

OCEAN LOG RAFTING.

In commenting on the proposition to extend the enterprise of rafting logs from Columbia river and Puget Sound to San Francisco, an old sea captain, who has been engaged in carrying lumber down the coast for years, lately said at Tacoma that there was nothing dangerous to the vessel interest in the proposed innovation, says the Northwestern Lumberman. He said they could build cigar-shaped rafts, and then build some more, but that would not feaze the carrying trade by vessels. His idea is that there are too many fathoms of chain, too many thousands of pounds of iron, too many days' labor, which go into the construction of such rafts, to make the

venture profitable. This sea captain says that it is not the profits on landing logs in San Francisco that the promoters of the cigar-shaped floats are looking for, but it is a scheme to get mill operators to pay a royalty of \$15,000 each for the privilege of using the cradle and chain-securing devices, which are patented. This oracle from the seas says that it is not log rafts which are to revolutionize the lumber-carrying business of the Pacific coast, and to relegate the wind-jamming drovers to the bone-yard. It is barges that are going to do the business, in his view, and the day of their introduction is not far distant. If the wind comes fair the towing steamer has but little strain in bringing her tow

along. If the wind comes foul, she tows as long as any headway is to be made. With a nasty gale and heavy sea, the tug gets her tow welled shore, signals the barges to slip their lines and make sufficient sail with which to lie to. Then the steamer drops them, lies near until the gale subsides, and with an easy run again picks up her string of barges, and continues down the coast.

BAND VS. CIRCULAR SAW.

The following table, showing the saving in lumber effected by the use of a band saw in comparison with a circular saw, is compiled by Mr. R. A. Johnston, of Bay City, Mich., and furnished to THE LUMBERMAN for publication. The band saw scale is figured on light $\frac{1}{8}$ inch, and the rotary scale on light $\frac{1}{4}$ inch.

TABLE SHOWING SAVING IN LUMBER EFFECTED BY BAND MILL OVER CIRCULAR MILL.

CIRCULAR SAW SCALE.

Diameter of Log.	Length of Log.								
	12 Feet.	14 Feet.	16 Feet.	18 Feet.	20 Feet.	22 Feet.	24 Feet.	26 Feet.	28 Feet.
6"	13	15	17	19	21	23	26	28	30
7	24	28	32	36	40	44	48	52	56
8	31	36	41	46	51	56	62	67	72
9	36	42	48	54	60	66	72	78	84
10	53	61	70	79	88	97	106	114	123
11	62	72	82	93	103	113	124	134	144
12	79	92	105	118	131	144	158	171	184
13	90	105	120	135	150	165	180	195	210
14	109	127	145	163	181	199	218	236	254
15	124	144	165	186	206	227	248	268	289
16	145	169	193	217	241	265	290	314	338
17	164	191	218	246	273	300	328	355	382
18	183	213	244	274	305	335	366	396	427
19	210	245	280	315	350	385	420	455	490
20	233	271	310	349	388	427	466	504	543
21	254	296	338	381	423	465	508	550	592
22	287	334	382	430	478	526	574	621	669
23	308	359	410	462	513	564	616	667	718
24	343	400	457	514	571	628	686	743	800
25	372	434	496	558	620	682	744	806	868
26	405	472	540	607	675	742	810	877	945
27	436	508	581	654	726	799	872	944	1017
28	475	554	633	712	791	870	950	1029	1108
29	508	588	672	756	840	924	1008	1092	1176
30	542	632	722	813	903	993	1084	1174	1264
31	584	681	778	876	973	1070	1168	1265	1362
32	617	719	822	925	1028	1131	1234	1336	1439
33	656	765	874	984	1093	1202	1312	1421	1530
34	701	817	934	1051	1168	1285	1402	1518	1635
35	740	863	986	1110	1233	1356	1480	1603	1726
36	791	922	1054	1186	1318	1450	1582	1713	1845
37	832	970	1103	1248	1386	1525	1664	1802	1941
38	857	999	1142	1285	1428	1571	1714	1856	1999
39	928	1082	1237	1392	1546	1701	1856	2010	2165
40	971	1132	1294	1456	1618	1780	1942	2103	2265
41	1032	1204	1376	1548	1720	1892	2064	2236	2408
42	1073	1251	1430	1609	1788	1967	2146	2324	2503
43	1128	1316	1504	1662	1880	2068	2256	2444	2632
44	1183	1380	1577	1774	1971	2168	2366	2563	2760
45	1230	1435	1640	1845	2050	2255	2460	2665	2870
46	1299	1515	1732	1948	2165	2381	2598	2814	3031
47	1342	1565	1789	2013	2236	2460	2684	2907	3131
48	1413	1648	1884	2110	2355	2590	2826	3061	3297
49	1474	1719	1965	2211	2456	2702	2948	3193	3439
50	1531	1786	2041	2296	2551	2806	3062	3317	3572
51	1612	1880	2149	2418	2686	2955	3224	3492	3761
52	1655	1930	2206	2482	2758	3034	3310	3585	3861
53	1730	2018	2306	2595	2883	3171	3460	3748	4036
54	1797	2096	2396	2695	2995	3294	3594	3893	4193
55	1870	2181	2493	2805	3116	3428	3740	4051	4363
56	1943	2266	2590	2914	3238	3562	3886	4209	4533

