



US00D774863S

(12) **United States Design Patent** (10) **Patent No.:** **US D774,863 S**
Naksen et al. (45) **Date of Patent:** **** Dec. 27, 2016**

(54) **IMPACT TOOL**

(71) Applicant: **Ingersoll-Rand Company**, Davidson, NC (US)

(72) Inventors: **Dennis Naksen**, Summit, NJ (US); **Scott David Price**, Lebanon, NJ (US); **Joshua Odell Johnson**, Allentown, PA (US); **Jason Christopher Bartoszek**, Bethlehem, PA (US); **Douglas Fornell Leavitt**, Bethlehem, PA (US); **Sean C. Ely**, Flemington, NJ (US); **Thomas S. Dougherty**, Nazareth, PA (US)

(73) Assignee: **Ingersoll-Rand Company**, Davidson, NC (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/530,572**

(22) Filed: **Jun. 17, 2015**

(51) **LOC (10) Cl.** **08-05**

(52) **U.S. Cl.**
USPC **D8/68**

(58) **Field of Classification Search**
USPC ... D8/61, 67, 68; 81/57.4, 489; 173/48, 109, 173/170, 178, 217; 408/124, 125; 362/119; 475/149

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D339,726 S 9/1993 Bruno et al.
D388,678 S 1/1998 Bantly et al.

(Continued)

OTHER PUBLICATIONS

“Wel-Blt: ½in. Air Impact Wrench User’s Manual.” Northern Tool., Apr. 13, 2010 [online], [retrieved on Jul. 8, 2016]. Retrieved from the Internet <URL: <http://www.northerntool.com/images/downloads/manuals/139270.pdf>>.*

(Continued)

Primary Examiner — Darlington Ly

(74) *Attorney, Agent, or Firm* — Barnes & Thornburg LLP

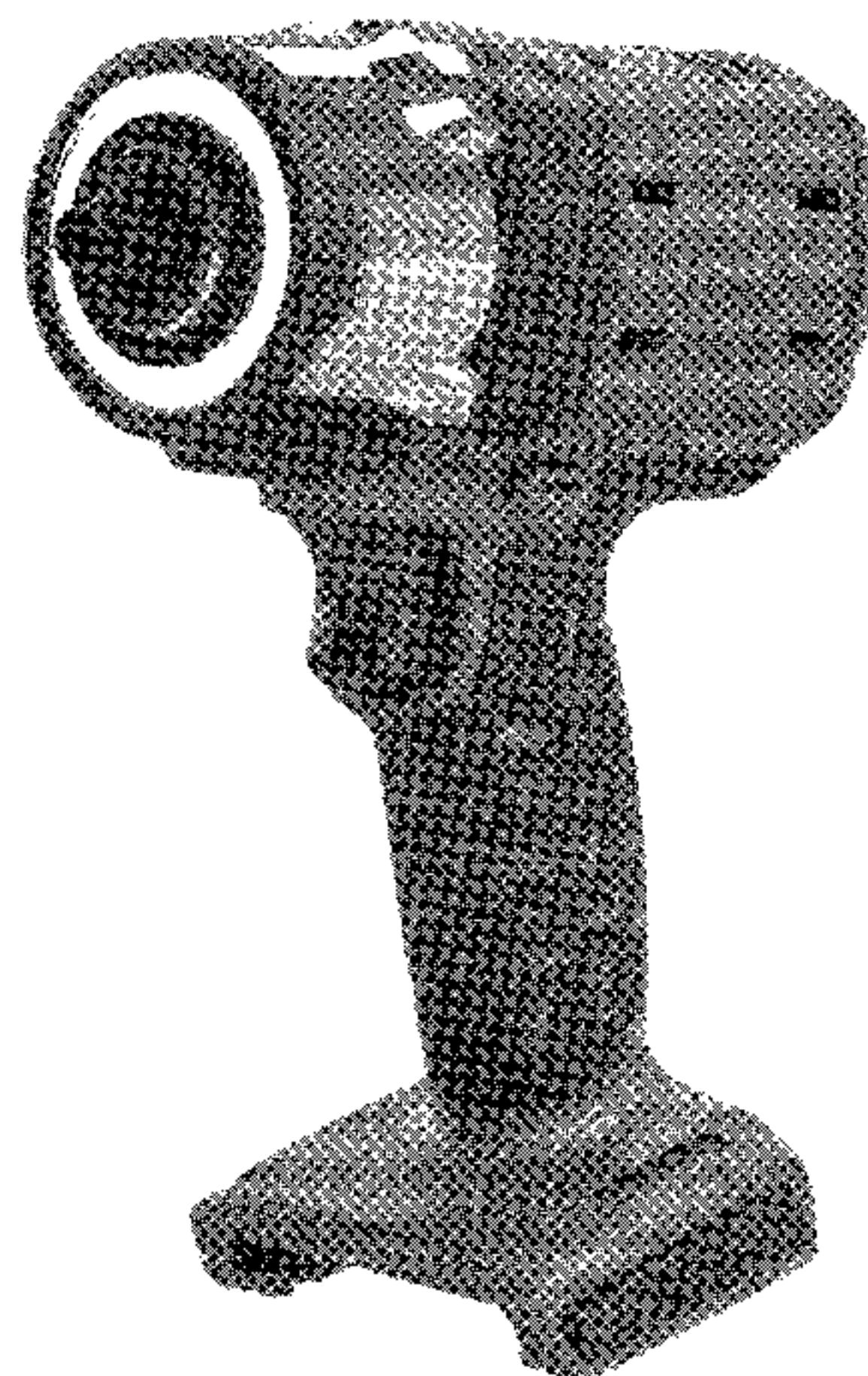
(57) **CLAIM**

The ornamental design for an impact tool, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a first embodiment of a design of an impact tool;
FIG. 2 is a rear perspective view thereof;
FIG. 3 is a front elevation view thereof;
FIG. 4 is a rear elevation view thereof;
FIG. 5 is a right side elevation view thereof;
FIG. 6 is a left side elevation view thereof; and
FIG. 7 is a top plan view thereof.
FIG. 8 is a front perspective view of a second embodiment of a design of an impact tool;
FIG. 9 is a rear perspective view thereof;
FIG. 10 is a front elevation view thereof;
FIG. 11 is a rear elevation view thereof;
FIG. 12 is a right side elevation view thereof;
FIG. 13 is a left side elevation view thereof; and
FIG. 14 is a top plan view thereof.
FIG. 15 is a front perspective view of a third embodiment of a design of an impact tool;
FIG. 16 is a rear perspective view thereof;
FIG. 17 is a front elevation view thereof;
FIG. 18 is a rear elevation view thereof;
FIG. 19 is a right side elevation view thereof;
FIG. 20 is a left side elevation view thereof; and
FIG. 21 is a top plan view thereof.
FIG. 22 is a front perspective view of a fourth embodiment of a design of an impact tool;
FIG. 23 is a rear perspective view thereof;
FIG. 24 is a front elevation view thereof;
FIG. 25 is a rear elevation view thereof;
FIG. 26 is a right side elevation view thereof;
FIG. 27 is a left side elevation view thereof; and
FIG. 28 is a top plan view thereof.

