Three groundnut threshers were used to thresh groundnuts (Variety J.L-24), each at previously determined optimum speeds. The threshers were: 1) the power operated nail thresher; 2) the power operated rib thresher; and 3) the manual groundnut thresher. The performance of each thresher was evaluated in terms of throughput capacity, shelling efficiency, material efficiency, and mechanical damage. The results showed that the power operated rib thresher had the highest throughput capacity and shelling efficiency, while the manual thresher had the lowest. The power operated nail thresher had moderate performance in terms of throughput capacity and shelling efficiency, but was less efficient in terms of material efficiency and mechanical damage. Overall, the power operated rib thresher was found to be the most effective and efficient thresher for groundnut threshing.