THE BULLETIN
of
RADNOR HISTORICAL SOCIETY
Volume IV 1984 No. 4

INCORPORATED APRIL 30, 1948

Headquarters and Museum

THE FINLEY HOUSE
113 WEST BEECH TREE LANE
WAYNE, PENNSYLVANIA 19087

Visitors Cordially Welcome. Telephone MUrray 8-2668.

BOARD OF DIRECTORS

Mrs. Robert I. Cummin  President
Emanuel E. Schwartz, M.D.  Vice President
Mrs. Marilyn Caltabiano  Secretary
Geo. Wm. Smith  Treasurer
Allen Baxter
Mrs. Edward F. Beatty, Jr.
Theodore B. Brooks
John L. Dale
William M. Fletcher, Editor
Herbert S. Henderson
Mrs. Robert J. LaRouche

Miss Isabella Auld McKnight
Mrs. John Stuart McNeil
Mrs. Garret C. Miller
Mrs. Percival B. Moser, Jr.
Brian Noll
Mrs. Harrison Therman
Mrs. John W. Watson
During the 1983-1984 fiscal year researchers entered the Finley House in increasing numbers. Topics under study varied widely but the Society's blue prints, The Overbrook and railroad collections were of especial use. Delaware County Council members used the George W. Childs ceremonial shovel to dig the hole for the time capsule prepared by the Heritage Commission of Delaware County and buried with considerable ritual in front of the County Court House in October.

The Society reproduced a map of Wayne dated 1898 which pictures the buildings then standing. Copies may be bought at the Finley House. A late eighteenth century rifle owned by the Society was lent to Waynesborough where it is on display. Attempts to save the WPA mural painted by Alfred D. Crimi and housed in the Wayne post office were undertaken.

A massive cataloguing (or recataloguing) of the Society's collections has been approached by a committee headed by Brian Noll. The information will eventually be computerized.

For the second year the Society presented a ten-week course on Main Line History at the request of Main Line School Night and, as usual, cooperated with the Radnor Middle School in its Arts Week, with a DAR Chapter, and with the North Wayne Protective Association not only in an Open House Tour but also in its work to transform a portion of North Wayne into an Historic District.

In the Spring, Theodore B. Brooks, Chairman of the Buildings Committee, resigned this post after twenty years. The Society is most grateful to him for the time and thought he has exerted in keeping its property in shape.

The Society is also grateful to its friends and members for the interest they show and the help they provide.

Necrology
Mr. John H. Foster
Mrs. John C. Lober
Mr. Charles M. Tatum

NEW MEMBERS

Dr. Wendy Branton
Mrs. Mary E. Elek
Mr. & Mrs. Jeremy Fergusson
Mrs. John M. Livers

Mr. Frank H. McPherson, Jr.
Ms. Barbara Prescott
Mr. Charles E. Reilly, Jr.
Mr. Henry B. Stewart


John Singer Sargent, born in 1856 in Florence, and twenty years old, made his first visit to the United States in 1876. It was his expatriate parents' native country but the young artist had never seen the land of which he was a citizen or the city of Philadelphia where his father had studied medicine and married a descendant of the local Newbold family.

In the company of his mother, Mary Newbold (Singer) Sargent, and his nineteen year old sister, Emily — his father, Dr. Fitzwilliam Sargent and younger sister Violet
remained behind in Switzerland for the sake of economy — young John Sargent travelled from May to September in the newly-found homeland, moving from Philadelphia to Saratoga and Newport, and thence to Quebec, Lake George, New York, Washington, and finally, back to Philadelphia once more.

The maternal city was the visitors’ first destination. Their program included a tour of the Centennial Exhibition “where it was difficult to tear John away from a Japanese exhibit,” and where “they discovered that a temperature of seventy-six degrees in the shade could be worse, with its accompanying humidity, than any heat they had known” and also a visit to Aunt Emily.

Sargent’s paternal aunt, Emily (Sargent) Pleasants (1817-1883) was the wife of Dr. Henry Pleasants (d. 1890), of Rockland, Radnor. The physician had a country practice and was in his nineteenth year of service as a vestryman of St. David’s Church, which the venerable Boston poet, Longfellow, had been taken to see while staying at the Arthur boarding house on Lancaster Pike in Rosemont, after having been for a week the house guest at Wootton, Bryn Mawr newspaper tycoon George W. Childs. (Mr. Childs was later to be also a vestryman of the historic rustic church.)

So, to the lovely stone house at Rockland, with its capacious wooden piazza, came the three Sargents. It was at Rockland that family tradition tells us John Singer Sargent painted a portrait of “Aunt Emily.” John is thought to have had already met this aunt for she and Dr. Pleasants had visited the elder Sargents in Brittany in 1875 and she would have seen her nephew in Paris.

The portrait of Mrs. Pleasants is a bust-length picture of a fifty-nine year-old woman, “plain, rather simple, with gentle eye and blunt speech.” Mrs. Pleasants, born in Newton, Massachusetts, of Puritan stock, was very unlike the rich and stylish Americans the young painter knew abroad. “From her knitted cap to her Bible,” Aunt Emily was “of a type he did not associate with himself.” He must, however, have enjoyed the family reunion at the house which still stands today, more than a century later. The handsome young “European” relation must have been entertained by his cousins, Sallie and Henry Pleasants, Jr., and perhaps heard talk of the “Centennial Tea Party” staged in costume by Sallie’s friends, local belles, at the nearby hamlet of General Wayne, formerly called Louella and soon to be simple, Wayne.

