

TABLE SHOWING THE EFFECT DUE TO THE INERTIA OF THE PARTS OF AN 11 IN. X 7 IN.
STEAM ENGINE RUNNING AT 525 R. P. M.

Crank Angle θ	Piston, Crosshead, etc.				Connecting Rod				Total turning moment required at crank to move all parts ft. pds.	
	$Q''O$ ft.	Accel. of piston ft. sec. ²	Force to accel. pis- ton, pds.	$Q'O$ ft.	Turning moment on crank ft. pds.	$G''O$ ft.	Acceln. of G ft. sec. ²	Force to accel. rod, pds.	h ft.	Turning moment on crank ft. pds.
0	+	.348	+ 1053	0	0	.349	1056	1542	0	0
18		.325	+ 983	.107	+ 526	.297	898	1311	.033	43
36		.253	765	.198	758	.272	823	1201	.052	62
54		.153	463	.264	611	.242	732	1069	.050	53
72	+	.047	+ 142	.295	+ 210	.217	656	958	.023	22
90	—	.060	— 181	.292	— 265	.215	650	950	.023	22
108		.137	414	.260	539	.228	690	1007	.045	45
126		.187	566	.208	588	.248	750	1095	.048	48
144		.217	656	.143	469	.267	808	1179	.035	41
162	—	.232	— 702	.073	— 256	.273	824	1205	.017	20
180		.235	711	0	0	.235	711	1038	0	0
198	+	.232	+ 702	.073	+ 256	.273	824	1205	.017	20
216		.217	656	.143	469	.267	808	1179	.035	41
234		.187	566	.208	588	.248	750	1095	.048	48
252		.137	414	.260	539	.228	690	1007	.045	45
270	+	.060	+ 181	.292	+ 265	.215	650	950	.023	22
288	—	.047	— 142	.295	— 210	.217	656	958	.023	22
306		.153	463	.264	611	.242	732	1069	.050	53
324		.253	765	.198	758	.272	823	1201	.052	62
342		.325	983	.107	— 526	.297	898	1311	.033	43
360	—	.348	— 1053	0	0	.349	1056	1542	0	0