# Franklin Gazette

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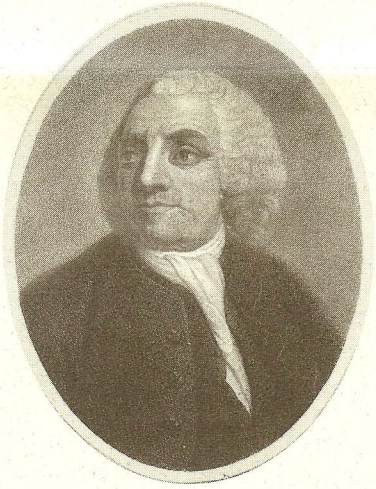
"We may give Advice, but we cannot give Conduct." *Poor Richard,* February, 1751.

## President's Message

By Ralph Gregory Elliot

I have recently finished reading Ron Chernow's magnificent biography, *Alexander Hamilton* and am now about to conclude Kent Newmyer's scholarly study *John Marshall and the Heroic Age of the Supreme Court.* That both books were readily at hand was the fortuitous result of my hospitalization: they were gifts from friends. That I have had the space of time to read them back-to-back results from a long convalescence at home, now coming to an end.

I have read these works against the background of constant reports of the difficulties encountered in Afghanistan and Iraq as they haltingly undertake the task of nation-building. Riven by factions, with what passes for a central government besieged by recalcitrant warlords exercising control over fiefdoms comprising most of Afghanistan, and by religious and ideological factions seeking to frustrate the constitution of a unitary national government in Iraq, they demonstrate how difficult nation-building is, especially where there is no culture or consensus that the territory and people in question really feel they are one people and one nation. We look back through the mists of time and historical mythology at our own beginnings, and marvel at what we perceive to have been our smooth path to nationhood.



*"Benjamin Franklin, L.L.D."*
Engraved by J. Chapman
Courtesy of The American Philosophical Society

Chernow and Newmyer show us that that path was hardly smooth and straight, that America was riven by competing views of what we should be; and that but for the vision and pertinacity of great men like Hamilton and Marshall, ours might well have been a quite different nation than it is.

Hamilton's vision was of a powerful central government encouraging development, promoting industry and commerce, and enjoying a sound financial structure that would fit us to aspire to equal bargaining status with England, France and the other nations of the world. He was beset on all sides by the states'-rights, anti-industrial, anti-central government forces of those like Jefferson and Madison who cherished an ideal of pastoral life and state sovereignty — the idea that this new nation was really a confederation of 13 individual sovereign states — totally antithetical to Hamilton's. This view was particularly prevalent in the South, which added a geographical dimension to the debate, but enjoyed support in the North as well. People in Virginia called their state "my country". Franklin, upon his return in 1785, was named "President" of Pennsylvania.

That Hamilton's view prevailed was a tribute to his determination and to the persuasiveness of his arguments to, among others, George Washington. It is also true, however, that Hamilton worked with a culture and consensus among Americans that whether the United States was merely a confederation of states or, as "We the People" implied in the Preamble to the Constitution, a creation of the sovereign people themselves, we were in fact a nation, one people with a desire to remain so. Every state shared with the others longstanding experience with common institutions of English origin — the judicial system, representative legislatures, popular elections, the idea of personal rights under the British constitution. That can hardly be said for Iraq — pasted together from disparate ethnic and religious groups by the Great Powers after World War I — or of Afghanistan.

The struggle between the states-rights adherents and the nationalists led to the formation of parties — the Democrat-Republicans and the Federalists; and the contest continued into the first third of the nineteenth century when Jefferson, then Madison, served for a total of 16 years as President.

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The Friends of Franklin, Inc.
P.O. Box 40048
Philadelphia, PA 19106

856.979.1613
Fax: 856. 854.0773
email:fof@benfranklin2006.org
Website:
www.benfranklin2006.org

Ralph Elliot, President

Carol Wojtowicz Smith,
Editor
cwsmith@verizon.net
856-429-8331

Claude-Anne Lopez,
Co-Editor

Roy Goodman
Contributing Editor

Newsletter Coordination:
Kathleen DeLuca

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## The President's Message

***(continued)***

During all of that period and beyond, however, John Marshall presided over the Supreme Court. He was a nationalist, a firm believer in the need for a national framework within which commerce could flourish. He saw the Constitution as the vehicle by which to put in place a system of government congenial to commerce and to the unleashing of the talents of the American people. In his 34 years as Chief Justice, he marshaled his Court to an interpretation of the Constitution that recognized the power of Congress under the Commerce Clause, the supremacy of federal law over state law, and the sanctity of contracts, to the exclusion of individual states' ability to interfere with contracts or interstate commerce. Marshall in effect, to the bitter consternation of Jefferson, consolidated the idea of a strong federal government and the subordinate status of the states that Hamilton, through legislation and bold administrative action, had initiated. In Marshall's court, all questions of power were viewed as constitutional issues, and he enlisted the Constitution in aid of his mission.

America was fortunate that its Constitution had provided a forum — the Supreme Court — which could be used to decide definitively the course the nation would take, on the principled basis of interpretation of that Constitution. America was also fortunate that the tradition of judges deciding such matters and all people, happily or unhappily, acquiescing in their decision, was of long standing as a heritage of English common law.

Afghanistan and Iraq have no such tradition and no such institutions. They must create them. Their task is undertaken against infinitely greater odds than was ours. Their internal divisions are exacerbated by ancient hatreds among close-knit ethnic groups, the overlay of religious zealotry and the competing norms of modernity and static orthodoxy, and a host of other differences that all combine to make nation-building and persuading disparate groupings to think of themselves as one people a daunting task indeed.