Sargent’s biographer, Charles Merrill Mount, considers the portrait of Mrs. Pleasants “markedly inferior” to the artist’s work of just one year later. He attempts to place the sitting in France during the visit of 1875. One has only to look at the rigid chair, with a triangle topped crest rail, its thin, vertical back posts so typically and completely American, to recognize that the insistence of the Pleasants family that the picture was done in Radnor and on the porch of the family house, is undoubtedly correct. The landscape background is certainly the wooded, hilly scenery which surrounded Rockland a century ago.

The visit to Radnor of the magnificent American painter-in-the-making is an event largely unknown outside the family of his American relations. It is time that the story of this Radnor portrait be recorded in local annals.

THE TREATY OF PARIS, 1783: Confirmation of Independence

(Ed. Note: Transcribed and edited copy of the talk before the Society by Miss Caroline Robbins on January 11, 1984.)

Three important documents mark the creation of the American Republic. First, of course, is the Declaration of Independence, 1776, eloquently memorializing unalienable rights — equality, life, liberty and the pursuit of happiness — and condemning their alleged betrayal by the British. Second, the concern of this paper — the Treaty of Paris of 1783, ending hostilities, ensuring explicit recognition of independence, and newly widened frontiers, soon to extend from Pacific to Atlantic, the Great Lakes to the Caribbean. Thirdly, the Constitution, vigorously debated in 1787 and soon replacing the Articles of Confederation with an original and durable form of government.

Defending the Union then being established, John Jay, in the second number of the Federalist (November 1787), asserted that it never could have taken shape had not Providence granted opportunity to “this one connected country, one united people, a people descended from the same ancestors, speaking the same language, professing the same religion, and attached to the same principles of government.” Possibly a modern commentary on this great country would not stress Jay’s argument, but at the time of the discussions leading to the Treaty of Paris, there is no doubt that, in spite of some seven years or more of bitter conflict, such ties made the task of British and American diplomats much easier.

Time prevents attention to many fascinating aspects of peacemaking. Here the focus will be on the months in 1782 between the fall of Lord North and the signing of the preliminary pact on St. Andrew’s Day, 30 November, in the same year. The context of negotiations, the personalities involved, and their reaction to the chief stumbling blocks must be summarized. The Treaty of 3 September 1783 repeated all but a fraction of the preliminaries, a word, a phrase or two, and the highly injudicious secret clause rejected by Congress. Other accommodations failed to materialize in the interim, December 1782 through September 1783. What proved important in the peacemaking were the circumstances which drove the combatants to see agreement, and the persons that discussed and arrived at decisions throughout the crucial months.

During the Revolutionary struggle various proposals about settlement had been put forward both by fighting and neutral powers. Peace had occasionally seemed barely possible, but the French alliance in which the French emissary, Achard de Bonvouloir, and Benjamin Franklin were deeply involved, was achieved in 1778 in time to bolster morale and provide material, even vital military assistance. Wartime and financial exigencies persisted and prompted Congress to appoint five commissioners to pursue the end of hostilities. Thomas Jefferson was named but did not serve. Henry Laurens departed promptly for Europe, but was seized on the way, and despite the diplomatic status claimed, was incarcerated in the Tower of London until bailed out by English
friends. Reported conversations with William Petty, Earl of Shelburne, and others reveal him as much a mind with his three colleagues, Franklin, Jay and John Adams, nominated at the same time as himself. Laurens, though he appears in Benjamin West’s celebrated picture, actually took part for only a few days before 30 November 1782. The burden then fell chiefly on his colleagues.

Instructions to the emissaries were very specific on the necessity of close cooperation with France; nothing was to be final without French advice and consent. There was some criticism of this admonition at the time; in fact, it was, in most respects, disregarded, though both the preliminary and definitive treaty included acknowledgment that full ratification would not come until French negotiations were complete. When the preliminaries became known in the States, Robert Livingston, in charge of foreign affairs, sternly rebuked his brother-in-law, Jay. Franklin, throughout, kept up what Jay and Adams felt at times to be a dangerous, even indiscreet intimacy with Versailles. The great alliance had earned deep gratitude from Americans, but the pressures towards postwar settlements by Anne Cesar de la Luzerne in Philadelphia, the Comte de Vergennes, and his secretary Joseph-Mathias Gerard de Rayneval in Paris and London, provoked the belief of the American delegation that better terms could be obtained through a simpler exchange solely with British emissaries in France and ministers in London. More on this when boundaries are noted.

If war weariness prompted American initiative, it also overcame any powerful British wish to continue fighting an unsuccessful war. To the expenses incurred in keeping thirty thousand troops fighting in unfamiliar territory, and a painful dislocation of trade, were added the activities cause by global expansion of conflict with France in 1778, Spain in 1779, and Holland in 1780. The Bourbons tried and failed in an attempted invasion of England in 1779, but the crashing defeat at Yorktown in October 1781 was a stunning blow. George III and Lord North, first minister since 1770, had long been unwilling even to consider the separation which most Americans demanded, and were chary about other conciliatory moves. North at last felt he should bow to unpopularity and resign, a resignation only reluctantly agreed to by the King in February 1782. Since some in Commons were already talking of American independence, George felt obliged to summon to office in March a very odd and divided team of so-called Rockingham and Chathamite whigs. All had urged some sort of conciliation, but were unable to agree about the magnitude of terms to be offered. With the death of Charles Watson-Wentworth, Marquess of Rockingham 1 July 1782, Shelburne, then one of the two secretaries, took the Treasury, whereupon the other secretary, Charles James Fox, angrily resigned. In April Fox had sent Thomas Grenville to the French court, and Earl Richard Oswald to talk to Franklin. The instructions to the two agents were not correlated.

