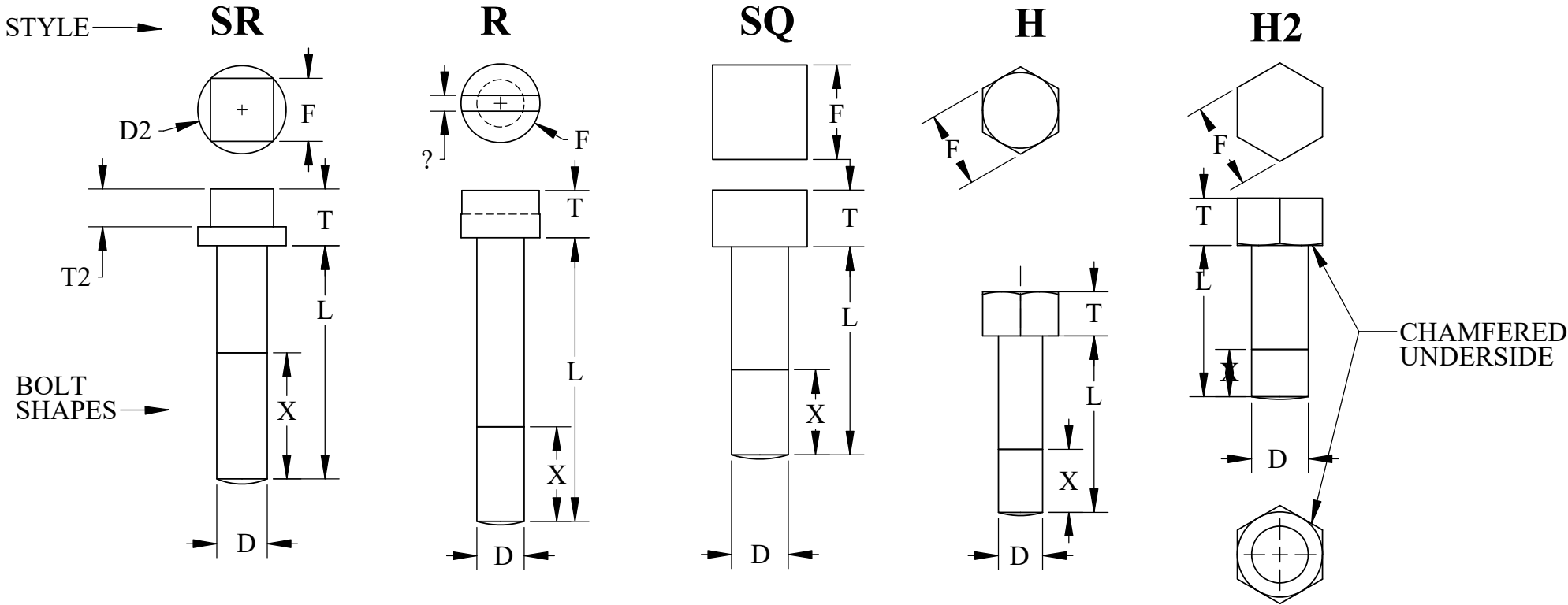


**NOTE:**  
THREAD PITCH  
INFORMATION (TPI)  
IS NOT AVAILABLE AS  
IT WAS AN  
INDIVIDUAL STANDARD  
BY VARIOUS  
MANUFACTURING SHOPS

BOLTS	MAJOR DIA	HEAD STYLE	THREAD LENGTH	BOLT LENGTH	FLAT SIZE	HEAD THICKNESS			BOM	TOTAL NEEDED	SUB-ASSEMBLY USE
PART #	D	H-H2-SQ-SR	X	L	F	T	T2	D2	USED AT LINE #	QUANTITY	
B 1	5/8"	SQ	1-1/4"	2	1-1/8"	1/2			197-319	4	REV WHEEL-BEDPLATE
B 2	3/4"	H2	5/8"	1-3/8"	1"	5/8" C			44	4	VALVE CHEST
B 3	3/4"	H2	1"	2-1/8"	1-1/8"	5/8" C			231	1	THROTTLE SHAFT
B 4	3/4"	H2	1"	2-1/2"	1"	5/8" C			229-291	8+2	STEAM PIPE-REVERSE BEARING
B 5	3/4"	SQ	1-1/8"	2-3/4'	1-1/4"	3/4"			223	16	THROTTLE BOX
B 6	3/4"	SQ	1/1/4"	3-1/4"	1-1/4"	3/4"			221	24	STEAM PIPE
B 7	3/4"	R	1-1/2"	4-1/2"	1-1/4"	3/4"			164	2	ECCENTRIC/PINION GEAR
B 8	3/4"	SQ	1-1/4"	6-3/4"	1-1/4"	3/4"			224	2	THROTTLE BOX
B 9	3/4"	H2	1-1/2"	7"	1-1/4"	3/4"			18	22	CENTER HEAD
B 10	7/8"	H	1-1/4"	5-1/2"	1-1/2"	7/8"			50-84	6+52	VALVE CHEST/CUTOFF CHEST
B 11	7/8"	H	1-1/2"	7"	1-1/2"	7/8"			83	4	VALVE CHEST
B 12	1"	H2	1-1/2"	2-1/2"	1-1/2"	1"			166-195-196-321	2+4+4+2	COMMON
B 13	1"	SR	2-1/2"	4-5/8"	1-1/4"	3/4"	3/8"	1-3/4"	163	2	PORT/STARBOARD ECCENTRIC
B 14	1-1/4"	H	3"	19"	2-1/4"	1-1/4"			289	2	THRUST COLLAR
B 15	1-1/4"	SQ	2-1/5"	6"	1-1/4"	1-1/2"			326	2	BEDPLATE
B 16	1-1/4"	H	3"	20-5/8"	2-1/4"	1-1/4"			330	2	THRUST BEARING EXTENSION
B 17	1-1/4"	SQ	7-3/4"	8"	1-1/2"	1-1/2"			322-324	1+18	BEDPLATE
B 18	1-1/2"	H2	3.	5-1/2"	2-1/4"	1-1/2"			30	4	CYLINDER MOUNTING
B 19	1"	SQ	6-1/4	6-1/2"	1-1/2"	1"					VOIDED
B 21	2-1/4"	SQ	4-1/2"	12"	3-1/2"	1-1/4"			328	2	THRUST BEARING EXTENSION
B 22											VOIDED
B 23	1-1/4"	H2	2"	6-1/2"	2-1/4"	1-1/4"			321	2	BEDPLATE BEARING CAP
B 24	7/8"	H	1-1/2"	3-3/4"	1-1/2"	7/8"			349	3	EJECTION GEAR

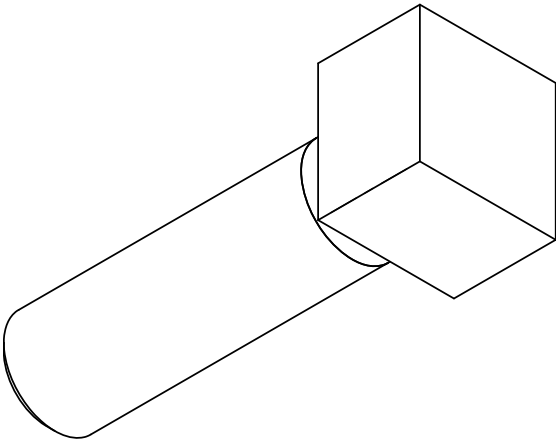
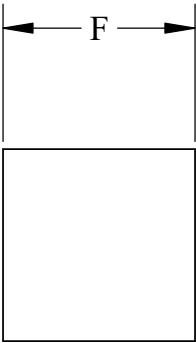
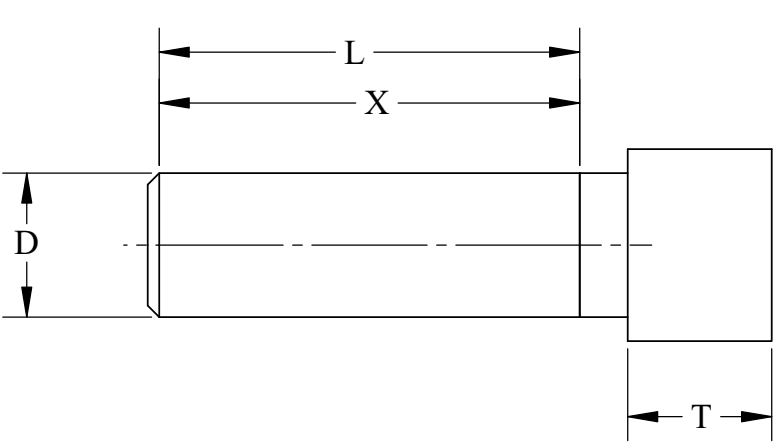


U.S.S. Monitor Steam Engine

Material STEEL	Drawn By - Date RWC 10-2018	Sub-Assembly VARIOUS
Weight (Lbs)	Description  <b>BOLTS</b>	
Scale N.T.S.		
Part # <b>B 1-23</b>		

