

# John C. Garand's Rifles: His Very Own

By Allan D. Cors

**Author's Note:** I have had a 50 year fascination with the U.S. RIFLE, CALIBER .30, M1, more commonly known as the Garand. I acquired the first Garand for my collection in 1960. It is a Lend Lease British proofed rifle in nearly new condition that was imported into the U.S. by Interarmco of Alexandria, Virginia. It is still in the collection. In 1966, I started competitive shooting with a match grade Garand and received the Army's Distinguished Rifleman's Badge in 1967. That rifle also has a special place in the collection. My interest in collecting military long arms has always included an intense focus on collecting examples of every vintage, manufacturer and configuration of the Garand rifle. In 1999 and 2001, irresistible opportunities were presented to acquire two rifles that were personally owned by John C. Garand, as well as many of his personal effects and documents. As the temporary custodian of these historic artifacts of American history and firearms technology, I am pleased to share them with you.

## THE M1 RIFLE

John Garand's rifle stands as one of the most important technological developments in modern small arms history. His talent as a machine and tool designer, combined with the production capabilities of Springfield Armory, gave the WW II U.S. soldiers and Marines a significant competitive edge with large quantities of a very robust and reliable semi-automatic rifle.

We all know of General George S. Patton's praise for the M1: "—the greatest battle implement ever devised." Less known is President Eisenhower's telegram to Garand upon his retirement from Springfield Armory in 1954:

"The combat soldier's best friend is his rifle and thanks to your technical skill and diligence the American infantryman has had your invention, the Garand rifle, as a reliable and competent friend on the battlefield."

In early 1942, General Douglas MacArthur said,

"The performance of this rifle under actual combat has been excellent. The weapon is operated without mechanical defects and has not developed stoppages from dust and dirt when used in fox holes. It has been used in almost constant action for as much as a week without cleaning or oiling."<sup>1</sup>

A total of 5,468,722 M1 rifles were made during the period beginning in July 1937 until the last rifle came off the line at Springfield Armory at 10:43 a.m. on May 17, 1957. Before and during WW II Springfield Armory produced



3,526,922 rifles and Winchester produced 513,880 for a total of 4,040,802 rifles made by 1945. The Korean War drove the re-opening of production at Springfield in 1952 as well as at two new manufacturers of the rifle, International Harvester and Harrington & Richardson. Springfield produced 661,747 rifles, IH produced 337,623 and H&R produced 428,600.

Revered by those who carried it in their military service to the United States of America and eagerly collected by those who did not, the M1 "Garand" is truly an icon in American military history.

## WHERE THE STORY BEGINS

Jean Cantius Garand (Figure 1) was born on January 1, 1888 in St. Remi, a farming community near Montreal, Quebec, Canada. In 1898, three years after his mother's death, his father and eleven brothers and sisters moved to Connecticut. At age fourteen he started working as a floor sweeper and bobbin boy at Slater's Mill, the textile factory that employed his father. Dropping out of school in the fourth grade, he began developing his mechanical skills and by the age of 18 was working as a tool and gauge maker for Brown & Sharpe in Providence, Rhode Island. In 1915 he joined the



Figure 1. John Cantius Garand.



Figure 2. Primer-actuated rifle designed by Garand for National Bureau of Standards, 1919.

Federal Screw Corporation as a foreman and machine designer. When the United States entered into WW I, John Garand moved to New York City and worked for a manufacturer of micrometers.

By 1916 the widespread use of successful machine guns was well known. Maxim, Vickers, Hotchkiss and Lewis were successful designs in large scale production. On the other hand, there were few semi-automatic or fully automatic rifles made in even small quantities and none widely used. They were, in general, too frail, too heavy or too complex. With the notable exception of the French models 1917 and 1918 semi-automatic rifles, there was a dearth of self-loading rifles. The Danish Bang, the Mexican Mondragon, the Chinese Liu, the British Farquhar-Hill and Germany's Mauser Model 1916 are examples of early and very limited efforts to give more fire power to the combat infantryman.