1 Claim, 28 Drawing Sheets



- (58) **Field of Classification Search**
 CPC B25B 21/02; B25D 11/00; B25D 11/12;
 B25D 16/00; B25D 17/24; B25D 17/043
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D393,580	S *	4/1998	Bantly	D8/68
D393,581	S	4/1998	McCallops et al.	
5,918,686	A *	7/1999	Izumisawa	B25B 21/00 173/169
6,062,323	A *	5/2000	Pusateri	B25B 21/00 173/169
D434,297	S	11/2000	Iritani et al.	
D434,958	S *	12/2000	Izumisawa	D8/68
D441,628	S *	5/2001	Bass	D8/68
D476,210	S *	6/2003	Chen	D8/68
D477,512	S *	7/2003	Liu	D8/68
D477,761	S *	7/2003	Liu	D8/68
D477,977	S *	8/2003	Liu	D8/68
D482,947	S *	12/2003	Lin	D8/68
D489,240	S	5/2004	Bartfeld et al.	
D493,085	S *	7/2004	Copeland, II	D8/68
D496,243	S *	9/2004	Huang	D8/68
D497,529	S *	10/2004	Price	D8/68
D497,787	S *	11/2004	Liao	D8/68
D505,055	S	5/2005	Nagasaka et al.	
D508,642	S	8/2005	Kokawa et al.	
D519,807	S *	5/2006	Chen	D8/68
D534,048	S	12/2006	Tsai et al.	
7,191,849	B2 *	3/2007	Chen	B25F 5/00 173/168
D565,375	S	4/2008	Shi	
D571,177	S	6/2008	Price et al.	
D572,991	S *	7/2008	Chen	D8/68
D584,124	S	1/2009	Price et al.	
D585,714	S	2/2009	Okuda et al.	
D590,226	S *	4/2009	Chu	D8/68
D590,680	S *	4/2009	Cole	D8/68
D591,127	S *	4/2009	Taga	D8/68
D592,479	S	5/2009	Price et al.	
D596,007	S	7/2009	Price et al.	
D614,468	S	4/2010	Aglassinger	
D617,622	S *	6/2010	Lopano	D8/68
D629,271	S *	12/2010	Dunkin	D8/68
D655,994	S	3/2012	Schoch	
D656,804	S	4/2012	Murray	
D664,413	S *	7/2012	Steinfels	D8/68
D672,627	S	12/2012	Kawase et al.	
D677,136	S	3/2013	Davis	
D678,025	S	3/2013	Naksen et al.	
D691,444	S	10/2013	Tirone et al.	
D707,522	S	6/2014	Naksen	
D712,714	S	9/2014	Lawson et al.	
D716,125	S *	10/2014	Yaschur	D8/68
2006/0102367	A1	5/2006	Etter et al.	
2009/0038816	A1 *	2/2009	Johnson	B25B 21/026 173/109
2012/0061117	A1	3/2012	Nagasaka et al.	
2014/0367130	A1 *	12/2014	Dougherty	B25B 21/026 173/1

OTHER PUBLICATIONS

“Kobalt—½ in. Air Impact Wrench.” Lowes., Jul. 26, 2012 [online], [retrieved on Jul. 8, 2016]. Retrieved from the Internet <URL: http://pdf.lowes.com/useandcareguides/879686003434_use.pdf>.*

“Kawasaki—½ Inch H. D. Air Impact Wrench Instruction Manual.” Kawasaki., Jul. 26, 2012 [online], [retrieved on Jul. 8, 2016]. Retrieved from the Internet <URL: http://pdf.lowes.com/useandcareguides/879686003434_use.pdf>.*

“Air Impact Wrench Guide.” Dec. 13, 2014 [online], [retrieved on Jul. 8, 2016]. Retrieved from the Internet <URL: <http://airimpactwrenchguide.com/air-impact-wrench-reviews/>>.*

Ingersoll Rand. W5001 Series 20V Mid-Torque Impacttools. Convenience of Cordless. High-Cycle Durability. Electronic Brochure. Mar. 22, 2013 [online], [retrieved on Nov. 8, 2013]. Retrieved from the Internet <URL: http://www.ingersollrandproducts.com/lpg/w7150/I_R_IT1_3003_W5001_Sniper_Industrial_Broch_8singles.pdf>.

Matador Pneumatic Tools. Powered screw tightening. Electronic Brochure. Mar. 31, 2013 [on line], [retrieved on Nov. 8, 2013]. Retrieved from the Internet <URL: <http://www.matador.de/fileadmin/pdf/MATADOR%20E%2004%20Pneumatic%20Tools.pdf>>.

“Ingersoll Rand—2135TiMAX ½" Air Impacttool—Maximum Impact”. Ingersoll Rand Products., Aug. 3, 2007 [online], [retrieved on Mar. 10, 2014]. Retrieved from the Internet <URL: http://www.ingersollrandproducts.com/2135timax/downloads/I_RPS0295_2135_sped1_O_VSS.pdf>.

“Ingersoll Rand Air Impact Wrenches”. Fastenal.com., Mar. 23, 2007 [online], [retrieved on Mar. 10, 2014]. Retrieved from the Internet <URL: http://www.fastenal.com/catalog_pages/2007/5-74.pdf>.

Ingersoll-Rand Co., “W7150 ½" 20V High-Torque Impacttool,” available at http://fileserver.ingersollrand.com/Documentlibrary/IRIT12011_W7150Brochure_F3_LR_Warranty.pdf, 2012, 6 pages.

Techway Industrial Co., “Impact Wrenches,” available at www.asianproducts.com/mcg/5641_A10810708932216_0_1/impact-wrenches.html, 2 pages.

Ingersoll-Rand Co., “2135TiMAX Series/ Impact Wrenches,” available at <http://www.ingersollrandproducts.com/am-en/products/tools/impacttools/maintenance-automotive-impacttools/1-2-drive/2135timax-series>, 2 pages.

Ingersoll-Rand Co., “IQV20 Series Cordless Tools,” available at http://www.ingersollrandproducts.com/am-en/products/tools/new-tools/I_QV20-Cordless-Tools, 2 pages.

Ingersoll-Rand Co., “½" Impacttools /Impact Wrenches,” available at <http://www.ingersollrandproducts.com/am-en/products/tools/impacttools/maintenance-automotive-impacttools/1-2-drive>, 1 page.

Milwaukee Electric Tool Co., “M12 Fuel ¼" Hex Impact Driver,” available at <http://www.milwaukeetool.com/power-tools/cordless/2453-20>, 2 pages.

Milwaukee Electric Tool Co., “M12 Fuel ¼" Impact Wrench,” available at <http://www.milwaukeetool.com/power-tools/cordless/2452-20>, 2 pages.

Milwaukee Electric Tool Co., “M12 Fuel ⅜" Impact Wrench,” available at <http://www.milwaukeetool.com/power-tools/cordless/2454-20>, 2 pages.

Makita U.S.A., Inc., “Impact Drivers,” available at <http://www.makitausa.com/en-us/Modules/Tools/Default.aspx?CatID=5>, 2 pages.

Dewalt Industrial Tool Co., “DCF813S2 12V Max* ⅜" Impact Wrench Kit,” available at <http://www.dewalt.com/tools/cordless-impact-driverswrenches-drivers--wrenches-dcf813s2.aspx>, 2 pages.

Dewalt Industrial Tool Co., “DCF815S2 12V Max* ¼" Impact Driver Kit,” available at <http://www.dewalt.com/tools/cordless-impact-driverswrenches-drivers--wrenches-dcf815s2.aspx>, 2 pages.

Milwaukee Electric Tool Co., “M18 ⅜" Compact Impact Wrench with Friction Ring (Bare Tool),” available at <http://www.milwaukeetool.com/power-tools/cordless/2651-20>, 2 pages.

Milwaukee Electric Tool Co., “M18 Fuel ⅜" Impact Wrench with Friction Ring (Bare Tool),” available at <http://www.milwaukeetool.com/power-tools/cordless/2654-20>, 2 pages.

Dewalt Industrial Tool Co., “DCF883B 20V Max* Lithium Ion ⅜" Impact Wrench,” available at <http://www.dewalt.com/tools/cordless-impact-driverswrenches-drivers--wrenches-dcf883b.aspx>, 2 pages.

Dewalt Industrial Tool Co., “DC823B ⅜" (9.5mm) 18V Cordless Impact Wrench,” available at <http://www.dewalt.com/tools/cordless-impact-driverswrenches-drivers--wrenches-dc823b.aspx>, 2 pages.

Dewalt Industrial Tool Co., “DC841KA ⅜" (9.5mm) 12V Cordless XRP Impact Wrench Kit,” available at <http://www.dewalt.com/tools-discontinued/cordless-impact-driverswrenches-drivers-wrenches-dc841ka.aspx>, 2 pages.

(56)

References Cited

OTHER PUBLICATIONS

Makita U.S.A., Inc., "18V LXT Lithium-Ion Cordless 3/8" Impact Wrench, Tool Only, Model XWT06Z," available at <http://makitatools.com/en-us/Modules/Tools/ToolDetails.aspx?Name=XWT06Z>, 2 pages.