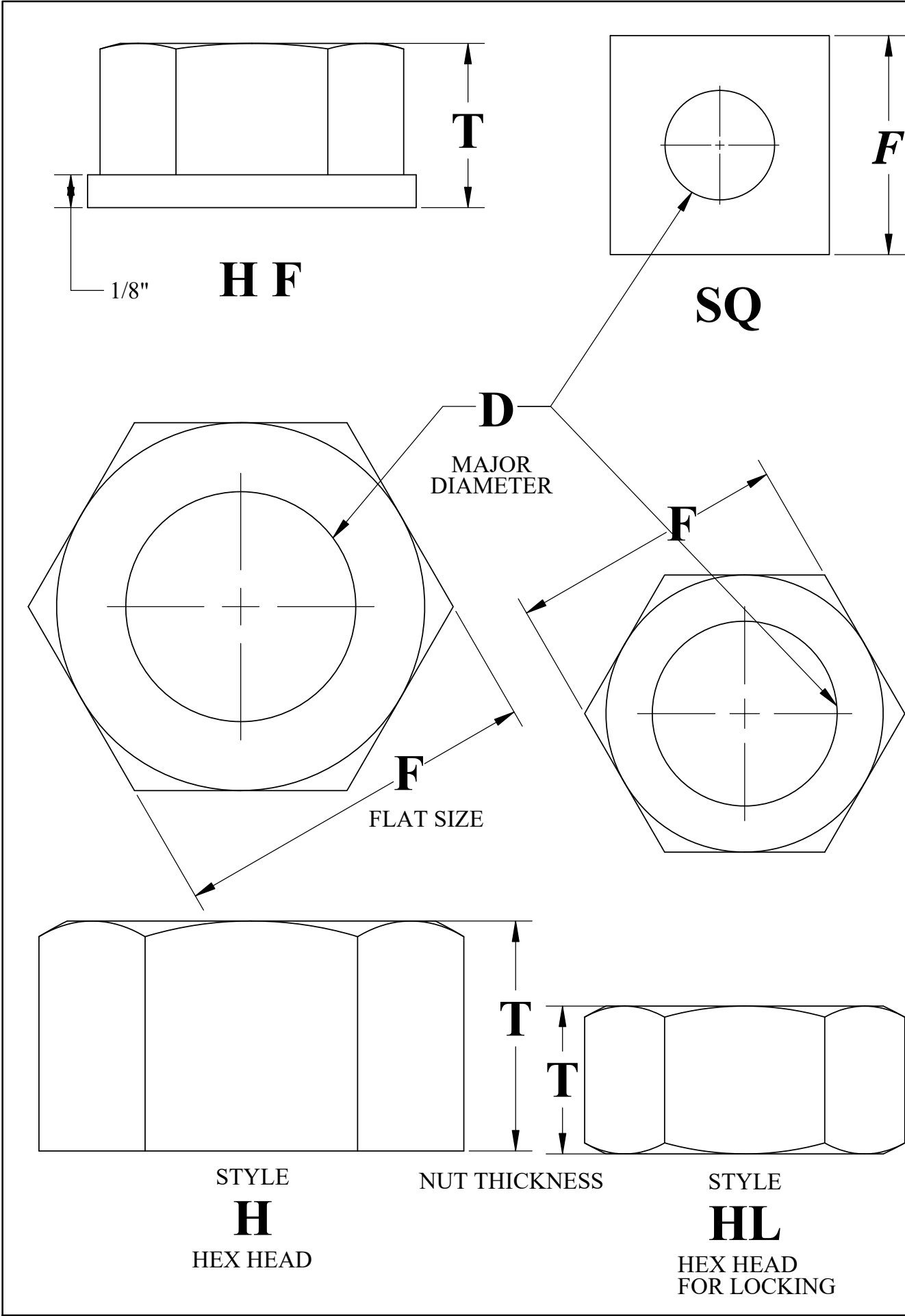
Locking Screw	DIAM.	THREAD LENGTH	O.A.L.	FLAT SIZE	HEAD THICKNESS	B.O.M. LINE	QUANTITY	SUB-ASSEMBLY USE
Part#	D	X	L	F	T			
L 1	3/8"	1-1/8"	1-1/4"	1/2"	3/8"	117	4	TRANSLATOR
L 2	1/2"	3/4"	7/8"	5/8"	1/2"	131	4	ECCENTRIC ROD
L 3	5/8"	2	2-1/8"	7/8"	5/8"	52-86-165	4+4+2	VALVE RODS-REVERSE KEY
L 4	3/4"	2	2-1/16"	1-1/8"	5/8"	112	4	TRANSLATOR ADJUSTING
L 5	7/8"	1-1/2"	1-3/4"	1-1/4"	3/4"	276	4	CONNECTING ROD
L 6	1"	1-5/8"	1-7/8"	1-1/2"	1"	162	1	REVERSING SHAFT SPACER
L 7	1"	2-7/8	3-1/8"	1-1/2"	1"	259	2	PISTON ROD

**NOTE:**  
**THREAD SPECIFICATIONS ARE**  
**UNKNOWN AS EACH MANUFACTURER**  
**HAD THEIR OWN STANDARDS FOR**  
**THREADS PER INCH (TPI)**



U.S.S. Monitor Steam Engine

Material STEEL	Drawn By - Date RWC 12-2018	Sub-Assembly Reversing Shaft
Weight (Lbs) VARIES	Description <b>Square Locking Screw</b>	
Scale 2:1		
Part # L 1-7		



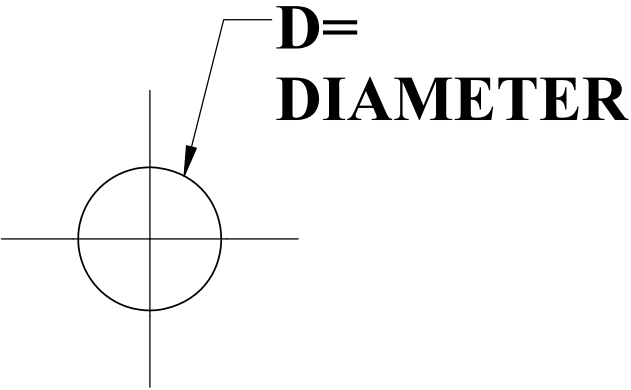
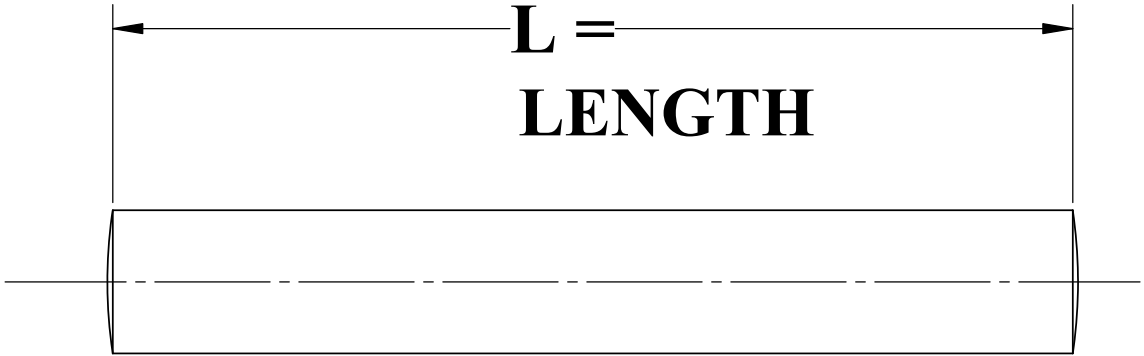
Nuts	MAJOR DIA	HEAD STYLE	FLAT SIZE	THICK	BOM	NUMBER	TOTAL NEEDED	SUB-ASSEMBLY
Part #	D	H - H L	F	T	LINE USE	QUAN	Total	USE
N 1	1/2"	H	7/8"	1/2"	227	2	2	STEAM THROTTLE
N 2	5/8"	H	1-1/8"	5/8"	47-53-82-87-292	4+4+4+4+2	18	COMMON
N 3	3/4"	H	1-1/4"	3/4"	18-27-88-113-222	22+12+2+4+24		COMMON
	Continue	>>>>			225+230	18+14	114	COMMON
N 4	7/8"	H	1-1/2"	7/8"	51-85-120-233	56+58+8+2	124	COMMON
N 5	1"	H	1-3/4"	1"	21-25	44+24	68	COMMON
N 6	1-1/4"	H	2 "	1-1/4"	290-323	4 + 1	5	M. CRANK-BEDPLATE
N 7	1-1/4"	H L	2"	7/8"	45-80	4+4	8	VALVE RODS
N 8	1-1/4"	H	1-7/8"	1"	199	2	2	REVERSING WHEEL
N 9	1-1/4"	H L	1-7/8"	1"	200	2	2	REVERSING WHEEL
N 10	1-1/4"	H	1-7/8"	1-1/4"	114	4	4	TRANSLATOR
N 11	1-1/4"	H	2-1/4"	1-1/4"	116-198-325-327-331	8+2+18+4+2	34	COMMON
N 12	1-1/2"	H	2-1/4"	1-1/8"	132	16	16	ECCENTRIC ROD
N 13	1-1/2"	H L	2-1/4"	1-1/8"	133	16	16	ECCENTRIC ROD
N 14	1-1/2"	H	2-1/2"	1-1/2"	23	8	8	PISTON
N 15	1-1/2"	H	2-3/4"	1-1/2"	29	4	4	CYLINDER
N 16	2-1/4"	H	3-3/4"	2-1/4"	329	2	2	BEDPL. EXTENSION
N 17	2-1/2"	H	4-1/2"	2-1/2"	332	8	8	SHAFT BEARING CAP
N 18	5/8"	H L	1-1/8"	1/2"	53-90	4+4	8	GLAND LOCK NUT
N 19	3/4"	H L	1-1/4"	5/8"	26	12	12	CYLINDER
N 20	7/8"	H L	1-1/2"	3/4"	119	8	8	TRANSLATOR
N 21	1/2"	H F	1"	5/8"	16-73-74	14	14	COCKS-TALLOW POT
N 22	2-1/2"	H	4-1/2"	2-1/2"	317	2	2	M.CRANK BEARING
N 23	2-1/2"	SQ.	5"	2-1/2"	318	2	2	M.CRANK BEARING

