



US0D1074847S

(12)

United States Design Patent

House et al.

(10)

Patent No.:

US D1,074,847 S

(45)

Date of Patent:

** May 13, 2025

(54) MODEL VEHICLE AXLE CARRIER

FOREIGN PATENT DOCUMENTS

(71) Applicant: **TRAXXAS, L.P.**, McKinney, TX (US)

(72) Inventors: **Noah House**, Sachse, TX (US); **Adam Cole Ewing**, McKinney, TX (US); **Ross Martin**, Roanoke, TX (US)

CN 303934573 11/2016
DE 102008057196 A1 7/2009
(Continued)

(73) Assignee: **TRAXXAS, L.P.**, McKinney, TX (US)

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

(21) Appl. No.: **29/925,242**

(22) Filed: **Jan. 23, 2024**

(51) **LOC (15) Cl.** **21-01**

(52) **U.S. Cl.**
USPC **D21/561**; D12/159

(58) **Field of Classification Search**
USPC D21/495, 533, 548, 552, 559, 560, 561, D21/562; D12/159, 160
CPC A63H 17/00; A63H 17/002; A63H 17/04; A63H 17/05; A63H 17/12; A63H 17/24; A63H 17/26; A63H 17/262; A63H 17/36
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,377,905 A	5/1921	Martz
1,455,706 A	5/1923	Bower et al.
2,041,992 A	5/1936	Noel
2,083,085 A	6/1937	Palmer
2,132,545 A	10/1938	Smith
2,547,435 A	4/1951	Bouchard
3,306,077 A	2/1967	Piatti
3,333,654 A	8/1967	Price-Stephens
3,767,221 A	10/1973	Asberg
D242,442 S	11/1976	Garrison
D246,451 S	11/1977	Shealy

(Continued)

OTHER PUBLICATIONS

ZXYRC Aluminum Alloy Front Hubs Steering Blocks for Traxxas X-MAXX 1/5 Scale RC Car Upgrade Parts (Black), Amazon Website, Earliest Comment Date: Oct. 23, 2023 [Website Visited Oct. 3, 2024], Available on the internet URL: <https://www.amazon.com/dp/B09HGMLF6K?th=1> (Year: 2023).

(Continued)

Primary Examiner — Cynthia M. Chin
(74) *Attorney, Agent, or Firm* — Daryl R. Wright; Greg Carr

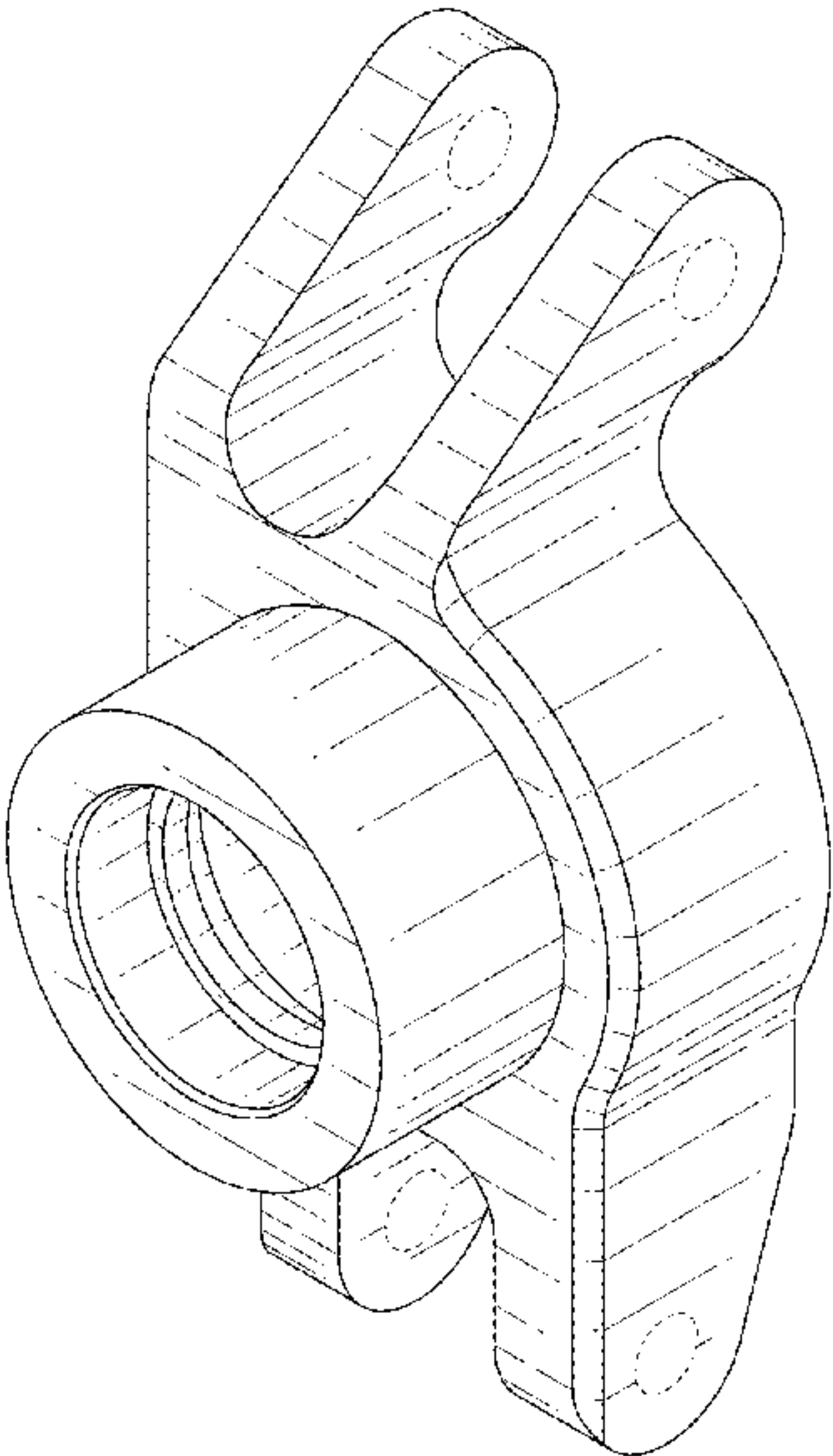
(57) **CLAIM**

The ornamental design for a model vehicle axle carrier as shown and described.