The scene was now set. In this year Britain was cheered by two naval victories; in the spring the Caribbean when de Grasse was captured by George Rodney; in the fall, off Gibraltar, relieved by Richard Howe from the assaults of France and Spain. Still in British hands were, among other places, part of the American South and New York. Shelburne, before November confirmed recognition of the States, had worked for something resembling the later dominion status. An admirer of Adam Smith who had introduced Oswald to him, he was keenly interested in economic issues, and seems not
to have cared greatly for imperial land holding, or its increase. Yet sadly the peace lacked those very commercial concessions that a policy of generosity required. Public, if not elite intellectual opinion in Britain, continued to uphold fervently the old mercantilist system.

Shelburne's choice of agents and advisers however, did even more than was generally approved, to secure the end of combat. These men were well informed about American affairs and acquainted with a good many Americans. You could even dub them the Franklin circle. Oswald, a Scot married to Mary Ramsay, a Jamaican, was a rich merchant, and with his wife owned property in the States. It was he who went bail for Laurens, a friend of some thirty years standing, to the tune of fifty or sixty thousand pounds.

He was introduced to Franklin by another Scot, Caleb Whitefoord, who was to act as secretary to the British Commission, April 1782 to April 1783. Liked by Samuel Johnson and Oliver Goldsmith, Whitefoord was well known as a journalist. Goldsmith declared that his talents would fit any station. His familiarity with Franklin when on Craven Street led to appointment as Oswald's Assistant.

After Oswald went to Passy in April 1782, he frequently crossed the channel with information and suggestions. An official status was awarded him after Shelburne became first minister, but the commission issued then was not accepted by the Americans, especially not by Jay, who wanted to negotiate on an equal basis, proposing parliamentary or royal public acknowledgment of independence. By September, after much hesitation, a second commission to Oswald was addressed to the thirteen United States and thereafter the pace of peacemaking was accelerated. The matter had not been one of any personal difficulty. Oswald was one-eyed and ugly, but agreeable enough to quickly establish friendship with both Franklin and Jay. They both trusted and liked him. When peacemaking was over, it was he who saw off Sally and John Jay to America. In spite of angry criticism in Britain and a rebuke from Shelburne himself, Oswald held on with conversations in France after the Preliminaries were signed by himself, four Americans, and Whitefoord and William Temple Franklin as secretaries. Shelburne's fall and the coalition of North and Fox with William Cavendish, third duke of Portland, as titular head, appointed in April, named David Hartley M.P. in his stead.

Hartley, signatory of the definitive treaty, though less attached to the Shelburne faction, in fact held very similar views. As a liberal he had opposed the American war; he was to work against the slave trade, and to support reform of election and economic laws. Long intimate with Franklin (their correspondence continued even when they were separated by war), it was he who bade his old friend Ben bon voyage in journeying to the States in 1785.

Another negotiator who seems to have had considerable influence with Shelburne was Benjamin Vaughan. His mother was a Bostonian and he was born in Jamaica. He was educated in nonconformist schools, at Cambridge, where as a Unitarian he could not graduate, and at Edinburgh. Among his acquaintance were Joseph Priestley, Richard Price, both cultivated by Shelburne, Horne Tooke and Tom Paine. A brother, John, consulted Jay when an envoy in Madrid, about emigration. Like him, but not until 1798, Benjamin moved to the States, maternal ties probably deciding him for Hallowell, Maine. He became intimate with Franklin when both were living in Craven Street, edited his works in 1779, and was one of the earliest to read the manuscript Autobiography. When Jay feared that Shelburne would not issue a second commission to Oswald addressed to the Thirteen States, thus recognizing independence, he sent Vaughan over to persuade the minister. Vaughan did not hold any official position, but, though his presence was not always welcome to Oswald, was constantly in Paris from the day he went there to tell Franklin about the more favorable conditions for peace brought about by the fall of North.

Nothing can be clearer from a survey of Shelburne's advisers in France at this time than the almost familial ties that existed or developed between British and Americans during the summer of '82. To be sure Henry Strachey and Alleyne Fitzherbert of much greater diplomatic experience, were sent to stiffen Oswald's hand. But they, too, found themselves unable to wrest a great deal more than their too compliant colleagues.

The Preamble to the Treaty of 1783 identifies the signers by the offices they had held. Hartley was a member of Parliament; Adams as commissioner to Versailles (1781), and the Netherlands, as well as delegate from Pennsylvania, president of that state's convention, and minister to Versailles; Jay as president of Congress, chief justice of New York, and minister to Madrid. These signers of the definitive treaty as well as the preliminaries, really shared the burden, but each often at different times and on various issues.

Franklin, architect of the French Alliance, already resident for months at Passy in the environs of Paris, was earliest contacted, and first to express his ideas about the "essential" and the "advisory" terms for which he hoped. After his sufferings with gout became great, and Jay recovered from the flu contracted on his arrival from Madrid in June, the aquilined nosed, upright, and rather stiff New Yorker of Huguenot descent, did most of the talking. Throughout that summer he fought for the acknowledgment of independence as remarked, and debated other possible arrangements. Adams, always downright prejudiced against France by an earlier encounter, did not leave Holland until late October, arriving (after a six-day journey) in Paris on the 29th. Oswald was to find him ungracious; he was indeed vain and touchy, even neglecting to call on Franklin, whom he disliked, at once, and on Vergennes not for ten days. He found Franklin less arrogant than he had feared, and was to be very appreciative of Jay. Both men, fervent Protestants, shared distrust of Catholic morals, and thus of France. Vergennes, when they did meet again, flattered him. Adams was to incur ridicule later on with the disclosure of comparison made by the French to Washington, Adams being the "Washington of diplomacy." "His Rotunity," as the New Englisher could be called, was vigorous and effective in the last month before the Preliminaries were completed.

