



US00D519008S

(12) **United States Design Patent**
Chaconas

(10) **Patent No.:** **US D519,008 S**

(45) **Date of Patent:** **** Apr. 18, 2006**

(54) **HIGH TORQUE OPEN END WRENCH**

(75) Inventor: **Peter C. Chaconas**, Glyndon, MD (US)

(73) Assignee: **Easco Hand Tools, Inc.**, Simsbury, CT (US)

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

(21) Appl. No.: **29/209,957**

(22) Filed: **Jul. 23, 2004**

(51) **LOC (8) Cl.** **08-05**

(52) **U.S. Cl.** **D8/28**; 81/119

(58) **Field of Classification Search** D8/21,
D8/22-29, 107; 81/119, 90.1, 176.1, 186,
81/176.2, 176.3, 121.1, 124.3, 124.7, 177.2,
81/177.85; 16/429

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

463,137	A	11/1891	Carpenter	
574,622	A	1/1897	Olden	
1,138,572	A	5/1915	Kaylor	
2,652,735	A	9/1953	Wilder	81/119
3,682,024	A	8/1972	Myers	81/129
3,757,614	A	9/1973	Evans et al.	81/119
3,850,057	A	* 11/1974	Evans	81/119
4,631,991	A	* 12/1986	Scott et al.	81/90.1
4,776,244	A	10/1988	Olson et al.	81/119
5,551,322	A	9/1996	Mikic et al.	81/186
D388,296	S	* 12/1997	Wei	D8/28
5,878,636	A	* 3/1999	Baker	81/119
D414,997	S	* 10/1999	Hsieh	D8/28
D417,374	S	* 12/1999	Chen	D8/28

6,089,131	A	* 7/2000	Taimiot	81/186
6,158,309	A	12/2000	Baker	81/119
6,269,715	B1	* 8/2001	Cagny	81/119
6,276,240	B1	8/2001	Blacklock	81/119
6,305,252	B1	* 10/2001	Hsu	81/186
6,334,374	B1	* 1/2002	Hirse	81/119
6,389,933	B1	* 5/2002	Chen	81/119
6,443,038	B1	* 9/2002	Hsieh	81/119