Our own history, then, must serve to teach us patience as we help these people to develop the spirit of oneness and the institutions that will reflect the national will of a sovereign people. It may well be that such a result will never occur because no one feels it is in their interests to create a nation-state embracing such diverse and antagonistic elements. If that be the case, the whole premise of our own nation, which was the touchstone of both Hamilton's and Marshall's efforts — that the Constitution was the will of a sovereign people and must be respected as such — must ready us to accept, however unhappily, what we consider the ill-considered will of the sovereign people of other countries.

On an altogether different note, let me commend to our gentle readers an eminently readable new book published in July: *The Genuine Article,* by our Friend, Edmund Morgan. Comprising many decades worth of book reviews seen in the New York Review of Books, it is a thoroughly enjoyable and edifying series of essays on American history.

And finally, a word of heartfelt thanks to all of you who so generously contributed to our Annual Fund. The Friends of Franklin have always lived on the financial edge. Our dues income does not suffice to support the work the organization both must do to keep alive and should do to fulfill its mission of celebrating the life and works of BF and spreading word of those works in meaningful ways to as wide an audience as we can reach. The annual subvention provided by the Fund is critical to our success, and those who gave are especially to be commended for stepping up to the plate.

# The Benjamin Franklin Tercentenary: Progress Update


With only 508 days until January 17th, 2006, the pace of progress at the Benjamin Franklin Tercentenary's offices in Philadelphia has picked up considerably. Our plans will form the official national celebration, endorsed by the federal Benjamin Franklin Tercentenary Commission, and we are hopeful they will prove a worthy commemoration for our first Founding Father to reach his 300th birthday. Dr. Rosalind Remer, the new executive director of both the Tercentenary and the Tercentenary Commission, came on board in May 2004. Ros was a history professor at Moravian College, Bethlehem, Pennsylvania for fourteen years, where her area of particular expertise was printing, publishing, and the press in late-eighteenth century America, as well as the history of entrepreneurship in the colonial and early national periods. In addition, she brings valuable experience from her stint as Director of Museum Planning and Programming at the National Constitution Center, as well as her previous roles in the heritage industry. She continues to benefit from the advice and support of her board, which consists of one representative from each of the Tercentenary's founding organizations – the American Philosophical Society, the Philadelphia Museum of Art, the University of Pennsylvania, the Library Company of Philadelphia, and The Franklin Institute.

***Benjamin Franklin: In Search of a Better World***

The Tercentenary's flagship project is the 8,000 square foot international traveling exhibition, *Benjamin Franklin: In Search of A Better World*, curated by Dr. Page Talbott. The exhibition has successfully completed its concept design phase, and is now moving through design development, with production scheduled to begin in late fall. It will be a seamless, fun, educational, and thought-provoking blend of priceless artifacts and engaging interactive devices, structured into six main areas: Character Matters, B. Franklin Printer, Civic Visions, The Search for Useful Knowledge, The World Stage and Taking Stock.

The exhibition will showcase over 250 original items, appraised at a value exceeding $150 million – including many owned by Franklin's own family and never publicly seen before. In addition, visitors will see original copies of all five of America's founding documents, all featuring Franklin's signature – he was unique among the Founding Fathers in being a signatory to not just the Declaration of Independence, the Paris Peace Treaty, and the Constitution, but also the Albany Plan and the Treaty of Amity. Our exhibition design firm, Staples and Charles Ltd., and our media design and production team, a More Perfect Union, LLC, are currently hard at work bringing Franklin to life with more than 40 interactive devices.

A lavishly illustrated catalogue featuring nine new essays by Franklin scholars will accompany the exhibition, and is to be published by Yale University Press. Also, with appraisals complete, conservation is proceeding, and many of the precious items in the exhibition will be fresh from conservation when our visitors see them. Meanwhile, the exhibition schedule has been finalized after a series of successful meetings with all the prospective venues. Indeed, the exhibition is already creating such a buzz that two top-rank institutions have made unsolicited approaches to us asking to be considered as hosts.

***Benjamin Franklin: In Search of a Better World***

| | |
|---|---|
| **Philadelphia** | Thurs. Dec. 15th 2005 – Sun. April 30th 2006 |
| **Boston** | Thurs. June 15th 2006 – Sun. Oct. 1st 2006 |
| **New York** | Thurs. Nov. 16th 2006 – Wed. Jan. 17th 2007 |
| **Denver** | Thurs. Feb. 22nd 2007 – Sun. May 20th 2007 |
| **Atlanta** | Thurs. June 28th 2007 – Sun. Sept. 23, 2007 |
| **Paris** | Thurs. Nov. 1st 2007 – Sun. Jan. 20th 2008 |

**The Frankliniana Database and www.benfranklin300.org**

Connie Hershey continues to compile the world's first comprehensive database of "Frankliniana" – original Franklin objects and life portraits –for web publication in 2005. The creation of the database is beginning to have its hoped-for result of bringing "out of the woodwork" objects with a tradition of Franklin ownership. One of the most recent is a Philadelphia Queen Anne compass-seat side chair. Its owners have provided us with information and photographs, and Connie is conducting research in the Philadelphia City Archives to augment its history further.

