In 1895 Conway moved to Ithaca to teach music at Cornell University. He organized the Cornell Cadet Band and remained its director 1908. During this period, Conway organized and directed the Ithaca Band. During the summer season the Ithaca Band, which changed its name to Patrick Conway and His Band, around 1908. The band toured the mid-western and western United States performing at state fairs and expositions, including the Panama-Pacific Exposition in 1915. Conway's band also had regular summer engagements for over twenty years at Willow Grove Park, Philadelphia, and Young's Pier, in Atlantic City, New Jersey