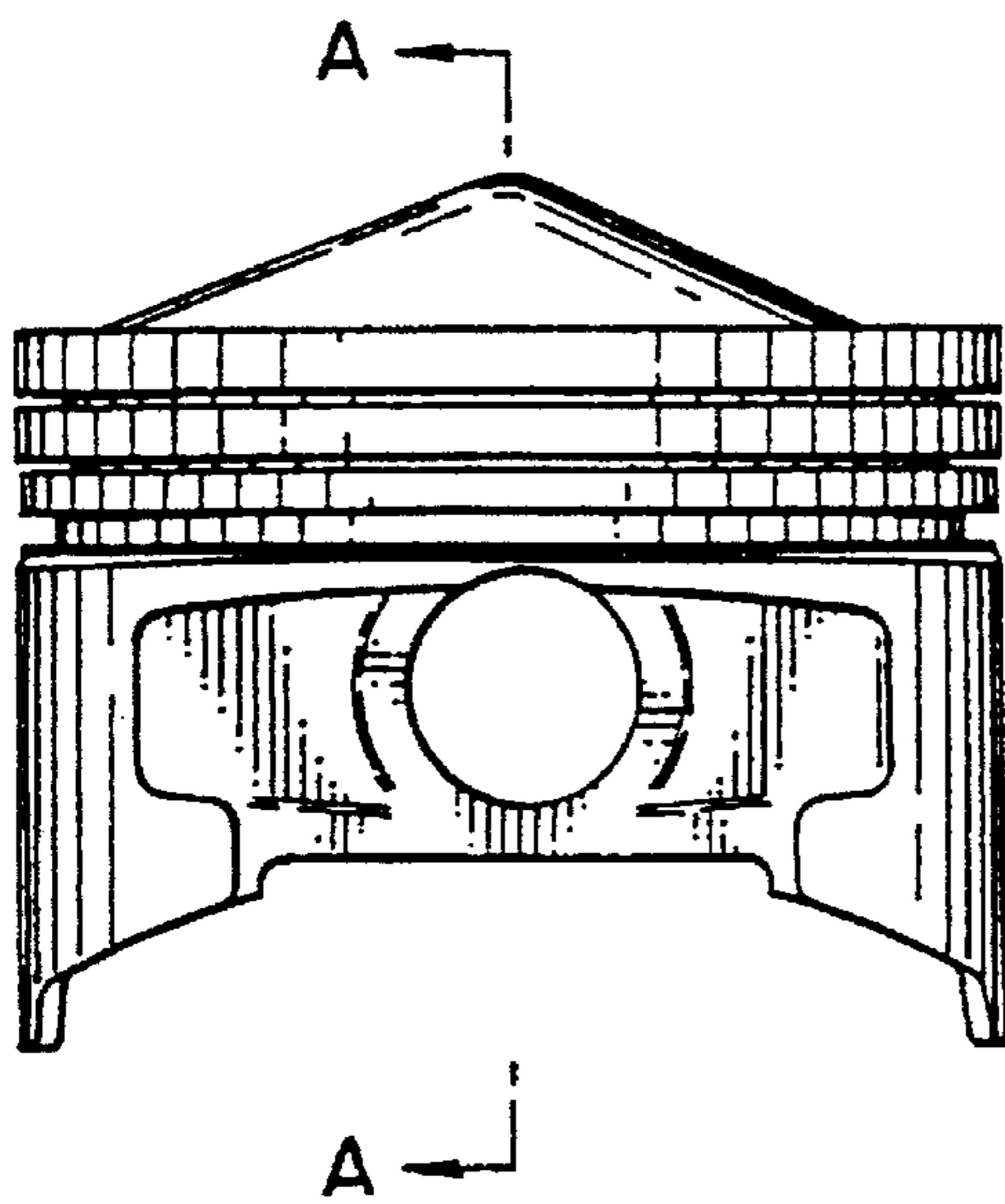


FIG. 39

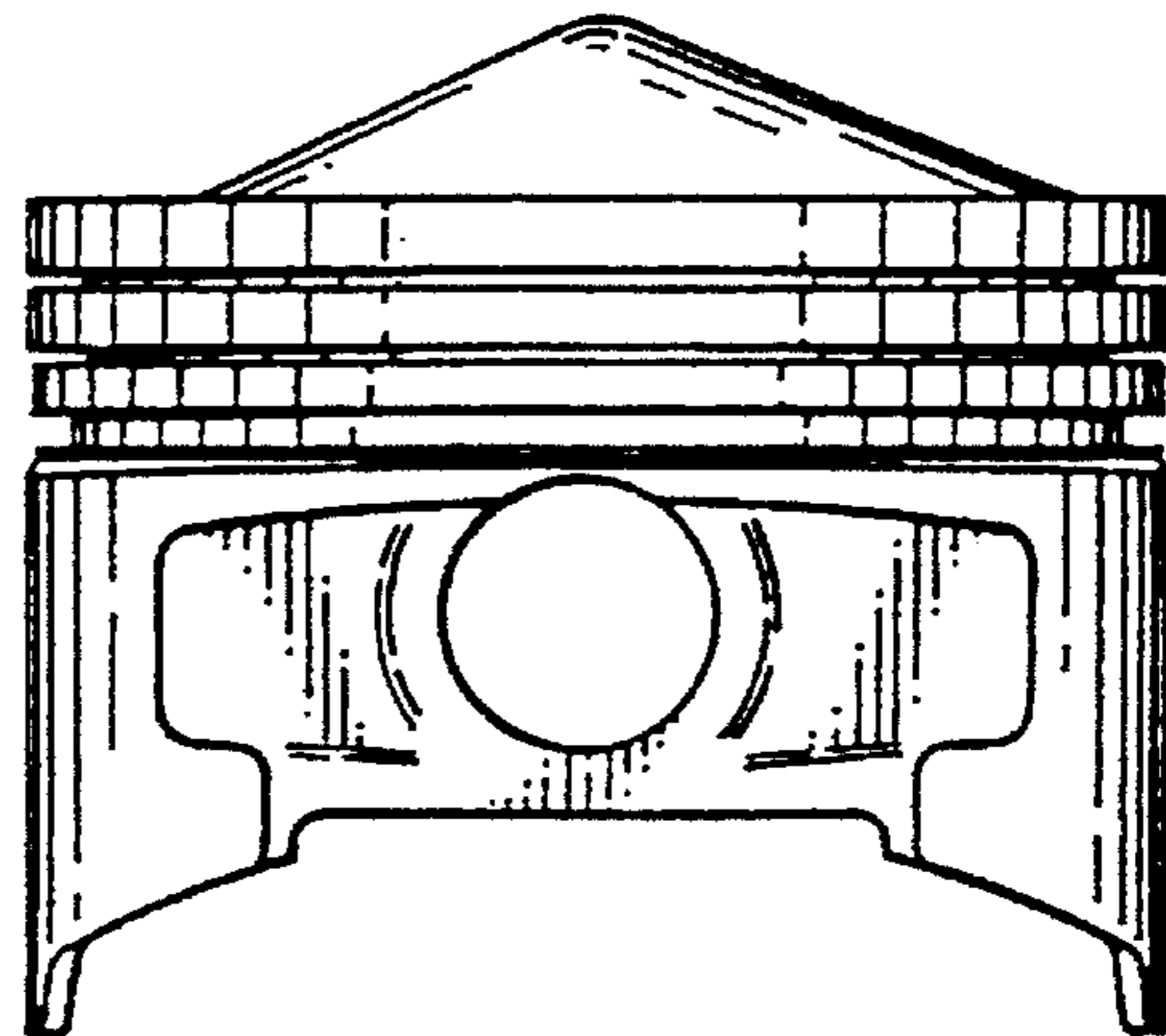


FIG. 40