The Frankliniana Database is one of the Tercentenary's legacy projects, and will continue to be available as a resource for scholars and Franklin enthusiasts into the future on our Web site, www.benfranklin.org. This site is currently being extensively developed for a re-launch in November, when it will make publicly available a wealth of information about Tercentenary-related events, new publications on Franklin, new curriculum programs for youth, an image bank, time lines, bibliographies, fact sheets, and links to partner organizations and other useful Franklin-related pages on the Internet. Ultimately, visitors to www.benfranklin.org will even be able to take a virtual tour of our exhibition, *Benjamin Franklin: In Search of a Better World.*

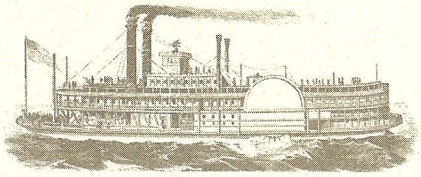
**Special Events, Lectures, Programs, and Partners**

Benjamin Franklin was a man of many, many accomplishments and interests, which is reflected in the range of ways that groups nationally and internationally are planning to celebrate his 300th birthday. In Philadelphia, where the exhibition will debut at the National Constitution Center in time for January 17th 2006, the Greater Philadelphia Tourism Marketing Corporation has received a grant from the Commonwealth of Pennsylvania to help the Tercentenary coordinate and market local programs. Plans currently being discussed include a city-wide reading of Franklin's *Autobiography,* satellite exhibitions at various partner institutions, and an array of concerts and theater productions to suit all tastes. The template developed for Philadelphia will be shared with the other exhibition host cities, to help them reach out to their communities, generate interest in arranging complementary events and programs, and pull together Franklin celebrations under one umbrella. In addition, the Tercentenary Coordin-ator, Nicola Twilley, is currently at work collating as comprehensive a calendar as possible to post on the re-launched Web site. She would be very pleased to hear from Friends of Franklin who are organizing events or

(Continued on *Page* **10**)

# *Franklin and the Early Steamboat Inventors*

*by Andreaa Sutcliffe*



On route from France to Philadelphia in September 1785, Franklin wrote a paper called "Maritime Observations," in which he discussed a variety of topics, including improving the efficiency of sailing ships and his experiments on the Gulf Stream. He also related the current thinking among European scientists regarding the best way to propel a ship by mechanical means.

In this paper, he agreed with the current French scientific opinion that paddlewheels would never be an efficient method of propelling a boat unless the source of power could be made incredibly forceful, something that seemed unlikely given the current state of technology. As an alternative, he suggested pumping a stream of water from the bow of a boat and out through the stern, either manually or with some sort of "fire engine," by which he meant a steam engine. This idea, first proposed by Daniel Bernoulli in the mid-1700s, was an early form of jet propulsion.

Franklin's paper was read at the December 2, 1785, meeting of the APS, and its contents were quickly relayed to a novice inventor named John Fitch. Fitch had recently moved from Bucks County to Philadelphia to build what would later become the world's first fairly reliable steamboat. Fitch had presented his plans and a model for his steamboat at an APS meeting just days before Franklin returned to the city, and he had met with Franklin not long after in hopes of gaining his support for his invention. Franklin, however, refused, on this occasion and others, to give Fitch anything but private encouragement. Fitch never gave up hope that Franklin would one day change his mind, and to that end Fitch abandoned his plan to use an endless chain of paddles and turned to water-jet propulsion instead.

Fortunately, Fitch was talked out of using jet propulsion by his chief engineer, a Philadelphia clockmaker named Henry Voigt. (Voigt had earlier worked with David Rittenhouse.) Voigt believed that Franklin's idea would never work given the limited power produced by the low-pressure steam engine they were trying to build. Fitch then came up with a design that used twelve oars, mounted on a rack and operated by cranks. The resulting boat looked quite odd, but the contraption worked well—so well, in fact, that by 1790 Fitch's steamboat was clocked at going eight miles an hour on the Delaware, nearly twice as fast as Robert Fulton's paddlewheel steamboats two decades later. But for various reasons, he was unable to make it a commercial success.

Three years after Franklin first rejected Fitch, he supported the efforts of another steamboat inventor, James Rumsey, a Virginian who had previously gained George Washington's approval. Not surprisingly, Rumsey's steamboat design featured water-jet propulsion. Rumsey came to Philadelphia seeking financial support in early 1788. The result of his efforts was a company known as the Rumseian Society, whose investors included Franklin and several other prominent Philadelphians. They sent Rumsey to London to build his steamboat there. After nearly four years of slow progress, Rumsey died suddenly, just one day before his steamboat was due to make its first public trial on the Thames. The vessel was tried a few weeks later but evidently did not work well enough to inspire anyone to take it over.

Interest in steamboats lagged for nearly a decade. In the late 1790s, Nicholas Roosevelt, a builder of steam engines in New Jersey, partnered with Robert R. Livingston and John Stevens to build a steamboat. Roosevelt wanted to use paddlewheels, but Livingston strongly opposed their use, no doubt recalling Franklin's criticism. Their boat, propelled by an awkward device of Livingston's design, also failed. Nearly two decades after Franklin's death, Robert Fulton, just returned to America after many years in Europe and either unaware of or dismissive of Franklin's admonition, mounted side paddlewheels (and a custom-made Watt steam engine) on his first steamboat in 1807 and made a success of the idea.

*Andrea Sutcliffe is the author of the book* ***Steam: The Untold Story of America's First Great Invention*** (Palgrave Macmillan, July 2004).

## Franklin Finding Aids Online at the American Philosophical Society Library

A new online resource at the American Philosophical Society Library allows researchers to browse remotely, for the first time, finding aids with detailed item-level inventories of all fifteen Franklin manuscript collections in the Library. Using these finding aids, researchers can obtain citations for and descriptions of individual letters and manuscripts within each Franklin collection, which streamlines the research process by allowing researchers to obtain all necessary information before contacting or visiting the Library. The guide also allows Library staff to more quickly identify items of potential interest for in-house and offsite researchers. The Library developed the online guide with the assistance of ByteManagers, which converted existing paper guides, inventories, and catalog cards to machine-readable code.

To access the entry page for the guide, go to http://www.amphilsoc.org/library/mole/f/franklin/. There you will see links to finding aids for each of the individual Franklin collections, which arrived in several accessions over the past 160 years. The first page of each finding aid includes additional links to subseries and subcollections within each Franklin collection. To find particular names, dates, or subjects on a given page, use your browser's find function ("edit" and then "find") to find each instance of the item of interest on that page. For questions or requests, please contact Valerie-Anne Lutz at 215-440-3444. Happy searching!