#### *Garand's First Rifle: National Bureau of Standards*

Press reports about the dismal performance of the U.S. Army's model 1909 Benet-Mercie machine rifle and subsequent ordnance trials sparked an interest in firearms design by Garand that resulted in him designing a fully automatic machine rifle, completed in June 1918. He submitted his design to the U.S. Navy. The design was then passed on to the U.S. Army's Ordnance Department for evaluation. Garand's design was rejected by Major Julian S. Hatcher and Captain G.U. Burdett at the Ordnance Department; however he was directed to the National Bureau of Standards where his concept was found to have merit. The Bureau of Standards hired him on August 16, 1918 to make a model of his machine rifle. He completed the model in 1919 (Figure 2) in his position as "Master Gauge and Gun Experimenter".

A unique feature of this first rifle was the "primer-actuated" concept for the self-loading action function. This Garand design principle is described as:

"... The principle of the first Garand rifle was a construction that permitted the primer to move rearwardly a slight fraction of an inch in the cartridge when the gun was

fired. That limited movement of the primer, due to the pressure of the gases developed by the explosion was made to operate an actuator by virtue of a tappet. The tappet, in addition acted as a firing pin, the actuator as a striker..."<sup>2</sup>

The rifle was successfully demonstrated in the spring of 1919. In Mr. Garand's personal diary, he made the following entry (Figures 3, 4 and 5) for Saturday, April 5, 1919:

*First successful test of gun at the Bureau of Standards.  
Clearance = .012"  
Dwell = .337"  
Spring = .072" Music wire with ten coils 1 3/16" Dia.*

Another entry was made for Saturday, April 12, 1919:

*"Demonstrated at the war college on above date."*<sup>3</sup>

While this prototype of a fully-automatic machine rifle was not further pursued, its performance and design so impressed the Ordnance Department that John Garand was

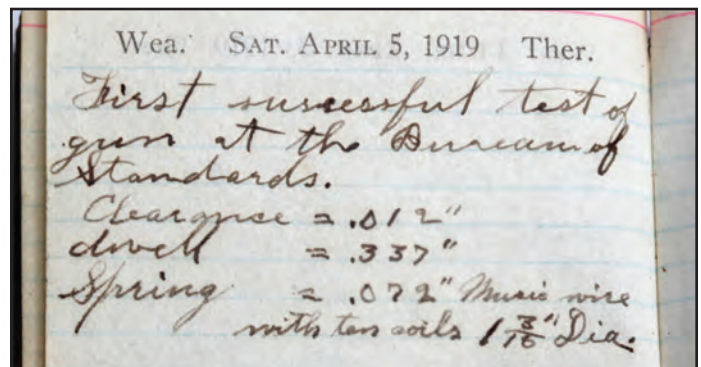


Figure 3. Garand diary, April 5, 1919.

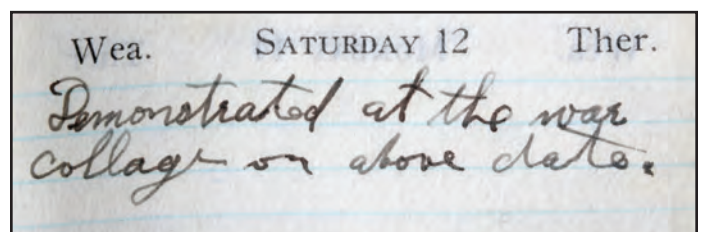


Figure 4. Garand diary, April 12, 1919.