Makita U.S.A., Inc., "12V max Lithium-Ion Cordless 3/8" Impact Wrench, Tool Only, Model WT01ZW" available at <http://makitatools.com/en-us/Modules/Tools/ToolDetails.aspx?Name=WT01ZW>, 2 pages.

Makita U.S.A., Inc., "Makita BTW253Z 18V LXT Lithium-Ion Cordless 3/8" IMakita Act Wrench, Tool Only," available at http://www.autotoolworld.com/Makita-BTW253Z-18V-LXT-Lithium-Ion-Cordless-38-IMakita-Act-Wrench-Tool-Only_p_153179.html, 2 pages.

* cited by examiner



FIG. 1



FIG. 2

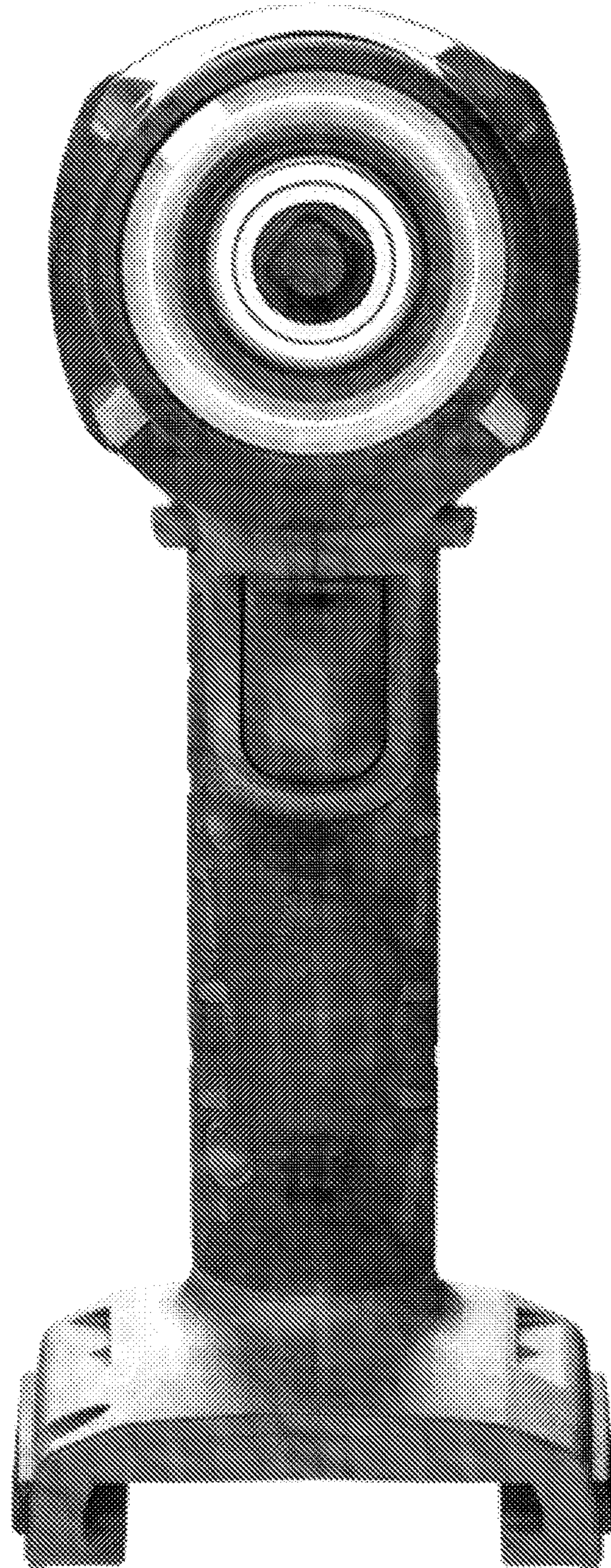


FIG. 3

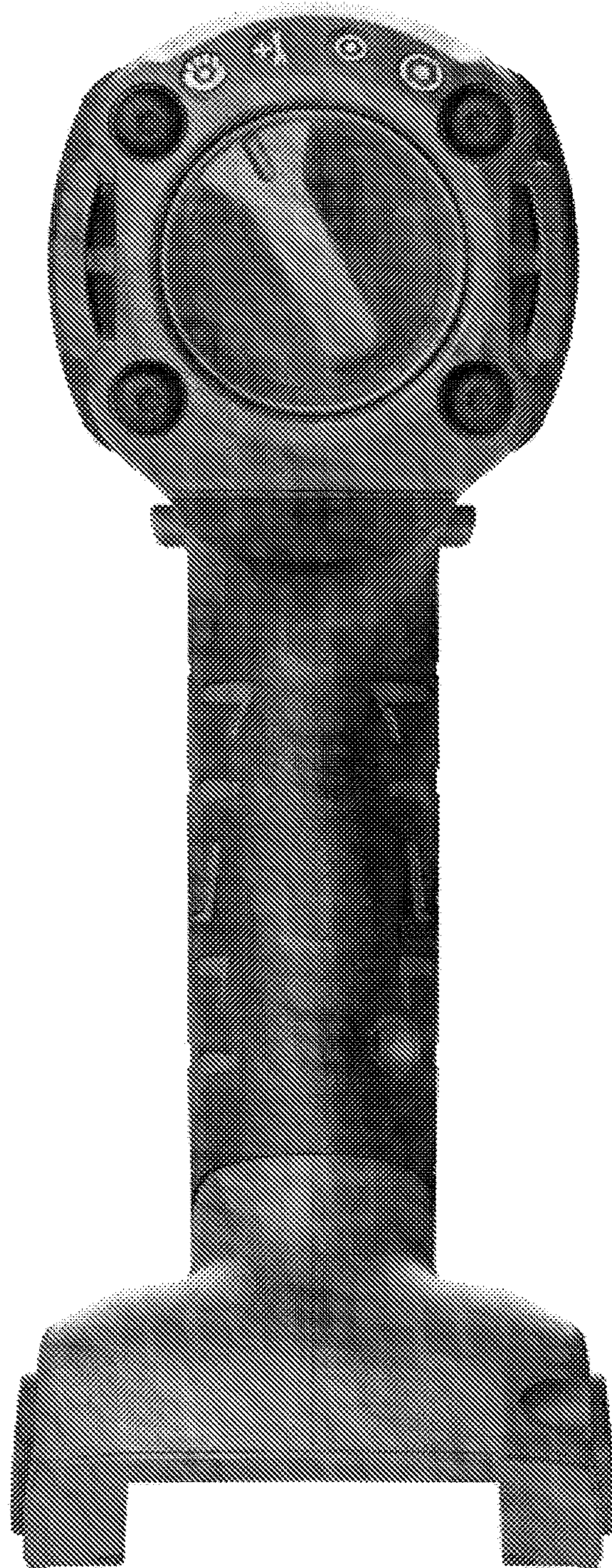


FIG. 4



FIG. 5



FIG. 6

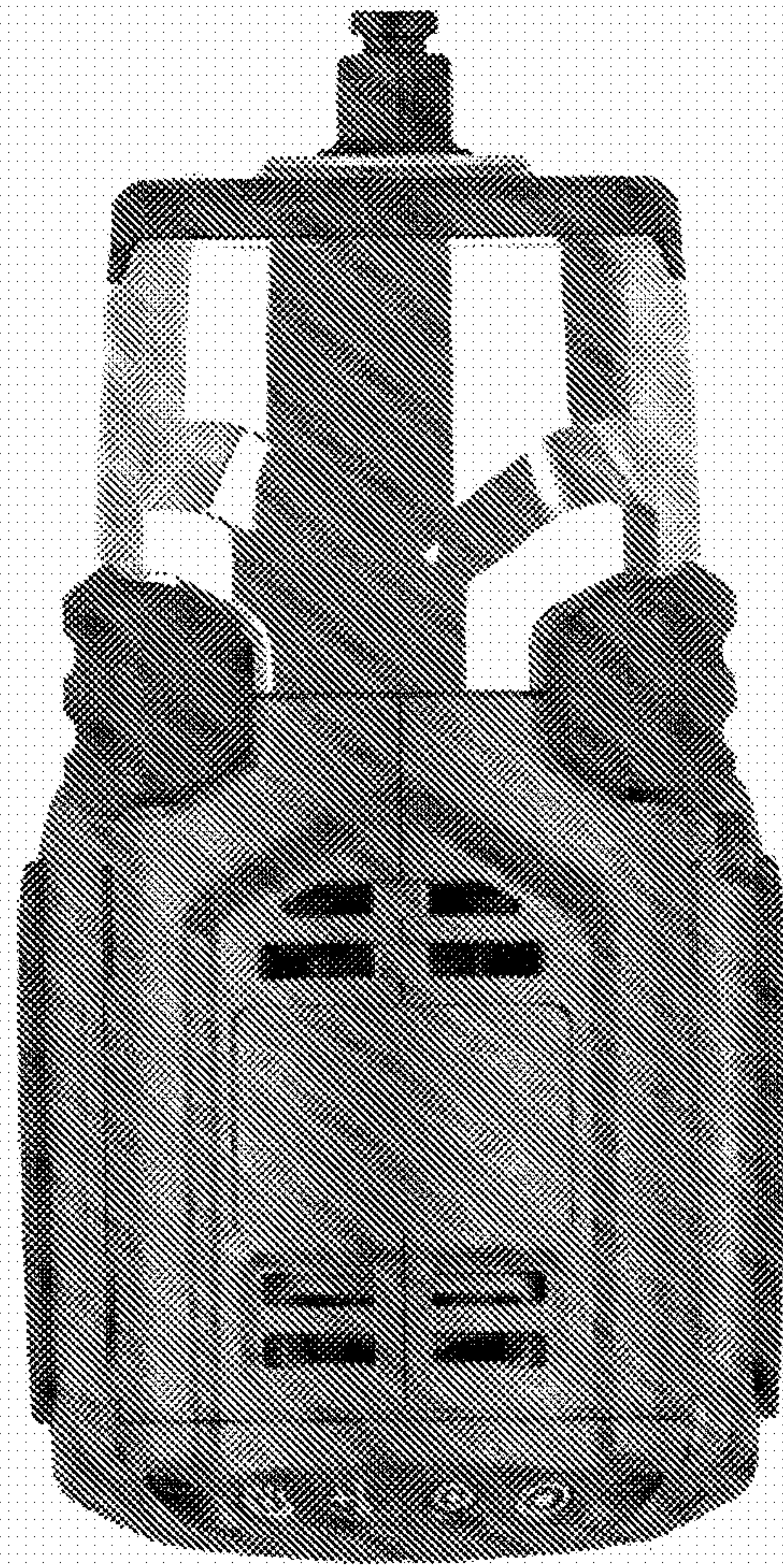


FIG. 7



FIG. 8

