#### **BIBLIOGRAPHY**

#### Maps, Plats, and Atlases

Benson, Harry L., "Plat – West Part of Buckingham Hundred and SW Part of Worcester Hundred, 1783 – Later West Berlin, District No. 9," Baltimore, 1933 (in MHS Library, Plat Case, Counties).

Bromley, George W. and Walter S., Atlas of *Baltimore County, Maryland*, G. W. Bromley and Co., Philadelphia, 1915.

Chiffelle, Thomas P., "Map of the City of Baltimore Including the Valley of the Great Gunpowder River from the Warren Factory to the Tidewater Shewing the Surveys Made Therein for the Introduction of Water into the City," Baltimore, 1852 (in EPFL Md. Department), Baltimore).

Griffith, Dennis, "A Map of the State of Maryland and of the Federal Territory as also a Sketch of the State of Delaware" J. Pallance, Engraver, Philadelphia, June 5, 1795.

Herrick, L. W., "A Map of Harford County, Maryland," Jennings and Herrick, Philadelphia, 1858.

Hopkins, G. M., Atlas of 15 Miles Around Baltimore Including Anne Arundel County, Md., Philadelphia, 1878.

Hopkins, G. M., Atlas of Baltimore County, Md., Philadelphia, 1877.

Hopkins, G. M., Atlas of Carroll County, Md., Philadelphia, 1877.

Hopkins, G. M., Atlas of 15 Miles Around Washington Including Prince Georges County, Md., Philadelphia, 1878.

Isler, J. B., "Map of Caroline County, Md.," 1875.

Kearney, James, A. T. Engineer, "Sketch of the Military Topography of Baltimore and Its Vicinity and of Patapsco Neck to North Pont," Baltimore, 1814 (National Archives).

Lake, Griffing, and Stevenson, An Illustrated Atlas of Cecil County, Md., Philadelphia, 1877.

Lake, Griffing, and Stevenson, An Illustrated Atlas of Kent and Queen Anne Counties, Md., Philadelphia, 1877.

Lake, Griffing, and Stevenson, An Illustrated Atlas of Washington County, Md, Philadelphia, 1877.

Lake, Griffing, and Stevenson, An Illustrated Atlas of Talbot and Dorchester Counties, Md., Philadelphia, 1877.

Lake, Griffing, and Stevenson, Atlas of Wicomico, Somerset and Worcester Counties, Md., Philadelphia, 1877.

Lake, D. J., *Atlas of Frederick County, Md.*, C. C. Titus and Company, Philadelphia, 1878.

Latrobe, Benj. H.; Trimble, Isaac Ridgeway; and Tegmeyer, J. H.; Commissioners; "Plat and Sections of Streets Submerged by Flood of July 1868 Exhibiting Proposed Changes Projected to Relieve the City Against future Over Flow," Kelly, Piet and Co., Baltimore, 1870.

Martenet, S. J., "Martenet and Bond's Map of Montgomery County, Maryland," S. J. Martenet, Baltimore, 1865.

Martenet, Simon J., "Martenet's Map of Cecil County, Md.," Baltimore, 1858.

Martenet, Simon J., "Martenet's Map of Howard County, Maryland," John Schofield, Ellicotts Mills, 1860.

Martenet, S. J.; Walling, H. F.; and Gray, O. W.; New Topographical Atlas of the State of Maryland and District of Columbia, Steadman, Brown, and Lyon, Baltimore, 1873.

Office of the Secretary of War, "Map of Vicinity of Hagerstown, Williamsport, and Falling Waters," Washington, 1879.

Papenfuse, Edward C.; and Coale, Joseph M. III, *The Hammond-Harwood House Atlas of Historical Maps of Maryland*, 1608-1908 (Johns Hopkins University Press: Baltimore, 1982.

Potomac Area American Youth Hostels, Inc., Collection of Maps of the Chesapeake and Ohio Canal, Washington, 1967.

Robins, James B., "Map of Worcester County, 1800," Recopied 1927 by William D. Pitt, Berlin, Md. (Photostat from Library of Congress).

Sachse, E., "Bird's Eye View of the City of Baltimore, 1869," E. Sachse & Co., Baltimore, 1869.

Saulsbury, M. L., "Map of Caroline County, Maryland," Ridgely, 1897 (certified true copy by George Herbert Fooks, Denton, 1969).

Sidney, J. C.; and J. W. Brown, "Map of Baltimore County," James M. Stephens, Baltimore, 1850.

Slade, James, "Plan and vertical section of the proposed water supply system of Baltimore, to include a dam in Jones falls at Relay House and a conduit thence to a reservoir at Hampden," Baltimore, 1857 (in EPFL Md. Department).

Strong, John C., "Map of Queen Anne's County, Md.," Centreville, 1866.

#### **Books**

Albright, I. H., *Landmark History of the United Brethren Church* (Reading, Pa., 1911).

Alexander, John Henry, A Report on the Manufacture of Iron Addressed to the Governor of Maryland (William McNair, Printer: Annapolis, 1840).

Ankum, Rev. Freeman, *Maryland and Pennsylvania Historical Sketches* (Times-Sun: West Newton, Pa., 1947).

Arnold, Joseph L., *Maryland*, *Old Line to New Prosperity* (Windsor Publications: Northridge, California, 1985).

Arts and Letters Club of Hagerstown, *Hearthstone History of Washington County* (Board of Education of Washington County: Hagerstown, 1935).

Bagnall, William R., *The Textile Industries of the United States* (Riverside Press: Cambridge, Mass., 1893).

Baley, Jane Wulf, ed., What's Past Is Prologue, The Wicomico County Centennial 1867-1967 (Wicomico County Centennial Inc.: Salisbury, 1967).

Baltimore American, Baltimore Maryland, The Monumental City, The Liverpool of America, With the Finest Harbor in the World. A Souvenir of the 121<sup>st</sup> Anniversary of the Baltimore American 1773-1894 (Baltimore American Job Press: Baltimore, 1894).

Baltimore Area Council Boy Scouts of America, 184 Miles of Adventure, Hikers Guide to the C. and O. Canal (Baltimore: 1967).

Barron, Lee and Barbara, *The History of Sharpsburg, Maryland* (Sharpsburg, 1873).

Bathe, Grenville and Dorothy, *Oliver Evans*, *A Chronicle of Early American Engineering* (The Historical Society of Pennsylvania: Philadelphia, 1935).

Bedini, Silvio A., The Life of Benjamin Banneker, The First African-American Man of Science (Maryland Historical Society: Baltimore, 1999).

Beirne, Francis F., *Baltimore*, *A Picture History 1858-1958* (Hastings House: New York, 1948).

Bell, Herbert C., *History of Leitersburg District, Washington County, Maryland* (Leitersburg, Md., 1898).

Bemis, Samuel Flagg, *John Quincy Adams and the Union* (Alfred A. Knopf: New York, 1956).

Bethlehem Steel Company, Principio to Sparrows Point. A Brief History of Maryland's Iron Industry, Part II (Baltimore, 1962).

Bicentennial Committee, Two Hundred Years Ago, Memories of Westminster, 1764-1964 (Westminster, Md., 1964).

Binning, Arthur Cecil; and Cochran, Thomas C., *The Rise of American Economic Life* (Charles Scribner's Sons: New York, 1964).

Bishop, Joseph Bucklin, Ed., *Theodore Roosevelt's Letters to His Children* (Charles Scribner's Sons: New York, 1919).

Bishop, John Leander, A History of American Manufactures from 1608 to 1860 (Howard Young and Co.: Philadelphia, 1861).

Bland, John R., Ed., *The Maryland Directory and State Gazetteer* (Baltimore Publishing Co.: Baltimore, 1887).

Blandi, Joseph G., *Maryland Business Corporations* 1783-1852 (Johns Hopkins Press: Baltimore, 1934).

Blumgart, Pamela James, ed., At the Head of the Bay (Cecil Historical Trust: Elkton, 1996).

Bohner, Charles H., *John Pendleton Kennedy, Gentleman from Baltimore* (Johns Hopkins University Press: Baltimore, 1961).

Bolles, Albert S., *Industrial History of the United States* (Henry Hill Publishing Company: Norwich, Conn., 1881).

Bond, Allen K., M. D., *Guide to Baltimore* (Norman, Remington Co.: Baltimore, 1926).

Bond, Allen Kerr, M. D., Bonds of Earth (Pegasus Press: Baltimore, 1930).

Bowie, Effie Gwynn, Across the Years in Prince Georges County (Garrett and Massie, Inc.: Richmond, Va., 1947).

Boyd, Thomas S., *History of Montgomery County, Md.* (1650-1879) (Clarksburg, Md., 1879).

Boyd, William H., Boyd's Business Directory of the State of Md. (Washington, 1875).

Brooks, Neal A.; and Eric G. Rockel, *A History of Baltimore County* (Friends of the Towson Library: Towson, Md., 1979).

Browning, Meshack, Forty-Four Years of the Life of a Hunter (Philadelphia, 1869).

Brugger, Robert J., *Maryland*, *A Middle Temperament 1634-1980* (Johns Hopkins University Press: Baltimore, 1988).

Bullock, Jams G., Jr., A Brief History of Textile Manufacturing Mills Along Jones Falls (Baltimore, April 30, 1970).

Canby, Henry Seidel, *The Brandywine* (Farrar & Rinehart Inc.: New York, 1941).

Canton Company of Baltimore, Canton Days (Baltimore, 1928).

Cassedy, J. Albert, *The Firemen's Record* (Firemen's Relief Association: Baltimore, 1925).

Capital-Gazette Press, Inc., 200 Years With the Maryland Gazette (Annapolis, September 19, 1927).

Caroline County Schools, *History of Caroline County* (J. W. Stowell Printing Co.: Federalsburg, Md., 1920).

Clark, Charles B., *The Eastern Shore of Maryland and Virginia* (Lewis Historical Publishing Co., Inc: New York, 1950).

Clark, Raymond B., and Clark, Sara Seth, Caroline County, Maryland Marriage Licenses 1774-1825 and a Short History of Caroline County (1969).

Clark, Victor S., *History of Manufactures in the United States* (McGraw Hill Book Co., Inc.: New York, 1929).

Colles, Christopher, A Survey of the Roads of the United States of America, 1789 (Belknap Press of Harvard University Press: Cambridge, Mass., 1961).

Joetta M. Cramm, *A Pictorial History of Howard County* (The Donning Company: Norfolk, Va., 1987).

Culper, Margaret Durst, Ed., Allegany County, Maryland Records, Abstracts of Land Records, Deed Books A-E: Real Estate Tax Lists, 1804-12 (Genealogical Records Chairman, Cresap Chapter, DAR: Cumberland, Md., 1966).

Dashiell, Benjamin J., *Dashiell Family Records* (Sun Book Co.: Baltimore, 1928).

Davidson, Isobel, *Real Stories from Baltimore County History* (Tradition press: Hatboro, Pa., 1967).

Democratic Advocate, *Carroll County*, 1837-1910 [Supplement] (Westminster, Md., 1910).

Department of Economic Development, *Directory of Maryland Manufacturers* (Annapolis, 1967).

Dickson, Isaac, M. D., The Early Days of Reisterstown and Vicinity (1869).

Burt, Dillon E., Fishing in Maryland (Baltimore, 1967).

Cecil County Public Library, We Called It the Everlasting Granite and By Golly It Is: Port Deposit History (Elkton: 1993).

Dilts, James D., *The Great Road, The Building of the Baltimore & Ohio, The Nation's First Railroad, 1828-1855* (Stanford University Press: Stanford, California, 1993).

Dorsey, Jean Muir; and Maxwell, Jay Dorsey, Christopher Gist of Maryland and Some of His Descendants (John S. Swift & Co.: Chicago, 1958).

