

US00D824966S

(12) **United States Design Patent** (10) **Patent No.:** **US D824,966 S**  
**Kaminski et al.** (45) **Date of Patent:** **\*\* Aug. 7, 2018**

(54) **POWDER INJECTOR**  
(71) Applicant: **OERLIKON METCO (US) INC.**,  
Westbury, NY (US)  
(72) Inventors: **Louis A. Kaminski**, Long Beach, NY  
(US); **Robert F. Savill, Jr.**, Levittown,  
NY (US)  
(73) Assignee: **OERLIKON METCO (US) INC.**,  
Westbury, NY (US)  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/581,011**  
(22) Filed: **Oct. 14, 2016**  
(51) **LOC (11) Cl.** ..... **15-09**  
(52) **U.S. Cl.**  
USPC ..... **D15/135**  
(58) **Field of Classification Search**  
USPC ..... D15/135, 138, 144, 144.1, 144.2;  
D23/213, 223  
CPC ..... B05B 5/03; B05B 5/0531  
See application file for complete search history.

(56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
D251,796 S \* 5/1979 Edin ..... D15/144.1  
4,456,228 A \* 6/1984 Cable ..... B23K 7/10  
266/70  
4,853,515 A 8/1989 Willen  
D365,345 S \* 12/1995 Carkhuff ..... D15/144  
5,678,770 A \* 10/1997 Shah ..... B05B 5/0531  
239/690  
5,793,013 A \* 8/1998 Read ..... H05H 1/30  
118/723 MW  
5,837,959 A 11/1998 Muehlberger  
D417,459 S \* 12/1999 Shintani ..... D15/144  
D446,231 S \* 8/2001 Kuraoka ..... D15/144  
D492,709 S \* 7/2004 Horner-Richardson ..... D15/144

D513,058 S \* 12/2005 Hayduk ..... D23/226  
D527,401 S \* 8/2006 Mizuno ..... D15/144  
D540,908 S \* 4/2007 Py ..... D23/213  
7,342,196 B2 3/2008 Koenig  
D567,900 S \* 4/2008 Patterson ..... D23/213  
D582,950 S \* 12/2008 Yamaguchi ..... D15/144  
D608,856 S \* 1/2010 Dammkoehler ..... D23/223  
D636,844 S \* 4/2011 Herre ..... D23/213  
D636,845 S \* 4/2011 Suzuki ..... D23/213  
D637,267 S \* 5/2011 Suzuki ..... D23/213  
D660,940 S \* 5/2012 Flowers ..... D23/213  
8,253,058 B2 \* 8/2012 Zehavi ..... H05H 1/42  
219/121.47  
D668,742 S \* 10/2012 English ..... D23/213  
D669,961 S \* 10/2012 Sanwald ..... D23/213  
D670,356 S \* 11/2012 Sanwald ..... D23/213  
D670,786 S \* 11/2012 Mauchle ..... D23/213  
D704,799 S \* 5/2014 Crawley ..... D23/213  
D744,564 S \* 12/2015 Hassan ..... D15/144  
D776,787 S \* 1/2017 Zhang ..... D23/213

