



US00D419422S

United States Patent [19]

[11] Patent Number: **Des. 419,422**

Weinerman et al.

[45] Date of Patent: **** Jan. 25, 2000**

[54] JOINT AND ARM PORTIONS OF SPRING BIASED HINGE

[75] Inventors: **Lee S. Weinerman**, Medina; **Scott A. Arthurs**, Brunswick, both of Ohio

[73] Assignee: **The Eastern Company**, Cleveland, Ohio

[**] Term: **14 Years**

[21] Appl. No.: **29/097,281**

[22] Filed: **Dec. 3, 1998**

[51] **LOC (7) Cl.** **08-06**

[52] **U.S. Cl.** **D8/328**

[58] **Field of Search** D8/323, 327, 328; 16/234, 280, 293, 295, 305, 307, 386, 387

[56] References Cited

U.S. PATENT DOCUMENTS

134,617	1/1873	Thompson .	
803,509	10/1905	Ryan .	
1,627,584	5/1927	Tishken .	
1,785,362	12/1930	Regan .	
3,102,583	9/1963	Rowe et al. .	
3,469,277	9/1969	Henrichs et al.	16/145
4,485,522	12/1984	Chen	16/307
4,495,672	1/1985	Adams	16/229
4,629,243	12/1986	Jensen	296/100
4,788,837	12/1988	MacFarlane	70/3
5,131,246	7/1992	Bonzer	70/260
5,884,363	3/1999	Tofts	16/386

OTHER PUBLICATIONS

Hong Kong Enterprise; p. 771; 2 hinges with staggered leaves (center top), Jun. 1994.

Bronson Co., Homer D., "Hinges by the Homer D. Bronson Company," 1971, p. 25, right column Entitled "Spring Hinges".

Guden Co., H.A., "Hardware for Industry," 1979, p. 9, bottom third of page entitled "Spring Hinges".

Primary Examiner—B. J. Bullock

Attorney, Agent, or Firm—David A. Burge

[57] CLAIM

We claim the ornamental design for joint and arm portions of spring biased hinge, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of joint and arm portions of a spring biased hinge showing our new design, with the two pivotally connected arms of the hinge extending substantially parallel, with the view showing principally top, front and right regions thereof, and with typical arm portions that comprise no part of the design being depicted by broken lines;