**NOTE:**THREAD PITCH INFORMATION (TPI) IS NOT AVAILABLE AS IT WAS AN INDIVIDUAL STANDARD BY VARIOUS MANUFACTURING SHOPS

**U.S.S. Monitor Steam Engine**

Material Steel	Drawn By - Date RWC 12-2018	Sub-Assembly As Listed
Weight (Lbs) Various	<b>NUTS</b>	
Scale N/A		
Part # <b>N 1-23</b>		

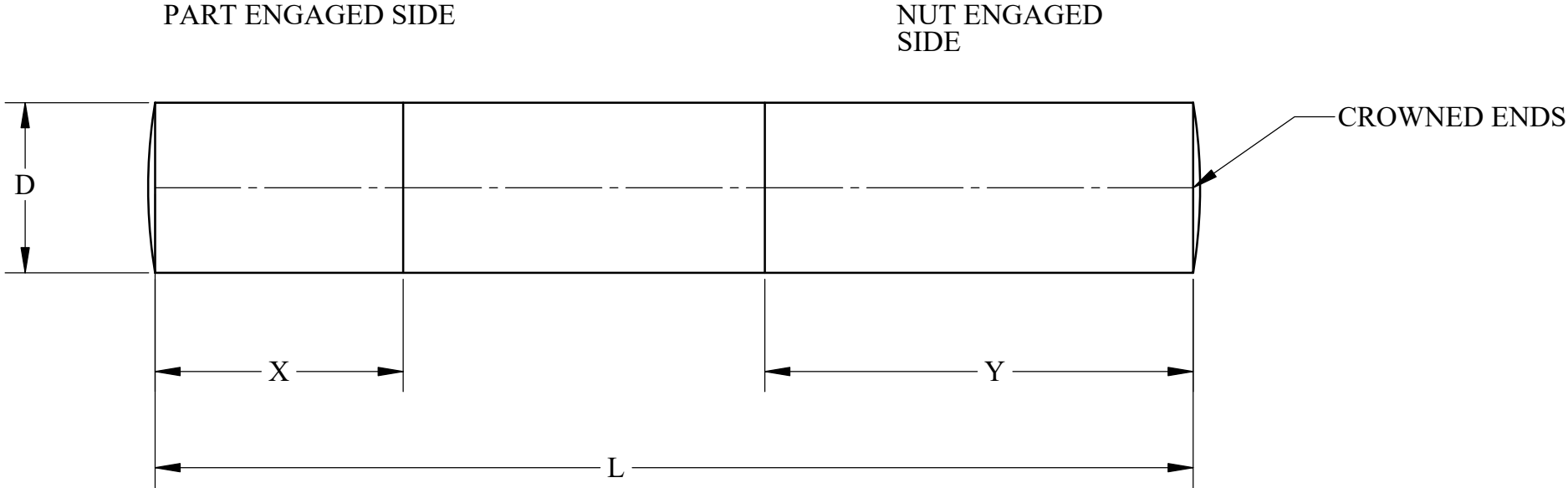
PART #	D	L	QUAN.	BOM LINE #	SUB-ASSEMBLY
P 1	3/16"	1-1/4:"	2	89	Cutoff Chest
P2	1/4"	2-1/4"	4	167	Reversing Shaft
P3	3/8"	3-3/4"	2	168	Reversing Shaft
P4	1/2"	2-1/4"	1	191	Reversing Wheel
P 5	1/2"	3-1/4"	2	192	Reversing Wheel
P6	1/4"	1-1/2"	1	344	Ejector Assembly



U.S.S. Monitor Steam Engine

Material STEEL	Drawn By - Date RWC 10-2018	Sub-Assembly VARIOUS
Weight (Lbs)	<b>PINS</b>	
Scale		
Part # <b>P</b>		

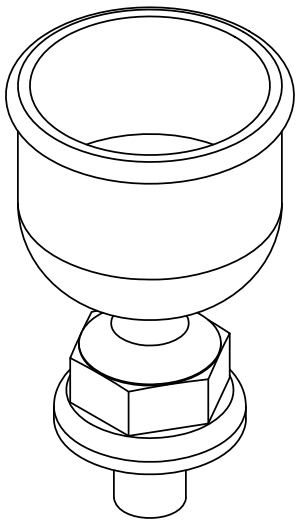
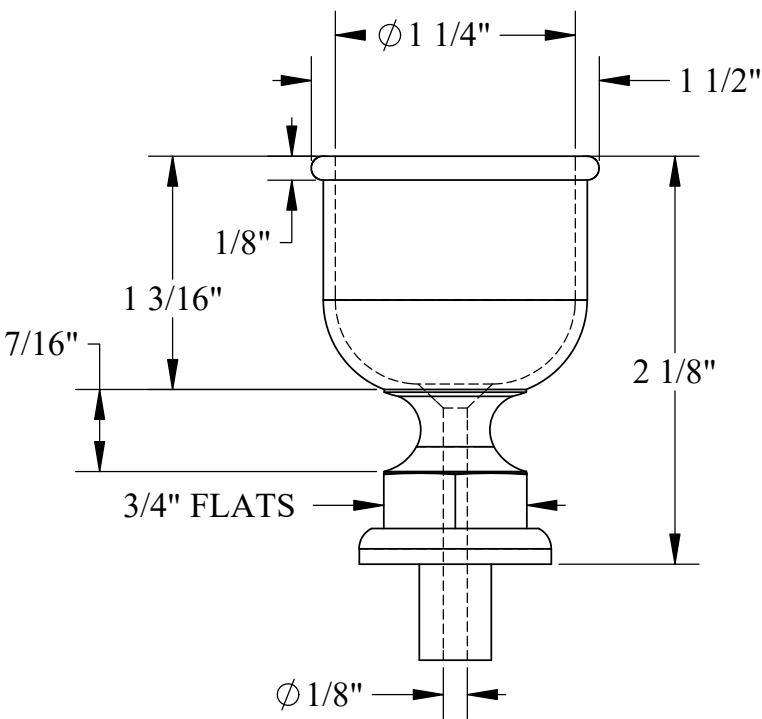
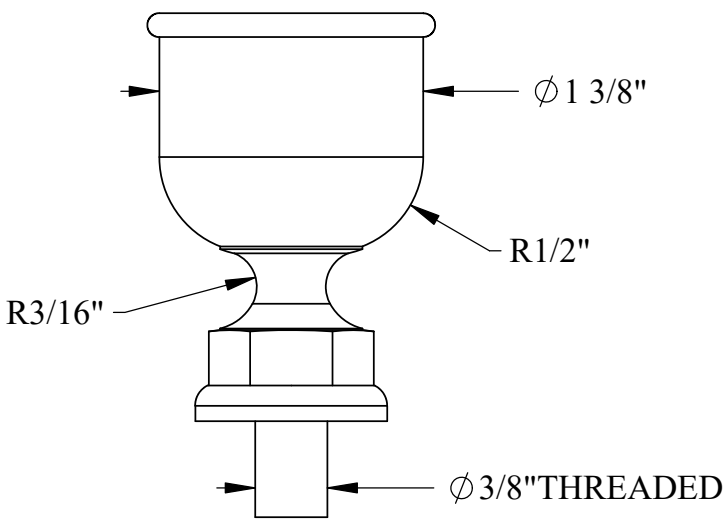
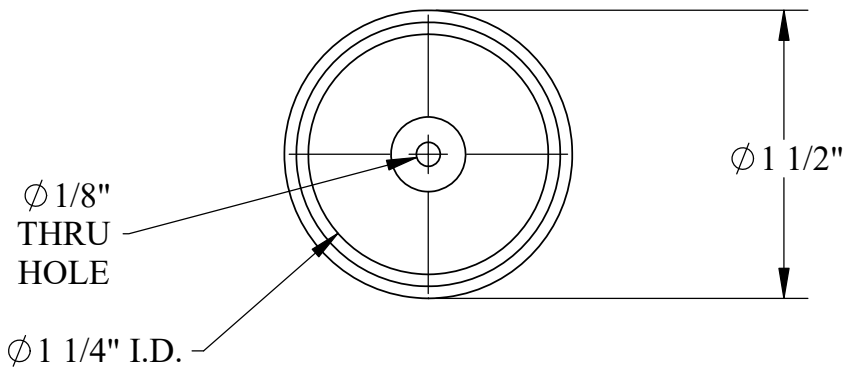
Part#	Diameter	Thread	Lengths	Tot. Length	BOM	Quantity	Sub-assembly
	D	X	Y	L	LINE		NAME
S 1	1/2"	3/4"	2"	3"	226	2	STEAM PIPE
S 2	5/8"	1"	2-1/2"	5"	46-81	4+4	VALVE & CUTOFF CHESTS
S 3	1-1/4"	Special Drawing		10"	194	2	REVERSING WHEEL
S 4	3/4"	1 "	1-1/2"	4-1/4"	79	2	CUTOFF CHEST
S 5	3/4"	1-1/4"	3"	5"	228	6	STEAM PIPE
S 6	3/4"	1-1/2"	2-1/2"	5-3/4"	25	12	CYLINDER
S 7	7/8"	1-1/2"	1-1/2"	3-3/4"	48	46	VALVE CHESTS
S 8	7/8"	1-1/2"	2"	4-7/8	118	8	TRANSLATOR
S 9	7/8"	1-1/2"	1-1/2"	7-1/4"	49	4	VALVE CHEST
S 10	7/8"	7/8"	1-1/4"	3"	232	2	STEAM PIPE
S 11	1"	1-3/4 "	1-3/4"	4"	19	44	CYLINDER
S 12	1"	1-3/4"	1-3/4"	6"	23	24	CYLINDER
S 13	1-1/4"	3-7/8"	1-3/4"	12"	115	8	TRANSLATOR
S 14	1-1/2"	3"	2-1/2"	6-1/2"	28	4	CYLINDER
S 15	1-1/2"	2-5/8"	1-1/2"	7"	21	8	CYLINDER



