



## President's Message

It was sad to report in our previous issue on the passing of member David Dalzell, and yet we have even more bad news. Former Trustee Richard O'Meara, who helped plan and coordinate many of our functions, succumbed to complications following a stroke in March, and Richard Wolsey, also a very active member, passed away in February. Additionally, we learned that Elton Given III, a former Trustee and son of Past-President Elton Given Jr., had died in 2009. Even though Elton had relocated to New Hampshire some years ago and was no longer active with MCMA, it is still a bit disappointing that we can sometimes so completely lose track of our members. On that note, I would ask any members receiving this newsletter who have similarly relocated out of the area to occasionally contact Ric at the office, by phone, e-mail, card or letter, just to stay in touch.

On a positive note, our MCMA website is now up and running (though not all sections are yet complete), and I urge everyone to visit it (the web address is [www.mcma1795.us](http://www.mcma1795.us), and the member sign-in password is *revere1795*), navigate through it, and let Ric know what you think. We like what we have so far, but our goal is to build on it to make it as useful for our members as we can, while at the same time keeping it user-friendly. I want to thank Director Purdy, Trustee Tony Scalesse and Past-Presidents Bill Jutila and Marty Joyce for making it happen.

## Recent Happenings

Our April Quarterly was held at Montvale Plaza in Stoneham. President Anderson began by asking all members to rise and observe a moment of silence in memory of deceased members Richard O'Meara, Richard Wolsey Jr., David Dalzell and Elton Given III. The business portion of the meeting was conducted following our meal (a turkey dinner, served family style), we welcomed our newest associate member Mr. George Milley, and Past-Presidents Jutila and Joyce were called on to describe and explain our new website. We then heard from our guest speaker, Mr. Brad Cook, who spoke of gradually overcoming serious challenges with alcohol in his youth and early adult life, then completing his education to become a school teacher and using that experience to work with troubled youth. His passion is outdoor activities, with a particular emphasis on the Appalachian Trail, and he uses that theme in speaking to and working with as many youth-connected groups as he can, through his *Trail Dreams* organization.

We are pleased to report that one of the early efforts by our Resources Committee has begun to yield results. You may recall that, with the goal of generating additional (i.e., beyond our own limited means) support for the organizations we help directly, we reached out to a number of charitable trusts and endowments to ask if they would partner with us in these efforts. We targeted only those entities (approximately 30) that support one or more of MCMA's own areas of interest, such as job-skills training, employment for physically or mentally challenged individuals, support for troubled youth, etc. We felt that our own practices of close examination

of grant requests, on-site visits to fully understand how the grant would be put to use, and follow-up action would appeal to many of these entities, especially those too big to devote such attention to relatively small requests or requestors. Nonetheless, we received only one positive response, and it came from representatives of the John Alden Trust, with whom then-President Joyce and Executive Director Purdy met to fully explain our proposal. Since then we have shared information with them, and this past year it resulted in the John Alden Trust awarding grants to six organizations proposed by us: North River Collaborative, Notre Dame Educational Center, The Eliot School, Home for Little Wanderers, Community Work Services and Granite Academy. More importantly, this is a continuing relationship upon which we hope to build, and possibly even add some of the organizations which initially declined to engage with us. We thank the John Alden Trust for their cooperation and support, but we also need to thank our Resources Committee for their initiative, and our Planning Committee for their dedicated work about which we freely and justifiably brag.

### **Helping Others**

One organization that MCMA has been pleased to support over the past 15 years is the North River Collaborative in Rockland, MA. This nonprofit organization, formed in 1976, functions as an extension of eight member school districts in southeastern Massachusetts, for which it provides quality, cost-effective programs for special needs students. It currently offers programs to over 200 students ages three through twenty-two with a wide variety of handicapping conditions. As part of its services it operates the North River School, which serves adolescents with social/emotional disorders in an alternative middle/high school program that includes academic education, counseling services and vocational training. This school serves Quincy, Brockton, Plymouth and more than a dozen other towns in addition to the member districts.



