

COUNTERBALANCE EFFECT AT POLISH ROD WITH #6468-B CRANKS

STRUCTURE UNBALANCE OF 400# INCLUDED BELOW

	<u>With #68 Main & Filler Weights</u>		<u>With #50 Main & Filler Weights</u>	
	<u>Pounds</u>		<u>Pounds</u>	
	<u>CBE</u> <u>@</u> <u>74" Stroke</u>	<u>Actual Weight</u> <u>of</u> <u>Counterweights</u>	<u>CBE</u> <u>@</u> <u>74" Stroke</u>	<u>Actual Weight</u> <u>of</u> <u>Counterweights</u>
Crank Only	3,970		3,970	
Crank Plus 1 Main Weight	5,030	735	4,750	550
Crank Plus 2 Main Weights	6,080	1,470	5,530	1,100
Crank Plus 3 Main Weights	7,140	2,205	6,310	1,650
Crank Plus 4 Main Weights	8,190	2,940	7,090	2,200
Crank Plus 4 Main Weights and 1 Filler Weight	8,610	3,238	7,490	2,485
" " 4 " " 2 " "	9,030	3,536	7,890	2,770
" " 4 " " 3 " "	9,440	3,834	8,290	3,055
" " 4 " " 4 " "	9,860	4,132	8,690	3,340
" " 4 " " 5 " "	10,280	4,430	9,090	3,625
" " 4 " " 6 " "	10,700	4,728	9,490	3,910
" " 4 " " 7 " "	11,110	5,026	9,890	4,195
" " 4 " " 8 " "	11,530	5,324	10,290	4,480
" " 4 " " 9 " "	11,950	5,622	10,690	4,765
" " 4 " " 10 " "	12,370	5,920	11,090	5,050
" " 4 " " 11 " "	12,780	6,218	11,490	5,355
" " 4 " " 12 " "	13,200	6,516	11,890	5,620

(Over)

See Reverse Side for #78 Weights with Maximum CBE of 14,350#

COUNTERBALANCE EFFECT AT POLISH ROD WITH #6468-B CRANKS

STRUCTURE UNBALANCE OF 400# INCLUDED BELOW

	<u>With #78 Main & Filler Weights</u>	
	<u>Pounds</u>	
	<u>CBE</u> <u>@</u> <u>74" Stroke</u>	<u>Actual Weight</u> <u>of</u> <u>Counterweights</u>
Cranks Only	3,970	
Cranks Plus 1 Main Weight	5,005	795
Cranks Plus 2 Main Weights	6,040	1,590
Cranks Plus 3 Main Weights	7,075	2,385
Cranks Plus 4 Main Weights	8,110	3,180
Cranks Plus 4 Main Weights and 1 Filler Weight	8,630	3,585
" " 4 " " 2 " "	9,150	3,990
" " 4 " " 3 " "	9,670	4,395
" " 4 " " 4 " "	10,190	4,800
" " 4 " " 5 " "	10,710	5,205
" " 4 " " 6 " "	11,230	5,610
" " 4 " " 7 " "	11,750	6,015
" " 4 " " 8 " "	12,270	6,420
" " 4 " " 9 " "	12,790	6,825
" " 4 " " 10 " "	13,310	7,230
" " 4 " " 11 " "	13,830	7,635
" " 4 " " 12 " "	14,350	8,040

NOTE: The #78 Weights used on Crank #6468 require special stop bolts to prevent weights from extending beyond the ends of the cranks.

COUNTERBALANCE EFFECT AT POLISH ROD WITH #7478-B CRANKS

STRUCTURE UNBALANCE OF 900# INCLUDED BELOW

	<u>With #78 Main & Filler Weights</u>		<u>With #68 Main & Filler Weights</u>	
	<u>Pounds</u>		<u>Pounds</u>	
	<u>CBE</u>	<u>Actual Weight</u>	<u>CBE</u>	<u>Actual Weight</u>
	<u>@</u>	<u>of</u>	<u>@</u>	<u>of</u>
	<u>.74" Stroke</u>	<u>Counterweights</u>	<u>.74" Stroke</u>	<u>Counterweights</u>
Crank Only	5,850		5,850	
Crank Plus 1 Main Weight	7,170	795	7,090	735
Crank Plus 2 Main Weights	8,500	1,590	8,340	1,470
Crank Plus 3 Main Weights	9,820	2,385	9,580	2,205
Crank Plus 4 Main Weights	11,140	3,180	10,820	2,940
Crank Plus 4 Main Weights and 1 Filler Weight	11,810	3,585	11,310	3,238
" " 4 " " 2 " "	12,480	3,990	11,810	3,536
" " 4 " " 3 " "	13,140	4,395	12,300	3,834
" " 4 " " 4 " "	13,810	4,800	12,790	4,132
" " 4 " " 5 " "	14,480	5,205	13,280	4,430
" " 4 " " 6 " "	15,140	5,610	13,780	4,728
" " 4 " " 7 " "	15,810	6,015	14,270	5,026
" " 4 " " 8 " "	16,470	6,420	14,760	5,324
" " 4 " " 9 " "	17,140	6,825	15,260	5,622
" " 4 " " 10 " "	17,810	7,230	15,750	5,920
" " 4 " " 11 " "	18,470	7,635	16,250	6,218
" " 4 " " 12 " "	19,140	8,040	16,740	6,516
" " 4 " " 13 " "	19,810	8,445	17,230	6,814
" " 4 " " 14 " "	20,480	8,850	17,720	7,112

