



US00D615573S

(12) **United States Design Patent**
Peters et al.

(10) **Patent No.:** **US D615,573 S**

(45) **Date of Patent:** **** May 11, 2010**

(54) **WELDING ELECTRODE HOLDER**

(75) Inventors: **Carl Peters**, Solon, OH (US); **Erin L. Justice**, Berea, OH (US); **Chris Gandee**, Bellville, OH (US); **David Anthony Zboray**, Trumbull, CT (US); **Matthew Alan Bennett**, Milford, CT (US); **Matthew Wayne Wallace**, Farmington, CT (US); **Jeremiah Hennessey**, Manchester, CT (US); **Zachary Steven Lenker**, Vernon, CT (US); **Andrew Paul Lundell**, New Britain, CT (US); **Lynn Briggs**, Bristol, CT (US); **Richard B. Droller**, New Hartford, CT (US); **Eric C. Briggs**, Bristol, CT (US)

(73) Assignee: **Lincoln Global, Inc.**, City of Industry, CA (US)

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

(21) Appl. No.: **29/339,980**

(22) Filed: **Jul. 10, 2009**

(51) **LOC (9) Cl.** **15-09**

(52) **U.S. Cl.** **D15/144**

(58) **Field of Classification Search** D8/30, D8/54; D15/144, 144.1, 144.2; 219/70, 219/138, 139, 140, 141, 142, 143, 144
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,159,119 A * 11/1915 Springer 239/430

(Continued)

OTHER PUBLICATIONS

Wang, et al., Study on welder training by means of haptic guidance and virtual reality for arc welding. 2006 IEEE International Conference on Robotics and Biomimetics, Robio 2006 ISBN-10; 1424405718, p. 954-958.

(Continued)

Primary Examiner—Sandra Snapp
Assistant Examiner—Patricia Palasik

(74) *Attorney, Agent, or Firm*—Kevin M. Dunn; Hahn Loeser + Parks LLP

(57) **CLAIM**

The ornamental design for a welding electrode holder, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an embodiment of a welding electrode holder;

FIG. 2 is a front view of the welding electrode holder of the embodiment illustrated in FIG. 1;

FIG. 3 is a left side view of the welding electrode holder of the embodiment illustrated in FIG. 1;

FIG. 4 is a right side view of the welding electrode holder of the embodiment illustrated in FIG. 1;

FIG. 5 is a top view of the welding electrode holder of the embodiment illustrated in FIG. 1;

FIG. 6 is a end view of the welding electrode holder of the embodiment illustrated in FIG. 1, the bottom of which is unornamented;

FIG. 7 is a perspective view of a second embodiment of a welding electrode holder;

FIG. 8 is a front view of the welding electrode holder of the embodiment illustrated in FIG. 7;

FIG. 9 is a left side view of the welding electrode holder of the embodiment illustrated in FIG. 7;

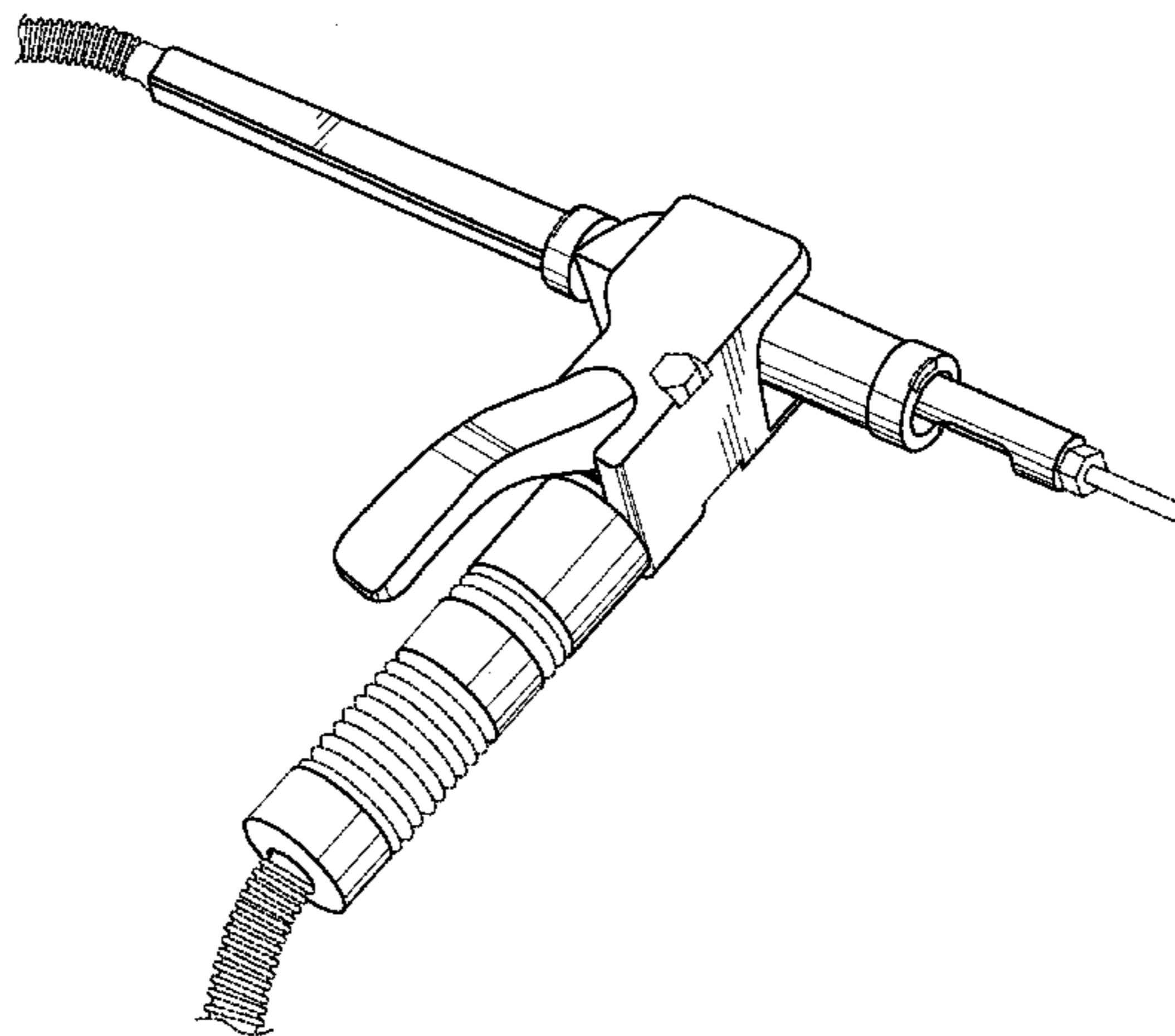
FIG. 10 is a right side view of the welding electrode holder of the embodiment illustrated in FIG. 7;

FIG. 11 is a top view of the welding electrode holder of the embodiment illustrated in FIG. 7; and,

FIG. 12 is a end view of the welding electrode holder of the embodiment illustrated in FIG. 7, the bottom of which is unornamented;

The broken lines shown in the Figures are for illustrative purposes only and form no part of the claimed invention. The cord is shown broken away to indicate that no particular length is claimed.