Drake, Julia Angeline, Ph. D.; and Orendorff, James Ridgely, From Mill Wheel to Plowshare (The Torch Press: Cedar Rapids, Iowa: 1938).

Duncan, John M., Travels Through Parts of America and Canada in 1818 and 1819 (Glasgow, 1823).

Duvall, Charles T., *The Maryland Scene* (Remington Putnam Book Co.: Baltimore, 1943).

Duvall, Charles Thomas, The Sunshine Trail (Baltimore, 1920).

Earle, Swepson, *The Chesapeake Bay Country* (Remington-Putnam: Baltimore, 1929, 1934).

Earle, Swepson, Ed., *Maryland's Colonial Eastern Shore* (Munder-Thompson: Baltimore, 1916).

Edwards, Richard, ed., Industries of Maryland, A Descriptive Review of the Manufacturing and Mercantile Industries, City of Baltimore (Historical Publishing Company: New York, 882).

Elliott, Jonathan, History of the Ten Miles Square (Washington, 1830).

Emory, Frederick, Queen Anne's County Maryland, Its Early History and Development (Maryland Historical Society: Baltimore, 1950).

Evans, Charles W., Family *History of Fox, Ellicott, and Evans Families* (Baker, Jones & Co.,: Buffalo, N. Y., 1882).

Evans, Oliver, Patent Right Oppression Exposed: or, Knavery Detected (Philadelphia, 1813).

Evans, Oliver, The Young Mill-Wright and Miller's Guide (Philadelphia, 1795).

Ewing, W. Francis, *From Edentowne to Bethlehem* (Economy Printing Co.: Easton, Md., 1967).

Farqhar, Roger Brooke, *Historic Montgomery County, Old Homes and History* (Silver Spring, Md., 1952).

Federal Writers' Project of WPA, The Ocean Highway, New Brunswick, New Jersey, to Jacksonville, Florida (Modern Age Books, Inc.: New York, 1938).

Federal Writers' Project, *Maryland, A Guide to the Old Line State* (Oxford University Press: New York, 1940).

Filby, Vera Ruth, Savage, Maryland (Savage Civic Association: Savage, 1965).

Fisher, R. S., M. D., Gazetteer of the State of Maryland (J. H. Colton, New York, 1852).

Fooks, Herbert C., *Fooks Family* (Wicomico Historical Society: Salisbury, 1953).

Footner, Hulbert, *Rivers of the Eastern Shore* (Farrar & Rinehart, Inc.: New York, 1944).

Forman, H. Chandlee, *Jamestown and Saint Mary's*, *Buried Cities of Romance* (Johns Hopkins Press: Baltimore, 1938).

Forman, H. Chandlee, *Old Buildings, Gardens, and Furniture in Tidewater Maryland* (Tidewater Publishers: Cambridge, Md., 1967).

Forman, Henry Chandlee, *Tidewater Maryland Architecture and Gardens* (Bonanza Books: New York, 1956).

Foster, Vera A., *Your Maryland* (Maryland Historical Press: Lanham, Md., 1965).

Fralish, Lynda Allmond, ed., *Historic Mills of America* (Landmark Publishing, Inc.,: Fort Worth, Texas, 2000).

Frederick Civil War Centennial, Inc., *Monocacy, the Battle That Saved Washington* (Frederick, Md.. 1964).

Galbreath, Paul M., *Maryland Water Law* (Water Resources Study Commission, University of Maryland: College Park, 1965).

Garber, D. W., Waterwheels and Millstones: A History of Ohio Gristmills and Milling (Ohio Historical Society: Columbus, Ohio, 1970).

Gibson, John, ed., *History of York County*, *Pa.* (F. A. Battley Publishing Co.: Chicago, 1886).

Gobright, John C., City Rambles, or, Baltimore As It Is (John W. Woods, Printer: Baltimore, 1857).

Gobright, John C., *The Monumental City or Baltimore Guide Book 1858* (Gobright and Torsch: Baltimore, 1858).

Gordon, Robert B., *American Iron*, 1607-1900 (Johns Hopkins University Press: Baltimore, 1996).

Graham, Leroy, *Baltimore*. The Nineteenth Century Black Capital (University Press of America, Inc.: Washington, D. C., 1982).

Granger, Helen R., ed., *The Shipleys of Maryland 1968* (The Shipleys of Maryland: Baltimore, 1971).

Greene, Suzanne Ellery, Baltimore, *An Illustrated History* (Windsor Publications" Woodland Hills, California, 1980).

Griffith, T. W., Annals of Baltimore (Baltimore, 1830).

Grine, Harry A., Report on the Iron and Steel Industry of Maryland (Md. State Planning commission: Baltimore, 1938).

Guthheim, Frederick, *The Potomac* (Grosset & Dunlap: New York, 1968).

Grove, William Jarboe, *History of Carrollton Manor* (Marken and Biefeld, Inc.: Frederick, Md., 1928).

Thomas F. Hahn, *Towpath Guide to the C & O Canal, Georgetown (Tidelock) to Cumberland* (American Canal and Transportation Center: Shepherdstown, West Virginia, 1987).

Hahn, Thomas F.; and Kemp, Emory L., *Cement Mills Along the Potomac River* (Institute for the History of Technology: Morgantown, West Virginia: 1994).

Hall, Clayton Colman, *Baltimore Its History and Its People* (Historical Publishing Co.: New York, 1912).

Hall, Clayton Colman, *Narratives of Early Maryland 1633-1684* (Barnes & Noble, Inc.: New York, 1946).

Hamilton, John C., ed., *The Works of Alexander Hamilton* (John F. Trow, Publisher: New York, 1850).

Harding, M. Elaine, *History of Howard County* (County Commissioners: Ellicott City,1947, mimeographed).

Harrison, Samuel Alexander, *History of Talbot County Maryland*, 1661-1861 (Williams and Wilkens Co.: Baltimore, 1915).

Hawes, George W., State Gazetteer and Business Directory 1867-1868 (Baltimore, 1867).

Hayes, Helen Ashe, *The Antietam and Its Bridges* (G. P. Putnam's Sons: New York, 1910).

Helman, James A., History of Emmitsburg, Maryland (Frederick, Md., 1906).

Heyl, Allan V.; and Pearre, Nancy C., Copper, Zinc, Lead, Iron, Cobalt and Barrite Deposits in the Piedmont Upland of Maryland (Maryland Geological Survey: Baltimore, 1965).

Hienton, Louise Joyner, *Prince Georges Heritage* (Maryland Historical Society: Baltimore, 1972).

Mike High, *The C&O Canal Company* (Johns Hopkins University Press: Baltimore, 1997).

Hindle, Brooke, *Technology in Early America: Needs and Opportunities for Study* (Institute of Early American History and Culture, University of North Carolina Pres: Chapel Hill, N. C., 1966).

Homecoming Committee, *Bicentennial and Homecoming, Thurmont, Md.* (Thurmont, 1951).

Hotchkiss, Fannie Winchester, Winchester Notes (The Tuttle, Morehouse and Taylor Company: New Haven, Conn., 1912).

Howard, George W., *The Monumental City, Its Past History and Present Resources* (J. D. Ehlers and Co.: Baltimore, 1873).

Huelle, Walter E., *Footnotes to Dorchester History* (Tidewater Publishers: Cambridge, Md., 1969).

Hughes, J. E. Sketches of Early History of Harford County (Harford County Historical Society, 1960).

Ingram. Prentiss, *Land of Legendary Lore* (Gazette Publishing House: Easton, Md., 1898).

Helwig, Alfred; and Huttenhaver, Helen G., *Baltimore County in State and Nation* (Board of Education of Baltimore County: Towson, Md., 1962).

Holland, Celia M., *Ellicott City, Maryland. Mill Town*, U.S. A. (Adams Press: Chicago, 1970).

International Publishing Company, City of Baltimore A Half Century of Progress (New York, 1887).

Johnston, George, History of Cecil County (Elkton, 1881).

Jones, Elias, New Revised History of Dorchester County, Md. (Tidewater Publishers: Cambridge, Md., 1966).

Jones, Fred C., *The Village of Darlington in Harford County, Md.* (Darlington, Md., 1947).

Kaessman, Beta; Manakee, Harold R.; and Wheeler, Joseph L., *My Maryland* (Ginn and Company: Boston, 1934).

Kausler, John S., City Park, Hagerstown, Maryland (1930).

Keffer, John Poist, Catholic Colonial Conewago (York Composition Company: York, Pa., 1965).

Kelley, William J., Brewing in Maryland From Colonial Times to the Present (Baltimore, 1965).

Kellock, Katherine A., Colonial Piscataway (Accokeek, Md., 1962).

Kelly, J. Reaney, *Quakers in the Founding of Anne Arundel County, Maryland* (Maryland Historical Society: Baltimore, 1963).

Kenny, Hamill, *The Origin and Meaning of the Indian Place Names of Maryland* (Waverly Press: Baltimore, 1961.

Keyser, W., Maryland, Its Resources, Industries and Institutions (Baltimore, 1893).

Kidwiler, Elias W., *History of Havre de Grace* (Havre de Grace Record: Havre de Grace, Md., 1947).

Klein, Frederick Shriver, *Just South of Gettysburg* (Newman Press: Westminster, Md., 1963).

Lanmon, Dwight P.; Schwind, Arlene Palmer; Nöel Hume, Ivor; Brill, Robert H.; Hanson, Victor F., *John Frederick Amelung, Early American Glassmaker* (Corning Museum of Glass Press/ Associated University Presses: Cranbury, New Jersey, 1990).

Larkin, David, Mill. The History and Future of Naturally Powered Buildings (Universe Publishing: New York, 2000).

Lovis, John B., *The Blast Furnaces of Sparrows Point, One Hundred Years of Ironmaking on Chesapeake Bay* (Canal History and Technology Press: Easton, Pa., 2005).

Lowdermilk, Will H., History of Cumberland (Washington, 1878).

Lucas, Fielding, Jr., Picture of Baltimore (Baltimore, 1832).

McGrain, John, *Gristmills of Baltimore County, Maryland* (Board of Library Trustees: Towson, Md., 1980).

McGrain, John, From Pig Iron to Cotton Duck (Board of Library Trustees: Towson, Md., 1985).

Macdonald, Betty Harrington, *Historic Landmarks of Delaware and the Eastern Shore* (Delaware State Society of Daughters of American Colonists (1963).

Magee, Henry, *The Miller in Eighteenth Century Virginia* (Williamsburg Craft Series, Colonial Williamsburg: Williamsburg, 1964).

Magruder, James M. Magruder's Maryland Colonial Abstracts, Wills, Accounts, and Inventories 1772-1777 (Genealogical Publishing Co.: Baltimore, 1968).

Mahool, John Blatter, Jr., ed., *The Mahool Family of Baltimore and Its Branches* (Baltimore 1955).

Mariner, Kirk C., *Nothing Ever Happened in Arcadia* (Cooper-Trent Printers: Richmond, Va., 1968).

Martinak, George J. A Short History of Essex and Middle River (1963).

Maryland Department of Geology, Mines and Water Resources, *Gazetteer of Maryland* (Baltimore, 1941).

Maryland Geological Survey, *Maryland Geological Survey* (Individual volumes for the various counties) (Johns Hopkins University Press: Baltimore, 1929).

John Mash, The Land of the Living, The Story of Maryland's Green Ridge Forest (Commercial Press: Cumberland, Md., 1996).

Mason, Samuel E., *Historical Sketches of Harford County, Md.* (Darlington, Md., 1955).

Matthews, Catherine Van Cortland, *Andrew Ellicott, His Life and Letters* (The Grafton Press: New York, 1908).

Maugansville Eighth and Ninth Grade, *The History of Maugansville* (Board of Education of Washington county: Hagerstown, Md.).

May, Earl Chapin, *Principio to Wheeling* (Harper and Brothers Publishers: New York, 1945).