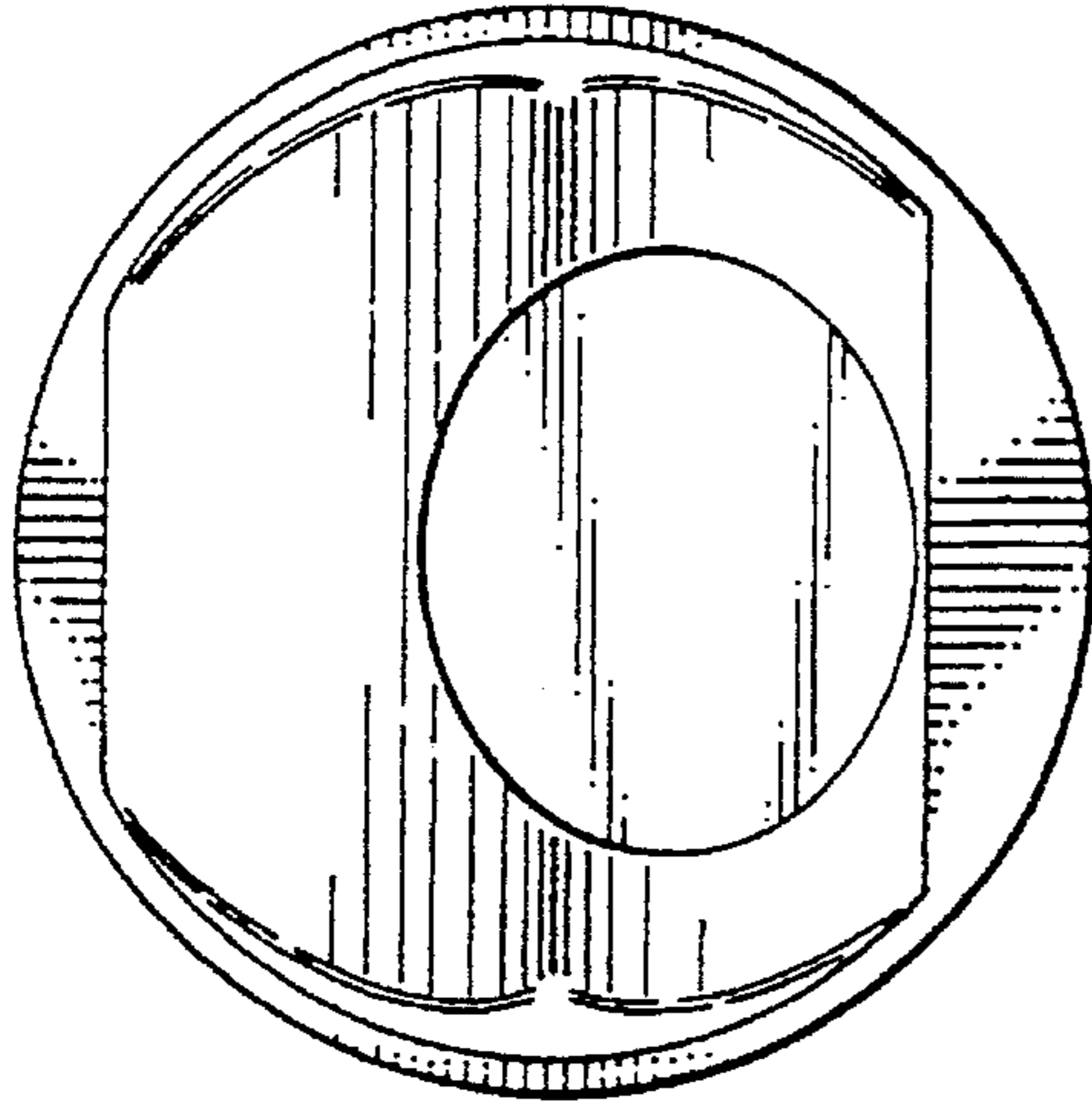


FIG. 41

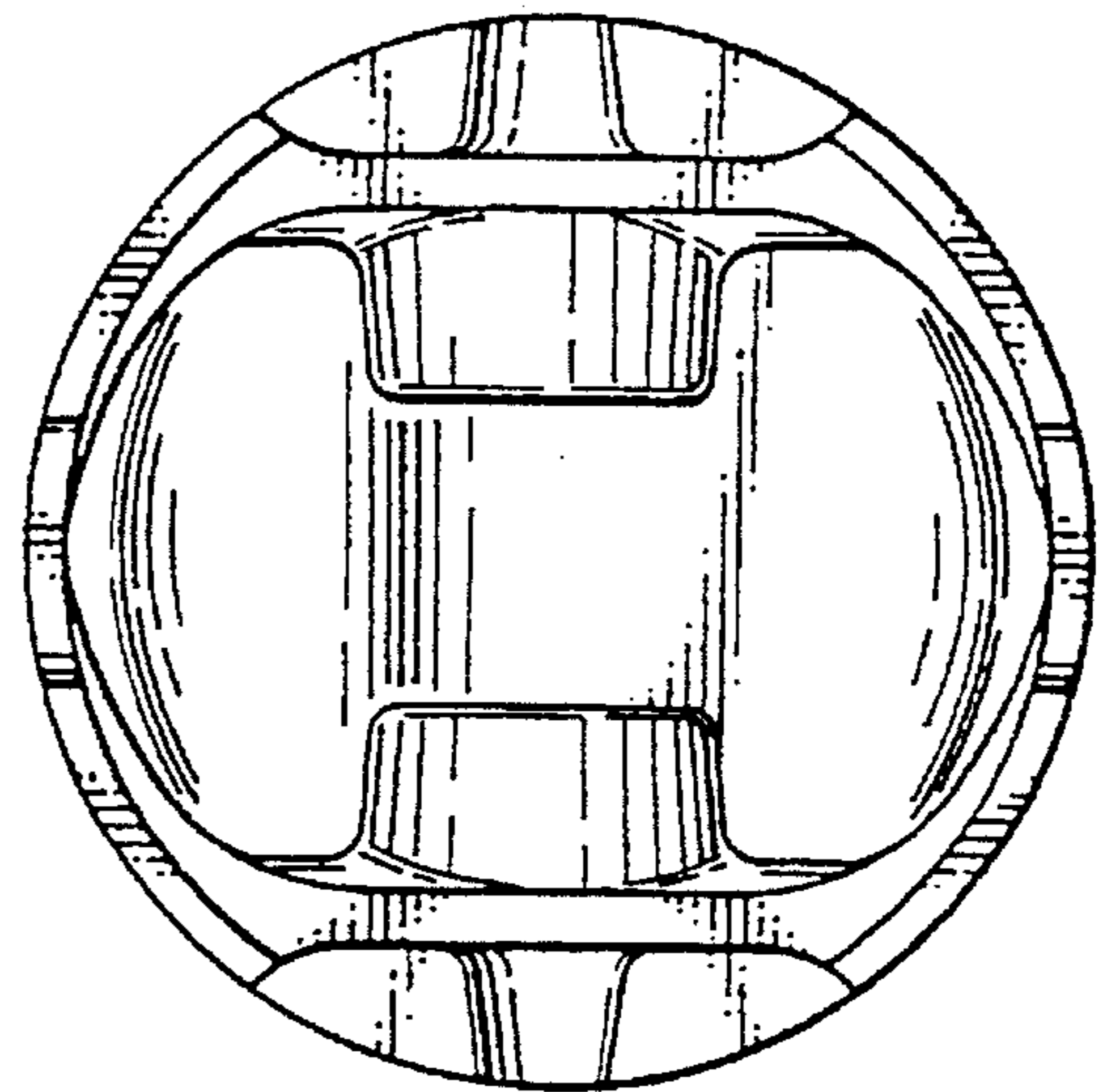


FIG. 42