1 Claim, 12 Drawing Sheets



U.S. PATENT DOCUMENTS

D140,630 S * 3/1945 Garibay D8/54
 2,681,969 A * 6/1954 Burke 219/138
 D174,208 S * 3/1955 Abildgaard D15/144
 2,728,838 A * 12/1955 Barnes 219/138
 2,894,086 A * 7/1959 Rizer 200/51 R
 3,035,155 A * 5/1962 Hawk 219/75
 3,356,823 A * 12/1967 Waters et al. 219/138
 3,654,421 A * 4/1972 Streetman et al. 219/70
 3,866,011 A 2/1975 Cole
 3,867,769 A 2/1975 Schow et al.
 3,904,845 A 9/1975 Minkiewicz
 4,041,615 A 8/1977 Whitehill
 D247,421 S * 3/1978 Driscoll D15/144
 4,124,944 A 11/1978 Blair
 4,132,014 A 1/1979 Schow
 4,237,365 A * 12/1980 Lambros et al. 219/139
 4,452,589 A 6/1984 Denison
 4,611,111 A 9/1986 Baheti et al.
 4,677,277 A 6/1987 Cook et al.
 4,680,014 A 7/1987 Paton et al.
 4,689,021 A 8/1987 Vasiliev et al.
 4,716,273 A 12/1987 Paton et al.
 D297,704 S * 9/1988 Bulow D15/144
 4,867,685 A 9/1989 Brush et al.
 4,897,521 A 1/1990 Burr
 4,907,973 A 3/1990 Hon
 4,931,018 A 6/1990 Herbst et al.
 5,320,538 A 6/1994 Baum
 5,823,785 A 10/1998 Matherne, Jr.
 6,155,928 A 12/2000 Burdick
 D456,428 S * 4/2002 Aronson et al. D15/144
 D456,828 S * 5/2002 Aronson et al. D15/144
 6,506,997 B2 1/2003 Matsuyama
 6,647,288 B2 11/2003 Madill et al.
 6,750,428 B2 6/2004 Okamoto et al.
 7,021,937 B2 4/2006 Simpson et al.
 D555,446 S * 11/2007 Picaza Ibarondo D8/30
 7,414,595 B1 8/2008 Muffler
 7,465,230 B2 12/2008 LeMay et al.
 D587,975 S * 3/2009 Aronson et al. D8/29.1
 2002/0032553 A1 3/2002 Simpson et al.
 2003/0172032 A1 9/2003 Choquet
 2004/0050824 A1 * 3/2004 Samler 219/75
 2005/0189336 A1 * 9/2005 Ku 219/138

2005/0275913 A1 12/2005 Vesely et al.
 2005/0275914 A1 12/2005 Vesely et al.
 2006/0136183 A1 6/2006 Choquet
 2006/0258447 A1 11/2006 Baszucki et al.
 2007/0198117 A1 8/2007 Wajihuddin
 2008/0038702 A1 2/2008 Choquet
 2008/0128398 A1 * 6/2008 Schneider 219/141
 2008/0233550 A1 9/2008 Solomon
 2010/0012637 A1 * 1/2010 Jaeger 219/136

OTHER PUBLICATIONS

White, et al., Virtual welder trainer, 2009 IEEE Virtual Reality Conference, p. 303, 2009.
 Mavrikios et al., A prototype virtual reality-based demonstrator for immersive and interactive simulation of welding processes, International Journal of Computer Integrated Manufacturing, vol. 19, Issue 3, Apr. 3, 2006, p. 264-300.
 N.A. Tech., P/NA.3 Process Modelling and Optimization, 11 pages, Jun. 4, 2008.
 FH Joanneum, Fronius—virtual welding, 2 pages, May 12, 2008.
 Arc Simulation & Certification, Weld Into The Future, 6 pages, May 2008.
 CS Wave, A Virtual learning tool for the welding motion, 10 pages, Mar. 14, 2008.
 The Fabricator, Virtual Welding, 4 pages, Mar. 2008.
 NSRP ASE, Low-Cost Virtual Reality Welder Training System, 1 page, 2008.
 Edison Welding Institute, E-Weld Predictor, 3 pages, 2008.
 CS Wave, The Virtual Welding Trainer, 6 pages, 2007.
 ASCIENCETUTOR.COM, A division of Advanced Science and Automation Corp., VWL (Virtual Welding Lab), 2 pages, 2007.
 Cooperative Research Program, Virtual Reality Welder Training, Summary Report SR0512, 4 pages, Jul. 2005.
 Porter, et al., Virtual Reality Welder Training, Paper No. 2005-P19, 14 pages, 2005.
 Arc Simulation & Certification, Weld Into the Future, 4 pages, 2005.
 ARS Electronica Linz GmbH, Fronious, 2 pages, May 18, 1997.
 Simfor / Cesol, "RV-Sold" Welding Simulator, Technical and Functional Features, 20 pages, no date available.
 U.S. Appl. No. 12/501,263, filed Jul. 10, 2009.
 U.S. Appl. No. 12/501,257, filed Jul. 10, 2009.
 U.S. Appl. No. 29/339,979, filed Jul. 10, 2009.
 U.S. Appl. No. 29/339,978, filed Jul. 10, 2009.