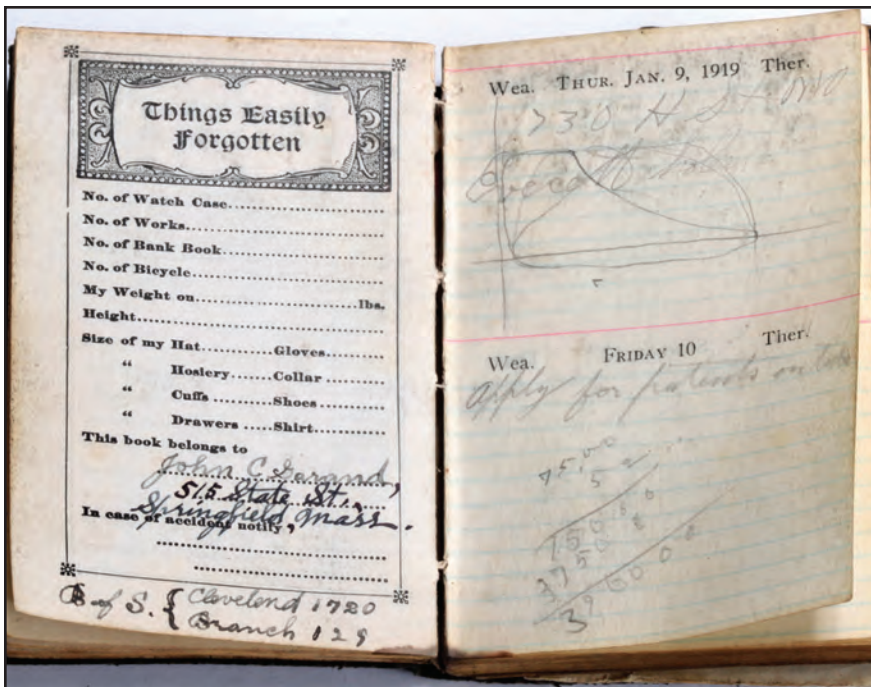


Figure 5. Inside cover of Garand diary, 1919.

asked to develop a semi-automatic rifle at Springfield Armory based on the basic design of his machine rifle. His diary entry (Figures 6 and 7) for October 27, 1919 states:

*Col. Herbert O'Leary*

*Ord. Dept.*

*Col. L.O. Wright*

*Ord. Dep.*

*7<sup>th</sup> & D St. B. building*

*"On this date I agreed (sic) with the above officers to build a gun made at the Springfield plant"*

On Nov. 4, 1919 he began his career as a Civil Service employee at Springfield Armory.

#### *Garand's Second Rifle: T1920*

Utilizing his primer-actuated system, Mr. Garand continued the development of this concept in 1920 and produced a rifle at Springfield Armory designated "T1920" (Figure 8). The rifle used a turning bolt with lugs that locked the bolt into the closed position. It used 20 and 30 shot magazines.



Figure 8. Garand's second rifle T1920.

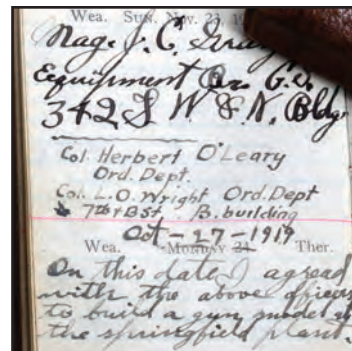


Figure 6. Garand diary, November 27, 1919.

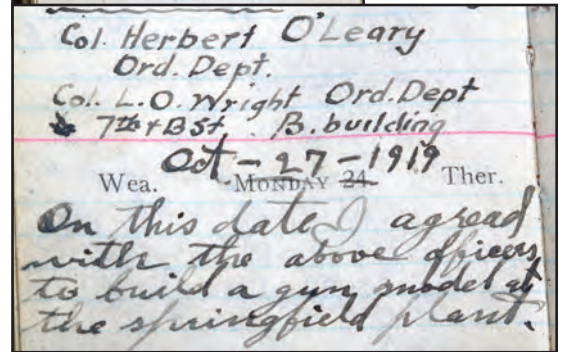


Figure 7. Close up of November 27, 1919 entry.

His rifle was evaluated by an Ordnance Department board in May 1920 along with the Danish Bang rifle, a Berthier design made by the U.S Machine Gun Company and a rifle submitted by Colt Patent Fire Arms Manufacturing Company. All were deemed to be unsatisfactory and in need of improvement.

#### *Garand's Third Rifle: Model 1921*

With substantial modifications to his design, John Garand's next rifle was designated as the Model 1921 (Figures 9, 10, 11 and 12). Chamber for the 30-06 cartridge with a five-shot integral magazine. The rifle retained his primer-actuated system with a new non-turning bolt design. It was locked in the closed position with a hinged block at the back of the bolt that dropped down against a locking shoulder. It performed well in the Ordnance Department tests of July 1922. In November 1922, a pilot model of the 1921 rifle was sent to the Infantry School at Ft. Benning, Georgia and to the Cavalry School at Ft. Riley, Kansas. On March 21, 1923, the Ordnance Committee recommended a number of specified modifications and authorized the



Figure 9. Garand's Model 1921.



