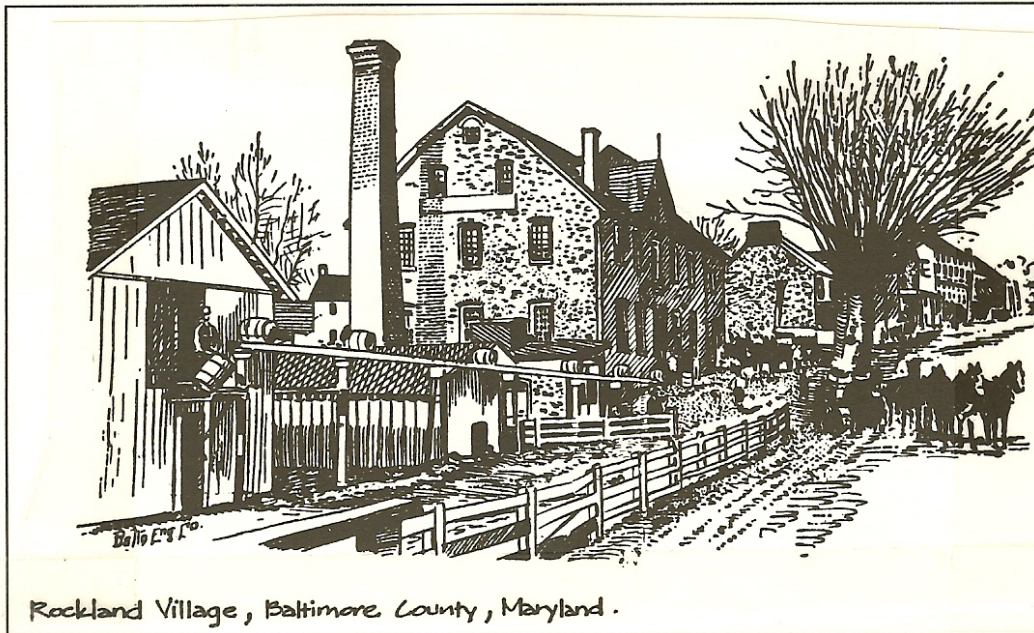


# THE MOLINOGRAPHY OF MARYLAND

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At Maryland State Archives, Annapolis**

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## INTRODUCTION TO ON-LINE EDITION 2007

### CODED REFERENCES

The following references are repeated frequently and are coded as follows (sources are published in Maryland unless otherwise noted):

- AAIB**        *The Antietam and Its Bridges.* Helen Ashe Hayes. G. P. Putnam's Sons, New York, 1910.
- ACYPGC**      *Across the Years in Prince Georges County.* Effie Gwynn Bowie. Garrett and Massie, Inc., Richmond, 1947.
- CCM**         *Cecil County Maryland. A Study in Local History.* Alice E. Miller, C. & L. Printing Specialty Co., Elkton, 1949.
- DMM**         *Directory of Maryland Manufacturers.* Department of Economic Development, Annapolis, 1967.
- ESMV**        *The Eastern Shore of Maryland and Virginia.* Charles B. Clark. Lewis Historical Publishing Co., Inc., New York, 1950.
- FAACHC**      *Founders of Anne Arundel and Howard Counties, Maryland.* J. D. Warfield, Kohn and Pollock. Baltimore, 1905.
- GZMF**        *Gazetteer of Maryland.* Maryland Department of Geology, Mines, and Water Resources. Baltimore, 1941.
- HAAC**        *A History of Anne Arundel County,* Elihu S. Riley, Annapolis, 1905.
- HAC**         *History of Allegany County,* James W. Thomas and T. J. C. Williams, L. R. Titsworth and Co., Hagerstown, 1923.
- HAM**         *History of American Manufactures,* J. Leander Bishop, Edward Young and Co., Philadelphia, 1861.
- HBCC**        *History of Baltimore City and County,* Thomas J. Scharf, Louis H. Evarts Co., Philadelphia, 1881.
- HCC**         *History of Cecil County,* George Johnston, published by the author, Elkton, 1881.
- HCLN**        *History of Caroline County, Maryland,* Caroline County Schools, J. W. Stowell Printing Co., Federalsburg, 1920.
- HCM**         *History of Carrollton Manor,* William Jarboe Grove, Marken and Bielfeld Inc., Frederick, 1928.

- HCVCM**      *A History of Calvert County, Maryland*, Charles Francis Stein, Published by the author, Calvert County Historical Society, Baltimore, 1960.
- HDC**        *New Revised History of Dorchester County, Md.*, Elias Jones, Tidewater Publishers, Cambridge, 1966.
- HFC**        *History of Frederick County Maryland*, T. J. C. Williams and Folger McKinsey. L. R. Titsworth and Co., Hagerstown, 1910.
- HHC**        *History of Harford County*, Walter Preston, Sun Book Company, Baltimore, 1901.
- HKC**        *History of Kent County, Md.*, Fred G. Usilton, Chestertown, 1916.
- HLD**        *History of Leitersburg District, Washington County, Maryland*, Herbert C. Bell, Leitersburg, 1898.
- HM**         *History of Maryland from the Earliest Period to the Present*, J Thomas Scharf, J. B. Piet, Baltimore, 1879.
- HMCM**      *Historic Montgomery County, Maryland, Old Homes and History*, Roger Brooke Farquhar, Silver Spring, 1952.
- HSHCM**     *Historic Sketches of Harford County, Maryland*, Samuel E. Mason, Darlington, 1940.
- HSM**        *Historic Salisbury Maryland*, Charles J. Truitt, Country Life Press, Garden City, N. Y., 1932.
- HTC**        *History of Talbot County, Maryland, 1661-1861*, Samuel Alexander Harrison, Williams and Wilkens Co., Baltimore, 1915.
- HWC**        *History of Washington County, Maryland*, Thomas J. C. Williams, Runk and Titsworth, Hagerstown, 1906.
- HJWM**      *History of Western Maryland*, J. Thomas Scharf, Louis H. Everts, Philadelphia, 1882.
- MCW**        *Maryland Calendar of Wills*, Jane Baldwin Cotton, Kohn and Pollock, Baltimore, 1906.
- MGS**        *Maryland Geological Survey* (Individual volumes for the county under discussion), Johns Hopkins University Press, Baltimore, 1929.
- MHM**        *Maryland Historical Magazine*, Published by Maryland Historical Society, Baltimore, 1906-2007 and onward.

- MIID**      *Maryland and Its Industrial Development, A Compilation and Commercial Review for 1880*, John F. Porter, Industrial Publishing Co., Baltimore, 1880.
- MPHS**      *Maryland and Pennsylvania Historical Sketches*, Rev. Freeman Ankrum, Times-Sun, West Newton, Pa., 1947.
- MWC**      “Mills of Wicomico County,” Nancy R. Fulton, *Salisbury Advertiser*, October 22, 1892.
- OBSF**      *Old Buildings, Gardens, and Furniture in Tidewater Maryland*, H. Chandlee Forman Tidewater Publishers, Cambridge, 1967.
- OHH**      *Our Harford Heritage*, C. Milton Wright, Published by author, Bel Air, 1967.
- QACM**      *Queen Anne’s County, Maryland, Its Early History and Development*, Frederick Emory, Maryland Historical Society, Baltimore, 1950.
- RIOM**      *Report on the Iron Ores of Maryland with an Account of the Iron Industry*, Joseph T. Singewald, Jr., Maryland Geological Survey, Johns Hopkins University Press, Baltimore, 1911.
- TT**      *Talbeland Trails*, Garrett County Maryland Issue, Vol. 2 No. 2, Tableland Trails Foundation, Oakland, 1956.