* cited by examiner

Primary Examiner—Raphael Barkai

Assistant Examiner—Randall H. Gholson

(74) *Attorney, Agent, or Firm*—Nelson Mullins Riley & Scarborough, LLP

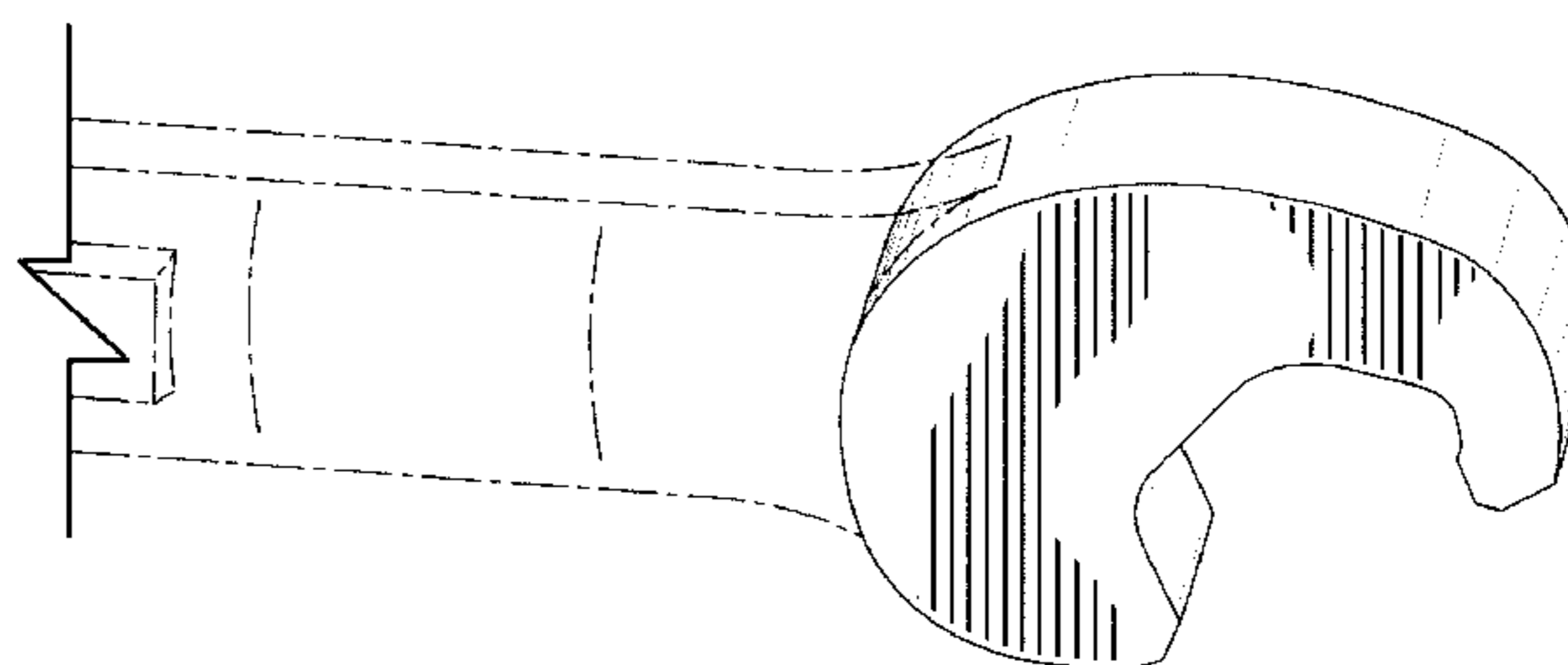
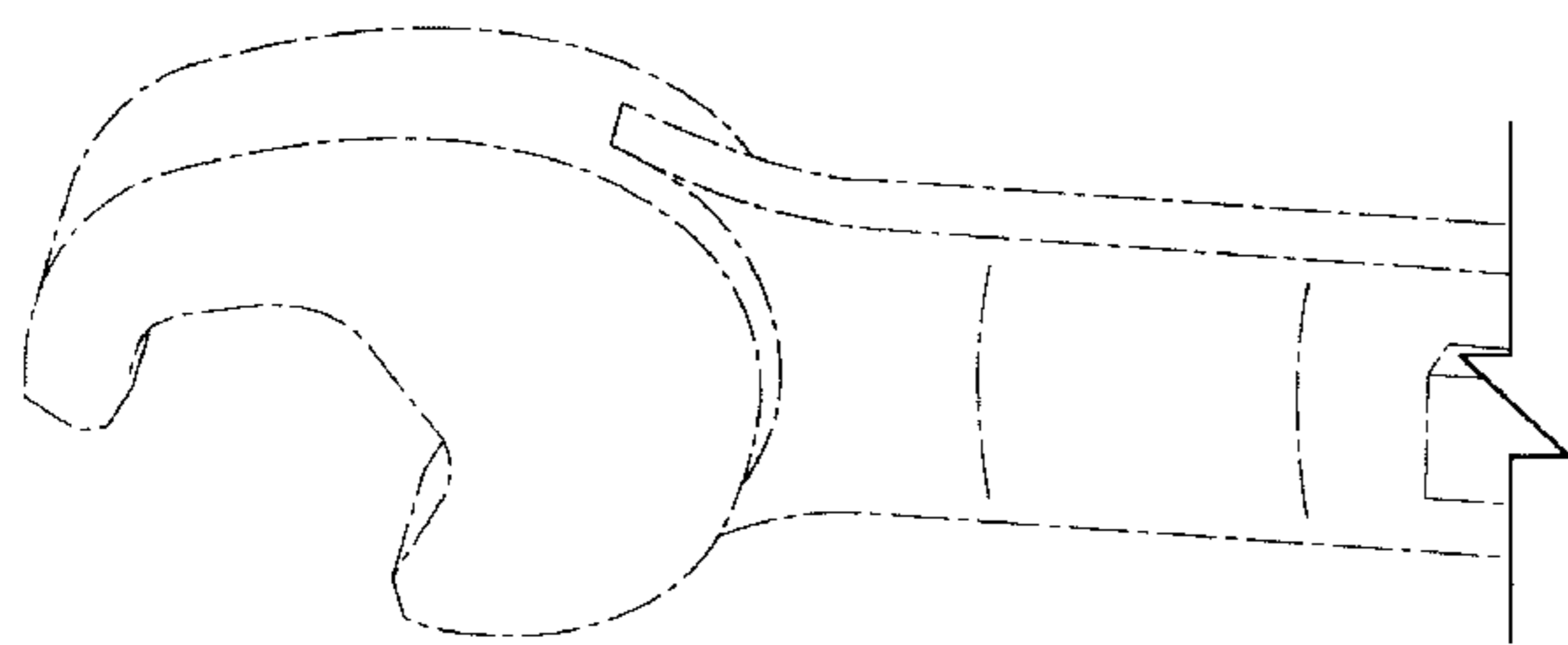
(57) **CLAIM**

