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

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(54) **PORTABLE COORDINATE MEASUREMENT MACHINE**

FOREIGN PATENT DOCUMENTS

DE 4345091 7/1995

(Continued)

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(57) **CLAIM**

The ornamental design for a portable coordinate measurement machine, as shown and described.

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

**DESCRIPTION**

(21) Appl. No.: **29/358,527**

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(51) **LOC (9) Cl.** ..... **10-04**

(52) **U.S. Cl.** ..... **D10/63; D15/199**

(58) **Field of Classification Search** ..... D10/46,  
D10/63; D15/199; 33/503–505, 558;  
74/491.01–490.15; 319/560; 700/245, 262,  
700/195, 80; 702/150–156, 94, 95, 167–169  
See application file for complete search history.

FIG. 1 is a perspective view of a portable coordinate measurement machine showing our new design in accordance with a fourth embodiment of the invention; FIG. 2 is a front view of the portable coordinate measurement machine as shown in FIG. 1; FIG. 3 is a rear view of the portable coordinate measurement machine as shown in FIG. 1; FIG. 4 is a left side view of the portable coordinate measurement machine as shown in FIG. 1; FIG. 5 is a right side view of the portable coordinate measurement machine as shown in FIG. 1; FIG. 6 is a top view of the portable coordinate measurement machine as shown in FIG. 1; FIG. 7 is a bottom view of the portable coordinate measurement machine as shown in FIG. 1; FIG. 8 is a perspective view of a portable coordinate measurement machine showing our new design in accordance with a fifth embodiment of the invention; FIG. 9 is a front view of the portable coordinate measurement machine as shown in FIG. 8; FIG. 10 is a rear view of the portable coordinate measurement machine as shown in FIG. 8; FIG. 11 is a left side view of the portable coordinate measurement machine as shown in FIG. 8; FIG. 12 is a right side view of the portable coordinate measurement machine as shown in FIG. 8; FIG. 13 is a top view of the portable coordinate measurement machine as shown in FIG. 8; and, FIG. 14 is a bottom view of the portable coordinate measurement machine as shown in FIG. 8.

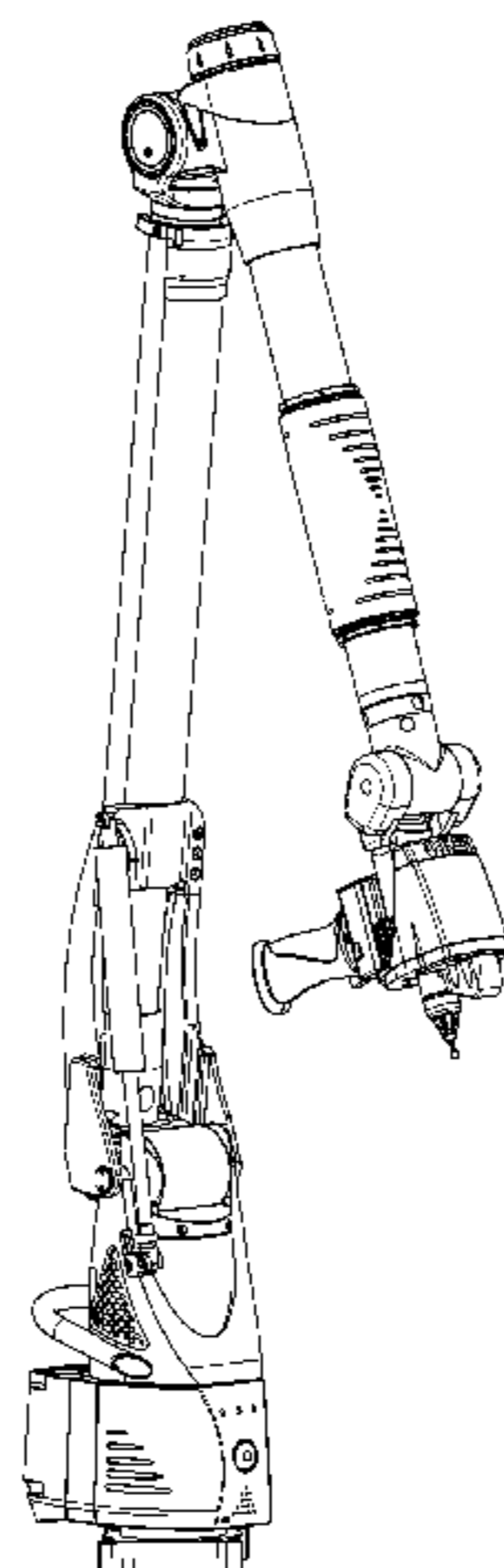
(56) **References Cited**

U.S. PATENT DOCUMENTS

4,972,090	A	11/1990	Eaton
5,084,981	A	2/1992	McMurtry et al.
5,088,337	A	2/1992	Bennett
5,148,377	A	9/1992	McDonald
5,187,874	A	2/1993	Takahashi et al.
5,189,797	A	3/1993	Granger
5,396,712	A	3/1995	Herzog
5,408,754	A	4/1995	Raab
5,412,880	A	5/1995	Raab
5,505,003	A	4/1996	Evans et al.
5,510,977	A	4/1996	Raab
5,521,847	A	5/1996	Ostrowski et al.
5,526,576	A	6/1996	Fuchs et al.
5,528,505	A	6/1996	Granger et al.
D377,932	S	2/1997	Schena et al.