# In His Own Words:

## *"For the Honour of Our Country"*

On October 14, 1777, Franklin wrote to David Hartley, an old friend from his years in London who was at the time a member of Parliament. He began by deploring the rift between Great Britain and America, and expressing his wish that peace be restored. He spoke in this letter of the comparatively good treatment of British prisoners in America and the sufferings of American prisoners in British hands, and predicted the likely effects of both approaches: "[Britain] has given us by her numberless Barbarities, in the Prosecution of the War, and in the Treatment of Prisoners, … so deep an Impression of her Depravity, that we never again can trust her in the Management of our Affairs, and Interests. … all join in convincing us that you are no longer the magnanimous and enlightened Nation we once esteemed you, and that you are unfit and unworthy to govern us, as not being able to govern your own Passions. …[My wish] induces me to mention… that between Nations long exasperated against each other in War, some Act of Generosity and kindness towards Prisoners on one side, has softened Resentment and abated Animosity on the other, so as to bring on an Accommodation. You in England if you wish for Peace, have at present the Opportunity of trying this means, with Regard to the Prisoners now in your Goals [Jails]. They complain of very severe treatment." Later in the letter, Franklin suggested that his friend personally visit the jails where Americans were confined so that he might see for himself how they were treated and asked if Hartley might get permission for the Americans "to send a Commissary … a trusty humane discrete Person…who would undertake to distribute what Relief we may be able to afford, [to] those unhappy brave Men, Martyrs to the Cause of Liberty. Your King will not reward you for taking this Trouble, but God will. …In revising what I have written, I found too much Warmth in it, and was about to strike out some Parts. Yet I let 'em go as they will afford you this one Reflexion: 'If a Man naturally Cool, and rendered still cooler by Old Age, is so warm'd by our Treatment in his Country, how much must those People in general be exasperated against us; and why are we making inveterate Enemies by our Barbarity, not only of the present Inhabitants of a great Country, but of their infinitely more numerous Posterity; who will in all future Ages detest the Name of Englishman …' This will certainly happen unless your Conduct is speedily changed, and the National Resentment falls, where it ought to fall heavily, on your Ministry or perhaps rather on the King whose will they only execute."

The tables were turned when British prisoners complained to John Paul Jones in late 1778, and the captain forwarded their memorial on to Franklin. Jones emphasized that their treatment in French prisons was incompatible with reason, law, and humanity. Franklin wrote to Sartine, the French naval minister, "desiring him to renew his Orders for the better treatment of the Prisoners," and drafted a letter to the prisoners themselves. When in 1779 an expedition was contemplated against Britain, Franklin anticipated that problems might arise, and gave John Paul Jones, who was to participate in the campaign, specific orders on that head. Not only was Jones to bring all the English seamen that he captured to France, but Franklin cautioned him about his men's behavior towards those future prisoners: "As many of your Officers and People have lately escaped from English Prisons either in Europe or America, You are to be particularly attentive to their Conduct towards the Prisoners which the fortune of War may throw into your Hands, lest Resentment of the more than barbarous Usage by the English in many Places towards the Americans should occasion a Retaliation, and an Imitation of what ought rather to be detested and avoided, for the sake of Humanity and for the Honour of our Country."

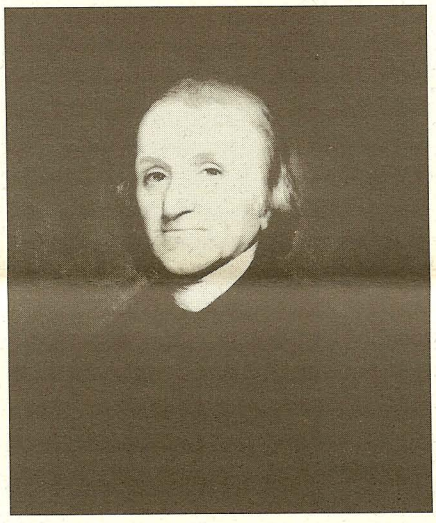
# Benjamin Franklin & Joseph Priestly: Kindred Kites...Amiable Airs

by Dudley Herschbach

*This August the memory of Reverend Joseph Priestley (1733-1804) was honored by the American Chemical Society at a two-day symposium in Philadelphia. Priestley, a nonconformist minister, was a prolific scholar and scientist of amazing scope. He wrote texts on grammar and drawing; many treatises on education, religion, philosophy, and politics; major histories of electricity and of optics, and several volumes reporting his own scientific experiments. Best known among chemists for his discovery of oxygen and other important gases, Priestley also elucidated the role of blood in oxygen transport and was a codiscoverer of photosynthesis. Experiments with plants and mice led him to recognize that plants absorb carbon dioxide and give off oxygen, while animals do the reverse. Moreover, Priestley invented synthetic soda water and thus fathered the soft drink industry.*

*Dudley Herschbach, a chemist at Harvard, was invited to describe the relationship of Priestley and Benjamin Franklin. This article is abstracted from his talk at the symposium.*

When they met in London in 1766, Benjamin Franklin was 60, renowned as "the Newton of electricity;" Joseph Priestley was 33, just beginning to explore science. Franklin, serving as agent for Pennsylvania and several other colonies (from 1757-62 and 1764-75) was ever eager to discuss natural philosophy. Priestley, a nonconformist minister and teacher of languages and rhetoric at Warrington Academy (halfway between Manchester and Liverpool) had an "idea that occurred to me of writing the history of electricity." Franklin gave him ample encouragement, providing books and advice, including suggestions for further experiments that should be pursued. Priestley tackled his project with alacrity, devoting much effort to repeating and improving many experiments. Already by 1767 he published his two-volume work, *The History and Present State of Electricity with Original Experiments.* It was remarkably comprehensive and contained important advances in instrumentation as well as astute observations. The book was translated into several languages and for several decades remained the primary text on electricity.