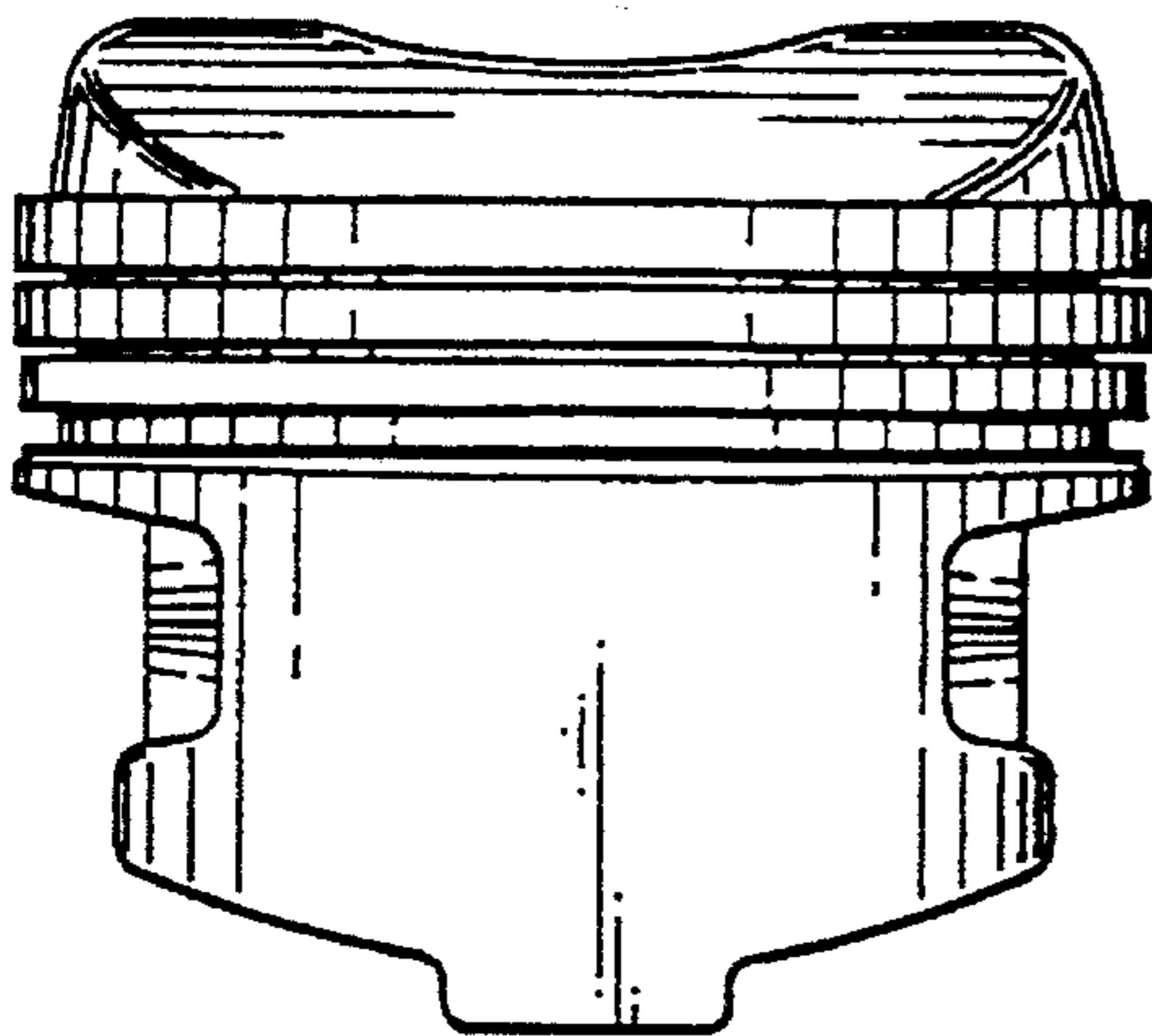


FIG. 43

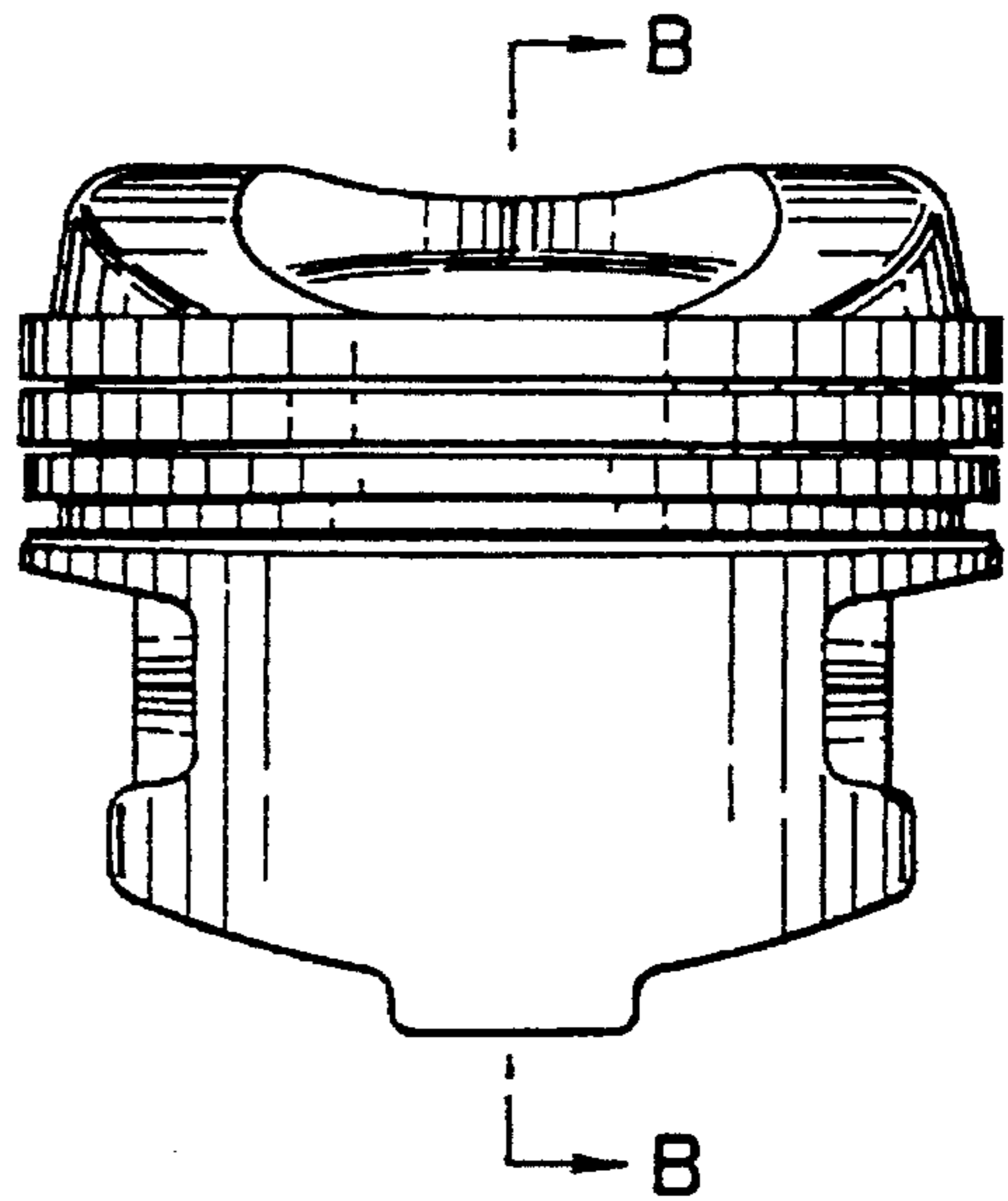




FIG. 44