(Continued)

**1 Claim, 8 Drawing Sheets**



# US D643,319 S

## U.S. PATENT DOCUMENTS

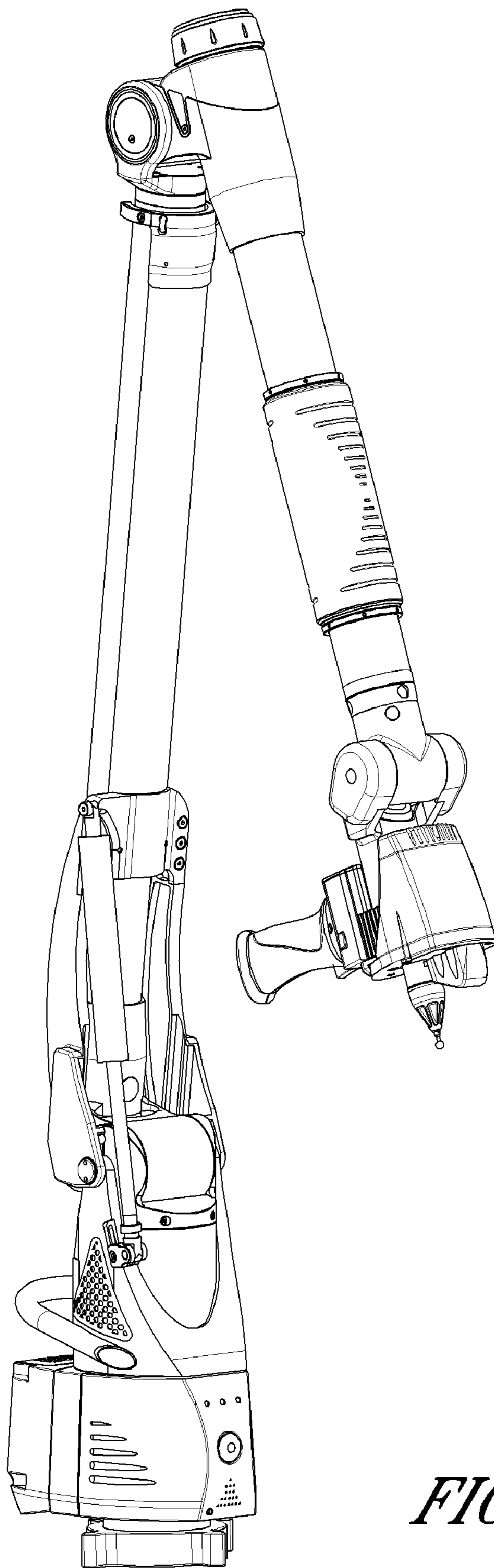
5,611,147	A	3/1997	Raab	
5,615,489	A	4/1997	Breyer et al.	
5,757,499	A	5/1998	Eaton	
5,768,792	A	6/1998	Raab	
5,794,356	A	8/1998	Raab	
5,822,450	A	10/1998	Arakawa et al.	
5,829,148	A	11/1998	Eaton	
5,978,748	A	11/1999	Raab	
5,991,704	A	11/1999	Rekar et al.	
6,134,506	A	10/2000	Rosenberg et al.	
6,161,079	A	12/2000	Zink et al.	
6,166,811	A	12/2000	Long et al.	
6,219,928	B1	4/2001	Raab et al.	
6,366,831	B1	4/2002	Raab	
6,487,896	B1	12/2002	Dall'Aglio	
6,526,670	B1	3/2003	Carli	
D472,824	S	4/2003	Raab et al.	
6,598,306	B2	7/2003	Eaton	
6,611,346	B2	8/2003	Granger	
6,611,617	B1	8/2003	Crampton	
D479,544	S	9/2003	Raab et al.	
6,618,496	B1	9/2003	Tassakos et al.	
6,668,466	B1	12/2003	Bieg et al.	
D490,831	S	6/2004	Raab et al.	
D491,589	S	6/2004	Raab et al.	
D491,965	S	6/2004	Raab et al.	
6,759,648	B2	7/2004	Baxter et al.	
D496,595	S	9/2004	Raab et al.	
D497,815	S	11/2004	Raab et al.	
6,817,108	B2	11/2004	Eaton	
D502,881	S	3/2005	Raab et al.	
D502,882	S	3/2005	Raab et al.	
D503,116	S	3/2005	Raab et al.	
D503,117	S	3/2005	Raab et al.	
D503,348	S	3/2005	Raab et al.	
6,892,465	B2	5/2005	Raab et al.	
6,904,691	B2	6/2005	Raab et al.	
D507,978	S *	8/2005	Raab et al. .... D10/63	
6,925,722	B2	8/2005	Raab et al.	
6,931,745	B2	8/2005	Granger	
6,952,882	B2	10/2005	Raab et al.	
6,984,236	B2	1/2006	Raab	