NOTE:  
THREAD COUNT NOT GIVEN  
NO DATA AVAILABLE FROM  
HISTORICAL RECORDS

U.S.S. Monitor Steam Engine

Material Steel	Drawn By - Date RWC 12-2018	Sub-Assembly Various As Stated
Weight (Lbs)	STUDS	
Scale N/A		
Part # S 1-15		

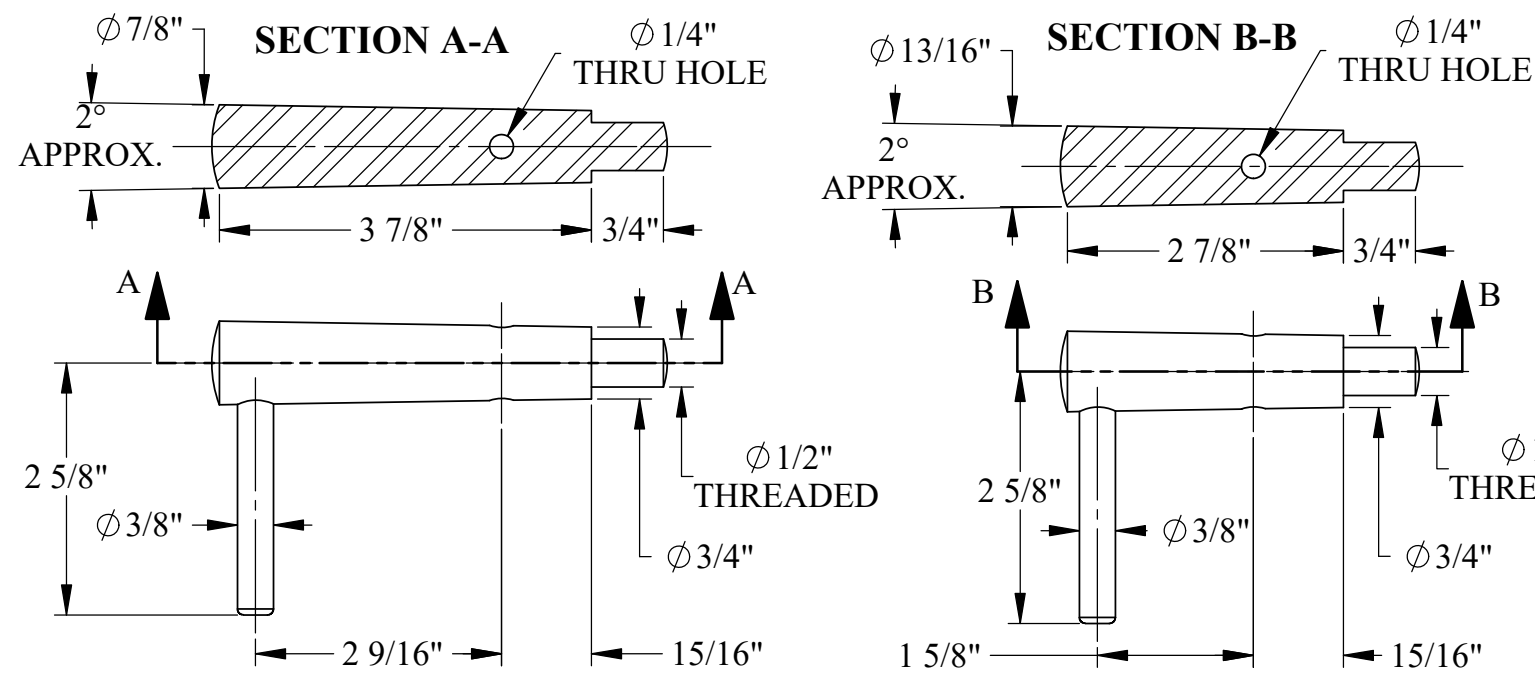


NOTE:  
ACCURATE DETAILS OF THE  
OIL CUPS USED ON MONITOR  
ARE NOT KNOWN AT THIS TIME

THE IMAGE HERE IS APPROXIMATED-  
ALSO SOME CUPS HAVE COVERS AND  
SOME CUPS MAY USE WICKS AND A  
LEVELING TUBE FOR SLOW FEEDS

U.S.S. Monitor Steam Engine

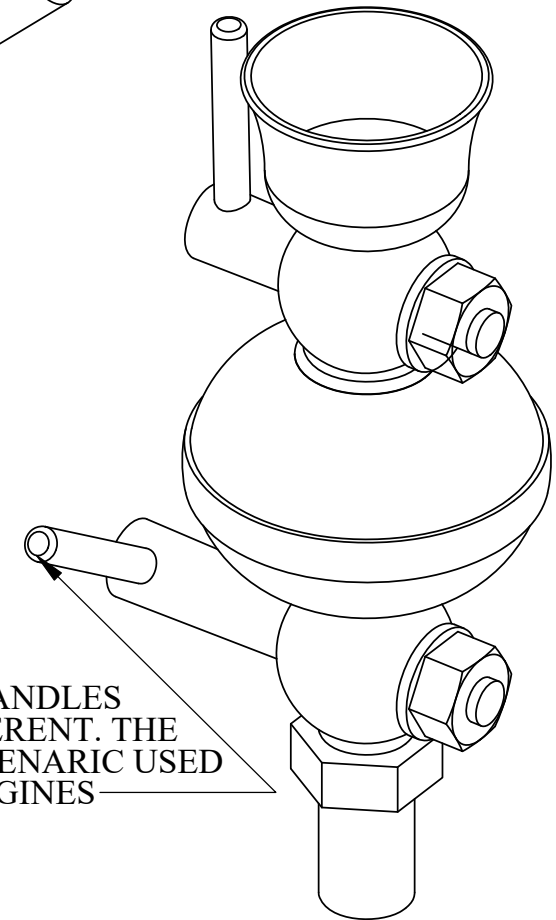
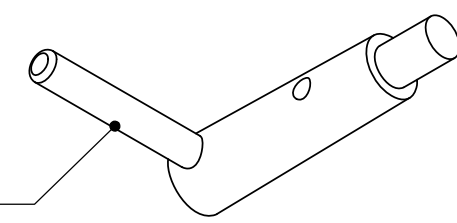
Material Brass	Drawn By - Date RWC 12-2018	Sub-Assembly ALL
Weight (Lbs) 0.23	Description  Oil Cup- Small	
Scale 1:1		
Part # O 1		



NOTE:  
ALL TAPERS SHOWN  
ARE 3/8" PER FOOT  
INCLUDED ANGLE

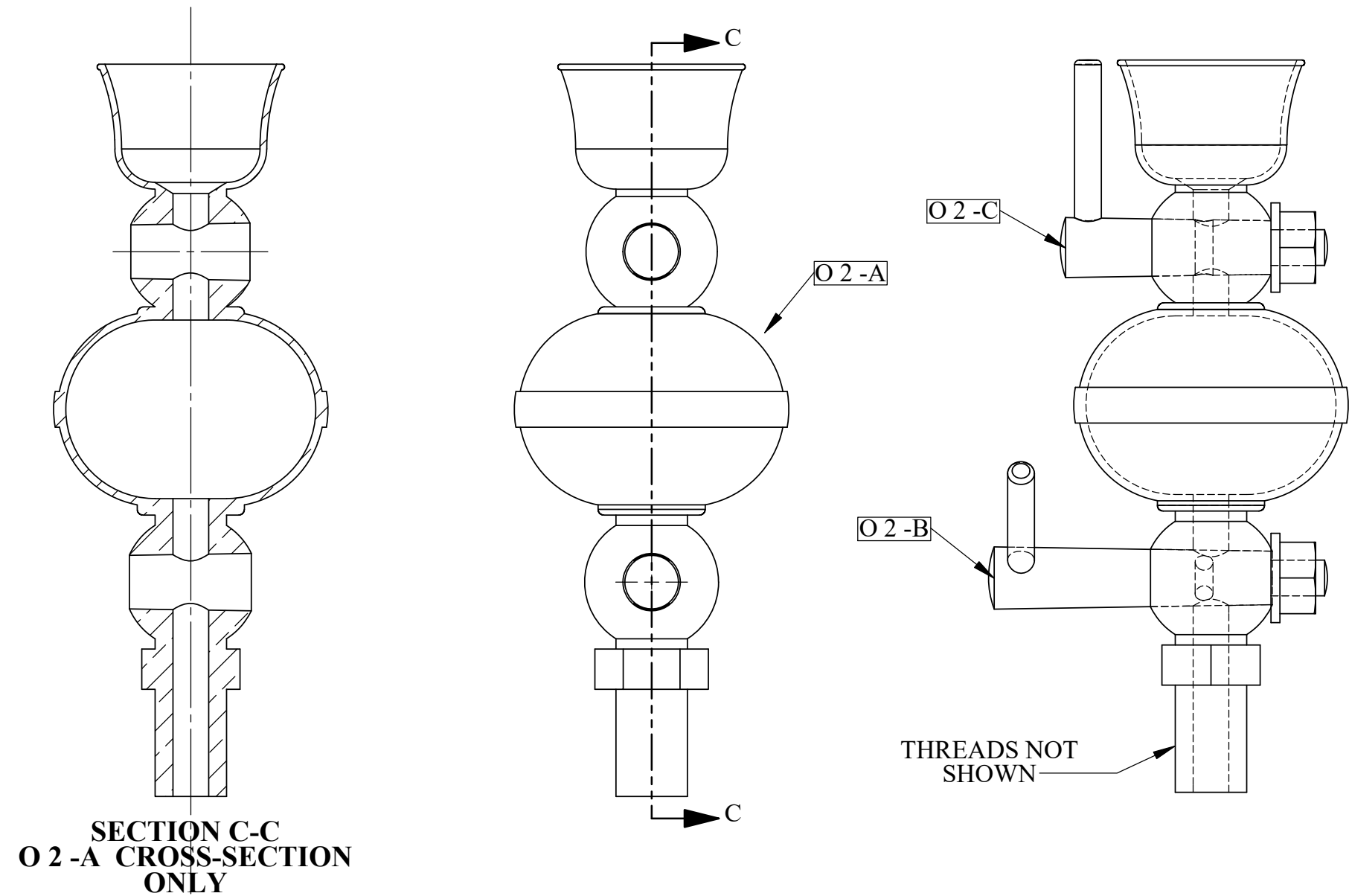
NOTE:  
PROJECTION  
DETAIL OF  
COCK -  
THREAD NOT  
SHOWN