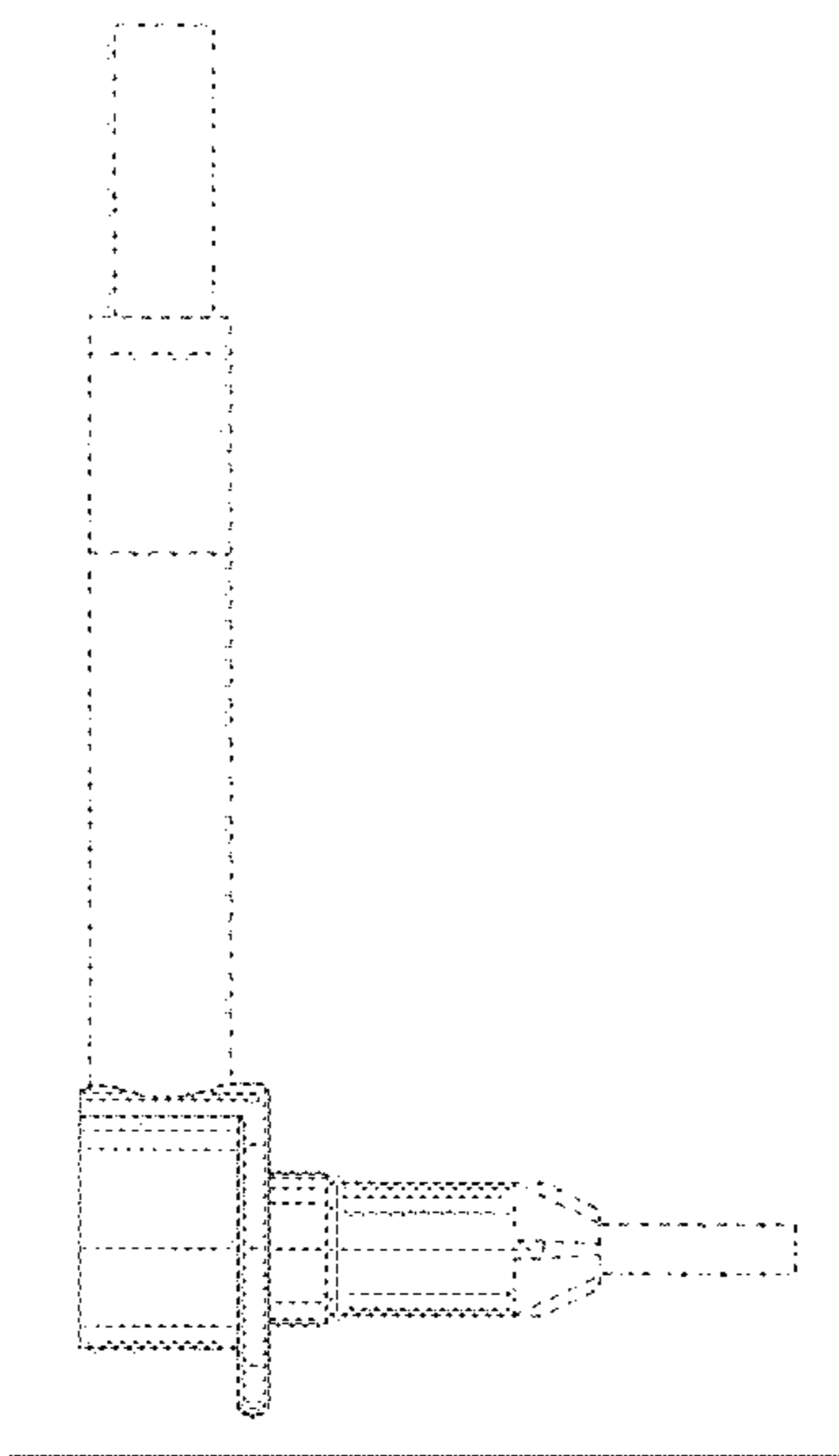
(Continued)

*Primary Examiner* — Patricia A Palasik  
(74) *Attorney, Agent, or Firm* — Greenblum & Bernstein,  
P.L.C.

(57) **CLAIM**  
We claim the ornamental design for a powder injector, as  
shown and described.

**DESCRIPTION**  
FIG. 1 shows a left side view of a powder injector;  
FIG. 2 shows a right side view of FIG. 1;  
FIG. 3 shows a cross-section view taken along line 3-3 of  
FIG. 4;  
FIG. 4 shows a front view of FIG. 1;  
FIG. 5 shows a rear view of FIG. 1;  
FIG. 6 shows a top view of FIG. 1; and,  
FIG. 7 shows a bottom view of FIG. 1.  
The broken lines in the drawings depict unclaimed environ-  
mental subject matter.