6,988,322	B2	1/2006	Raab et al.	
7,003,892	B2	2/2006	Eaton et al.	
7,017,275	B2	3/2006	Raab et al.	
7,043,847	B2	5/2006	Raab et al.	
7,051,450	B2	5/2006	Raab et al.	
7,073,271	B2	7/2006	Raab et al.	
7,096,077	B2	8/2006	Price et al.	
7,152,456	B2	12/2006	Eaton	
7,174,651	B2	2/2007	Raab et al.	
7,246,030	B2	7/2007	Raab et al.	
7,269,910	B2	9/2007	Raab et al.	
7,296,364	B2	11/2007	Seitz et al.	
7,296,979	B2	11/2007	Raab et al.	
7,372,581	B2	5/2008	Raab et al.	
7,395,606	B2	7/2008	Crampton	
7,441,341	B2	10/2008	Eaton	
7,525,276	B2	4/2009	Eaton	
7,546,689	B2	6/2009	Ferrari et al.	
7,568,293	B2	8/2009	Ferrari	
7,578,069	B2	8/2009	Eaton	
D599,226	S	9/2009	Gerent et al.	
7,624,510	B2	12/2009	Ferrari	
D607,350	S *	1/2010	Cooduvalli et al. .... D10/63	
7,640,674	B2	1/2010	Ferrari et al.	
D610,926	S *	3/2010	Gerent et al. .... D10/63	
7,676,945	B2	3/2010	Prestidge et al.	
7,693,325	B2	4/2010	Pulla et al.	
7,743,524	B2	6/2010	Eaton et al.	
7,774,949	B2	8/2010	Ferrari	
2008/0016711	A1	1/2008	Baebler	
2010/0095542	A1	4/2010	Ferrari	

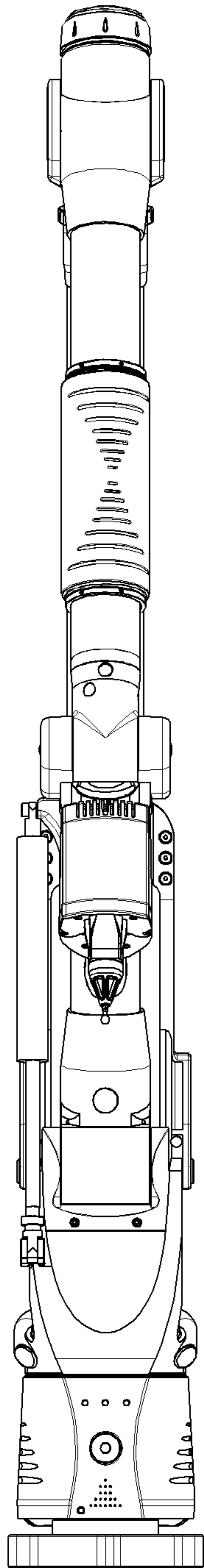
## FOREIGN PATENT DOCUMENTS

DE	10112977	11/2002
EP	0522610	1/1993
FR	2740546	4/1997
GB	2274526	7/1994
JP	05-031685	2/1993
JP	2003-021133	1/2003
JP	2003-175484	6/2003
WO	WO 98/08050	2/1998

