

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

Volume Four Number 6

November 1975

P.R. SUGAR MACHINERY RESTORATION

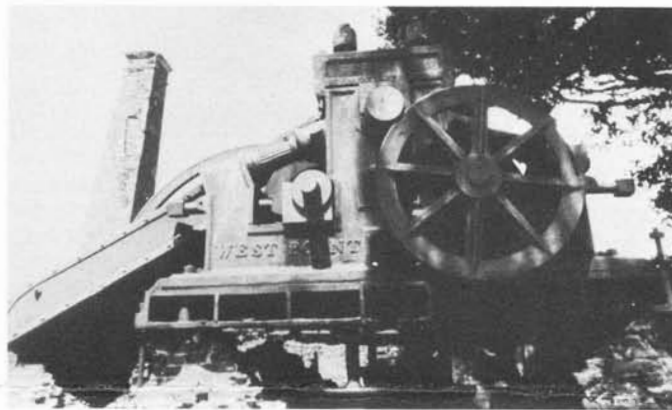
Along with the increasing preservation and reconstruction of industrial sites, there is a rising awareness that however valuable such work, its meaning is increased vastly if the interpretation of the site for the public can be extended beyond traditional verbal and graphic means to include actual operation. This commonly is done at flour mills, saw mills, and dozens of craft operations at museum villages. Beyond these relatively simple processes the question of day to day – or even periodic – operation for the public becomes far more difficult in terms of raw material supply, product disposal, maintenance, and obtaining operating personnel. We've just noted the Tannehill Furnace proposal; equally interesting and important to the future of this sort of thing is a plan by Francisco Javier Blanco, Exec Dir of The Conservation Trust of Puerto Rico (San Juan) eventually to put into full operation the sugar production complex of the Trust's Hacienda La Esperanza plantation in Manati, west of San Juan. Established early in the 19thC, it reached its full extent by mid-century with 2265 acres.

Focus is on the sugar factory, which contains remnants of the evaporating equipment. But of most importance are the almost fully intact 3-roll sugar (cane-crushing) mill, the high-pressure beam engine that drove it, and the intermediate gearing, all on a very considerable scale. The only principal element missing is the boiler. The machinery was built by the West Point Foundry of Cold Spring, N.Y. [SIAN 2:4:4 & 3:6:8] in 1861 (only the mill actually bears the signature & date, but it is assumed that the engine, typical of their work at that time, is by the same firm.

The engine is heavily Gothicized (the entablature and beam supported by 6 columns), its flywheel is 18 ft in diam, and the power was transmitted to the mill by double-reduction gearing of which the largest gear is 10 ft in diam.

The restoration of the site is to proceed with care, an important element of the preliminary study being a HAER survey scheduled for summer 1976. Sr Blanco's plan is ambitious, certainly feasible given adequate funding, and exciting. Details of progress will, of course, be reported.

Information on WPF's engines and other machinery of the period is urgently sought.



(l) The West Point beam engine & drive gearing to mill. (r) Side view of the three-roll cane crushing mill.

TANNEHILL BACK INTO BLAST NEXT SEPT

Historic Tannehill Furnace No 1 in Tannehill Historical State Park near McCalla, Ala., under reconstruction for the past several years, is to be recharged and a heat run on 19 Sept in a ceremony probably unique in the preservation of 19thC iron furnaces. Of the dozens of stone-built blast furnaces preserved in N America and W Europe – even in those few instances where the installation is entirely intact – there never has been a serious proposal to put one in blast because of the difficulties of obtaining charcoal and locating people with knowledge of early blast-furnace operation. Tannehill operated for less than a decade, starting in 1855. The progress of this venturesome undertaking will be reported on from time to

time during the summer. If the event is a success, it should serve as inspiration to do the same at such essentially complete furnace sites as Cornwall and Hopewell, Penna., and Saugus, Mass.

1976 ANNUAL CONFERENCE 23-26 April

In LOWELL, MASS, recall, with an extraordinary program planned, one of the highlights of which will be the operation 10 AM - 2PM of Taylor's Sawmill, the only operating up-&-down sawmill in the East. Island Pond Rd, SE of Derry, N.H.