**1 Claim, 7 Drawing Sheets**



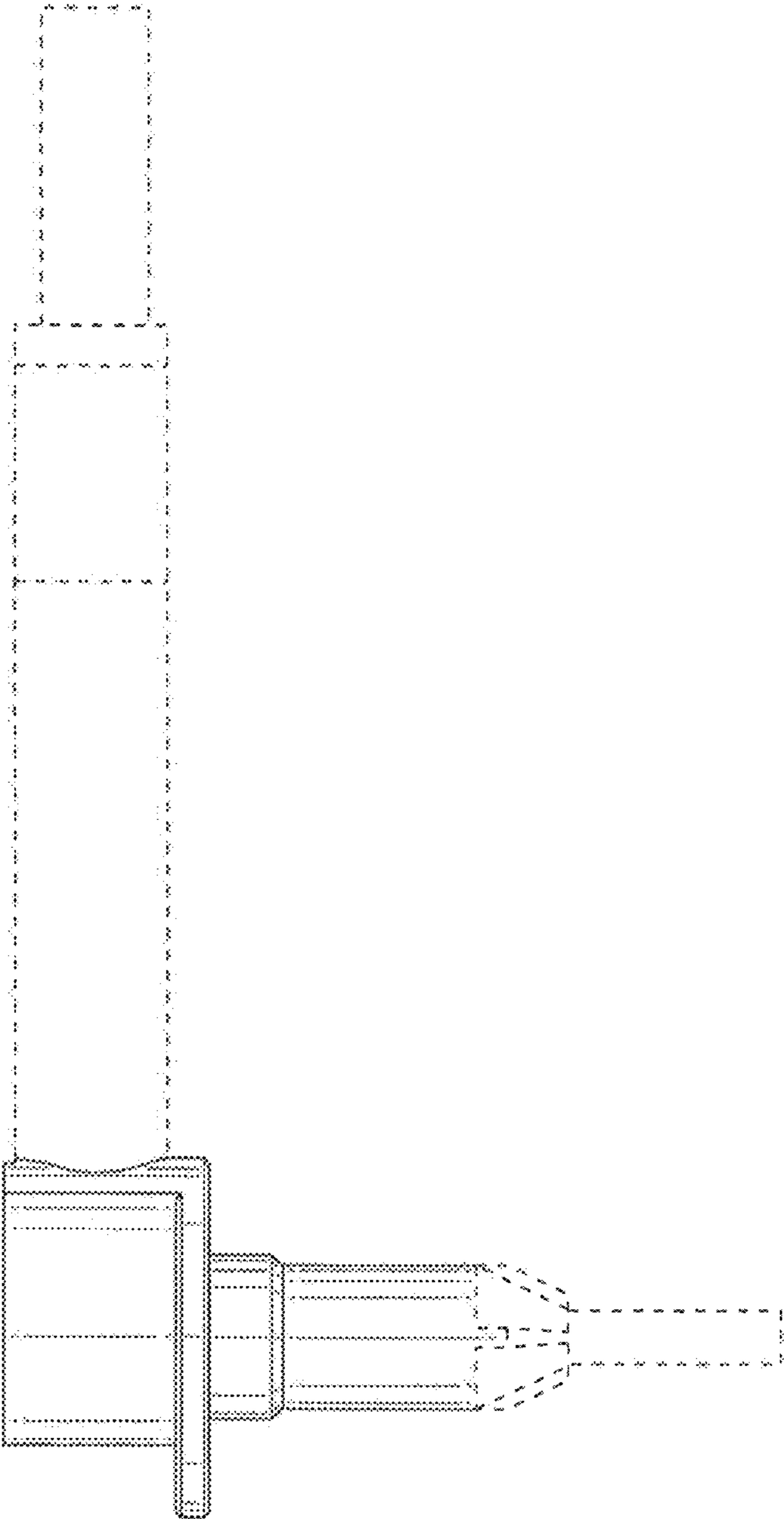
(56)