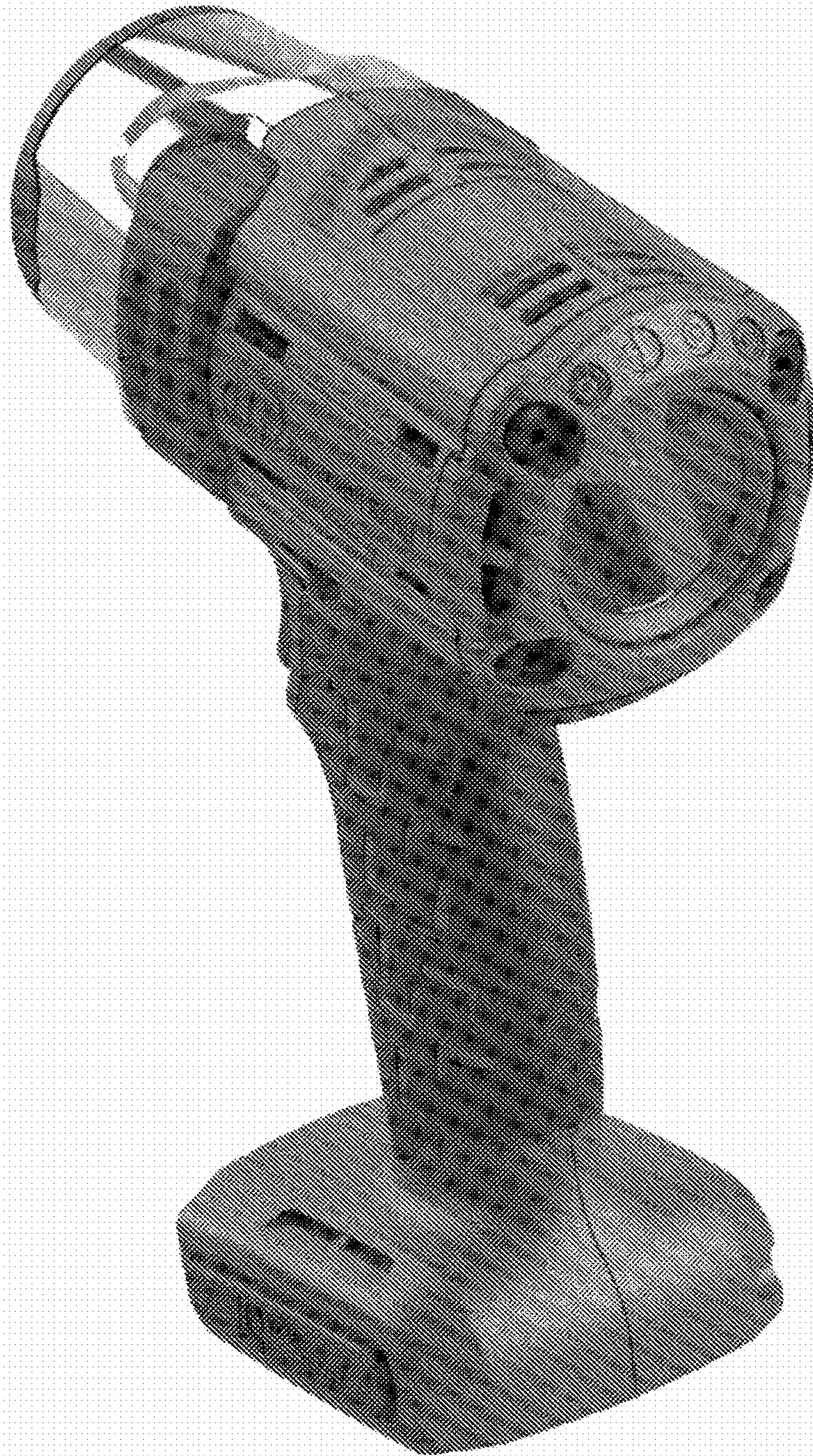


FIG. 9

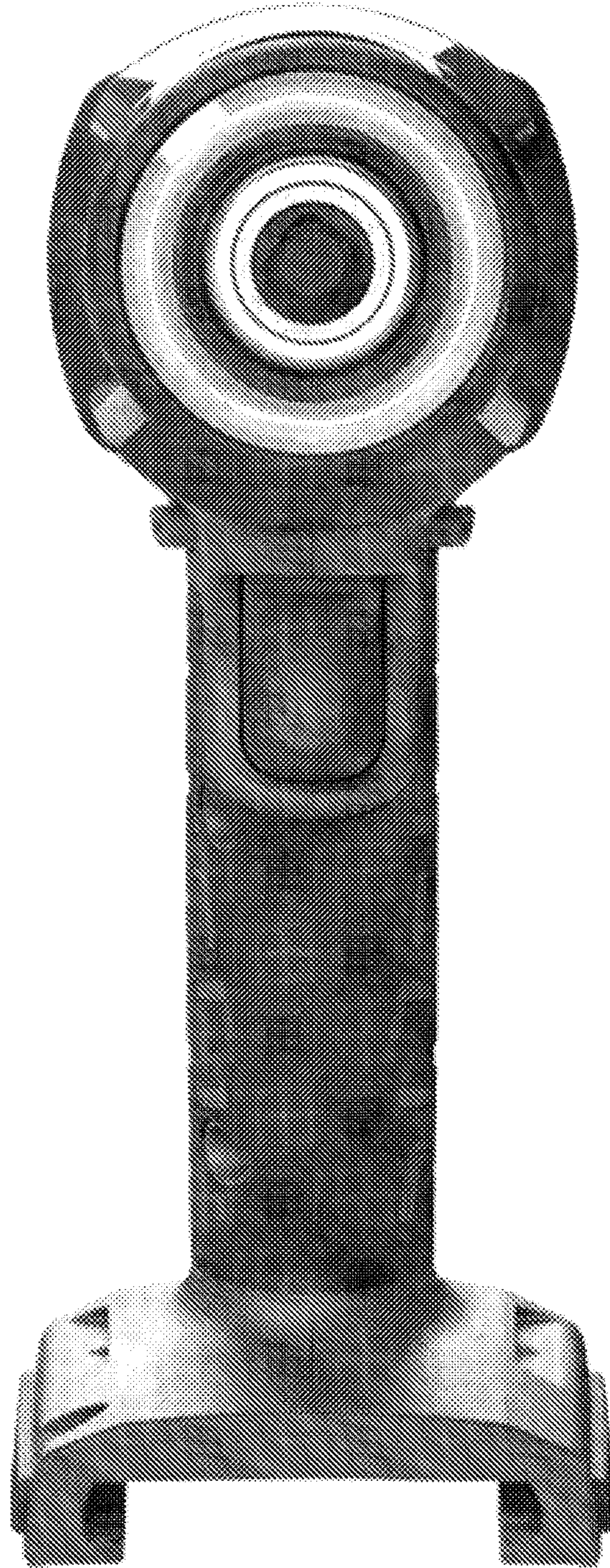


FIG. 10

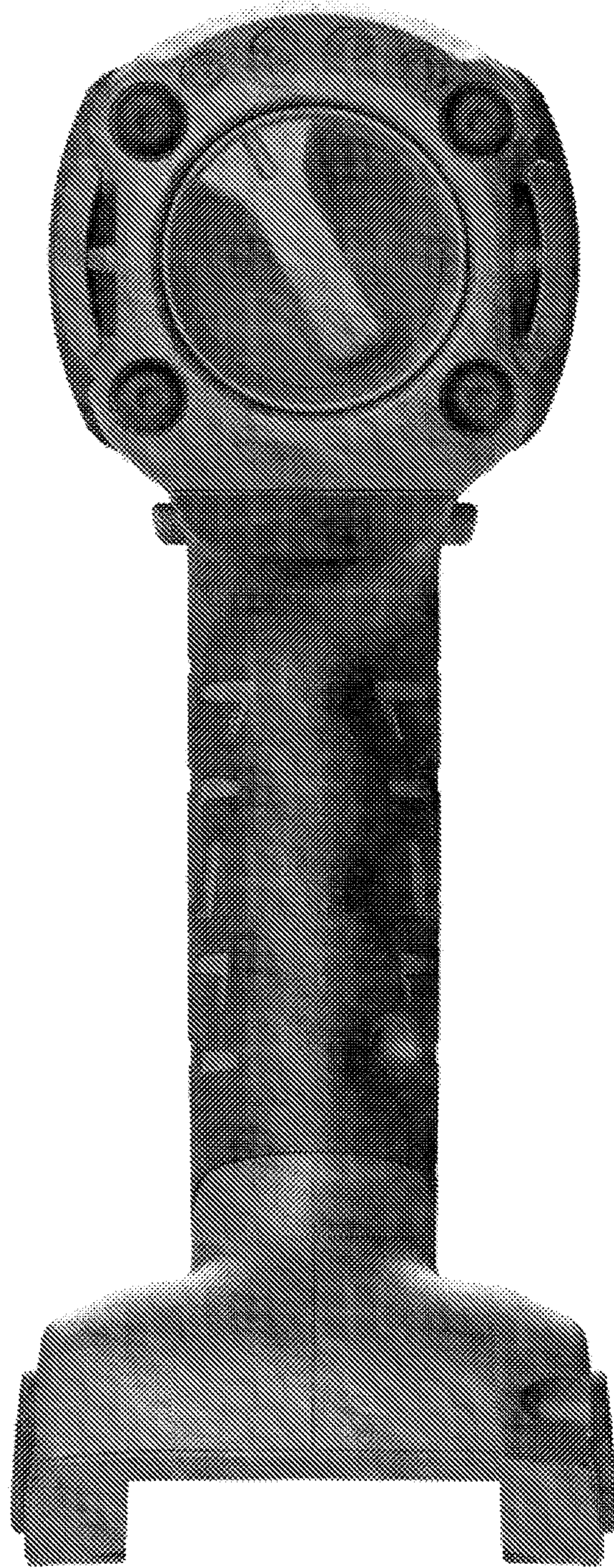


FIG. 11



FIG. 12



FIG. 13

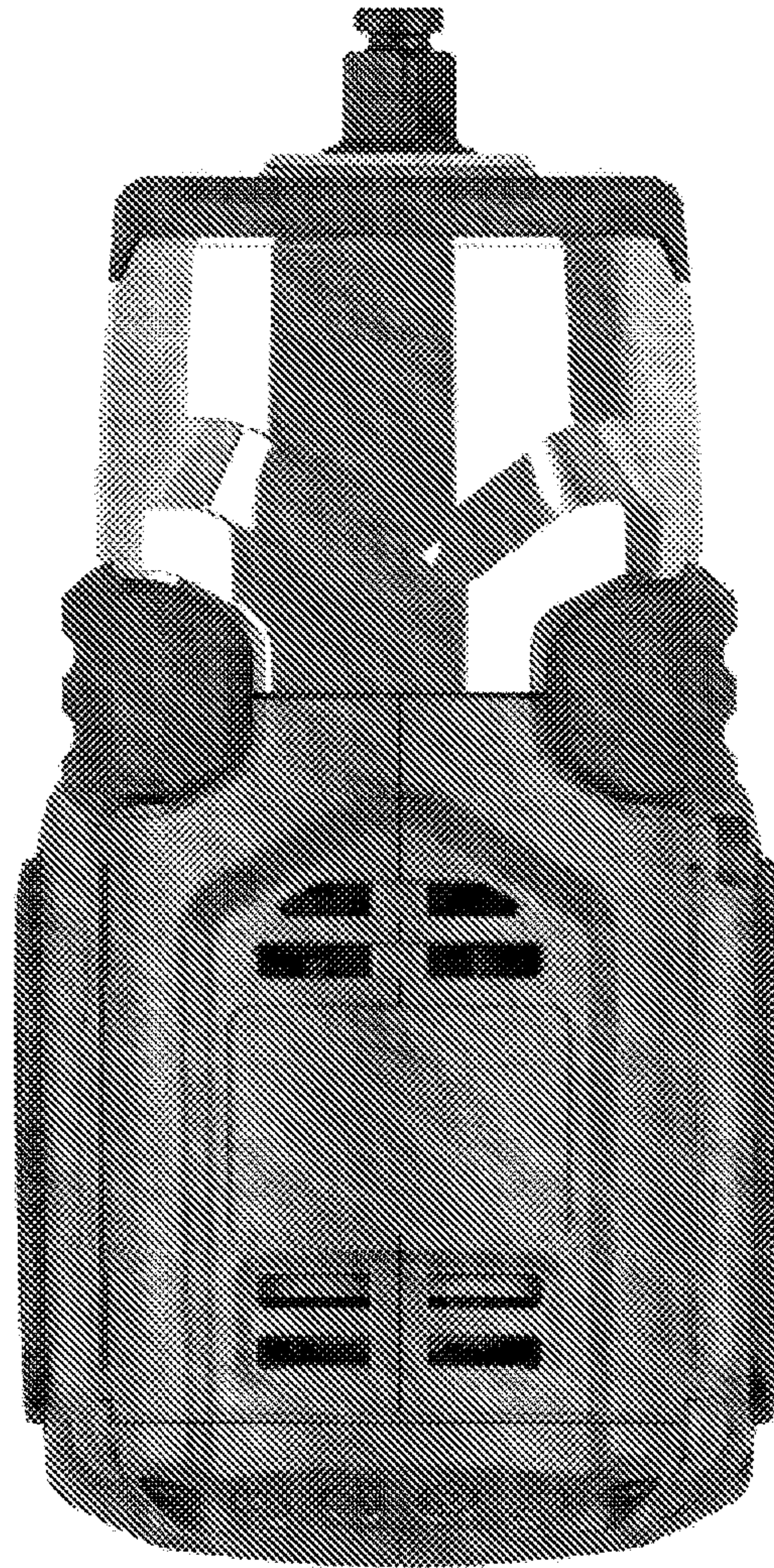


