JACOB HIRAM MYERS,
BRILLIANT INVENTOR OF
THE VOTING MACHINE

By Richard O. Reisem

In the national political election on
November 9, 2010, an electronic voting device for the
first time replaced the mechanical voting machine that
had been used in New York State for 114 years. Gone
was the bulky machine
where the voter faced lists of
political choices and with
one hand pulled a curtain
closed around the voter, who
then faced a large panel of
names and levers. Closing
the curtain provided privacy,
and the voter could make
selections from the array of
political parties by pushing
down a small lever over one
selected name for each
government office. The voter
could also change the selection by pushing the
depressed lever back up and
choosing another person for
that particular office. This
process was continued until
all the choices for the various
government positions had
been selected. The process was
private and it was secret. When the
voter pushed the lever to open the
curtain, the machine mechanically
recorded the votes cast and reset the
panel for the next voter. The machine
did not know who the voter was; it
only contained accumulated numbers
assigned to particular candidates.
When the election was over, voting
inspectors read the accumulated vote
counts that the machine had collected
for each candidate. In contested races,
insiders could return to the voting
machines and reread the numbers.

In last fall’s election, these bulky me-
canical machines were replaced by
sleek electronic scanners that scanned
paper ballots filled out by voters, who,

The Industrial Revolution of the 1800s
and 1900s produced mechanization of
every imaginable kind of process in our
society, and voting in early America
was in particular need of some kind of
means to control notorious corruption in
elections. Before the secret ballot was
employed in New York City, for example, Tammany Hall
controlled elections for decades through buying votes
from the burgeoning immigrant population. Tammany
Society officials directed the voting practices of immi-
grants at polling places by instructing them on how to
fill out their paper ballots and paying them small
amounts for their patronage.

The state of Victoria, Aus-
tralia, developed the Australian Secret Ballot in 1856.
This style of uniform official paper ballot was printed
by the government and listed the names of all can-
didates and issues in a fixed order and was counted by
hand. It compelled voters to fill out the ballot in secret.
The Australian ballot was considered for use in New
York City to reduce fraud
and corruption, but it was re-
jected because the ballot required literate voters and many foreign im-
grants were not literate in English and
would be denied voting rights.

At the 1851 Crystal Palace Exhibition
in London, inventor William Chamber-
lain, Jr. of Sussex exhibited the first
voting machine, which counted votes
automatically and incorporated a system
to prevent over-voting. But it never
went into production. Anthony C. Ber-
neck, a Chicago inventor, took Chamberlain’s idea and modified it to work in American elections in 1881, but again the machine was never introduced to the marketplace. It was Jacob Hiram Myers (1841-1920), a Rochester inventor, who devised the American Ballot Machine, later called the Myers Automatic Booth, in 1889 (U.S. Patent 415,549) which went into production and was first used in 1892 in a Lockport, New York, election and then in Rochester, New York, in the general election of 1896.

Jacob Myers came to the invention of his mechanical lever voting machine with lots of experience. Born in Bellefonte, Pennsylvania, he attended the famous Bellefonte Academy. That school is credited with educating more leaders, more governors, more senators, more judges, and more public administrators than any other school in Pennsylvania. After graduation, he studied law, but found his interests leaning more toward technology and business. He apprenticed at a farm near he newly established Agricultural College of Pennsylvania, which later became Pennsylvania State University. The college acquired state-of-the-art agricultural machines, which Myers studied firsthand.

After his apprenticeship, Myers became the agent for mowers and reaper-mowers in Centre County, Pennsylvania. His business was a huge success, partly because he sold the newest and best equipment and partly because he knew intimately how the machines worked and how they could be repaired. The combination reaper-mower machines that Myers sold and serviced were designed by a Syracuse inventor, Moses G. Hubbard, and Hubbard’s machines were manufactured in Rochester, New York by Rochester Agricultural Works.

Myers close relationship with Hubbard and the Rochester Agricultural Works persuaded him to move his wife, the former Emma C. Smith, and family to a house on South Union Street in Rochester, so that he could be more closely affiliated with the Rochester Agricultural Works. In fact, Myers designed several improvements to the raking mechanisms used on horse-drawn reaping machines and received U.S. patents for his inventions. The company hired Myers to be Superintendent of World Sales. In 1875, they sent him to Europe.