**References Cited**

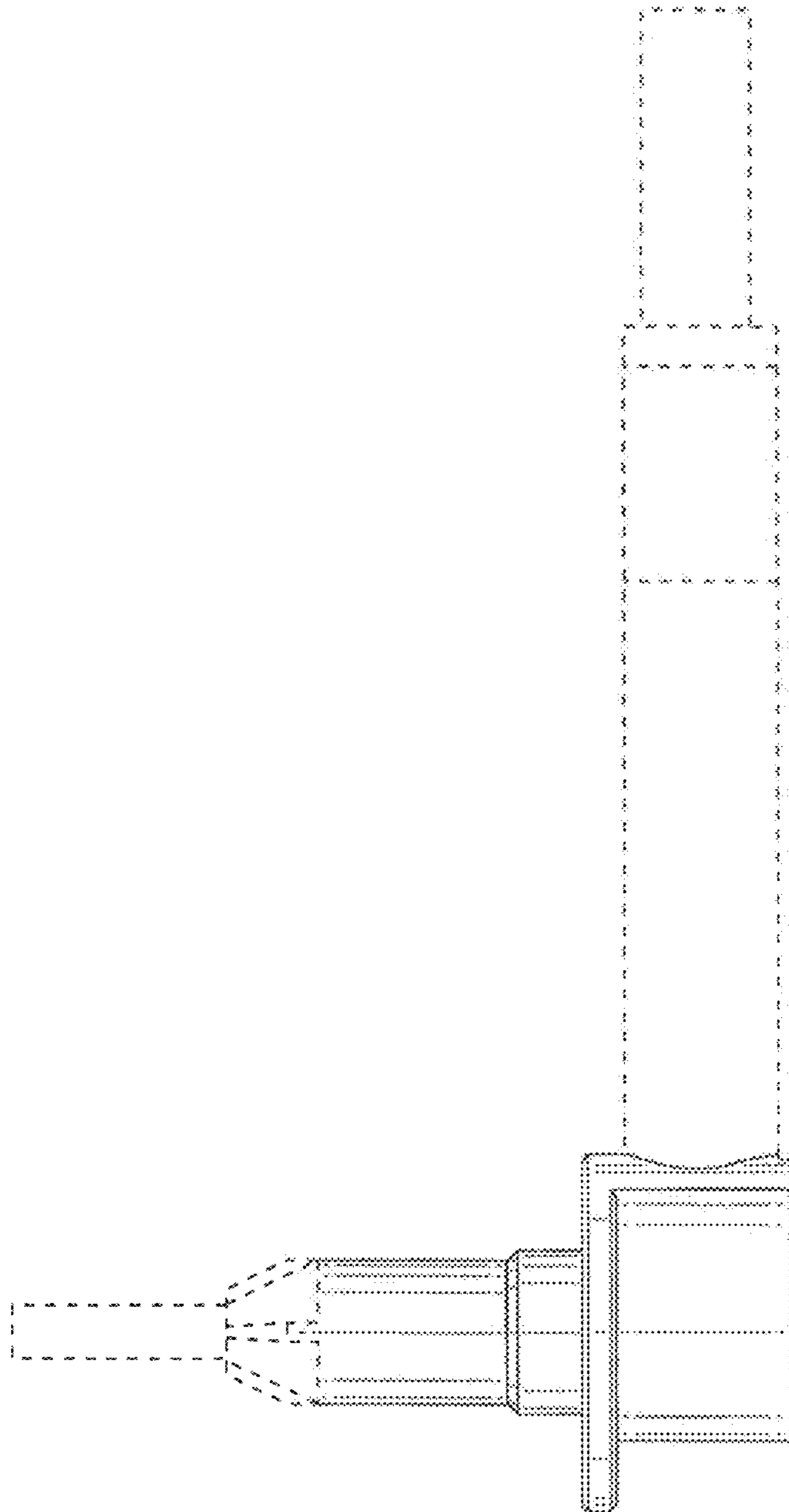
U.S. PATENT DOCUMENTS

D777,812 S \* 1/2017 Namburu ..... D15/144  
D804,555 S \* 12/2017 Townsend ..... B23K 9/282  
D15/144  
2004/0234687 A1 11/2004 Schmid  
2007/0138147 A1 6/2007 Molz  
2008/0121624 A1 5/2008 Belashchenko  
2012/0298217 A1 11/2012 Molz  
2014/0326703 A1 11/2014 Molz  
2016/0228892 A1\* 8/2016 St. Peter ..... B05B 5/1608