Miller, Alice E. Cecil County, Maryland, A Study in Local History (C. & L. Printing & Specialty Co.: Elkton, Md., 1949).

Miller, Charles W., General Directory of Frederick City, W. T. Delaplaine and Co.: Frederick, Md., 1886).

Mish, Mary Vernon, *Bridges Our Legacy in Stone* (Washington County Museum of Fine Arts: Hagerstown, Md., 1965).

Moore, S. S.; and Jones, T. W., The Traveller's Directory, or, A Pocket Companion Shewing the Course of the Main Road from Philadelphia to New York and from Philadelphia to Washington (Matthew Carey: Philadelphia, 1804).

Moylan, Charles E., *Ijamsville, The Story of a Country Village of Frederick County* (Frederick News: Frederick, Md., 1951).

Murray, Rev. James, *History of Pocomoke City Formerly New Town* (Curry Clay & Co.: Baltimore, 1883).

Murray, William A., The Unheralded Heroes – of Baltimore's Big Blazes (E. John Schmitz & Sons, Inc.: Baltimore, 1969).

Norris, Walter B., *Annapolis, Its Colonial and Naval Story* (Thomas Y. Crowell Company: New York, 1925).

Oliver, John W., *History of American Technology* (The Ronald Press Company: New York, 1956).

Olson, Sherry H., *Baltimore*, *The Building of an American City* (Johns Hopkins University Press: Baltimore, 1980).

Park, John R., *Maryland Mining Heritage Guide* (Stonerose Publishing Company: South Miami, Florida, 2002).

Passanno, L. Magruder, *History of Maryland* (Williams and Wilkens Co. Press: Baltimore, 1904).

Payne, John, New and Complete System of Universal Geography (New York: 1798).

Peirce, James Walter, A Guide to Patapsco Valley Mill Sites (Author House: Bloomington, Indiana, 2004).

Phillips, Thomas L., Orange Grove in 1900 (Washington, 1971).

Pleasants, J. Hall, ed., *Proceedings of the Court of Chancery of Maryland, Archives of Md.*, Vol. 51 (Maryland Historical Society: Baltimore, 1934).

Pogue, Robert E. T., Old Maryland Landmarks (Bushwood, Md., 1972).

Pogue, Robert E. T., Yesterday in Old Saint Marys County (Carlton Press: New York, 1938).

Porter, John E., The Industries of Western Maryland (Maryland and Its Industrial Development (Industrial Publishing Co.: 1880).

Powell, Henry Fletcher, *Tercentenary History of Maryland* (S. J. Clarke Publishing Co.: Chicago-Baltimore, 1925).

Powers, Roger T., ed., *Postal Markings of Maryland* (Associated Stamp Clubs of the Chesapeake Area: Baltimore, 1960).

Preston, Dickson J., Wye Oak, The History of a Great Tree (Tidewater Publishers: Cambridge, Md., 1972).

Preston, Walter, *History of Harford County* (Sun Book Company: Baltimore, 1901).

Prall, Joan, Mills and Memories (Westminster, Md., 1985).

Radisics, Elmer, ed., *Hungary*, *Pictorial Record of a Thousand Years* (Athaneum: Budapest, 1944).

Rawson. Marion Nicholl, *Little Old Mills* (E. P. Dutton and Co., Inc.: New York, 1935).

Riley, John Timon, Collections in the Life and Times of Cardinal Gibbons (McSherrystown, Pa., 1900).

Riely, Elihu S., A History of Anne Arundel County (Annapolis, 1905).

Revere Copper and Brass, Inc., Listen America, Chronological History of Revere Copper and Brass Incorporated, 1801-1970 (New York, 1970).

Robbins, Michael W., Maryland's Iron Industry During the Revolutionary War Era (Maryland Bicentennial Commission: Annapolis, 1973).

Robbins, Michael W., *The Principio Company: Iron-Making in Colonial Maryland 1720-1791* (Garland Publishing, Inc.: New York, 1986).

Mark Reutter, Sparrows Point, Making Steel—The Rise and Ruin of American Industrial Might (Summit Books: New York, 1988).

Reynolds, John, Windmills and Watermills (Praeger Publishers: New York, 1970).

La Rochefoucauld-Liancourt, Alexander Frederic duc de, *Voyage Dans Les Etats-Unis D'Amerique*, *Fait En 1795*, *1796*, *et 1797* (Du Pont, Imprimeus-Libraire: Paris, 1700).

Rukert, Norman G., *Historic Canton* (Bodine & Associates, Inc.: Baltimore, 1978.

Sadler, Drysdale, and Purnell, State Gazette and Merchants and Farmers Directory for Md. and D. C. (Baltimore, 1871).

Salisbury Fire Department, *Historical Salisbury Illustrated* (Brewington Brothers: Salisbury, 1898).

Saulsbury, Emma Grant, *The Founding of Ridgely and the Early Days of Its History* (Caroline Sun: Ridgely, 1912).

Schaeffer, J. R., From Baltimore to Charleston (Gormania, West Virginia, 1906).

Scharf, J. Thomas, *The Chronicles of Baltimore* (Baltimore: 1874).

Scharf, Thomas J., *History of Baltimore City and County* (Louis H. Everts Co.: Philadelphia, 1881).

Sehorn, Richard Alan, The Mills and Millers of Mud Mill Pond, Kent County, Delaware, and the Eastern Shore of Maryland 1757 to the Present, A Documentary History (Delaware Documents: Dover, Delaware, 2005).

Scharf, J. Thomas, *History of Maryland From the Earliest Period to the Present* (Philadelphia, 1879).

Scharf, J. Thomas, *History of Western Maryland* (Louis H. Everts: Philadelphia, 1882).

Sharp, Henry K., *The Patapsco River Valley, Cradle of the Industrial Revolution in Maryland* (Maryland Historical Society: Baltimore, 2001).

Schaun, George and Virginia, *Everyday Life in Colonial Maryland* (Greenberry Publications: Annapolis, 1959).

Schildt, Rev. John W., *Drums Along the Antietam* (McLain Printing Company: Parsons, West Virginia, 1972).

Schlosnagle, Stephen, et al., *Garrett County: A History of Maryland's Tableland* (McClain Printing Company: Parsons, West Virginia, 1978).

Scott, Dina Mills, *The Forgotten Corner. A History of Oakland Mill* (Historical Society of Carroll County: Westminster, 2005).

Scott, Joseph, A Geographical Description of the States of Maryland and Delaware (Kimber, Conrad, and Co.: Philadelphia, 1807).

Seitz, May A., *History of Hoffman Paper Mills in Baltimore County* (Holiday Press: Towson, Md., 1946).

Semmes, Raphael, *Baltimore As Seen By Visitors 1783-1860* (Maryland Historical Society: Baltimore, 1953).

Shagena, Jack L., *Bel Air Roller Mills, The Town's First Industry* (Morris Publishing: Kearney, Nebraska, 2005).

Shagena, Jack L., Jr., *Jerusalem, A Preserved Mill Village* (Morris Publishing: Kearney, Nebraska, 2005).

Silver, Albert P., Lapidum and Its Surroundings (1888).

Singewald, Joseph T., Jr., Report on the Iron Ores of Maryland with an Account of the Iron Industry (Maryland Geological Survey, Johns Hopkins University Press: Baltimore, 1911).

Smith, Augustine V. P., *The Ecological Relations and Plant Succession in Four Drained Millponds of the Eastern Shore of Maryland* (Catholic University of America: Washington, 1938).

Spessard, Howard Lehman, *The Lehman Family*, A Brief History (Hagerstown, Md., 1961).

Stansbury, Elijah, Memoirs of Colonel Elijah Stansbury (Baltimore, 1871).

Steen, Herman, *Flour Milling in America* (T. S. Dennison and Company, Inc.: Minneapolis, 1963).

Stein, Charles Francis, A History of Calvert County, Maryland (Calvert County Historical Society: Prince Frederick, 1960).

Stein, Charles Francis, Jr., *Origin and History of Howard County, Maryland* (Howard County Historical Society: Baltimore, 1972).

Steiner, Bernard C., Men of Mark in Maryland, Biographies of Leading Men in the State (Johnson-Wynne Co., Washington, 1907).

Stonebreaker, Joseph R., A Rebel of '61 (New York and Albany, 1899).

Stump, Brice N., *It Happened in Dorchester* (Economy Printing Co., Easton, Md., 1969).

Swank, James M., *History of the Manufacturing of Iron in All Ages* (The American Iron and Steel Association: Philadelphia, 1892).

Sword, Gerald J., A History of Blair Valley, Washington County, Md. (1968).

Thomas, James Walter, *Chronicles of Colonial Maryland* (Eddy Press Corp., Cumberland, 1913).

Thomas, James W., and Williams, T. J. C., *History of Allegany County* (L. R. Titsworth & Co.: Hagerstown, Md., 1925).

Michael D. Thompson, *The Iron Industry in Western Maryland* (Morgantown, West Virginia, 1975).

Torrence, Clayton, *Old Somerset on the Eastern Shore of Maryland* (Whittet and Shepperson: Richmond, Va., 1934).

Travers, Paul J., *The Patapsco, Baltimore's River of History* (Tidewater Publications: Centreville, Md.: 1990).

Truitt, Charles J., *Historic Salisbury Maryland* (Country Life Press: Garden City, N. Y., 1932).

Truitt, Reginald V., *High Winds* . . . *High Tides* (Natural Resources Institute: University of Maryland, 1967).

Tunis, Edwin, Colonial Craftsmen, and the Beginnings of American Industry (World Publishing Co.: Cleveland, 1965).

Tyson, John S., *The Founders of Ellicotts Mills* [originally serialized in *Howard District Press*, 1847], John McGrain, ed. (privately printed: Perry Hall, 1994).

Tyson, Martha E., *Settlement of Ellicotts Mills* (Maryland Historical Society: John Murphy Co.: Baltimore, 1871).

University of Maryland Class in Maryland History, *Prince Georges County Historic Sites* (mimeographed, 1962), in Hyattsville library.

Usilton, Fred G., History of Kent County, Md. (Chestertown, Md., 1916).

Wansey, Henry, An Excursion to the United States of North America in the Summer of 1794 (J. Easton: Salisbury, England, 1798).

Warfield, J. D., Founders and Leaders of Anne Arundel and Howard Counties, Maryland (Kohn and Pollock: Baltimore, 1905).

Watson, James Douglas, *Prince Georges County, Past and Present* (Federal Lithograph Co.: Washington, 1962).

Ware, Donna M., Green Glades and Sooty Gob Piles. The Maryland Coal Region's *Industrial and Architectural Past* (Maryland Historical Trust: Crownsville, Md., 1991).

Warner, Constance, *Georgetown Historic Waterfront* (Office of Archaeology and Historic Preservation, National Park Service: Washington, 1968).

Weaks, Thekla Fundenberg, *Oakland, Garrett County, Md. Centennial History* 1849-1949 (Oakland Centennial Commission, Inc.: Oakland, Md., 1949).

Webb & Fitzgerald, Maryland State Business Directory (New York, 1866).

Weston, B. Latrobe, *The Story of Mt. Washington* (Baltimore, 1948).

Wilcox, Joseph, *Ivy Mills*, 1729-1866, Wilcox and Allied Families (Lucas Brothers, Inc.: Baltimore, 1911).

Williams, Harold a., Baltimore Afire (Remington: Baltimore, 1954).

Williams, T. J. C.; and McKinsey, Folger, *History of Frederick County* Maryland (L. R. Titsworth & Co.: Hagerstown, Md., 1910).

Williams, Thomas J. C., A History of Washington County, Maryland (Runk and Titsworth: Hagerstown, Md., 1906).

Williamsport Chamber of Commerce, Williamsport and Vicinity and Reminiscences (Williamsport, Md., 1933).

