

# Asphalt Through the Ages

Superpave represents the latest in asphalt technology. These photos show some earlier asphalt pavement testing technology.

## Penetrometers.

These penetrometers were designed by A.W. Dow in 1898. The original penetrometer was designed to be attached to the water bath and used for experimental purposes in the laboratory. Since the apparatus was rather bulky for use in the field, a similar apparatus was devised which could be used for all purposes. A description of this apparatus is given in a paper by Mr. Dow on "The Testing of Bitumens for Paving Purposes" in ASTM, Volume 3, 1903.



## Hubbard-Field Asphalt Stability Testing Machine.

Prevost Hubbard and Frederick Field developed this asphalt stability testing machine. Hubbard was the Chief Chemist and Research Engineer for the Asphalt Institute from 1919 to 1947. He was known as "The Dean Emeritus" of asphalt research. Frederick Field was an asphalt chemist and research engineer for the Asphalt Institute from 1924 to 1943. Field was a pioneer in the development of asphalt hydraulic structures.



Michigan State Highway Department, University of Michigan, Ann Arbor Bituminous Laboratory, 1914.