DESCRIPTION

FIG. 1 is an upper, left, front perspective view of a model vehicle axle carrier showing our new design;
FIG. 2 is an upper, right, rear perspective view thereof;
FIG. 3 is a lower, right, front perspective view thereof;
FIG. 4 is a lower, left, rear perspective view thereof;
FIG. 5 is a front elevation view thereof;
FIG. 6 is a rear elevation view thereof;
FIG. 7 is an upper plan view thereof;
FIG. 8 is a lower plan view thereof;
FIG. 9 is a right-side elevation view thereof; and,
FIG. 10 is a left-side elevation view of the model vehicle axle carrier.
In the drawings, the broken lines illustrate portions of the model vehicle axle carrier that form no part of the claimed design. Only the left-side model vehicle axle carrier is shown. The right-side model vehicle axle carrier is a mirror image of the shown model vehicle axle carrier.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D246,921	S	1/1978	Moline	
4,509,932	A	4/1985	Weible	
4,632,203	A	12/1986	Krude	
4,690,656	A	9/1987	Friedman et al.	
D304,472	S	11/1989	Poulsen	
D304,473	S	11/1989	Poulsen	
D304,746	S	11/1989	Poulsen	
D311,942	S	11/1990	Dideriksen	
D327,280	S	6/1992	Macomber	
D332,978	S	2/1993	Tsuchiya	
D341,560	S	11/1993	Fabris et al.	
5,338,247	A	8/1994	Miles	
5,498,208	A	3/1996	Braun	
5,516,130	A	5/1996	Mitchell	
D385,835	S	11/1997	Webster	
D403,023	S	12/1998	Araki	
5,954,586	A	9/1999	Kirson	
D424,988	S	5/2000	Rothlisberger	
6,394,878	B1	5/2002	Wang	
6,416,136	B1	7/2002	Smith	
6,478,709	B1	11/2002	Irwin et al.	
6,513,614	B2	2/2003	Knutson et al.	
6,773,353	B2	8/2004	Cornay et al.	
6,779,755	B1	8/2004	Thomsen	
6,796,404	B1	9/2004	Dick, Jr. et al.	
6,820,707	B1	11/2004	Cantemir	
D516,582	S	3/2006	Giddens	
7,144,326	B2	12/2006	Thompson	
D564,951	S	3/2008	Gile	
D605,985	S	12/2009	Pennala	
7,690,660	B2	4/2010	Dudding et al.	
7,810,604	B2	10/2010	Byers et al.	
7,841,923	B2	11/2010	Marzetta et al.	
D661,713	S	6/2012	Marchesan	
8,356,827	B2 *	1/2013	Takeda	B60G 11/04 280/124.17
D677,608	S	3/2013	Kientzy	
D686,677	S	7/2013	Simonds	
D686,952	S	7/2013	Rau et al.	
8,540,260	B1	9/2013	Batdorf et al.	
8,574,022	B2	11/2013	Grisolia et al.	
D717,216	S	11/2014	Dunn et al.	
8,893,364	B2	11/2014	Rode	
D736,681	S	8/2015	Awasa	
9,500,272	B2 *	11/2016	Elzib	F16H 57/03
D788,653	S	6/2017	Smith	
D798,906	S	10/2017	Bennett et al.	
D799,552	S	10/2017	McGinley	
D822,125	S	7/2018	Ewing et al.	
D826,340	S	8/2018	Ewing et al.	
D840,282	S	2/2019	Coste	
D843,273	S	3/2019	Audley-Coote	
D845,182	S	4/2019	Sagawa et al.	
D845,398	S	4/2019	Wood	
D845,842	S	4/2019	Sun	
D847,911	S	5/2019	Wood	
D847,912	S	5/2019	Wood	
D866,683	S	11/2019	Ewing et al.	
D868,171	S	11/2019	Wood	
D869,348	S	12/2019	Kucharski	
D871,273	S	12/2019	Bhaskar	
D878,974	S	3/2020	McGaughy	
D880,279	S	4/2020	Marchesan	
D880,375	S	4/2020	McGaughy	
D887,359	S	6/2020	McCoy, Jr.	
D891,998	S	8/2020	Smith	
D900,250	S	10/2020	Ewing et al.	
D902,089	S	11/2020	Ewing et al.	
D902,091	S	11/2020	Ewing et al.	
D904,532	S	12/2020	Ewing et al.	
D905,799	S	12/2020	Ewing et al.	
D913,166	S	3/2021	Kiska	
11,002,352	B2 *	5/2021	Ghatti	F16H 57/023
D923,115	S	6/2021	Ewing et al.	
D923,116	S	6/2021	Ewing et al.	

D923,722	S	6/2021	Ewing et al.	
D931,151	S	9/2021	Wade et al.	
D944,901	S	3/2022	Ewing et al.	
D945,488	S	3/2022	Mathura	
D945,897	S	3/2022	Brumbach	
D947,290	S	3/2022	Christensen et al.	
D947,958	S	4/2022	Christensen et al.	
D947,959	S	4/2022	Christensen et al.	
D951,150	S	5/2022	Ewing et al.	
D951,299	S	5/2022	Nyren	
D954,610	S	6/2022	Owens et al.	
D954,611	S	6/2022	Owens et al.	
D954,612	S	6/2022	Owens et al.	
11,378,176	B2	7/2022	Fast	
D961,690	S	8/2022	Ewing	
D996,528	S	8/2023	Christensen et al.	
D1,014,657	S	2/2024	Christensen et al.	
D1,014,658	S	2/2024	Christensen et al.	
D1,020,915	S *	4/2024	Christensen	D21/562
D1,032,424	S	6/2024	Smith	
D1,040,937	S *	9/2024	Ewing	D21/562
D1,049,262	S	10/2024	Wood et al.	
D1,051,244	S	11/2024	Ewing et al.	
D1,051,245	S *	11/2024	Ewing	D21/562
D1,053,277	S *	12/2024	Poteet	D21/562
D1,053,278	S *	12/2024	Poteet	D21/562
D1,060,180	S *	2/2025	Collins	D21/562
D1,060,527	S *	2/2025	Ewing	D21/562
D1,060,528	S *	2/2025	Poteet	D21/562
2002/0065021	A1	5/2002	Wang	
2002/0077025	A1	6/2002	Wu	
2002/0160688	A1	10/2002	Rehkemper et al.	
2002/0165031	A1	11/2002	Riefe	
2003/0110885	A1	6/2003	Beutler	
2004/0005931	A1	1/2004	Wang et al.	
2004/0231910	A1	11/2004	Mercier et al.	
2005/0156399	A1	7/2005	Chu	
2005/0206222	A1	9/2005	Swanson	
2006/0240897	A1	10/2006	Carlini et al.	
2007/0256659	A1	11/2007	Anderson et al.	
2007/0293328	A1	12/2007	Mazziotti	
2008/0238015	A1	10/2008	Duddling et al.	
2008/0303227	A1	12/2008	Chi Chun Idiot	
2009/0020973	A1	1/2009	Richardson	
2009/0029821	A1	1/2009	Martin, III et al.	
2009/0039700	A1	2/2009	Gradu et al.	
2009/0173033	A1	7/2009	Baxter, Jr.	
2011/0001350	A1	1/2011	Schmitz et al.	
2011/0057408	A1	3/2011	Koschinat	
2011/0079978	A1	4/2011	Schreiner et al.	
2011/0315468	A1	12/2011	Sellars et al.	
2013/0278047	A1	10/2013	Gottschalk	
2014/0361507	A1	12/2014	Park et al.	
2015/0191064	A1	7/2015	Gielisch et al.	
2015/0266350	A1	9/2015	Morino	
2016/0046151	A1	2/2016	Kelly et al.	
2016/0167432	A1	6/2016	Szczepanski	
2016/0169367	A1	6/2016	Orr et al.	
2017/0028517	A1	2/2017	Ferrari	
2017/0050483	A1	2/2017	Gordon et al.	
2017/0370465	A1	12/2017	Fast et al.	
2019/0030700	A1	1/2019	Huang	
2019/0054818	A1	2/2019	Garcia et al.	
2019/0210661	A1	7/2019	Cao et al.	
2020/0164708	A1	5/2020	Lim et al.	
2020/0198426	A1	6/2020	Rosene et al.	
2020/0282792	A1	9/2020	Horst et al.	
2023/0219010	A1	7/2023	Christensen et al.	
2024/0115964	A1	4/2024	Christensen et al.	
2024/0115965	A1	4/2024	Christensen et al.	

FOREIGN PATENT DOCUMENTS

EM	007721154-0004	3/2020
EM	007721154-0006	3/2020
EM	015013355-0018	3/2023
EM	015013355-0041	3/2023
GB	6228967	10/2022
GB	6265731	3/2023

(56)

References Cited

FOREIGN PATENT DOCUMENTS

GB	6265751	3/2023
GB	6307596	9/2023
GB	6307601	9/2023
GB	6307609	9/2023
GB	6379200	7/2024
IN	274347	11/2018
TW	179940-0001	12/2016
WO	D095551-013	4/2017
WO	D095551-014	4/2017
WO	D095551-016	4/2017

OTHER PUBLICATIONS

2pcs Alloy Steering Hub Carrier Blocks 7737 for RC Hobby Car 1/5 1/6 X-MAXX (Red), Amazon Website, Earliest Comment Date: Aug. 22, 2024 [Website Visited Oct. 3, 2024], Available on the Internet URL: <https://www.amazon.com/dp/B092MBNQJ3/> (Year: 2024).

Aluminum Steering Blocks, Traxxas Website, No Available Date [Website Visited Oct. 3, 2024], Available on the Internet URL: <https://traxxas.com/products/parts/7836-GRAY> (Year: 2024).

Traxxas 3752 Stub Axle Carrier (pair), Amazon Website, Earliest Comment Date: Jul. 25, 2014 [Website Visited Oct. 1, 2024], Available on the Internet URL: <https://www.amazon.com/dp/B000SU2D0C/> (Year: 2014).

Aluminum Stub Axle Carriers, Traxxas Website, No Available Date [Website Visited Oct. 1, 2024], Available on the Internet URL: <https://traxxas.com/products/parts/7852-blue> (Year: 2024).