This collection of data began as a manuscript typed on a non-electric Royal typewriter in the late 1960s. Many of our individual entries about mills probably match up with other mills, but in many cases it is difficult to prove a connection. Many persons listed in census records and directories were probably one-year tenants or tenant operators of a mill that belonged to some other person. Over the years, where a definitive link can be established, we have regrouped many of the discrete facts. Many facts have been accidentally discovered in daily newspapers reporting the burning or flooding of mills--one lucky find was the exact date when the Hockley Mill burned. Historians should be more willing to reveal their lucky breaks rather than boasting of their methodology. Some of the things the reader needs to know are: (1) The number in parenthesis after the mill name is the Election District where the mill is located, if we can find it. (2) Writs of *ad quad damnum* were a legal tool provided by the General Assembly that allowed one citizen to condemn the unused land of some other person to use that spot as a mill seat. It was viewed as a public purpose to have a mill in a neighborhood otherwise not served. (3) The census of manufactures was a separate list from the population census. The figures given by millers sometimes seem like sheer inventions; the high number of revolutions per minute they gave for immense wallowing water wheels of six foot width sometimes seem difficult to picture. In 1880, when the most detailed information was collected, the census form did not ask for the diameter of water wheel, only their width. That year, there were no roller mills in Maryland, possibly

none in the nation, to ask about. But in 1880, many mills were already turbine-powered.

Our regional ancestors spelled words as best they could and they were never consistent about apostrophes. Where we are paraphrasing some old statement, we tend to leave out apostrophes, as do most highway signs. People who ran woolen factories, spelled the different types of cloth every which way, especially on "cassinet." We cannot help but enjoy the rambling prose of trustees who advertised property for sale in the old newspapers, or the Ciceronian indignation expressed by attorneys in bills of complaint about some property. No local color novelist could invent lines like a witness's description of an old mill, "She is most smartly out of repair." This is Americana at its best, well worth slowing down to read and savor. History should not be thin, distilled gruel equally true of South Carolina, Minnesota, or Maryland.

In the age of the computer, it is possible to post reams of information hoping that somebody somewhere will find it useful, possibly amusing.

Our other project of the early 21st century was the set of on-line Bibliographies of Industry covering the Baltimore region, the Western Maryland area, and the Eastern Shore and Southern Maryland segment. To find the bibliographies go to Yahoo or Google and type in "Baltimore County Maps and Research Links," then hit "Historic Preservation." We owe thanks to a separate list of local experts for some of the choice listings in the bibliographies. The bibliographies' contain a rich mixture of corporate reports, railroad surveys, newspaper accounts of factory tours, industrial accidents, and the wonderful verbose titles of maps and corporate charters, the first trips of trains and steamboats, the opening of bridges, and trustees' auction advertisements for cotton works.

Most of the photographs shown digitally in the new molinography are by the author or from his collection of HABS photographs and from old postcards. We have tried to find public domain illustrations. Anyone who wants to go into commercial, hard copy book publication should check on the legal ownership of the photographs. Any photographs or prints prior to 1923 should be fair game for reuse, unless they are the exclusive property of some institution, such as the Maryland Historical Society.

## **INTRODUCTION TO THE 1976 MICROFILM EDITION**

The mass of mill data in the 1968 edition of this work ran to three Volumes of Xeroxed pages, and one copy has been available in the Maryland Historical Society library. That manuscript was in some respects a skeleton list of Maryland Mills, based mainly on secondary sources. Since that time, the author has been able to search titles in 22 out of 23 counties, and the molinographical data has become too voluminous and too soporific to publish as a book, having reached some 1,652

manuscript pages by March of 1976. Even so, only a scattering of the possible mills has been searched via land records, and very few of the tracts have been platted out. In view of the fact that the author's first scrap of mill data was collected in 1964, it is clear that no one could live long enough to search every title in the State and interview every descendant of a milling family.

Microfilm, while not the most handy form for dispensing information, was undeniably cheap. For libraries, the cost was negligible, and for private collectors, a roll of film is half the price of some expensive and ostentatious bound volume.

A number of illustrations were included in the film editions. Some were from picture postcards of the early 20th Century. A few others were contemporary photos of the 149 surviving Maryland mills of antiquarian interest; others were new prints made from old glass or film negatives. Those illustrations were mostly decorative; the author's collection contains hundreds of outside views of mills and numerous interior details of equipment and construction. There is also a supply of old billheads, lithographed flour bags, and numerous newspaper clippings. The preface of the 1968 Xerox edition (Which follows these pages) is more or less unchanged. The 1968 version promised an index, but the author has still failed to provide one, largely because the collection of mill names on cards now fills six shoeboxes and four steel card file drawers. In the absence of an index, the reader is urged to look for the mill of his interest in alphabetical order in the county where it stood. Numerous cross-references are provided for alternate placenames and for various mill owners.

The maps indicate the mills of antique interest that stood as of 1976 and also show some feed mills. But in an 8 x by 11 inch format, the maps are too small to show some of the mill roads with accuracy. Any serious mill hunter would do well to acquire a topographical map of his favorite county, or even a set of 15-minute quadratic maps. Errors are bound to creep into a work of this nature, and the most probable errors would be those resulting from incorrect match-up of land titles or else from the failure to match up facts that are parts of the same mill history. If this work in places seems to be merely a history of land titles, it is the fault of the author's methods. One would prefer to provide technical data on mills and their moving parts, but often the legal descent is the only variety of information that has come to light.

After ten or so years of collecting, it became obvious that the author should have been omniscient in a dozen fields before attempting to write such a work. The gift of omniscience still eludes him and he presents this [film] edition with the assurance to the reader that there are hundreds of mill titles left for them to search and hundreds of possible articles and studies of 20 to 40-page length that could still be written.

Perhaps no list of the mills and primitive industries of Maryland will ever be complete. The mills were many, and their ownership shifted constantly; some

burned down and were rebuilt; others changed location, and some passed through various descendants; often millers' sons set up shop at other locations, and hired mill operators founded their own establishments. Some mills operated under place names; others operated under the names of original owners even after being sold; others changed names to match successive owners. It is fairly usual to find Smiths Mill on Jones Mill Road.

Quite often there is but the mention of a mill's name in some old document or county history. Few of the mills have been fully described in print, fewer accurately researched. The average account of a mill in a county newspaper may cover many inches of column space and yet contain not enough facts to cover a filing card. Shorn of sentimental verbiage about the good old days, these articles shrink to a few facts lifted out of the standard county and regional histories.

The references to other works will in most cases lead to little more knowledge than found in the entry, especially in the very brief entries. However, some areas have been well covered in the past. Union Mills in Carroll County, the mill towns of Savage and Warren, the Baltimore County paper mills, and the mills of Harford County have been thoroughly described in available publications. This volume attempts to at least tabulate the names of all mills and prove their existence in fact or in the mind of some past writer on the local scene. This work makes the assumption, not without some anxiety, that the writers of the past had firm command of their facts. This molinography, therefore, depends to an extent on secondary sources in high hopes that the secondary sources had been in touch with primary sources.

