



US00D352050S

United States Patent [19]

Ulrich et al.

[11] Patent Number: Des. 352,050

[45] Date of Patent: ** Nov. 1, 1994

[54] ROBOTIC WRIST

[75] Inventors: Nathan Ulrich, Woods Hole; William T. Townsend, Weston, both of Mass.

[73] Assignee: Barrett Technology Inc., Cambridge, Mass.

[**] Term: 14 Years

[21] Appl. No.: 10,603

[22] Filed: Jul. 9, 1993

[52] U.S. Cl. D15/199

[58] Field of Search 74/417, 479 BW, 479 R;
403/24, 220, 291, 404; 414/735, 744.4, 751;
901/16, 22, 23, 24, 25, 26, 28, 29; D15/199;
D21/189

[56] References Cited

U.S. PATENT DOCUMENTS

D. 236,144	7/1975	Christiansen		D21/189
D. 236,520	8/1975	Christansen		D21/189
D. 236,521	8/1975	Christiansen		D21/189
4,586,868	5/1986	Nakashima et al.		D15/199 X
4,862,759	9/1989	Trevelyan et al.		74/417
4,922,755	5/1990	Oshiro et al.		901/29 X
4,990,050	2/1991	Tsuge et al.		901/29 X
4,995,782	2/1991	Suyama		901/29 X
5,125,759	6/1992	Chun		403/5 X

Primary Examiner—Alan P. Douglas

Assistant Examiner—Antoine D. Davis

Attorney, Agent, or Firm—Iandiorio & Teska

[57] CLAIM

The ornamental design for a robotic wrist, as shown and described.

DESCRIPTION

FIG. 1 is a left side elevational view of a robotic wrist showing my new design, the right side elevational view being a mirror image thereof;

FIG. 2 is a front elevational view, the rear elevational view being a mirror image thereof;

FIG. 3 is a top plan view;

FIG. 4 is a bottom plan view;

FIG. 5 is a perspective view;

FIG. 6 is a perspective view, with the robotic wrist shown in a plus 45 degree angle;

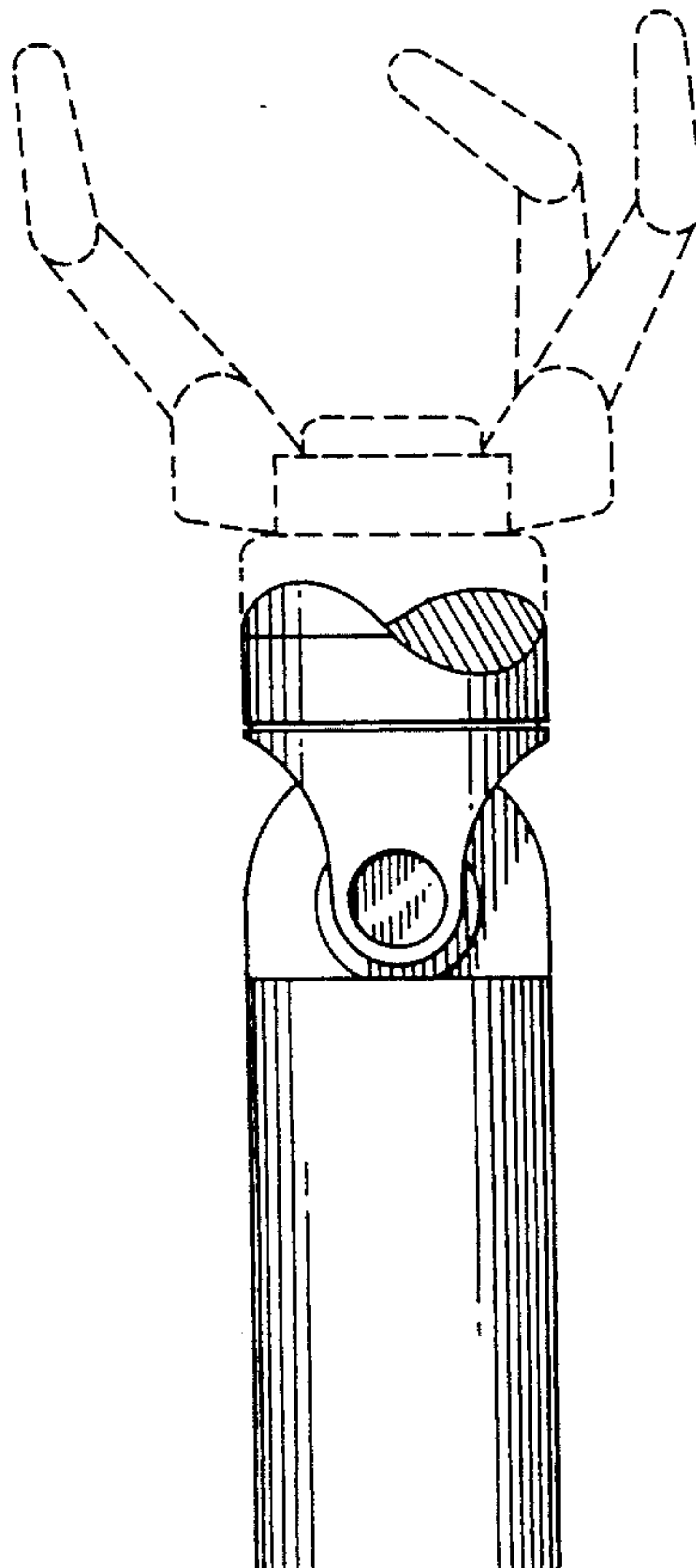
FIG. 7 is a perspective view, with the robotic wrist shown in a minus 45 degree angle;