Myers returned to Rochester and bought another house on South Union Street. When he operated a factory in Ohio, Myers became aware of a manufacturer of bank safes and vaults in Cincinnati. He had ideas about making bank vaults burglar-proof. Working with the Cincinnati vault manufactory, he designed and installed burglar-proof vaults for banks across the country. It was a particularly profitable business, and he spent some of his newly acquired wealth on a handsome house at 280 Alexander Street.

Inventors, apparently, never cease inventing. In 1888, Myers began thinking about a safe voting machine. In his bank-vault days, he had acquired considerable knowledge and a number of patents for the intricate mechanisms of burglar-proof bank vaults. Machines with gears and levers were on the cutting edge of technology in the late 1800s. They had more moving parts than almost any other kind of machinery and required inventive brilliance as well as advanced knowledge. Jacob Myers was just the man for the job.

Looking at the 22 pages of Myers initial voting machine patent number 415,549, the 12 pages of refinements in patent number 424,332, the 15 pages of further refinements in patent number 494,588, and the 25 pages of major revisions in patent number 972,565, this project was by no means simple. Only by reproducing all 74 pages could we tell the story of how this voting machine worked. We will settle for a couple of descriptive paragraphs.

Myer’s machine was actually contained in a small, portable room with four walls and three doors. Spaces inside accommodated one person, with an exception for a blind or otherwise disabled person, who was allowed to be accompanied by an assistant. Inside the first door, which locked behind the voter, was a panel with vertical columns of names for each political party, say, a red column for Republican, a yellow column for Democrat, a blue column for
Prohibition (which was a party in Myer’s day), and a brown column for Socialist. If the voter preferred to vote a straight party ticket, he could depress all of the knobs down the column of the color of his party choice, and he was through voting. Once a knob was depressed, it could not be pulled out. You could not change your mind. Also, you could not vote for the same government position in two different columns. An interlocking mechanism prohibited pressing two knobs in the same horizontal row at once or after one knob in that row had already been pressed.

If the voter wanted to split votes among various parties, he would select the desired individuals from the several columns and push down the appropriate knobs, working his way to the bottom of the list of candidate positions. When the voting process was complete, he exited via a second door (remember that the first door behind him had locked when it was closed). Beyond the second door, the voter faced a third door, which could be opened only when the second door was closed. Exiting the third door put the voter free of Myer’s Automatic Booth with his vote safely stored in the lever voting machine.

When the voter closed the third door, the machine reset the voting panel and released the lock on the first door to admit the next voter. When polls closed, voting inspectors opened the back of the machine and read the number of votes for each candidate in much the same way as a meter reader tallies electrical usage from the dials on an electric meter.

Myers’ complex machine was designed to ensure every voter’s intentions were met and common errors prevented. Because the push-keys for all candidates in a particular category locked in place when one of the knobs was depressed, voters were prohibited from over voting.

To help people with limited English literacy while voting, Myers had a facsimile of the electoral panel inside the voting booth displayed in the polling place so that these people could obtain help in memorizing the panel locations of candidates that they wished to vote for. When Myers’ voting machine became available, it received high praise in newspapers across America. They said it provided secrecy without punishing illiterate voters. It was called an “inventive triumph” and attracted support from all political parties. In 1890, Rochester investors of both the Republican and Democratic parties raised capital for the establishment of the Myers American Ballot Machine Company and named Jacob Myers as president of the company.

New York State Senator Donald McNaughton, a Democrat, introduced a bill to make the use of Myers’ voting machine legal in all state elections. It was passed with an unanimous vote in the Senate and with an overwhelming majority in the Assembly. The bill became law in March 1892.

Myers’ machine was used for the first time in an April 1892 election in Lockport, New York. The city was for a long time run by Democratic political bosses, and members of both parties were fed up with the city government and demanded that the city adopt the new voting machine. They did and the special April election went smoothly. Although Democrats were in the majority, voters tossed out the political bosses in favor of Republican reformers, thereby making Lockport a leader in a municipal reform movement in America.

The Lockport results created great enthusiasm for Myers’ machine, which was installed in dozens of towns throughout upstate New York in 1893. In 1894, New York State voters approved an amendment to the state constitution enabling the use of Myers’ machines in all state elections.