Wilson, Roger B., ed., *The River and the Ridge*, 300 Years of Local History. Peach Bottom Township and Delta, Pennsylvania, Cardiff and Whiteford, Maryland (Gateway Press, Inc.: Baltimore, 2003).

Wingate, Isabel B., ed., Fairchilds Dictionary of Textiles (Fairchild Publications: New York, 1967).

Woolfe, Ralph S.; and Rhoderick, George, Jr., *Historical Sketch of Middletown Valley with Illustrations* (Middletown, Md., 1914).

Worthington, Glenn H., *Fighting for Time* (Frederick County Historical Society: Frederick, Md., 1932).

Wright, C. Milton, Our Harford Heritage (Bel Air, 1967).

**Periodicals – Signed Articles** 

Abbott, Collamer M., "Isaac Tyson, Jr.: Pioneer Industrialist," *Business History Review*, 42 (Spring 1968): 67.

Adams, Douglas, "Forgotten Mills of Millington," Baltimore Sun, July 7, 1935.

Ahlers, John C., "Old Furnace Slumber As New Guns Roar," Baltimore *Evening Sun*, February 5, 1943.

Alexander, Grif, "St. Mary's Great Mils," Washington Post, March 1, 1936.

Ames, Henry C., "The Port Differential Question," *Baltimore*, April 1954, p. 14.

Arnett, Earl, "Ashland – Poor Little Rich Town," Baltimore *Sun*, December 19, 1968, p. B1.

Bahr, Betsy, "The Antietam Woolen Manufacturing Company: A Case Study in American Industrial Beginnings," in *Working Papers from the Regional Economic History Research Center* (Elutherian Mills-Hagely Foundation: Greenville, Wilmington, Delaware, 1980).

Ball, John W., "Virginian Grinds Flour in Maryland Mill Where Time Stands Still," *Washington Post*, April 3, 1947.

Barry, Edwin M., "Thee Old Wye Mills, 1690-1956," Maryland Historical Magazine, 52 (March 1957): 35.

Baker, John G., "I Remember When Hampden Was a Country Town," Baltimore *Sun Magazine*, June 13, 1948.

Bates, Carol, "The Gristmill's Gift," Gourmet, (October 1973): 37-44.

Bland, Bertha B., "Ashland Furnace," *Federation PTA News*, Towson, 14 (March-April 1938): 3.

Bland, Bertha B., "The Old Iron Industry at Oregon and Ashland," *Federation PTA News*, Towson, 14 (March-April 1938: 2.

Bosley, William H., Jr., "Scotts Tan Yard," Federation PTA News, Towson, 14 (March-April 1938): 5.

Bryce, Peter, "Iron for 200 Years from Principio Furnace," Baltimore *Sunday Sun*, December 29, 1946.

Calder, John, "Rediscovered Views of Laurel's Milltown History Are Published Here for First Time," Laurel *News-Leader*, January 29, 1970.

Clark, Allen C., "The Old Mills," *Columbia Historical Magazine*, 31-32 (1930): 81.

Cook, Eleanor, M. V., "Early Water Mills in Montgomery County," The *Montgomery County Story*, 33 (November 1990): 139.

Cook, Eleanor M. V., "Newport Mill," *The Montgomery County Story*, 34 (February 1991): 141-151.

Coyle, Wilbur F., "Mr. Coyle Writes About the Scenes Pictured in Fine Old Photographs," Baltimore *Sunday Sun*, April 18, 1920, Part 8, p. 2.

Cross, E. May, "Paper Making in Baltimore County," Federation PTA News, Towson, 14 (March-April 1938): 1.

Dance, Leta S., "An Old Landmark," Federation PTA News, Towson, 14 (March-April 1938): 1.

Day, William H., "Mills on Broad Creek," Bel Air Times, December \_\_ 1933.

Deute, A. H., "The Stones Grind Slowly," Gourmet, 3 (March 1943): 14.

Dilts, James D., "Maryland and the Penn Central I—Shore Shippers Fight to Keep Rail Service [portrait of mill owner Philip M. Brooks at Radcliffe Mill, Chestertown]," Baltimore *Sun*, November 25, 1973.

Duffy, Edward Paul, "Where the Patapsco Is a River of Romance," Baltimore Sun, August 25, 1907, p. 14.

Durst, Ross C., "The Mills of New Germany," *Glades Star*, 2 (September 1955): 300.

Durst, Ross Compton, "The Savage River Valley," *Glades Star*, 4 (September 1969): 641.

Fenwick, Charles E., "Mill Memories in St. Mary's County, Maryland," *Chronicles of St. Marys*, 18 (No. 11, November 1970).

Fowler, Robert H., "AHI Visits—the Shriver Homestead at Union Mills, Maryland," *American History Illustrated*, July 1969.

Fulton, Nancy R., "Mills of Wicomico County," Salisbury Advertiser, October 22, 1942.

Gilbert, Arlan K., "Gunpowder Production in Post-Revolutionary Maryland," *Maryland Historical Magazine*, 52 (September 1957): 187.

Gillis, Christopher C., "Carroll's Mill: A Reminder of Frederick County's Agricultural Heritage," *Historical Society of Frederick County, Inc. Newsletter* (September 1990): 6-9.

Gillis, Christopher C., "McKinstry's Mill, Carroll County, Maryland," *Old Mill News*, 21 (Summer 1993): 10-11.

Gipe, George, "A Man and His Mills," Maryland Magazine, Spring, 19772.

Gorr, Louis F., "The Foxall-Columbia Foundry. An Early Defense Contractor in Georgetown," *Records of Columbia Historical Society* 71-72 (1973): 34-59.

Gould, Dick, "Action Needed to Preserve Historic Points from Ruin," Salisbury *Times*, October 31, 1963.

Griffin, Richard W., "The Columbia Manufacturing Company and the Textile Industry of the District of Columbia, 180918-1816," *Maryland Historical Magazine*, 57 (September 1962): 259.

Griffin, Richard W., "An Origin of the Industrial Revolution in Maryland: The Textile Industry, 1789-1826," *Maryland Historical Magazine*, 61 (March 1966): 24.

Guzy, Dan, "Batteaux, Mills, and Fish Dams: Opening Navigation on the Monocacy River and the Conococheague and Antietam Creeks," *Maryland Historical Magazine*, 98 (Fall 2003): 281-301.

Haines, Elsie White, "Mill Towns Along Patuxent Flourished in Last Century," Ellicott City *Times*, March 17, 1941.

Hall, F. C., "The Big and Little Patuxent," Baltimore *Sunday Sun*, November 8, 1908, p. 24.

Hart, John F., "The Maryland Mill Act, 1669-1766; Economic Policy and the Confiscatory Redistribution of Private Property," *The American Journal of Legal History*, 29 (January 1995)" 1-24.

Harvey, Katherine A., "Building a Frontier Ironworks: Problems of Transport and Supply, 1837-1840," *Maryland Historical Magazine*, 70 (Summer 1975): 149-166.

Howard, Ernest A., "History Recounted at Dedication of Memorial to Leeds Church Founder," Elkton *Cecil Democrat*, September 22, 1954.

Howard, Wilton L., "I Remember When the Town of Warren Flourished," Baltimore *Sunday Sun*, September 8, 1951.

Hull, William C., and Groff, William D., "History of Owings Mills," *Federation PTA News*, Towson, March-April 1928, p. 8.

Hunter, Brooke, "Wheat, War, and the American Economy during the Age of Revolution," William and Mary Quarterly, 3d Series, 62 (July 2005): 505-526.

Jessop, Jennie E., "Ghost Towns of Baltimore County," *History Trails*, 4 (December 1969): 1-4.

Johnson, Keach, "The Baltimore Company Seeks English Subsidies for the Colonial Iron Industry," *Maryland Historical Magazine*, 46 (March 1951): 27.

Kuethe, Louis, "List of Maryland Mills, Taverns, Forges, and Furnaces of 1795," *Maryland Historical Magazine*, 31 (June 1936): 155.

Lantz, Emily Emerson, "Catoctin Furnace Has Rich Past," Baltimore Sun, October 4, 1925.

Lawson, Publius Virgilius, "The Invention of the Roller Flour Mill," *Proceedings of the State Historical Society of Wisconsin* (Madison, 1908), in Eisenhower Library, John Hopkins University.

Lee, David, "The Old Mill at Jerusalem," Bel Air Times, April 17, 1931.

Leslie, Jeremiah L., "The Mills and Manufactories of Cecil County Half a Century Ago," *Cecil Whig*, April 22, 1854.

Linton, Terry L., "The Forgotten Millwright," *History Trails*, 23 (Autumn 1988-Winter 1988-1989): 1-7.

Littlepage, G. B.; and Gay, H., "A Brief History of Jerusalem and Its Mill," Baltimore *Sun*, (n.d.), 1939.

Logan, Anna G., "A Forgotten Mill Town of Baltimore County," Federation PTA News, Towson, March-April 1938.

Lufrieu, Ivan; and Gillis, Christopher, "Milling Around Carroll County," *Catoctin History*, 7 (Spring/Summer 2006): 12-17.

McCourtney, S. O., "Old Mills of the County," Bel Air *Times*, March 27, 1931.

McGrain, John, "Mayo's Tide Mill," Anne Arundel County History Notes, 7 (January 1972): 2-3.

McGrain, John, "Englehart Cruse and Baltimore's First Steam Mill," *Maryland Historical Magazine*, 71 (Spring 1976); 65-79.

McGrain, John, "The Development and Decline of Dorsey's Forge," *Maryland Historical Magazine*, 72 (Fall 1977): 346-352.

McGrain, John, "Good Bye Old Burr: The Roller Mill Revolution in Maryland, 1882," *Maryland Historical Magazine*, 77 (Summer 1982): 154-176.

McGrain, "The Man Who 'Invented' Automation," Baltimore *Evening Sun*, May 23, 1987.

McGrain, John, "Harford County's Mill Heritage," *Harford Historical Bulletin*, 75 (Winter 1998): 3-40.

McGrain, John. "Harford County's Mill Heritage II," *Harford Historical Bulletin*, 80 (Spring 1999): 2-52.

McGrain, John, "Calverton Mills," History Trails, 34 (2001): 1-8.

McGrain, John, "The Mill Boom in Western Maryland," *Catoctin History*, 7 (Spring/Summer 2006): 4-11.

McNeill, Virginia Yerby, "There's Glass in Them Thar Hills re Amelung works]," Sun Magazine, October 16, 1949.

Martin, Mrs. George P., "Early History of Crumpton," *The Kent Shoreman*, July 1969.

Martz, Ralph F., "Carroll Creek Once Powered Many Mills," Frederick *News*, August 27, 1973.

Martz, Ralph F., "The Old Chilcote's Mills," Middletown Valley Register, December 29, 1972.

Martz, Ralph F., "Old Mills on Catoctin Creek," Frederick *Post*, February 26, 1973.

Marye, William B., "Baltimore City Place Names, Stony Run, Its Plantations, Farms, Country Seats, and Mills," *Maryland Historical Magazine*, 58 (September 1963): 211.

Marye, William B., "The Baltimore County 'Garrison' and the Old Garrison Roads," *Maryland Historical Magazine*, 16 (September 1921): 207,

Marye, William B., "Some Baltimore City Place Names," *Maryland Historical Magazine*, 54 (March 1959): 15.

Medford, Carl, "Principio, Iron and Steel," Baltimore *Evening Sun*, June 1, 1945.

Mitford, Harriet N., "Amelung and His New Bremen Glass Works," *Maryland Historical Magazine*, 47 (March 1952): 1.

Nöel Hume, Ivor, "Maryland's Famed Early Glassworks. Ruins of the Amelung Plant near Frederick, Dating to the 1700s, Have Been Laid Bare and May Be Named a National Landmark," *Sun Magazine*, October 18, 1964.