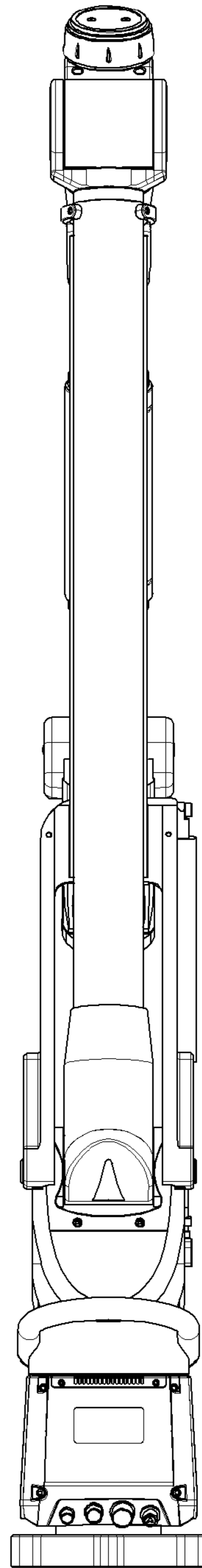
\* cited by examiner



*FIG. 1*

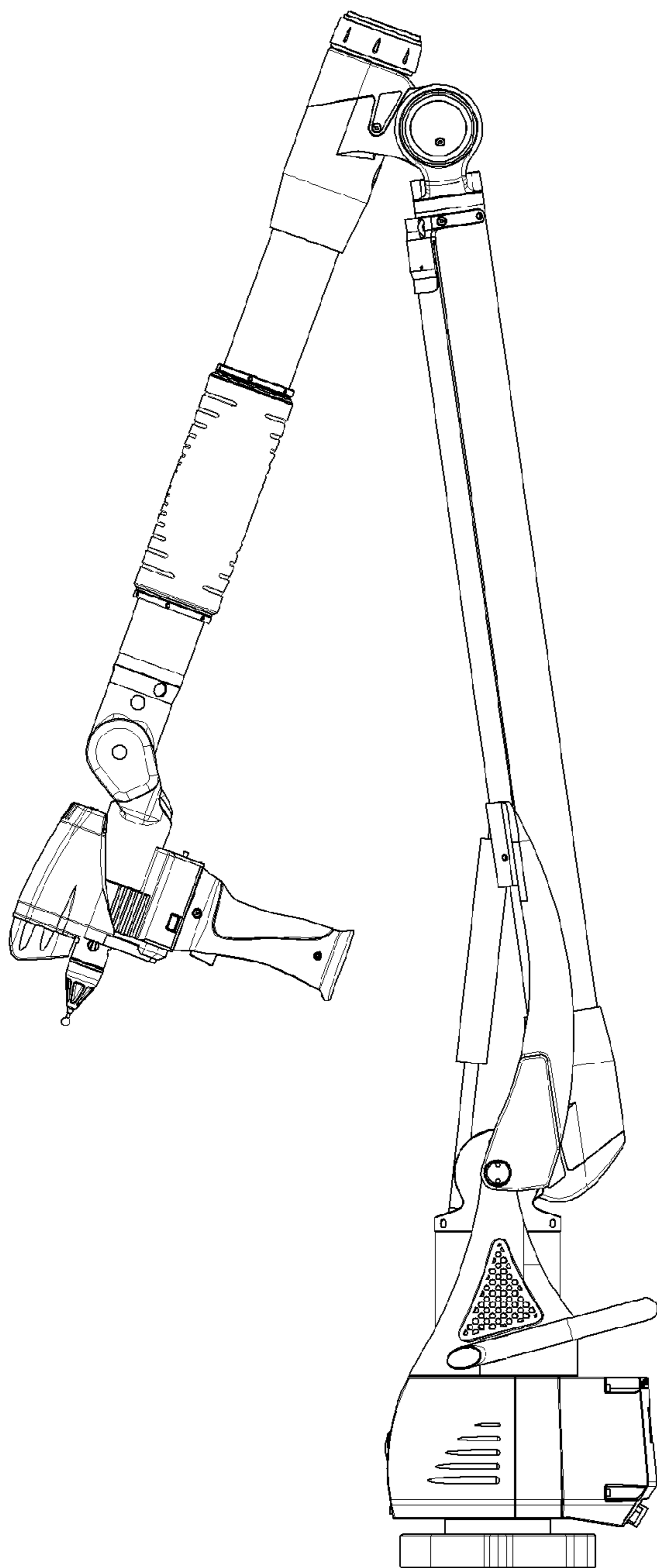


*FIG. 2*