FIG. 8 is a left side elevational view, with the robotic wrist shown in a plus 90 degree angle;

FIG. 9 is another left side elevational view; and,

FIG. 10 is a left side elevational view, with the robotic wrist shown in a minus 90 degree angle thereof.

The broken line showing of a robotic hand is for illustrative purposes only and forms no part of the claimed design.



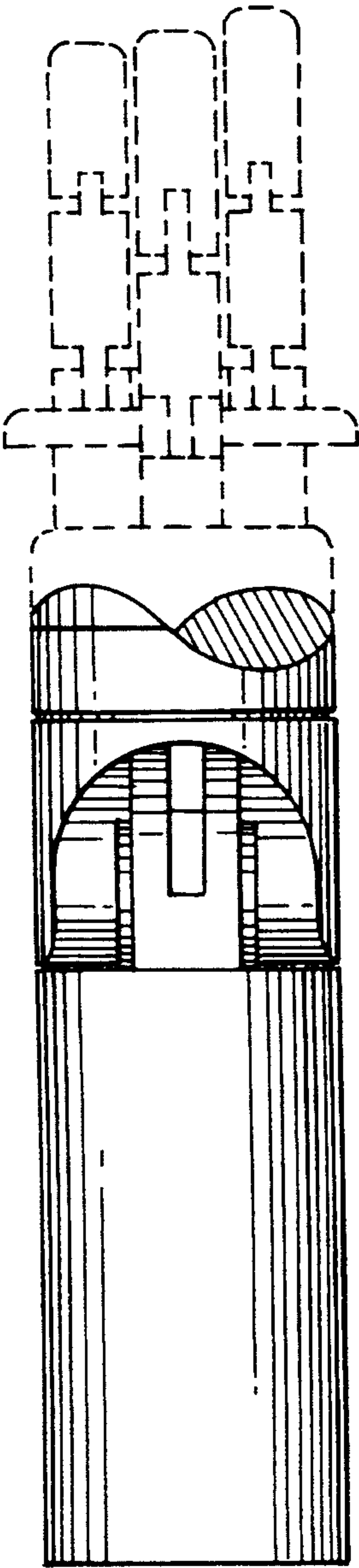


FIG. 2

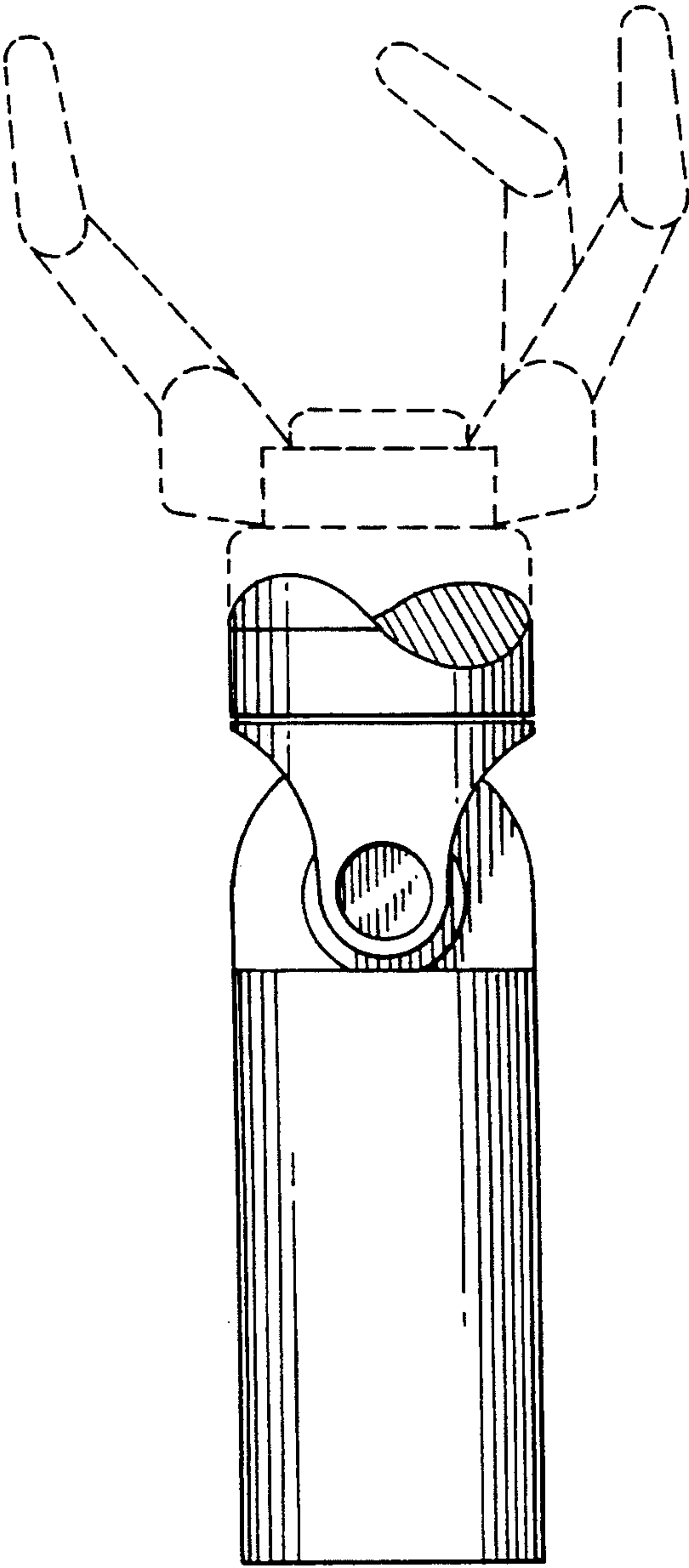


FIG. 1

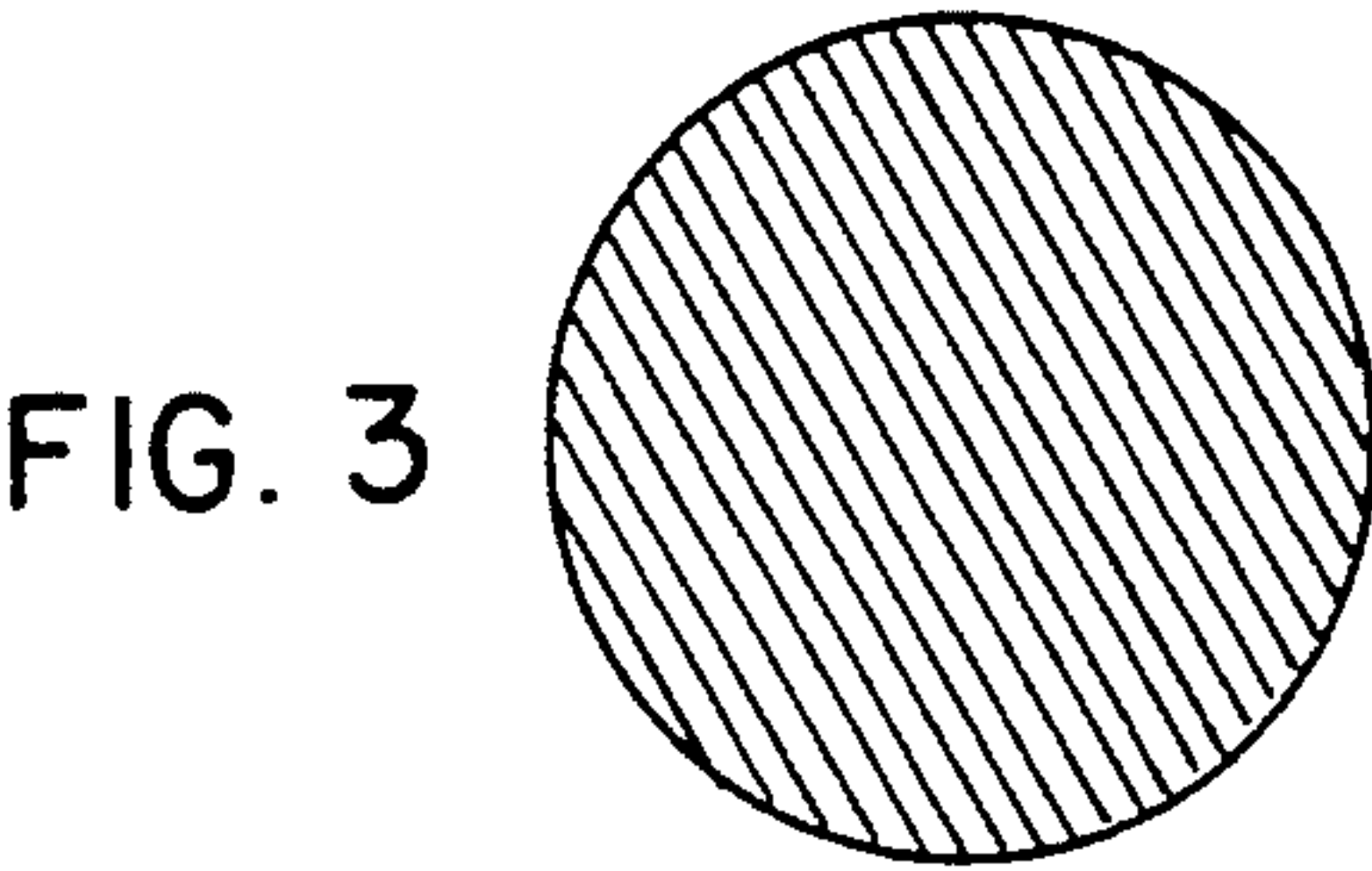