Norman, Ralph; and Wright, C. Milton, "Old Mills of Harford County," in *Directory of Harford County* (County Directories Publishing Co.: Baltimore, 1953).

Price, Jacob M., "The Beginning of Tobacco Manufacture in Virginia," *Virginia Magazine of History and Biography*, 64 (January 1956): 1.

Propf, A. B., "Jerusalem's Ancient Mill," Baltimore Sun, September 8, 1935.

Reed, W. Norman, "Opening Up the Conococheague," Hagerstown *Herald-Mail*, n. d.

Robinson, Ralph J., "Forgotten Baltimore First in Metal Working," *Baltimore*, 45 (September 1952): 52, 37-43.

Scarborough, Katherine, "Famous Old Mills Tackle Task Vital to Nation," Baltimore *Sun*, December 31, 1944.

Scarff, John H, FAIA, "Belmont, Howard County," Maryland Historical Magazine, 48 (March 1953): 37.

Scarpua, Henry, "A Ghost Town with a Band," Baltimore Sun Magazine, October 14, 1973.

Sharrer, Terry G., "Flour Milling in the Growth of Baltimore, 1750-1830," *Maryland Historical Magazine*, 71 (Fall 1976): 222-333.

Sharrer, Terry G., "Oliver Evans and the Beginning of Automated Milling in Maryland and the Upper South," *Papers from Seminar on Water Mills and Windmills* (Erno River Association: Durham, North Carolina, 1979).

Sharrer, Terry G., "The Merchant Millers: Baltimore's Flour Milling Industry, 1783-1860" *Agricultural History*, 56 (January 1983)" 138-150.

Shelly, Fred, ed., "Ebenezer Hazard's Travels Through Maryland in 1777," *Maryland Historical Magazine*, 46 (March 1951): 44.

Shepherd, James S., "Water Mills and Windmills of Dorchester County," *Maryland Conservationist*, Spring 1934, p. 7.

Smith, Harold D.; and Burnett, James O., "Market Structure of the Sawmill Industry in the Handling of Forest Products in Maryland," (Agricultural Experiment Station, University of Md.: College Park, 1968).

Snyder, Betty M., "Ancient Mills of the Monocacy," Baltimore Sun, April 20, 1926.

Spade, Leah L., "Old Mills of Middletown Valley," Middletown Valley Register, March 9, 1973.

Sparks, Jared, "Summary of Millstreams in the Vicinity of Baltimore," *North American Review*, January 1825,p. 126.

Stabler, Esther B., "Triadelphia, Forgotten Maryland Town," *Maryland Historical Magazine*, 43 (June 1948): 108.

Thomas, Mrs. Walter E., "Industries of Baltimore County – Old and New," *Federation PTA News*, Towson, 14 (March-April 1938).

Walker, Cooper, "Maryland's Last Windmill," Baltimore Sunday Sun Magazine, March 23, 1962.

Whiteley, Henry, "The Principio Company," *Pennsylvania Magazine of History*, 11 (1887): 11-63.

William, Ann, "The Abundant Granary," Washington *Sunday Star*, February 28, 1971.

Woodward, Alice, "I Remember Franklintown Mill and Its Lovely Setting," Baltimore Sun Magazine, April 11, 1965.

## **Periodicals – Unsigned Articles**

"Sound' Marble Products Are Turned Out at Cardiff Mill," Bel Air *Aegis*, July 14, 1960.

"Streams and Water Wheels," Bel Air Aegis, July 1, 1965.

"The Late Heavy Rains," Bel Air Aegis and Intelligencer, August 23, 1867, p. 2.

"Sams Creek Mills from Mouth to Source," Westminster *Carroll Record*, January 2, 1931.

"Iron Making in the Colony of Maryland, 1720-1780," Elkton *Cecil Whig*, February 9, 1878.

"Old Mill Stream Doomed for Two Plants," Baltimore *Evening Sun*, April 6, 1951.

"Dance's Mill, Dismantled Seventeen Years Ago, Had Interesting Background," Towson *Jeffersonian*, March 19, 1948.

"Franklintown Mill Second Oldest Plant of Its Type and Nature in United States," Towson *Jeffersonian*, October 25, 1946.

"Indian Meal Mill on Banks of Patapsco Recalls Days When Red Men Roamed Here," Towson *Jeffersonian*, November 15, 1946.

"Old Gorsuch Mill Near Shawan, Was One of the Earliest Water Power Plants Here," Towson *Jeffersonian*, November 29, 1946.

"Water Mill with Wooden-Cog Machinery Still in Operation at Owings Mills," Towson *Jeffersonian*, January 8, 1947.

"Placid Loch Raven Waters Cover Warren Once Busy Milltown of 1000 Inhabitants," Towson *Jeffersonian*, March 7, 1947.

"Warren Was One of Quaintest and Most Picturesque Villages in Maryland,' Towson *Jeffersonian*, April 15, 1946.

"Present and Past of Famous 'Old Furnace'," Salisbury Advertiser and the Wicomico Countian, October 22, 1942.

"An Old Man and His Mill Defy Time and Change," Easton Star-Democrat, December 27, 1967.

"5 Veteran Woodberry Mills Workers Back Up Fighters," Baltimore Sun, December 22, 1944.

"They Prosper, The Millers of Maryland," Baltimore Sunday Sun, March 1, 1942.

"Paper Making in Baltimore County," Towson *Union News*, September 27, 1946.

## Manuscript Sources, Theses, Series, and Collections

American State Papers, Documents, Legislative and Executive of the Congress of the United States, Financial Affairs, Volume II (Gales and Seaton: Washington, 1860).

Baltimore County, 1783 Maryland Tax List (Rhistoric Publications: Philadelphia, 1970).

Beall, John Rodgers, "The History and Construction of the Mill at Burnt Mills, Md., "(Initiation Thesis, Tau Beta Pi, January 16, 1931 (in McKeldin Library, College Park).

Byers, Janet McC., "Dickeyville, The History of an Industry," (Johns Hopkins University paper in American Economic History, 1939 (in EPFL Md. Department, VF).

Calvert Papers, The, Maryland Historical Society, John Murphy and Co.: Baltimore, 1889).

Clark, Wayne E., "Archaeological Survey of the Northwest Transportation Corridor, Baltimore County, Maryland," (Division of Archaeology, Maryland Geological Survey: Baltimore, 1973).

Cobb, Doris B., "Mills on the Senecas and Their Tributaries," (University of Md. paper in Md. History, Spring 1968 (Montgomery County Historical Society, Rockville).

Cox, Mrs. T. Newell, "The Story of Pikesville," 1957 (in Historical Society of Baltimore County, Cockeysville).

Davis, John, "Account Books" [costs of milling Eastern Shore wheat crops, 1751-1782, in present Wicomico County], MHS Special Collections, Ms. 1475 [also available on microfilm].

Donegan, Angella Carroll; and Carroll, Cathryn Gordon, "Elkridge," (Johns Hopkins University paper in American Economic History, 1934 (in EPFL Md. Department, VF).

Frye, Susan Winter, "Evolution of Mill Settlement Patterns in the Antietam Drainage, Washington County, Maryland," (M. A. thesis, Department of Anthropology, College of William and Mary, 1984).

Garber, H. F., "History of Mills on the Monocacy River," (Initiation Thesis, Pi Mu, January 17, 1927, in McKeldin Library, College Park).

Haile, Amelia Kolk, "Reckord, Maryland," (Johns Hopkins University paper in American Economic History, 1939 in EPFL, Md. Department, VF).

History of Some Carroll County Villages, 1894-96 [clippings from the *Carroll Record*], scrapbook in MHS library stacks.

History of Union Bridge, Maryland (Pilot Publishing Co.: Union Bridge, Md., 1937).

"Hollingsworth Family Papers, 1715-1849 [documents of milling family of Cecil County]," (Historical Society of Pennsylvania, Philadelphia, Collection No. 289; also PDF version).

Lambdin, Robert Dawson, "Early Ship-Building in Maryland—Autobiography of Robert Dawson Lambdin," St. Michaels, April 1953 (in EPFL, Md. Department, VF).

Libby, Jean, "African Ironmaking Culture among African American Ironworkers in Western Maryland, 1760-1850," (M. A. thesis, San Francisco State University, 1991).

Marye, William B., "Some Notes on Hockley, Elk Ridge, Avalon, and Curtis Creek Iron Works," (in MHS Library, General Clipping file).

Marye, William B., "The Salisbury Mills Properties on Jones Falls Baltimore County (now Baltimore City Maryland) with Special Reference to Three Paintings by Francis Guy," n. d., (in MHS library, filed, s. v., "Historic Houses—Baltimore—Prospect).

Moser, Jean R., Settlement of Western Maryland 1748 to 1776 (Master's Thesis, Faculty of Political Science, Columbia University, 1940), in Washington County Historical Society, Hagerstown.

Perkins, John W., "Paper read Before Round Table of Historical Society," Elkton, January 14, 1957 (in Historical Society of Cecil County).

Portrait and Biographical Record of the Eastern Shore (Chapman Publishing Co.: New York, 1898).

"Principio Papers," original ledgers and correspondence 1722-- (in Historical Society of Delaware, Wilmington).

"Principio Company Papers," assembled by George P. Whitaker, 1670-1913 (MHS Special Collections, Ms. 1730).

Roberts, William Edward, "Riggs Mill," (Thesis presented to Tau Beta Pi, April 28, 1930 (in Hyattsville Library, Reference).

Sween, Jane Chinn, "A History of Dawsonville and Seneca," 1967 (in Montgomery County Historical Society).

Silver, Albert P., "The Early Iron Industry," paper read before Historical Society of Harford County (in MHS general clipping file).

Thorwarth, W. C., "Ellicott and Co., Flour Mills," (Johns Hopkins University paper in American Economic History, n. d. (in EPFL Md. Department, VF).

Weiland, Evelyn, "An Economic History of Warren, Maryland," (Johns Hopkins University paper in American Economic History, 1933, in EPFL Md. Department, VF).

#### INDUSTRIAL STATISTICS

The industrial statistics presented here were gathered in the census of 1850, the heyday of the milling industry. In that census, no industrial establishments of over \$500 annual production were reported from Calvert and Caroline Counties. Nothing relevant to this history was reported from Dorchester; Garrett and Wicomico Counties did not exist, and Howard County was merged in the statistics with Anne Arundel. It was essentially with this

accumulation of plant and resources that Maryland's fragment of the United States went into the War Between the States, a conflict that called forth courage and fortitude of almost Messianic proportions on both sides, and yet was brought to its end by the superior industrial productivity, inventory of productive machinery, and accumulated mineral resources that lay in greater preponderance in but one of the almost random groupings of states that participated in that conflict. The data is from Dr. R. S. Fisher's *Gazetteer of Maryland*.

#### ANNE ARUNDEL COUNTY INDUSTRIAL STATISTICS - 1850

	No.	Capital	Hands	Value of Product
Factories, Cotton	2	\$125,000	314	\$207,500
Factories, Wool	1	,300 [sic]	6	3,500
Furnaces, Iron	3	115,000	195	168,600
Mills, Clover	1	150	1	2,000
Mills, Flour	4	88,500	18	315,925
Mills, Grist	13	15,950	18	31,180
Mills, Paper	2	1,200	5	5,600
Mills, Saw	13	12,300	16	27,650
Tanners	1	300	3	900

NOTE: All the sites above except the furnaces, were in the Howard District of Anne Arundel County, and their sites are in present Howard County. No figures are recorded in the original census book for mills in Anne Arundel County itself.