Rcarmumb RC Upgrades Part for 1/6 Maxx WideMaxx, Aluminum Caster Blocks, Amazon Website, Earliest Comment Date: Jan. 30, 2023 [Website Visited Oct. 1, 2024], Available on the Internet URL: <https://www.amazon.com/dp/B0BBN892JJ/> (Year: 2023).

Traxxas X-Maxx Caster Blocks, Amazon Website, Earliest Comment Date: Sep. 9, 2016 [Website Visited Oct. 2, 2024], Available on the Internet URL: <https://www.amazon.com/Traxxas-7732-X-Maxx-Caster-Blocks/dp/B01A6YD1XC> (Year: 2016).

2pcs Alloy Front C Hub Carrier Caster Blocks 7732 for RC Hobby Car 1/5 1/6 X-MAXX (Red), Amazon Website, Earliest Comment Date: Oct. 21, 2021 [Website Visited Oct. 2, 2024], Available on the Internet URL: <https://www.amazon.com/dp/B092M9XJYW/> (Year: 2021).

Aluminum Caster Blocks, Traxxas Website, No Available Date [Website Visited Oct. 2, 2024], Available on the Internet URL: <https://traxxas.com/products/parts/7832-RED> (Year: 2024).

Traxxas TRX-4M Axle Housing (2) (Front & Rear), Part # TRA9741, as shown in www.hobbytown.com, May 23, 2023. (Year: 2023).

Traxxas 9744 Axle Rear (Assembled) M2.5x0.45 NL(2) TRX-4M, ASIN B0C4TM58TG, as show in www.amazon.com, May 11, 2023 (Year: 2023).

Injora Rear Axle Housing CNC Aluminum for TRX4M 1/8 RC Crawler Upgrade, Asin BOBV6LPYQK, as shown in www.amazon.com, Jul. 24, 2023. (Year: 2023).

Rear Axle Housing CNC Aluminum Portal Axles High Trail Axles Perfect Substitution for TRX4M 1/8 RC Crawler Upgrade Accessories, Asin B0CXXMN1PM, as shown in www.amazon.com, no date listed, date found. Oct. 10, 2024. (Year: 2024).

Meus Racing TRX4M Portal Axles +8mm Ground Clearance for Traxxas TRX4M Defender/Bronco/K10/F150 1/8 RC Crawler (Version 2.0), ASIN B0D14HS837, as shown in www.amazon.com, Jun. 10, 2024. (Year: 2024).

KYX Racing Metal Axle Housing Axle Shell with Cover for 1/10 RC Crawler SCX10 II 90046 90047, ASIN B07THY3Q59, as shown in www.amazon.com, Apr. 11, 2020. (Year: 2020).

Element RC Enduro SE Axle Housings, Part # ASC42307, as shown in www.amainhobbies.com, Dec. 5, 2022. (Year: 2022).

Traxxas TRX-4M Front Steering Blocks & Caster Blocks, Part#: TRA9732, as shown in www.amainhobbies.com, May 22, 2023. (Year: 2023).

Arrma Infraction Mega/Vendetta 3S BLX Steering Block (2), Part#: ARA330686, as shown in www.amainhobbies.com, Dec. 27, 2021. (Year: 2021).

Yokomo YZ-4 Steering Block Set, Part#: YOKZ4-415SA, as shown in www.amainhobbies.com, Nov. 19, 2015. (Year: 2015).

Element RC Enduro IFS 2 Steering Blocks, Part#: ASC42342, as shown in www.amainhobbies.com, Jul. 17, 2023. (Year: 2023).

Steering blocks, left & right/ caster blocks (c-hubs), left or right (2), Traxxas website, posted date unknown [online], [retrieved Nov. 25, 2024]. Retrieved from internet, <https://traxxas.com/products/parts/9732> (Year: 2024).

OGRC 5g Brass Caster Blocks C-Hubs for Traxxas TRX4M 1/8 Bronco/Defender, Amazon website, posted date unknown [online], [retrieved Nov. 25, 2024]. Retrieved from internet, <https://www.amazon.com/Caster-Blocks-Traxxas-Defender-Upgrade/dp/B0BWQ8WRCJ/> (Year: 2024).

Injora Black Brass Caster Blocks C-Hubs 4g Front Counterweight for 1/8 RC Crawler, posted date unknown [online], [retrieved Nov. 25, 2024]. Retrieved from internet, <https://www.amazon.com/dp/B0BQDD4HGZ> (Year: 2024).

Traxxas XRT Steering Blocks (2), as shown in www.hobbytown.com, May 16, 2023, Part # TRA7836. (Year: 2023).

Arrma 4S BLX Steering Block (2), as shown in www.hobbytown.com, Jul. 16, 2019, Part # ARA330523. (Year: 2019).

RPM Oversized Front Axle Carriers for Traxxas X-Maxx w/Bearings (2), as shown in www.amainhobbies.com, Jan. 18, 2021, Part # RPM80662. (Year: 2021).

Aluminum Alloy Front Hubs Steering Blocks for Traxxas X-MAXX 1/5 Scale RC Car Upgrade Parts (Red), ZXYRC Store, as shown in www.amazon.com, Apr. 10, 2022. (Year: 2022).

Traxxas 7836-Gray Steering Blocks Alum Gray, as shown in www.rc-powerhouse.com, no date listed, date found Jun. 18, 2024. (Year: 2024).

Traxxas XRT Caster Blocks (2), as shown in www.hobbytown.com, May 16, 2023, Part # TRA7832. (Year: 2023).

Hot Racing Aluminum Rear Hubs w/Over Size Bearings for Traxxas X-Maxx/XRT, as shown in www.amainhobbies.com, Apr. 9, 2024, Part # HRAXMX22M01. (Year: 2024).

Hot Racing Aluminum C-Hub Caster Blocks for Traxxas Maxx (Black) (2), as shown in www.hobbytown.com, May 4, 2021, Part # HRAMXX1901. (Year: 2021).

Yokomo Graphite Front Steering Hub Carrier (4°) (-1mm Tread) (Hard Type), as shown in www.hobbytown.com, Jan. 30, 2018, Part # YOKB8-413GH1. (Year: 2018).

Traxxas Rear Stub Axle Carriers (2), as shown in www.hobbytown.com, May 16, 2023, Part # TRA7852. (Year: 2023).

Measjimi Brand, 2pcs Alloy Rear Stub Axle Hub Carrier 7752 for RC Hobby Car 1/5 1/6 X-MAXX (Red), as shown in www.amazon.com, no date listed, Jun. 17, 2024, date found, ASIN B09MH1V2Q. (Year: 2024).

Weiqian brand, 1 Pair RC Rear Hub Carrier Portable Flexible CNC Aluminum Alloy Rear Stub Axle Carrier Replacement for TRAXXAS 1/5 Black, as shown in www.walmart.com, no date listed, Jun. 17, 2024, date found. (Year: 2024).

RPM Oversized Rear Axle Carriers for Traxxas X-Maxx, as shown in www.hobbytown.com, Sep. 27, 2016, Part # RPM81732. (Year: 2016).

Globact Brass LCG Heavy Weight Caster Blocks Portal Drive C-Hubs 84g Counterweight for 1/10 TRX4 TRX6 RC Crawler Car Upgrades Parts (2PCS), as shown in www.amazon.com, Aug. 9, 2023, ASIN B0C9SWT276. (Year: 2023).

Carriers, stub axle, 6061-T6 aluminum, posted date unknown [online], [retrieved Jul. 5, 2024]. Retrieved from internet, <https://traxxas.com/products/parts/9552T> (Year: 2024).

RiToEasysports 2Pcs RC Rear Axle Carrier, posted date unknown [online], [retrieved xx/xx/xx]. Retrieved from internet, https://www.amazon.com/RiToEasysports-Carrier-Aluminum-Alloy-Compatible/dp/B09JGDWWWSK/ref=sr_1_28 (Year: 2024).

Xray; "T1R Raycer-Instruction Manual;" Xray Model Racing Cars, Trencin, Slovak Republic, Europe.

Traxxas; "T-Maxx Assemblies-Front Assembly;" Traxxas LP, Plano, Texas.