FIG. 3

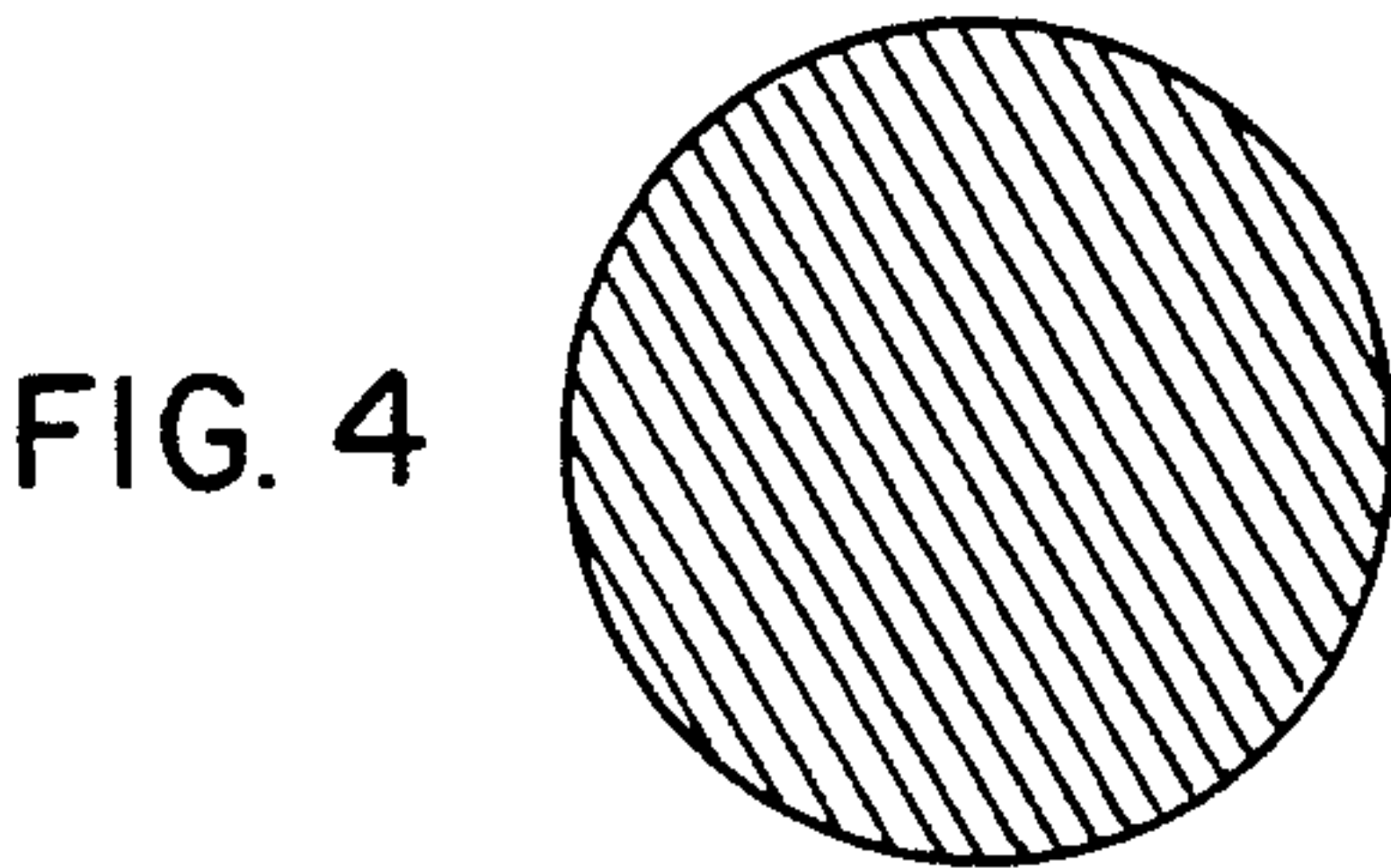


FIG. 4

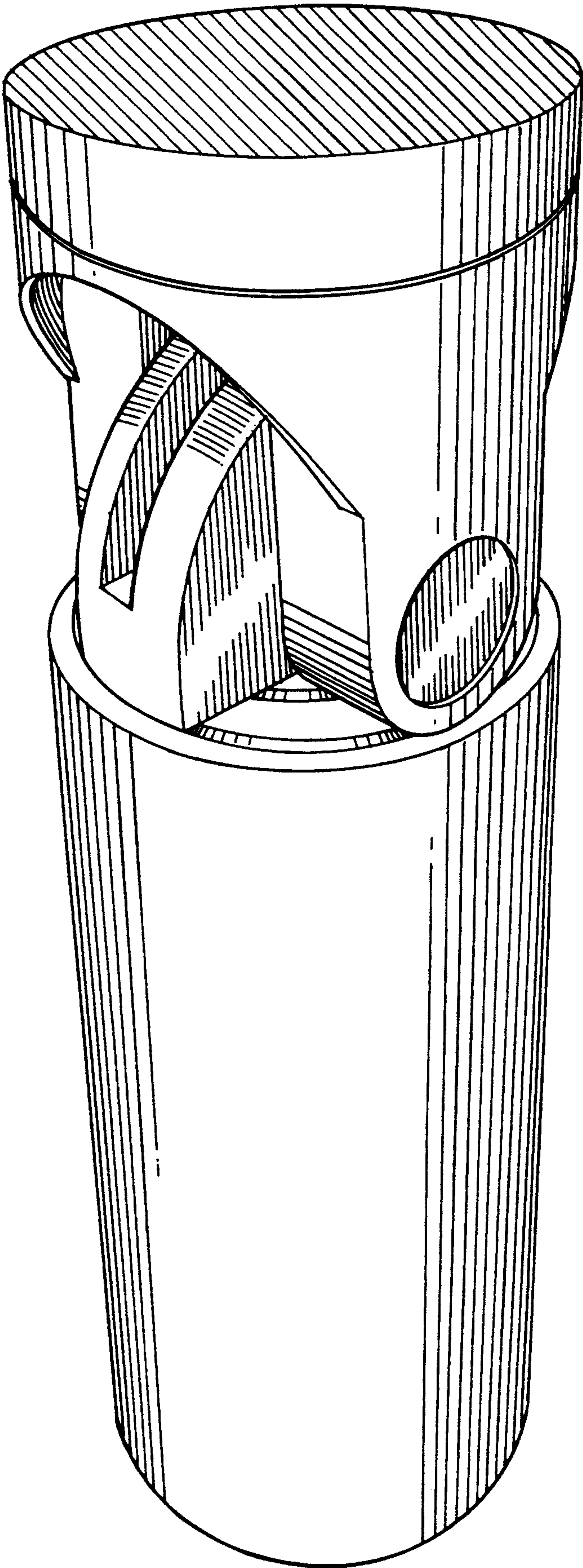


FIG. 5