* cited by examiner

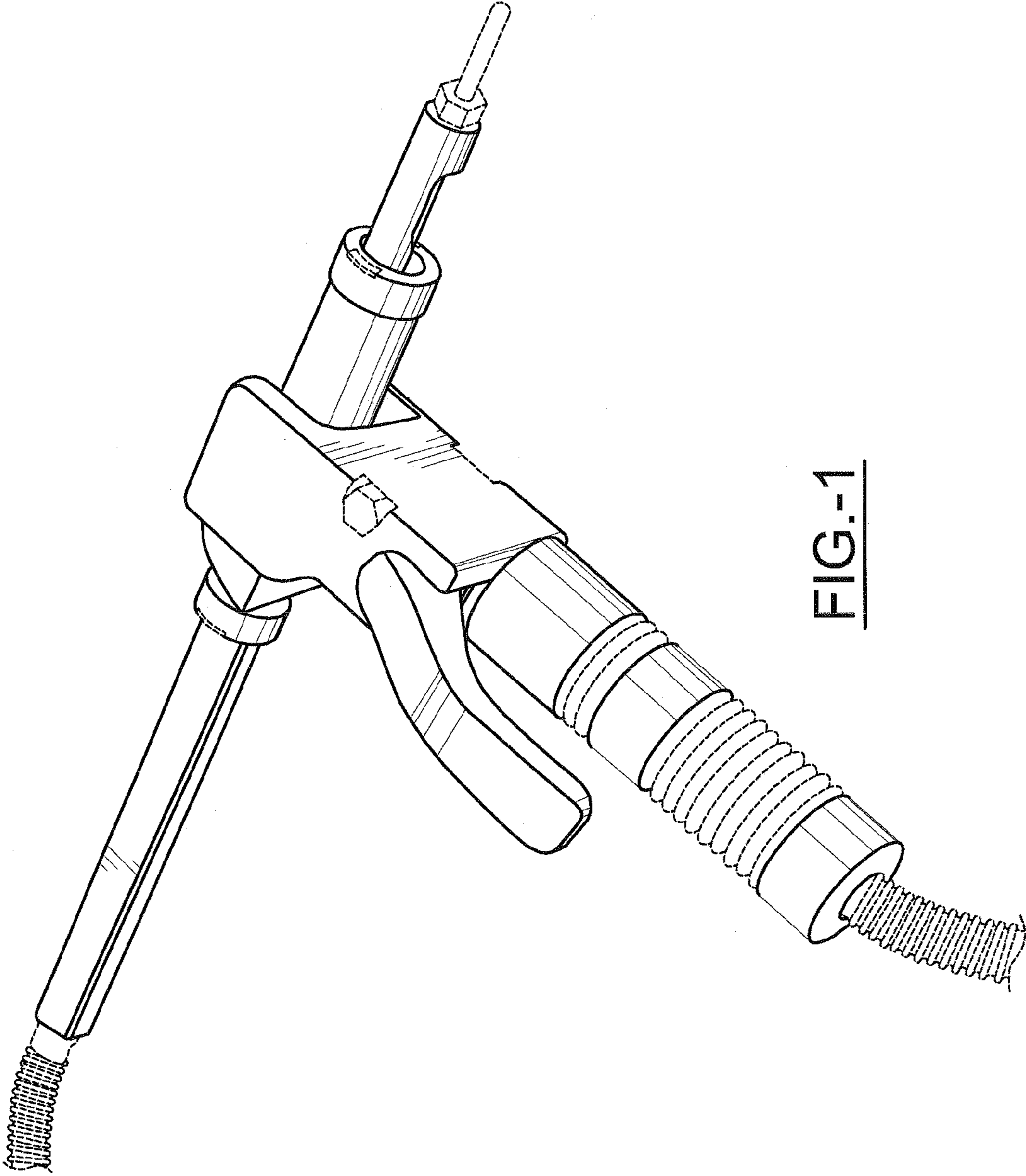


FIG.-1

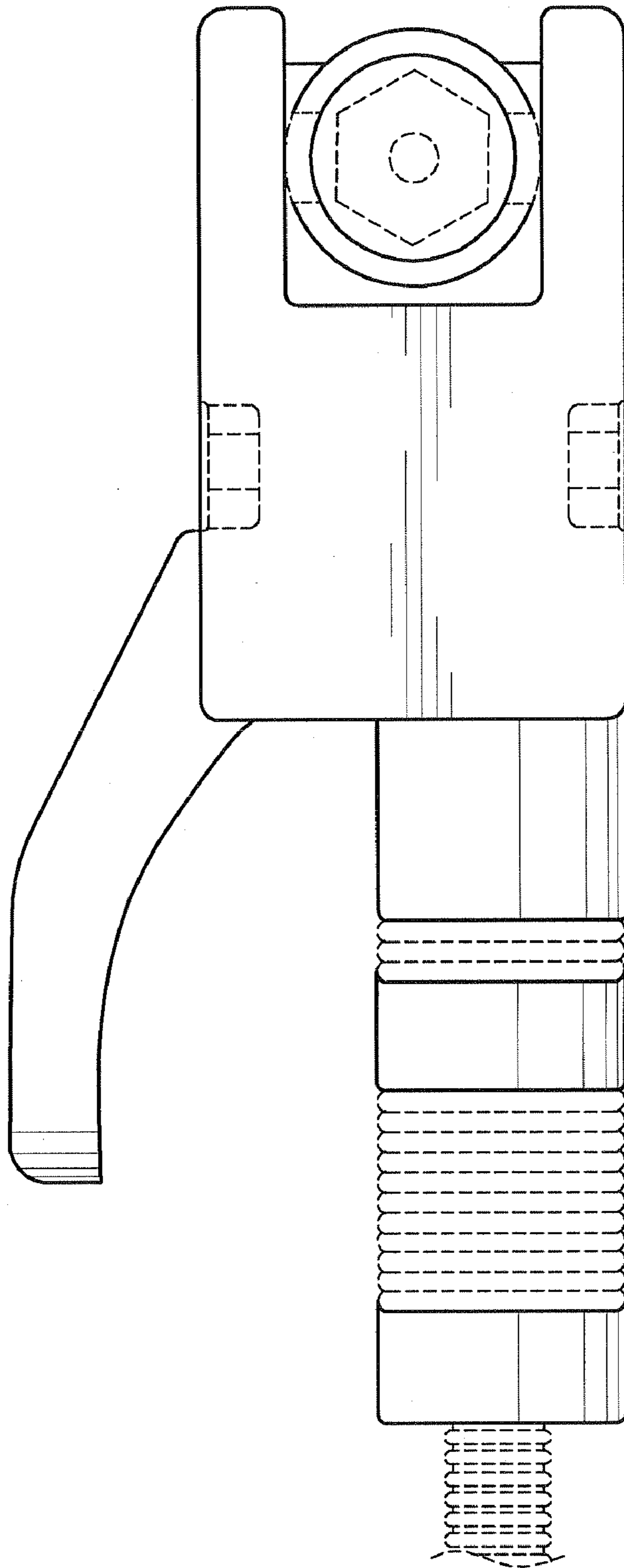