The three commissioners were more united than perhaps could have been anticipated. Franklin, as noticed, was fond of the French, but when Jay and Adams had decided that efforts with Britain were likely to prove more fruitful, and that the Bourbon powers might even prolong the war to obtain things other than Independence, like Gibraltar, Franklin promised not to chat so freely with Lafayette and Vergennes, and kept his promise. All important in the peacemaking of 1782 was the split in Franco-American
confidence, in part personal, in part stimulated by their peace proposals and continued interest in forcing Britain to disgorge old conquests.

Franklin had early assured Oswald that independence was the price of any treaty. That document should also settle the boundaries, especially of Canada, so greatly enlarged in 1763, and ensure access to the northeast fisheries as formerly enjoyed. He urged compensation for damage by British and Indians, and an acknowledgment of errors in policy towards the States. These two suggestions did not get very far. Nor did Franklin's proposed union with Canada, and demand for concessions about shipping and trade regulations. Canada, chiefly valuable then for its pelf, was not seriously sought either by France or the States. The French seem to have preferred continued British control there to a union with the thirteen colonies. Franklin was not much concerned with the frontier, so long as it was not the old line of 1763, which was to prove the subject of much controversy. All aspects of a possible treaty were debated during the summer, mostly between Jay and Oswald. But only when Oswald's second commission arrived containing a virtual admission of independence as insisted, did Jay draft a pact which was finished about 5 October. Discussion now will focus on those articles which ultimately formed the treaty in November.

Article I contained George III's acknowledgment that the United States were free, sovereign, and independent. Whether it would have been admitted earlier, if Jay had not throughout those weeks demanded it with all a lawyer's agility, is doubtful. Franklin, for example, had felt an admission in the treaty sufficient. Vaughan's role in convincing Shelburne must also be remembered. It is sometimes thought that the Earl was devious in his statements about acknowledgment before the treaty. Yet the attitude of George, and his fervent hope till the end for the continuance of close ties made his position, never good, very difficult. Designated the Jesuit of Berkeley Square, Shelburne had less credit than he may have earned.

Jay did a great deal of work on Article 2 about boundaries. The Atlantic shore presented few difficulties save in the Northeast corner where Massachusetts-Maine, Canada, New Brunswick and Nova Scotia had claims and interests. The absence of good maps for this area as well as that for the Northwest above the Mississippi resulted in a good many mistakes and in confused demands on both sides. Still Jay secured the mid-St. Lawrence River and the lakes between these more iffy sites as a possible, viable frontier. Canada kept an essential connection with New Brunswick south of the East St. Lawrence, and enough of Ontario to be useful to the refugee loyalists. On the south Spain had already regained the Floridas, and in spite of an attempt to cede West Florida to Britain, Britain reluctant to fight there again, a frontier line ran north of those Spanish provinces to the Mississippi. On this river also the treaty asserted that navigation for both Britain and the States should be free, but without any free access to a port, this provision of Article 8 proved valueless. This consideration probably lay back of Jay's secret article already mentioned, of which, Congress as noted, disapproved.

The western boundary, not mentioned by Franklin in his notes in July, was very important in several ways. It secured for the States territories only imprecisely defined but essential to further expansion, and in fact already vaguely claimed by Britain before the war, and by various colonies. The Indians made trouble, some of which was halted a while by Anthony Wayne's later victory at Fallen Timbers. Firm control east of the Mississippi was not easily won. The British did not seem to have been too competitive, but France and Spain on the other hand, had several definite plans, too many to describe here. They varied from an American border confining the new republic to east of the Appalachians, to one somewhat further west, south of Lake Erie, to a complex division of the country south of Lakes Superior, Michigan and Huron to the Florida line. There were to be, Rayneval said, three parts: the northern to the Wabash or Ohio rivers, at Britain's disposal; another south and east to be Indian lands protected by the United States; a third from the Cumberland river south to Florida under Spanish protection. Proposals like these, put forward through the summer and fall of 1782 by Pedro D'Aranda for Spain, Vergennes and Rayneval for France did much to weaken the Franco-American alliance.

The third article on fisheries was the result of much debate. For one thing, the French again wanted concessions which further irritated Americans. Adams had come, late in the day, but prepared with an armful of evidence about ancient geographical water usage, and was unwilling to concede anything about "Tom Cod and Haddock." He got his way. Americans could fish as before and it had, as well, considerable leeway ("liberty" not "Right," the British maintained) in the matter of curing and drying. The possibility of future development on some of the coast roundabout was hinted at as having a less unlimited future. But Adams' first preoccupation was to be successfully fulfilled, and of course Franklin of New England origin was with him.

Article 4, declaring that creditors should not meet with impediment to collection, was again Adams' contribution. That Puritan conscience could not for a moment deny legitimate rights, though neither Franklin nor Jay was as much concerned.

Article 5 was a compromise. Throughout that summer and fall the Shelburne administration had been harassed by Loyalists, not the least by Franklin's son William, to help them. Nothing was more likely to cause trouble with the British public, the matter seeming to relate to national obligation and honor. Yet Franklin was for long adamantly, and neither Adams nor Jay was anxious to agree to any form of reparation, that most, if not all, Americans would surely resent. At the very last moment a compromise was devised that Shelburne could read to a Parliament not very well acquainted with American constitutional practice, that sounded sympathetic, yet to which the American Commissioners could agree. Congress could not legislate about the property in the several states, but it could recommend to them restitution for those Loyalists who had not borne arms nor acted violently. Of course this was honored in the breach, save for a few like the Pennsylvanians who allotted Lady Penn due compensation. What the British did for the Loyalists in addition to the cash assistance of emigrants in England, was bestowal of lands in Southern Ontario and across the future Maine border in New Brunswick. Oswald warned this might lead to an unstable border, but his advice was not heeded. Today the inhabitants of those two sections of Canada have not quite overcome bitterness toward Americans.
Articles six, seven and nine deal with the usual problems of peace-making after such conflicts — release of prisoners, return of captured property and territories and the complete cessation of hostilities. The last article, ten, provides for ratification within six months, an optimistic appraisal of the time consumed in transit from one combatant to another. France and Spain concluded terms in January, 1783, Vergennes, the strong man of the Bourbons, unwilling to continue fighting for Gibraltar after the Anglo-American peace was made. Peace came officially to save all Holland on 12 May 1784 when final exchanges of ratifications took place. Holland concluded peace with Britain a week or two later.