*Portrait of Joseph Priestly by Rembrandt Peale*
Courtesy of The American Philosophical Society

In particular, Priestley gave an account of Franklin's kite experiment, clearly extracted from Ben himself. This provides significant detail beyond the terse report Franklin had published in the fall of 1752, and modern historians rely chiefly on Priestley's account. Artistic depictions of this iconic experiment are legion, but I've yet to see one consistent with Priestley's description. Aside from misrepresenting technical aspects, Franklin is always shown as elderly. His son William, who assisted him, if shown at all, is depicted as a youngster. In 1752, however, Franklin was only 46 and William was 21.

A recent book titled *Bolt of Fate,* by Tom Tucker, argues that Franklin did not actually fly an electrical kite but pulled off a clever hoax. Tucker's polemic is nicely crafted and fun to read, although I do not find his case convincing. Much of it reprises questions raised in the 1920s and already considered carefully by historians, especially by the late I. Bernard Cohen. Tucker also ignores much evidence inconsistent with his theme. He even conjectures that Franklin, annoyed because one of his reports had been slighted by another scientist, deliberately proposed an experiment, which would have been fatal, had the fellow attempted it. Tucker, who presumes that Franklin was thirsting for celebrity, seems not to realize that advocating a fatal technique would not enhance a scientific reputation!

In a later section of his book as well as in contemporary letters to colleagues, Priestley describes preparing, in the spring of 1766, a kite and other apparatus for collecting electricity from clouds. Tucker notes that Priestley assembled a kite but says that he never flew it for fear of getting killed. That statement, I found, traces back to a funeral oration after Joseph Priestley died in 1804. It was given by his younger brother Tim, who described making the kite for Joseph but com-

ments that "a philosopher about that time being killed in such an experiment, his wife would not suffer him to rise his heighth." His wife's concern is likely, yet Priestley did fly his kite. He describes precautions needed during thunderstorms, including use of a trailing chain to carry the electricity to ground. The fatality alluded to by Tim occurred in 1753 but not in a kite experiment. As discussed by I.B. Cohen, in fact many electrical kite experiments had been safely carried out prior to Priestley's. The importance of grounding was emphasized in Priestley's book by his mention that a neighbor's curious goose was electrocuted when it grabbed the trailing chain.

Priestley, like Franklin, reported his scientific work in a forthright, simple style, noting errors of observation or interpretation as well as welcome results or insights. He remarked that this style was "less calculated to do an author honor as a philosopher" but that it would "contribute more to make other persons philosophers, which is a thing of much more consequence to the public." This aligns with Franklin's view that reputation for discovery was "less important than exciting the attention of the ingenious."

Priestley's passion for science expanded further during 1767-1773 when he served as pastor at Mill Hill Chapel, the oldest and largest Dissenting meetinghouse in Leeds. He published another major study, his *History and Present State of Discoveries Relating to Vision, Light, and Colors,* as well as several religious and political tracts and books on oratory, grammar, and the technique of perspective drawing. Although Priestley intended to pursue experiments as an "amusement" only, he devoted to them much of his time and a large part of his scanty income, as shown in his letters to Franklin and other friends. His discovery of the electrical conductivity of charcoal fostered his interest in chemical properties. He undertook studies of "pneumatic chemistry" and reported discoveries of several distinct kinds of "airs." During a visit in 1771, Franklin observed some of these experiments. Later he received a classic letter from Priestley, describing how he used mice to establish that "a sprig of mint" could covert "noxious air" to "restored air."

Most acclaimed was Priestley's invention of soda pop, described in his *Directions for Impregnating Water with Fixed Air,* a prize-winning paper read to the Royal Society. He had a ready supply of fixed air (carbon dioxide), produced by fermentation in a brewery next to his house, but generated his own by treating chalk with dilute acid. His carbonated water aroused great interest when he suggested (wrongly) that it might be useful in preventing scurvy.

Concerned about providing for his growing family (wife, daughter and two sons) as well as the expenses of his scientific "amusements," but reluctant to give up preaching, Priestley asked Franklin's advice. In response, Franklin propounded his "prudential algebra," a systematic way to weigh the pros and cons of important decisions. Franklin also wrote to John Winthrop, his friend at Harvard, at Priestley's request. In early 1773, Winthrop replied "I am extremely concerned to hear, that Dr. Priestly is so meanly provided for...I admire his comprehensive genius, his perspicuity and vigor of composition, his indefatigable application, and his free, independent spirit..." But he saw no prospect for an appointment of Priestley at Harvard or other American colleges, as "his religious principles would hardly be thought orthodox enough."

A few months later, Franklin informed Winthrop that "Priestly is now well provided for, Lord Shelbourne is become his Patron," supplying a handsome stipend and house. It probably helped that Shelburne admired Franklin and supported his efforts on behalf of the American colonies. Franklin applauded Priestley's appointment, writing that "The learned leisure he will now have...gives his friends a pleasing hope of many useful works from his pen." Indeed, by mid-1774 Priestley had discovered oxygen, although he thought it was "dephlogisticated air." Over the next few years, he went on to publish five of his six volumes of *Observations on Air,* including important episodes in his work related to photosynthesis.