PART NUMBER	DESCRIPTION	QTY.
O 2 -A	Tallow Pot Body	1
O 2 -B	Tallow Pot Lower Cock	1
O 2 -C	Tallow Pot Upper Cock	1
N 21	1/2" Nut W/Flange	2



NOTE:  
MONITOR'S HANDLES  
MAY BE DIFFERENT. THE  
ABOVE ARE GENARIC USED  
ON OTHER ENGINES

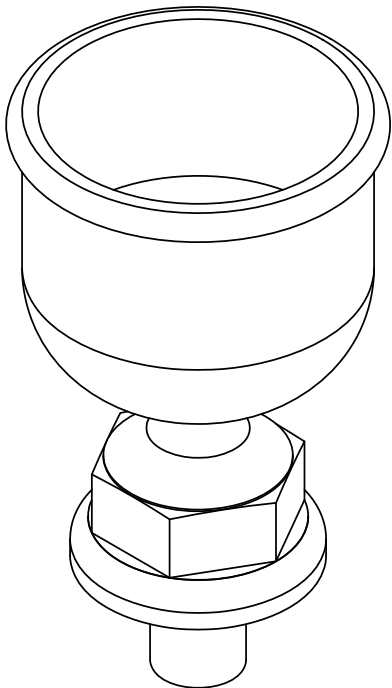
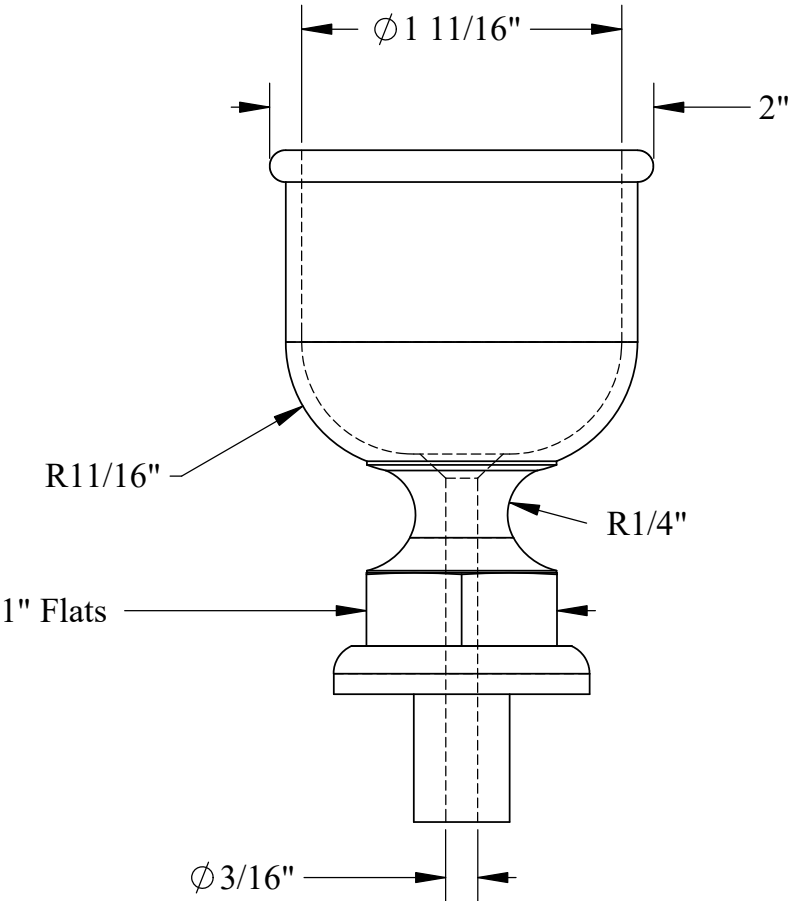
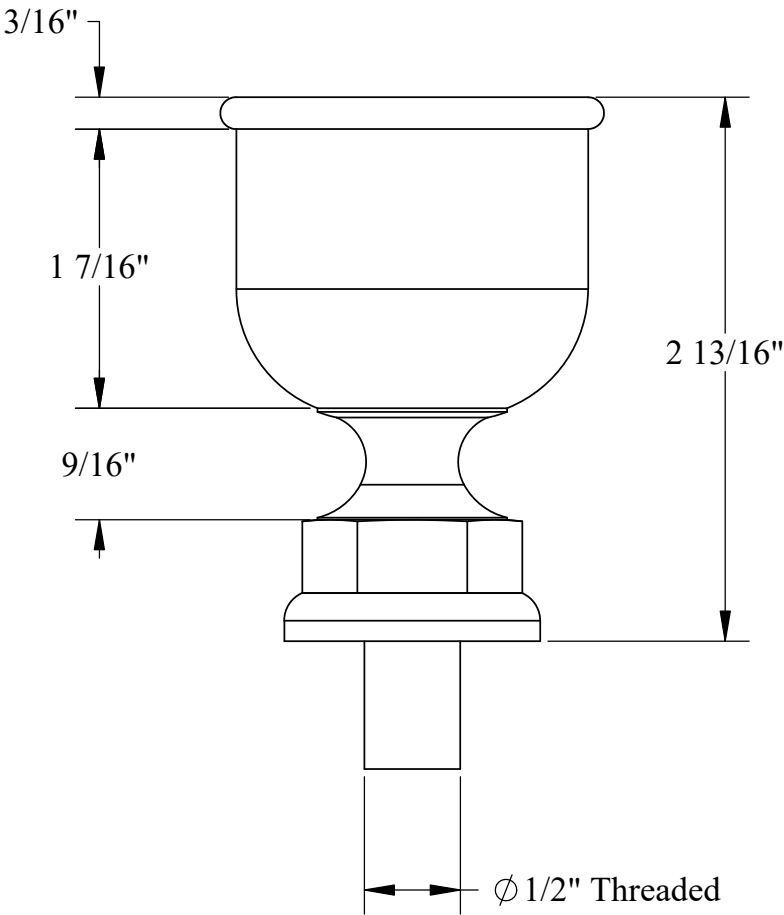
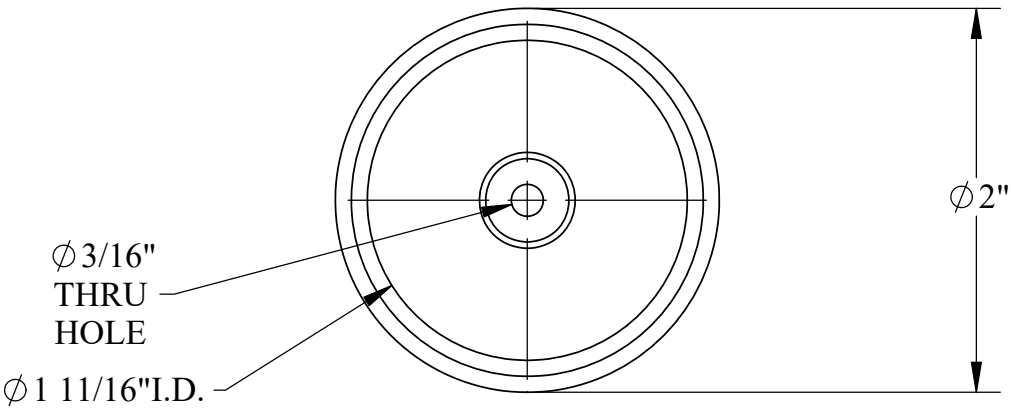
NOTE:  
UPPER COCK IS OPEN &  
LOWER COCK IS CLOSED  
IN ABOVE DISPLAY



### U.S.S. Monitor Steam Engine

Material	Drawn By - Date	Sub-Assembly
Weight (Lbs)	RWC 12-2018	Cutoff Chest
Scale	Description	
1:2		
Part #		
O 2		