The ornamental design of a high torque open end wrench, substantially as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a high torque open end wrench embodying the design of the present invention; FIG. 2 is a right side elevational view of the high torque open end wrench illustrated in FIG. 1; FIG. 3 is a back side elevational view of the high torque open end wrench shown in FIG. 1; FIG. 4 is a front view of the high torque open end wrench shown in FIG. 1; FIG. 5 is a top view of the high torque open end wrench shown in FIG. 1; and, FIG. 6 is a bottom view of the high torque open end wrench illustrated in FIG. 1. Broken lines are for illustrative purposes and form no part of the claim.

1 Claim, 2 Drawing Sheets



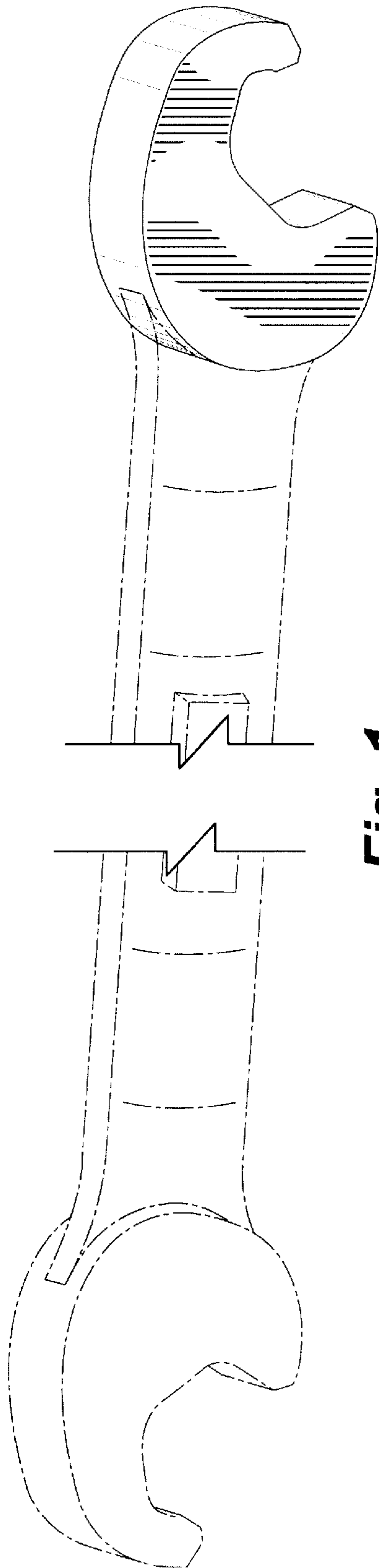


Fig. 1

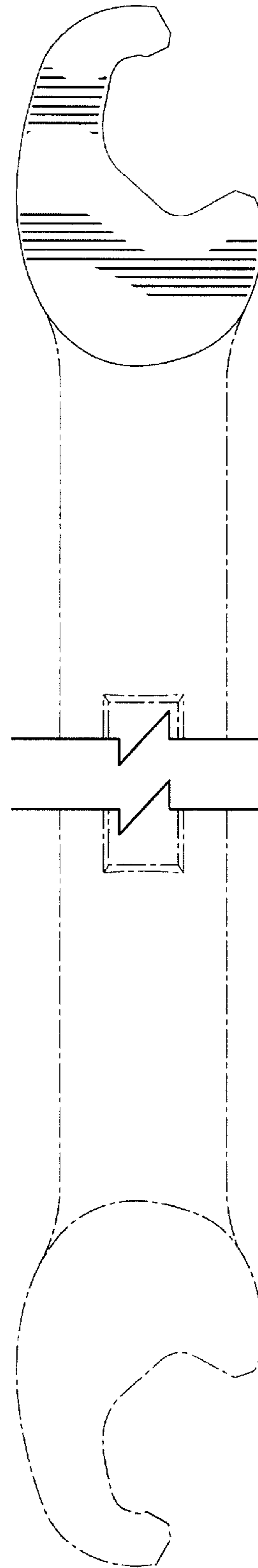


Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6