Figure 10. Receiver of Model 1921.



Figure 11. Receiver ring of Model 1921.

construction of 24 rifles which later became known as the Model 1924 (Figure 13).<sup>5</sup>

The rifle shown in Figures 9-12 is one of the two Model 1921 rifles manufactured. It is unnumbered and marked on the front of the receiver, "Garand Auto Loading Rifle." The rifle is 44¼" long with a 21¼" barrel. The muzzle diameter is .62, the same as a Model 1903 rifle. The rear sight and butt plate appear to have been taken from a U.S. Model 1917 rifle.

This particular rifle was in John Garand's personal possession and was given by him to a family acquaintance in the 1960s. It was purchased from that gentleman by Bert Kellerstedt of Springfield, Massachusetts and passed on to two other collectors before being acquired by the author. In a letter to the author dated February 16, 2002, Mr. Kellerstedt said in part,

"In the mid 1960's a good friend and fellow Springfield collector, John Y. "Jack" Hess, was dating John Garand's daughter. He got into the cellar of John Garand's house in Springfield, Mass and found a rusty old rifle that turned out to be one of the two Garand semi auto primer-actuated rifles

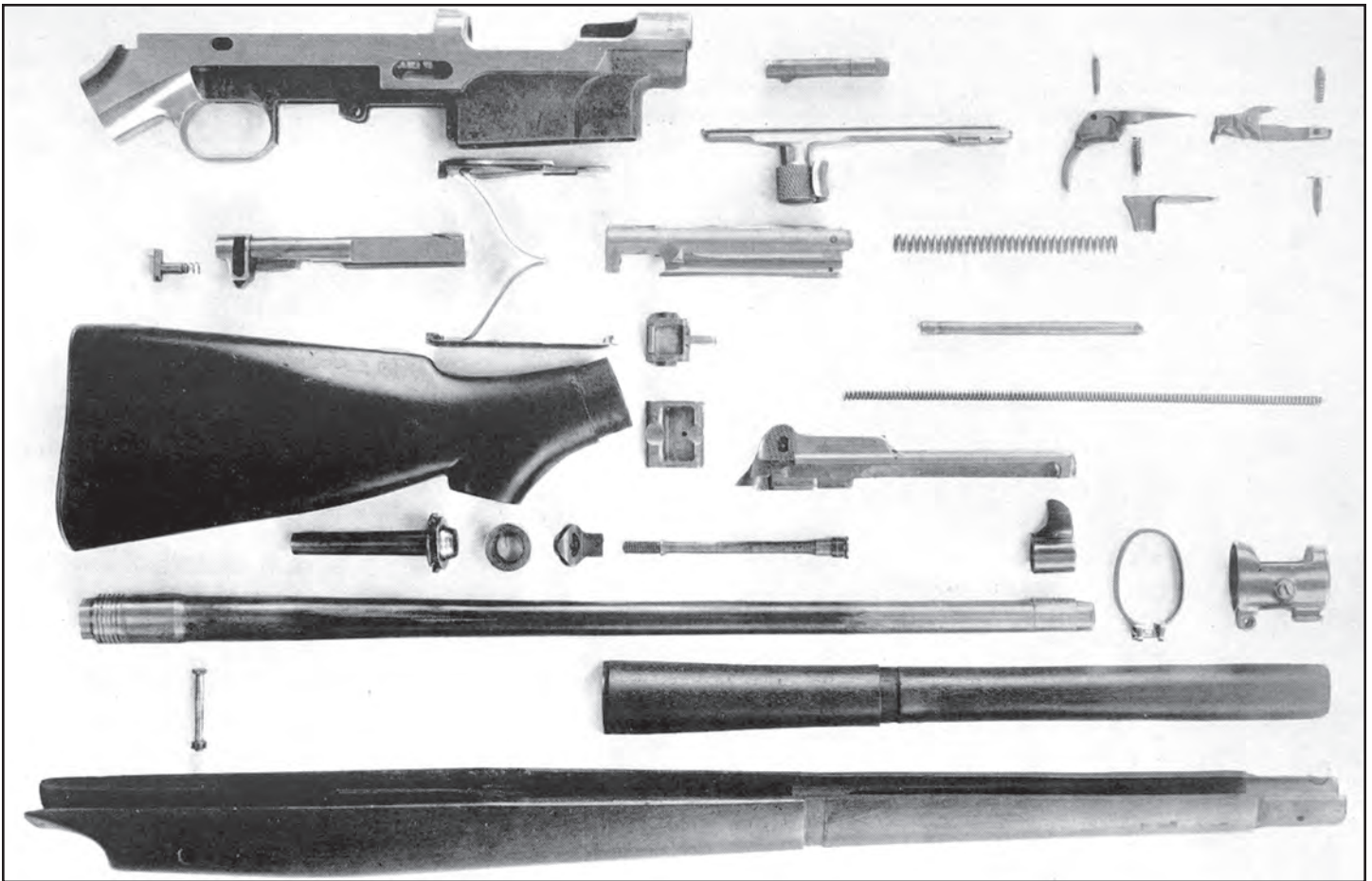


Figure 12. Action parts of Model 1921.

made in the 1922 period at Springfield Armory by John Garand. Jack showed interest in this rifle and it was given to him by John Garand along with a box of ammo for this rifle. Jack cleaned up the rifle and tried to fire it but the ammo mis-fired, so he didn't get to shoot it. The rifle stayed in his Springfield collection until 1968 when Jack decided to break up his collection."<sup>6</sup>

The severe pitting on the front of the barrel and on the receiver suggests that the rifle was stored in a damp environment during some part of its existence.

As described above, all of Mr. Garand's primer-actuated rifles fired a 30-06 cartridge utilizing a special primer that moved slightly to rear upon firing. The primer acted as a piston that drove the firing pin/tappet rearward (two or three hundredths of an inch) and cycled the self-loading action. Figure 14 is a 20 round box of these cartridges

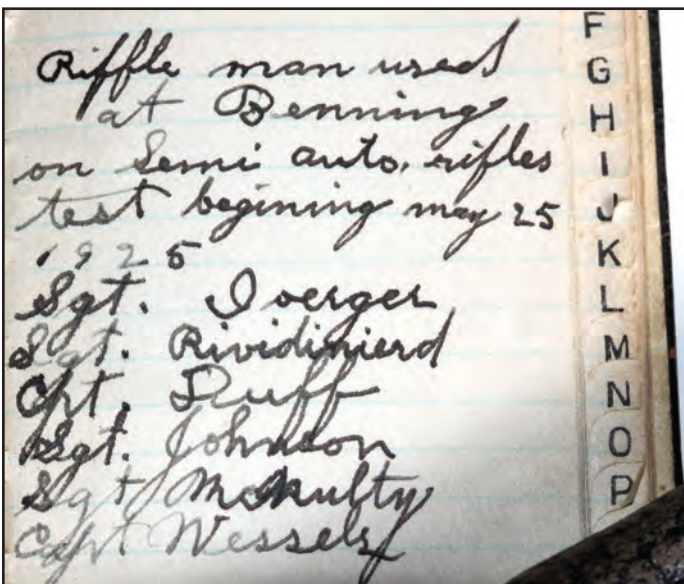


Figure 13. Garand diary, May 25, 1925.

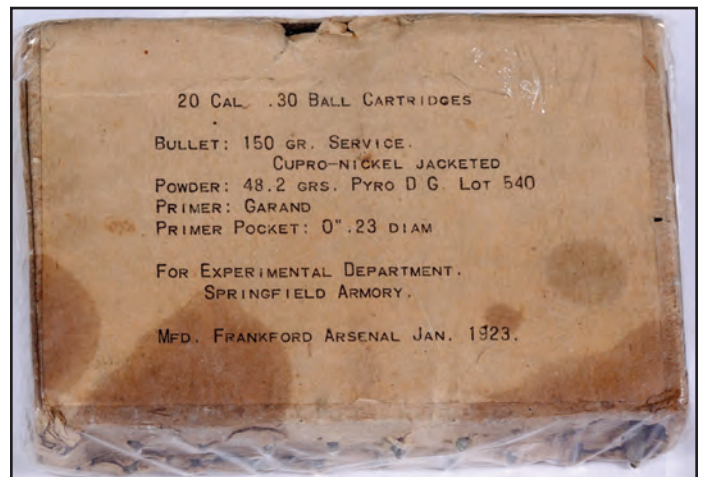


Figure 14. Box of experimental .30 caliber cartridges for primer-actuated rifles.