Finding the name of every mill might involve a lifetime of searching miscellaneous papers on every subject in hope of finding some random mention; many names have already turned up in this way; many others probably lie hidden. The entire project could be better handled by a 23-man committee with a member stationed in every county seat to search land records at a leisurely pace. Now that one state has been more or less molinographed, only 49 others remain, and there may be hope for a world molinography. It would be gratifying to know the really important things about world molinography such as the r. p. m. and bushels-per-hour ratings of the windmills whose operations were interfered with by Don Quixote de la Mancha, or the Liber and Folio number of the deed to the mill whose female attendant was recorded in the *Schöne Muhlerin* songs of Schubert; not to mention the burning question as to what abrasive is used on the rollers in the mills of the gods that are said to be grinding toward us all.

The number of mill sites varies across the state. Baltimore Town and Baltimore County contained the greatest number of mills, and in the Federal Era, Baltimore was the flour milling capital of the world: according to Scharf, the county contained 365 mills, a suspiciously exact number.



**This compilation grew out of a survey of Baltimore County and Baltimore City mills, and once that group was tabulated, the making of a state-wide list appeared to be downhill work. The great wheat boom of the early 19th Century produced a large number of mills in Carroll, Frederick, Harford, and Washington Counties. Elsewhere, the quantity was less; in Southern Maryland, tobacco was the chief crop; the westernmost counties were mountainous, and mining and forestry were often the chief occupation; on the Eastern Shore, there were many mills in Caroline County, the most inland of the counties. The tidewater counties lacked fast flowing streams, and in Talbot, windmills did some of the local work until the steam age.**

**The author started out under the delusion that only about four mills survived on the Eastern Shore and that these could be found on the way to Ocean City. But in the course of his research, he discovered a number of correspondents who assured him that there were mills galore with colorful histories. There were also the modern broiler chicken industry and tomato and truck farm canneries. Mr. Everett Lambden of Chestertown once searched Kent County mills, weather, and crops in depth. The names of a number of chicken-feed mills were contributed by Mrs. Clara Mitchell of Caroline County. The broiler industry in the 1970s raised 2 billion fowl per year and supported a quarter of the population of the peninsula. The modern feed mills are heavily- mechanized and elaborately constructed of metal ducting, with sheet- metal bins and silos, and moving conveyors and powerful grinders; while a far cry from the water-driven, wind-driven, or even steam mills of the late 19th Century, many of the modern feed mills have grown out of antique establishments and are operated by scions of old milling families. The canneries are not so antique, but many of them qualify as primitive industries. The canneries are highly practical farm structures, and quite often the boilers are out of doors or under an open shed. The canning season is fairly brief, and the influx of cheap labor hits a sharp peak. In the neighborhood of a cannery, the roads are strewn for miles with tomatoes that have fallen out of their baskets; decrepit school busses haul the pickers out to the fields, and the gutters near the plants run red with tomato juice. Any African American woman wearing galoshes on these sunny summer or autumn days is easily spotted as a cannery worker. The red ripe tomatoes are casually shoveled onto conveyor belts from the loaded trucks outside the factory. There is also a season for corn and string beans, not to mention such highly specialized forms of canning as crab, oyster, and tuna packing.**

**The maps after each chapter attempt to show present-day roads called by mill names, existing mill structures, sites of some more famous mills, and ruins surviving at the time of writing; the maps are only functional guides, not intended to be to scale.**

**The public will be spared a dissertation on the philosophy of mills, or attempts to impose a calculus formula on the statistics of the past; Louis Kuethe, however, writing in the *Maryland Historical Magazine*, Vol. 31, remarked that in the settled counties, the mills outnumbered taverns 2-to-1. In the counties along the National Road, where frontier conditions still prevailed, "the old West", as Frederick Jackson Turner would have described it, the taverns outnumbered the mills 2-to-1.**

Perhaps a map could be devised to show the great divide between the sober world of meal and the free and easy world of mash. This map has yet to be plotted.

The mills are listed by counties, with Baltimore City and County merged together because of their past union and present coalescence. The author has dragged a number of nearby Pennsylvania mills into the account; some of them are lumped under Baltimore County, whose land records included areas that ultimately lay north of the Mason-Dixon Line.

The selection of names involves a certain amount of method. Most mill-road names are spelled on highway signs without apostrophes, and the same practice is used throughout this tabulation. In some cases, millers who advertised in the old-time atlases spelled and punctuated the name in a particular style, which has been reproduced. In some cases, as in the listing of millers in the 1887 state directory, it is not always clear whether the man named is an employed miller, or an owner; in such cases, the name is given as Smith Mill, without an "s" or an apostrophe and with a notation such as "listed as miller." A great many of these entries are no doubt different names for places already listed. "Same as" entries have been used where the evidence is clear enough to provide a match up. We tend to forget in these times how much type was set by hand from handwritten copy in the 19th Century. Spellings have changed in many instances. The old county atlases and state gazetteers were often compiled out-of-town by correspondence with local editors and postmasters; thus the out-of-town writer lacked the familiarity with the Maryland scene to second-guess garbled handwriting.

This account at times presents conflicting data as furnished by two or more sources rather than make an unenlightened selection of possible facts. "The atlases of the 1870s carried lists of patrons as well as advertisements and maps of land holdings; even within these volumes, there were variations of spelling, first names, and initials. The farmers and millers who were listed as "patrons" gave their place of "nativity" and "date of settlement"; for those showing nativity within the county described in the particular atlas, date of settlement is taken as the year of their settlement upon this planet.

The reader is under no obligation to believe such statements as "bricks from England" or "flour for Valley Forge" claimed for so many mills, nor to expect formal certitude from the tall tales about ghost millers and other rustic haunts and hobgoblins which are here reproduced for their literary and sociological value.

The various claims for local "firsts" are reproduced as received from local "firsts" experts; they may very well be right. Any allusion to the good old days that appears here is within quoted matter; the exact duration of the Good Old Days has not yet been determined; in some minds they embrace World War II, but authors of the 1890' seemed to feel that they occurred in an age 40 to 50 years prior to their own; we can at least deduce that they are not ahead of us.

A few facts about wheat and flour are useful in the reading of molinographic

accounts. The purpose of wheat milling is to produce white flour by separating the wheat germ from the bran. A wheat kernel is covered by an outer hull; beneath the hull are layers called husks or bran; these portions were originally considered inedible by Western Europeans and were ground away and separated from the inner portions of the kernel, the food elements, starch and gluten. At the end of the grain is the wheat germ which is low in food value. The hull is always discarded to make white flour. Graham flour such as goes into Graham crackers, is ground from the entire wheat kernel, hull and husk included.

**The chief grades of flour are:**

**Patent:** The highest grade, with glut in of the best quality. Made from whitest cells of the kernel and used for making best grade of food products.

**Clear:** A slightly harder flour than patent, ground from whiter particles, or middlings, which remain after patent flour is removed.