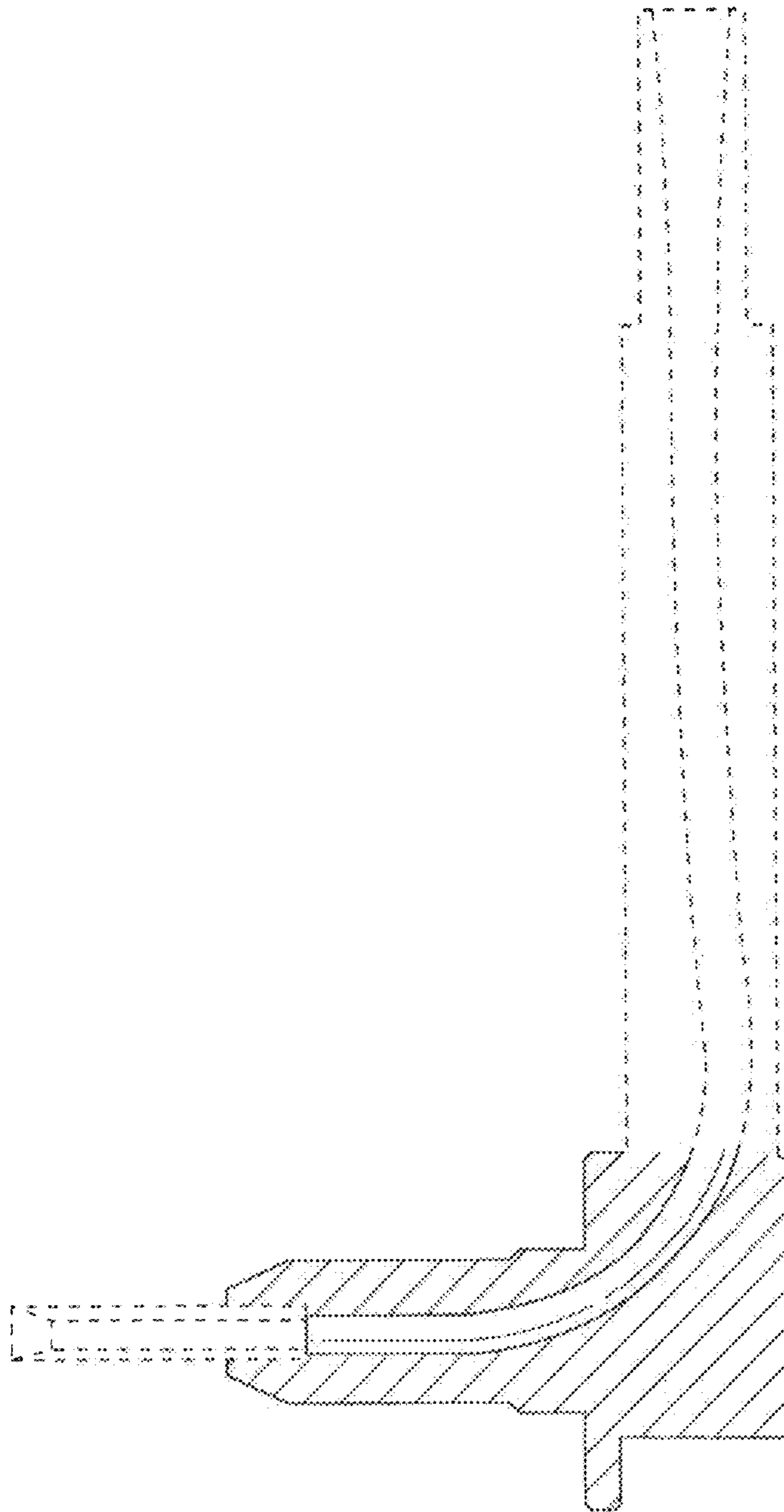
\* cited by examiner



**FIG. 1**