Shelburne’s hope for a more liberal arrangement had not been brought about in the months between November 1782 and September 1783, but the Americans had done well in spite of the frailties of the boundaries agreed on, was well set for a good future, once some of the wartime difficulties had been surmounted. George III could not bear to think of Dunkirk, Tobago and Senegal, useful for her slave traders. Minorca, temporarily the Florida’s, and a vague sovereignty over western North America, the latter to be absorbed by the American Republic in the next half century. The treaties made a trading nation. The Industrial Revolution brought new wealth and new technological horizons. George Chalmers, indeed, in his Estimate thought the loss of America exchanges of ratifications took place. Holland concluded terms in January, 1783, Vergennes, the strong man of the Bourbons, unwilling to continue fighting for Gibraltar after the Anglo-American peace was made. Peace came officially to save all Holland on 12 May 1784 when final exchanges of ratifications took place. Holland concluded peace with Britain a week or two later.

The thirty-sixth Annual Meeting of the Society was held in the Winsor Room of the Memorial Library of Radnor Township. We were pleased to hear a musical program by a local singing group, The Times Revue, covering popular songs of World War II. The program follows:

"THE WAR YEARS"
Conceived By Ronald Hokenberry
A Times Revue Production

THE SONGS
Remember Pearl Harbor........................Don Reid and Sammy Kaye
This is the Army, Mister Jones..................Irving Berlin

THE COMPANY
Mary Harrison Carle
Pat Jordan
Sue Lomax

THE COMPANY
Don Johnson
Jim Weeks
Ron Hokenberry, Pianist

Saturday, September 24, 1983
The Society members enjoyed a guided walking tour of Cabrini College, then gathered for cheese and wine at the college.

Wednesday, November 9, 1983
Meeting in the Community Room of the Main Line Federal Savings and Loan Association in Wayne, the Society heard a talk, illustrated with slides of her work, by Ms. Carol Creutzburg, one of our members, on Greenwich Village—its history and architecture.

Wednesday, January 11, 1984
The meeting was held in the Community Room of the Main Line Federal Savings and Loan Association. Miss Caroline Robbins talked on The Treaty of Paris—the Real Confirmation of Independence, 1783-1784. Miss Robbins is eminently qualified to speak on the subject in commemoration of the two-hundredth anniversary of the signing, having been chairman of the department of history at Bryn Mawr College for many years. She is the author of The Eighteenth Century Commonwealth Man, as well as other books and numerous articles. From 1967-1978 she collected the Penn papers and prepared them for microfilming. Among other activities, she is Senior Vice-President of the Board of the Historical Society of Pennsylvania. She was President of our Board of Directors at the time the Finley House was donated to us and served for many years on our Board of Directors. A transcript of her talk appears elsewhere in this Issue.

Tuesday, March 27, 1984
Mr. Theodore Xaras presented an illustrated lecture on the Main Line of the Pennsylvania Railroad in the Winsor Room of the memorial Library of Radnor Township, covering the period from "The Main Line of Public Works" in the early nineteenth century into the twentieth century. Mr. Xaras, a railroad "buff" of long standing, is professor of art at Ursinus College.
CAST IRON RADIATORS

Brian Noll

(Ed>Note: The following article, with illustrations, has been adapted from a paper submitted by Mr. Noll in connection with a course in Architecture at the University of Pennsylvania on American Domestic Environments. Although I have been familiar with radiators ever since I can remember, as I am sure many of us have, they are household objects I always took for granted and never gave much thought to; however, it is hoped that this paper will throw some new and interesting light, if not heat, on this subject.)

I developed an interest in cast iron radiators while working with a number of large nineteenth century houses in West Philadelphia. In some of these houses, the radiators appeared to be the original heating system. Most of the houses were built with a gravity air system and later converted to steam or hot water. Because these conversions from warm or hot air systems were so numerous, I assumed that there were significant heating advantages to be had from steam or hot water.

I often wondered about the aesthetic considerations people had of these systems. Large cast iron radiators were highly visible in the heavily decorated parlors and dining rooms. Often the plumbing for the radiators was exposed on walls as it passed to the upper stories. How was this acceptable to late nineteenth century taste? Was this a new technology that was proudly displayed? The graceful heat registers, mantels and concealed flues of the hot air systems seemed more pleasing to me than exposed plumbing and large iron radiators that were difficult to clean. Today, many people living in these houses attempt to conceal them with various covers and frames. The information that I collected for this paper suggests some answers to these questions.

Why was hot water or steam heat preferable to hot or warm air heat? Large houses were difficult to heat uniformly by the gravity air systems commercially available in the second half of the nineteenth century. This is true even with some modern forced air systems. Steam and hot water heat provided a more uniform temperature.

The late nineteenth century saw increasing concern for health problems associated with poor ventilation in heated buildings. Stoves and lamps in closed rooms subjected their occupants to breathing vitiated air. It was recognized that a more healthful environment was achieved when the combustion needed for heating and lighting could be removed as much as possible from living spaces.