In contrast, by early 1774 Franklin's efforts to remain astride a widening political gulf had ended in abject failure. He was shocked by the Boston Tea Party, "an act of violent injustice... wrong to destroy private property." Shortly after, it became known that he had been given letters showing that Thomas Hutchinson, governor of Massachusetts had advocated "abridgement of what are called English liberties" in order to subdue colonial unrest. Franklin had secretly forwarded the letters to a friend in Boston, asking that they not be made public, but they were published. In the resulting uproar, his political enemies seized the opportunity to call him before the Privy Council, meeting in the Cockpit (where Henry VIII staged cockfights). With only a few friends there for moral support, among them Priestley and Edmund Burke, Franklin stood silently for an hour, suffering a furious and fateful verbal pummeling before a jeering crowd.

With war looming a year later, Franklin departed England. He spent his last day with Priestley, who record-

ed that, while Franklin read American newspapers "the tears trickled down his cheeks...He dreaded the war," but did not doubt that "the issue would be favorable to America...The English may take all our great towns, but that will not give them possession of the country." Within a few days of landing in Philadelphia, Franklin wrote Priestley about the British assault on Lexington and Concord, and their retreat, emphasizing that "All America is...more firmly united than ever" and describing his activities in Congress.

They continued to correspond steadily throughout the war years, exchanging news, reports of experiments, and shared enthusiasm about the future of science as well as dismay with war and some cheerful whimsey. After Franklin went to France to take up his crucial diplomatic mission (1776-1785), Priestley remarked that "You will smile when I tell you I do not absolutely despair of the transmutation of metals." Franklin responded that if Priestley found the Philosopher's Stone, he hoped "you will take care to lose it again." Franklin devoted one of his recreational bagatelles, printed on his private press, to a mock research proposal to study the causes and devise cures for flatulence. He pointed out that it should be of interest to Priestley, "who is apt to give himself airs." Both would be glad to learn about an enzyme that does suppress emission from gassy foods; it is marketed as "Beano," and a few years ago was awarded the IgNobel Prize in Chemistry.

Priestley was not comfortable with aristocratic airs. He had to defend himself against furious charges of atheism, and the notoriety became embarrassing for Shelburne. After again asking advice from Franklin, Priestley accepted an amicable settlement and moved to Birmingham. This separation did not diminish Shelburne's esteem for Franklin. A few years later, when Shelburne became prime minister, that esteem helped ease the negotiations that ended the Revolutionary War with the Treaty of Paris.

In Birmingham, Priestley served from 1780-1791 as minister to the New Meeting, one of the largest Dissenting congregations in England. Again he was much occupied with theological writing and political activities. Yet he did significant further work on photosynthesis. He also vigorously (and vainly) defended the phlogiston theory against the chemical revolution launched by Antoine Lavoisier. Especially after Priestley hailed the onset of the French Revolution as perhaps the start of the Millennium, opposition to Priestley's reformist political and religious views grew fierce. In 1791, when a mob destroyed the New Meeting House and his home, Priestley had to flee to London. Three years later he reluctantly moved his family to America, settling in Northumberland, Pennsylvania. He hoped to found a community of "rational Christians" and a college but those efforts failed. A series of sermons Priestley gave is credited with founding the First Unitarian Church of Philadelphia. An 1874 conference held to celebrate the centennial of Priestley's discovery of oxygen led to founding the American Chemical Society, now the world's largest professional scientific organization.

The letters between Franklin and Priestley contain many expressions of warm affection, beyond eighteenth century etiquette. For instance, in a pair from 1782: JP says to BF "You have made me very happy...[as] your usual humour and pleasantry has not forsaken you...;" BF says to JP "I love you as much as ever...and labour for peace with more earnestness, that I may again be happy in your sweet society." This poses a historical puzzle. Friendly letters from BF to JP continued until less than a year before Franklin's death in 1790, although none after 1783 from JP to BF seem to have been found. Thus, I find it strange that Priestley did not give a funeral sermon for Franklin. A peculiar statement in Priestley's memoirs may be pertinent: "It is much to be lamented that a man of Dr. Franklin's general good character and great influence should have been an unbeliever in Christianity, and also have done so much as he did to make others unbelievers." As Franklin's extraordinary religious tolerance is well documented, Priestley's comment is inexplicable.

*This article owes much to the Franklin papers at Yale, which include 31 letters from JP to BF (between 2/66 to 5/83) and 13 from BF to JP (between 5/72 and 5/79). My talk at the Priestley Symposium consisted largely of extended quotations from selected letters, introduced with brief comments to explain the context. Also invaluable were excellent books by Robert E. Schofield: an annotated collection of letters and extracts from JP's scientific works, titled A* ***Scientific Autobiography of Joseph Priestley*** *(MIT Press, 1966); and a comprehensive biography in two volumes, titled* ***The Enlightenment of Joseph Priestley (1733 to 1773)*** *and* ***The Enlightened Joseph Priestley (1773-1804),*** *both published by the Pennsylvania State University Press (1997 and 2004).*

*An exhibit, "Joseph Priestley: Radical Thinker," is at the Chemical Heritage Foundation in Philadelphia through July 2005. This includes objects like those used by him, materials illustrating interactions with his contemporaries, an extensive series of political caricatures, and books written by or about Priestley.*

# Franklin Tidbits

## 50 Years Coming Full Circle

This summer Yale University's Sterling Memorial Library displayed a small exhibit entitled "50/50" which was mounted to commemorate the dual anniversaries of the founding of The Papers of Benjamin Franklin and the 50th reunion of the Yale class of 1954.

On January 17, 1954, the 248th anniversary of Franklin's birth, Yale University and the American Philosophical Society in Philadelphia announced their joint sponsorship of a project to gather, edit, and publish all known papers of Benjamin Franklin. The editorial offices were established in the world-renowned Franklin Collection located on the second floor of Sterling Memorial Library.

The Franklin Collection was assembled by alumnus William Smith Mason, Yale class of 1888 (Sheffield Scientific School). It was widely regarded as the finest collection ever assembled around an individual. Broadly conceived as a research library about Franklin and his times, Mason collected some 20,000 volumes as well as manuscripts, maps and atlases, artwork (including one of the world's finest collections of Franklin prints) and artifacts. When it came to Yale in 1935 it was hailed as the most important gift the University Library had ever received.