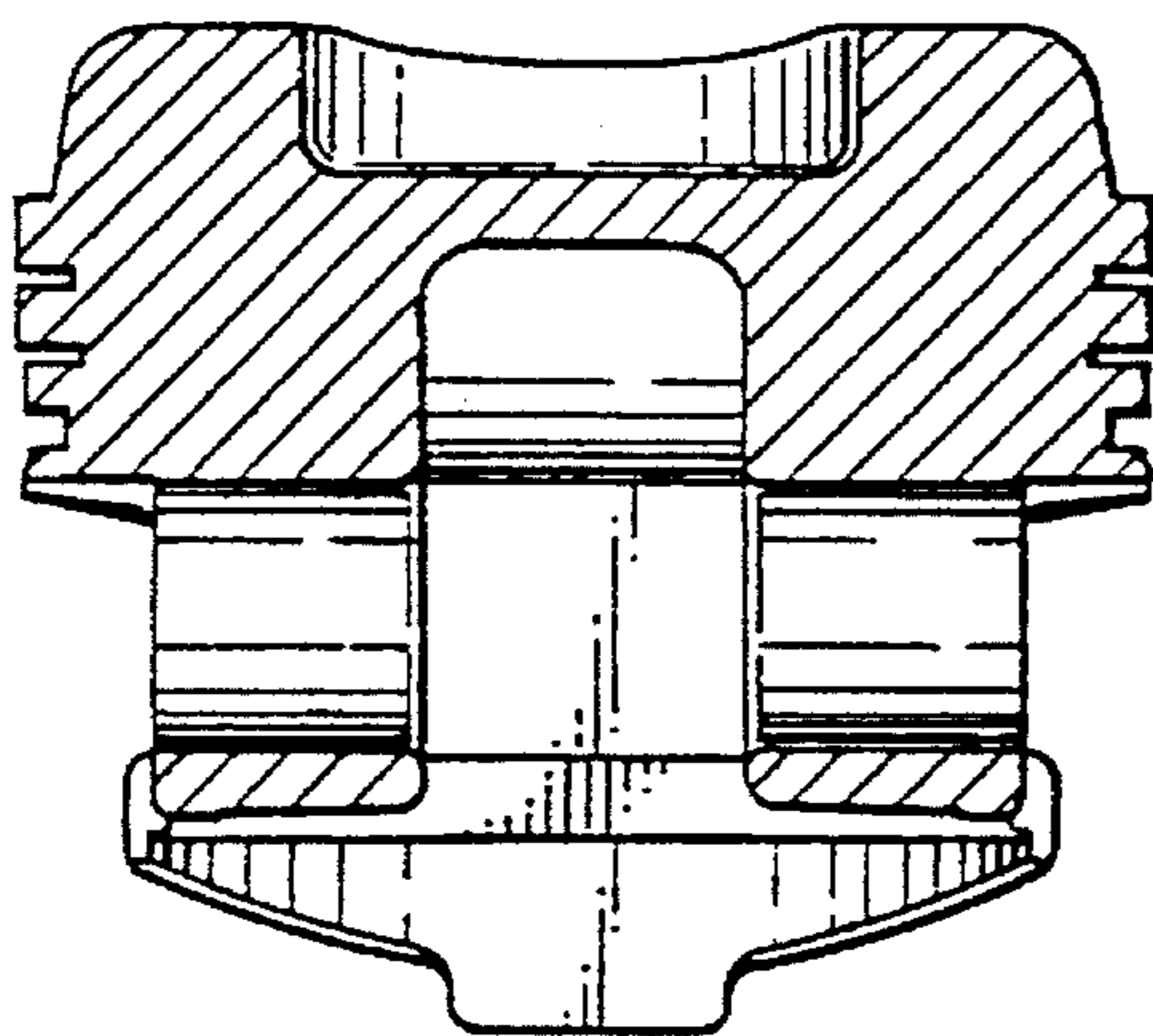


FIG. 45

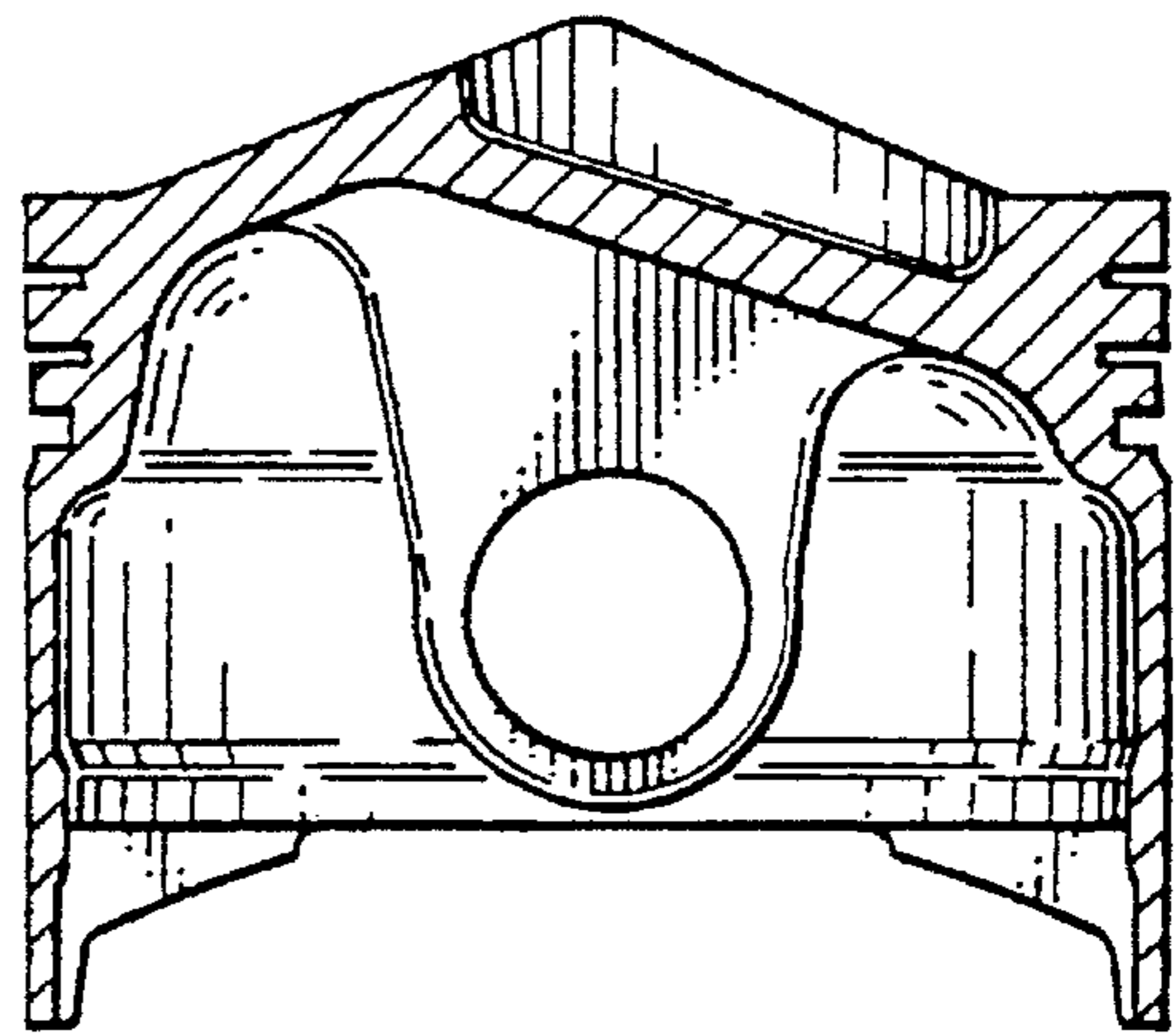


FIG. 46

