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United States Patent [19]

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Miller et al.

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[54] CYLINDRICAL FILTER ELEMENT

4,402,830 9/1983 Pall .

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4,882,056 11/1989 Degen et al. .

4,902,417 2/1990 Lien .

5,039,413 8/1991 Harwood et al. .

5,252,207 10/1993 Miller et al. .

[73] Assignee: **Pall Corporation**, East Hills, N.Y.

5,290,457 3/1994 Karbachsch et al. 210/264

5,543,047 8/1996 Stoyell et al. .

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

FOREIGN PATENT DOCUMENTS

[21] Appl. No.: **60,231**

855068 12/1955 United Kingdom .

[22] Filed: **Sep. 25, 1996**

1005987 9/1963 United Kingdom .

1337170 12/1971 United Kingdom .

Related U.S. Application Data

OTHER PUBLICATIONS

[63] Continuation of Ser. No. 31,229, Nov. 14, 1994, abandoned, which is a continuation of Ser. No. 24,481, Jun. 13, 1994, abandoned, which is a continuation of Ser. No. 682,452, Apr. 9, 1991, Pat. No. Des. 349,567.

“Ultipor Composite Filter Structure”, Pall Corporation, 1992.

[51] **LOC (6) Cl.** **23-01**

Primary Examiner—Alan P. Douglas

[52] **U.S. Cl.** **D23/209**

Assistant Examiner—Robin V. Taylor

[58] **Field of Search** D23/200, 207, D23/209; 210/263-4, 282, 446, 448-9, 452, 459, 460, 493.4, 497.1

Attorney, Agent, or Firm—Leydig, Voit & Mayer, Ltd.

[57] CLAIM

[56] References Cited

DESCRIPTION

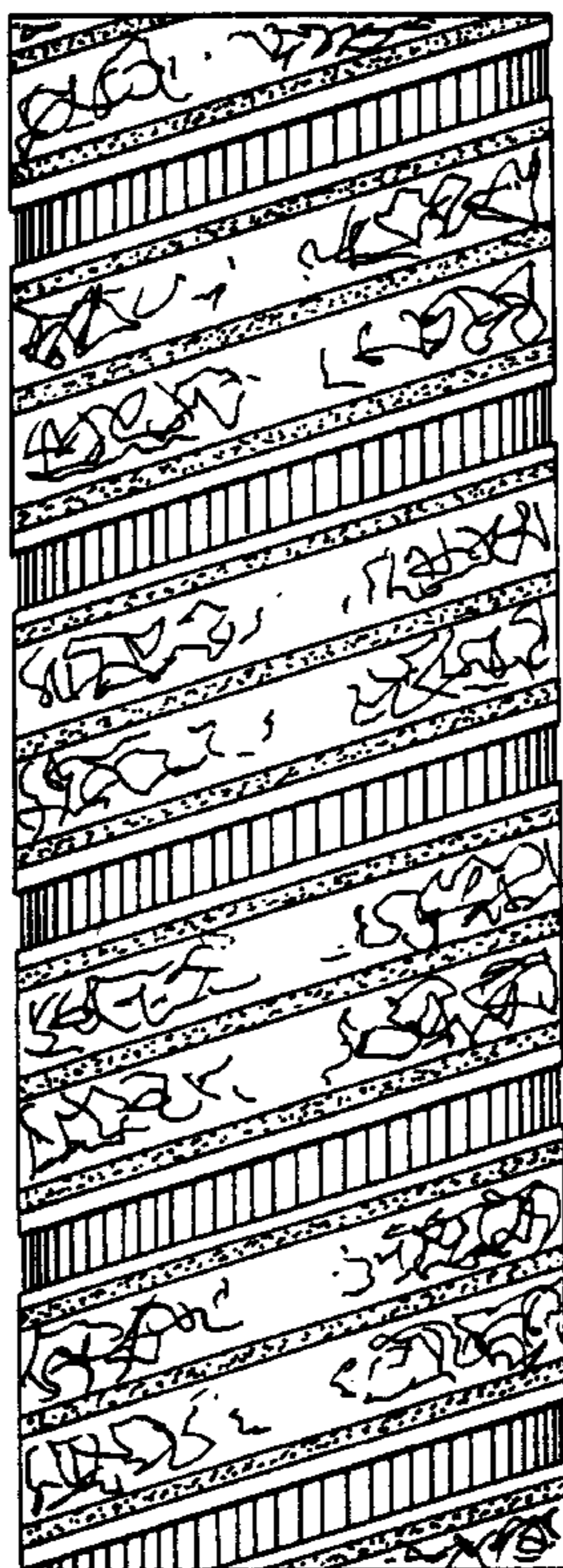
U.S. PATENT DOCUMENTS

D. 349,567	8/1994	Miller et al. .	
629,377	7/1899	Leland	210/448
2,426,405	8/1947	McDermott	D23/209
2,539,450	1/1951	Magill .	
3,241,680	3/1966	Humbert, Jr. .	
3,442,392	5/1969	Skelley .	
3,566,607	3/1971	Sixt	210/459
4,154,688	5/1979	Pall .	

The ornamental design for a cylindrical filter element, as shown and described.

FIG. 1 is a front view of a cylindrical filter element showing a first embodiment of our design; and, FIG. 2 is a front view of a cylindrical filter element showing a second embodiment of our design. The top and bottom views form no part of the claimed design.

