We give a classification of the solvable subgroups $G$ of the group $Homeo_+(S^1)$ of all orientation-preserving homeomorphisms of the circle. The key tool is proving that the rotation number map is a group homomorphism and it is done by relating the dynamics of $G$ and its group structure. Applications include new proofs of known results as the Margulis’ theorem on the existence of a $G$-invariant probability measure on $S^1$. (Received January 23, 2007)