Jacob Myers’ hometown, Rochester, was the first American city to install his voting machines citywide. By that time, Myers had competition in the field of voting machines. A former Myers employee, Sylvanus E. Davis, absorbed all of the technical information he learned at the American Ballot Machine Company and decided to go out on his own and develop his version of a voting machine that was manufactured by the United States Voting Machine Company. Davis tried to win the contract to supply voting machines for the Rochester election, but the city selected Myers’ machine and Rochester became the first city in America to use voting machines in a general election.

It was Alfred Gillespie’s voting machine that finally became the forerunner of all future mechanical voting machines. It utilized many features of Myers’ first machine.
All did not go well in Rochester at the election of 1896. Some machines, apparently, lost dozens, or perhaps hundreds of votes. A Democratic candidate for alderman, Jacob Gerling, became convinced that he lost the election because the Republican election officials had somehow tampered the machine to defeat him, a charge that on the surface appeared preposterous, but created a faror. Another losing candidate, adopting Gerling's argument, decided to sue. Gerling persuaded many of his fellow Democrats to oppose Myers's machine. Public sentiment turned against Jacob Myers and his mechanical voting machine. Newspapers reported outrage at the possibly gross failure of the 1896 election.

Myers' design utilized thousands of springs, many of them pushing against each other. They worked perfectly at first, but apparently with heavy use the machines began to operate erratically. Inspections of a number of machines seemed to confirm a design flaw. In the face of all the opposition to what was once called a "mechanical marvel", the board of directors of the American Ballot Machine Company voted to close the factory and fire Myers, all without giving him a chance to correct any defects.

Devastated by the board's actions, Myers and his son Oscar fled Rochester the following year, traveling to the Klondike, a region of Yukon Territory in northwest Canada, to join the gold rush that had started there in 1896 and ended the following year when the Myers arrived on the scene. After failing in the Klondike Gold Rush as well, Myers returned to Rochester, retired, his achievements all but forgotten, and died on April 1, 1920. He is buried in Range 4, Lot 68, Mount Hope Cemetery.

Sylvanus E. Davis, whose mentor had been Jacob Myers, suspected that there might be a problem with springs and designed his machine to provide direct, positive action. No springs. After his failure to obtain the Rochester contract, Davis moved his company to Jamestown, New York. But he still was unable to persuade Rochester to use his machines in the election of 1898, because another inventor of mechanical voting machines arrived on the scene.

The first successful election in Rochester incorporating voting machines occurred in 1898. This new machine was devised by an Iowa inventor, named Alfred J. Gillespie. It is interesting to note that Frank A. Gillespie, trustee emeritus of the Friends of Mount Hope Cemetery and photographer of a number of Friends publications, is a descendant of Alfred J. Gillespie. Frank's great great grandfather was a brother of Alfred J. Gillespie.

With his patents in hand, Alfred J. Gillespie moved to Rochester after the 1896 election fiasco. In 1897, Gillespie directed his attorney, Frank Church, to buy Jacob Myers' patents, which provided the basic structure for his improved machine. He then persuaded Yawman & Erbe, a Rochester manufacturer of business machines, to support his newly formed Standard Voting Machine Company and manufacture his voting machine.

Gillespie's superior voting machine had a simpler appearance than Myers' conception. Gillespie dispensed with the enclosed booth with three doors in favor of a privacy curtain that the voter closed around him when voting. Closing the curtain activated the machine. And his machine, for the first time, enabled voters to change their votes before they were recorded. When a voter was happy with his selections, he pulled a large lever, which opened the curtain and recorded his vote. Otherwise, Gillespie's machine did everything that Myers' did. Without the springs, that is. It was installed citywide in Rochester and Buffalo in 1898 and proclaimed the successful beginning of the voting machine era.

But even Alfred Gillespie was not destined for immortality. His Standard Voting Machine Company was short-lived. Just after the 1898 election, Davis' United States Voting Machine Company filed a patent infringement lawsuit against Gillespie's Standard Voting Machine Company. To partly settle this suit, Rochester and Jamestown investors formed the United States Standard Voting Machine Company in 1900. It purchased the patents of both of the other companies. And although Davis' patents were purchased, they were not used. The new company chose to manufacture an improved version of the Gillespie machine, which incorporated Myers' patents. It was decided that the Jamestown factory should produce the new machines, which it did until the company was bankrupt in 1983.