**FIG. 2**



**FIG. 3**

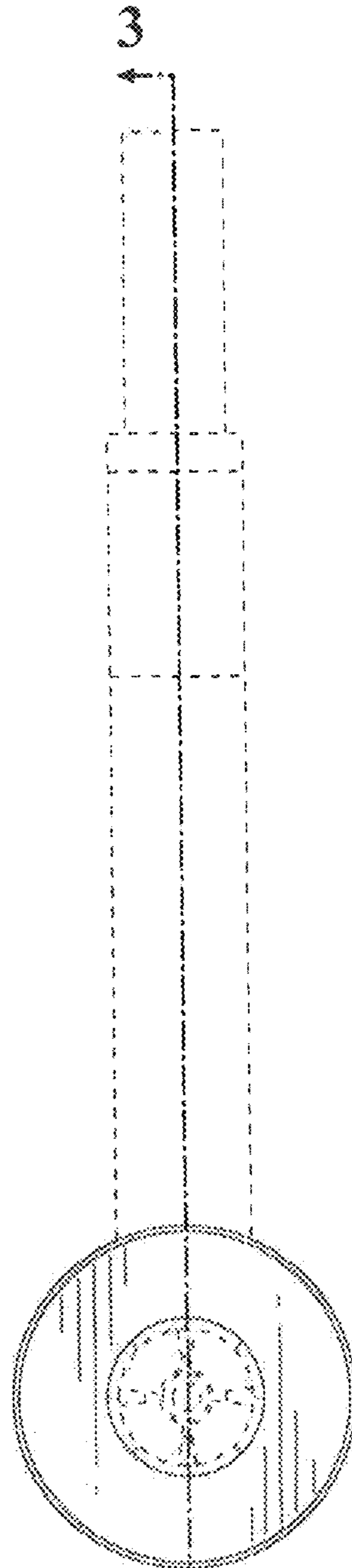
