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For an integer $s_1, s_2, s_3 > 0$, let N_{s_1, s_2, s_3} denote the graph obtained by identifying each vertex of a K_3 with an end vertex of three disjoint paths $P_{s_1+1}, P_{s_2+1}, P_{s_3+1}$ of length s_1, s_2 , and s_3 , respectively. It is known that every 3-connected $(K_{1,3}, N_{8,0,0})$ -free graph is hamiltonian. We prove the following results.

- (i) Every 3-connected $(K_{1,3}, N_{s_1, s_2, s_3})$ -free graph with $s_1 + s_2 + s_3 \leq 9$ is hamiltonian.
- (ii) Every 3-connected $(K_{1,3}, N_{s_1, s_2, 0})$ -free graph with $s_1 + s_2 \leq 8$ is hamiltonian. (Received August 27, 2012)