FIG. 14



FIG. 15



FIG. 16

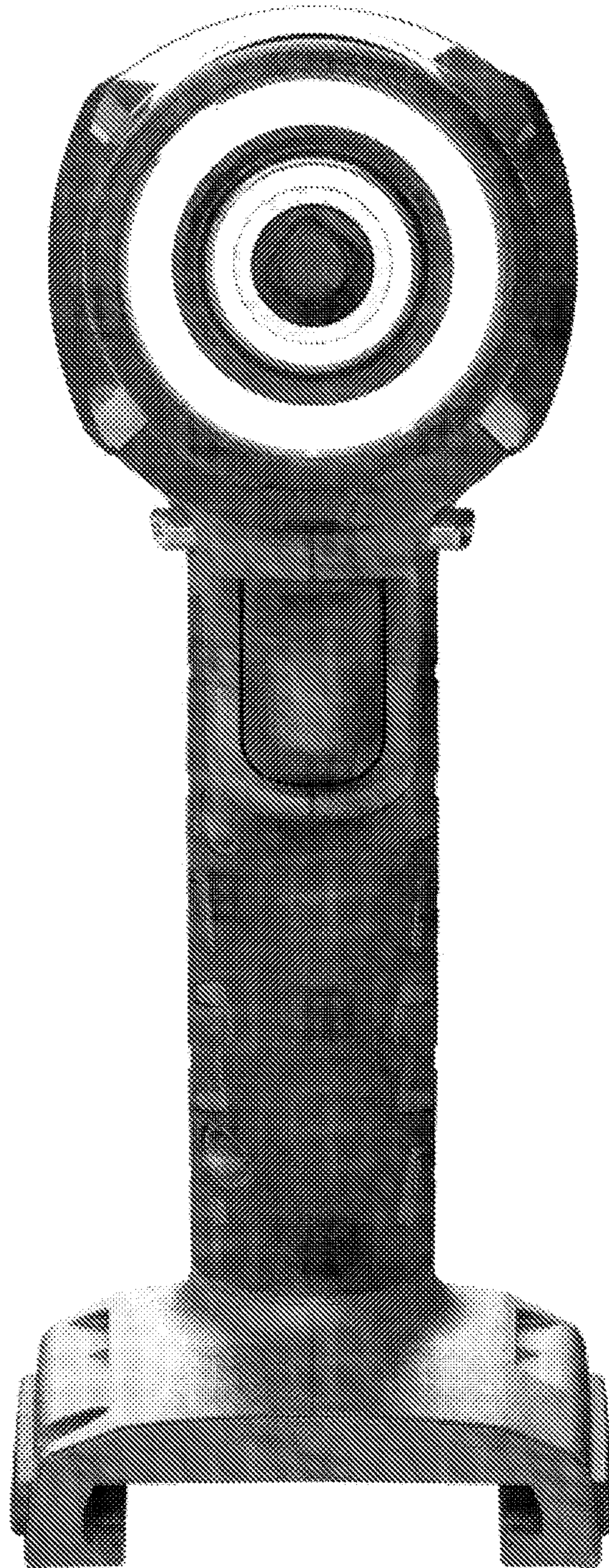


FIG. 17

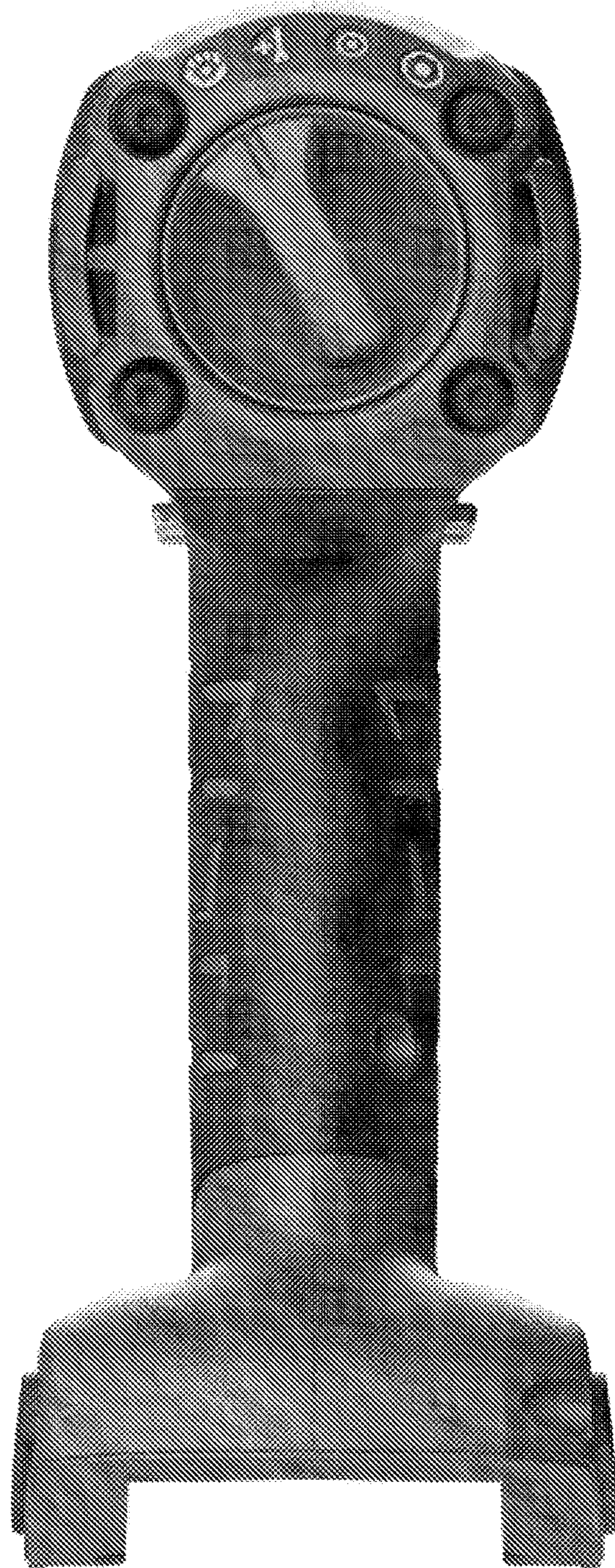


FIG. 18



FIG. 19



FIG. 20

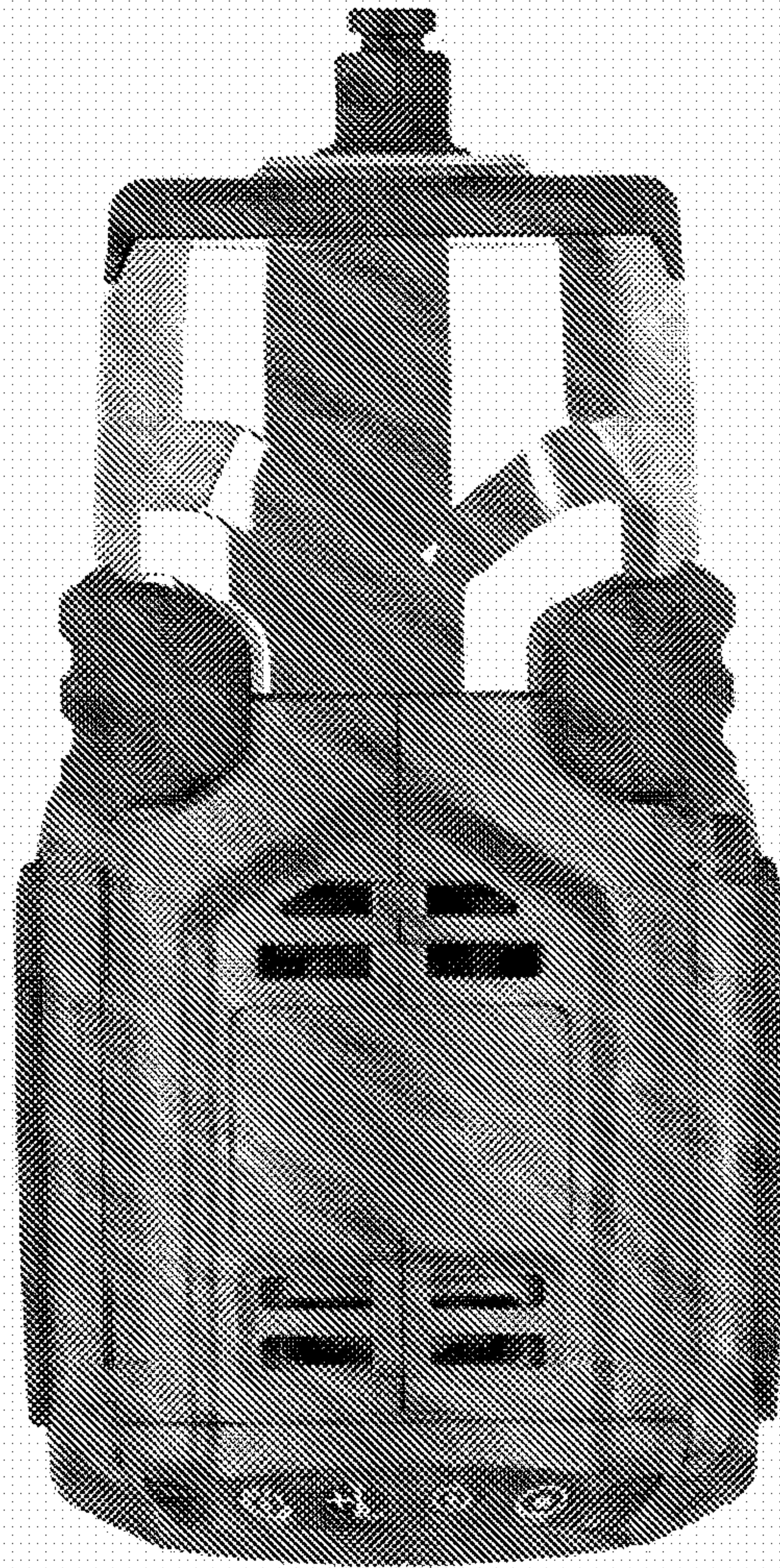


FIG. 21



FIG. 22