**Straight/Standard:** A mixture of patent or clear flour.

**Red Dog:** The cheapest grade of flour, used for cattle feed and cereals.

**Shorts:** A mixture of bran and other coarse parts.

**Self-rising Flour:** Ordinary flour with added alkalis and acids which can be used without yeast.

**Buckwheat:** A flour made from the buckwheat plant rather than wheat; the buckwheat has beechnut-shaped seeds, and the name comes from the Anglo-Saxon word boc, meaning beech.

**Spring wheat** is a hard grain and contains more protein and is best for bread making because of its power of expansion and capacity for absorbing water.

Spring wheat, planted in the spring, is the important product of the western wheat belt. The hard kernels could not be ground by the old mill stones, but could be successfully crushed by the Hungarian roller process, an invention attributed also to John Stevens of Neenah, Wisconsin. The combination of rollers and machine purifiers has helped spring wheat replace winter wheat as the chief source of good bread flour. It was western wheat with its overwhelming bounty channeled through a vastly more efficient milling industry centered in Minneapolis that under-mined the economic base of the Maryland and eastern grist mill business. With Minneapolis alone producing 2,000,000 barrels per year, total mechanization gave the edge to the western producer and reduced the local grist mill to the status of ruin, tourist curiosity, producer of specialized feed products, or a declining business doggedly carried on by its crusty proprietor.

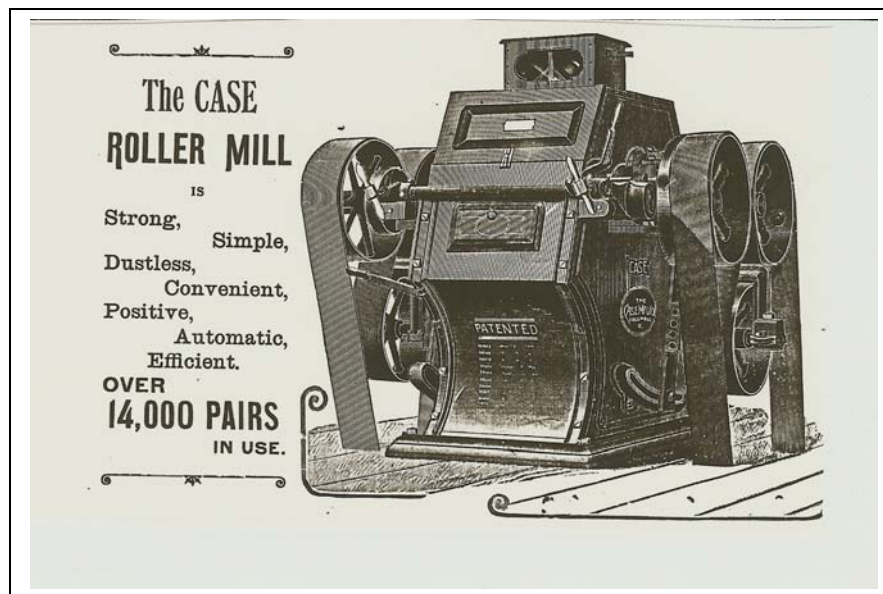
Soft winter wheat, sown in autumn, and harvested in spring along about the end of June in Maryland, is used for hot bread, Johnny cake, and pancakes at present, but in colonial times was the mainstay of the Maryland milling business and the source of the vast overseas flour trade out of Baltimore.

**Hominy, an Indian invention, is dry corn hulled and coarsely ground to be eaten in boiled form. The corn is first soaked in water and then put into a machine with a number of beaters somewhat like rough, dull knives. The beaters revolve until the outer hull has been removed; then the corn is cleaned, and dried and is ready for the cooker as the grits found on every breakfast menu south of the Potomac.**

**The modern flour mill has many operations laid out in an efficient order over many floors of a vast building. The chief steps are cleaning, grinding, bolting, purifying, and bleaching. The bleaching is done by electricity to turn the naturally cream-colored wheat to a pure white. The industry has come a long way since Thomas Cornwalley's built the first mill in this State in Saint Mary's City, 1634, before he even built himself "a house to put mine own head in" as he remarked.**

**A word or two on the claims of the Hungarian milling industry might be in order since it contributed indirectly to the ruination of many local mills:**

**The Hungarian milling industry was raised to world wide fame by three eminent engineers, who though of foreign birth became true Hungarians. Abraham Ganz (UHS-1867), an engineer of Swiss origin, supplied the roller plants of the milling industry with grooved chilled-iron rollers; he was the first in Europe to make cast railway-car wheels. The small foundry established by him at Pest in 1844 very soon developed into the great wheelwright workshop of Central Europe and later expanded into the world-famous Ganz factory. Andrew Mechwart (1837-1907) was responsible for considerable improvements in the roller plants of the milling industry. Henry Haggemacher (1838-1921), also of Swiss origin, invented the "horizontal sieve" and the deviating system for directing the movement of material through this horizontal sieve. Today, there is not a single mill of importance in the world not using Haggemacher's horizontal sieve. Prior to the second Great War the Hungarian mills manufactured 17 different kinds of wheat flour; not only did this number of varieties require an excessively complicated milling procedure; the increased mechanization resulted also in a deterioration of the quality of the several types of flour. For that reason the Hungarian Corn and Flour Experimental Institute has in recent years reduced the number of varieties. --*Hungary, A Thousand Years*, Budapest, 1944.**



*The roller mill rendered millstones obsolete in the 1880s.*

The *Monumental City* was published in 1873 and, while full of interesting data, is an Our-Town sort of book with high praise heaped on all the local products at a high point in two industries in which the town has long been surpassed, and in both cases by events in Minnesota. The flour milling industry was still going strong in 1873, and while the flow of western wheat was beginning to reach the East coast, the great New Process mills of Minneapolis had yet to dominate the market. The *Monumental City* assured the public that there were no shady dealings of any kind in the flour market in Baltimore such as existed elsewhere, "The trade won't stand for it."

In 1873, the iron industry in Baltimore was still flourishing and shipping its products, including prefabricated bridges, to other parts of the country and beyond; the Baltimore area industry was still operating from locally mined ores. "The very ground upon which the city is built is an ore bank and the neighboring hills teem with the valuable metal in the crude state." These supplies replaced the shallow deposits of bog iron that had supplied the iron furnaces of colonial times, but in the 1890s the vast production of the Mesabi Range at Hibbling, Minnesota and the deposits around Birmingham, Alabama, rendered Maryland iron mining uncompetitive. In 1885, there were only five furnaces in operation in the state and they were soon closed. The Maryland Steel Company founded in the 1880s at Sparrows Point is not an outgrowth of the old stone furnaces, but was a totally new organization relying on water transportation of ore and rail transportation of coal and coke. The steel furnaces of the present [1976] rely on ore shipped in by sea from Chile and elsewhere with the addition of a percentage of scrap. Bog iron, or limonite, is a form of iron ore lying close to the surface of the ground and was found where shallow seas of some previous geologic epoch had receded. The iron had been trapped in the tissues of aquatic bacteria which precipitated it in successive layers. Limonite is brownish-yellow as distinguished from hematite, blood-red iron ore. The wood-fired, stone chimney iron furnace disappeared except as a tourist ruin until the 1960's when the Chinese Peoples' Republic started its ill-fated campaign to produce pig iron in every man's back yard; the Chinese only relearned the economic