Last year we were asked by North River Collaborative to support an expansion of their vocational training programs, with particular emphasis on their Desktop Publishing program. MCMA has helped this desktop publishing "class" develop into a full vocational program through our past support [*their words, not ours...the lab is shown above, and all of this equipment has been donated by MCMA*], but these technologies change and improve rapidly. The school felt that an HP Designjet T1200 sign making system would be a particularly beneficial addition, and we were pleased to be able to procure it for them. Additionally, we purchased a variety of bicycle repair tools to support the school's Small Engine Repair program to expand into the repair of motorized and non-motorized bicycles. (Our 2010 grant totaled \$9,690.00.)

North River Collaborative acknowledges challenges similar if not identical to those we hear from many other organizations we support. Their students demonstrate talent and intelligence, but they are unfortunately not highly motivated, having already failed in large traditional classrooms, and their self-esteem is low. Vocational training affords them an opportunity not just to learn specific employability skills, but to develop good work attitudes, habits and social skills as well. And the technologies challenge them to think creatively, make decisions, solve problems, reason and analyze. Some of the students do indeed go on to further education and employment in these fields, but all of them benefit from the experience. Our Planning Committee is very supportive of the work done by North River Collaborative, and very satisfied that our grants over the years have been put to good use. We are pleased to be associated with them.

## MCMA History



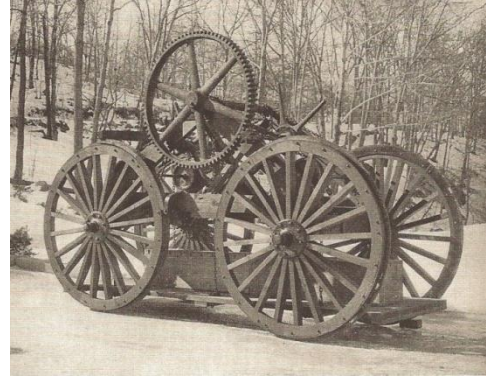
In an earlier issue we briefly noted the contributions of **Gridley Bryant** in connection with the building of the Bunker Hill Monument, but the achievements of this man warrant closer attention and wider acknowledgement. Bryant, who joined MCMA in 1822 and listed his trade as *mason*, was a largely self-educated master mason and engineer. Born in Scituate in 1789 and left fatherless at an early age, he was apprenticed by his mother at 15 to a builder in Boston, then went into business on his own when he became of age. He worked on wartime fortifications in Boston in 1814, and from 1818-21 constructed the 1.5 mile Mill Dam causeway [*now Beacon Street*] across the Back Bay, a great engineering achievement at the time. He was also contractor for a number of important buildings in Boston, and in 1823 he invented a movable derrick.

Bryant's association with the Bunker Hill Monument began in 1824, when he was asked by **Solomon Willard** (another member of MCMA) to prepare a cost estimate for an obelisk design Willard had recently submitted to the Bunker Hill Monument Association. Willard and Bryant had previously partnered on the construction of a bank building in Boston, a bank with which Thomas Perkins was associated. Perkins also served on the board of directors for the Bunker Hill Monument Association, and when Willard's design was accepted by the Association Perkins wrote a letter recommending Willard to handle the construction, and putting in a good word as well for "Bryant, the mason". Willard was indeed selected for the job of architect and superintendent, and soon thereafter convinced the Association that much money could be saved by self-quarrying rather than purchasing the enormous quantity of stone that would be required. In 1825 therefore, following a wide-ranging examination of potential quarry sites by Willard, the Association acquired the rights to take stone from a site in West Quincy. The granite was of fine quality, but the site was remote. Initially it was considered that the stones could be quarried and stockpiled until snow cover allowed for hauling the large blocks by sledge to the Neponset River four miles distant.