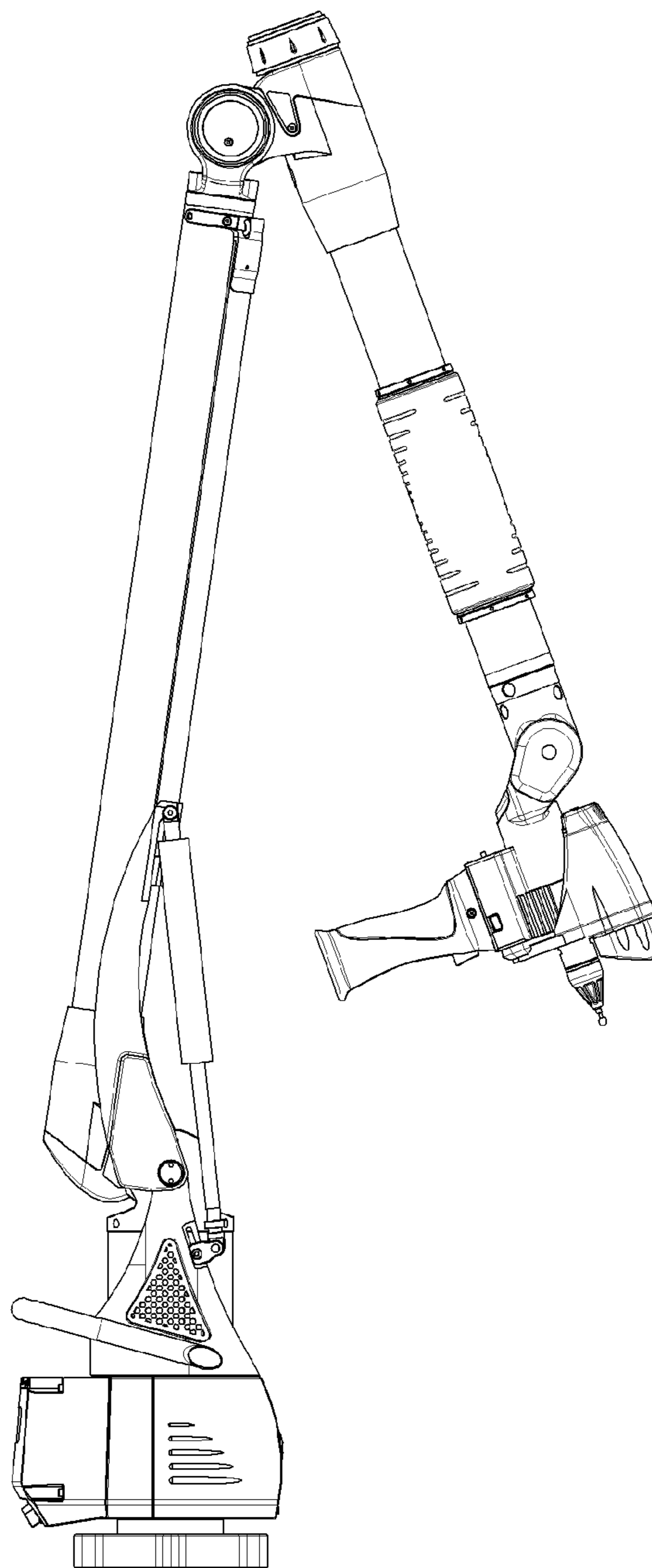


*FIG. 3*

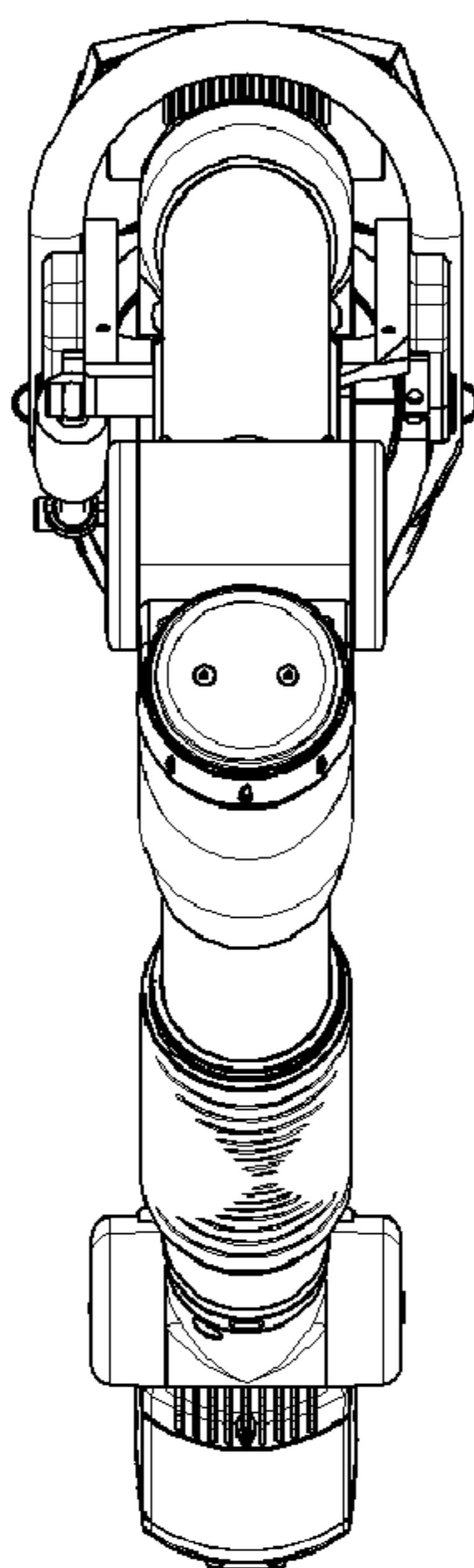




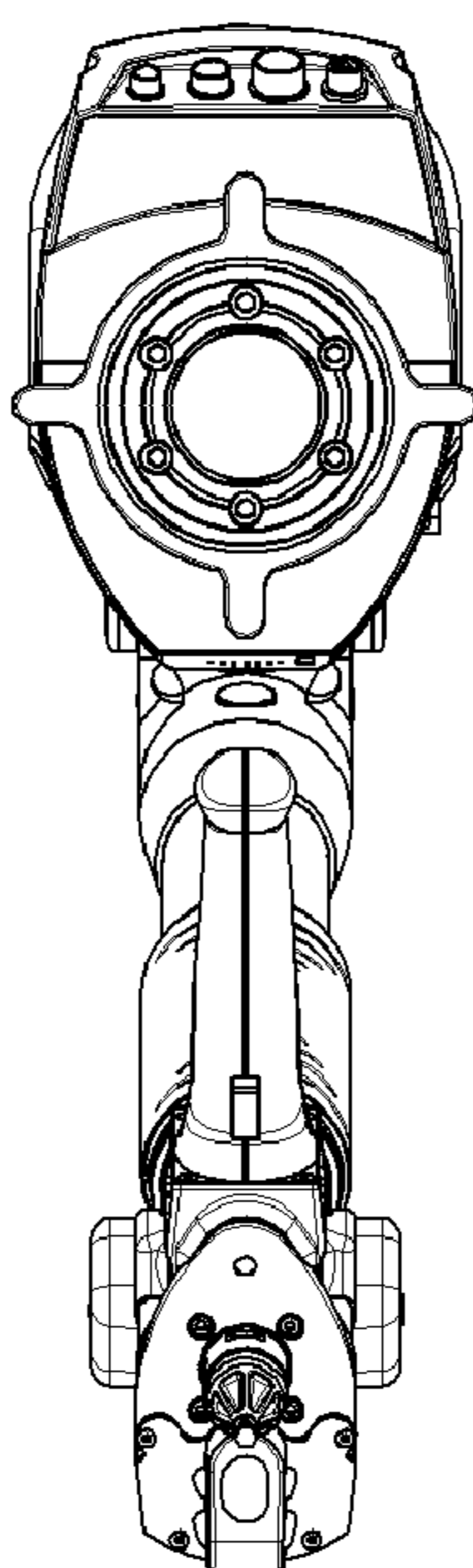
*FIG. 4*