Even basement furnaces that provided hot or warm air could not completely overcome the objection of "scorched air.” As early as 1850 A.J. Downing explains his preference for hot water heat:

"The superiority of this mode consists in the fact that the air which comes from a hot water chamber is always of a mild and gentle heat, since it can never be raised to a high temperature, robbed of moisture, or injured in quality. Consequently, it is never either hot, or loaded with the flavor of cast iron, both of which in many hot air furnaces so largely destroy and vitiate the air. For this reason we hope to see more attention paid to heating by hot water, so that, if possible, it may be rendered simple and cheap enough to come within the reach of persons in moderate circumstances.”

Steam and hot water systems developed simultaneously. Steam was used to heat factories in England and America early in the nineteenth century. This was usually done by directing the steam through pipes in the areas that were to be heated. Various provisions were made for collecting the water that condensed from the steam. Steam produced specifically for heating was used in some public buildings early in the nineteenth century. Hot water systems were recognized as superior to steam because of the even temperatures that they could supply. They were a popular form of heat in greenhouses. Early hot water systems depended on gravity circulation that required pipes of three to four inches in diameter. A major objection of this system for home heating was the visual unattractiveness of these large pipes. This limited the use of hot water heat.

The Perkins system developed in England in 1831 made it possible to use small diameter pipes to circulate hot water. Water heated to 350 degrees Fahrenheit in a closed system would circulate in smaller pipes. The use of this super heated water required constant supervision. It used no radiators as such, only loops of pipe passing through the areas to be heated. The dangers of exposed pipes that could reach temperatures of 500 degrees as well as the need for a skilled mechanic to maintain the system restricted its use.

Hot water and steam systems existed in other forms. Air could be forced over or allowed to pass by gravity over pipes heated by steam or hot water and then directed through ducts to various rooms. A system of this type was installed in the United States Capitol in the 1850's.

Two developments made practical the use of steam and hot water heat in the homes of "persons in moderate circumstances.” The sectional boiler developed in 1859 by Samuel Gold reduced the cost of furnaces by allowing sections to be assembled on location. The development of the sectional cast iron radiator in the 1880's provided an efficient means of distributing heat through larger houses. This is the type of radiator which is the focus of this paper.

The development of the cored, cast iron sectional radiator as we know it was the result of a number of small technological advances. The earliest systems were simply loops of pipe through which hot water or steam passed. The "mattress" radiator of 1854 was based on an earlier design by the inventor James Watt. This was composed of two embossed iron sheets riveted together through which steam or hot water would pass. The "pin" type radiator of 1862 was a series of hollow castings with small pins or cones in them to aid in the transfer of heat. The "tube" radiators of the 1870's were wrought or cast iron tubes fastened to a base through which steam or hot water passed.

The sectional radiator was a further development of the tube type radiator. The cored sectional radiator eliminated the need for a separate base. The end sections of the radiator had legs cast on them. This simplified the manufacture of radiators and lowered their cost. These radiators were designed so that they could be fitted for use in steam or
hot water systems. This is the type that is prevalent in late nineteenth century houses. It is also the type of iron radiator that we are most familiar with today.

Advances in boiler and radiator technology had, by the late 1880's, made practical and popular the use of low pressure hot water and steam heat in private homes. Manufacturers of radiators responded to this demand with a wide variety of radiator styles and ornamentation. Major producers of radiators such as the H.B. Smith Co. of Massachusetts, the A.A. Griffing Iron Co. of New York and the American Radiator Co. of Detroit cast ornamental radiators through the early 1900's. The fact that so many of these ornamental radiators were offered for so long a time is some indication of the demand for them.

Not everyone agreed with this phase of radiator ornamentation. John Mills, a radiator and boiler designer and engineer, wrote in 1890:

"Instead of calling attention to this substitute for the always unsightly stove, the radiator should be retired as much as possible. Sometimes this good taste prevails, and where the heaters are not placed below the first floor they are let into recesses made for them under the windows, or, what is still better, into a space formed in the breast of the chimney."

Mills' opinion notwithstanding, the 1890's were the high point of radiator ornamentation.

In considering examples of radiator styles, I used two trade catalogues: A.A. Griffing Iron Co. of 1894 and American Radiator Co. of 1901. I have used copies of pages from these catalogues to illustrate my discussion.

The radiator in its earliest configuration is shown in fig. 1. The tubes are attached to a cast iron base and fitted with an ornamental iron top or an optional marble one. Prices provided in an accompanying chart indicate these radiators did not come cheaply, varying from $6.00 for a one by three steam radiator 24 inches high with a standard loop to $218.40 for a four by twenty-four model of the same height with an enlarged loop.

A more sophisticated version, the duplex base shown in fig. 2 is partly described in the catalogue as follows:

Bundy Duplex Base Radiator is furnished with two, three and four rows of loops, so constructed that only one or more rows of loops may be used at a time, thereby securing just the amount of heat required. During fully 75 per cent. of the heating season less than the full heating capacity of a Radiator of sufficient size to give ample heat during the remaining 25 per cent. of the time is required, hence out of 200 days in a year when artificial heat is necessary the Bundy Duplex Radiator will make available... (many) ...advantages.

It is seen that even in 1894 energy conservation was a consideration.

Although the radiator in fig. 3 had about the same exterior appearance as the standard model in fig. 1, the significant difference is readily apparent, being designed to provide fresh air circulation by opening a register in the base of the radiator next to a wall duct leading to the exterior of the house. (An early simplified version of the heat pump?) Although evidence of the basic radiator is easily identifiable in the next illustration
(fig. 4) of the ingenuity of this dual purpose device for both heating and keeping food hot is more than apparent. This “hot closet” radiator is also notable for its elaborate decoration designed to harmonize with the late Victorian decor of a fashionable dining room. The list prices, ranging from $136.00 for the standard model with a heating surface of 59 feet to $161.00 for an enlarged model with a heating surface of 90 feet, suggests that they may have been placed beyond those in “moderate circumstances.”