Gridley Bryant, who had been following experimentation with railways in England to carry tram cars from coal mines, proposed the building of a rail system with horse-drawn cars, but the Association dismissed the idea as too ambitious. Bryant persevered, though, taking his idea to Thomas Perkins and other businessmen, and convincing them to back his venture. In January 1826 the state legislature was petitioned for the incorporation of the Granite Railway Company, but the petition for this untried enterprise met with much opposition. The legislature was skeptical that a commercial railway would be in the public interest, citing right-of-way and abutting property rights, safety, and liability among its principal concerns. But Perkins' stature helped carry the day, and in March 1826, by a bare majority, the charter was granted, and work on the railway began only weeks later. [*It would be completed in October of the same year, and commercial operations began the following Spring. Among its early visitors were various dignitaries, including President John Quincy Adams, and a committee from the then-in-planning Baltimore & Ohio Railroad.*]

Bryant's initial design problems dealt with the roadbed and rails, and here he had to contend with two conditions the English did not face: heavier, more concentrated loads, and a three-foot frost line. His roadbed was essentially a wide dry-stone wall three feet deep supporting massive granite sleepers eight feet apart. The sleepers supported 6"x 12" timber rails topped with quarter-

inch thick iron plates on which the flanged car wheels rolled. Iron rods from the sleepers kept the rails upright and aligned, and crushed stone filled the space between the sleepers. *[The wood rails proved inadequate for the heavy loads involved, and were eventually replaced with granite rails.]* A lengthy wooded trestle carried the railway across a swampy area near the quarry end of the line. Bryant encountered other "railroad" problems as his project progressed, and as this was clearly new technology, he simply went about solving them on his own. In doing so, he developed the railway switch, or frog, and the turntable, railroad features still in use today. He also designed a number of different cars to suit various sizes of freight, and the principle of coupling the cars. The first car he designed and built was intended for large blocks and operated like a present-day straddle truck. *[A replica of this car is pictured to the right.]* A platform would be laid down between the rails and loaded with stones. The massive car would then be rolled over it, four chains attached, and the platform raised off the road bed by a powerful arrangement of gears. Strong brakes were manned on the loaded down-grade run to control the car and keep it from overrunning the horses. New car designs were developed to meet load demands, culminating in the two-truck, eight-wheel car that is still standard in railroad practice today. Other innovations included a snow plow and a granite polishing machine. Bryant was probably most proud, though, of the inclined system he designed to bring stone down 84 feet on an inclined plane after the Granite Railway Company purchased its own quarry. This ingenious device involved the use of an endless chain, to which loaded cars would be attached at the quarry end, and as they were lowered the empty cars were raised, and it remained in operation until the 1940s. *[The Company had lost money on its Bunker Hill contract, but soon procured other contracts and became quite successful.]*



Bryant never patented his inventions, believing that they should be for the benefit of all, but he took umbrage when another man (Ross Winans) took out a patent on a two-truck, eight-wheel car for use on the Baltimore & Ohio Railroad, and later sued the New York and Erie Railroad for infringement of his patent, undoubtedly intending to collect royalties from all the railroads in the country. Bryant contested the patent, and after an expensive and lengthy (five year) litigation that ultimately made it to the United States Supreme Court, the patent was overturned. Although the decision confirmed Bryant as the inventor of the eight-wheel car, he did not benefit financially from it, as the railroads simply ignored their obligations to him. Though a tremendous fortune had seemingly been within his grasp, Bryant had not been able to realize it, and he died a poor man at his home in Scituate in 1867. His Granite Railway, however, has been designated a National Historic Civil Engineering Landmark. The Quincy granite transported by it would go, in addition to the Bunker Hill Monument, into structures up and down the East Coast. And it surely served as the "proof of concept" project that inspired and enabled other railroad projects to develop. As a reporter wrote in its early days, "It was built so substantially and attracted so much attention that it may be regarded as the germ from which the railroad in America has sprung". Gridley Bryant may have lacked money at his death, but he accumulated a lifetime of success, accomplishment and respect, and he left quite a legacy. *[He also left a son, the very accomplished architect, and MCMA member, **Gridley J.F. Bryant.**]*

The primary sources for this article were [Quincy's Legacy](#) by H. Hobart Holly (published by the Quincy Historical Society), and [The First Railroad in America](#), published by The Granite Railway Company to commemorate its 100th anniversary in 1926.