(56)

References Cited

OTHER PUBLICATIONS

Traxxas Rear Stub Axle Carrier (1.5 Degree), Earliest Available Date Oct. 29, 2007 [Online], [Site Visited Oct. 28, 2020] Available From Internet, URL: <https://www.amainhobbies.com/traxxas-rear-stub-axle-carrier-1.5-degree-tra4352/p17759?gclid=EAlalQobChMlyY7Ak_TX7AIVWQiICR1dzw2fEAQYBCABEgL99vD_BwE> (Year: 2007).

Axle Bearing Carrier Suzuki LTZ400 Kawasaki KFX400 Arctic DVX400, Earliest Available Date Jun. 13, 2018 [Online], [Site Visited Oct. 28, 2020] Available From Internet, URL: <<https://www.amazon.com/Bearing-Carrier-SUZUKI-LTZ400-KAWASAKI/dp/B07F22WBPJ>> (Year: 2018).

Traxxas C-Hubs, Published date unavailable [online], [retrieved on Feb. 5, 2022]. Retrieved from the Internet: <https://www.rcsuperstore.com/traxxas-caster-blocks-c-hubs-left-right-slash-4x4/> (Year: 2022).

Traxxas Rear Stub Axle Carrier, Published date unavailable [online], [retrieved on Feb. 5, 2022]. Retrieved from the Internet: <https://www.rcmart.com/traxxas-rear-left-and-right-stub-axle-carrier-for-jato-5555-00036488> (Year: 2022).

Carriers stub axle, First Date Available: Unknown, Imaged retrieved on: Jun. 3, 2023, <<https://traxxas.com/products/parts/9552>>.

Traxxas Sledge Left & Right Steering Blocks, as shown in www.hobbytown.com, Jul. 27, 2022, Part # TRA9537. (Year: 2022).

Traxxas Sledge Caster Blocks L/R w/ Kingpin Bushings, as shown in www.hobbytown.com, Jul. 5, 2022, Part # TRA9532. (Year: 2022).

Traxxas TRX-4M Axle Cover (Black Chrome), Amain Hobbies Webpage [online], [Site Visit Nov. 20, 2023], URL: https://www.amainhobbies.com/traxxas-trx4m-axle-cover-black-chrome-2-tra9738-blkcr/p1451999?gclid=EAlalQobChMInZan4p3TggMV-TWtBh3KAA8AEAKYAiABEgKPqPD_BwE (Year: 2023).

TRA9738-Red TRX-4M Axle Cover Front or Rear (Traxxas), Michael's RC Hobbies Webpage [online], [Site Visit Nov. 20, 2023], URL: <https://www.michaelsrchoobbies.com/tra9738-red-trx-4m-axle-cover-front-or-rear-red-2.html> (Year: 2023).

Palumma RC Gearbox Cover, available in Amazon.com, date first available Jun. 9, 2023 [online], [site visited Apr. 16, 2024], Available from the internet URL: https://www.amazon.com/Palumma-Gearbox-Aluminum-Transmission-Differential/dp/B0C7JW49ZB/ref=sr_1_6?crid=30VAI2L9URG6D&dib=eyJ2ljoMSJ9._JgbGBev5Lj (Year: 2023).