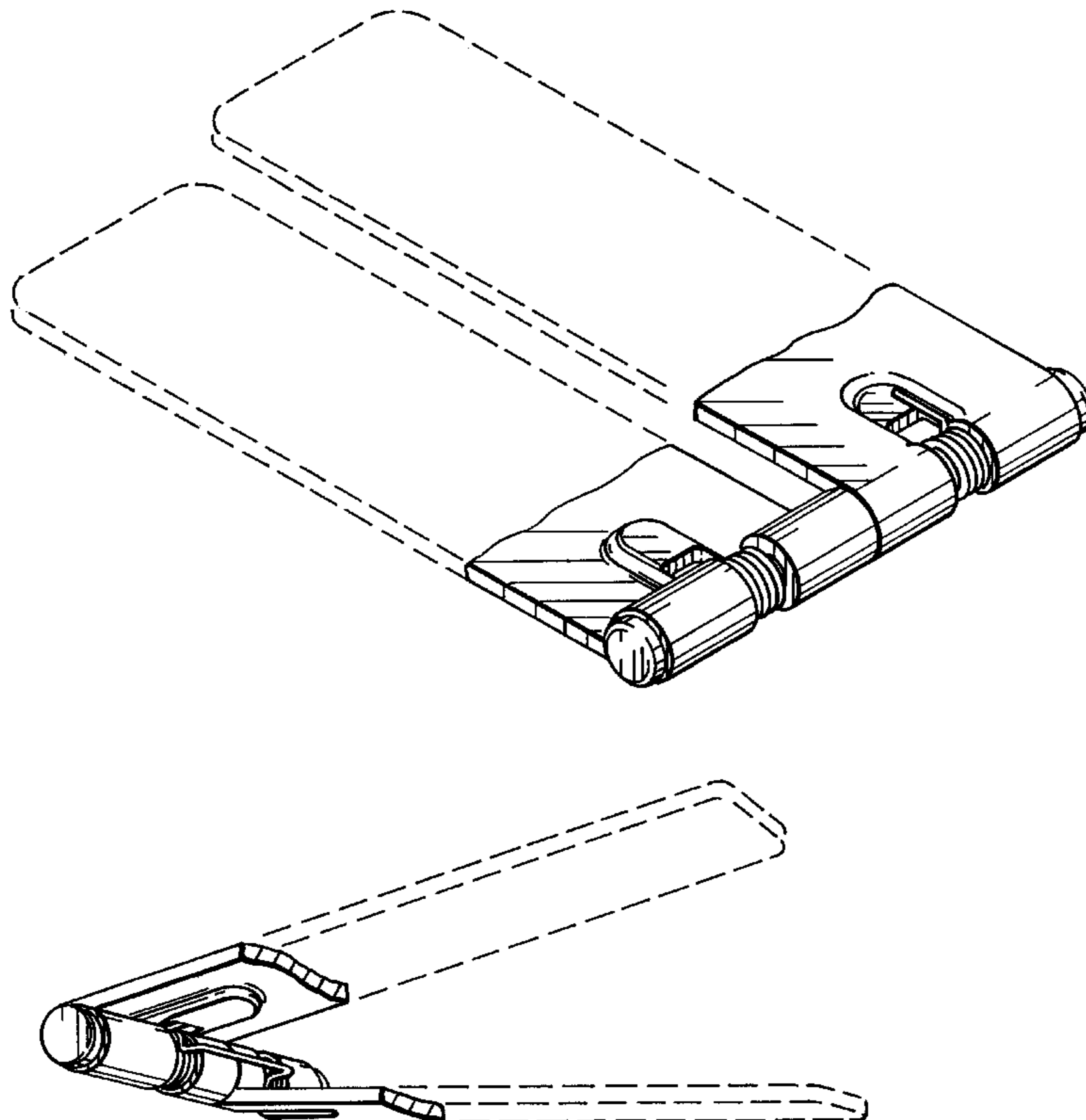
FIG. 2 is a perspective view thereof showing principally bottom, front and left regions thereof, with the two pivotally connected arms of the hinge extending non-parallel;

FIG. 3 is a right end elevational view thereof with the arms of the hinge oriented as in FIG. 1;

FIG. 4 is a front side elevational view thereof; and,

FIG. 5 is a top plan view thereof.

