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ASME & ASCE DESIGNATE ENGINEERING LANDMARKS

During 1975 the two major engineering societies designated a variety of national historic engineering landmarks with fitting ceremonies and plaques, notably:

FAIRMOUNT WATER WORKS, Philadelphia (17 June),



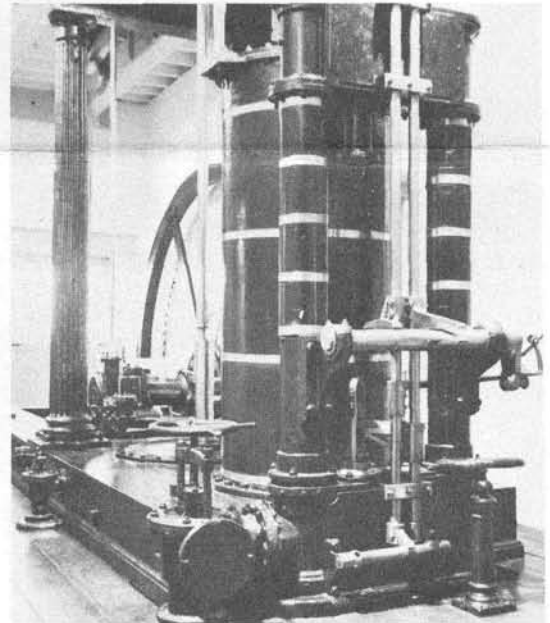
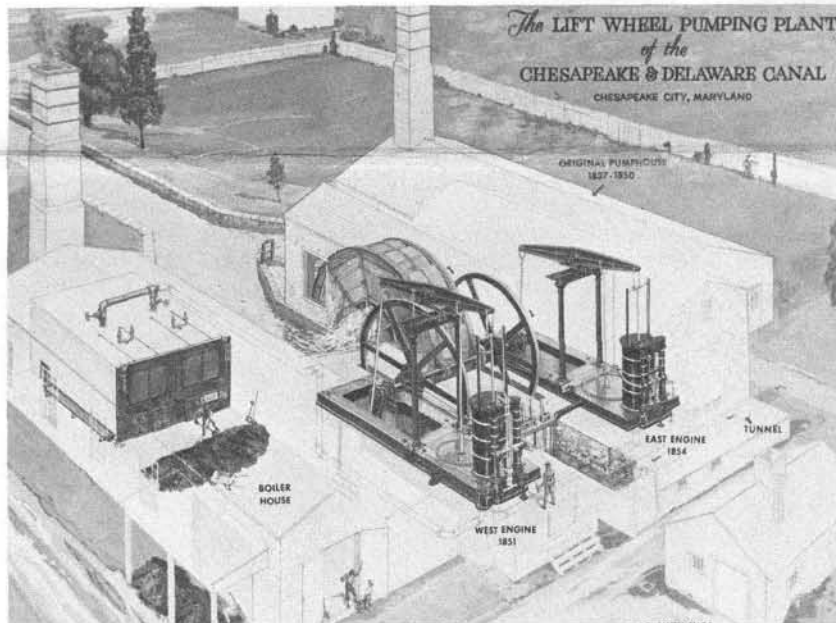
ASCE. Opened 1815 with one Boulton & Watt steam pumping engine; in 1817 an Evans high-pressure pumping engine added; from 1822 these were succeeded by a series, ultimately, of 8 large breast-wheel driven pumps (replaced between 1851 and 1866 by axial-flow water turbines that operated until the station's closure in 1911). The first large-scale municipal water supply system in the U.S. The classical buildings on the left bank of the Schuylkill and some of the machinery are intact. (ASME will designate the site also a Natl Mechanical Engineering landmark and the Secy of the Interior a Natl Historic Landmark, Spring 1976.)

PIONEER OIL REFINERY, Newhall, Calif. (27 Sept), ASME. The first successful Western refinery, opened in 1876 several

years after the first extraction of oil in the state, producing kerosene and lubricating oils. Two 150-bbl per day stills and a storage tank remain.

CROTON WATER SYSTEM, Westchester County, N.Y. (16 Oct), ASCE. In addition to the Old and New Croton Dams [SIAN 2:5:3], the designation included the Old Croton Aqueduct (1837-42), a gravity-flow conduit that was the first major aqueduct in N America. Chief engineer was John Bloomfield Jervis (1795-1885). The NHCEL designation also included the New Croton Aqueduct (1885-93), whose principal feature was a tunnel nearly 30 miles in length and 50-500 ft below ground surface. Its inverted siphon 300 ft under the Harlem River utilizes two 12'3" diam shafts with a vertical drop of 174 ft and 321 ft at the N and S ends respectively. (Last summer the aqueduct was the subject of a HAER Survey, co-sponsored with the N.Y. State Divn for Historic Preservation and the ASCE Metropolitan Section.) *Peter H. Stott.*

CHESAPEAKE & DELAWARE CANAL PUMPING MACHINERY: SCOOP WHEEL & ENGINES, Chesapeake City, Md. (25 Oct), ASME. The 40-ft diam scoop wheel and a Merrick (Philadelphia) 150 hp condensing beam engine were installed in 1851-52 to supply water to the canal's summit level to make up for that lost in lockage; in 1854 a similar engine was installed to increase the system's capacity. The plant operated until 1927. These are the earliest American steam engines on their original foundations (the boilers have been removed). The site is operated as a museum by the US Army Corps of Engineers [SIAN 1:5:3]. *Continued*



Chesapeake & Delaware Canal Pumping Station. (L) Original arrangement, ca1855-1927. Rendering by Frank Snyder [SIA]. (R) The West Engine today. Eric N. DeLony [SIA] photograph.