* cited by examiner

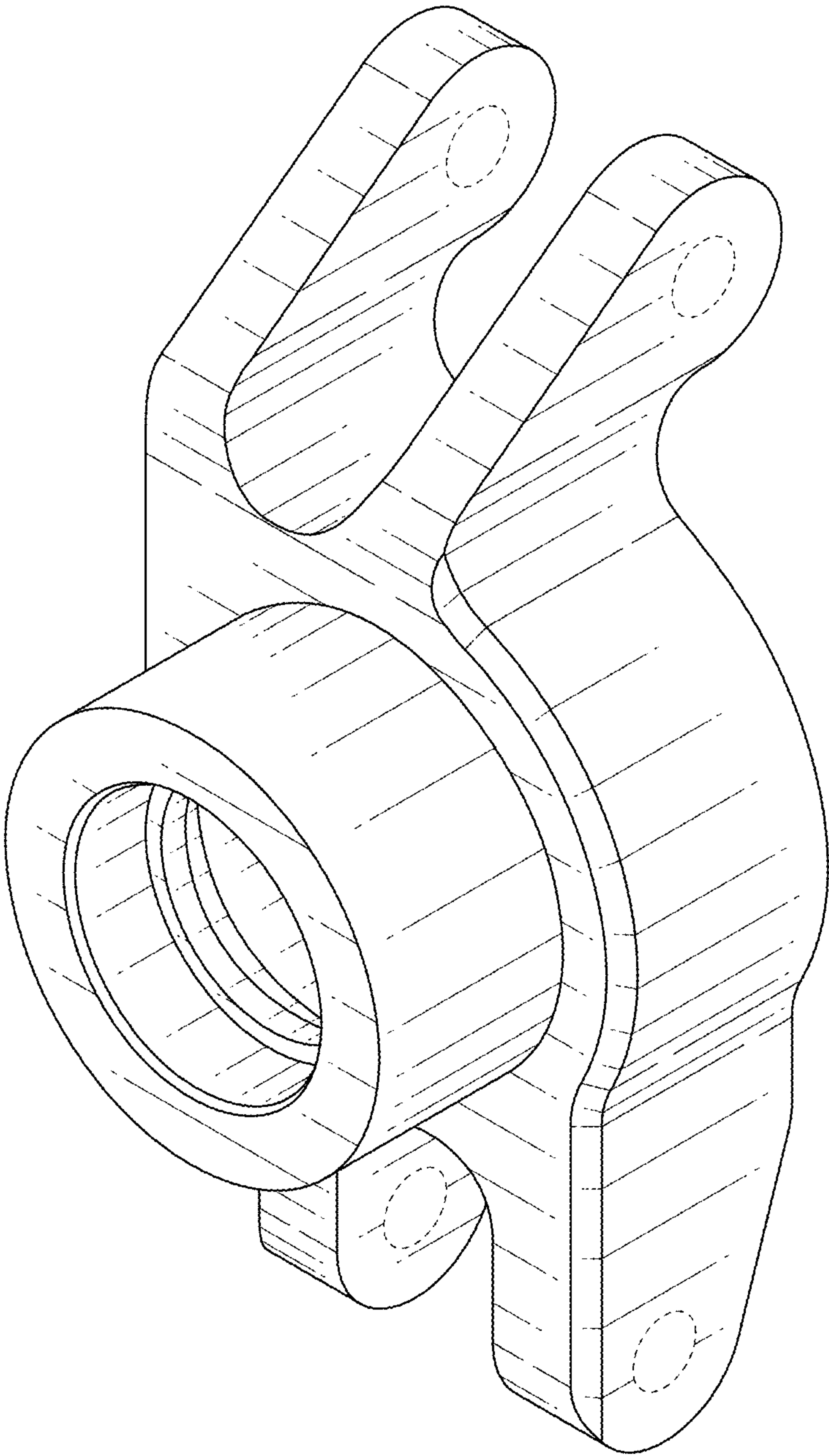


FIG. 1

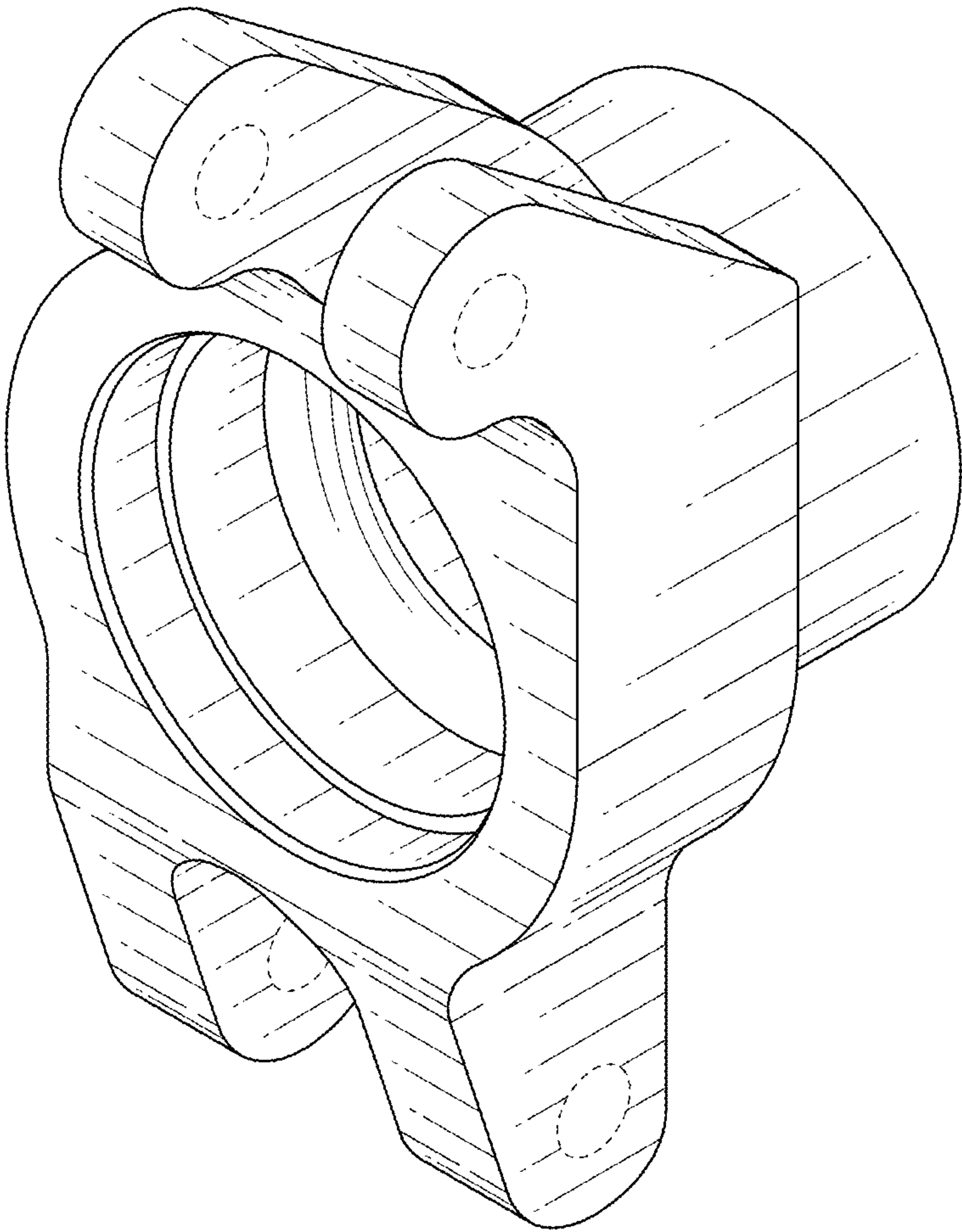


FIG. 2