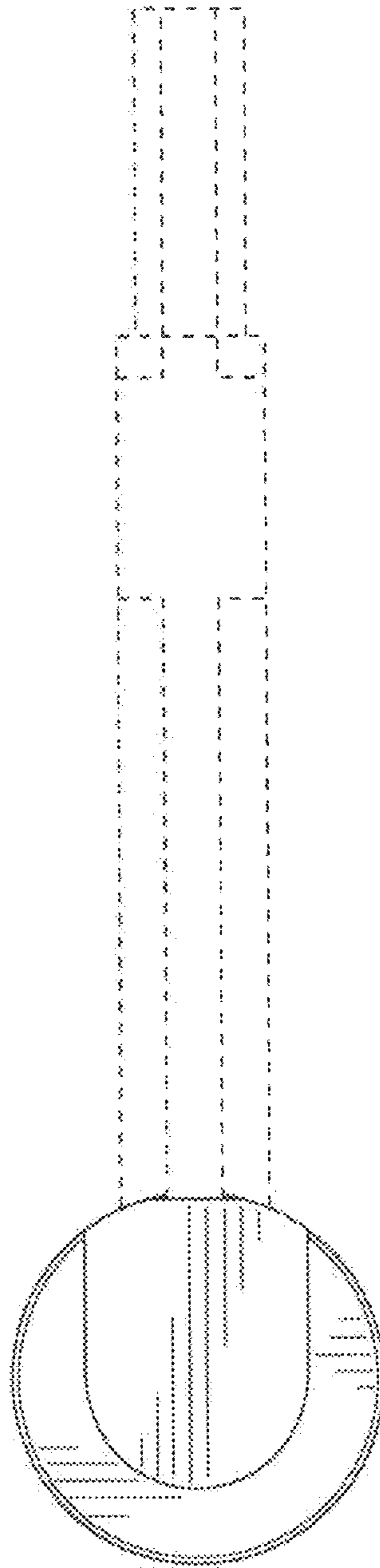
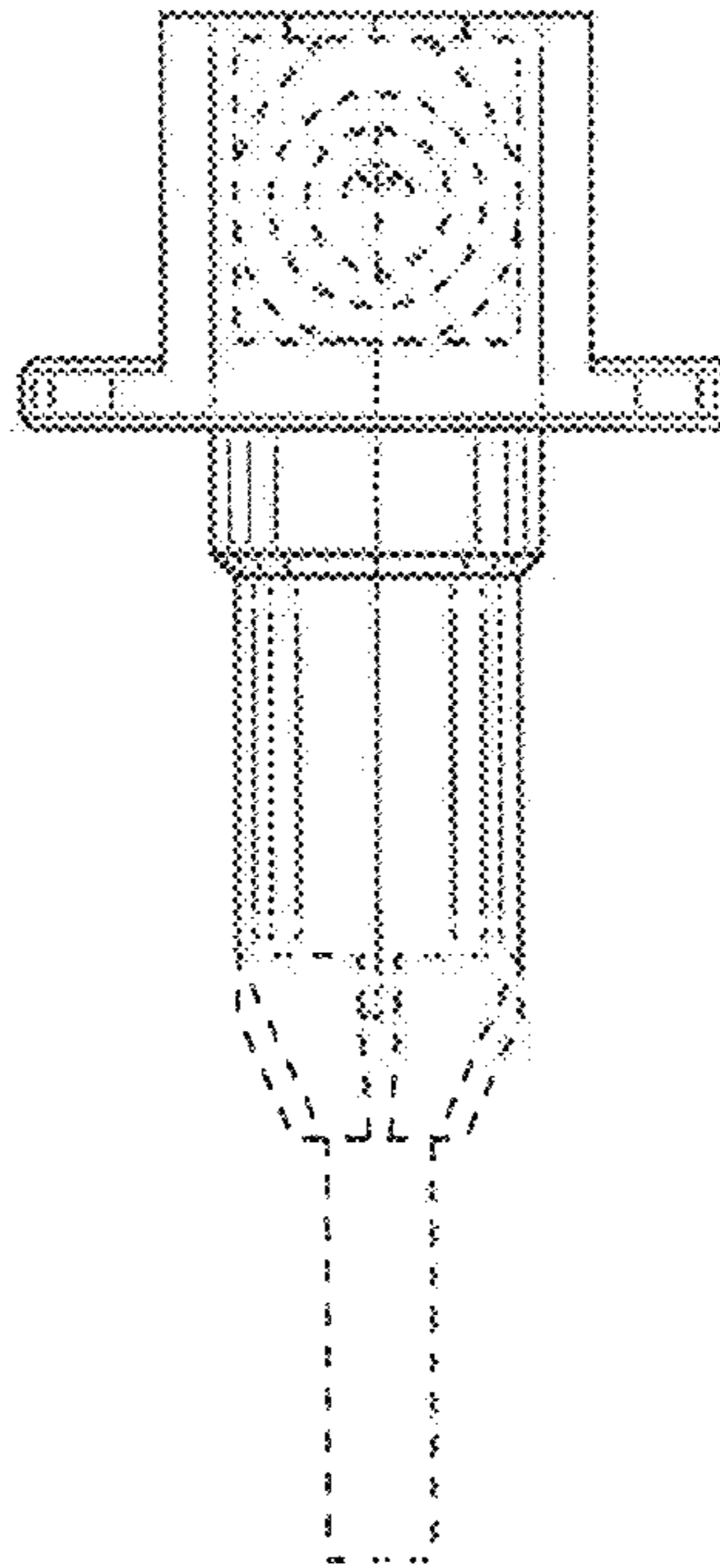