A radiator manufacturer would have a variety of ornamental patterns in the same catalogue appropriately named according to the type of decoration. For example, the Pyro model (fig. 5) is described in the catalogue thus: “The design of the Pyro Radiator, as the name implies, is typical of fire, representing, as it does, a census pot from which fire and smoke is shown rising, making a very handsome Radiator, and one capable of very elaborate decoration.” This radiator is of the cored casting sectional type. It was offered in the same catalogue as the older and more expensive tube type radiators shown in figs. 1,2,3, and 4. Another highly ornamented radiator was the Bundy Columbia Steam and Hot Water Direct Radiator shown in fig. 6, designed in honor of the Columbian Year. Although the relationship of the design to Columbus’ discovery of the new world is not clear the manufacturer wanted to be sure that the prospective buyer would not overlook any of its more aesthetic features: “The design of the Bundy Columbia Radiator is of the Byzantine type, a style of architecture that sprung into existence and was fully developed in the Byzantine Empire during the Third Century. Its leading forms are the round arch, the dome, the pillars, the circle and the cross, features which abound in the Columbia Radiator. Notable examples of this time-honored architecture are found in the Mosque of St. Sophia, Constantinople, and the Church of St. Mark, Venice.”

These seem to be a good indication that these radiator styles were produced over a period of years concurrently with other styles. There were several other types designed to fit special situations such as “Two-Column Stairway” model, which ascended from low to high to conform to the pitch of any stairway, the “Perfection Curved Radiator” which would follow the line of a curved wall in a vestibule or perhaps under a baywindow, or the “Perfection Corner Radiator,” which, as the name implies, fitted into the corner of a room without breaking the line of the heating surface.

For those who wished to see no radiator at all, or who perhaps wanted to conserve floor space, one could be installed, provided there was sufficient space available under floor joists. This is actually another version of the model shown in fig. 3. Other specialty type radiators included ones that could be fitted between and around windows, fig. 7 illustrating an application around a window. It will be noted that this one is highly decorated, as well. Circular radiators designed to fit around a column, fig. 8, as I recall were usually installed in hotel lobbies or other public buildings where there were large areas of open floor space that required supports for the ceilings and upper floors.

Radiators were available with many accessories. Ornamental iron tops as well as marble slabs could be ordered to fit the tops of most models. Examples of these can be seen in figs. 3 and 6. Intricate brass screens could also be had to cover the radiators.
They could be had in a choice of four finishes, "Antique Brass (Blackened Gold), Polished Brass (Bright Gold), Oxidized Silver (Blackened Silver) or Bright Nickel, and in plain surface or hammered effect." Screen patterns could be made to customers' specifications and designs "when drawings are furnished." Foot rests, which clamped to the side of the radiator and thus could be removed if desired, were available in eleven different finishes with carpet rolls in three kinds of materials in assorted colors. Handles were available in nine kinds of woods, including Black Ebony, King Wood, and Madagascar Rosewood. Floor and ceiling plates were important for finishing areas where radiator plumbing passed through floors and ceilings and could be had in either plain iron or nickel plated.

When renovating or decorating a house that had these radiators, the question of how to finish or paint them must be resolved. What is an authentic paint scheme or treatment for them? The trade catalogues, in order to be of assistance to their customers, suggested a variety of treatments. Bare iron radiators would rust if left unfinished, but there were a variety of finishing techniques which could overcome this problem and still be in harmony with the surrounding decor. For example, radiators could be bronzed. This involved either mixing bronze powder with bronzing liquid and painting it on or applying bronze powder in a dry state to a radiator which already had been coated with bronzing liquid. Bronze powders were sold in standard colors of gold, silver, copper, green, flesh(?) and fire. So that all tastes could be accommodated custom colors could also be ordered. Bundy, in their catalogue modestly stated that their bronzing powder
“Is cheaper than any other good Bronze, and more brilliant, and packages contain full weight, not ten percent. short, as is generally the case with other bronzes.”

Enamels or Japans were sold in a wide variety of colors and could also be mixed to match wall colors. Some of the standard colors were Sage, Fawn, Chocolate, Gloss and Dark Maroon, and again Flesh. They were also available in dull or gloss finish. The catalogs even suggested multi-color schemes for radiators and mixing enamel and bronze finishes on the same radiator. Recommended combinations were:

- silver body with copper ornament copper body with silver ornament copper body with gold ornament green body with gold ornament enameled body with bronze ornament.

Radiator could be ordered bronzed or enameled from the factory. In addition A.A. Griffling offered to electroplate radiators on special order in a bright or oxidized finish. Six standard metallic colors were available; also, the company would try to match custom colors, although the price list indicates that this service would about double the price of most radiators. One company even gave complete and detailed instructions for applying various finishes for the "do-it-yourselfers."

The information presented in this paper offers some insight into the place of radiators in the decorative scheme of late nineteenth and early twentieth century houses. There is conflicting evidence that their visibility was desirable at all. The wide variety of decorative treatments give some indication that they were made to be seen; however, Mills, the prominent heating engineer, prefers that they not be seen at all. Radiators that were meant to be concealed were available from the earliest days. The placement of radiators in an old house often will offer some clue as to their original decorative treatment as those that were prominently exposed in principal rooms surely would have received one of the ornamental treatments outlined in this paper.