facts that had dawned on their Maryland counterparts eighty years before. The *Monumental City* did point to some important developments that brought business to Baltimore and even now continues: the B. & O. Railroad was about to reach Chicago, and three railroads were set to build Marine Terminals in combination with grain elevators. The three terminals of the present [1976], Port Covington, Canton, " and Locust Point, are shipping points for vast quantities of unmilled grain, and now as in 1873, Baltimore manages to use its position on an inland sea to achieve a lower freight rate to the interior grain lands that overwhelmed local agriculture in Maryland. The perpetual fight to retain the Baltimore and Philadelphia Freight Differential against New York would make a history in itself and illustrates the Baltimore business community's desperate desire to retain some fragment of a business it once dominated. Although this is a book on Maryland alone, there were other regions that played an important part in the colonial and more recent economy. Southeastern Pennsylvania was the largest center of iron making with elaborate iron plantations. In fact, colonial iron production, says Dr. Arthur Binning, was one-seventh of the world's output. While there was a great deal of gunpowder manufacture in Maryland, one-fifth of the national production, it was the duPonts of Delaware whose superior technique and talent eventually made Wilmington, Delaware, the center of that industry. Southeastern Pennsylvania had a great many mills too; Philadelphia was full of ingenious and aggressive millers, inventors, scholars, and scientists. Baltimore was just barely the second largest city in the United States in 1830 and was replete with local sages and savants and, while never the equal of Philadelphia in wealth, it cultivated a graciousness, a Southern attitude, and a semi-tropical languor (after normal working hours).

There were also important mills on the James River at Richmond; some of them were engineered by Oliver Evans. The development of Ellicotts Mills is worth the unusual space given it here and was an event of more than purely local importance. The Ellicotts had a profound effect in removing Maryland from a one-crop economy and were the first great merchant millers of this area, paying cash for crops and shipping to points overseas. Then in the case of cotton factories, the Maryland mills never equaled the size or output of the dark Satanic mills of New England, for example Lowell, Massachusetts or Manchester, New Hampshire. But in one textile product, cotton duck, Baltimore excelled and was even the center of a trust at the turn of this century. The Consolidated Cotton Duck Company claimed 90% of the world's production in its Woodberry Mills and other out-of-state mills; their 1907, advertisement listed 28 brands. The word duck came from the Dutch, *doeck*, which meant canvas; canvas had many uses from sail cloth to fire hose and rovings, belting, and tarpaulins.

Mr. William B. Marye of the Maryland Historical Society, searcher of deeds and fisher for trout, has given the location of many mills in his articles on the Garrison Roads, the Maryland Barrens, and the place names of Baltimore City, Baltimore County, and Harford County. This molinography has relied heavily on Mr. Marye's text and urges anyone with an interest in genealogy to look up the Marye works and search his footnotes for the reasoning behind the data that is confidently presented

here as fact.

Both the author and Mr. Marye have both searched the Hall of Records in Annapolis for writs of *Ad Quod Damnum* which run through the record books of the High Court of Chancery" Liber 1 through 12. In the early books, the writs were mixed with other court business. In the later books, they occur in the back of each liber, in one case, bound upside-down in relation to the main body of proceedings. The condemnation of private property to build mills was authorized by Acts of 1669, "An Act for Encouragement of Such Persons as Will Undertake To Build Water Mills." The act was renewed in 1692, and 1704. A similar law allowing private persons to condemn 100 acres for forge mills was passed under Acts of 1719 and not repealed until Acts of 1832, Chapter 56.

The 1704 act for building water mills was partially repealed in 1766, leaving only the paragraph concerning the amount of toll a miller could exact from his customers- The reason cited for doing away with private condemnation for mill seats was a desire to protect the supply of fish. Only toward the end of the condemnation system did the sheriff's juries stop instructing persons to pay themselves damages and indemnities if the land condemned already belonged to them. While there seems to be something absurd about condemning one's own land to build a mill, the theory is discussed in High Court of Chancery, 2 Bland 99, Binney's Case, wherein the Chancellor distinguished in the best medieval manner between the ownership of a thing and the use to which it is put. In addition, a well defined mill seat was a marketable commodity. The court in ca. 1745 also discussed the improper use of the writ and insisted that the Act of 1719 permitted acquisition of land for forge sites but not for the mere accumulation of timber land for charcoal burning (See Dallam and Brown entry, Baltimore County chapter).

There is no guarantee that a mill was built every time a writ was obtained, but considering that there was a requirement to post a bond of 50,000 pounds of tobacco, one was very likely to be in earnest. In fact, there are instances where the surveyor found the mill already in existence when he laid out the tract on which to build it. In some cases, land belonging to the Lord Proprietor was to be paid for in Sterling, whereas current money of Maryland (probably tobacco or notes) was good enough for the ordinary citizen who owned the opposite bank of the stream. In one case, the condemned land belonged to "Gibbs' Negroes" and they were to be paid 10 Shillings per acre (Jacobs Forge, Queen Anne County). In another instance, Indians were to be recompensed for the loss of property. In retrospect, most of the writs to 1762 seemed to be in the well settled areas, only two had been in Frederick County, none to speak of in Carroll or the present Montgomery Counties, which may suggest that the western mills were being built inside large estates or built without complying with the letter of the law or the custom of taking out writs of condemnation on one's own property. Under this system, the grantee always received exactly 10 acres on each side of the stream, and in some of the strangely worded documents, the stream might very well have an east side and a north side, or similar perplexing combinations. To avoid a jungle of quotation marks, many of the

entries in this work reproduce short phrases from old sale notices and descriptions of locations from the writs of condemnation. These brief excerpts should be recognizable by their quaint manner of expression. An effort has been made to transcribe the fantastic variations that occurred in spelling. Quite often, sale prices are expressed in the old British Sterling system that prevailed in the United Kingdom and other associated countries until 1971. The pounds-shillings-pence (Lsd) method involved such sums as "£ 4-2/6," that is, four pounds, two shillings, sixpence. The appearance of "2/6" or the like in speaking of money is of course two shillings sixpence, rather than a fractional numeral. Maryland storekeepers continued to do accounts in £sd terms until the War of 1812, well after the birth of the almighty dollar. The word "mill house" has switched meaning over the centuries. On the 1798 tax list, "mill house" signified the mill structure itself; today, "mill house" suggests what would have in 1798 been called the "miller's house" or dwelling. A single mill structure was quite often spoken of as "mills" or "set of mills", and anyone schooled in good grammar has qualms of conscience about his selection of the corresponding verb. Dr. Joseph G. Blandi, in *Maryland Business Corporations, 1783-1852*, gives a long list of companies chartered by the General Assembly. Some of the names are familiar, but others may not have passed beyond the paper stage. Almost every Eastern Shore county had a silk company chartered, but they do not figure in local histories. Only a few of these corporations have been included in this compilation. In 1808, the Union Manufacturing Company was the first factory issued a charter by the General Assembly. Charters of incorporation had previously been awarded only to religious and humanitarian societies and such semi-public undertakings as banks and canals. In 1789, incorporation had been refused to the Baltimore Manufacturing Company, the first business organization to apply for charter.