#### **BALTIMORE CITY INDUSTRIAL STATISTICS – 1850**

	No.	Capital	Hands	Value of Product
Distilleries	5	\$75,300	9	\$358,864
Forges	1	30,000	35	60,000
Furnaces, Iron	2	27,500	403	195,000
Furnaces, Copper	1	100,000	40	450,000
Mills, Flour	4	130,000	22	491,133
Rolling Mills	1	60,000	96	171,531
Tanners	7	141,000	72	277,150

## CARROLL COUNTY INDUSTRIAL STATISTICS -- 1850

	No.	Capital	Hands	Value of Product
Mills, Flour	10		50	\$96,350
Tanneries	20		57	99,315
Factories, Cotton	1		40	24,000
Factories, Woolen	6		18	12,790

## CECIL COUNTY INDUSTRIAL STATISTICS - 1850

	No.	Capital	Hands	Value of Product
Factories. Cotton	2	\$48,000	97	\$89,284
Factories, Woolen	5	31,500	45	45,754
Furnaces	2	68,000	204	81,000
Mills, Flour	22	104,600	35	121,000
Mils, Grist	8	32,400	15	57,548
Mills, Paper	3	42,500	16	42,000
Mills, Rolling	3	111,000	70	86,000
Tanneries	2	10,000	7	8,850

## FREDERICK COUNTY INDUSTRIAL STATISTICS – 1850

	No.	Capital	Hands	Value of Product
Mills, Flour	72	\$350,550	135	\$798,586
Tanneries	41	243,100	179	429,508
Furnaces, Iron	1	80,000	90	100,000
Mills, Woolen	9	25,600	45	26,950

## HARFORD COUNTY INDUSTRIAL STATISTICS – 1850

	No.	Capital	Hands	Value of Product
Mills, Woolen	3	\$7,600	20	\$13,100
Mills, Paper	1	6,000	5	8,000
Forges, Iron	2	38,500	27	29,300
Furnaces, Iron	4	280,000	144	171,800
Mills, Flour	12	65,500	21	262,010
Tanneries	6	11,000	17	9,700

## MONTGOMERY COUNTY INDUSRIAL STATISTICS – 1850

	No.	Capital	Hands	Value of Product
Mills, Cotton	1	20,000	70	\$39,200
Mills, Woolen	4	15,200	30	24,500
Mills, Flour	6	25,050	13	124,945
Mills, Grist	15	12,050	15	15,852
Tanneries	3	3.900	9	9,668

#### PRINCE GEORGE'S COUNTY INDUSTRIAL STATISTICS - 1850

	No.	Capital	Hands	Value of Product
Mills, Cotton	3	\$298,000	215 Male 340 Female	\$275,000
Mills, Woolen	1	2,500	11	6,000
Furnaces	1	15,000	25	27,000
Mills, Flour	2	33,000	11	40,294
Mills, Grist	2	4,000	3	8,800
Mills, Saw	1	2,200	10	7,000

# QUEEN ANNE'S COUNTY INDUSTRIAL STATISTICS – 1850

	No.	Capital	Hands	Value of Product
Mills, Bark	1	\$5,000	5	\$3,000
Mills, Grist	8	17,800	13	64,992
Mills, Saw	3	5,500	30	15,200

#### SAINT MARY'S COUNTY INDUSTRIAL STATISTICS - 1850

	No.	Capital	Hands	Value of Product
Mills, Cotton	1	\$10,000	11	\$7,000
Mills, Grist	9	23,000	9	49,312
Mills, Saw	1	5,500	11	12,000

## SOMERSET COUNTY INDUSTRIAL STATISTICS – 1850

	No.	Capital	Hands	Value of Product
Mills, Flour	3	\$6,000	3	\$5,860
Mills, Grist	28	35,000	40	41,560
Mills, Saw	31	39,250	54	51,535
Tanneries	2	2,500	4	3,400

## WASHINGTON COUNTY INDUSTRIAL STATISTICS – 1850

	No.	Capital	Hands	Value of Product
Distilleries	6	\$15,000	9	\$32,520
Mills, File	1	25,000	20	30,000
Mills, Nail	1	15,000	24	47,000
Mills, Woolen	3	12,500	25	14,675
Mills, Flour	59	405,600	108	1,309,412
Mills, Rolling	1	25,000	9	25,000
Forges	1	5,000	12	26,000
Furnaces	2	58,000	85	80,500
Tanneries	18	58,800	49	96,985

## **BALTIMORE COUNTY INDUSTRIAL STATISTICS – 1850**

	No.	Capital	Value Raw Material	Hands Male	Hands Female	Value of Product
<b>Cotton Goods</b>	15	\$1,713,000	\$853,461	617	1,317	\$1,258,512
Woolen Goods	4	134,200	105,000	76	73	159,900
Paper	13	69,400	80,501	69	43	152,740
Tanneries	7	75,000	52,445	35		77,700
Iron Mines	13	26,700	26,700	179		133,000
Iron Furnaces	2	350,000	163,053	165		155,000
Iron Forges	1	21,000	13,420	16		20,000
Iron Nail Mills	1	105,000	56,700	140		140,000
<b>Copper Mines</b>	1	1,000		23		5,375
Coffer Refining	1	45,000	105,400	15		155,500
Flour Mills	20	500,500	1,085,272	70		1,340,426
Grist Mills	20	56,000	77,800	25		95,150
Distillers	3	91,500	133,481	30		157,700

# SUMMARY OF MILLS IN 1850 – VS- SURVIVALS FOUND IN 1976

COUNTY	GRIST FLOUR PAP.	CTN WOOL FOR	GES FURN TAN	NAILS BONE ROLLING DIST SAV	V 1976

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Alleg.								1	7					4	1	
Anne A.								3							0	
B. City	5	4					1	2	7				5		10	
B. County	20	29	13	15	4		1	2	7	1			3		21	
Calvert	No r	eport tha	t year												0	
Caroline	No r	eport tha	t year												6	
Carroll	9	30	4	1	6				20						22	
Cecil	8	22	3	2	5		2		2			3		4	11	
Charles	No re	port that	year												2	
Dorchester	No re	eport that	t year												4	
Frederick		72	1		9			1	43				1	13	13	
Harford		12	1		3		2	4	6					2	16	
Howard	13	4	2	2	2				1					13	3	
Kent	6	5			1										1	
Montg.	25	6	1	1	4				3			1		15	2	2
Prince G.	2	2		2	1			1						1	2	2
Queen A.	8													3	;	3
St. Marys	9			1										1		3
Somerset	28	3			2				2					31		2
Talbot	5	6														3
Wash.		59			3	1	2		18	1		1	6	3		18
Worcester	17						1		2					17	,	0
Dist. Col.				1	1											2
Garrett	Not yet established, included in Allegany statistics											2				
Wicomico	Not yet	establish	ed, incl	luded in	Somer	set aı	nd Wo	rcester	statis	tics						2

# GRAND TOTALS: Type of Mill

Grist	147	
Flour	245	
Paper	25	
Cotton	33	
Woolen	43	
Forges	5	
<b>Furnaces</b>	19	
Tanvards	116	

Nails 8 Bone Mill 3

Rolling 5

Distill. 16 Sawml. 118

Mills of antiquarian interest surviving 1976: 149.

NOTES: Except for the furnaces, all the sites listed under Anne Arundel County in the statistics were actually in Howard District of Anne Arundel County. See original census of manufactures returns in Maryland State Library, Court of Appeal Building, Annapolis.

In 1968, the author counted 242 mills, furnace, and primitive industry sites, but that counted the 20<sup>th</sup> century feed mills. The 1976 tabulation counted 12 furnace ruins and 82 mill ruins.

#### **GLOSSARY**

Ad Quod Damnum, writ of: A legal device available in the colonial period for condemning 20 acres of another person's property to build a mill.

Air furnace: A reverberatory furnace like a baker's oven used to melt pig iron at a foundry.

Bails: The "iceman's tongues" hoisting apparatus to lift the upper millstone for sharpening.

Bank: The earthen hill into which an iron furnace is built. Also an easily worked deposit of iron ore.

Bark mill: A works that rolled a large stone with a corrugated edges over oak and hemlock bark to provide a powder for tanning hides. Usually powered by an animal.

Bate: A tanyard vat for steeping hides in lye (from the Swedish word *beta*, meaning to tan).

Beam house: The area of a tanyard where de-hairing and liming occurs, the first step where hides are stretched over wooden beams for hand scraping.

Bedder: Or bed stone, the lower millstone, the one that does not move, being bolted to the floor.

Bellows: The leather bladder or accordion-like chamber that was pumped by water power to create a forced blast to fan the fire in an iron furnace.

Bessemer process: A method for making mild steel by blowing a cold blast through the bottom of a crucible to burn out the carbon content. First used in this region at Sparrows Point in 1891.

Bill stuff: At a sawmill, an assortment of different sized board and scantling for filling out contractors' bills of material.

Billy: Nickname of a slubbing machine or roving machine.

Blast: The entire period an iron furnace is continuously fired up, as much as a year. Also the constant current of air pumped into the bottom of the furnace stack.

Bleach works" A plant where cloth was whitened by caustics and exposure to the sun, e. g., Rockland Bleach Works in Baltimore County.

Bloomery: A primitive works where about a bushel of iron ore was heated to a hot pasty mass to produce a type of wrought iron.

Blue stones: See Cologne stones.

Bobbin: The wooden spool on which rovings or yarn is wound after spinning. See also cop.

Bog iron: A form of iron deposited by aquatic microorganisms, usually lying near the surface, a species of limonite, easily melted by colonial iron furnaces.

Bogus: A heavy grade of paper suitable for lining the inside of railroad box cars.

Bolster: In mill-wrighting terms, a large shaped wooden block set on top of a post and under the overhead girts in the interior framing of a mill. The bolster was pinned to the girts with 1-inch diameter "treenails," "trunnels," or pegs.

**Bolter:** A device used to sift flour for fineness.

Bolting cloth: Usually made of silk in historic times, the fine mesh cloth used to sift flour. Now available in nylon.

Bosh: The widest part of the furnace chamber; located at the bottom where the molten materials accumulated under blazing hot conditions.

Bran: The outer coating of a wheat grain, some times discarded to sell as feed, sometimes ground to make whole wheat flour.

Breast wheel: Water wheel that is fed at mid-point on its diameter.

Bridge house: A wooden ramp at the top of an iron furnace where hand carts full of ore, flux, and charcoal could be dumped into the top of the furnace to keep the furnace going for weeks or months.

Buckets: The receptacle built into a water wheel to hold the water while the wheel rotates.

Buddle: A wooden placer mining apparatus or sluice box, used for washing chrome ore from streams in Baltimore County.

Burr, or buhr: A millstone.

Calcine: To reduce to a powder or friable state by application of extreme heat.

Calender: A roller machine that gives a luster or smoothness to manufactured cloth.

Calico: Cotton cloth decorated with colors by roller machinery similar to a printing press for comic strips.

Cap: The rotating roof of a smock windmill. Only the roof and the windmill sails were turned into the wind.

Cam: projecting stud or protrusion on a revolving wheel or axle to activate a hammer or pounding mallet once each cycle. Used at both tilt-hammer forges and in fulling mills.

Canvas: A class of plain, heavy cotton fabric, including duck. Includes entire range of tent material, sailcloth, belting, material for threshing aprons, mail pouches, laundry carts, tarpaulins, tire fabric, shoe material.

Carding machine: A combing machine employed in (1) woolen mills to align fibers into rolls suitable for spinning. (2) in cotton mills to produce a spiral rope of soft cotton fibers aligned in parallel (i. e., a sliver).

Carding Mill: A mill used for processing wool before it is spun or woven.

Cassimere: A plain or twilled woolen cloth used in men's suiting. Variously spelled by country millers.

Cassinet: Variously spelled by rural millers, it probably meant an all-wool suit material, the same as kersey, if made at a small fulling mill wool factory. Nationally, cassinet might also contain cotton.

Casting arch: A masonry arch, usually brick, to allow the furnace workers access to the bottom of the bosh to unplug the clay seal and let the molten iron gush out.