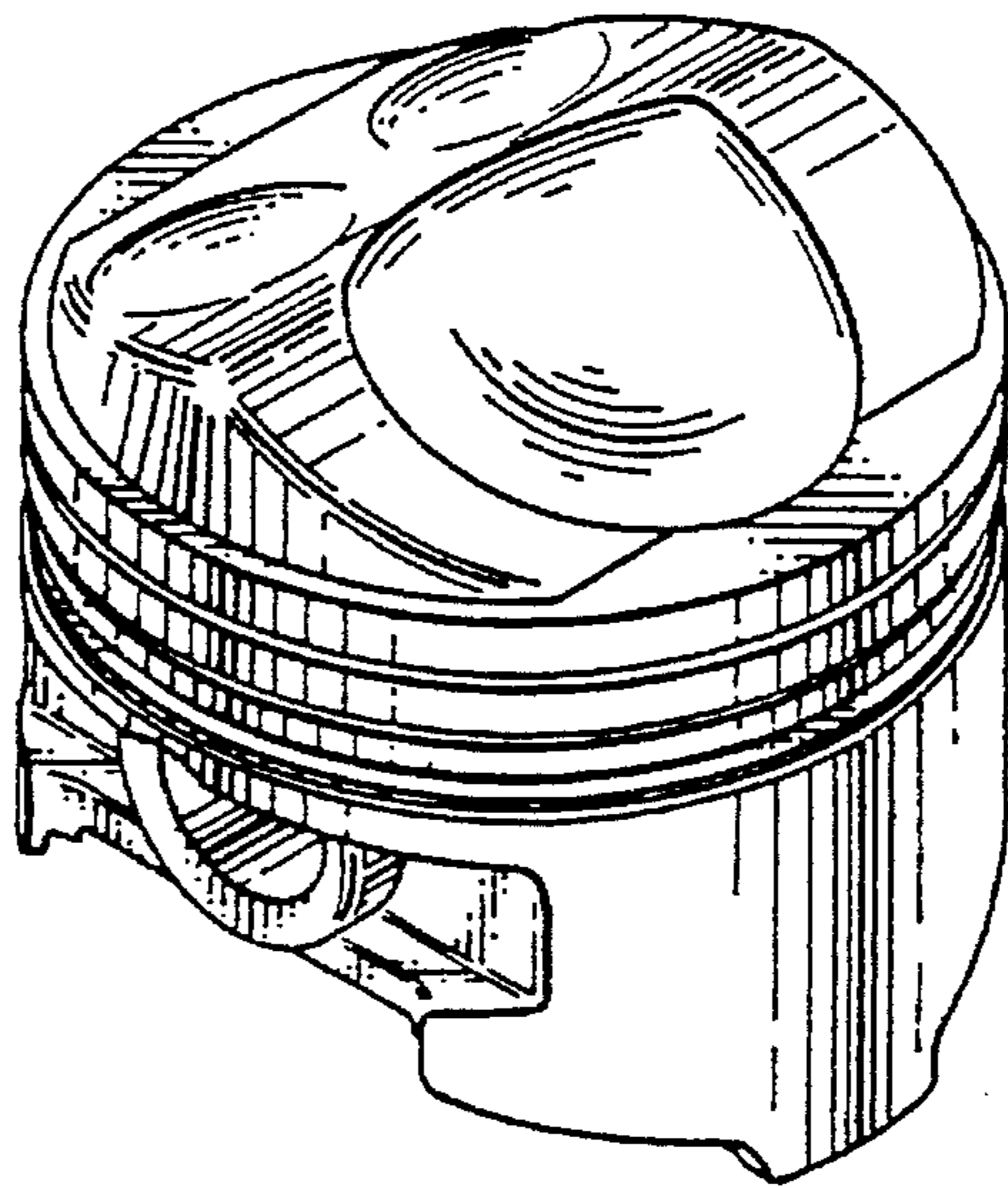


FIG. 47

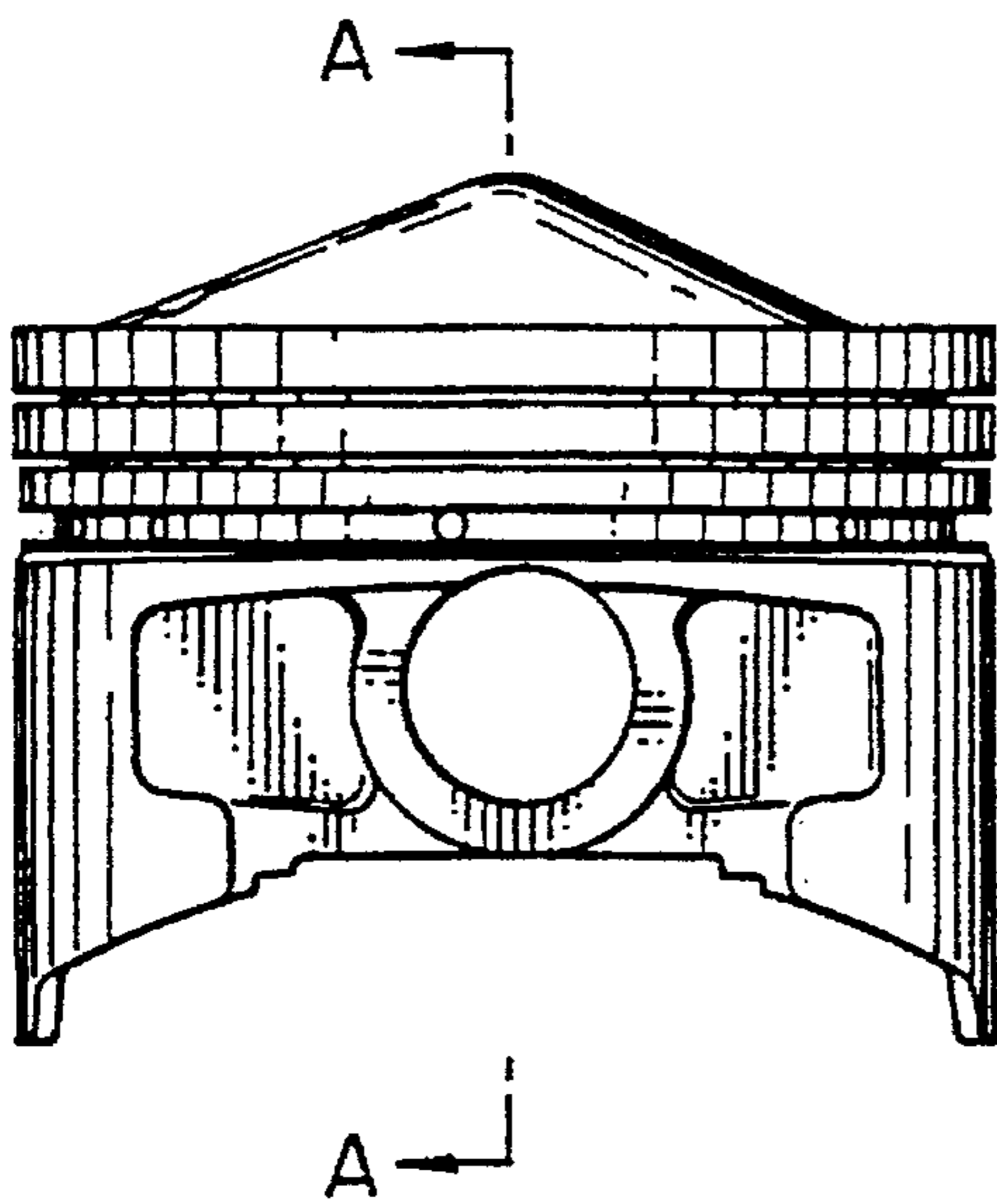


FIG. 48