The manufacturers census reports for 1820, 1850, 1860, and 1880 are rich in revelations as well as mysteries. In the 1850 list, some counties were broken down into election districts, but Washington and Baltimore Counties were not, leaving in the former county a perplexing half dozen Newcomer Mills to identify. It is not always clear which sites in Somerset and Worcester Counties found their way into Wicomico County which was erected in 1867. The data listed as Anne Arundel County in 1850 applied almost entirely present Howard County.

The census taker earned his keep in 1880 when he was sent out to record numerous technical points about water wheels, their rating in horse power and rpm, the maximum capacity of the mill in bushels per diem, output in pounds of meal and hominy but in barrels for flour and rye. No roller equipment whatever was reported that year. Some enumerators when asked the type of water wheel, replied "wooden" rather than specifying turbine, overshot, undershot, or the like.





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Some entries are clearly impossible combinations, such as a 5-foot broad overshot wheel functioning at 200 rpm. It is possible that in some cases the enumerator wrote down the width of a turbine wheel expressed in inches and put it in a column headed by "feet." It also seems possible that the maximum capacity per diem has been occasionally entered in units of barrels in a column that calls for expressions in bushels.

The census taker was only concerned with the operation of a mill rather than the person who held title to it. Thus a number of millers listed in 1880 can not be found in land record indices and can not always be matched up with another name already known, even when the election district and stream are given. Every mill is listed with a "capital investment" figure, but if a mill is operated under lease, the capital sum belongs to the unmentioned owner. The census called for both mills and elevators, but in some cases the census taker has interpreted "elevator" as the mechanism for hoisting grain within the mill rather than as a storage building, because the capacities are so absurdly low, sometimes 5 bu/hour. In one case, a tanner replied to the question, "Where do you get tanbark?" with the entry, "June." But in general, the census records mesh beautifully with other recorded data from land records, sale notices, and contemporary sketches. However, some very large mills were not reported and entire counties failed to report in 1850 and 1860. There was little uniformity in the 1850 census when each county reported in bushels or barrels for flour and meal -- quarts for buckwheat, reams and pounds for paper, and both board feet and tons for lumber. In all the census lists, a layer of editing has taken place, sometimes resulting in suspiciously round looking figures. Some of the census takers seemed to turn in suspiciously uniform figures at different mills. The classic example in 1880 occurred at Rock Run Mill, Harford County, where the miller sent in a note beginning, "Being as dumb as the enumerator who called to take my business I thought I would not try to fill up the blanks," but Mr. Matthews then wrote a few lines about his output -- almost none of it expressed in numerical terms -- and the census editor managed to fill out almost every blank on the elaborate bureaucratic tally sheet.

Excellent books are available that delve into the practical side, in particular *Water Wheels and Millstones* by D. W. Garber, published by the Ohio Historical Society,

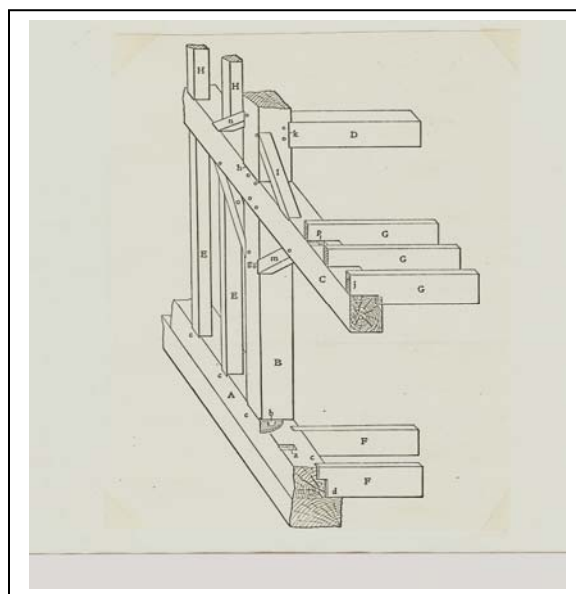
Columbus, 1970. Also a British work, *Windmills & Watermills*, John Reynolds, Praeger Publishers, New York, 1970. Both books have glossaries—of vastly different terms on each side of the Atlantic millpond; some of the words found in old records are missing from both American dictionaries and the OED; a spell-check system on a PC fails to recognize the argot of the trade. Oliver Evans’s *Young Millwright* and other rare 19<sup>th</sup> century books are now available in reprints.

Millers and Millwrights have generally been taciturn fellows, rarely given to utterance in prose. The most characteristic outbursts made by practical Maryland millers are found in the entry on Purnell Mill (Worcester), Priests Mill (Cecil), and Trevanion Mill (Carroll). James F. Hobart, if we might quote just one non-Maryland expert, lamented in 1909 that mill building had gone to the dogs (*Millwrighting*, Hill Publishing Company: New York, 1909):

The ancient type of millwright has passed away. He has gone with the old-time carpenter and the obsolete shoemaker – the former with 500 pounds of moulding planes and woodworking tools, the latter with nothing but pegging and sewing awls, hammer and knife. It used to be said, so leisurely were the movements of the typical millwright, as he pared for hours and days on the teeth of a single mortise-gear, that ‘A drop of a millwright’s sweat would kill a toad.’ The modern millwright is a pretty lively proposition. He is a wide-awake man who works with brains as well as with his hands.

Hobart also provided an illustration shown below of the elaborate mortises cut by 19<sup>th</sup> century millwrights, an art already dead in his time. Thomas Ellicott’s classic cross-sectional view of a 1795 automated mill used in the Oliver Evans book is included under Roxbury Mill (Howard County) because that out-of-State illustration was on the reverse side of a license issued by Evans to the Maryland mill owner.

See text box at end for Hobart’s explanation of “Old-Time Framing.”



**Mills have been the scenes of murders, arson, ghostly apparitions, and industrial accidents, to mention but a few of the events that provide purple prose for yellow journalism; any number of mills have found opposing armies drawn up on either side; cannon balls have pounded the walls; the mills have served as command posts during the battle and as hospitals after the conclusion. Mills have been the germ and incubation womb of industrial empires, the nest eggs of merchant princes. Mill ponds and still waters have been the fishing holes of boys and old men, and the meeting place of lovers who found the still leafy reflections along the cool banks the homely Fragonard or Watteau tapestry backdrop for launching miller's sons and daughters into the ultimate absurdity that few of the practical millers have ever had the rationality and business acumen to resist. Many a single mill apprentice has gained mill ownership by romancing the miller's daughter.**

**Every book of this sort requires a gratitude section to thank the many persons who have helped dispel the author's ignorance. One could only wish for more such helpful souls to produce a perfect product. The author has visited 22 out of 23 county libraries (one was undergoing reconstruction), plus those at Johns Hopkins, Loyola-Notre Dame, the Enoch Pratt Free Library, Maryland Historical Society, the State Library at Annapolis, the National Agricultural Library, Georgetown University, Towson University, Goucher College, Catholic University, and the British Museum library in its old location. Countless librarians are due thanks as are the personnel of records rooms in numerous courthouses. A county-by-county rundown is probably the best way of listing the author's correspondents and informants, a group of knowledgeable people, some of whom reported in with the regularity of spies in a military intelligence net. If anyone is missing, it is by mental lapse rather than malice; the gratitude list is largely based on a correspondence file – and yet many a fact has been gathered in conversations here and there where no minutes were taken. The list of persons who helped with the digital version from 2005 to 2007 are listed separately after the people who contributed to the 1976 basic manuscript.**

