

Frederick J. Warren



Prior to the formation of the Warren Brothers Company in 1900, Frederick J. Warren had been engaged in the laying of asphalt pavements with the Barber Asphalt Paving Company, of Denver, Colorado. In the early 1890's he pioneered in the development and placement of sheet asphalt, a three-inch hot mix two- course pavement, the top course being a blend of fine sand and filler dust.

During the late nineties Mr. Warren gave considerable thought to the practicability of one-course asphalt concrete pavement using stone or gravel with stone screenings on sand as aggregates. In 1900 he was granted a patent for a dense- graded hot-mix asphalt concrete

pavement possessing high stability and low voids. This mixture he gave the trade name "Bitulithic."

In 1899 he asked his six brothers to join him in forming a new company to promote the use of his patented bitulithic pavement. The Warren Brothers Company today ranks as one of the largest paving contractors in the world.

Fred Warren was instrumental in the development of petroleum asphalt for paving mixes. In the early part of the century he discovered that, if intelligently handled, the residue from distilling of California crude oil was the purest and best asphalt for this type of mixture.

Elected: 1966