FIG. 4

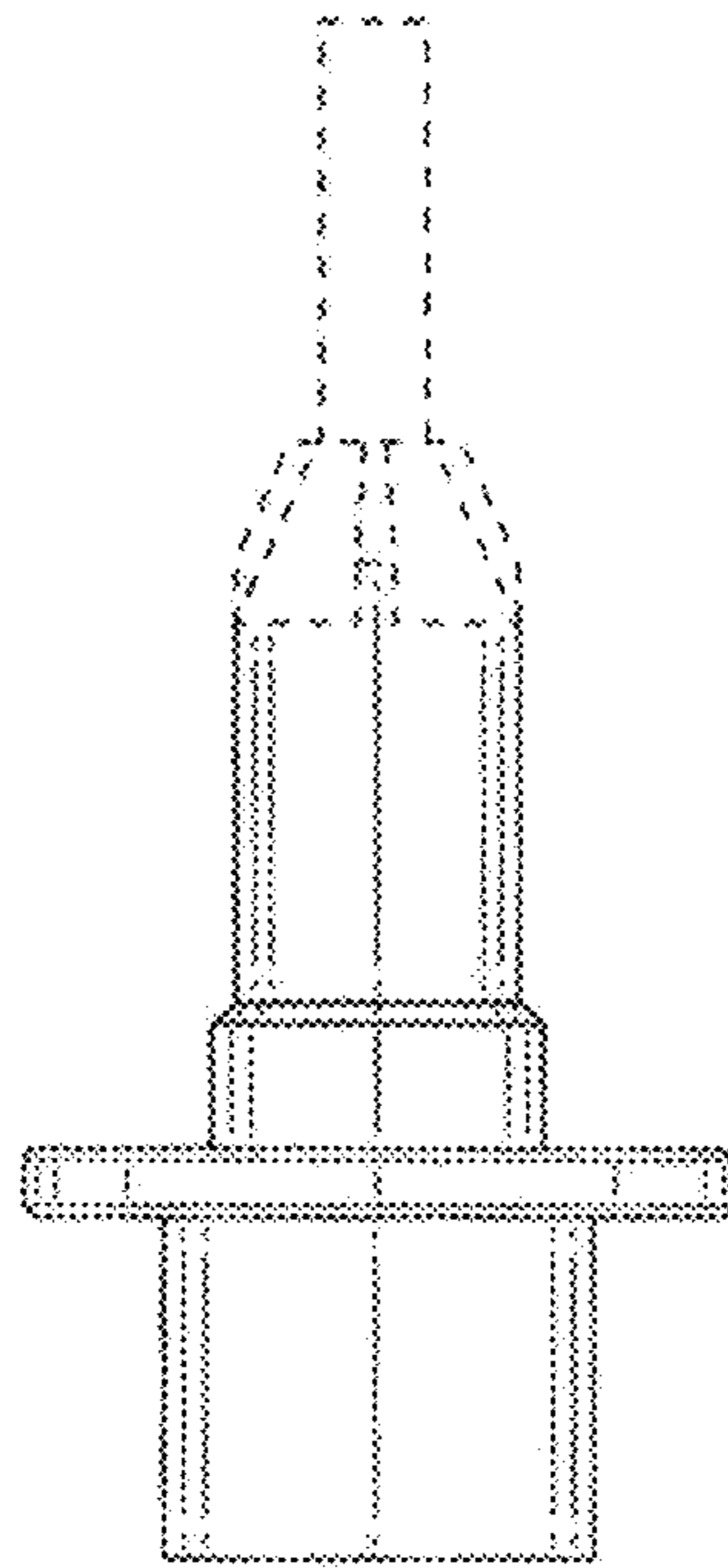


**FIG. 5**



**FIG. 6**





**FIG. 7**