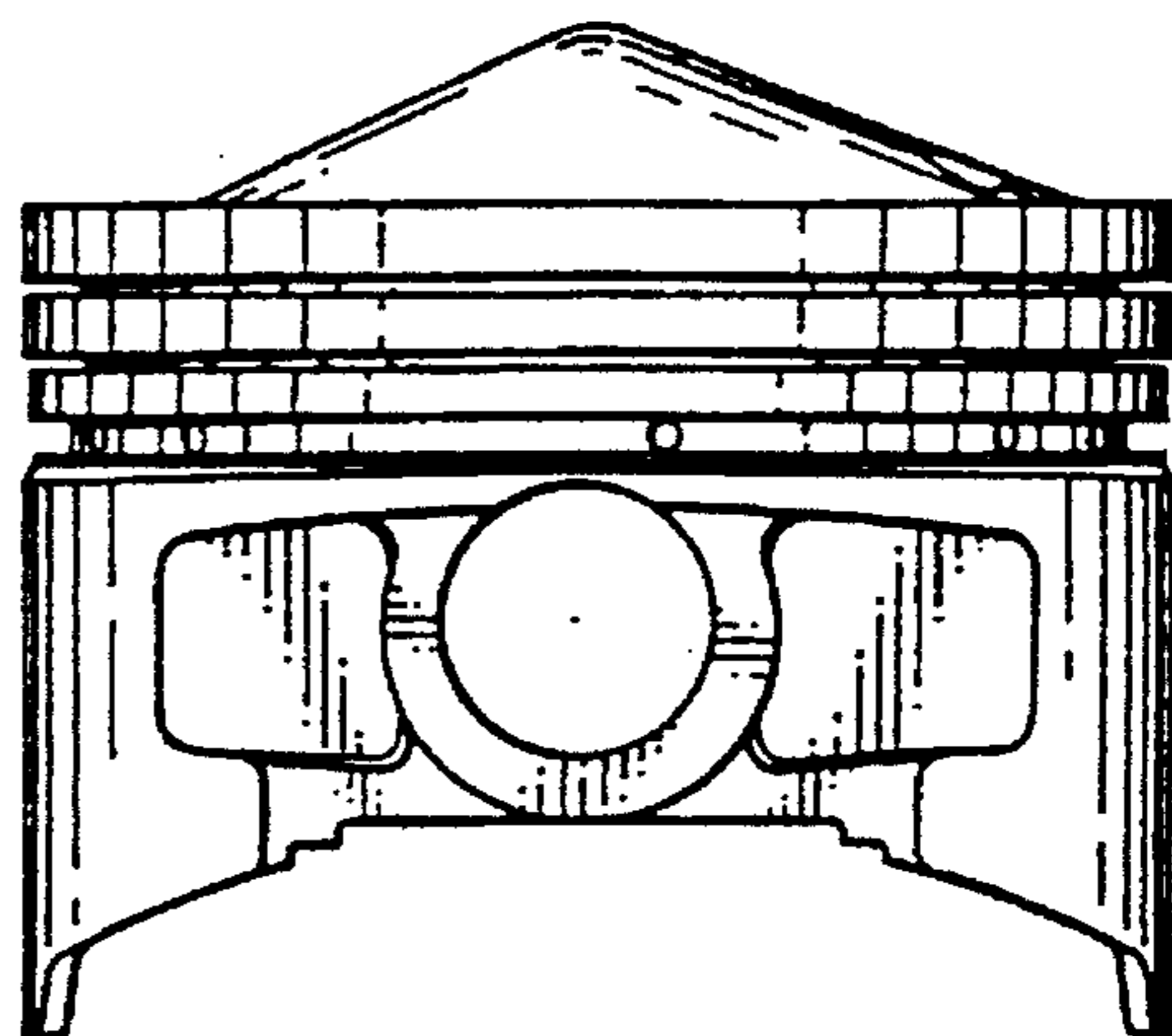


FIG. 49

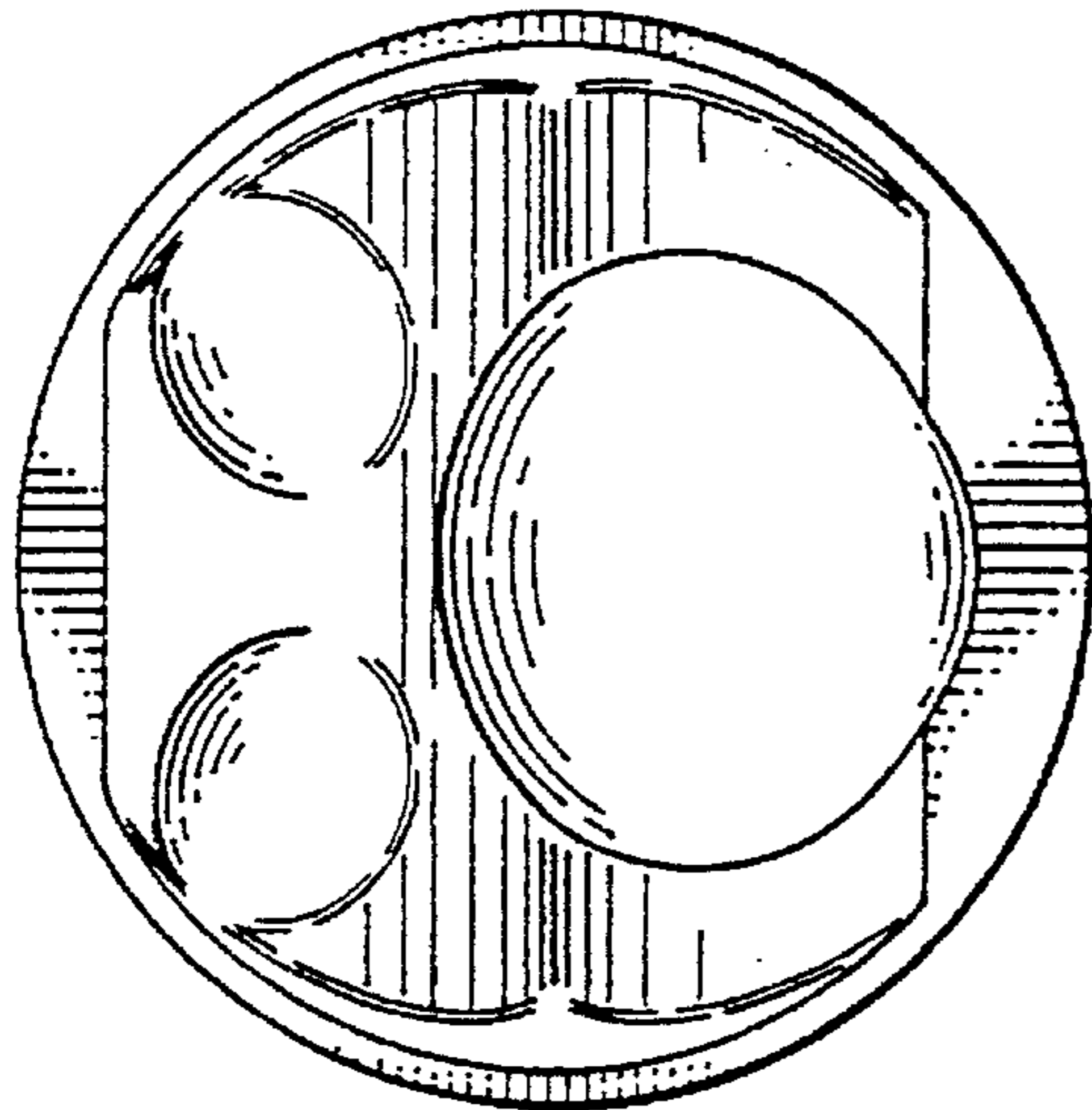


FIG. 50