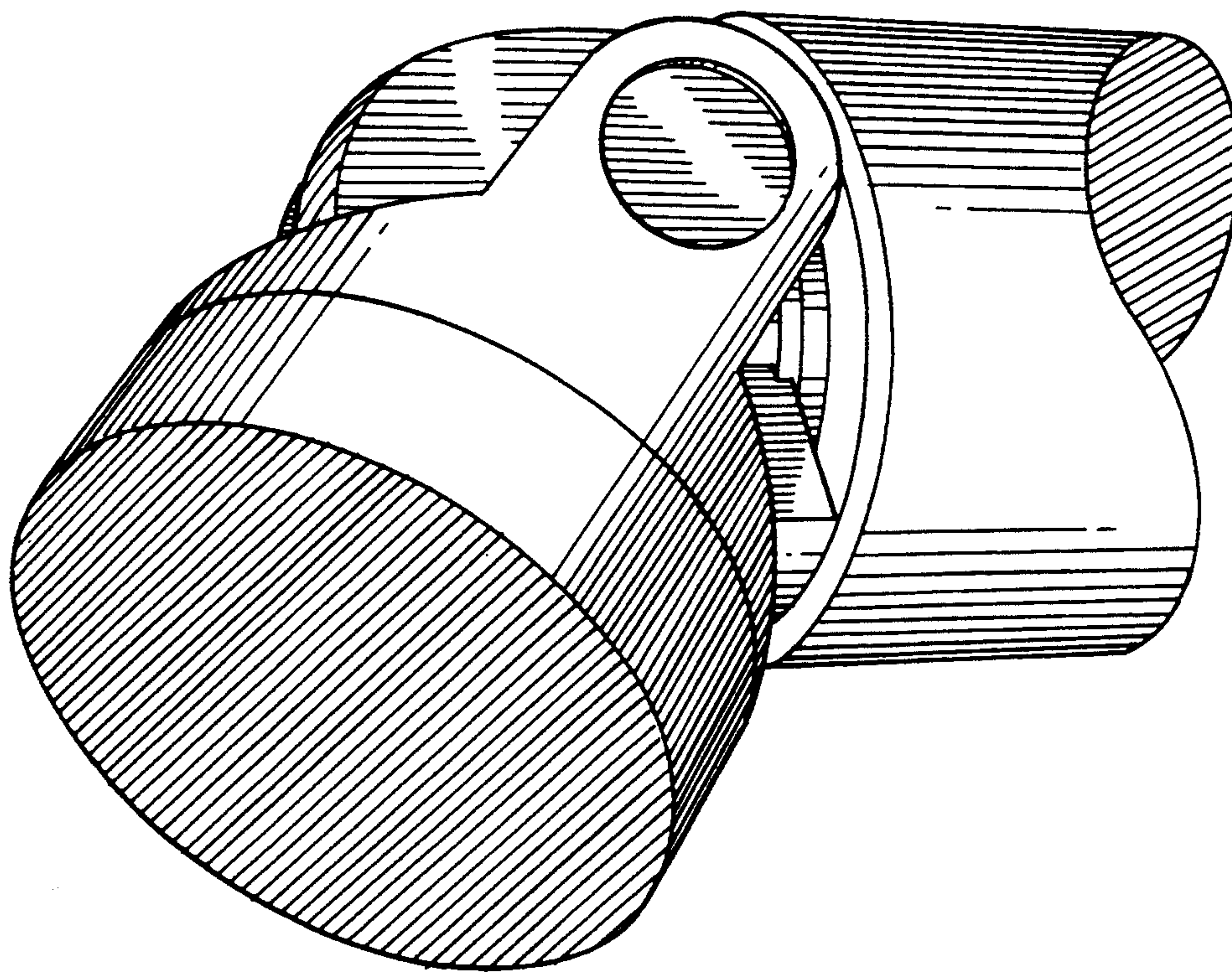


FIG. 7

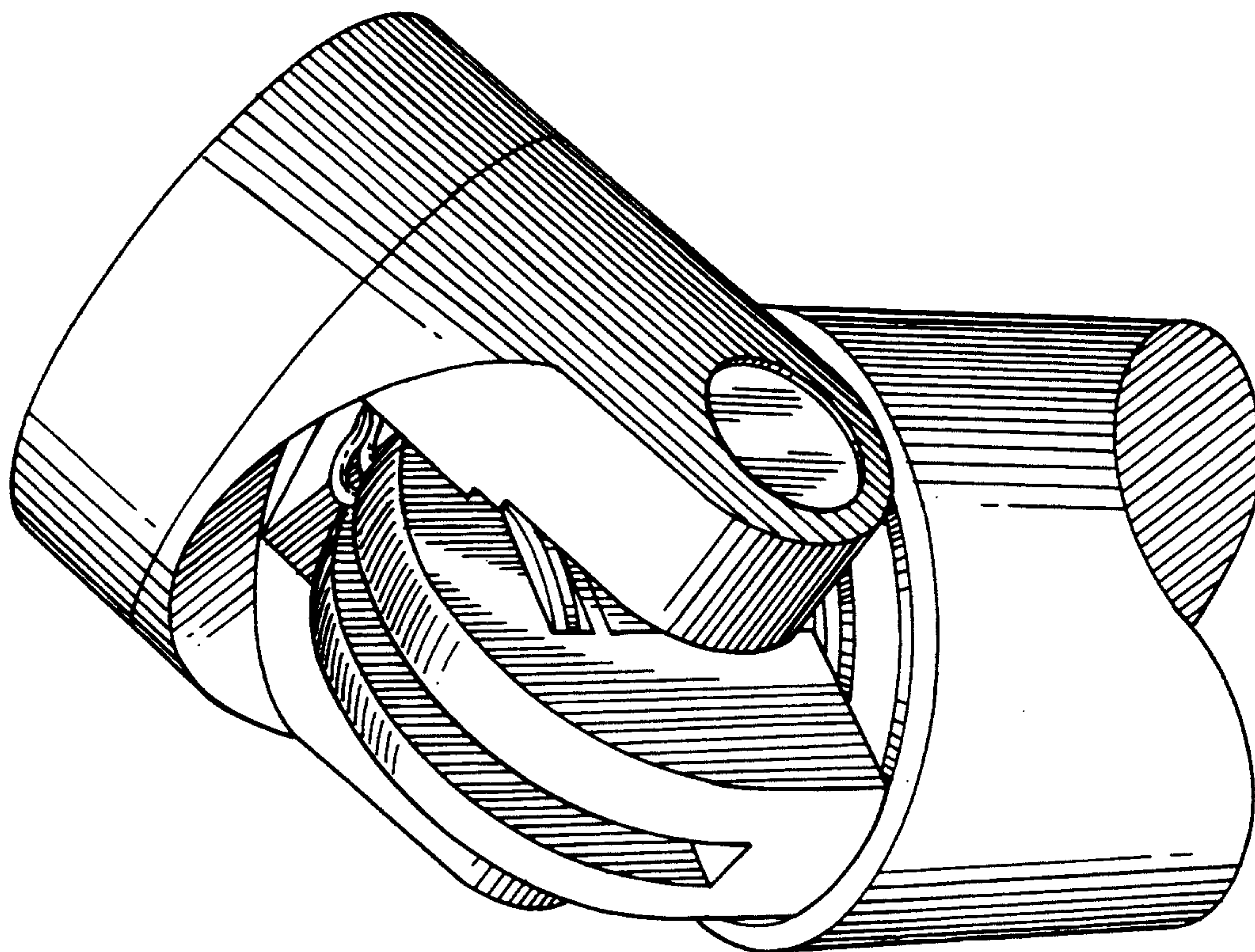


FIG. 6

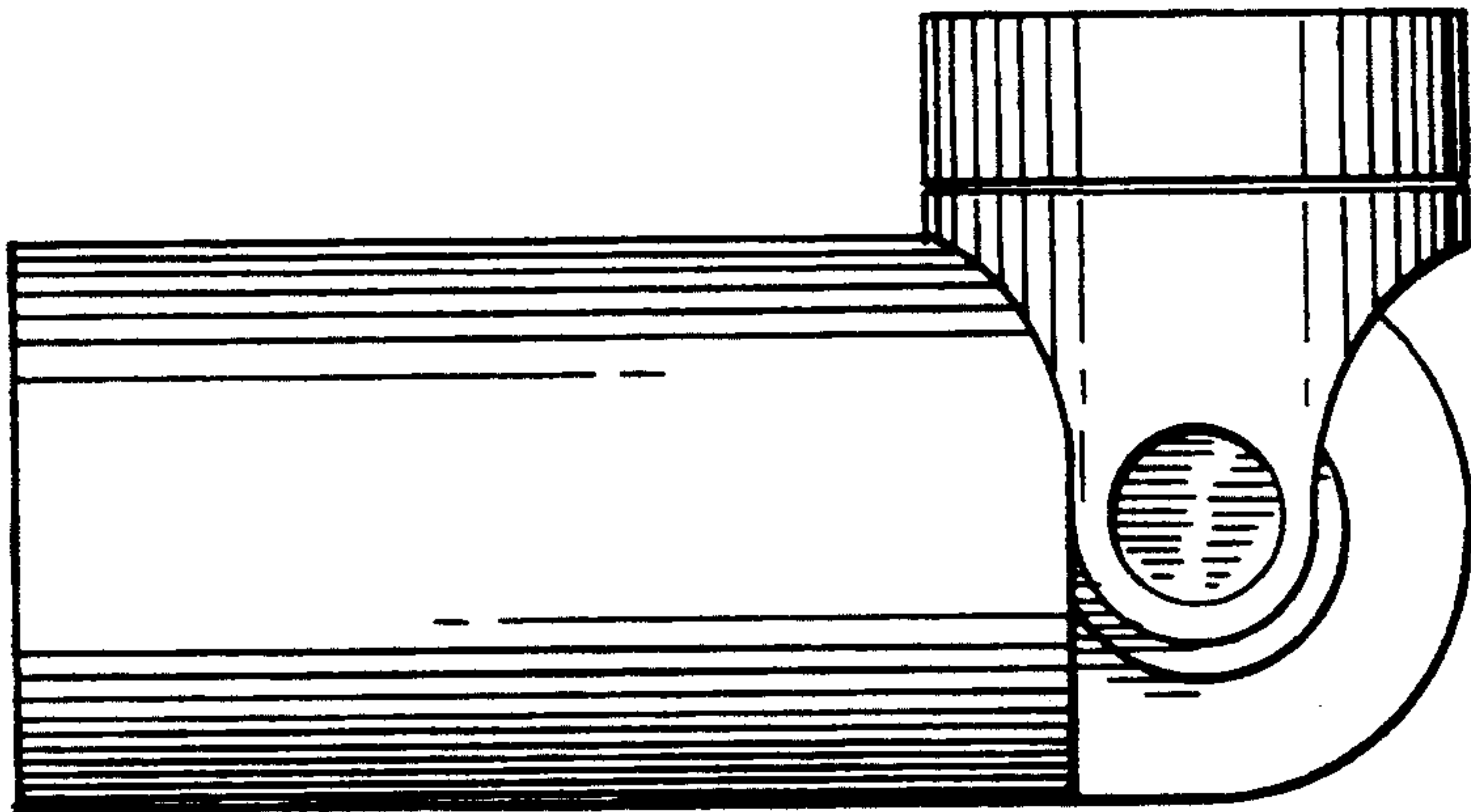