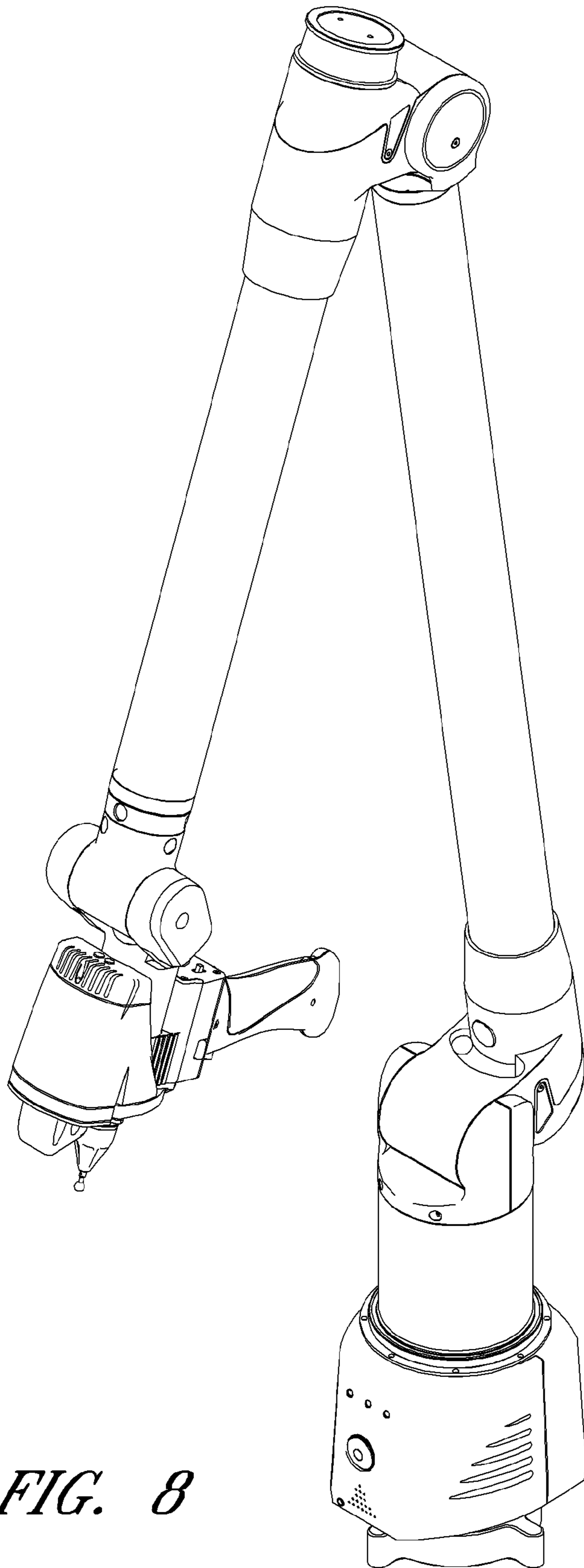
*FIG. 5*



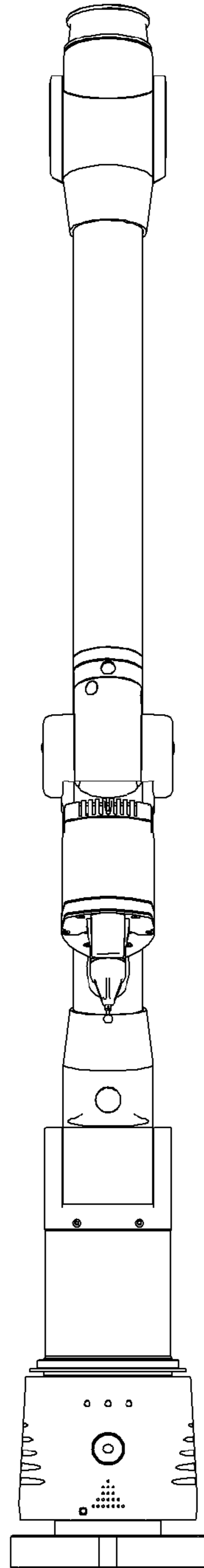
*FIG. 6*



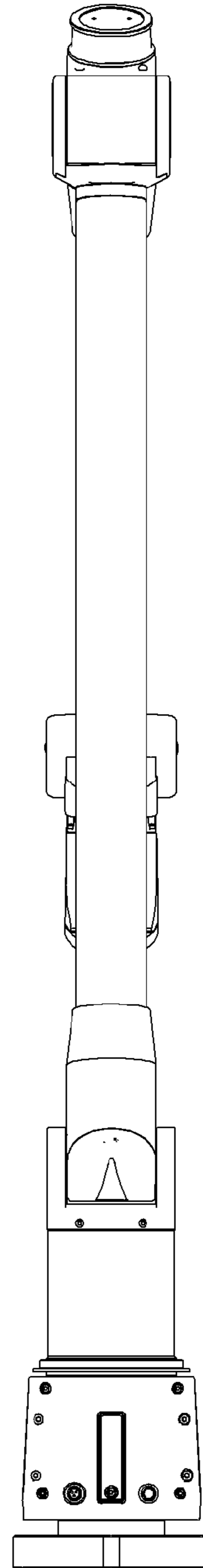