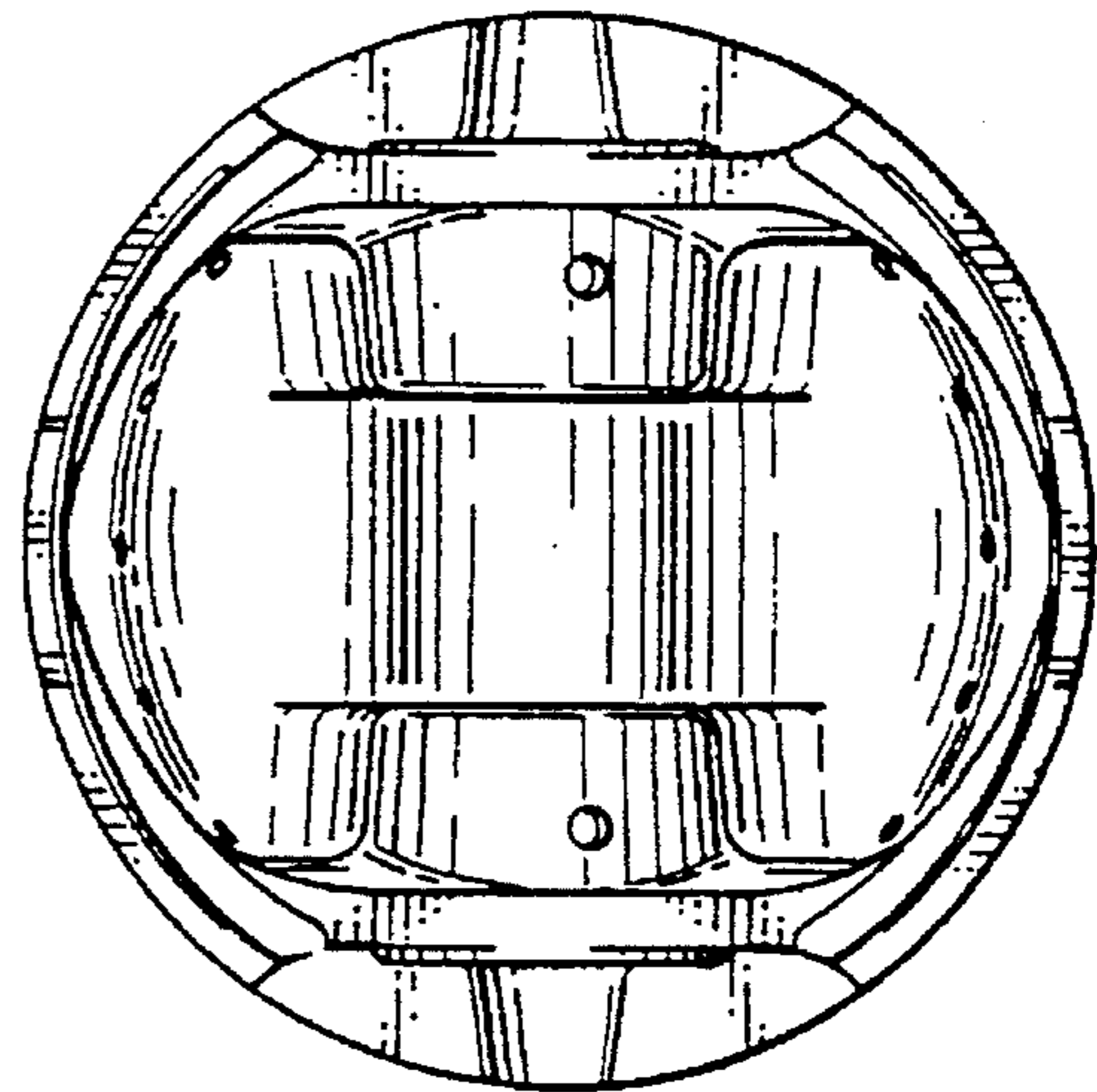


FIG. 51

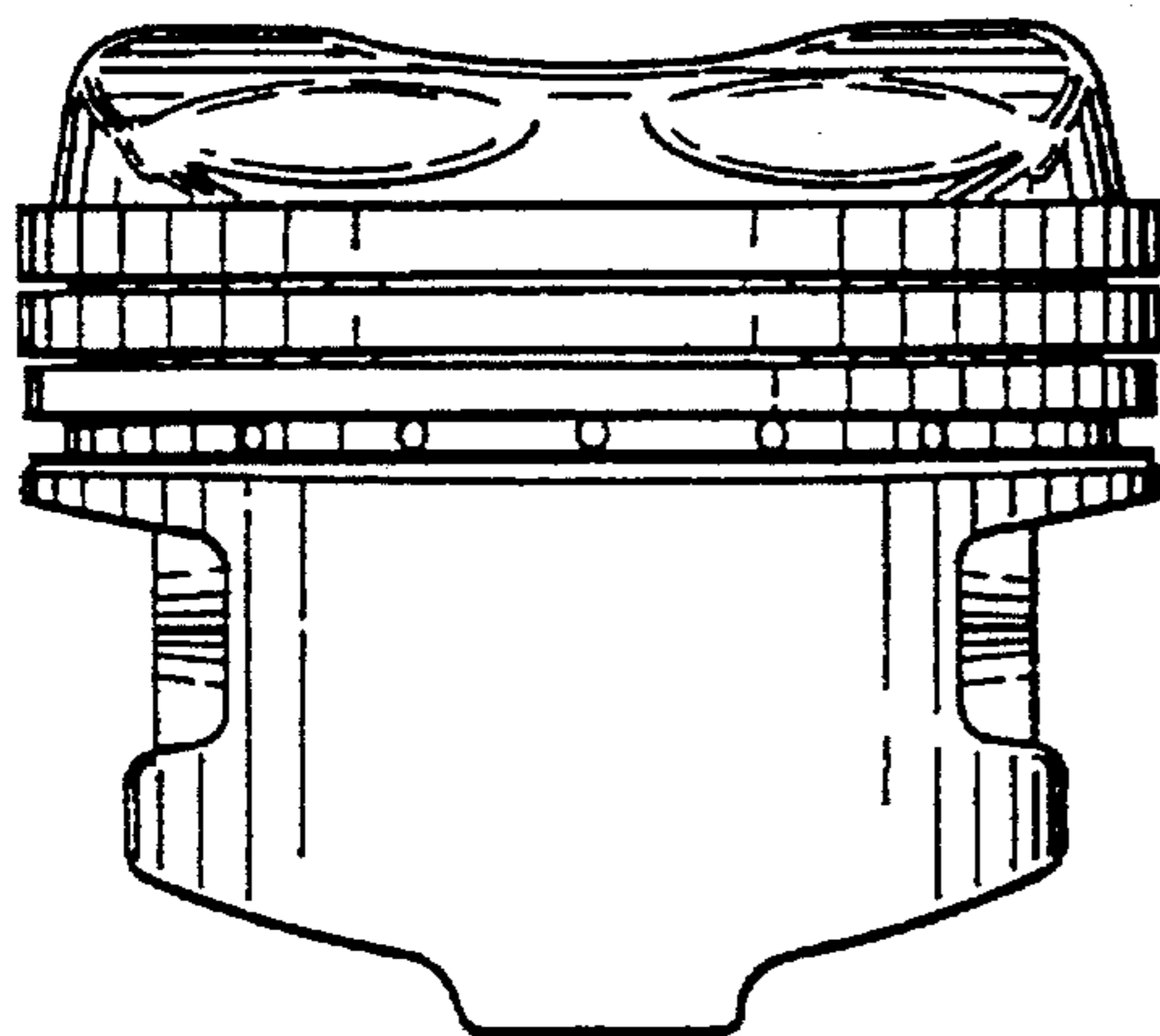


FIG. 52

