In the beginning of the year 1863, Mr. Connor was offered and accepted a seat as Pusine Judge of the Court of Queen's Bench. He was appointed Judge on the 31st January, 1863. He had been but a few months on the Bench, when the seeds of the disease he had contracted while in Parliament, began to shew themselves with increase. He survived his appointment to the Bench but a few months, when he died at his residence on Peter Street, in Toronto, on the 29th April, 1863, at the age of fifty-three, and was buried in St. James's Cemetery.

His wife, who was the sister of Judge Charles Robinson, of Sarnia, survived him.

Doctor Connor left no family to perpetuate his name; his widow since his decease has followed him to the grave.