FIG.-2

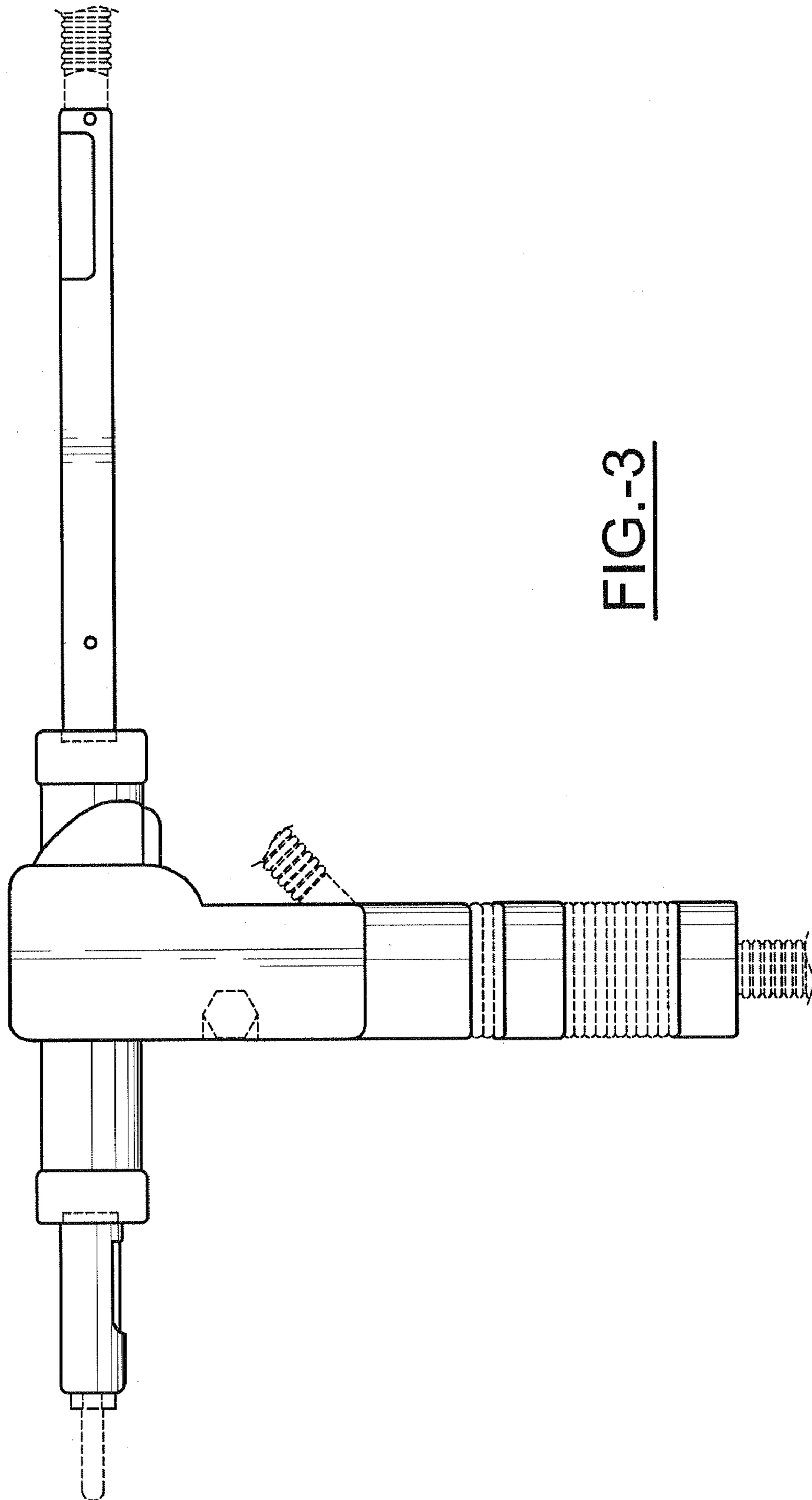


FIG.-3

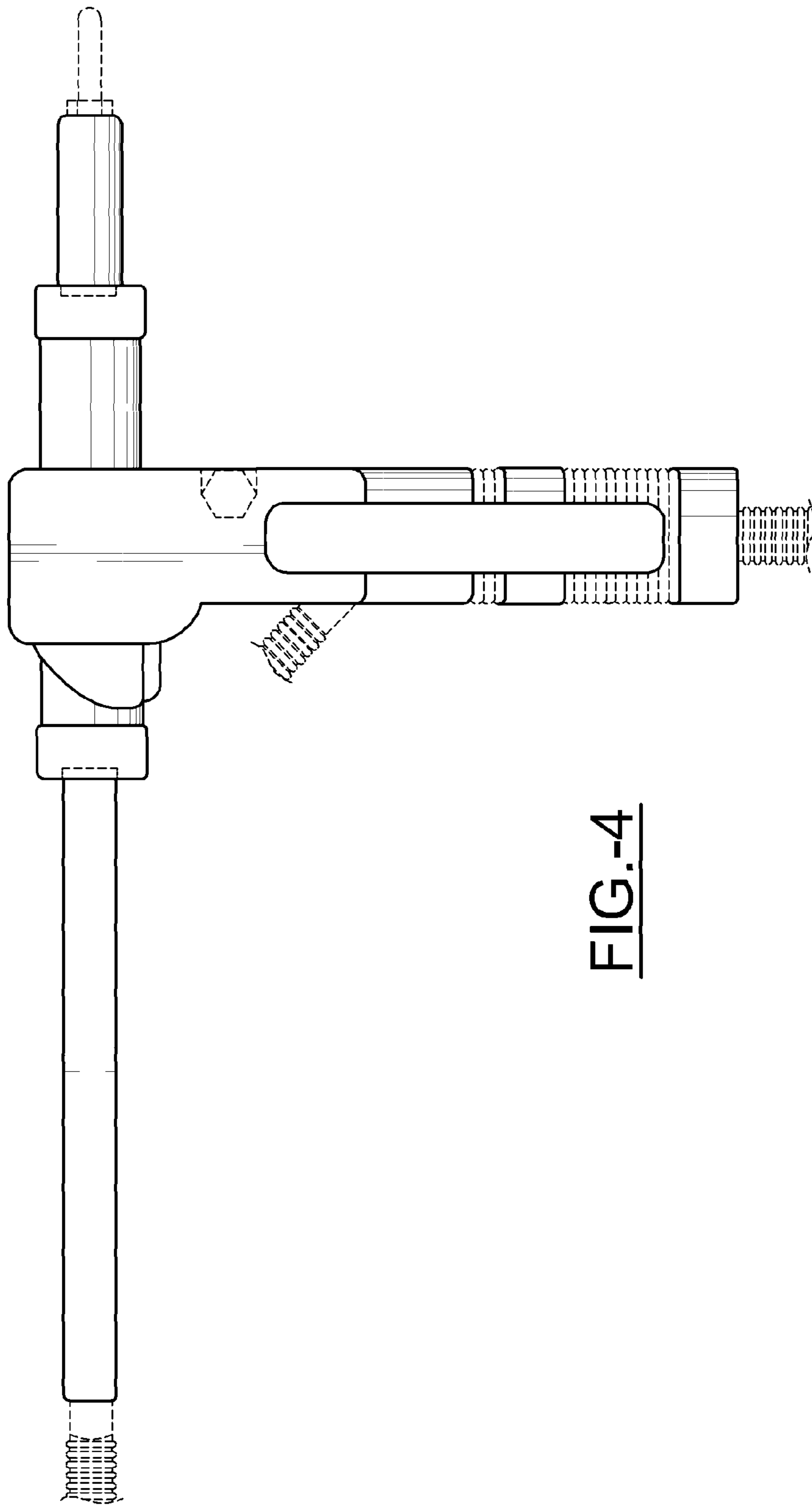