1 Claim, 1 Drawing Sheet



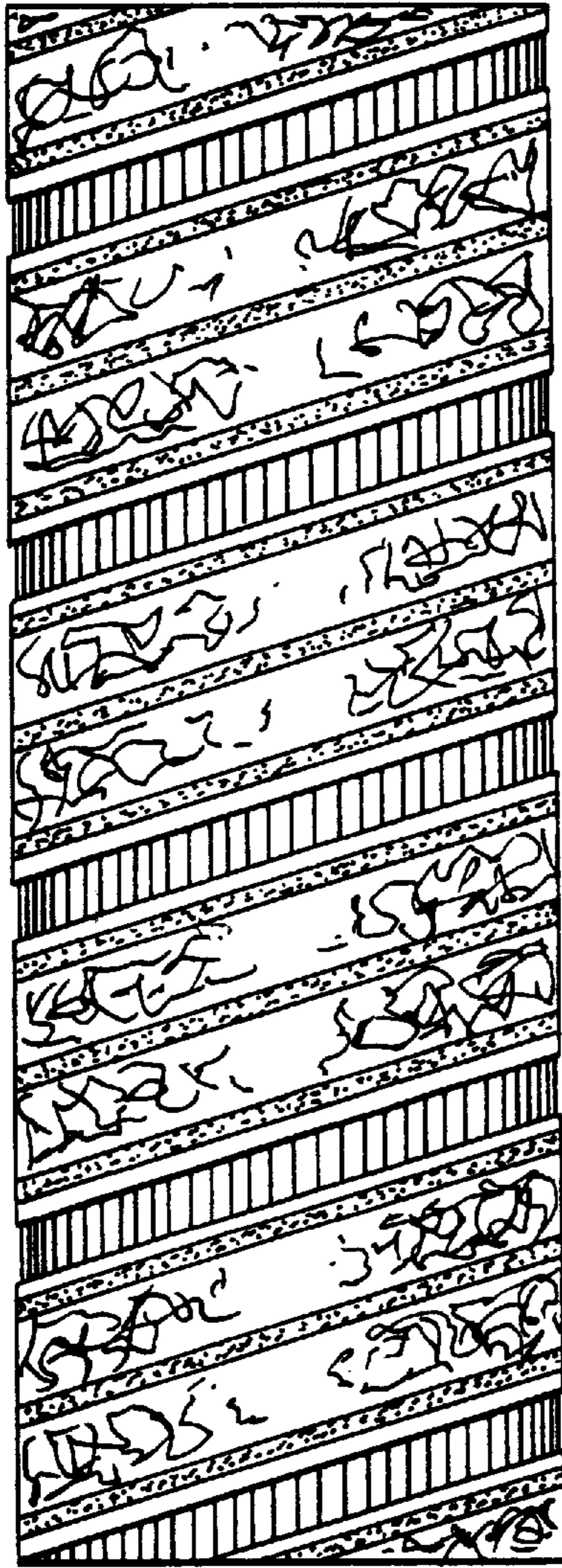


FIG. 1

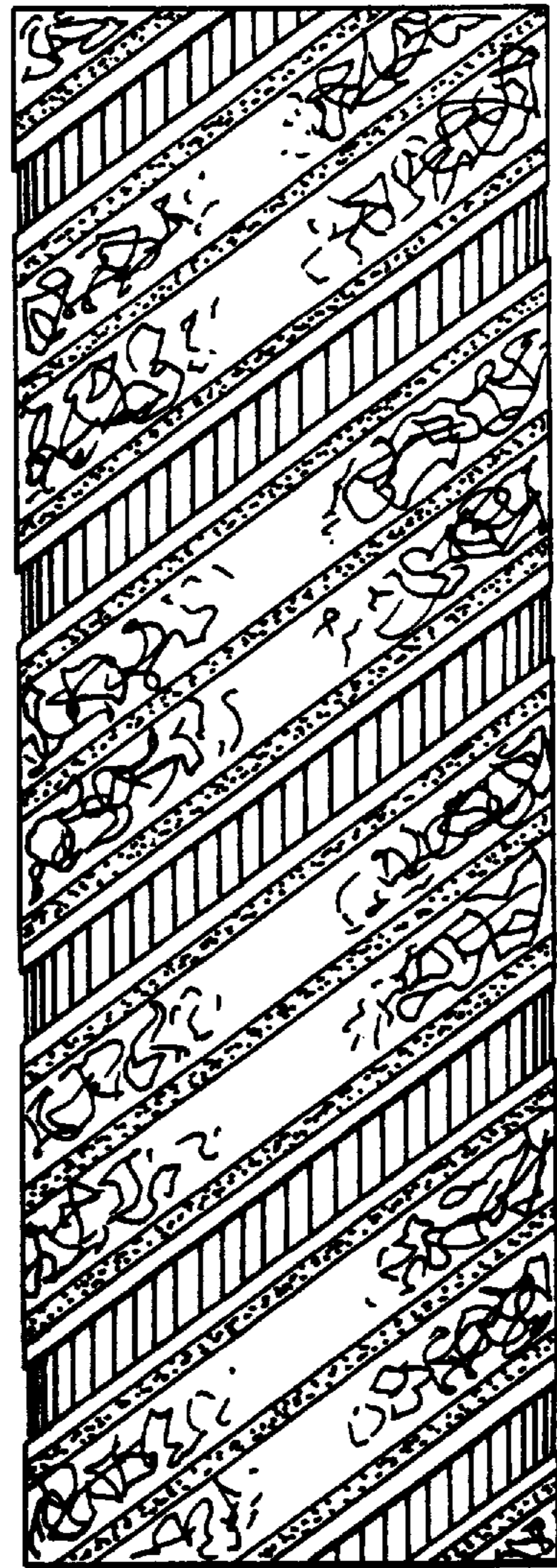


FIG. 2