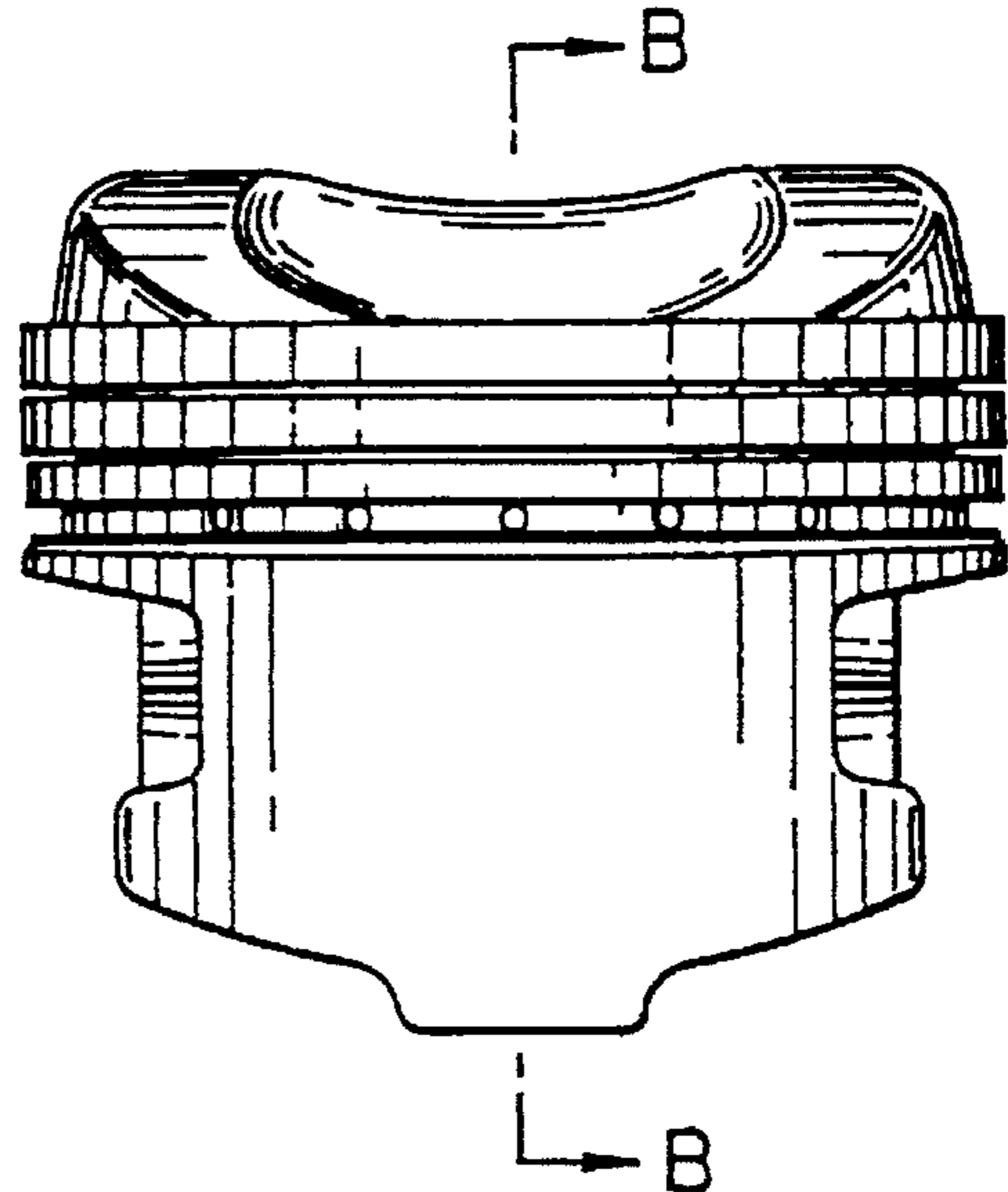


FIG. 53

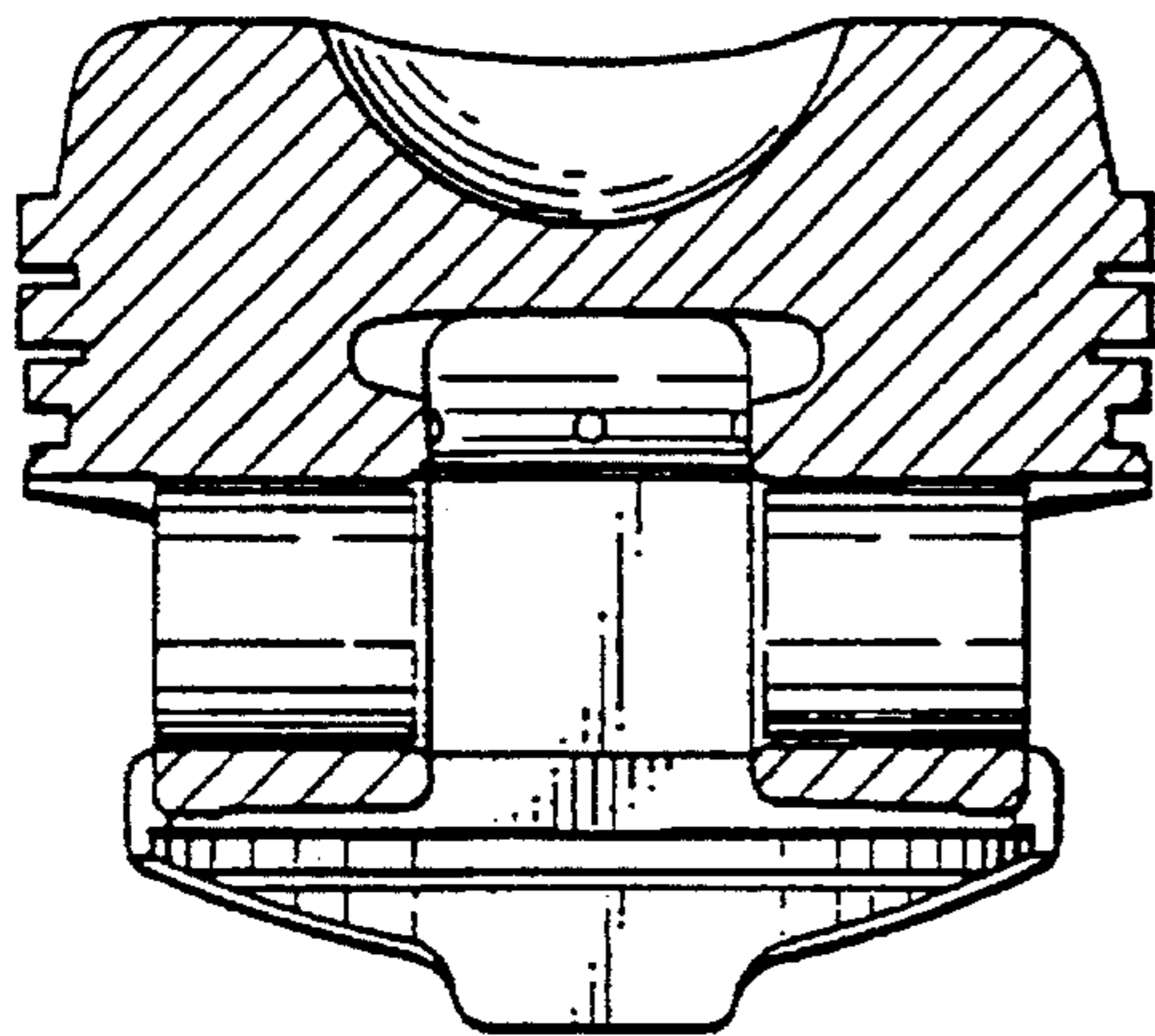


FIG. 54