FIG.-4

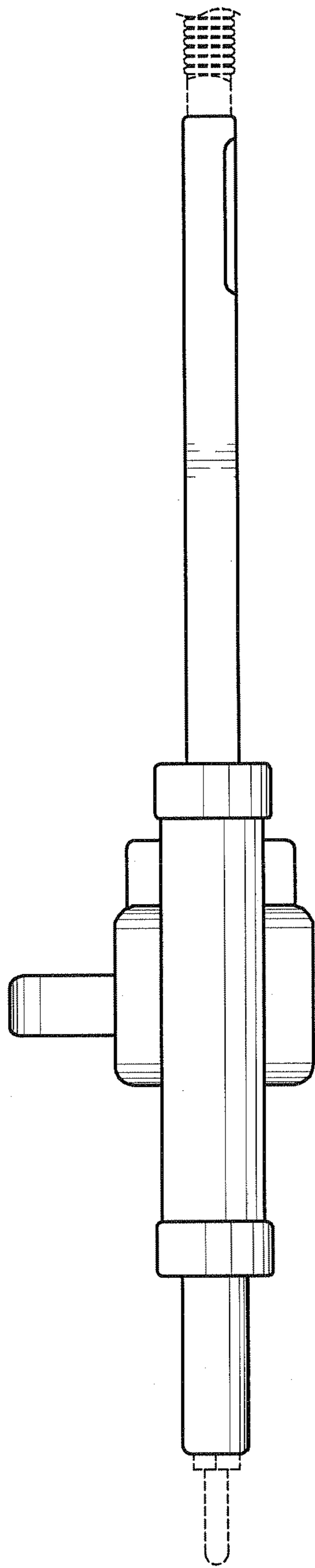


FIG.-5

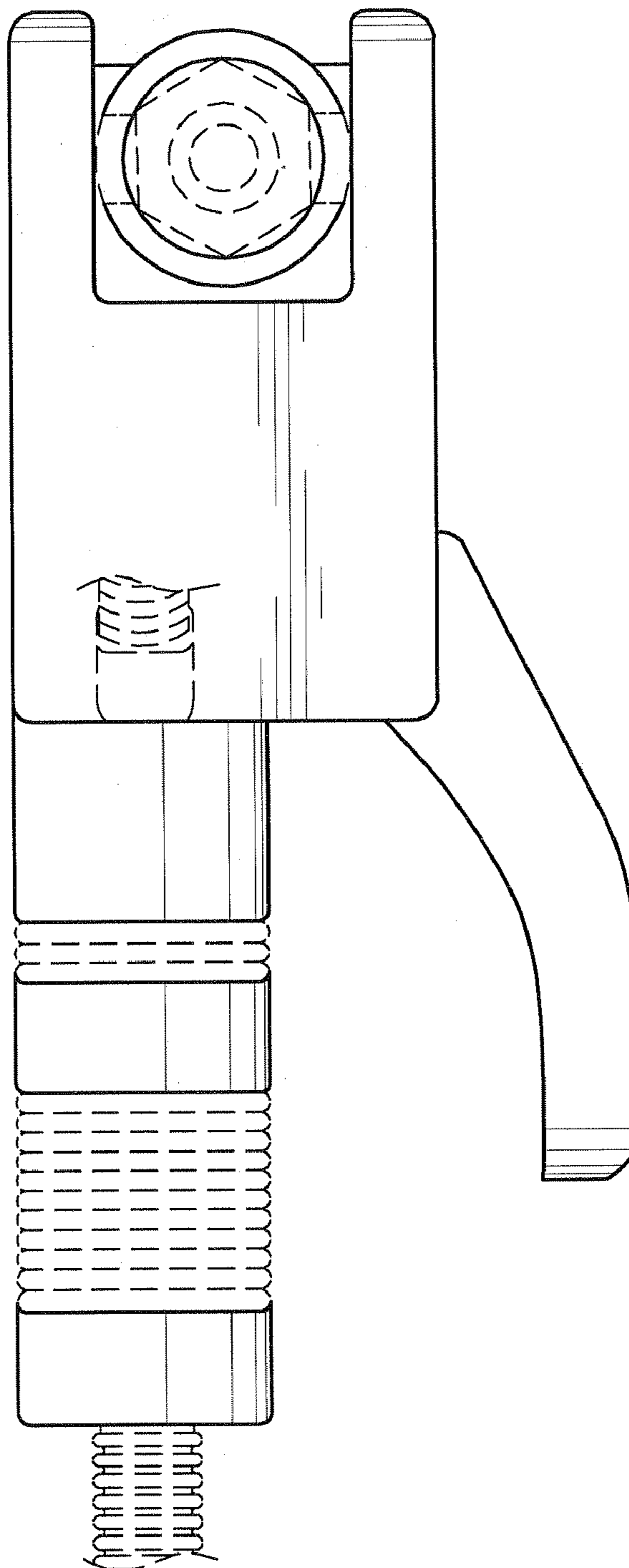