Casting house: A wooden shelter at one end of the furnace to keep the elements off the molten iron released into earth gutters to form pigs of iron. A rebuilt casting house can be seen at Catoctin Furnace.

Centrifugal system: A device for forcing middlings particles through the bolting cloth by forced air.

Chaffery: The part of a forge mill where blooms or "anconys" were beaten by tilt hammers into inch-thick bar iron suitable for reworking into horseshoes or hinge material. Rendered obsolete by the puddling mill. An example can be seen at Saugus, Massachusetts.

Charge: The first batch of iron, flux, and charcoal dumped into a furnace at the start its season in blast.

Cinder hole: The orifice through which slag could be periodically be raked out of an iron furnace while in blast.

Clothe: To equip the vanes of a windmill with canvas sails to catch the wind.

Clover mill: A mill devoted to extracting clover seed.

Coal: "Coal" always meant charcoal to colonial furnace men. It was stored in a coal house. Anthracite, never called "anthracite coal," was used for smelting in Harford County in 1815 and in Allentown, Pennsylvania in 1839 in early experiments.

Coatings: Bulk quantities of woven material suitable for cutting into coats at tailoring shops. Similar term to "suitings" and "sportscoatings." Large weaving mills did not ordinarily make items of clothing.

Cockeye: The slot cut into an upper millstone to mesh with an iron bracket fitted to the shaft, supporting the millstone from below.

Cockloft: The uppermost floor of a mill.

Cold blast: The stream of forced air pumped into the bottom of a colonial iron furnace. There was no method to heat the blast until the 19<sup>th</sup> century.

Collier: The iron plantation workman who stayed out in the woods day and night to make sure the smoldering mounds of burning wood for charcoal would not break out into open flame.

Cologne stones: One-piece millstone of volcanic rock from the vicinity of Köln in the Rhineland. Also spelled "Cullins."

Conveyor: An Oliver Evans invention of 1787 using an endless screw mechanism to move flour or grain horizontally through the mill, an Archimedean screw device using wooden fins mounted on a shaft.

Cop: A cardboard cone on which the threads from an early mule spinner were accumulated.

Couch: Pronounced "cooch," the felt or wire belting in a paper mill into which the slurry of dissolved rag or straw stock was poured to begin its flattening and drying into a web of paper.

Count: The yarn count or thread-size number indicates the number of yards that weigh one pound. A low number (e. g., No. 10) indicates coarse thread. A number such as 240 indicates a very fine thread.

Creel; A spool rack used to wind up warp yarns on a mule.

Creel boy: An employee assigned to collect filled-up bobbins in the spinning frame or mule.

Crucible: The bowl-like depression below the bosh where the molten iron accumulated in a furnace. A late 19<sup>th</sup> century crucible was a vessel for purifying molten iron of carbon with a forced air blast.

Custom mill: A mill where the owner operated on a commission or barter basis and did not buy wheat crops from farmers (as opposed to a merchant mill).

Damsel: A wooden device that keeps shaking the hopper to hasten the movement of the grain. Old millers said it was so called because it chattered while it worked.

Descender: An Oliver Evans device of 1787 designed to move grain or meal horizontally through the mill.

Descorticator: A grain cleaning machine that removes the husks of wheat.

Doffing: The act of lifting filled bobbins of spun threads from the throstle frame—done by hand, once a child's job.

Doubling: The stage of combing and stretching two or more slivers or threads.

Drawing: The stage of stretching the carded sliver to render the fibers parallel and uniform.

Dress: The design or configuration of the furrows on a millstone. Several different patterns have been used.

Dressing: The application of chemical coating to the warp threads in a textile mill.

**Dressing:** The re-sharpening of the furrows on a millstone.

Drill: An Oliver Evans device that used a shaft with small wooden fins to pull material through a flour mill in a horizontal direction.

Drill: Twilled cotton fabric sometimes in herringbone design, suitable for ticking and shoe lining, pocket material, etc.

Driving stocks: Water powered tilt hammers employed for fulling cloth.

Duck: The heavier type of cotton canvas sail-cloth, plainly woven. A duck symbol had been applied to this grade in Scotland to distinguish it from the lighter "Ravensduck." Duck is derived from the Dutch word for canvas rather than the name of the bird. Available in numbered varieties.

Duster: A badly designed and unsuccessful mill.

Dusty: Nickname for a miller or for his sweeper apprentice.

Elevator: An Oliver Evans invention using belting and scoops on an endless chain to lift flour to the upper levels of a mill for storage or further treatment.

Evans improvements: Term used in advertising for the five patented devices invented by Oliver Evans before 1787 to automate flour mills.

Extra: A finely sifted grade of flour.

Eye: The center hole in a millstone.

Factory: In 19<sup>th</sup> century terms, a small works to prepare, spin, and weave wool into cloth of various grades.

Faggoting: The pounding of many rods of hot bar iron into a single iron shaft. See Franklinville Iron Works in Baltimore County.

Falling stock: Water-powered stamping devices for fulling cloth, driven intermittently by cam action.

Filling: The threads running crosswise in weaving—inserted by the shuttle. Its opposite was "warp."

Finery: A part of a forge mill where pig iron was remelted and hammered by tilt hammers into blooms or "anconys" that could be pounded further at the chaffery to produce bar iron or wrought iron.

Fish weir: A dam built in a river to herd fish toward a cage.

Flask: A sand-filled wood-framed mold used for forming cast iron objects such as pots and plow parts. Filled from ladles with small quantities of molten iron drawn form the furnace crucible.

Flume: A wooden trough to lead the water the last stretch to the millwheel.

Flutter wheel: A wide wooden wheel propelled by the current of the water.

Flux: Derived from the medical concept of a purgative, lime stone or oyster shells were used in iron furnaces to absorb impurities. It was drained off as slag, a useless, glassy product when hardened.

Flyer: A spinning wire device that wound threads from a throstle onto the bobbins. Replaced by ring spinning in the 1840s.

Forge: The part of an iron plantation where water-powered hammers were used to pound pig iron into marketable forms such as bar iron (wrought iron). Some blacksmith shops were also called forges, e. g., Rodgers Forge in Baltimore County.

Founder: Skilled workman who regulated the iron furnace, prepared the molds to become "pigs," and cast the iron onto the sand floor of the casting house.

Fourdriner: Named for the English brothers, Henry and Sealey Fourdriner, who in 1803 invented the first machine for making a continuous web of paper, revolutionizing a hand-work industry. The name still applies to such machines.

Frame: An upright machine or rack fitted with numerous spindles for winding up newly spun threads. See also water frame.

French burrs: Millstones made of separate pieces of white volcanic rock, held together by an iron rim, the material found in northern France near Paris.

Fulling mill: A mill equipped with cam-operated hammers to pound on wool cloth and full (i. e., fluff up or give body to) its fibers.

Fulling stocks: Same as falling stocks, q. v.

Furnace: In colonial times, a stone stack with brick lined interior designed to melt iron ore. In the later 19<sup>th</sup> century, furnaces had fire brick interiors and riveted iron jackets on the outside.

Fustian: A stout fabric of flax and cotton.

Garner: A wooden bin for storing wheat built into the upper floors of the mill.

Gig: A power-driven machine that roughs up woven woolen cloth with fine wire brushes to produce a thick pile.

Ginning: The separation of seeds from cotton bolls, usually performed in the cotton growing country before baling and shipping the crop.

Girts: In the interior framing of a mill, the girts are the horizontal members supporting the floor above. Girts sit on bolsters, and the bolsters sit on the upright posts.

Gries: The spelling of "grist" in the 1798 Federal direct tax list.

Gristmill: A mill that usually operated on a commission basis, no crops purchased from farmers. A custom mill.

Gudgeon: An iron journal on the end of a wooden axle or shaft, usually rotating in a bearing. One of the few iron parts in a colonial mill.

Hank: A unit of 840 yards of thread.

Head race: The channel or canal leading up to the waterwheel, sometimes fed into a head gate or into a flume.

Hematite: A hard red or grey iron ore found near the surface in Baltimore County but not used by iron makers until the 19<sup>th</sup> century.

Hessian fly: Destructive insect brought to America in the bedding of Hessian troops, a destroyer of wheat. Also just called "the fly."

Hoist: The block and tackle lifting device on the façade of a mill. Usually sheltered by an extension of the roof called a "hood."

Hood: The projecting part of a mill's roof ridge used to shelter the hoisting mechanism. Sometimes called a cat's head.

Hopper: The funnel-like, four-sided wooden chute that feeds grain to the eve of the millstone.

Horizontal mill: A tub mill, Greek Mill, Norse Mill, or Swede's Mill in which a water wheel is parallel to the ground; the shaft is directly coupled to the upper millstone.

Hopperboy: An Oliver Evans device, a rotating rake that swept newly ground flour or meal around to allow it to cool, then swept it down a chute to a bin. Named for the live employee it replaced.

Hot blast: A forced-draft of preheated air fed into more advanced furnaces, first used in Scotland in 1828, first patented in Germany in 1832.

Hurst: A platform in a mill that contains the millstones, designed to isolate the vibrations from the rest of the building.

Husk frame: Same as "hurst."

Ironmaster: The skilled manager of the entire iron plantation, not necessarily the owner, but a person of considerable rank.

Jenny: The 1764 invention of James Hargreaves that produced multiple (11) threads (suitable only for filling) in a spinning frame that used a moving carriage guided by a human operator. Ancestor of both the water frame and the mule. Its output was colleted on bobbins. Supposedly named for Mrs. Hargreaves.

Kersey: Also called Maryland Kersey, a wool suit material. See cassinet.

Lantern gear: A squirrel cage gear or trundle formed of round wooden rods of broomstick thickness, designed to be propelled by large wooden teeth on a another gear such as a wallower or master gear.

Lap: A broad flat blanket of loosely assembled cotton fiber, the output of a spreader. Served as input to the carding machine, either rolled on drums or sent directly by conveyor belts.

Lime: A tanyard vat for steeping hides in calcium hydroxide or other chemicals to loosen hair and fatty matter.

Liming: Removing hair from hides and plumping them for tanning.

Limonite: A brown or yellowish iron ore found near the surface, used in colonial furnaces; includes bog ores; the usual raw material of colonial era furnaces.

Linsey: Or linsey-woolsey, a coarse cloth with linen warp threads and wool filling. Often home-made and considered suitable fro bumpkins.

Lint: Cotton fibers after their removal from the seed.

Lixiviate: The process of using caustic chemicals (lixivium, made from coal ashes) to treat woolen cloth.

Merchant mill: A mill operated as a capitalistic enterprise where the miller buys entire grain crops from farmers to mill and sell to commission merchants and exporters.

Middlings: The partially ground matter after the first pass of wheat through the millstones or rollers. Same as "semolina," i. e., "half milled."

Middlings purifier: A sifting device to get more flour particles out of middlings. Used in the New Process and in the roller mill era.

Midget mill: A small unit that used steel rollers to grind flour; a product of the late 19<sup>th</sup> century.

Mill bill: Sharp edged, case hardened hammer used for sharpening the furrows in millstones.

Millpond: The impounded water behind a mill dam.

Millwright: A master builder capable of construction and repairing of mills and servicing the millstones.

Molinography: Writing about the subject of mills by a molinologist.

Mule: The massive, carriage-mounted, humanly pushed machine that intermittently drew out rovings and then wound up the spun fibers onto cops (or onto paper spools). Replaced by self-acting mules.

Muley saw: A water-powered sawmill with a straight, up-and-down blade set in a sash. A sash saw.

Negro cloth: Coarse hemp material with some wool or cotton content used to clothe slaves.

New Process: A system adopted in the 1870s to set the millstones slightly farther apart to grind for a maximum of middlings to regrind and re-sift at a second or third stage.

Norse mill: See horizontal mill.

Oil mill: An mill devoted to crushing vegetable oil from flax seed.