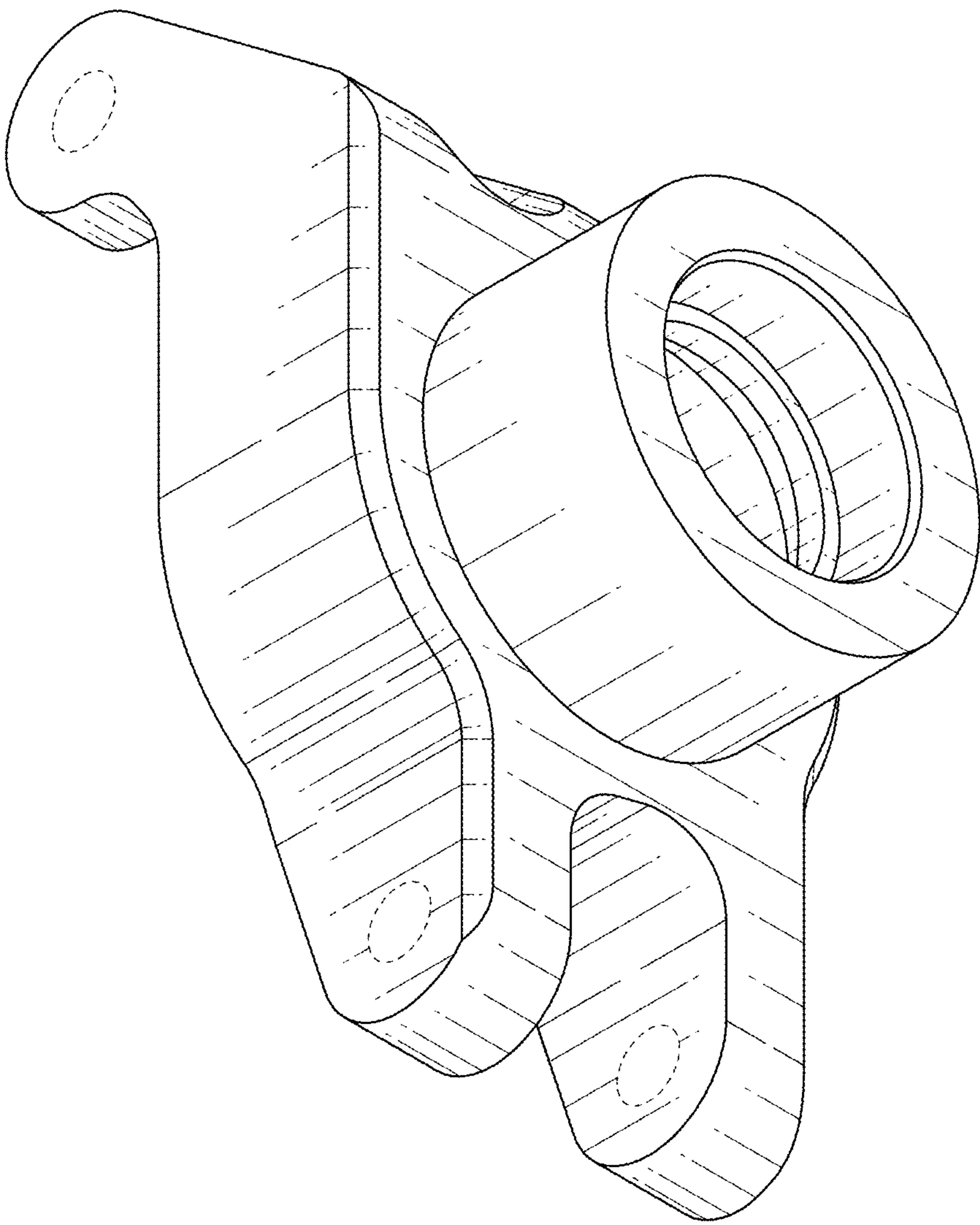


FIG. 3

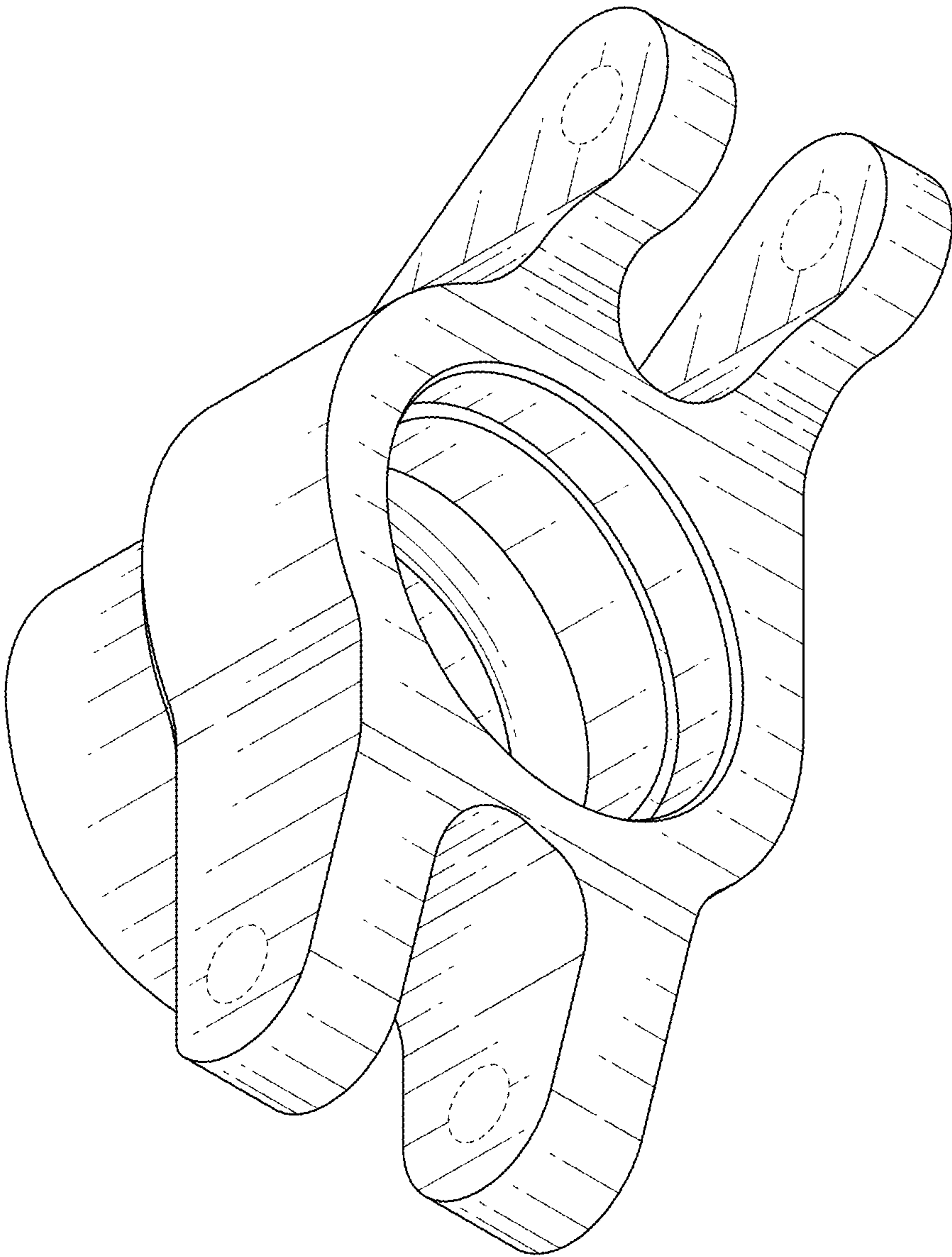


FIG. 4

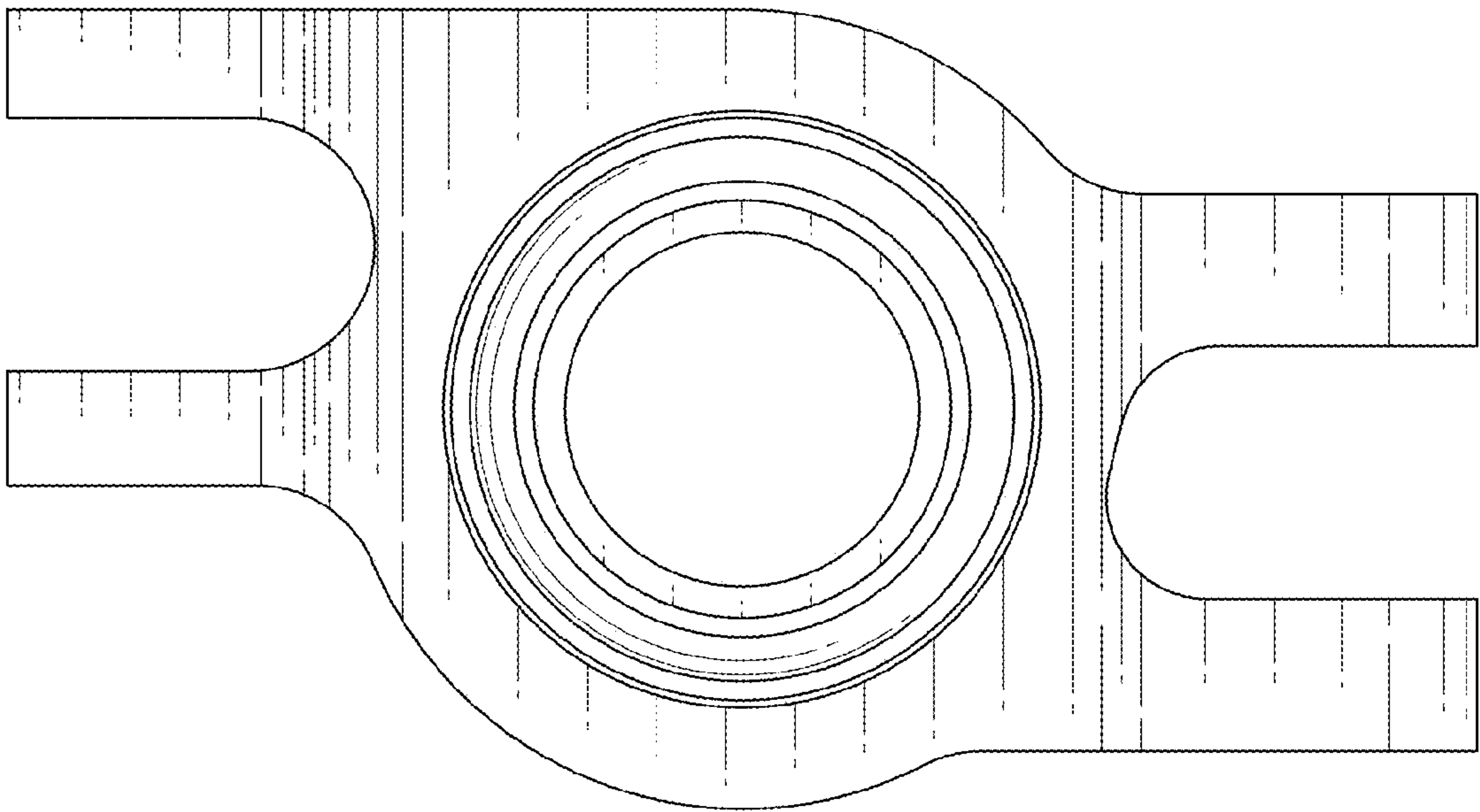