FIG.-6

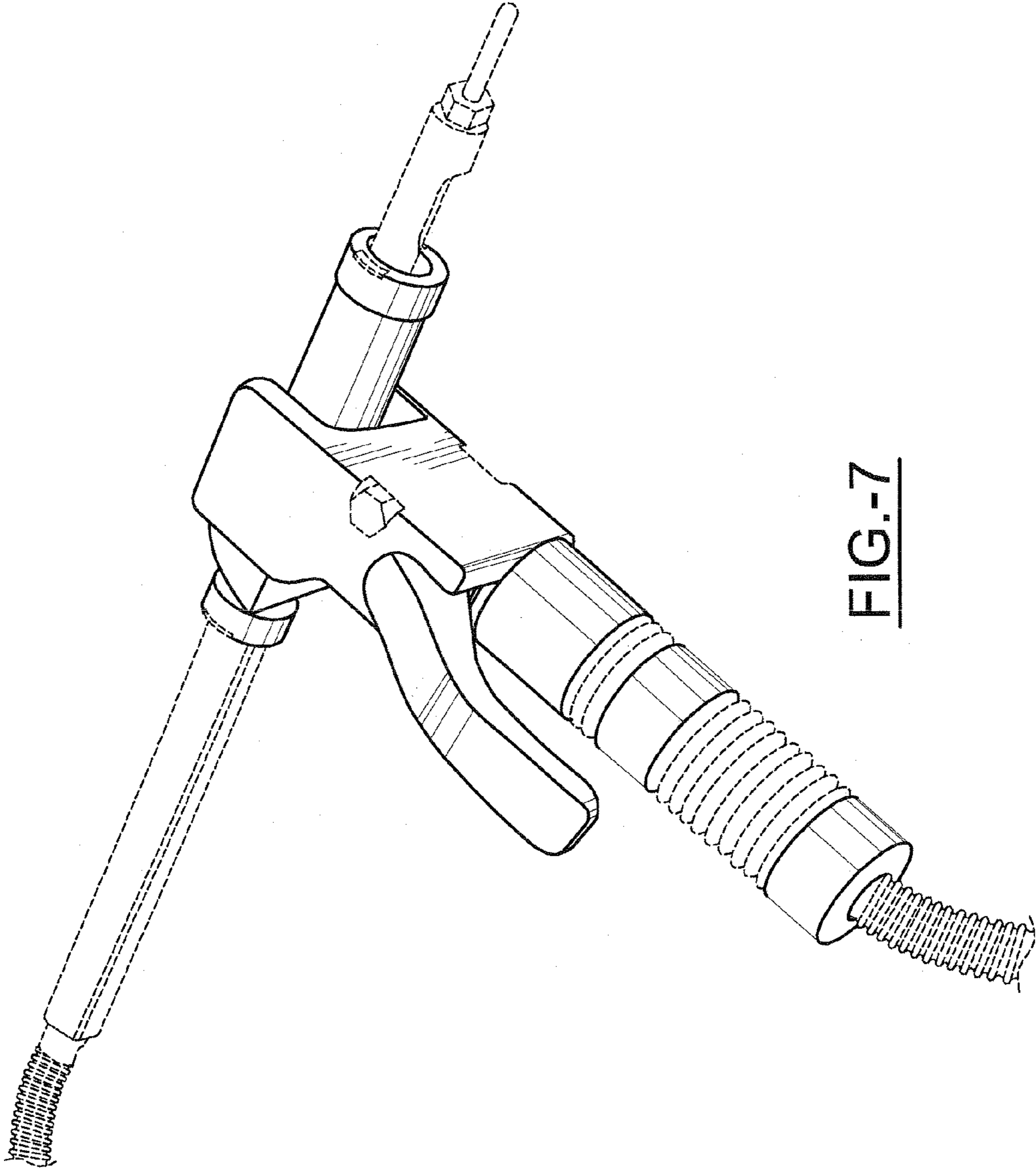


FIG.-7

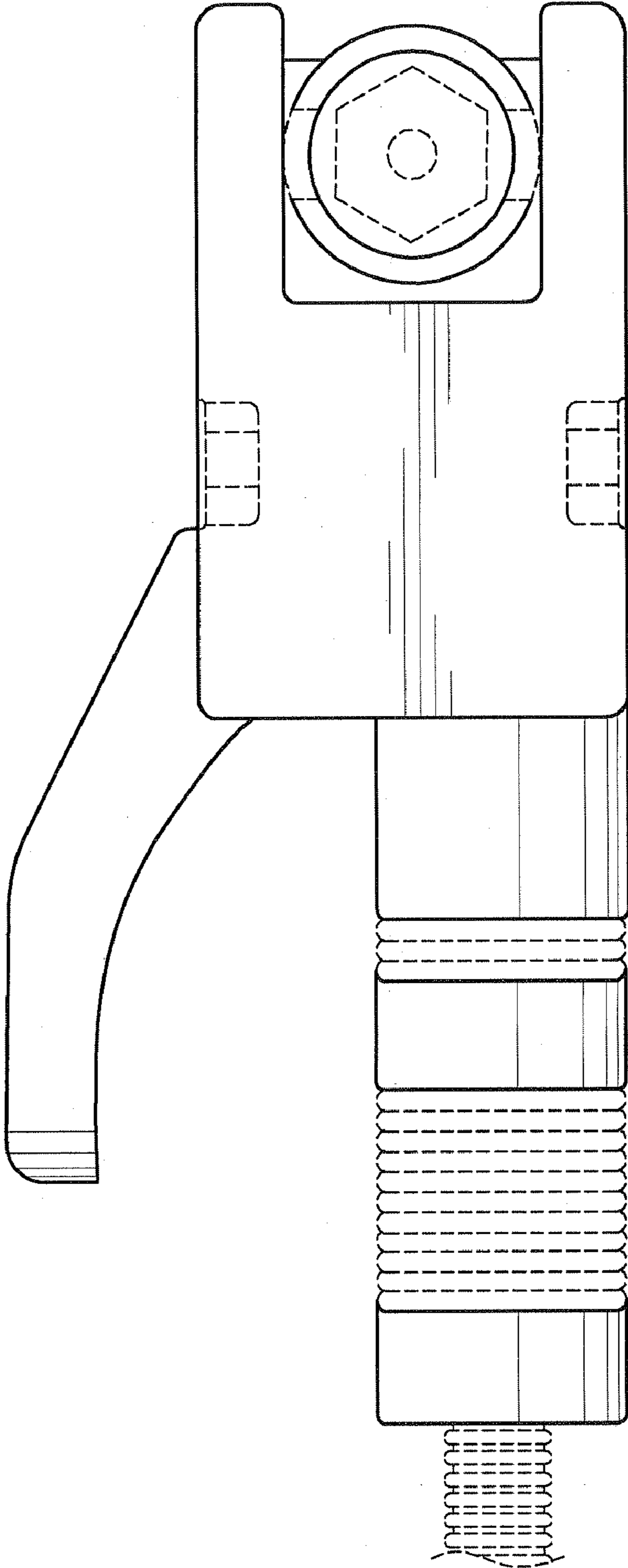