**ALLEGANY COUNTY: The members of the historical society in Cumberland, including Mr. A. N. Billings and Mrs. Charles Johnson Hansrote.**

**ANNE ARUNDAL COUNTY: Mr. Mark Schatz and Mrs. John Smith of the Anne Arundel County Historical Society; Mrs. Ann D. Parrish, formerly keeper of the Maryland Register, Annapolis; Ms. Nancy Miller, historian; and Mr. Orlando Rideout IV, director of the Maryland Historical Trust. The personnel of the State Library and Court of Appeals Library, including Mr. Nelson Molter, Mrs. Bernice Bernstein, and Mrs. Pat Buckheimer; the staff of the Maryland State Archives (at that time called the Hall of Records), including Mr. Gust Skordas, Mrs. Phoebe**

Jacobson, Mr. Frank White, Ms. Beverly Baker, Ms. Mary Lipham, Ms. Pat Melville, Mrs. Diane Frese, and Mrs. Pam Narbeth; also Ms. Margaret M. Dougherty, editor of *Maryland Magazine*, who publicized this project in the spring issue of 1972.

**BALTIMORE COUNTY:** Many of the members of the Historical Society of Baltimore County have helped, including Mrs. L. Bland Goodwin, Ms. Matilda C. Lacey, Mrs. Alice J. Martin, Ms. Claire A. Richardson, Mr. Wilson Herrera, Ms. E. Frances Offutt, Mr. Malcolm Dill (first director of the Baltimore County Office of Planning), Mrs. T. Newell Cox, Ms. Bertha B. Bland, Mr. Llewellyn A. Diggs, Mr. Bernard J. Medairy, Jr., and Andrew Clemens, Clarence Clemens, and Shirley B. Clemens. Also my former neighbor Erick A. Davis, Civil War buff; Mr. Ben R. Womer of the Dundalk Patapsco Neck Historical Society, and Mr. Alex Baumgartner of Essex Middle River Heritage Society; Messrs. Stuart Roser and Clarence Lintz, mill owners; Mr. G. Lee Burgess; R. J. Getz, plant manager of DCA, Ellicott City; Charles L. Wagandt 2d of Oella Company; George J. Horvath, Jr., of the SHA.

**BALTIMORE CITY:** At the Enoch Pratt Free Library Maryland Department, Mrs. Eleanor Lynn and Ms. Katherine Kennedy, and all the pages who went into the dusty stacks for ancient bundles of newspapers. At the Maryland Historical Society, Mrs. Evelyn Paxton, Mrs. Nancy Boles, Ms. Arlen Palmer, Ms. Hester Rich, Mr. Anthony Gonzales, Mrs. Mary K. Meyer, Dr. Harold R. Manakee, Ms. Ellen Lee Barker, Mrs. Lois McCauley, Mrs. Susan Knight, and Mr. P. W. Filby. Enormous help has been rendered by Mr. William B. Marye who took an interest in mills that has ranged from fishing and swimming in the ponds to searching the ancestries of mill families.

Also Mr. Tyler Bastian, State Archaeologist; Mr. William Cecil; Betty F. Adler; Mr. James C. Bullock, Jr; Mrs. Dorothy S. Granger; Mr. Richard H. Randall; Mrs. Huntington Williams for translating from the Dutch language; the Rev. Thomas O'B. Hanley, S. J., biographer of Charles Carroll of Carrollton.

**CAROLINE COUNTY:** The mill-rich Caroline brings to mind Mrs. Clara Mitchell of Preston and Ms. Dora Mitchell, and Preston editor Max Chambers; also Mr. Frank Langrell and Mr. Bob Glessner of Linchester Mill, and Mr. H. Torbert Williamson of Federalsburg.

**CARROLL:** Ms. Jane A. Griffin, former curator of the Historical Society; Dr. Grace Tracey, Mrs. \_\_\_\_ Beggs, and Mrs. Edgar G. Barnes, who compiled a card file index of mills some years ago; also Mr. John J. O'Neal, and Arthur H. Griffiee, both of Sykesville area. Also Mr. Paul Lester, owner of Pleasant Valley Mill.

**CALVERT COUNTY:** Mrs. T. Reid (Aileen) Hutchins who came up with nine pages

of elusive data; also the Honorable Louis L. Goldstein.

**CECIL COUNTY:** Mr. Ernest A. Howard of Elkton, a man of fantastic memory was most helpful, as were his fellow historical society members Mr. Morton F. Taylor, curator, and Mrs. Argus Robinson, president at the time of my visits. Also, Mr. Edward J. Ludwig III of Old Bohemia Historical Society.

**DORCEHESTER COUNTY:** Mrs. James Harper of Rhodesdale and Ms. Nellie Marshall of Cambridge, Dr. James Johnson of Linkwood, Mr. F. Winfield Trice of Hurlock, Mr. Elton Bounds of Mardella Springs, and Mr. George M. Radcliffe of Spocott Windmill Foundation.

**FREDERICK COUNTY:** Mr. Ralph F. Martz ran down the history of Markers Mill and other Catoctin sites as well as the genealogy of the Ramsburg family.

**GARRETT COUNTY:** Mr. Robert Garrett of that county's historical society.

**HARFORD COUNTY:** Mr. Clarence V. Joerndt discovered the long forgotten papers of the Rev. J. Alphonse Frederick in his search for Catholic history and unearthed a number of clippings on mills among the religious material. Also Mrs. Mary R. Bristow, a mill hunter, and the mill restorers, Mr. and Mrs. Robert Farmer and Mr. and Mrs. Andrew Holtan.

**HOWARD COUNTY:** Mrs. Vera Ruth Filby, author of *Savage, Maryland*, who read the first draft of that county's mills. Also mill-hunter Lunsford H. Luckado of Guilford.

**KENT COUNTY:** Mr. Everett S. Lambden of Chestertown, author of a detailed history of mills, crops, and weather in that county.

**MONTGOMERY COUNTY:** Mrs. Pollard Kelleher, Mr. Bob Braunberg, Mr. Alexander Cassanges, Ms. Martha Poole, Mrs. Vought, and Mrs. Doris Cobb, all active in Montgomery County Historical Society about 1969. Also Ms. Gwendolyn Tillery for drawing the first mill map of the project; park historian, Michael Dwyer, also the staff of Sugarloaf Regional Trails.

**PRINCE GEORGES COUNTY:** Mr. James C. Wilfong, Jr., and Mr. John C. Brennan. Mr. Brennan was also the John Calder of the *Laurel News Leader* and has supplied the author with mill information as well as an accumulation of puns, witticisms, comic clippings, and some fanciful tombstone inscriptions. Also, Dr. Daniel Whiteford of the University of Maryland, Mrs. Celia M. Holland of Hyattsville, John M. Walton, Jr., of Clinton, graduate scholar Allen Kulokoff [now Dr. Kulikoff], and Mr. Fred DeMarr for a goldmine of data and some ancient photographs.