Eventually, the new company became the Automatic Voting Machine Company, which dominated the mechanical voting machine industry. By 1930, lever machines had been installed in virtually every major city in the U.S. But even the long-lasting Automatic Voting Machine Company was eventually bankrupt in 1983, when punch-card and other voting systems began to replace the bulky lever voting machines.

During the 91 years that lever voting machines were manufactured and 23 more years that dependable existing machines continued to be used, mechanical voting dominated American political elections. Over the years, the machines were improved and modified in a number of ways, but all of them were based on the original concept created by the brilliant ingenuity of Jacob H. Myers.

(Author's Note: This article was prepared from information researched by Marilyn Nolte.)
The Friends of Mount Hope Cemetery held their annual meeting on Tuesday, April 5, 7:00 p.m. at Brighton Town Hall. It was an evening filled with fascinating and informative presentations, and the auditorium was packed with an overflow crowd. President Marilyn Nolte reviewed the many activities of our growing organization, which now numbers more than 600 members. Volunteer efforts by board members exceeded 5,000 hours for the second year, including substantial effort by the Landscape Committee to implement recommendations of the comprehensive Cultural Landscape Study completed in May 2009. The highly successful tour season included two Torch Light tours that attracted over 900 tour-goers. Scores of members made donations to restore monuments in the cemetery in our Ugly Wall project. Through Friends efforts, the cemetery became a designated site on the National Underground Railroad Network to Freedom program. Nolte continued with a host of other accomplishments.

Treasurer Denis Carr reported record income from membership dues, tours, events, gifts, and grants. Even after spending thousands on restoration projects over the past few years, the organization has more than $60,000 invested for future projects to improve the cemetery.

Vice-president and author Richard Reisem described a new Friends book, Frederick Douglass and the Underground Railroad, to the audience—in the photo showing a map identifying the gravesites of 35 important Underground Railroad participants. In the book, GPS locations are noted for all of those abolitionists.

Teenagers Nahoma Presberg and Amanda Ghyssel represented Rochester’s School of the Arts students who prepared a video titled Post Mortem in which they interviewed high school students and recorded scenes in Mount Hope Cemetery. Their question to students was “What do you think happens to you after you die?” The fascinating and diverse opinions were presented in a showing of the video. The program won the “Best Investigative Documentary Produced by Teenagers” in a local competition.

The main speaker of the evening was Democrat & Chronicle reporter and author Bob Marcotte, who kept the audience engrossed in his stories of Rochester area soldiers in the Civil War. His book, Where They Fell, sold out after the meeting, as did Reisem’s book on the Underground Railroad. Delicious refreshments capped the very special evening.
BEVERLY WAUGH JONES: LESSON IN POLITICAL COURAGE

By Phyllis C. Stehm

Beverly Waugh Jones, the son of a politically active father, Hubbard W. Jones of Rochester, had his political courage tested when he came into contact with Susan B. Anthony one cool autumn day in 1872. A young man of 24 years, Jones was present at the Board of Registration, reportedly a local barbershop in the First Election District, 8th Ward, 29th Congressional District, when Susan B. Anthony—along with her three sisters, Guelma McLean, Hannah Mosher, and Mary Anthony—presented themselves on Friday, November 1, 1872 to register to vote in the presidential election.

Jones was again present at the West Avenue (now Main Street) polling place when Susan returned with her sisters to vote on Tuesday, November 5, 1872. In his fourth year serving as an elected and duly appointed election inspector, and as a registered Republican, Jones initially refused to accept Miss Anthony's voter registration, but after much discussion of the 14th constitutional amendment with Miss Anthony, he was eventually persuaded by her and others present to accept it.

On election day, Miss Anthony wrote in her diary that Edwin T. Marsh, the other Republican election inspector, and Jones agreed to put her vote in the box. Anthony’s diary entry further states that Jones said, “We’ll fight it on this line if it takes all winter,” perhaps realizing that his acceptance of her vote would be challenged in court. Little did he know that at the time that he would be indicted on four counts of election fraud, and be convicted at a trial on June 18, 1873 in the Canandaigua Courthouse. All three election inspectors—Jones, Marsh, and the Democratic inspector William B. Hall—refused to pay the judge’s imposed fine and court costs, which resulted in their arrest February 25, 1874.