FIG.-8

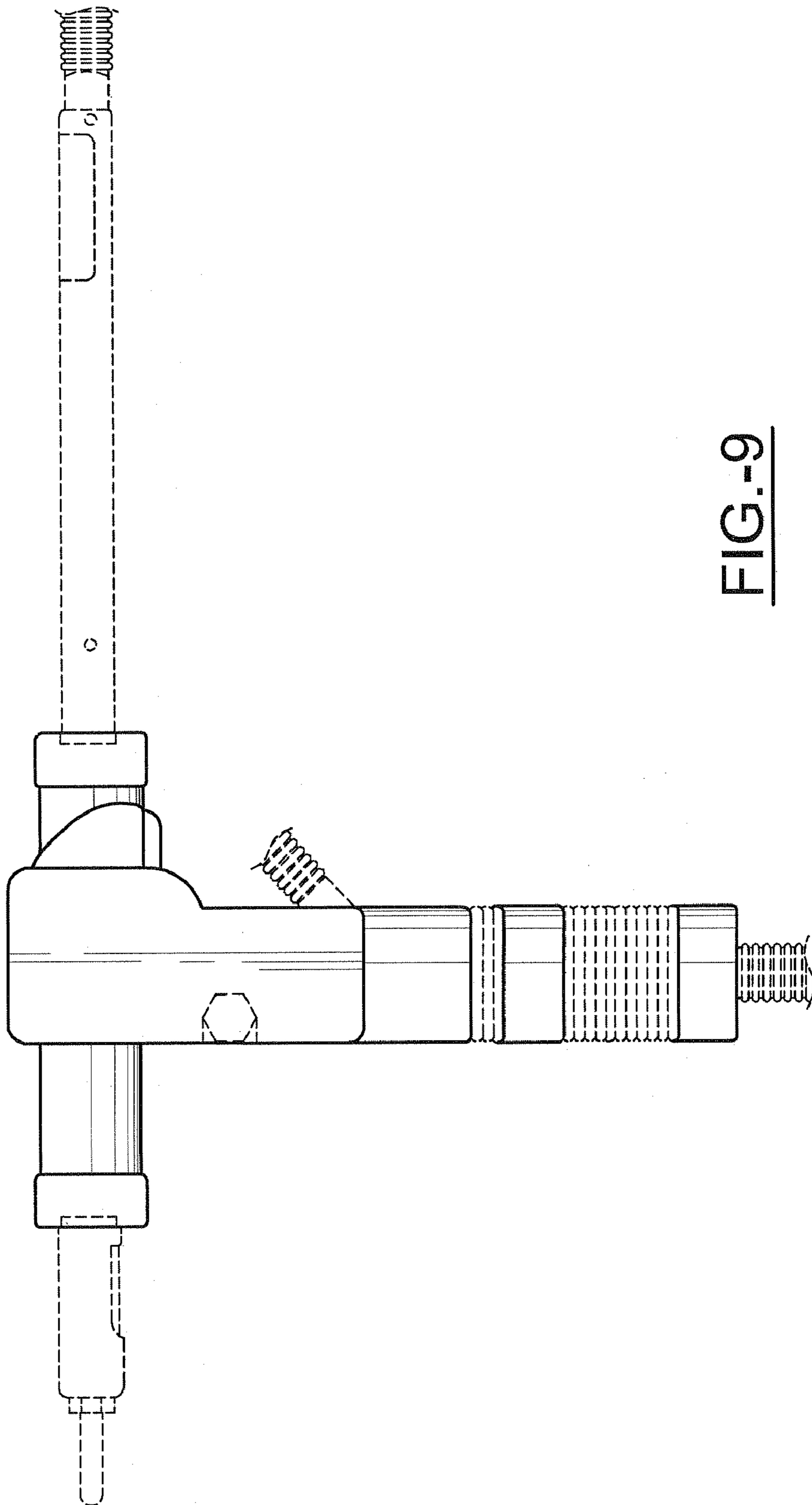


FIG.-9

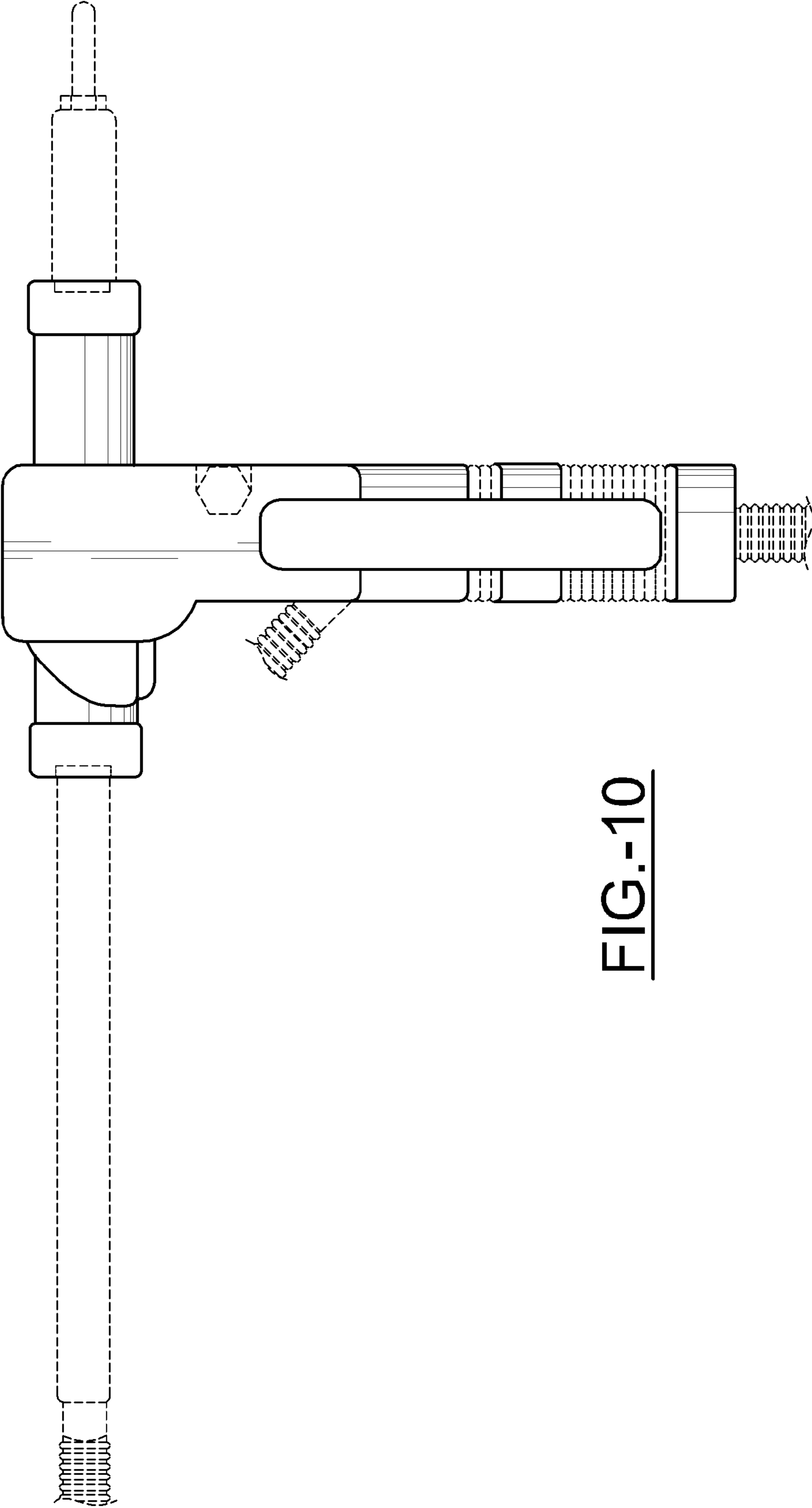


FIG.-10