FIG. 6

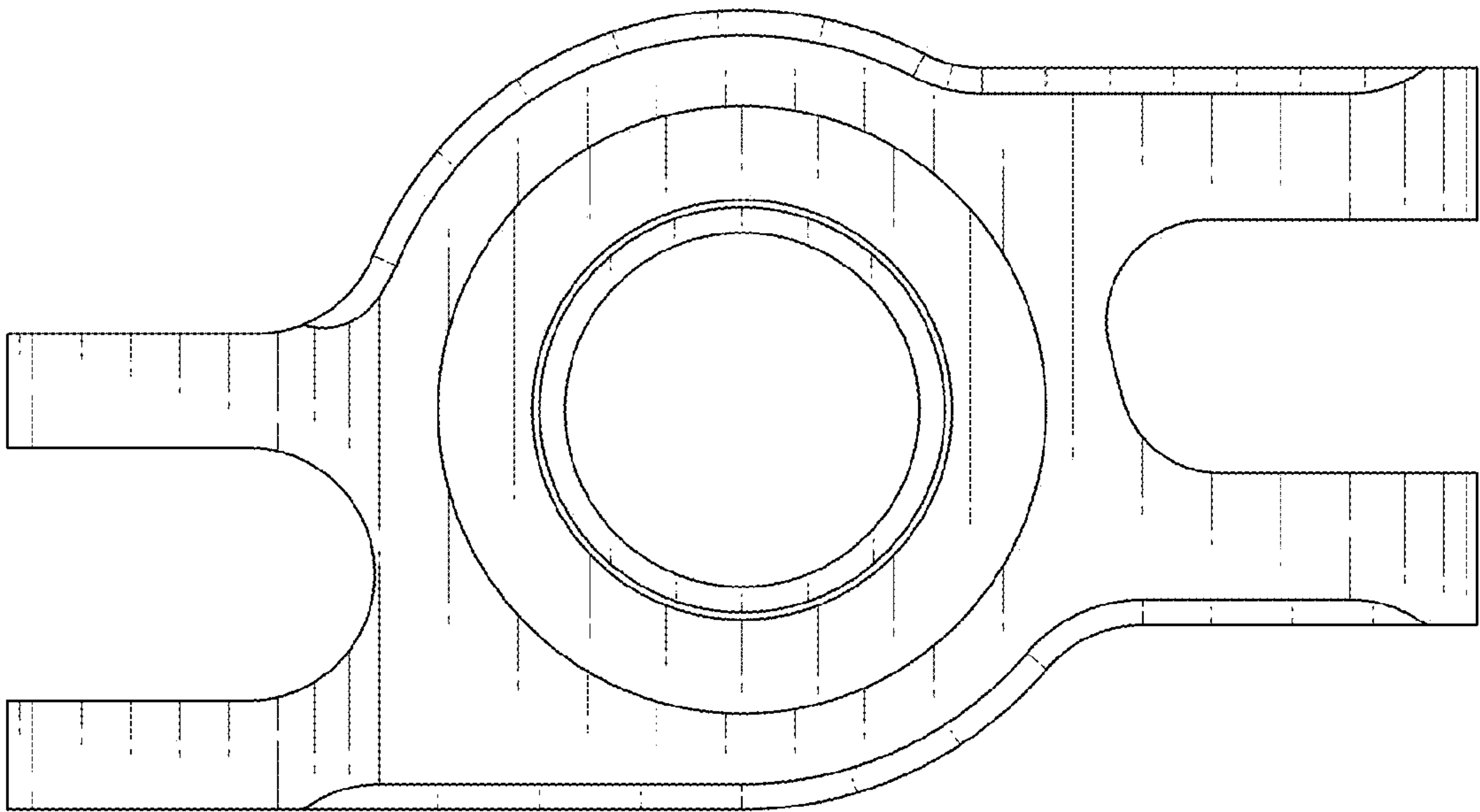


FIG. 5

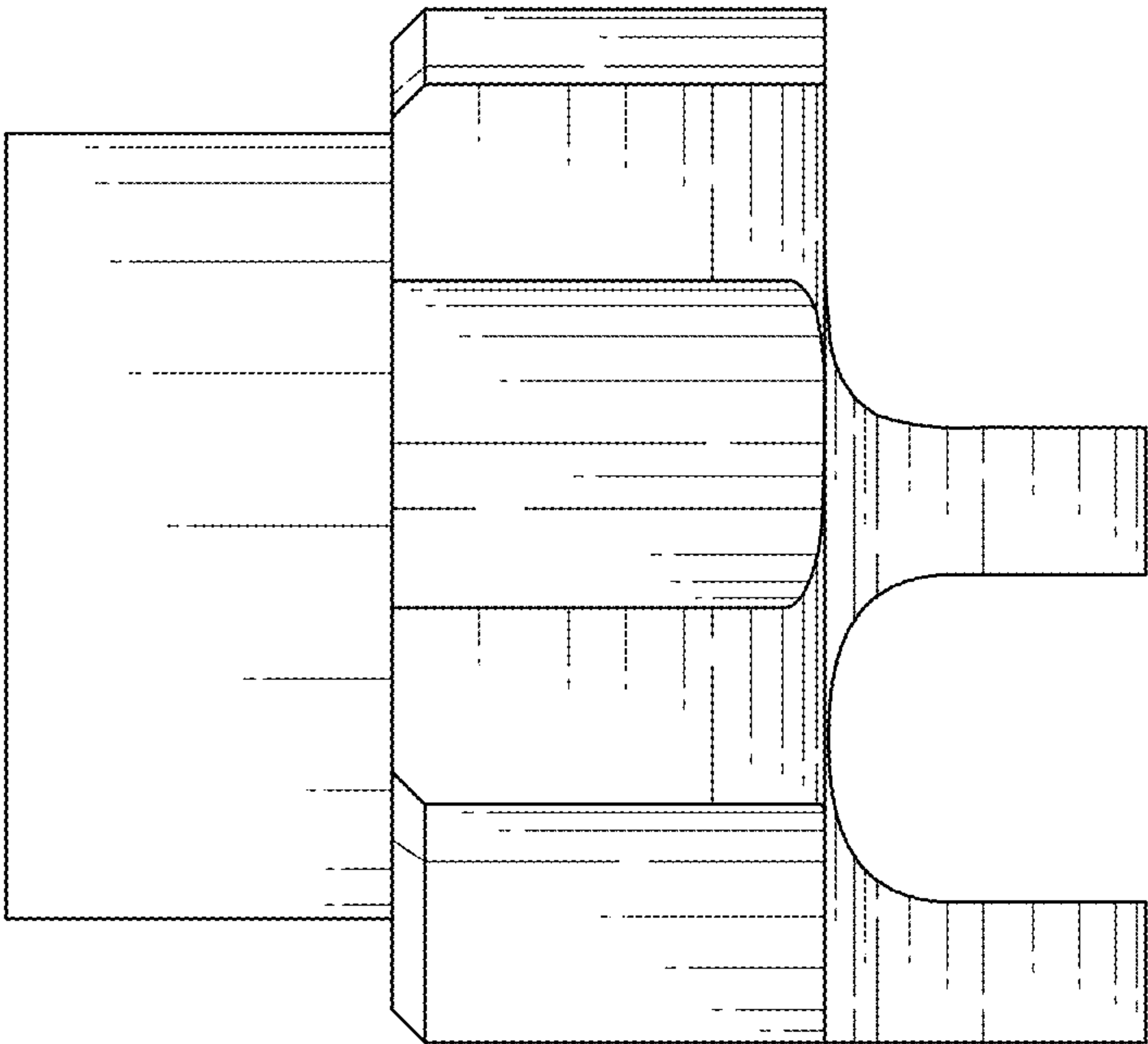


FIG. 8