**Operative:** Archaic term for mill employees.

Osnaburg: Coarse, strong, plain woven cotton fabric, sometimes printed with stripes, used for bagging, sheeting, or work clothing; named for a German city.

Overshot wheel: A water wheel where the water is poured in at the top of the wheel.

Patent flour: An imprecise commercial term for flour made by improved methods of the later 19<sup>th</sup> century.

Pattern: A wooden form used to impress its shape into a sand mold which would then be filled with molten iron to solidify into the shape of the pattern. Used in the furnace casting house to make pots, stove plates, and plow parts.

Pattern: A full pattern or half pattern meant a standard mill design based on Thomas Ellicott's chapter in the 1795 Oliver Evans book.

Picker house or room: A building or room, usually sheathed in sheet iron on the inside walls, where the pickers of a woolen or cotton mill were isolated from the rest of the plant for fire safety.

Pig: A long bar of cast iron formed by pouring molten iron into rectangular molds formed in sand on the casting house floor. Pigs were not the final product but had to be reworked by further processing at a forge, a many-step, wasteful process.

Pitchback wheel: A wheel designed to turn in the direction opposite the direction of the flowing water, the water fed in near the top of the wheel.

Planing mill: A mill used for manufacturing finished lumber.

Plansifter: A late 19<sup>th</sup> century bolting apparatus invented in Budapest that sifted middlings by shaking the matter in a horizontal tray. It usually delivered its output through canvas tubes like fire hose material.

Post: An upright wooden member in the interior framing of a mill, usually separated from the overhead girts by a wooden bolster.

Post mill: A wooden windmill consisting of one room above and one below, the entire structure pivoted on a post and turned into the prevailing wind as necessary, steadied by its "tailpole."

Power loom: Water or steam-driven weaving machine that produced cloth far faster then traditional hand and foot-powered looms. Its shuttle was propelled at high velocity by a "picker stick" or rocker arm.

Print works: A factory where white cloth was imprinted with colors by either handstamping on tables or by printing with rollers, especially to make calico, e. g., Rockland Print works in Baltimore County.

Privilege: A legal right to conduct a mill and back up pond water, usually secured by writs of condemnation or legally recorded agreements with neighbors.

Puddling furnace: A small, 19<sup>th</sup> century furnace designed to re-melt pig iron by an anthracite fire to convert it by stirring or puddling into wrought iron, thus eliminating the wasteful colonial stages of reworking pig iron in a finery and a chaffery.

Quern: Small, primitive, hand-powered mill with a large flat bottom stone and hand operated top stone. Very small output gained at great expenditure of energy.

Ravensduck: In America, a lighter grade of cotton sail cloth. Scottish flax sail-cloth had once been stenciled with a raven symbol. See also "Duck."

Red Dog: Slang for a poor quality of flour.

Reduction: Also called gradual reduction, the process of making flour by several steps of grinding, sifting, and re-grinding, part of the New Process of the 1870s.

Riddle: A hand-held sifter.

Ring spinning: An improvement in winding the finished thread using a flanged metal ring rather than the wire flyer. Patented by John Thorp in 1828.

Roller: A steel roller with corrugations scribed on it to substitute for the furrows in a millstone. The key device of the Roller Process of the 1880s. The first rollers were porcelain.

Rolling and slitting mill: A water-powered works where bar iron strips were heated white hot and flattened by rollers and cut by mechanical shears into one-half-inch rods suitable for making hand-made nails. Nails had to be headed by hand, one at a time.

Roving: The stage before spinning which introduces a twist to the sliver. The intermediate product is called a roving. The process was carried out by a slubber or billy.

Run: A pair of millstones. A mill advertised with "two run of stones" would have four stones in all.

Runner: The upper millstone, the one that moves (as opposed to the bedder, which was bolted to the floor). A runner can be identified because it had a keyway in the center to mesh with the iron bracket or "cockeye" on the "spindle" that supported it from below.

Russia iron: Sheet iron with a smooth, glossy finish of protective oxide.

Salamander: An accretion of solidified iron stuck to the bottom of a furnace, so called for the salamander reptile that was supposed to be able to survive in fire. Hence the trade name of "Salamander Safe," which was supposed to preserve business papers.

Satinet: Fabric made with cotton warp and woolen filling; fulled and finished like an all-wool cloth.

Sheave: Pronounced "shiv," a pulley driven by belting.

Shed: The path produced by a lifting mechanism to provide a passage for the shuttle between every other row of warp threads. The shuttle inserted one row of filling through the shed on each pass from side to side.

Shipstuff: A low grade flour with unsifted bran that was suitable for baking into ship's bread or biscuits for provisioning a sea voyage.

Shoddy: Recycled wool cloth (with a tendency to disintegrate while worn by its second owner).

Shorts: A type of middlings or a poor quality of flour.

Shuttle: The hard, wooden, bullet-shaped device with a built-in supply of thread that carries the filling back and forth through the warp within the loom.

Sliver: A soft untwisted rope of fibers produced by a carding machine by stretching out flat laps. Pronounced "sly-ver."

Slubber: A water-powered intermediate spinning engine (also called a slubbing billy or a billy) developed from the earlier spinning jenny. The slubber stretched sliver into longer lengths before spinning the actual thread.

Smock Mill: The Dutch type of mill with tapering walls that suggested the body of a man wearing a smock or linen duster.

Slag: A waste product of smelting raked from the cinder hole. The best samples to be dug up at furnace sites have a glassy surface.

Smut: A disease that ruined wheat. A "smutter" was a separate item of machinery used to clean smut from wheat before grinding.

Sorting: A hand process wherein wool bales are opened and the fibers sorted according to the body area of the sheep, the quality and length of the fibers being different on the back, flanks, neck, etc.

Sow: The channel through which molten iron gushed from the furnace crucible to the parallel depressions in the casting house floor where the pigs were formed, once the iron cooled. The solidified sow could be broken up in several marketable lengths to ship with the pigs.

Speeder: One of the machines in the doubling process which combines slivers from several canisters into a single roving of cotton.

Spindle: The shaft that supports the upper (moving) millstone via an iron bracket.

Spinning frame: The machine that spins the final roving into yarn or thread. Same as a power frame. Outgrowth of the water frame.

Spreader: A device in the picking department that blew the picked fleece clean and produced a loose lap or blanket of cotton fibers about 2 feet wide; it wound the product onto drums or fed it directly to the carding engine on a conveyor belt.

Spur gear: A gear usually of wood with its teeth pointing out from the rim. It was usually possible to hammer on the teeth at their "roots" to push out the teeth just enough to compensate for wear on the outer diameter.

Swedes Iron: A high grade of wrought iron imported from Sweden.

Swedes mill: See horizontal mill.

Tailrace: The ditch or channel that drains away the used water from the wheel. It was undesirable to allow used water to pond up and slow the rotation of the wheel.

Tailpole: Usually a entire tree trunk used to steady a pivoting Post Mill or windmill. There was a wheel on the end near the ground to make it easy to turn the entire building into the prevailing wind. Also called "tail tree."

Tanbark: Powdered oak or hemlock bark used in tanyard vats to cure leather.

Throstle: The final machine in the cotton spinning process which continuously drew out and twisted the rovings and collected the threads onto bobbins, which were neatly wound by the spinning of the flyer.

Ticking: A heavy striped cotton cloth suitable for mattress cloth.

Tide mill: A mill that trapped tidewater within a dam in an inlet or bay at high tide and used the accumulated water to pass back out into the estuary trough the millwheel. Tide mills had to operate on a shifting schedule to take advantage of the high tide hour.

Tilt-hammer: Historically, tilt-hammers consisted of "an oscillating wooden beam pivoted at one end and carrying at the free end the upper half of a pair of dies, the lower half being carried to an anvil below. The beam is lifted by a rotating shaft carrying a series of cams, each of which raises the hammer and allows it to drop suddenly." There are modern versions of this process.

Toll: The in-kind commission charged by a rural miller for grinding a farm family's flour. The miller fed and fattened hogs on the toll or sold it to commission merchants.

Toll dish: A scoop the miller used to measure his share of "custom" ground flour or meal. Sometimes the miller got one-sixth of what passed through the stones.

Trundle: Same as lantern gear,

Tub mill: Same as horizontal mill.

Tumbling dam: A dam or weir designed to spill the surplus water outward to avoid scouring out its foundation. George Washington wrote about the tumbling dam at his mill at Mount Vernon. British usage is "tumbling weir." It is usually a low dam or outfall from a canal, river, or reservoir. In 1820, Elkanah Watson, writing about the Erie Canal, defined it as a waste weir or tumbling dam about 5 feet high.

Turbine: A French invention of ca. 1848 in which the water entered a tube and passed through a finned spinning device inside an iron casing to produce useful energy. Later

manufactured at Poole & Hunt's foundry in Woodberry in Baltimore County (now Baltimore City).

Tuyre: The iron nozzle (about 4 feet long) inserted at the base of the iron furnace to feed in the iron blast. Pronounced "tweer."

Twill: Fabric woven with a diagonal rib or twill, a strong and durable material (such as green army fatigue jackets).

Undershot wheel: A wheel powered by water pushing it at or near the bottom. Used where there was not enough elevation of the terrain to run an overshot wheel.

Vat: The round wooden casing around the two millstones in a pair.

Wallower: The first gear in a windmill or water mill that is driven by the main axle.

Warp: The threads running lengthwise in cloth. The strands set up in the loom before activating the shuttle to fill in the crosswise threads.

Water frame: Richard Arkwright's 1768 cotton spinning machine that twisted, drew, and spun rovings and collected the threads on bobbins. Its inertia made water or steam power necessary. It led to the spinning frame or power frame.

Willow: One of the devices of a picker house which churned the loose cotton fleece and cleaned it of litter and dirt with an air blast. In India, the job had been done by willow wands.

Wing dam: A dam or obstruction built part way out in a river to channel water to a millrace. There were examples on the Monocacy River and the Potomac.

Wool sorters' disease: A form of pulmonary anthrax that once afflicted employees who graded wool by hand. The virus entered via breaks in the skin.

Worm: The copper coil in a rural whiskey distillery.

Worsted: Fabric made of woolen yarn combed straight and smooth while being woven. Distinct from "woolens" which are woven from yarns already roughed and crossed during previous carding and spinning steps.

Wormseed oil: A crop that was once cultivated in Frederick and Carroll Counties to distill for a medicinal oil. Fully treated in Carroll County chapter, s. v., "Wormseed Distillery Industry."

Writ of Condemnation: See Ad Quod Damnum.

Wrought iron: Pig iron that has been reworked (1) by a forge mill in the finery and chaffers of the colonial era, or, (2) by a 19<sup>th</sup> century paddling furnace, for processing

into workable into bars and plates. The crude bloomery process of colonial times produced about a bushel at a time of what was essentially wrought iron.

## NOTE

The terms above list the vocabulary commonly found in advertising mills and encountered in historical sources. Much more detailed glossaries that include terms of art for building and maintaining mills are found in *The Mill at Philipsburg Manor Upper Mills and a Brief History of Milling* by Charles Howell and Allan Keller (Tarrytown, New York, 1977). See also D. W. Garber, *Waterwheels and Millstones: a History of Ohio Gristmills and Milling* (Columbus, Ohio, 1970). See also, Felicity L. Leung, *Grist and Flour Mills in Ontario* (Ottawa, Ontario, Canada, 1981). An excellent glossary prepared by Theodore R. Hazen is available on-line at <Pond Lilly Mill Restorations>. For iron works, see Robert B. Gordon, *American Iron 1607-1900* (Baltimore, 1996). For cloth manufacturing, see Phyllis G. Tortura and Robert S. Merkel, *Fairchild's Dictionary of Textiles*, 7<sup>th</sup> ed. (New York, 2000). Many terms in old advertisements and legal papers cannot be found in dictionaries. Many of the words in this list are rejected by the computer spell-check system.

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