### Tallow Pot Assembly

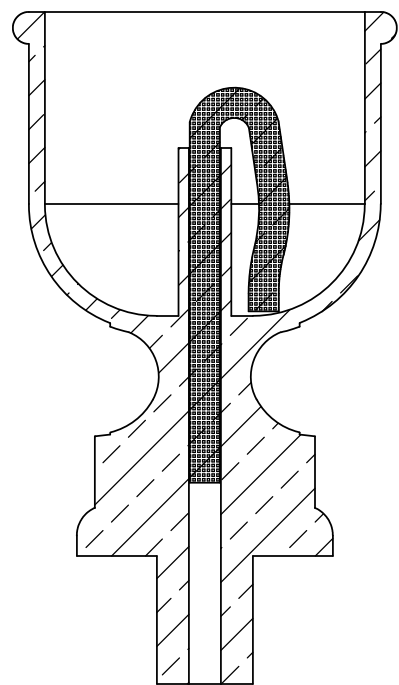
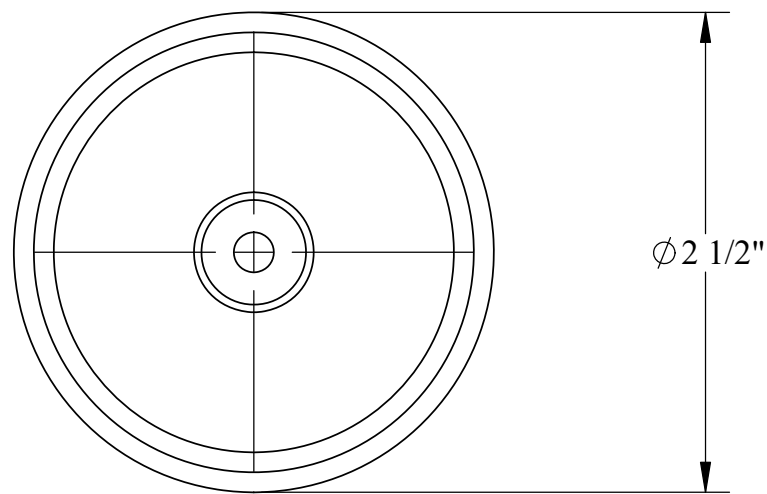


NOTE:  
ACCURATE DETAILS OF THE  
OIL CUPS USED ON MONITOR  
ARE NOT KNOWN AT THIS TIME  
THE IMAGE HERE IS APPROXIMATED-  
ALSO SOME CUPS HAVE COVERS AND  
SOME CUPS MAY USE WICKS AND A  
LEVELING TUBE FOR SLOW FEEDS

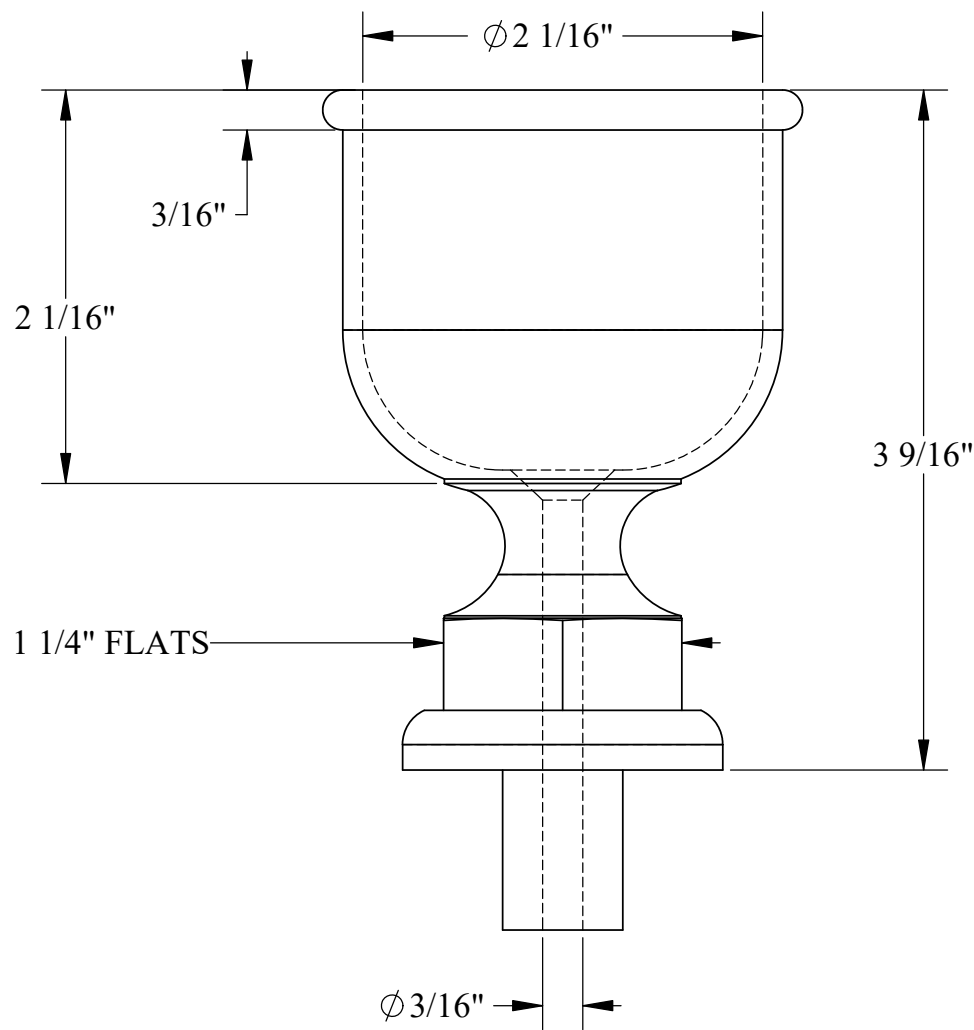
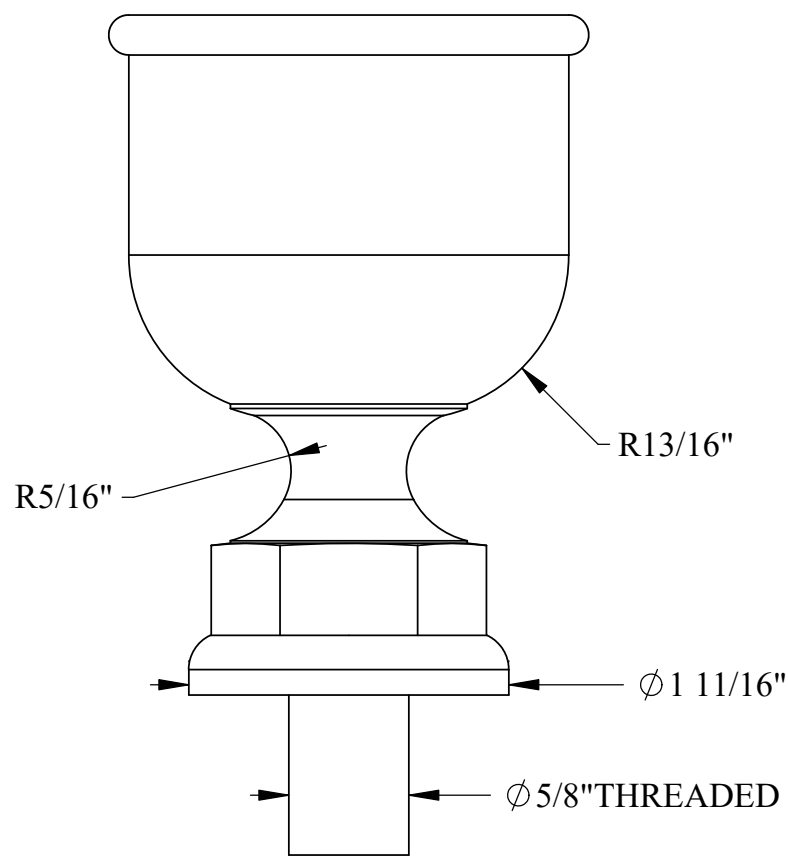
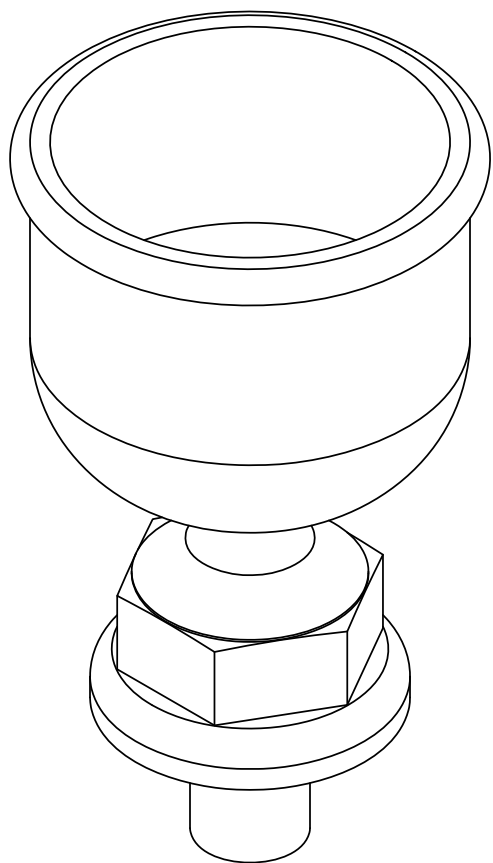
U.S.S. Monitor Steam Engine

Material Brass	Drawn By - Date RWC 12-2018	Sub-Assembly ALL
Weight (Lbs) 0.55	Description  Oil Cup- Medium	
Scale 1:1		
Part # O 3		