Figure 15. Rice Medal from American Ordnance Association.



Figure 16. Obverse of Rice Medal.



Figure 17. Rice Medal Certificate.



Figure 18. American Society for Metals award.

number of outstanding publications noted in the bibliography. In particular, see the books by Scott A. Duff, Billy Pyle, Bruce N. Canfield and Major General Julian H. Hatcher.

### Honoring John C. Garand

Early on, Mr. Garand was recognized by numerous organizations for his extraordinary contribution to the interests of the United States. Among them are:

produced at Frankford Arsenal in January 1923 and acquired by Bert Kellerstedt along with the Model 1921 rifle. Note the “Garand” primer and the critically important specification for the diameter of the primer pocket. “Pyro D.G.” powder is the double-graphited powder used with a 150 grain flat based bullet in the Model 1906 ammunition. The later adopted 30-06 cartridges, the M1 cartridge (172 grain boat-tail bullet) and the M2 cartridge (150 grain flat based bullet) both used IMR, or Improved Military Rifle powder.<sup>7</sup>

### AND THE REST OF THE STORY

The subsequent development of John Garand’s development of a semi-automatic rifle is well-described in a number

- 1941 The first recipient of the General John H. Rice Medal from the American Ordnance Association, November 18, 1941 (Figures 15-17)
- 1941 The Holley Medal from the American Society of Mechanical Engineers
- 1942 The Lord & Taylor Design Award<sup>8</sup>
- 1942 The American Society for Metals Special Award, October 1942 (Figures 18 and 19)
- 1943 The John Scott Medal from the City of Philadelphia
- 1949 Honorary Degree, Doctor of Engineering from Lehigh University (Figure 20)
- 1973 Ordnance Hall of Fame, Ordnance Center, Aberdeen Proving Ground<sup>9</sup>



Figure 19. American Society for Metals certificate.

A \$1,000 honorarium accompanied the 1942 award from Lord & Taylor. Mr. Garand directed this cash award to the Army Emergency Relief Fund. Earning an annual salary of only \$3,500, this was a remarkably generous gift from Mr. Garand to the Fund.<sup>10</sup>

for Merit (Figures 21, 22 and 23) was presented to Mr. Garand by Secretary of State Cordell Hull on March 28, 1944. He was only the second recipient of this award which was given to civilians for the performance of outstanding service during WW II. It is the civilian equivalent to the military Distinguished Service Medal, surpassed only by the Congressional Medal of Honor and the Distinguished Service Cross. Other high profile people who later received this honor were: Irving Berlin, Dr. Enrico Fermi, Henry Ford, Leroy R. Grumman, J. Edgar Hoover, Bob Hope, Cordell Hull, Frank Knox Dr. Robert J. Oppenheimer, Linus Pauling and Ernie Pyle.

On June 27, 1980, Secretary of the Army Clifford L. Alexander, Jr. dedicated the Garand Conference Room, 2E680, in the Pentagon (Figures 24-29). Following the renovations at the Pentagon after the 9/11 attack, the



Figure 20. Doctor of Engineering from Lehigh University certificate.



Figure 21. Medal for Merit, blue leather case.

conference room honoring John C. Garand was relocated to 3D684.

SERIAL NUMBER  
1,000,000



Figure 22. Medal for Merit.

The M1 rifle was approved for standardization on January 9, 1936 and the first production rifles were completed and tested in July 1937. While there was very limited production of the M1 rifle prior to 1941, production soared after the entry of the United States into WW II. In November 1942 serial number 1,000,000 was manufactured at Springfield Armory (Figures 30-34). The barrel is dated 10/42. With a selected fiddle back walnut stock and matching hand guards, the rifle was placed in the Museum at Springfield Armory. To honor his service to the United States, this rifle was presented to John Garand, age 65, at his retirement dinner on April 30, 1953 (Figures 35 and 36). It



Figure 23. Presentation of Medal for Merit to Garand by Secretary of State Cordell Hull (left).