### ACCESSIONS

**Allen Baxter**
Large photograph of the Berwind estate, c. 1900, 269-273 Berwind Road.

**Arthur H. Moss**
A notebook to be used by the Secretary of the Society.

**The Neighborhood League**
The Ledger of the League covering the period from 1930 through 1956.

**Frank Eppinger,** North Stonington, Conn.
Transcript of “The Potter’s Papers” relating to Gen. James Potter.

**Alice B. Johnston**

**Joyce T. Whidden**
Papers relating to Main Line real estate offerings.

**R. T. Rowland Associates**
Supplemental Environmental Impact Study — “Blue Route.”

**George Bull**
Mid-Victorian oak mantel-piece from his home at 401 Chestnut Lane.

**Caroline Robbins**
An electric fan.

**Robert Gosborn**

**Tredyffrin Easttown History Club Quarterly,** Vol. XXII No. 1.

**Francis James Dallett**
Set of postcards of early Wayne.
Collection of material — letters, programs, pamphlets, photographs, relating to the Radnor Historical Society and to local Main Line history.

**Mrs. Henry D. Cornman III**
Surveys and advertisements of Willowburn.

**Anonymous**
Two glass bottles labeled “La Dows Pharmacy,” Wayne.

**Christine Scott**
Copy of her paper on “The Louella Mansion.”

**James F. Thomason**
Pamphlet on St. Davids in Wales.

**Mrs. V. P. Keen**
Program of the 1931 Wayne Pageant of Patriotism held on Anthony Wayne Day.

**Department of Education, Commonwealth of Pennsylvania**
Copy of William Penn and the Founding of Pennsylvania, 1680-1684, A Documentary History.
Mrs. Charles Tatum
School Directory of the Rowland School, Junior High School — Junior Service Board.

A Friend
A Book on Minority Influences in the U.S.A.

Lehigh County Historical Society
Architectural Ornament in Allentown.

Mrs. Robert I. Cummin
Montgomery County History — past 100 years. 2 Vols.

Philadelphia Mayor's Commission on Women

RADNOR PHARMACY
Prescription Specialists
Complete line Cosmetics and Fragrances
Featuring
Guerlain,
Chanel, Revlon, Norell

787 Lancaster Avenue
Villanova, Penna. 19085

525-1071

In Wayne
it's Ray's
For Young Women of All Ages

WAYNE JEWELERS
& SILVERSVERS

NOW TWO LOCATIONS TO SERVE YOU

Corner of Lanc. & N. Wayne Aves.
Wayne, Pa.

King of Prussia Plaza
King of Prussia, Pa.

The Book Shelf
WAYNE'S PERSONAL SERVICE BOOK SHOP
New, Rare, and Out of Print Books

WILLIAM T. DeWITT
LEE DeWITT
4 Louella Court
Wayne, Pennsylvania 19087

Where in the World Do You Want to Go?
CRUISE...
around the Caribbean, the Atlantic, the Pacific or around the World!

No repacking suitcases
No hunting for restaurants
Swim, sun, stroll — be pampered and pampers by professionals
Sail to exotic, fascinating ports of call
Nightly entertainment

WORLD TRAVEL SERVICE, INC.
110 E. Lancaster Ave., Wayne, Pa. 19087

687-6677
Newman and Saunders Galleries

120 Bloomingdale Avenue
Wayne, Pennsylvania 19087
(215) 293-1280

Gallery Hours
Tuesday to Saturday
10:00 to 5:00

(The gallery is located one block west of the center of Wayne)

Established 1890

WACK APOTHECARY
Norman L. McMahon
Robert I. McMahon

120 E. Lancaster Ave.
WAYNE, PA.
688-0100

FORSTER'S FRAME-IT

183 E. Lancaster Avenue
Wayne, Pa 19087
(215) 687-2121

ART FORSTER
CUSTOM FRAMING • DO IT YOURSELF FRAMING
COMMERCIAL FRAMING • ART SUPPLIES
ART CONSERVATION

143 PENNSYLVANIA AVENUE
WAYNE, PA. 19087

DELAWARE MARKET HOUSE
PURVEYORS OF FINE
PROVISIONS FOR OVER
75 YEARS

116 EAST LANCASTER AVE.
WAYNE, PA 19087
688-2204 WE DELIVER

688-0115 / 688-0116

The RUG-O-VATOR Co.
RUGS SALES SERVICE
Compliments of

R. H. JOHNSON CO. CONTRACTORS
Since 1885

210 Conestoga Road
WAYNE, PA.
Roads-Drives-Parking-Tennis Courts
688-2250

L. K. BURKET & BRO.
147 Penna. Ave., Wayne, Pa.
Established 1887

Oil Burner Sales, Service and Installation
688-6500

Budget Planning
24 Hour Emergency Service

HARRY J. CAMPBELL, Inc.
PLUMBING & HEATING CONTRACTORS
135 Pennsylvania Ave.
Wayne, Pa.

Brooks Stationery
- Complete line of School Supplies
- Engineers' Materials
- Imported and Domestic Greeting Cards
- Scrapbooks and Photo Albums
- Engineering and Drafting Equipment
- Paper Party Goods
130 E. LANCASTER AVE.
WAYNE, PENNSYLVANIA
688-1072

Compliments of

Adelberger Florist
229 West Wayne Avenue
and Conestoga Road
688-0431
Established 1888

Compliments of

Lynam Electric
Established 1912
688-9200
Call For Current Mortgage Rates — anytime, day or night, 24 hours a day, 7 days a week.

ADJUSTABLE OR FIXED RATE MORTGAGES & HOME EQUITY LOANS.

DIAL 527-6212

LENDING RATE LINE

Main Line Federal
Serving Montgomery, Delaware & Chester Counties
Two Aldwyn Center, Villanova, PA 19085

For complete information on Mortgage Loans, please call
527-6210
Member FSLIC/Equal Opportunity Lender