SECTION XX-X

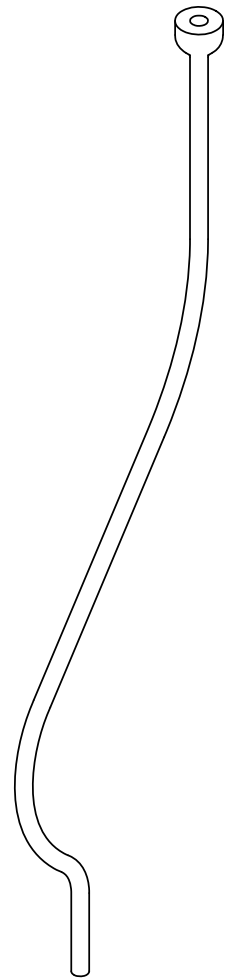
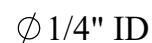
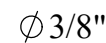
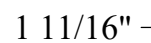
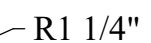
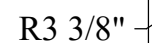
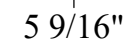
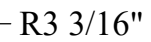
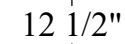
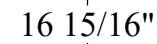
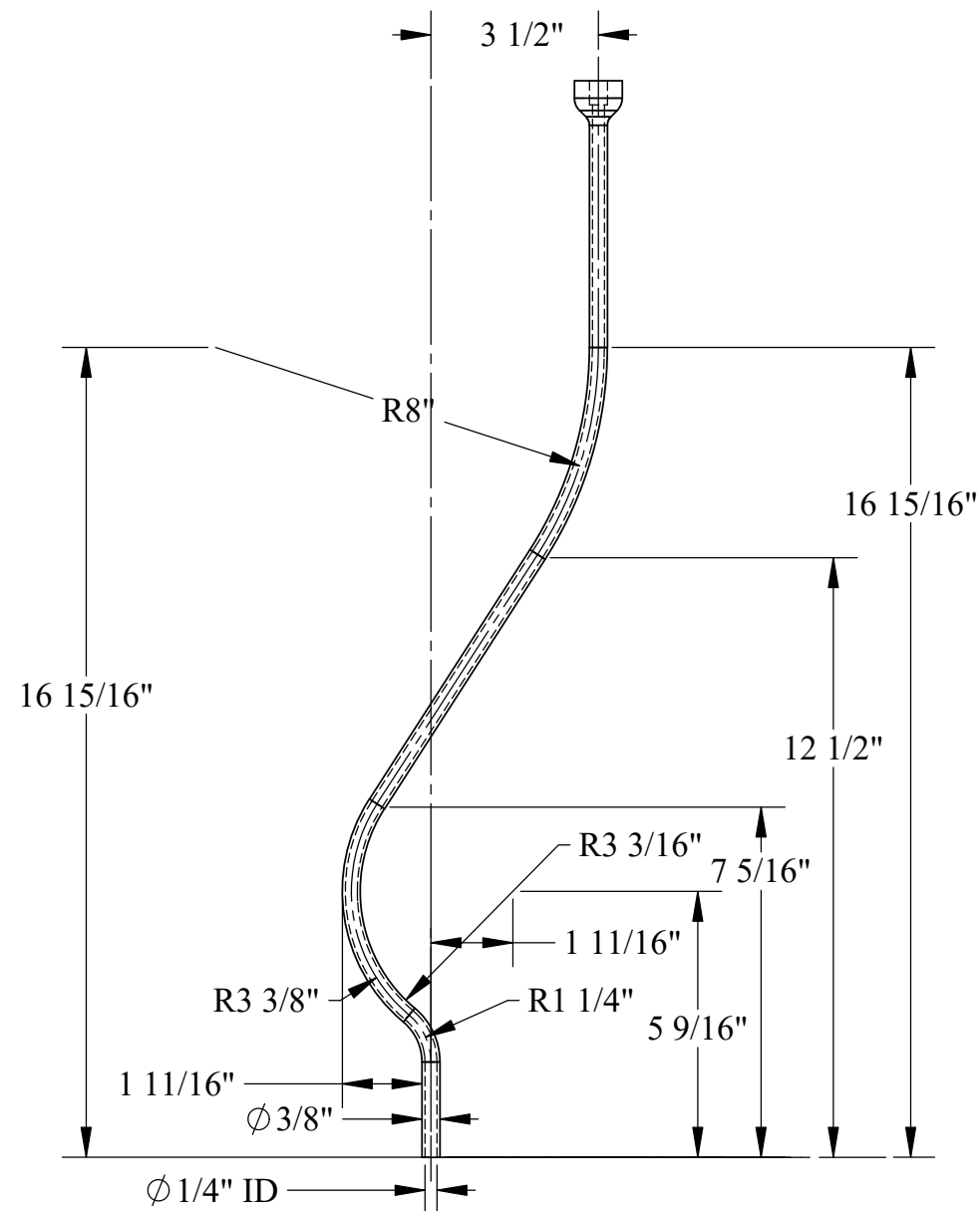
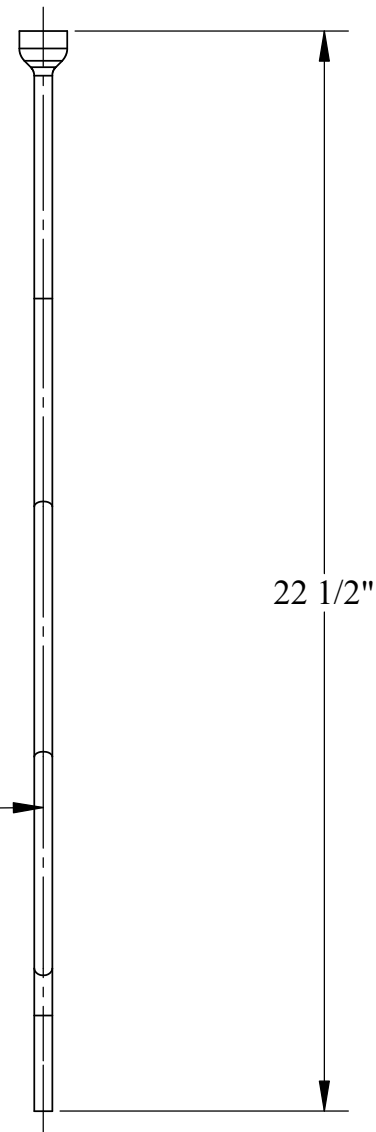
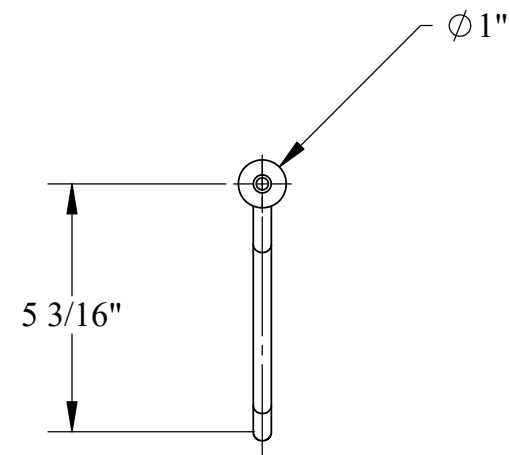


NOTE:  
ACCURATE DETAILS OF THE  
OIL CUPS USED ON MONITOR  
ARE NOT KNOWN AT THIS TIME

THE IMAGE HERE IS APPROXIMATED-  
ALSO SOME CUPS HAVE COVERS AND  
SOME CUPS MAY USE WICKS AND A  
LEVELING TUBE FOR SLOW FEEDS  
AS DISPLAYED IN VIEW X-X