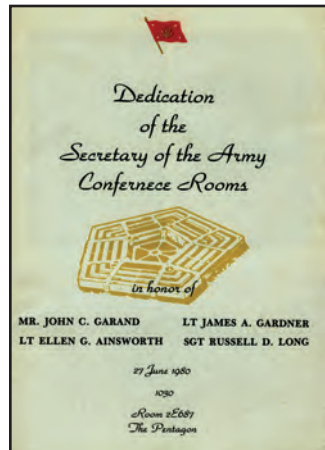


Figure 24. Program for dedication of Garand Conference Room.



Figure 25. Entrance to Garand Conference Room.

remained in his possession until he passed away at age 86 on February 16, 1974.

Serial number 1,000,000 was acquired from Mr. Garand's son, Richard, in November 1999. It should be noted that the Garand family clearly appreciated the significance of this rifle and were concerned about who would be the next custodian of this historic artifact. With Scott A. Duff representing the interests of the family, the rifle was quietly offered to a number of potential buyers. Receiving three strong offers for the rifle, the family required personal resumes of potential buyers. In addition, Mr. and Mrs. Richard Garand traveled a long distance for a final face-to-face interview with the buyer before agreeing to sell the rifle. Significantly, the selected buyer was not the highest bidder.



Figure 26. Plaque at entrance to Garand Conference Room.

### Presentation Cartridges

Also presented to Mr. Garand at the retirement dinner was a silver plated 8 shot en bloc clip of gold plated drill purpose .30 cal. Cartridges (Figure 37). The clip is stamped in the center of the raised rings on the back "BR-W" and is engraved:

John Garand      Spring Division  
April 30, 1953      Borg-Warner Corp.

Engraved on each of the eight gold cartridges is a single name: Jack Becker, Adolph Bergetz, Dan Gillespie, Pat Gillett, Jim Niblick, Bill Schumacher, Harry Troendly and Art Welch.



Figure 27. Unveiling of plaque by Secretary of the Army, Clifford Alexander.



Figure 28. Reception area for Garand Conference Room.



Figure 29. Garand portrait in Conference Room.

At this time, it is not known where these people worked or their relationship with John Garand. Perhaps they were associated with Borg-Warner or the Springfield Armory?

#### COMPENSATION FOR JOHN C. GARAND

John Garand began his career at Springfield Armory on November 4, 1919. His salary was \$3,500 per year.<sup>11</sup> His salary was not increased until after his rifle was adopted in January 1936. As recorded by Major General Julian Hatcher in his book,

“ . . . as soon as Garand's design had been officially adopted, he was treated very much as though he had been an outside inventor whose patent had been bought; it was more or less felt that his part of the job was finished, and that from now on it was up to the production force. In fact, one officer of high rank gravely recommended that in view of the shortage of appropriation he be dropped from the payroll to save his \$3,500 salary. I am glad to be able to state that this proposal was received in the Ordnance Office with indignation,

and it was considered monstrous that anyone could consider so lightly the obligation of the Government to a man who had faithfully given sixteen years of his life to the rifle's development.”<sup>12</sup>

For nearly three decades, efforts were made by members of the Massachusetts delegation in the U.S. House of Representatives and the U.S. Senate to gain the passage of a “private bill” for the benefit of John C. Garand. On June 9, 1941, H.R. 5276 (Figure 38) was introduced by Congressman Charles R. Clason. The provisions of the bill directed the Secretary of the Treasury to pay John C. Garand the sum of \$100,000. “Such sum represents additional remuneration for the very valuable services rendered the United State by said John C. Garand in the development of the functioning and in the production of the Garand M-1 semiautomatic rifle.” No action was taken by the Congress on this proposal.

Similar legislation was introduced by Congressman Edward Boland on May 31, 1962 (H.R. 11962), and again on January 9, 1973 (H.R. 1691). Congressman Boland “. . . constantly asserted that this is a moral obligation that the Government, in equity and good conscience should honor.”<sup>13</sup> Supported by the Springfield Armory Historical Association, Mr. Garand alleged that he had been negotiating to sell the rights to the M1 rifle to Winchester Repeating Arms and, “. . . that a contract had been drawn up, and was awaiting



Figure 30. Wood presentation chest for M1 rifle, serial number 1,000,000.





