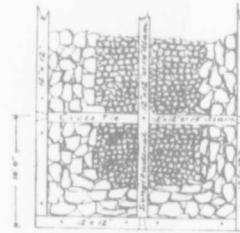
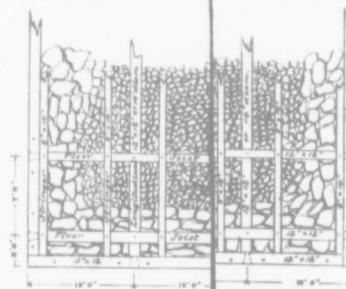


-TABLE OF QUANTITIES-
AND-
-PLAN-
OF
-CRIBWORK PIERS-

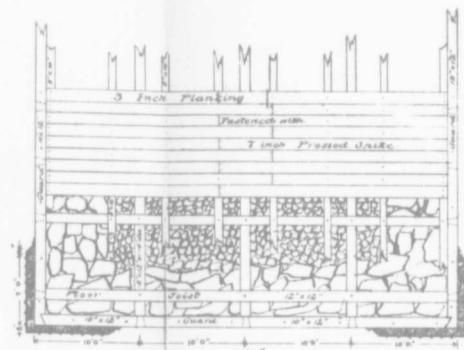
BY WARNER, A.M.CAN. SOC. C.E.



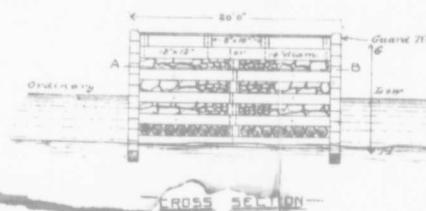
-PLAN A-



-PLAN B-



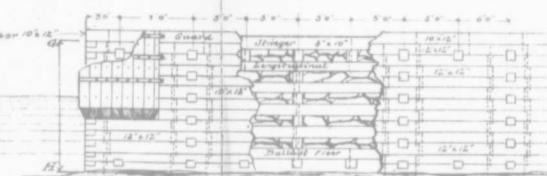
-PLAN-



CROSS SECTION



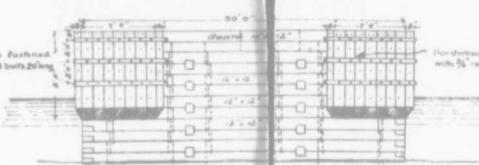
CROSS SECTION



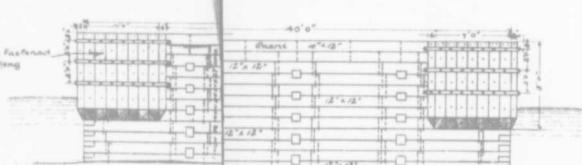
LONGITUDINAL ELEVATION AND SECTION



END ELEVATION



END ELEVATION



END ELEVATION

SIZE OF CRIB	Crib						Ends						Ballast Floor						Floors						Sheathing					
	Face Timbers 8' x 10' F.O.M.	Bolts 25 ft long No. 10 F.O.M.	Cross Ties 2' x 2' x 4' F.O.M.	Bolts 10' long No. 10 F.O.M.	Longitudinals 8' x 10' x 4' F.O.M.	Bolts 10' long No. 10 F.O.M.	Stone cable girders	10' x 12' Guard F.O.M.	Bolts 10' long No. 10 F.O.M.	Cross Ties 10' x 12' diam F.O.M.	Longitudinals 10' x 12' diam F.O.M.	Bolts 10' long No. 10 F.O.M.	Poles 10' long No. 10 F.O.M.	Joints 8' x 10' F.O.M.	Bolts 10' long No. 10 F.O.M.	Stranders 8' x 10' x 4' F.O.M.	Bolts 10' long No. 10 F.O.M.	Guard Timber 10' x 12' F.O.M.	Bolts 10' long No. 10 F.O.M.	3 Plank 7' long No. 10 F.O.M.	Spike T-tension No. 10 F.O.M.	HARDWOOD Bolts 10' long No. 10 F.O.M.	Bolts 10' long No. 10 F.O.M.	Strand Bolts 10' long No. 10 F.O.M.	Bolts 10' long No. 10 F.O.M.					
10' 0" x 20' 0"	480	60.42	216	10	4.76	120	10	4.76	11.92	960	12128	400	39.6	4.96	58	120	10	10.05	196	4.56	10.05	258.72	3724	500	19.6	514.8	17.55	182	238.08 583.5 210.3	
10' 0" x 25' 0"	-	270	22.5	4.76	120	10	4.76	15.35	1200	12128	500	43	570	47.5	120	10	10.05	260	370	10.05	323.4	4655	200	19.6	657.8	25.40	140.8	287.68 583.5 252.		
10' 0" x 30' 0"	-	324	27	9.52	240	20	9.52	16.36	1440	18192	600	58.6	684	37	240	20	20.10	310	684	20.10	388.08	55.86	200	19.6	800.8	26.35	182.0	388.08 583.5 336.		
10' 0" x 35' 0"	-	378	31.5	9.52	240	24	9.52	21.80	1680	16192	700	68.6	793	66.5	240	20	20.10	370	793	20.10	452.76	65.18	200	19.6	943.8	28.25	192.0	500.88 583.5 336.		
10' 0" x 40' 0"	-	432	36	14.28	260	30	14.28	24.65	1820	242.5	800	78.7	912	76	360	30	30.15	420	912	30.15	517.44	74.48	200	19.6	1056.8	38.18	182.0	580.88 583.5 586.		
10' 0" x 50' 0"	-	540	45	19.04	480	40	19.04	31.31	2400	30321	1000	98	1140	95	480	40	40.20	320	1140	40.20	646.8	90.10	200	19.6	1572.8	40.95	182.0	580.88 583.5 336		
10' 0" x 60' 0"	-	648	54	28.81	600	50	28.81	37.77	2880	36681	1800	117.6	1565	114	600	50	50.25	630	1565	50.25	776.16	111.72	200	19.6	1658.8	46.80	182.0	380.88 583.5 336.		
For Cants	Multiply by $\frac{1}{2} L \times D$						Multiply by $\frac{1}{2} L \times D$						Multiply by $L \times D$						Multiply by $L \times D$						Multiply by $L \times D$					
For Total	$D \times L = S$						$D \times L = S$						$D \times L = S$						$D \times L = S$						$D \times L = S$					

WEIGHT OF BOLTS

Bolts for Face Timbers (say 8' long, weight 1.5 lbs.)
 - Cross Ties
 - Longitudinals
 - Guard
 - Strangers
 - Sheathing
 from Strain
 per Strain
 per Strain
 Spikes for Planking

NOTE

Depth of Crib is taken as being from bottom of Guard to bottom of lowest Face Timber; see G, H in Cross-section and Longitudinal Elevation of Crib of uneven depth; in construction, either add Face timber shown hatched in Cross-section, or omit Face timber, laying Stringers in taking out quantities for Cribs of uneven depths in the formula $\frac{D \times L}{2}$; the decimal is omitted i.e. Crib, 17' 0" depth, $\frac{17 \times 25}{2} = 212.5$.

Quantities for Cross Ties and Longitudinals are given for both square and round timber.

Guard Elevation
 across longitudinal
 6.5 Multiplied by 6 only.

MEANING OF SYMBOLS

d = given depth of Crib in feet
 D = quantities required of given depth so long
 L = given length of Crib in feet
 Q = quantities required