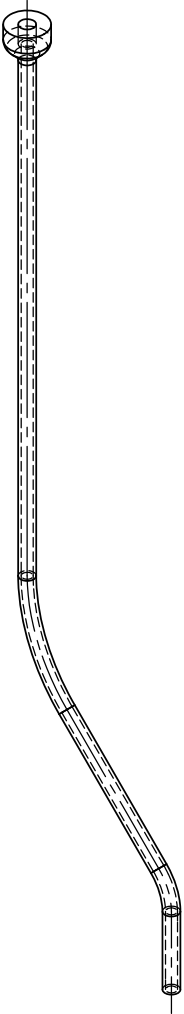
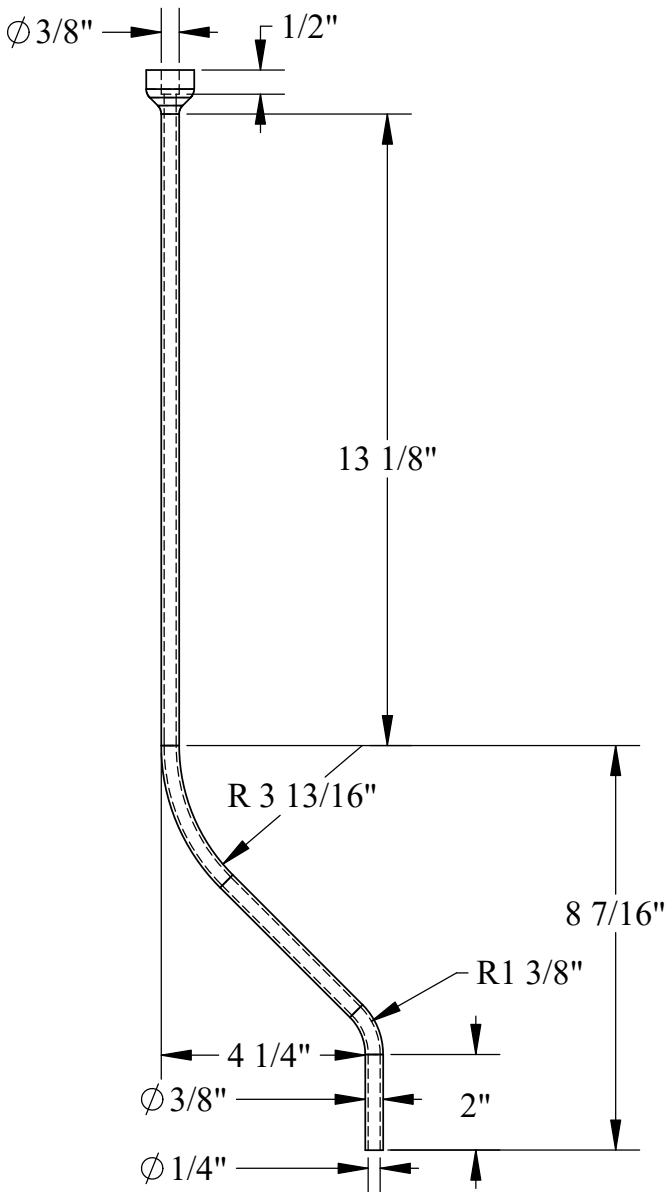
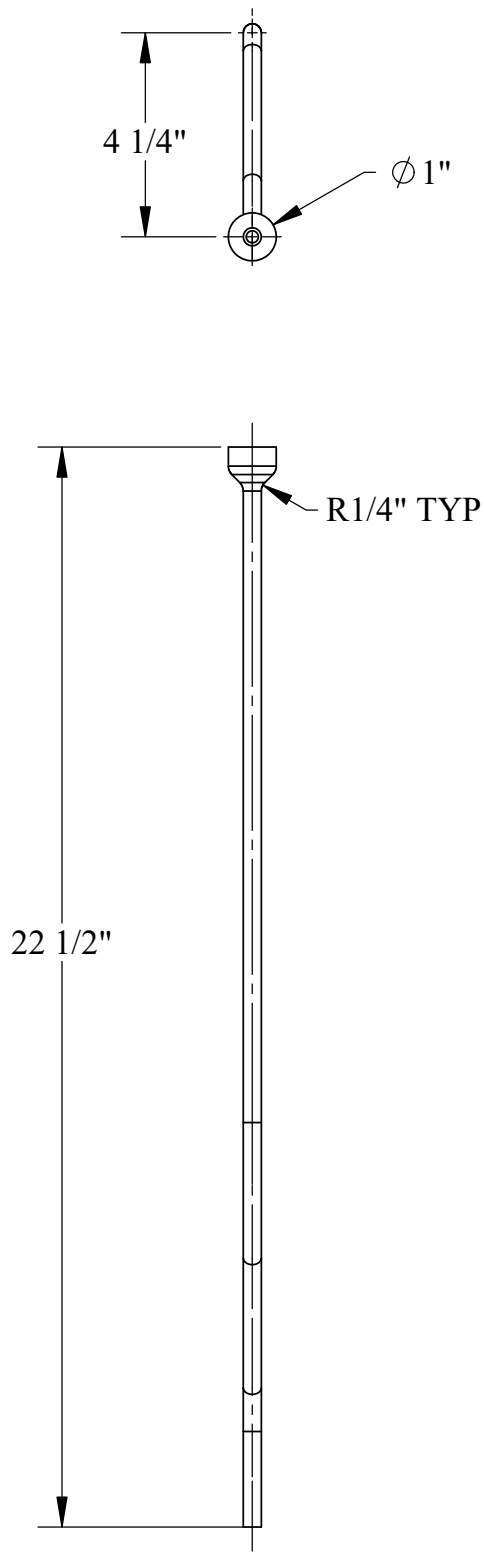
**U.S.S. Monitor Steam Engine**

Material Brass	Drawn By - Date RWC 12-2018	Sub-Assembly ALL
Weight (Lbs) 1.07	Description  <b>Oil Cup- Large</b>	
Scale 1:1		
Part # <b>O 4</b>		



## U.S.S. Monitor Steam Engine

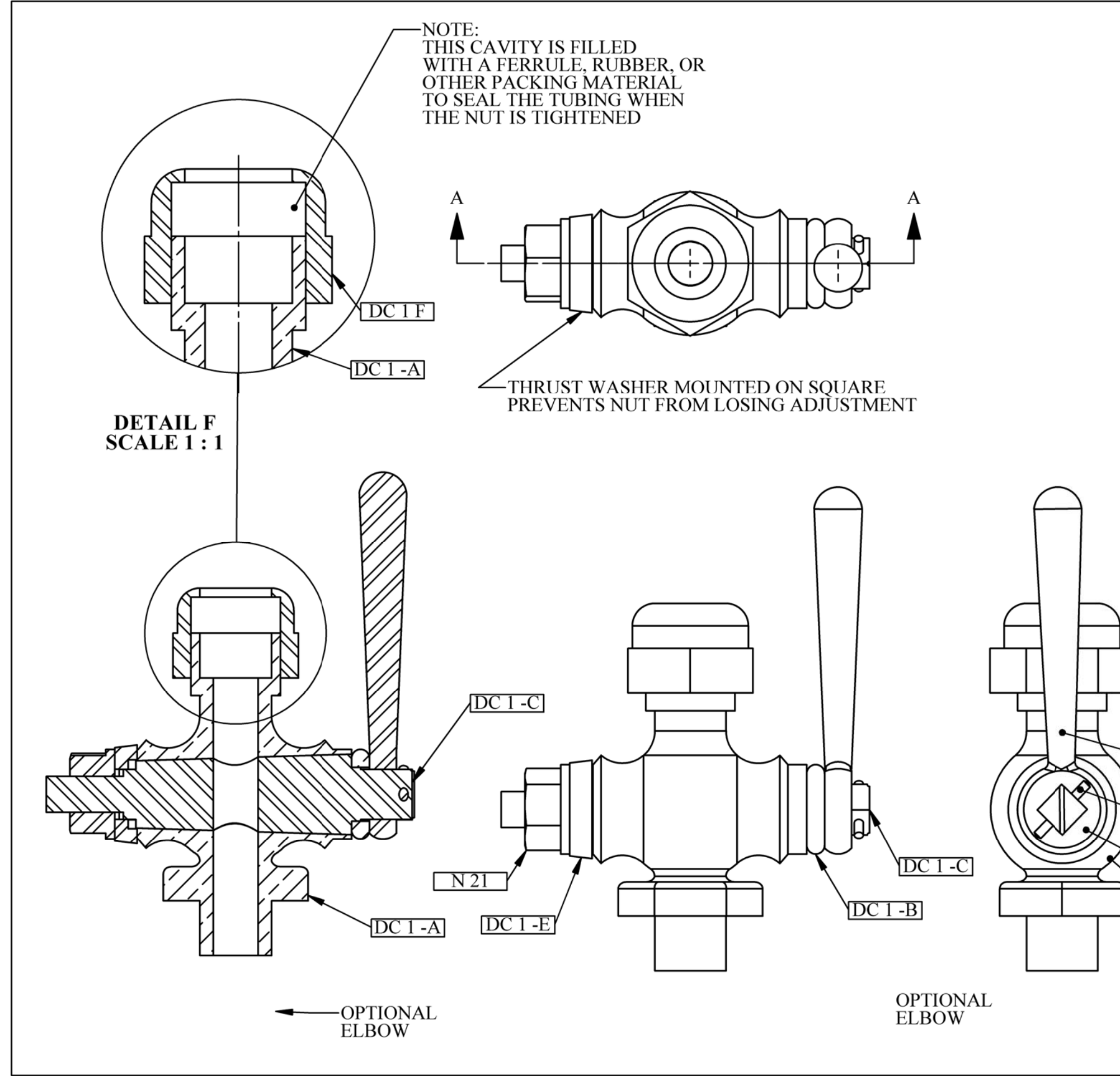
Material Copper Tube	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 0.61	Description  Middle Bearing Oil line	
Scale 1:4		
Part # O 7		



NOTE:  
THIS IS AN APPROXIMATION  
OF A OIL LINE USED TO FEED  
THE FORWARD BEARING OF THE  
REVERSING SHAFT  
THE LINE MUST FIT BETWEEN  
THE BEDPLATE FRAME AND THE  
CYLINDER AND VALVE CHESTS  
MOST LIKELY IT WAS FIELD BENT

U.S.S. Monitor Steam Engine

Material Copper Tube	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 0.60	Description Forward Oil Line- Reversing Shaft Bearing	
Scale 1:4		
Part # O 8		



PART NUMBER	DESCRIPTION	QTY.
DC 1 -A	Drain Cock Body	1
DC 1 -B	Drain Cock Thrust Washer	1
DC 1 -C	Drain Cock (PLUG)	1
DC 1 -D	Handle	1
DC 1 -E	Drain Cock Thrust Washer	1
DC 1 F	Drain Cock Tubing Nut	1
N 21	1/2" Nut W/Flange	1
P 7	1/8" X 1" Pin	1



PROBABLE SIZES OF GENERIC  
VALVES AVAILABLE IN 1860

U.S.S. Monitor Steam Engine

Material	Drawn By - Date	Sub-Assembly
Weight (Lbs) 3.44	RWC 12-2018	Drain Cock
Scale 1:2	Description	
Part # DC 1		
Drain Cock Assembly		SHEET 1 OF 2