The Franklin Papers was launched under the direction of the late Leonard W. Labaree, Farnham professor of History. Labaree and his team located and accessioned copies of some 28,000 Franklin papers, including letters Franklin received as well as everything he wrote. In the 45 years since the initial search for manuscripts was conducted, the succeeding editors have located another 2,000 items.

To date, 37 volumes have been published by the Yale University Press, out of a projected total of 47 volumes. Volume 38 is currently in production. This will bring Franklin's life up to January 20, 1783, the day he and his fellow peace commissioners in Paris signed the armistice that effectively ended the American Revolution. Negotiating the peace treaty was one of the crowning achievements of Franklin's life.

Coming full circle, The Franklin Papers project in recent years has been greatly aided by Mason Willrich, Yale class of 1954, grandson of William Smith Mason, who has provided invaluable assistance in garnering support for the final 10 volumes of the series.

### Franklin in the Garden

Chuck Hargis alerted the *Gazette* to a new tribute to Franklin. The new Jackson and Perkins seed catalog found online lists the new 2005 Lily of the Year as the new "Benjamin Franklin." Listed under Fragrant Oriental Lilies it is described as "showy with richly colored flowers speckled in vivid magenta."

### Franklin on the Web

Common-Place at www.common-place.org in their July 2004 issue contains a thought-provoking essay by David Waldstreicher on "Benjamin Franklin, Slavery, and the Founders; On the dangers of reading backwards."

Paul Pasles, a mathematician from Villanova University, who wrote about Franklin and his magic squares in an article in the *Gazette* in the fall of 2000, has updated his website with a new mathematics page. Written for young students it is of interest to all ages with wonderful links.

Check it out at:
http://pasles.org/Franklin/index.html.

In a related link the Drexel Math Forum offers a look at various types of magic squares at http://mathforum.org/alejandre/magic.square.html. Magic squares were used by the Chinese more than 3,000 years ago; a magic square, "Melancholia," also appears in a 1514 engraving by Albrecht Durer; and an alphabetical magic square was found in Roman sites from the Middle Ages (with letters in the manner of a crossword puzzle rather than numbers).

### News from Craven Street

Dr. Márcia Balisciano writes from Craven Street: "With help from the Heritage Lottery Fund we are in the final stages of opening Benjamin Franklin House for the first time to the public in time for Franklin's 300th birthday in 2006. To make this goal, we are now raising the remaining $650,000 (£350,000) of the $5.4 million (£3 million) total project cost to complete the interior conservation of the building and create a dynamic museum and educational experience. "

### A Musical Note

On a new CD, "Sempre Libera," (Mahler Chamber Orchestra: Deutsche Gramophone) soprano Anna Netrebko, sings an aria (the title track) from Donizetti's "Lucia de Lamermoor". There conductor Claudio Abbado has replaced the usual solo flute with Franklin's invention, the glass armonica, the instrument originally called for by the composer. One reviewer in the *New York Times* applauded the use of the armonica, asserting, "Its gentle, hazy sounds, popular in the 19th century, lend an affecting fragility to Lucia's emotional breakdown.

## Good Reads

Seymour Stanton Block, *Benjamin Franklin, Genius of Kites, Flights and Voting Rights* (McFarland & Company, 2004). This description was provided by the publisher: "This unconventional biography of Benjamin Franklin, the great American Renaissance man, explores examples of Franklin's diverse genius and accomplishments in different fields. Among the topics explored are Franklin's views on women's issues, such as disapproving of impractical hoop skirts, supporting their education, and suggesting insurance for widows and spinsters. It describes his love of a good hoax, contributions to ballooning while an ambassador in France, experiments with the famous kite, and advances in heating houses. His work with money is also covered, including methods of printing money to confuse counterfeiters, a revolutionary way of making a print of a real leaf, and his updated portrait on the present $100 bill. Franklin's role as head of a commission to examine (and debunk) mesmerism is addressed."

**Forthcoming:**

*Jeffry L. Pasley et al, eds., Beyond the Founders: New Approaches to the Political History of the Early American Republic* (University of North Carolina Press, October, 2004).

Sheldon Cohen, *British Supporters of the American Revolution: The Role of Middling-Level Activists* (to be published in Britain by Boydell & Brewer, November, 2004). From the dust jacket: "This work focuses on five unrenowned men, all of whom represented the diverse although significant 'middling orders.' These individuals actively endeavoured to aid the American cause. Their personal efforts, often unlawful, brought them into contact with Benjamin Franklin, for whom they befriended rebel seamen confined in British gaols."

**For Kids:**

Ann Heinrichs, *Benjamin Franklin: Printer, Scientist, Author, and Diplomat* (Child's World). For readers ages 9-12.

Gail Blasser Riley, *Benjamin Franklin and Electricity* (Children's Press). For readers ages 9-12.

**Forthcoming:**

Edwin S. Gaustad, *Benjamin Franklin* (Oxford University Press, November, 2004). This book for young adult readers by a leading scholar of religious history is part of the *Oxford Portraits* series.

(Progress Update *from Page 3)*

know of celebrations planned in their area, in order to include that information in the calendar. Nicola is also preparing some materials and suggestions for people who would like to do something to mark the 300th anniversary of Benjamin Franklin's birth, but aren't quite sure what that something should be – if you fall into that category, watch this space!