1 Claim, 2 Drawing Sheets



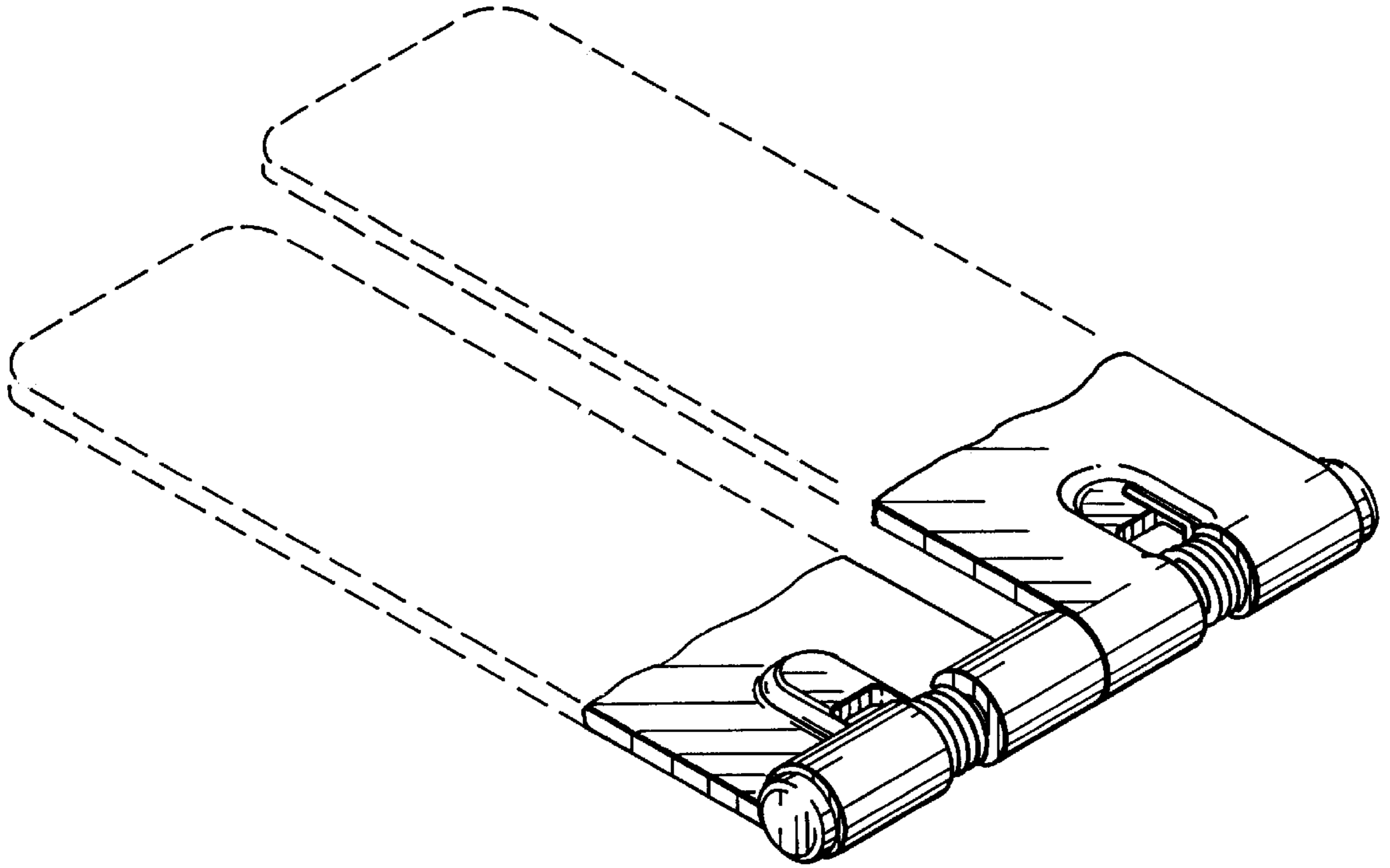


FIG. 1