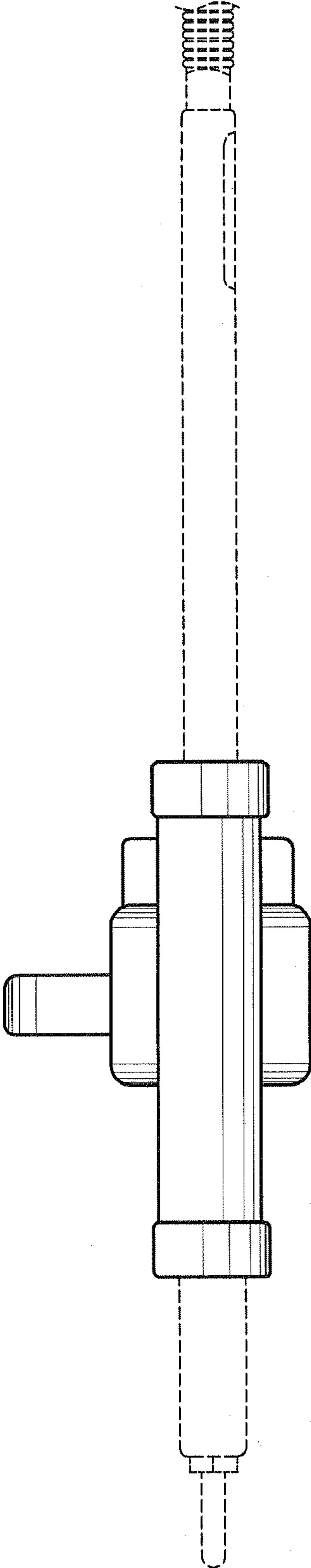


FIG.-11

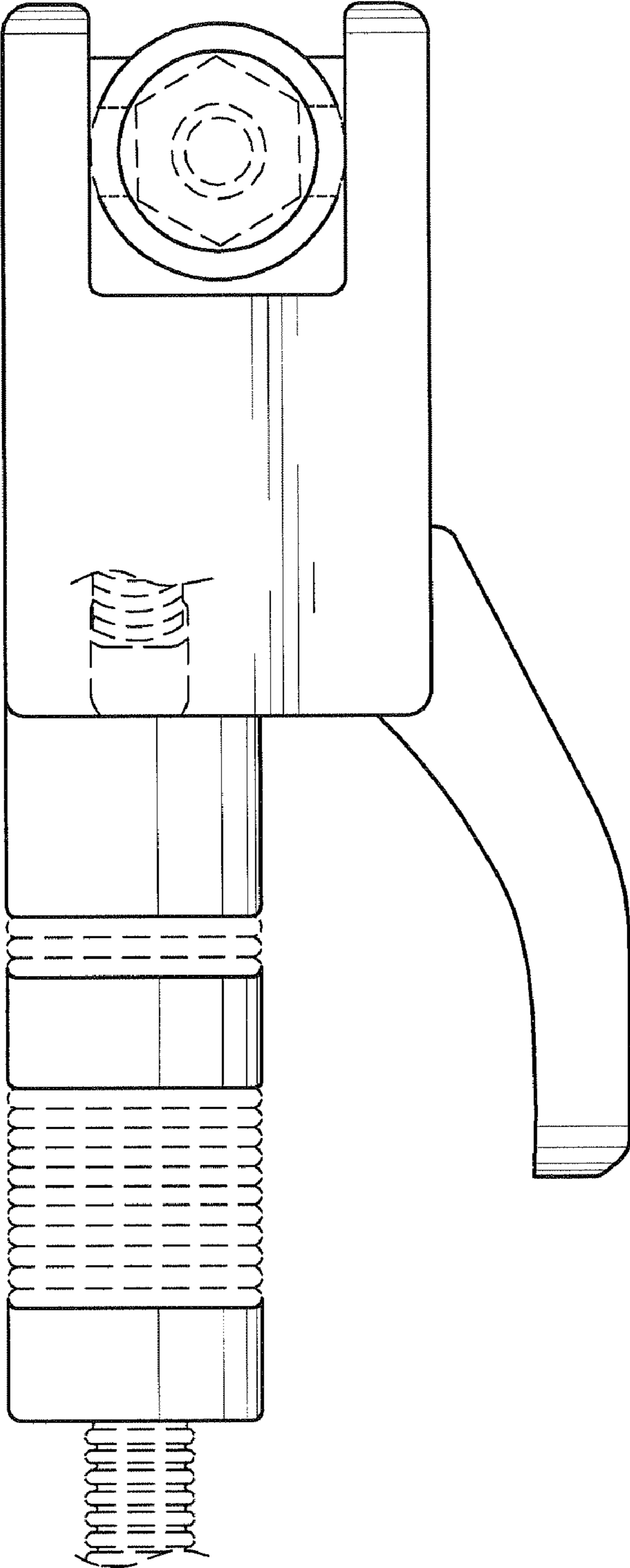


FIG.-12