**QUEEN ANNE'S COUNTY: Rev. Edward B. Carley of Centreville.**

**SAINT MARYS COUNTY: Mr. Edwin Warfield Beitzell, editor of the *Chronicles of St. Marys* and all the people he interrogated, including Messrs. Charles Fenwick, John A. Chappellear, and John H. T. Briscoe.**

**WASHINGTON COUNTY: John C. Frye of the Western Maryland Room, Washington County Free Library, Hagerstown, who publicized this project in the local papers and inspired seven or eight correspondents: including: Mrs. Alice B. Malone, who supplied copies of her grandfather's diary; Mr. Fred F. Remsburg, Mr. E. H. Harner. Also Ms. Barbara Kaetzel of Chewsville; Mr. William B. McMahon, mill owner and marina operator. Also Ms. Margaret Stickell of the Hagerstown milling family, and the staff of the historical society there. Also Mrs. Leah Spade of Smithsburg for data on Catoclin Valley.**

**WORCESTER COUNTY Dr. Reginald V. Truitt for data on Boxiron Mill.**

**OUT OF STATE: Mr. Jesse Choate Phillips of Harrisburg, Pa.; Mr. Herman Steen of Wheaton, Illinois, author of *Flour Milling in America*; Ms. Nancy K. Beinke, architectural historian, U. S. Department of Interior; Mr. J. Rotteveel of Geervliet, South Holland, who had planned to write a mill history of the entire United States before he found out how large this country is. Also Mr. George P. Rowland, Jr., Akron, Ohio. Mr. C. Herbert Baxley, Ridgewood, New Jersey; Mr. David Gilchrest of the Eleutherian Mills Foundation, Wilmington, Delaware; John W. Heisey of the Historical Society of York County, Pa; Mrs. Arthur Zeizel of Potomac, Md.; Mrs. And Mrs. Stuart Kerschner of Austin, Texas, who platted out the Conococheague Valley. Also, Allan Feinberg and Gene Brooks of Vosbeck, Vosbeck, Kenrick Redinger, Alexandria, Virginia; Dr. Peveril Meigs, Wayland, Mass.; Dr. G. Terry Sharrer and Mr. Robert M. Vogel of the Smithsonian; Mrs. Jean Ewing of Philadelphia, and Mr. Charles E. Peterson, FAIA, also of that city.**

### **The Computer Age:**

**In 1976, the idea of a personal computer was as unlikely as a personal rocket ship. In 1999, the author learned to type on the PC and in 2005 decided to copy the 13 ring binders of mill data typed on the old mechanical Royal typewriter into the computer. Early in 2006, he acquired a HP laptop for home use and started typing. By January 2007, only Frederick County remained to be typed and some of the chapters were already on-line at the Maryland State Archives. Much new material was added, mostly items gleaned from the *American Miller* trade journal and items found in books and articles from the last 30 years. It was also necessary to add the sad news of mills demolished and the passing of all the old millers.**

**It proved impossible to copy much of the old typing by Optical Character Scanning because the OCR machines convert the old Pica type into gibberish. To avoid going back to all the mill sites, the author began fishing in the internet for persons to correspond with by e-mail. Any number of friendly correspondents have emerged to tell us if mills have perished. Using the computer, it is possible to capture photographs from on-line sources, especially from the files of the Maryland Historical Trust, which documented many mills in the 1970s and 1980s although its files do not indicate if a building has disappeared in the meanwhile.**

**The people who have helped in the 21<sup>st</sup> Century with both the Molinography and the Bibliographies of Industry are scattered all over the State:**

**ALLEGANY COUNTY: Anne Failing.**

**ANNE ARUNDEL COUNTY: Donna M. Ware, and at the MHT Mary Louise DeSarren, Barbara Shepherd, Geoffrey M. Henry, Peter Kurtze, Orlando Rideout V, and Jennifer K. Cosham, Archaeological Registrar of the MHT, who has supplied a lot of archaeology maps and data. Also Pat Melville and Nancy Bramucci of the Maryland State Archives.**

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**BALTIMORE COUNTY: All my former co-workers at the Baltimore County Office of Planning have helped, especially computer experts, Teri Rising, Kathy Schlabach, Jean White, Krystle Patchak, also Vicki Nevy, Jenifer German Nugent, Jenifer Meacham, Diana Itter, Lynn Lanham, Kui Zhao, Ron McDowell, Tim Dugan, and Kimberly R. Abe. Also, Ruth B. Mascari, William Hollifield, Keven Clement of the HSBC, and Judith Kremen. Richard Parsons of the Baltimore County Public Library.**

**CARROLL COUNTY: George J. Horvath, Jr., and Anne Horvath, also Johnny Johnsson.**

**CAROLINE CUNTY: Ed Richards.**

**CHARLES COUNTY: Cathy Hardy.**

**CECIL COUNTY: Milt Diggins, who read the county chapter for errors.**

**DORCHESTER COUNTY: Anne Roane, city planner of Cambridge, Margaret G. Calloway, Amanda Brinsfield, and George M. Radcliffe.**

**FREDERICK COUNTY: Janet Davis of Frederick County planning, Dan Guzy and Mary K. Mannix of the FCPL, Patti Kuhn of EHT Tracerics, Inc., Dean Herring of Frederick Community College.**

**GARRETT COUNTY: Rev. John Grant, Patty Manown Mash, and Barry Dickey.**

**HARFORD COUNTY: Jim Chrismer, Jack L. Shagena, Jr., and Spike Webb, and Chris Scovill of Jerusalem Mill.**

**KENT COUNTY: David Welser and Jeff Greenblatt.**

**MONTGOMERY COUNTY: Jim Sorenson, Mike Dwyer, Joyce Thornton, and Kate Fones, and Karen Gray of the NPS.**

**QUEEN ANNE'S COUNTY: Amanda Apple, Pat Harvey, Jenifer Gayman Ruffner.**

**St. MARYS COUNTY: Dr. Gary Wheeler Stone.**

**SOMERSET COUNTY: Julie Horner.**

**TALBOT COUNTY: Kate Fones of St. Michaels.**

**WICOMICO COUNTY: Silvia Bradley [who actually lives in Delaware].**

**WORCESTER COUNTY: Bob Jones of Girdle Tree, operator of a voluminous web site. Jeanette \_\_\_\_\_ of Worcester County Public Library.**

**WASHINGTON COUNTY: Jill Craig and John Frye of the Washington County Public Library, Dr. Luigi Perini, Rev. John W. Schildt, and James T. Clark.**



Hobart's legend for the illustration of "old-time framing" was, "In the engraving, the heavy sill is shown at A, a post at B, and the girt at C. These timbers were made anywhere from 10x10 inches up to 20x24 inches, according to the size off the building and its height. The wall studs E, E, were framed in at both top and bottom, and the floor joists F, F, and G, G, were also let into the timbers upon which they had a bearing. The cut on A, at c, shows how the floor joist F was framed. The notch or gain, cut in the side of A, permits the end of F to enter, and the shoulder d, left on F, is made just right to reach the foundation of the building.

The upper floor joists were disposed of in a slightly different manner, made necessary by the fact that there was no foundation for the floor joists to rest upon. Accordingly, the upper portion of the joist G was allowed to project over the top of girt C, as shown at i. By this arrangement, the joist is prevented from splitting between l and j.

The post B is mortised into sill A, as shown at b, the sill being broken away to reveal the tenon b which is usually made very short for a post. The tenons on the upper end of A are long enough to reach nearly half way through girt C.