BAND SAW SCALE.

Diameter of Log.	Length of Log.								
	12 Feet.	14 Feet.	16 Feet.	18 Feet.	20 Feet.	22 Feet.	24 Feet.	26 Feet.	28 Feet.
6"	15	17	20	22	25	27	30	32	35
7	26	30	34	39	43	47	52	56	60
8	31	36	41	46	51	56	62	67	72
9	46	53	61	69	76	84	92	99	107
10	55	64	73	82	91	100	110	119	128
11	70	81	93	105	116	128	140	151	163
12	84	98	112	126	140	154	168	182	196
13	102	119	136	153	170	187	204	221	238
14	117	136	156	175	195	214	234	253	273
15	136	158	181	204	226	249	272	294	317
16	157	183	209	235	261	287	314	340	366
17	182	212	242	273	303	333	364	394	424
18	203	236	270	304	338	372	406	439	473
19	232	270	309	348	386	425	464	502	541
20	255	297	340	382	425	467	510	552	595
21	276	322	368	414	460	506	552	598	644
22	313	365	417	469	521	573	626	678	730
23	336	392	448	504	560	616	672	728	784
24	375	437	500	562	625	687	750	812	875
25	428	499	570	642	713	784	856	927	998
26	443	516	590	664	738	812	886	959	1033
27	496	578	661	744	826	909	992	1074	1157
28	515	600	686	772	858	944	1030	1115	1201
29	560	653	746	840	933	1026	1120	1213	1306
30	593	691	790	889	988	1087	1186	1284	1383
31	636	742	848	954	1060	1166	1272	1378	1484
32	675	787	900	1012	1125	1237	1350	1462	1575
33	722	842	962	1083	1203	1323	1444	1564	1684
34	767	894	1022	1150	1278	1406	1534	1661	1789
35	822	959	1096	1233	1370	1507	1644	1781	1918
36	887	1034	1182	1330	1478	1626	1774	1921	2069
37	916	1068	1221	1374	1526	1679	1836	1984	2137
38	965	1125	1286	1447	1608	1769	1930	2090	2251
39	1018	1187	1357	1527	1696	1866	2036	2205	2375
40	1069	1247	1425	1603	1781	1959	2138	2316	2494
41	1130	1318	1506	1695	1883	2071	2260	2448	2636
42	1187	1384	1582	1780	1978	2176	2374	2571	2769
43	1236	1442	1648	1854	2060	2266	2472	2678	2884
44	1309	1527	1745	1963	2181	2399	2618	2836	3054
45	1362	1589	1816	2043	2270	2497	2724	2951	3178
46	1425	1662	1900	2137	2375	2612	2850	3087	3325
47	1492	1740	1989	2238	2486	2735	2984	3232	3481
48	1567	1828	2089	2350	2611	2872	3134	3395	3656
49	1630	1901	2173	2445	2716	2988	3260	3531	3803
50	1703	1986	2270	2554	2838	3122	3406	3689	3973
51	1778	2074	2370	2667	2963	3259	3556	3852	4148
52	1837	2143	2449	2755	3061	3367	3674	3980	4286
53	1910	2228	2546	2865	3183	3501	3820	4138	4456
54	1977	2306	2636	2965	3295	3624	3954	4283	4613
55	2046	2387	2728	3069	3410	3751	4092	4433	4774
56	2131	2486	2841	3196	3551	3906	4262	4617	4972