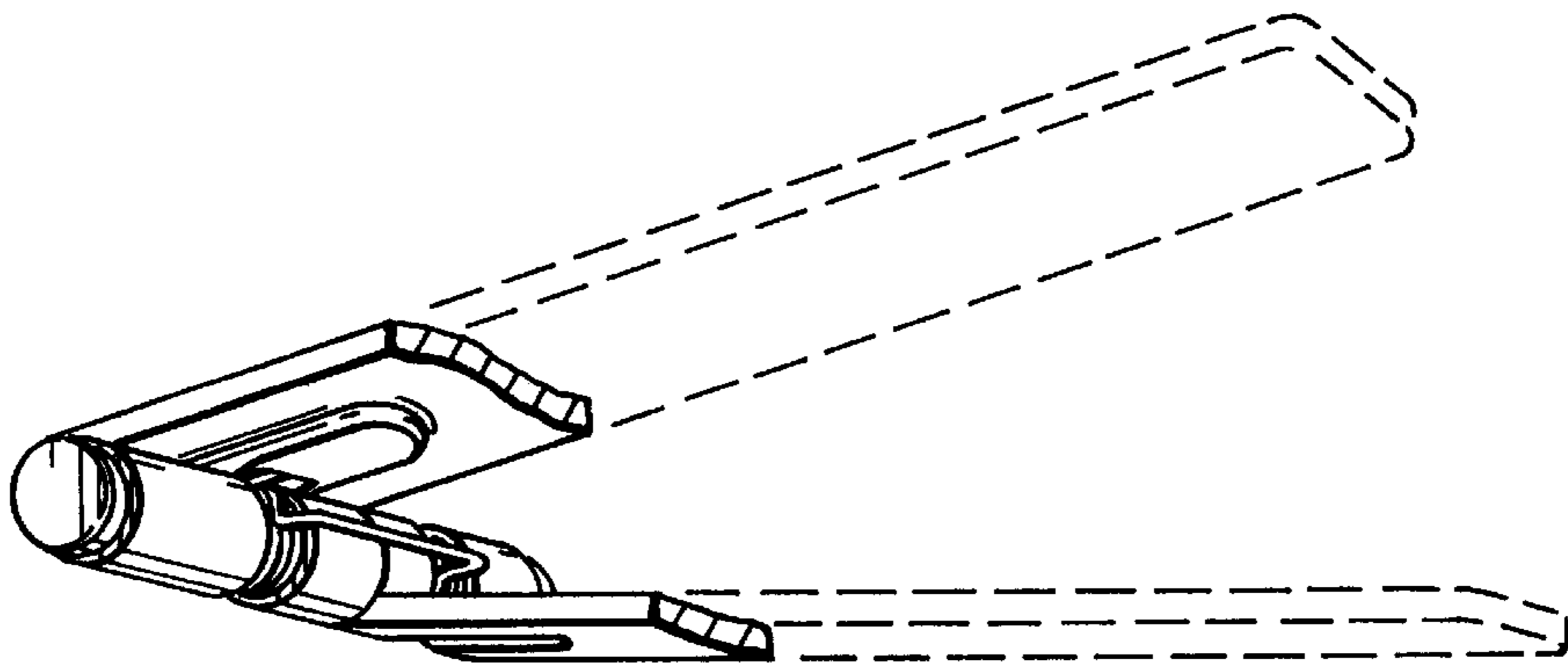


FIG. 2

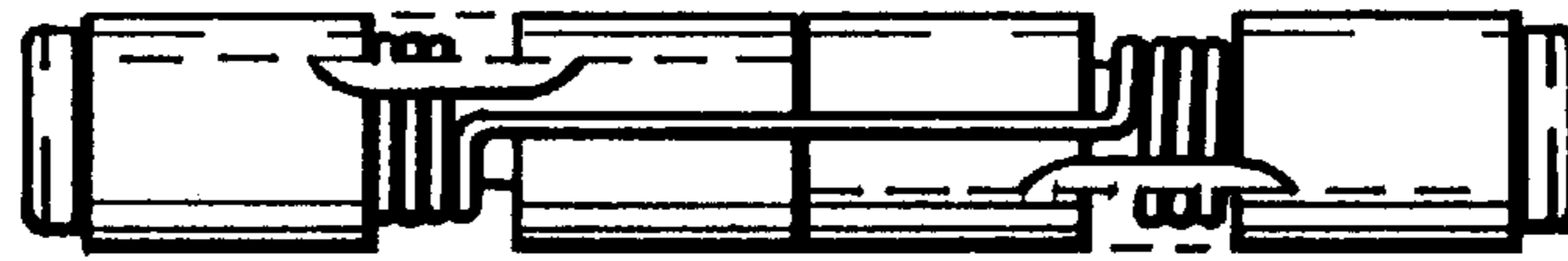


FIG. 3