FIG. 8

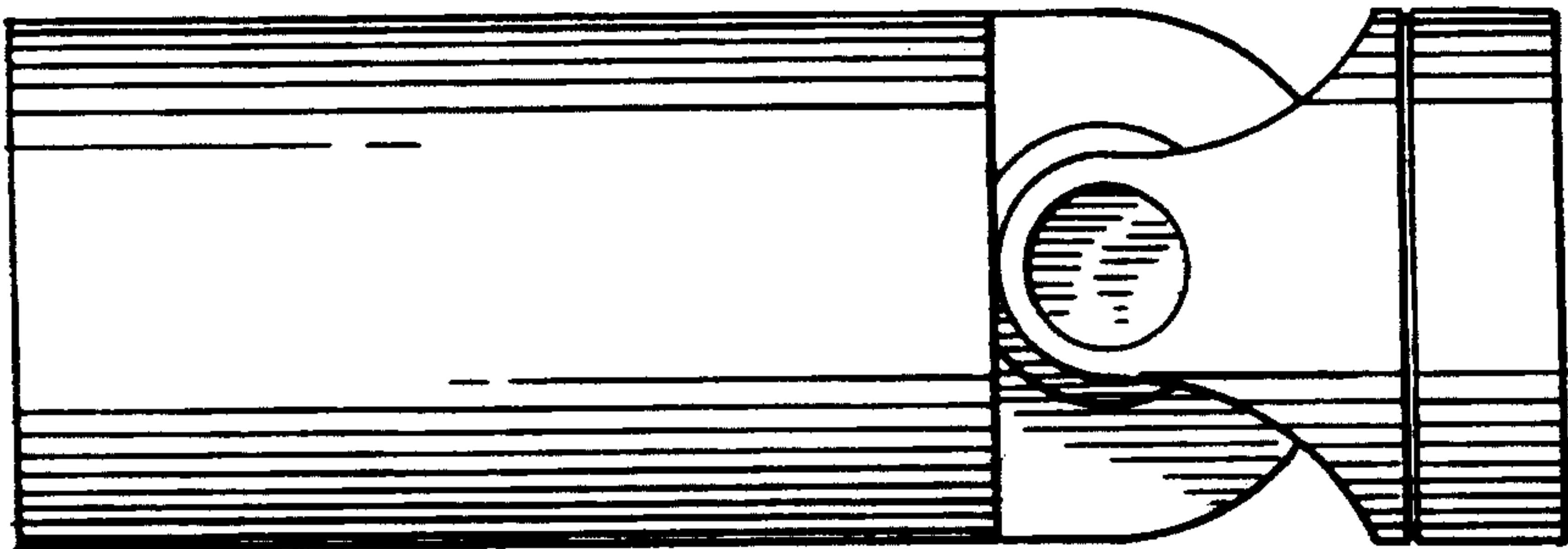


FIG. 9

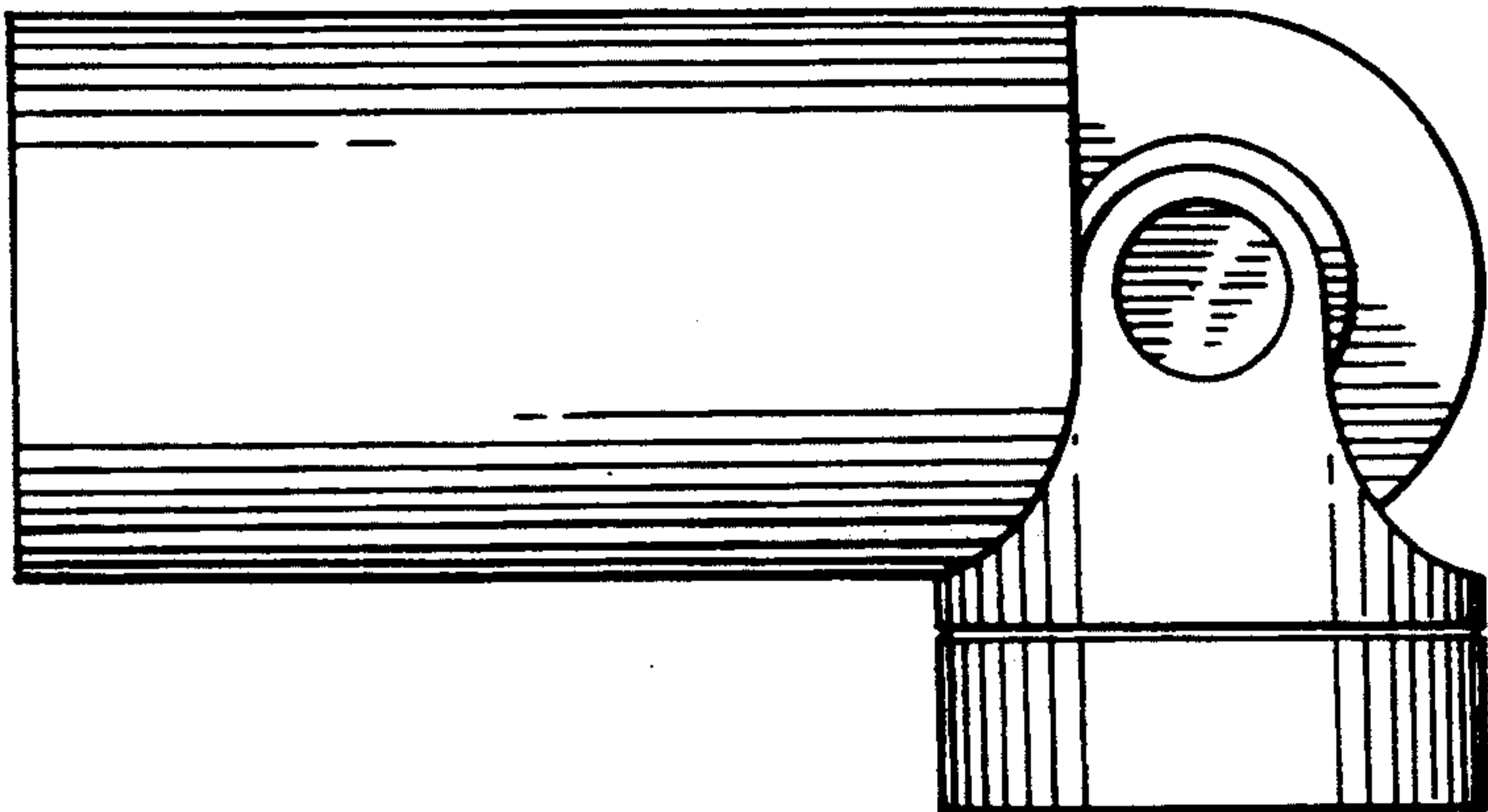


FIG. 10