*FIG. 7*



*FIG. 8*

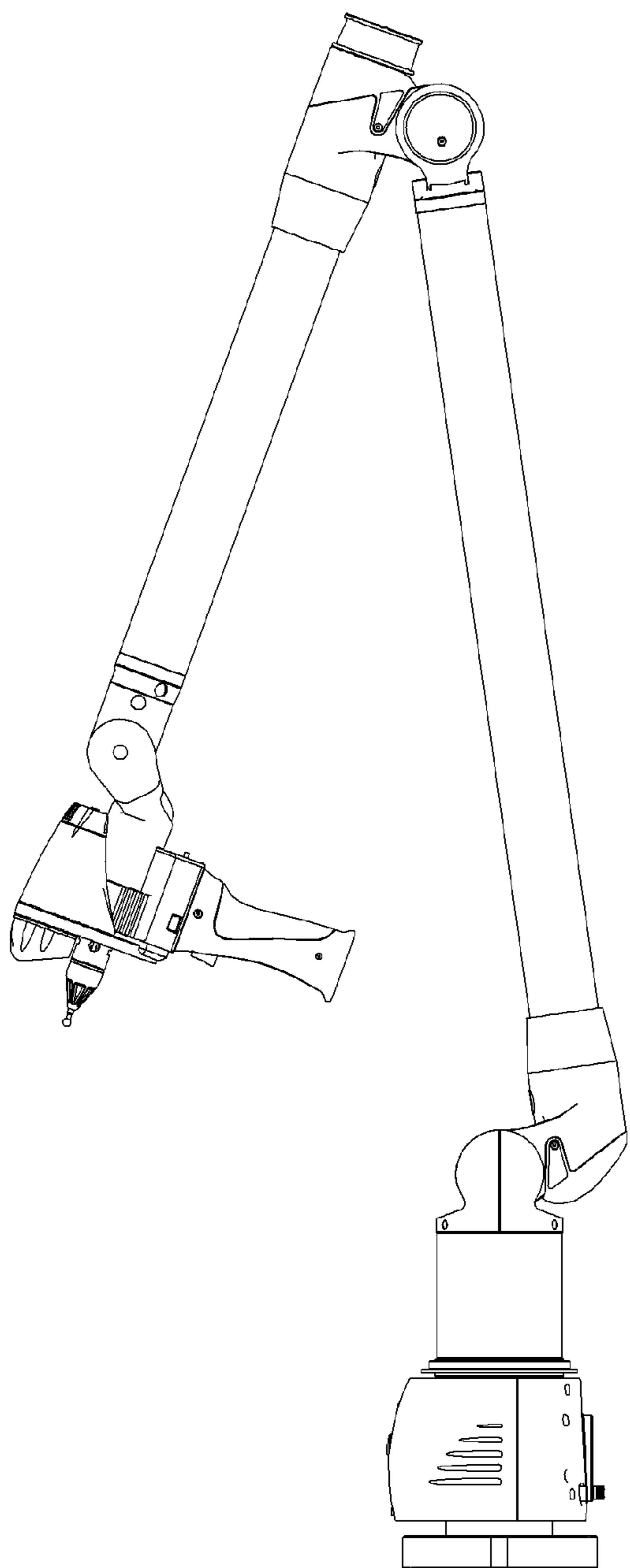


*FIG. 9*

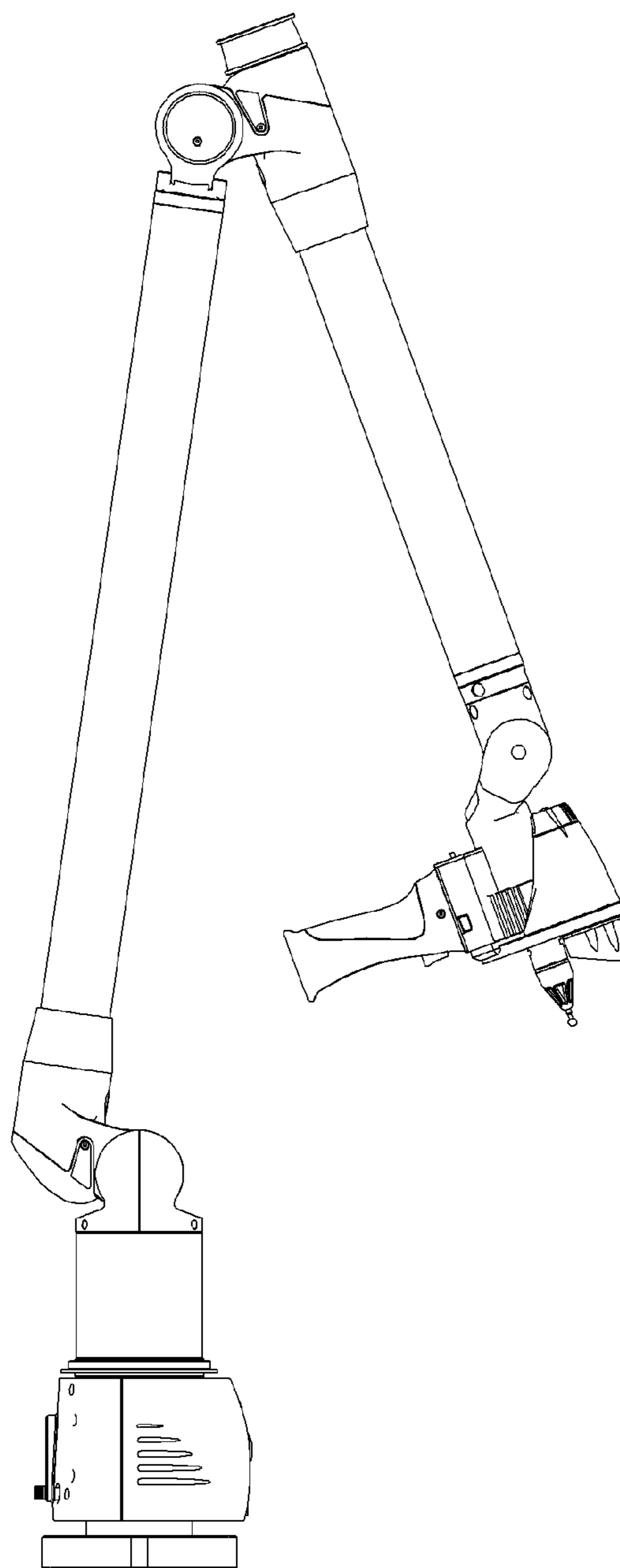


*FIG. 10*