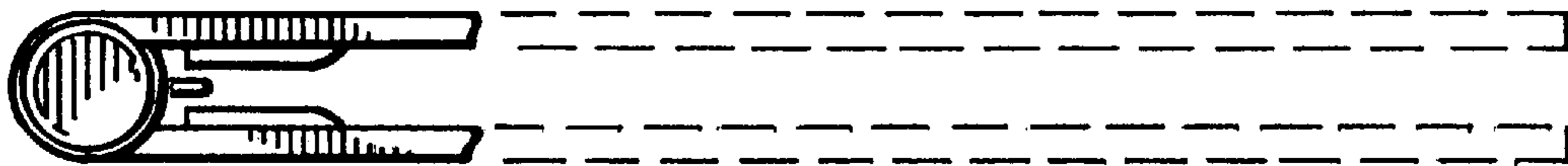


FIG. 4

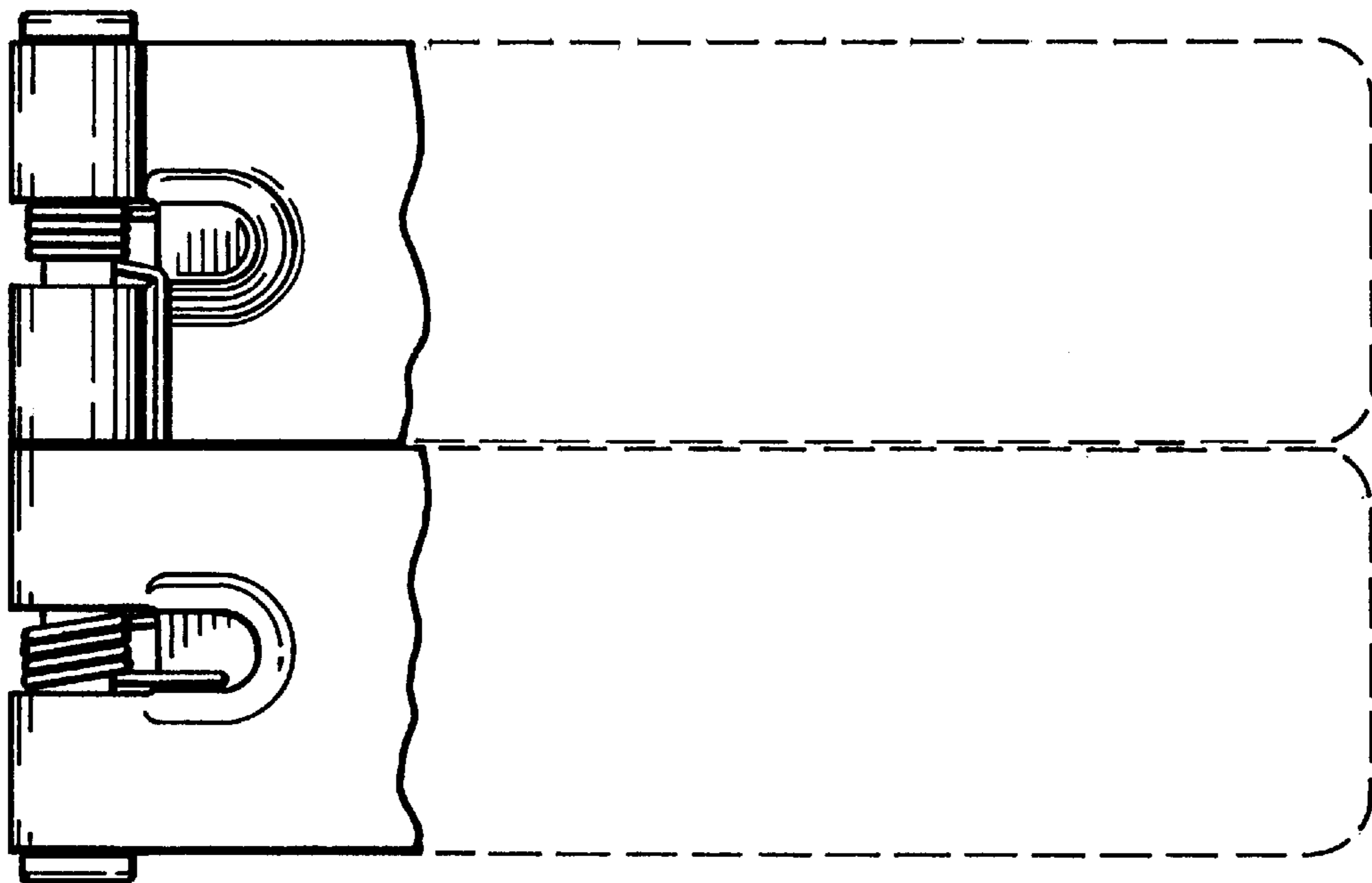


FIG. 5