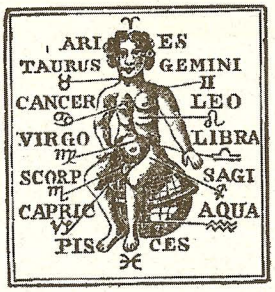
*Nicola Twilley, Tercentenary Coordinator (ntwilley@fi.edu /Benjamin Franklin Tercentenary, 222 N. 20th Street, Philadelphia, PA 19103)*

**Can you help us, please?**

As previously reported, coin legislation has been introduced into the Senate by Senator Joseph Biden Jr. (D-Delaware), and has been sponsored by Senators Specter, Santorum, Campbell, Lieberman, Lautenberg, Carper, DeWine, Fitzgerald, Johnson, and Kennedy. This bill will authorize the U.S. Mint to produce a limited edition silver coin, in two designs, to honor the achievements of Benjamin Franklin. When Congress returns on September 7th, our supporters will work hard to reach the total of 67 co-sponsors that the Senate bill (S.2568) needs in order to join its House counterpart in committee (HR.3204). Friends of Franklin could help the passage of this bill by calling on their Senators to co-sponsor the bill.

We hope to continue updating the Friends of Franklin on a regular basis, and we welcome your support and ideas.






# CALENDAR OF EVENTS

**On-going – July 29, 2005.**

"Joseph Priestley, Radical Thinker." Exhibit at the Chemical Heritage Foundation, Philadelphia, PA. The exhibit mounted to commemorate the 200th anniversary of Priestley's death, brings together artifacts and images including some items originally owned by Priestley which interpret his life and work. Perhaps best known for his scientific work including the identification and isolation of oxygen, Priestley was also a well-known minister and helped to found the First Unitarian Society of Philadelphia.

**Ongoing- February 2006.**

Exhibit at the College of Physicians of Philadelphia. "Only One Man Died: Medical Adventures on the Lewis and Clark Trail." Exhibit explores the medical aspects of the Lewis and Clark Expedition. Meriwether Lewis carefully planned the trip consulting with doctors in Philadelphia to learn critical medical skills he would need for the expedition and purchasing medical supplies, scientific equipment and provisions.

**Oct. 16, 2004. 10:00 a.m. - 1 p.m.**

"Eagle Rising" Program on the history, symbolism, and imagery of the Great Seal of the United States at the Historic Harriton House, home of Charles Thomson, in Bryn Mawr, Pa. Franklin was involved in the design and dissemination of the Great Seal. Speakers at the event include John MacArthur, a history and science writer, and Thomson biographer Professor J. Edwin Hendricks of Wake Forest University. Reservations required. Call (610) 525-0201. For directions tap into: http://www.harritonhouse.org/

**Oct. 22-23, 2004.**

"Cultures in Conflict" Conference on the French and Indian War, Shenandoah University, Winchester, Va. Contact: Prof. Warren R. Hofstra, Dept. of History.

**November 4-6, 2004.**

Conference on Health and Medicine in the Era of Lewis and Clark at the College of Physicans, Philadelphia, PA. Sponsored by the Francis C. Wood Institute for the History of Medicine of the College of Physicians of Philadelphia, this conference is free and open to the public. Information including program and registration details can be found on the College's website: www.collphyphil.org/L&CConf.htm or call Margaret Patton at 215-563-3737 ext. 305. An opening dinner, for which is there is a charge, honors Dr. Whitfield J. Bell, Jr.

**November 18, 2004.**

"Benjamin Franklin and Slavery," lecture by David Waldstreicher at 7:30 p.m. at the David Library, 1201 River Road, Washington Crossing, Pa. Free and open to the public. Reservations suggested. Call (215) 493-6776. For directions tap into http://www.dlar.org

**December 5, 2004.**

History Channel documentary, *Benjamin Franklin,* airs at 9:00 p.m. Eastern and Pacific time.

**January 14, 2005.**

"Franklin and Architecture: Building the City." Annual celebration of Benjamin Franklin's birthday in Philadelphia sponsored by Celebration! Benjamin Franklin, Founder. Contact Carol Smith at 856.429.8331 or via e-mail at cwsmith@verizon.net for more information.

**January 14-16, 2005.**

Philomel, an original instruments strings ensemble, presents a concert in honor of Franklin's birthday, "The Amazing Dr. Franklin." Performances vary by time and location although are held in Philadelphia or Doylestown, PA. Contact www.philomel.org for additional information.

**February 2-6, 2005.**

Glass Music Festival will be held in Paris and surrounding areas. See website for more information: www.glassmusicintl.org.

**December 15, 2005.**

The special tercentenary exhibit, *Benjamin Franklin: In Search of a Better World,* will open in Philadelphia on December 15, 2005. The exhibit will travel to Boston, New York, Paris, Denver and Atlanta before closing on January 20, 2008.

## Special Thanks to Our Life Members!

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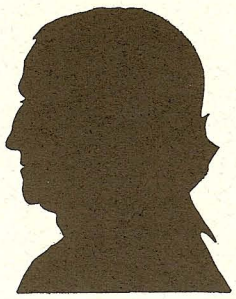
*Visit the Friends of Franklin website:*
**www.benfranklin2006.org**



## Welcome & Thanks to New Members!

### Franklin Diplomats

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New York, NY

Newton Minow
Chicago, IL

Clarence Wolf
Bryn Mawr, PA

### Franklin Friends

Barry Epps
Ferndale, MI

Roger Jones
Broomall, PA

The Friends of Franklin Organization is seeking speakers on Franklin and various aspects of his life. If you are interested in sharing your research with other members of the Friends please contact Kathy DeLuca at 856.979.1613

## Join Friends of Franklin!

Would you like to become an official member of the Friends of Franklin organization? Do you have a friend or relative who might wish to join, or who would appreciate a gift membership? All individuals, scholars, students, collectors, and Franklinophiles, as well as institutions, are invited to become members of the Friends of Franklin at the following membership rates:

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P.O. Box 40048
Philadelphia, PA 19106
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