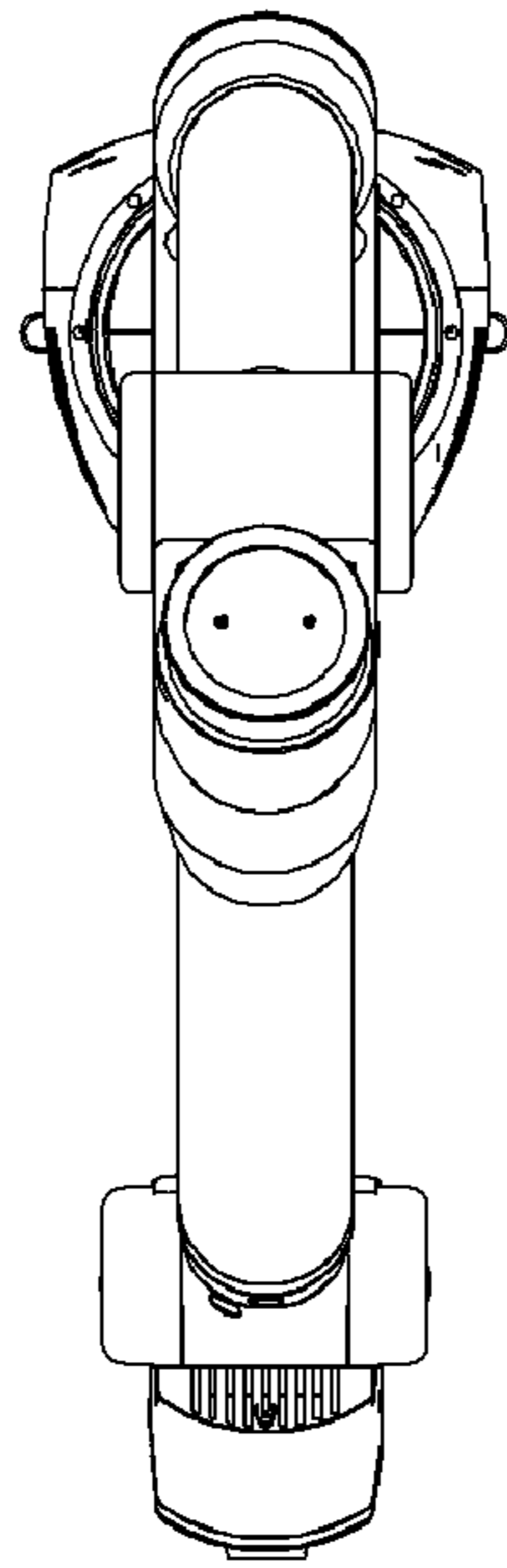




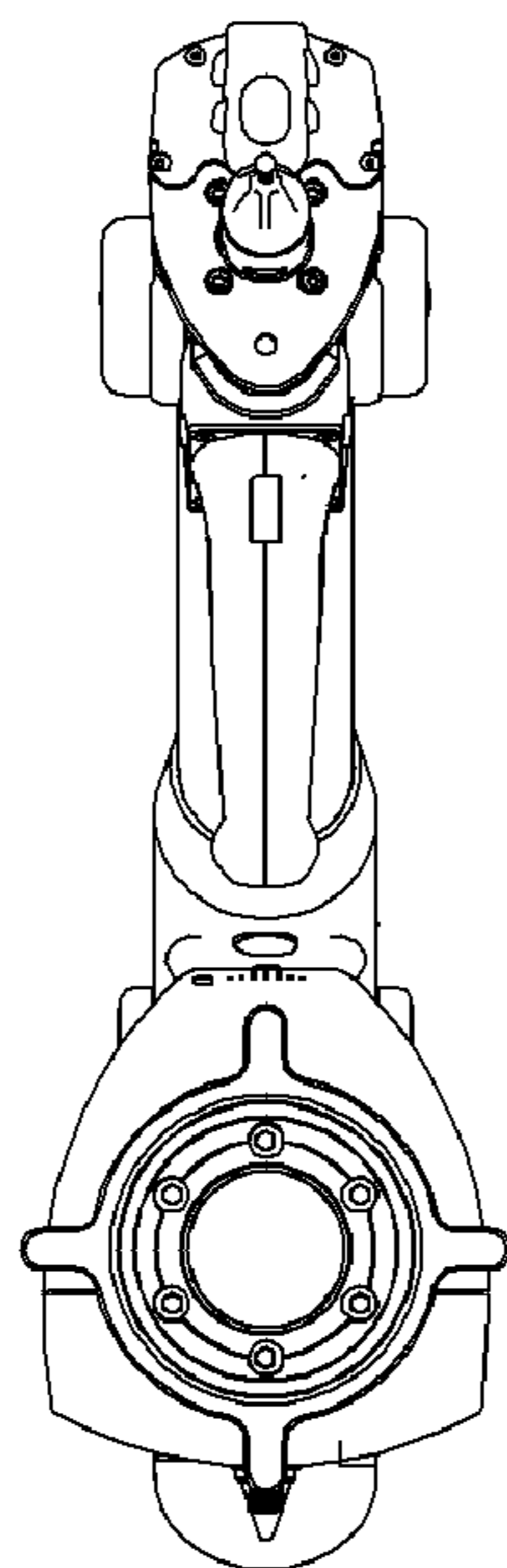
*FIG. 11*



*FIG. 12*



*FIG. 13*



*FIG. 14*