Run of the Mill
Archaeology and Industry

Laurel Historical Society
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The Quintessential Mill: Darlington, Harford County, MD
Variability in Water Mill Design

- Intended Products
- Water Sources
- Dams & Races
- Wheels & Turbines
- Milling Stones

Mill foundations and race
Coffer dam and mill dam foundation
Coffer and mill dam trusses

Ballast and planking

Moved coffer and mill dam truss assembly
Completed mill dam and foundation
Wheelpit construction

Breast
A really big wagon wheel
Transferring direction of drive from horizontal to vertical

Use of a Face or Crown Gear that meshes with a Lantern or Pinion Gear

Note succession of increasingly smaller gears
Medieval European and 19th-century American drive systems
Milling mechanism and terms
Variability in Water Mill Design

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Stony Brook, Long Island, New York ca. 1750

Setauket, Long Island, New York 1824
Joinery shop in mill complex
Sawmill interiors
Framed dam comparable to that illustrated by David Macaulay
No ballast…pinned to blocks
Timber framed and earthen filled
Tidal mills
Millpond at Rutland Road and Defense Highway (MD 450)
Low earthen dam on Tarnan’s Branch, Rutland, Anne Arundel County
Half-mile-long headrace from low earthen dam
Mill site in Dorchester County

Note elevations
White Hall Mill, by US 50 just west of Chesapeake Bay Bridge
Laveille Mill in Port Republic, Calvert County
Undershot wheel

Overshot wheel
Overshot Wheel

Mill reconstructed at Stratford Hall, birthplace of Robert E. Lee, President of Washington College, Lexington, Virginia
Modern enclosed turbine

Roman or Medieval ‘horizontal flutter wheel
Derelict turbines
Imported buhr stones, Landis Valley Farm Museum, Pennsylvania
Specialty stone, Laveille Mill, Calvert County
Paint grinding stones

‘Flint’ grinding stones
Investigating a mill site: Samuel Bowles Mill, Hancock, Maryland

Lake, Griffing, and Stevenson (1877)
Thomas Taggart’s (1859) Wall Map
Varlé 1808 map
Reconstruction of late 18th-century land plats
US 70 above and National Turnpike (US 40)
Riffles, a tell-tale sign of a dam
Timber dam remnant
Submerged timbers from dam
Dovetails and vertical planks
Vertical planks for downstream side of dam
One of these styles? Or, a composite of two or three types?

Note anchor wall
Probable wheelpit remnant
Deteriorating wheelpit wall
Block with lugs for end of wheel shaft
Mill walls exposed by failed stormwater drain
Conservation successes
Conservation failure