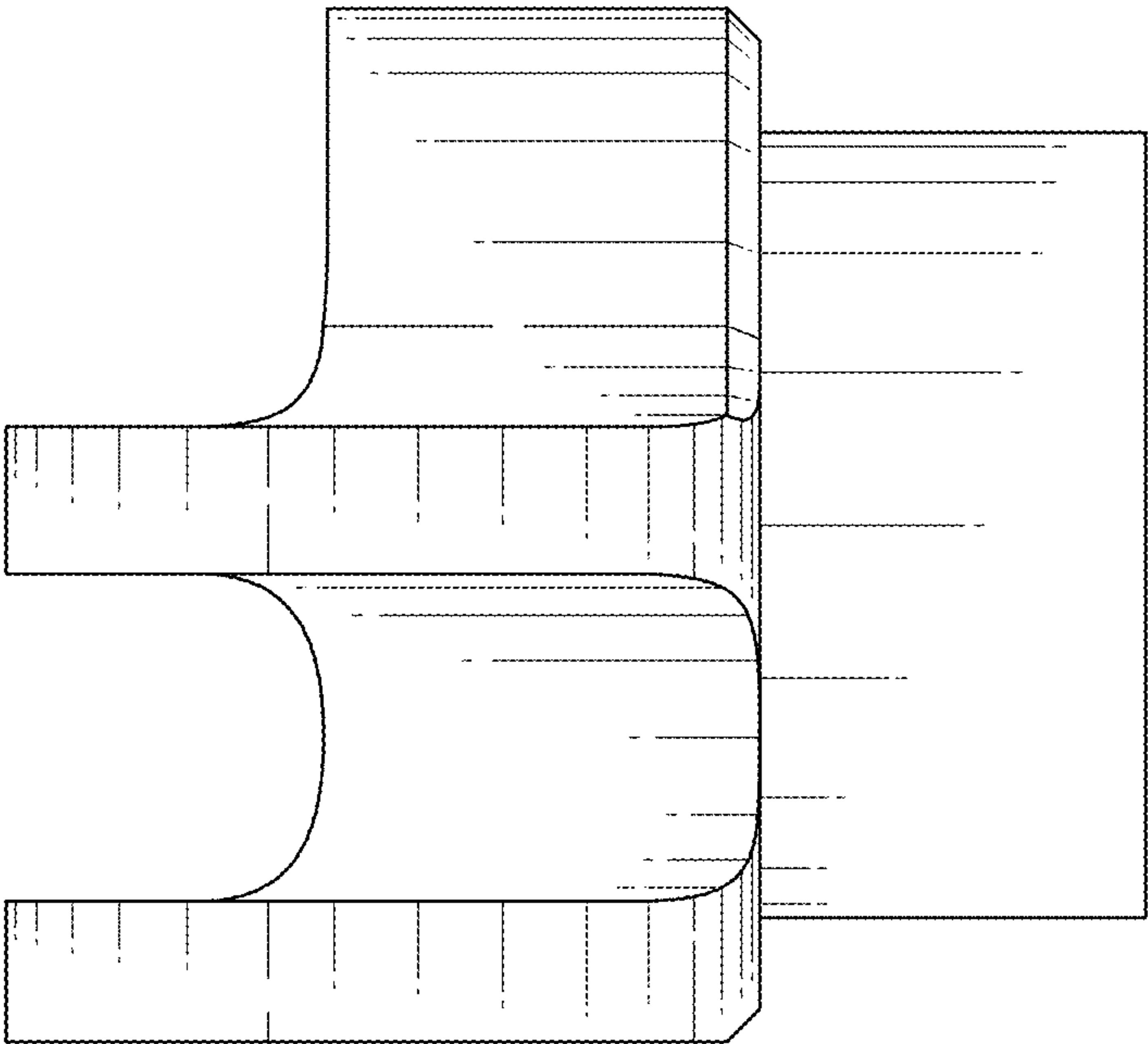


FIG. 7

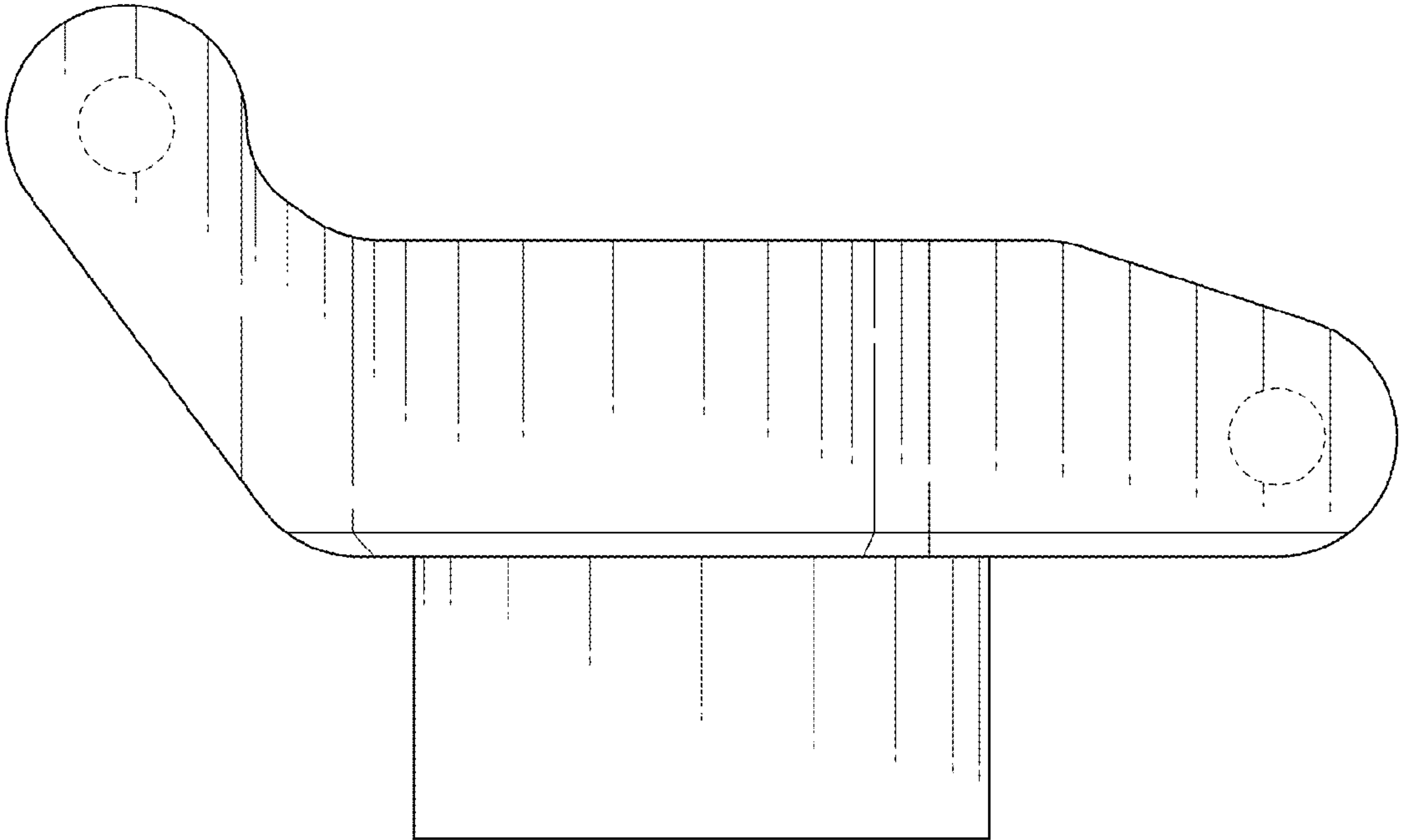


FIG. 9

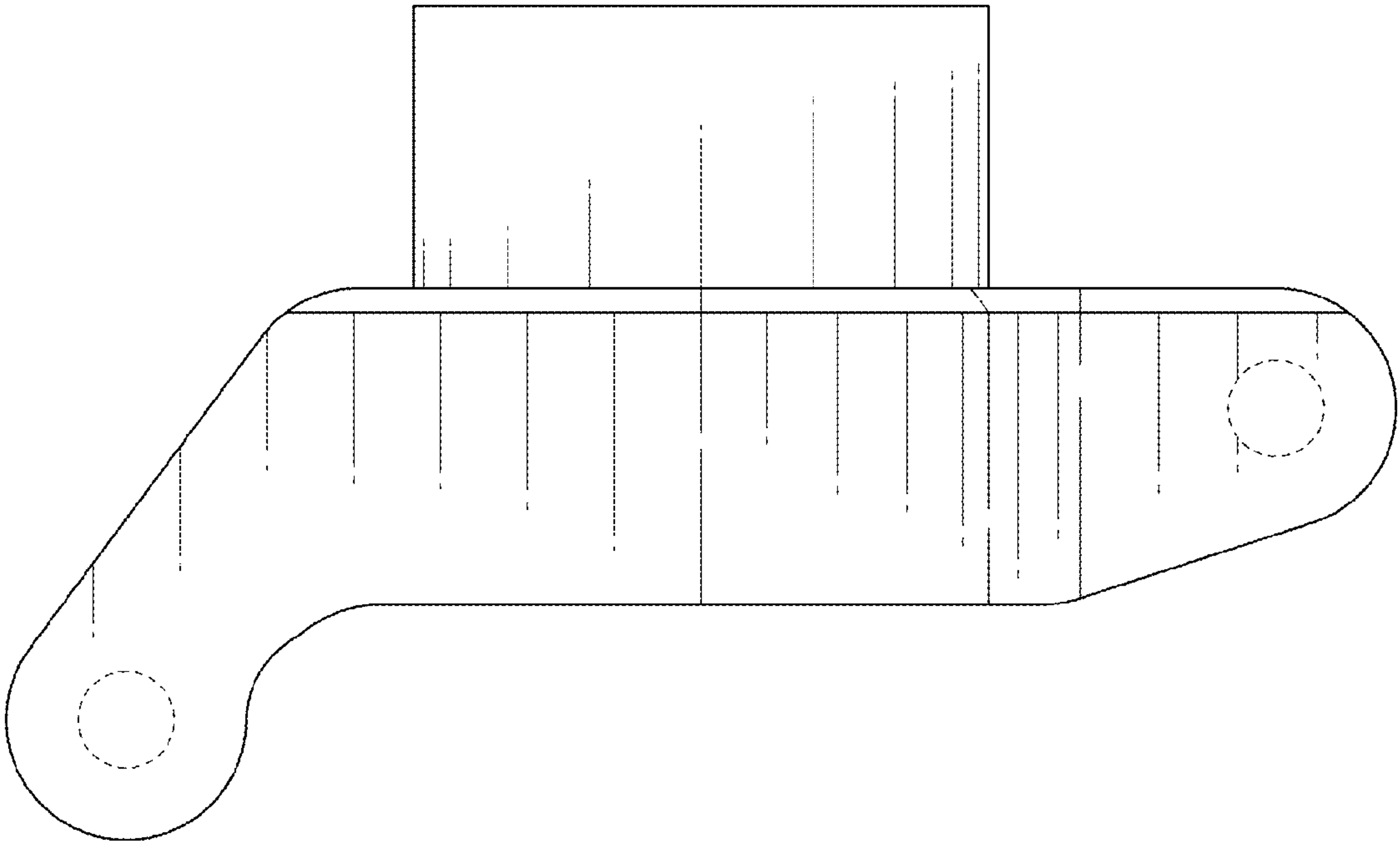


FIG. 10