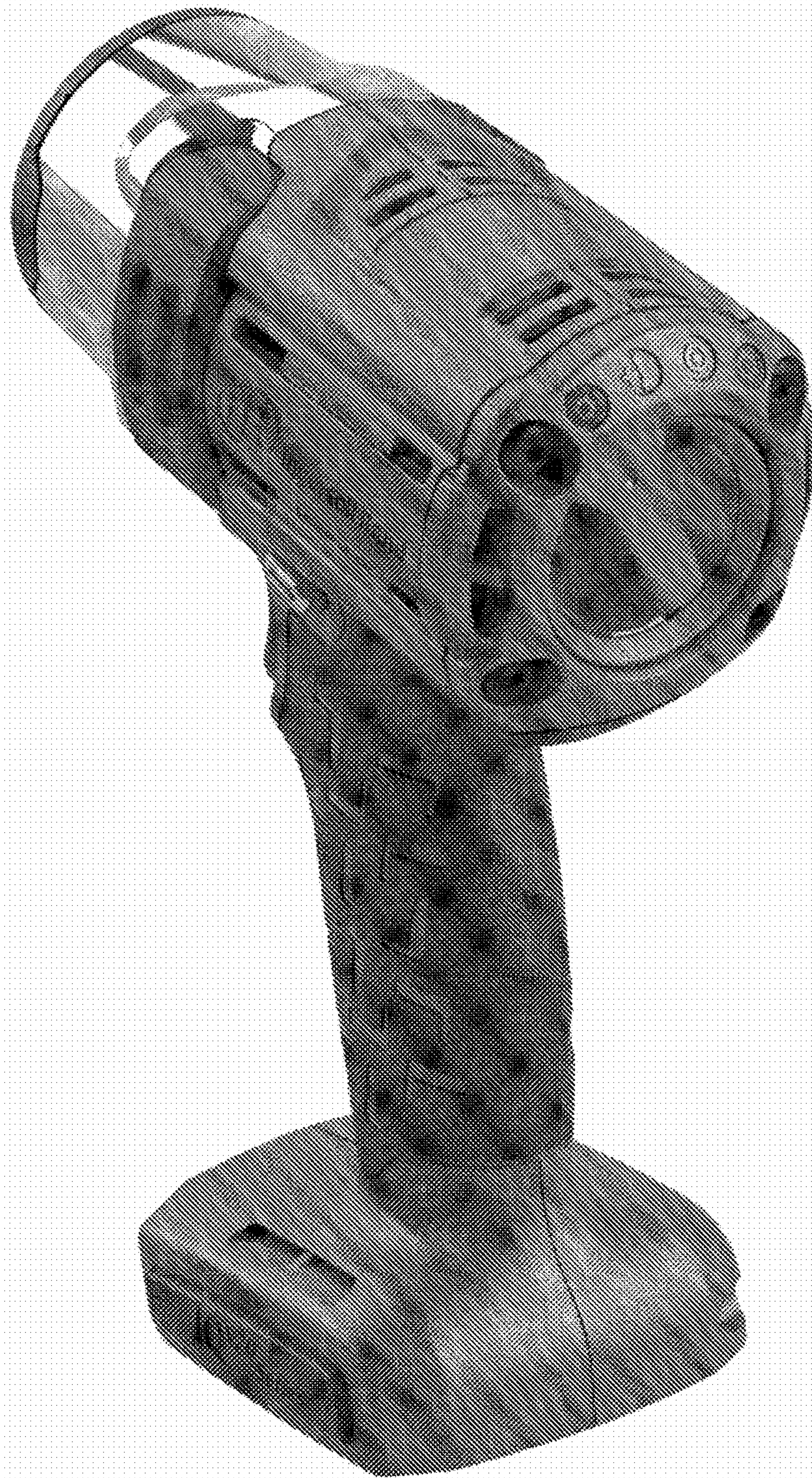


FIG. 23

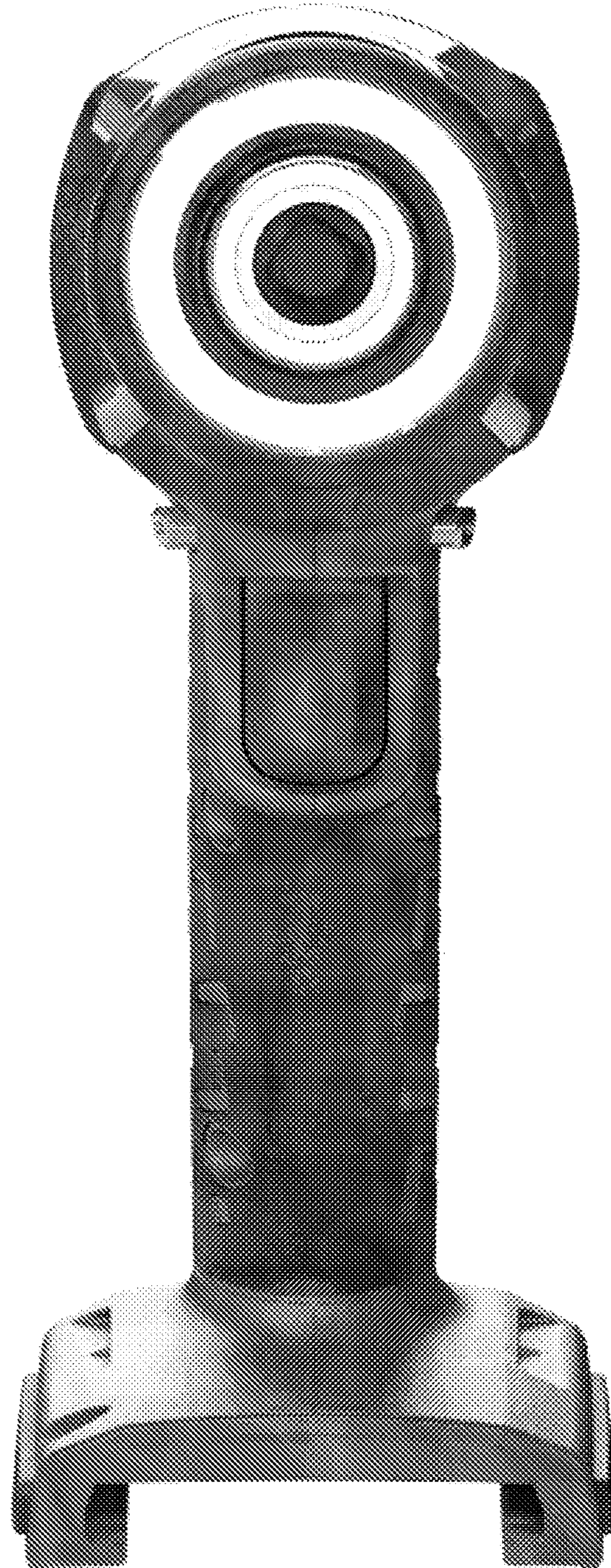


FIG. 24

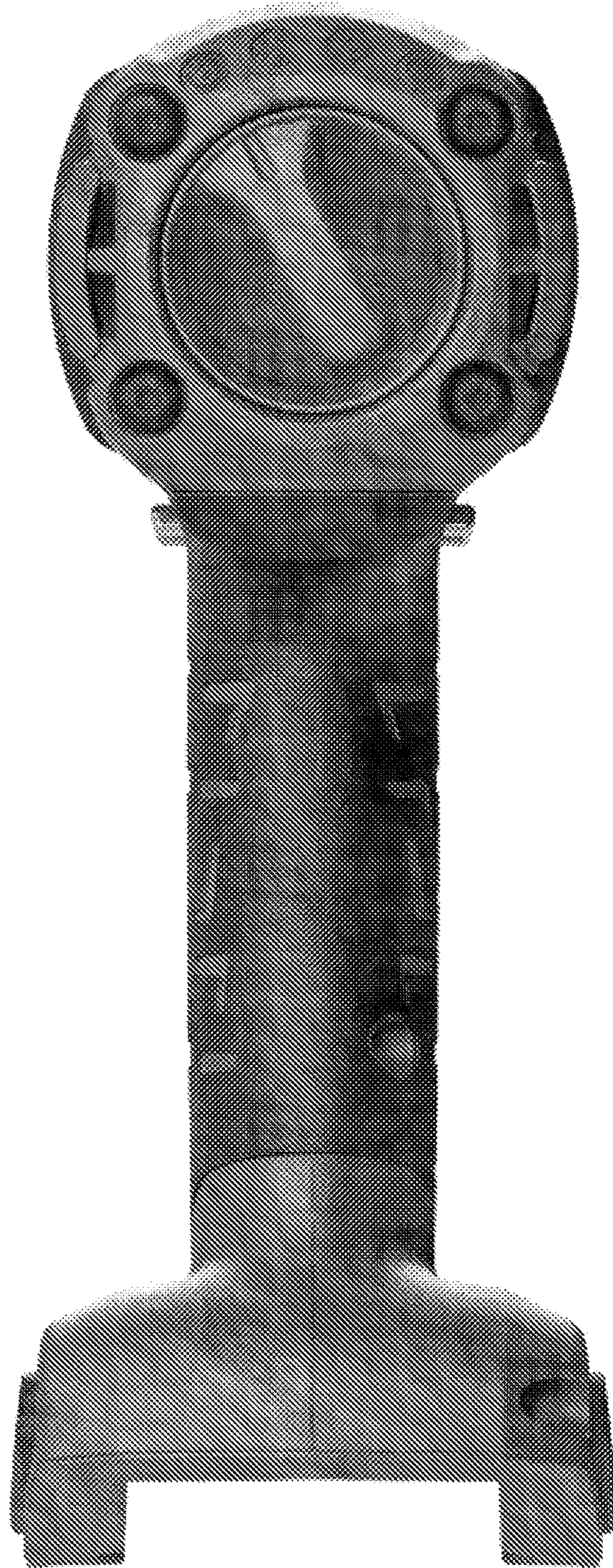


FIG. 25



FIG. 26



FIG. 27

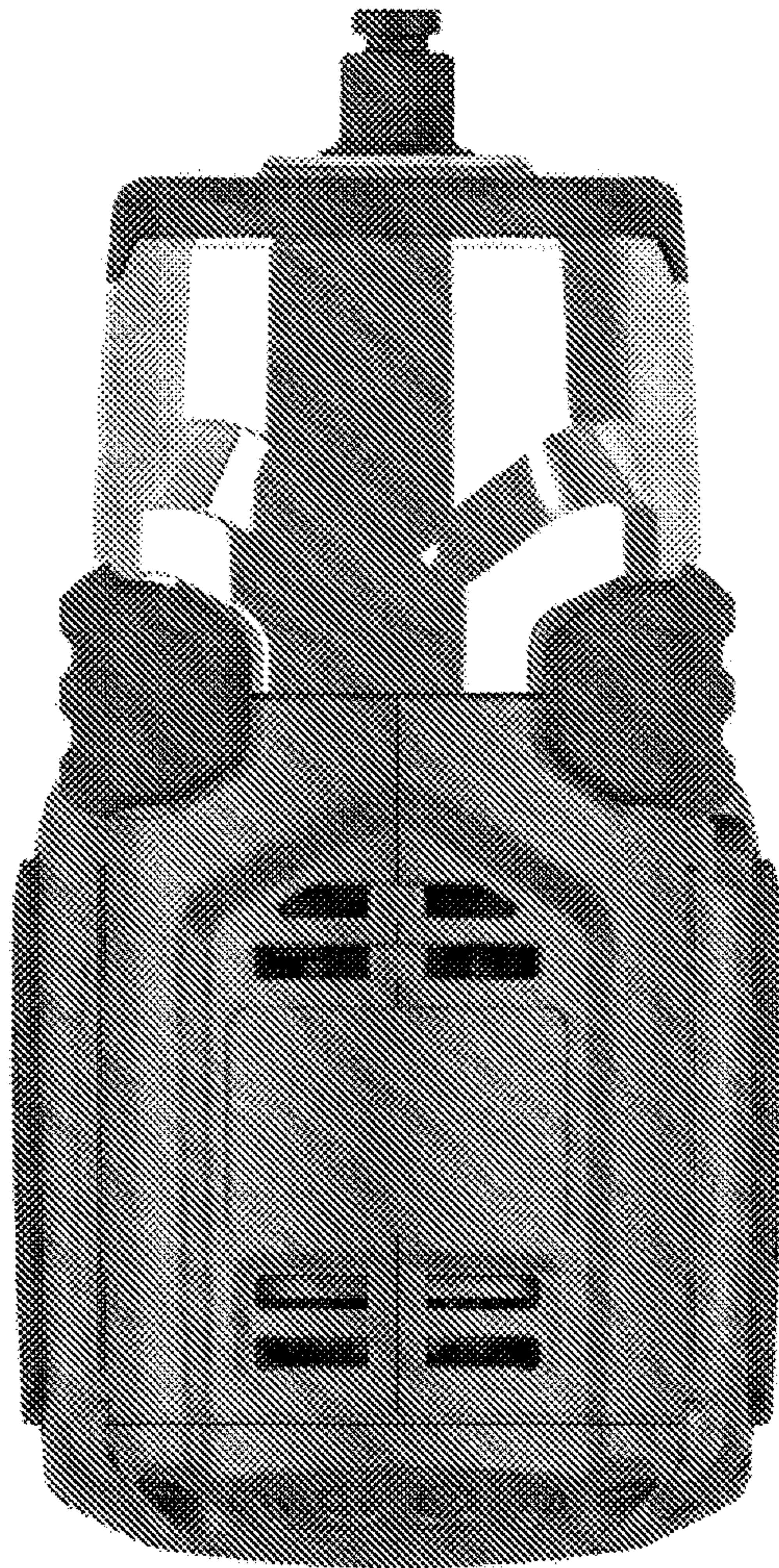


FIG. 28