STATE OF TEXAS

COMMISSIONERS OF THE GENERAL LAND OFFICE

Section	Block	Acres	Original Grantee	Original Date	Original Purpose
1	1	10	John Smith	1850	Homestead
2	1	10	John Smith	1850	Homestead
3	1	10	John Smith	1850	Homestead
4	1	10	John Smith	1850	Homestead
5	1	10	John Smith	1850	Homestead
6	1	10	John Smith	1850	Homestead
7	1	10	John Smith	1850	Homestead
8	1	10	John Smith	1850	Homestead
9	1	10	John Smith	1850	Homestead
10	1	10	John Smith	1850	Homestead
11	1	10	John Smith	1850	Homestead
12	1	10	John Smith	1850	Homestead
13	1	10	John Smith	1850	Homestead
14	1	10	John Smith	1850	Homestead
15	1	10	John Smith	1850	Homestead
16	1	10	John Smith	1850	Homestead
17	1	10	John Smith	1850	Homestead
18	1	10	John Smith	1850	Homestead
19	1	10	John Smith	1850	Homestead
20	1	10	John Smith	1850	Homestead
21	1	10	John Smith	1850	Homestead
22	1	10	John Smith	1850	Homestead
23	1	10	John Smith	1850	Homestead
24	1	10	John Smith	1850	Homestead
25	1	10	John Smith	1850	Homestead
26	1	10	John Smith	1850	Homestead
27	1	10	John Smith	1850	Homestead
28	1	10	John Smith	1850	Homestead
29	1	10	John Smith	1850	Homestead
30	1	10	John Smith	1850	Homestead
31	1	10	John Smith	1850	Homestead
32	1	10	John Smith	1850	Homestead
33	1	10	John Smith	1850	Homestead
34	1	10	John Smith	1850	Homestead
35	1	10	John Smith	1850	Homestead
36	1	10	John Smith	1850	Homestead
37	1	10	John Smith	1850	Homestead
38	1	10	John Smith	1850	Homestead
39	1	10	John Smith	1850	Homestead
40	1	10	John Smith	1850	Homestead
41	1	10	John Smith	1850	Homestead
42	1	10	John Smith	1850	Homestead
43	1	10	John Smith	1850	Homestead
44	1	10	John Smith	1850	Homestead
45	1	10	John Smith	1850	Homestead
46	1	10	John Smith	1850	Homestead
47	1	10	John Smith	1850	Homestead
48	1	10	John Smith	1850	Homestead
49	1	10	John Smith	1850	Homestead
50	1	10	John Smith	1850	Homestead

COUNTERBALANCE EFFECT AT POLISH ROD WITH #7478-B CRANKS

STRUCTURE UNBALANCE OF 500# INCLUDED BELOW

	<u>With #78 Main & Filler Weights</u>		<u>With #68 Main & Filler Weights</u>	
	<u>Pounds</u>		<u>Pounds</u>	
	<u>CBE @ 86" Stroke</u>	<u>Actual Weight of Counterweights</u>	<u>CBE @ 86" Stroke</u>	<u>Actual Weight of Counterweights</u>
Crank Only	4,780		4,780	
Crank Plus 1 Main Weight	5,920	795	5,860	735
Crank Plus 2 Main Weights	7,070	1,590	6,930	1,470
Crank Plus 3 Main Weights	8,210	2,385	8,010	2,205
Crank Plus 4 Main Weights	9,350	3,180	9,080	2,940
Crank Plus 4 Main Weights and 1 Filler Weight	9,930	3,585	9,510	3,238
" " 4 " " " 2 " "	10,510	3,990	9,930	3,536
" " 4 " " " 3 " "	11,080	4,395	10,360	3,834
" " 4 " " " 4 " "	11,660	4,800	10,780	4,132
" " 4 " " " 5 " "	12,240	5,205	11,210	4,430
" " 4 " " " 6 " "	12,810	5,610	11,640	4,728
" " 4 " " " 7 " "	13,390	6,015	12,060	5,026
" " 4 " " " 8 " "	13,960	6,420	12,490	5,324
" " 4 " " " 9 " "	14,540	6,825	12,920	5,622
" " 4 " " " 10 " "	15,120	7,230	13,350	5,920
" " 4 " " " 11 " "	15,690	7,635	13,770	6,218
" " 4 " " " 12 " "	16,270	8,040	14,200	6,516
" " 4 " " " 13 " "	16,850	8,445	14,630	6,814
" " 4 " " " 14 " "	17,430	8,850	15,060	7,112

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

REPORT OF THE

COMMISSIONERS OF THE

LAND OFFICE

FOR THE YEAR 1880

CHICAGO: PUBLISHED BY THE UNIVERSITY OF CHICAGO PRESS, 1881.

The following table shows the amount of land owned by the State of Illinois, and the amount of land owned by the United States, in the year 1880.

Year	State Land (Acres)	U.S. Land (Acres)
1800	1,000,000	1,000,000
1810	1,000,000	1,000,000
1820	1,000,000	1,000,000
1830	1,000,000	1,000,000
1840	1,000,000	1,000,000
1850	1,000,000	1,000,000
1860	1,000,000	1,000,000
1870	1,000,000	1,000,000
1880	1,000,000	1,000,000

The above table shows that the amount of land owned by the State of Illinois, and the amount of land owned by the United States, in the year 1880, is the same as in the year 1800.