Beverly Jones spent a brief morning in jail, before being quickly bailed out by his father. In a diary entry on Tuesday, March 3, 1874, Miss Anthony reports that in the city election that day, both "Marsh and Jones were re-elected to the office of inspector by a good majority vote; thus the 8th Ward rebuked Judge Hunt by honoring the boys." President Ulysses S. Grant pardoned the Republican election inspectors, Beverly Jones and Edwin T. Marsh, as well as the Democratic inspector, William B. Hall, on March 3, 1874.

A cement roofer by trade in 1872, Beverly W. Jones was born in March 1848 to Hubbard W. and Huldah D. Jones. At the time of this event, Beverly Jones lived with his wife, Elizabeth “Libbie” Ann Renfrew, whom he married in March 1869, and their son, Theodore Beverly Jones, born February 1870, at 13 W. Atkinson Street in the 8th Ward. Only seven short years later, Beverly Jones died September 6, 1879 at age 31 years, 6 months and 6 days. He died of consumption, and was buried in a single grave in Mount Hope Cemetery, Section L, E1/2, Lot 92.

His wife, Libbie, never remarried. Afterward, she made her home until 1924 with her younger brother, Robert Renfrew, and sister, Jennette M. Renfrew, in Rochester. In later life, Libbie lived with her son, Theodore, in California and died July 26, 1939 in Cave Creek, Maricopa County, Arizona, where she is buried in the Greenwood Lawn Memorial Cemetery. William B. Hall, the Democratic election inspector, was the son of Asa B. Hall, who is buried in Mount Hope.
NEW CREMATORY
AT MOUNT HOPE

Newly completed at Mount Hope Cemetery is a state-of-the-art crematory that includes a viewing room where a family can hold a ceremony before committing a body to ashes. Comfortable furniture allows families to remain during the entire cremation process. Facilities include a mini-kitchen with sink, refrigerator, coffeemaker, and microwave oven in case families want to include food and beverages as part of a memorial service.

The expansive new facility also includes a wheelchair elevator and stairs down to the room containing the cremation retorts. A third room in the complex contains refrigerators to store bodies before cremation and a state-of-the-art machine that pulverizes bones and automatically separates metals from the ashes.

Cemetery manager Jeffery Simmons said that cremation is an increasingly preferred method of handling deceased remains and that this advanced facility provides all of the features requested by various ethnic and religious groups.
GUIDED WALKING TOURS OF MOUNT HOPE CEMETERY

Free public tours every Saturday at 1:00 p.m. and Sunday at 2:00 p.m. from May through October. Meet at north gatehouse.

2011 THEME TOURS

$5.00/Free for members, except Torch Light Tour.

Sunday, May 22, 8:00 a.m. Bird Watcher Tour.
Meet at north gatehouse.

Friday, June 17, 7:00 p.m. Mischief, Murder & Mayhem.
Meet at north gatehouse.

Saturday, June 18, 11:30 a.m. Rochester & Erie Canal.
Meet at north gatehouse.

Saturday, June 25, 1:30 p.m. Civil War Tour.
Meet at north gatehouse.

Sunday, June 26, 10:00 a.m. Jewish Roots.
Meet at cemetery office.

Saturday, July 16, 10:00 a.m. Famous and Forgotten.
Meet at cemetery office.

Friday, August 12, 6:30 p.m. Mischief, Murder & Mayhem.
Meet at north gatehouse.

Saturday, August 13, 12:00 noon. Revolutionary War.
Meet at north gatehouse.

Saturday, August 20, 1:00 p.m. Ice Cream Tour.
Meet at cemetery office.

Saturday, September 10, 12:30 p.m. Lost Secrets.
Meet at north gatehouse.

Saturday, September 17, 12:30 p.m. Geology at Mount Hope.
Meet at north gatehouse.

Saturday, October 22, 12:00 noon. Fall Foliage Tour.
Meet at north gatehouse.

Saturday, October 22, 6:00 p.m. Torch Light Tour. $7.00/10.00.
Meet at north gatehouse.

Tuesday, October 25, 6:00 p.m. Torch Light Tour. $7.00/10.00.
Meet at north gatehouse.

Refreshments after all tours. Visit www.fomh.org for important ticket information.