Figure 31. Serial number 1,000,000 M1 rifle in presentation chest.



Figure 32. Brass plaque on presentation chest.



Figure 33. Heel of receiver, serial number 1,000,000.

signing.”<sup>14</sup> An article based on an interview with Garand that appeared in the *New York Times* on June 27, 1971, stated that, “A former Springfield Armory commander told him that he would be paid for his work as soon as world tensions eased. Mr. Garand did not disclose the commander’s name, but he said: ‘I believed this man and I didn’t ask for any written statement. I believed Congress would pay. It was a word of mouth commitment.’”<sup>15</sup>

The War Department and the Department of the Army consistently opposed the proposed legislation with adverse

reports on the matter. No action was ever taken on any of these proposals. Bruce N. Canfield, author and firearms historian, is currently in the process of conducting an extensive study of the M1 rifle related files of Edwin Pugsley, the General Superintendent/Vice President of Winchester from



Figure 34. M1 rifle, serial number 1,000,000.

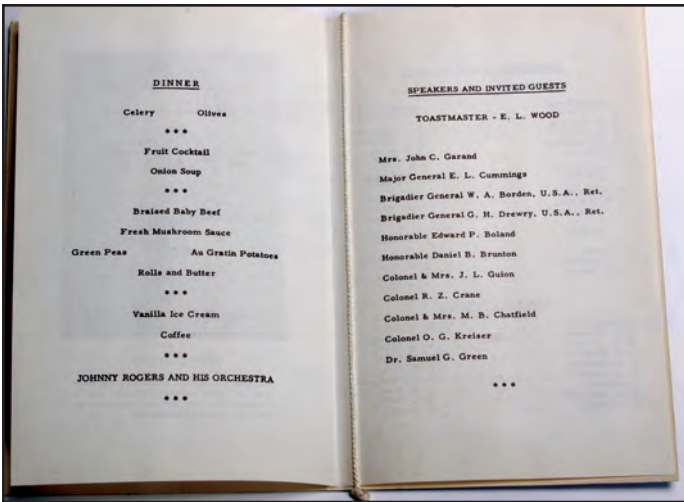


Figure 35. List of honored guests at Testimonial Dinner & Dance, Hotel Kimball, Springfield, MA.

1911 to the mid-1950s. He has not found documentation that supports the inventor's assertion. In fact, there are numerous documents that make it clear that John Garand assigned all of his rights to the government.

A poignant moment in this controversy comes from a letter to John Garand from Dorothy Jerome of Helena, Montana dated August 12, 1971 (Figure 39).

*Dear Mr. Garand:*

*I am sending you my family's share of what is due you for your invention of the rifle, the Garand M1 which helped our fighting men.*

*This does not indicate my belief or disbelief in the legality, necessity or moral righteousness of these wars. It is rather that I feel that since we the people are the govern-*



Figure 36. After dinner group photo: Col. James L. Guion, Commander of Springfield Armory (second from left), Congressman Edward Boland (second from right) and Garand holding the serial 1,000,000 M1 rifle.



Figure 37. Engraved gold plated cartridges in silver en bloc clip presented to Garand.

*ment, I want to fulfill my family's share of the obligation to you if in fact our government has not done so in our behalf. (enclosed is a check for \$1.00)*

*Dorothy Jerome  
520 Third St.  
Helena, Montana*

*P.S. We read about you in the "National Enquirer"*<sup>16</sup>

**JOHN C. GARAND'S  
PERSONAL EFFECTS**

A substantial number of his tools, documents and other personal items were passed along by the family in 2000-2002 (Figures 40-46).

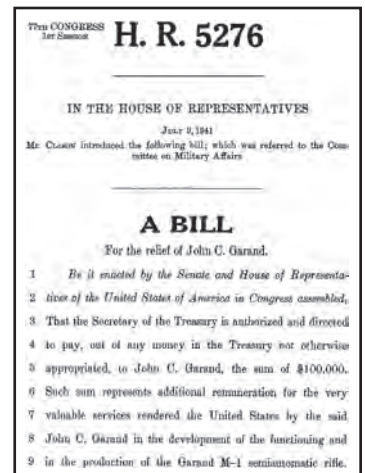


Figure 38. HR 5276 proposed \$100,000 payment to Garand.

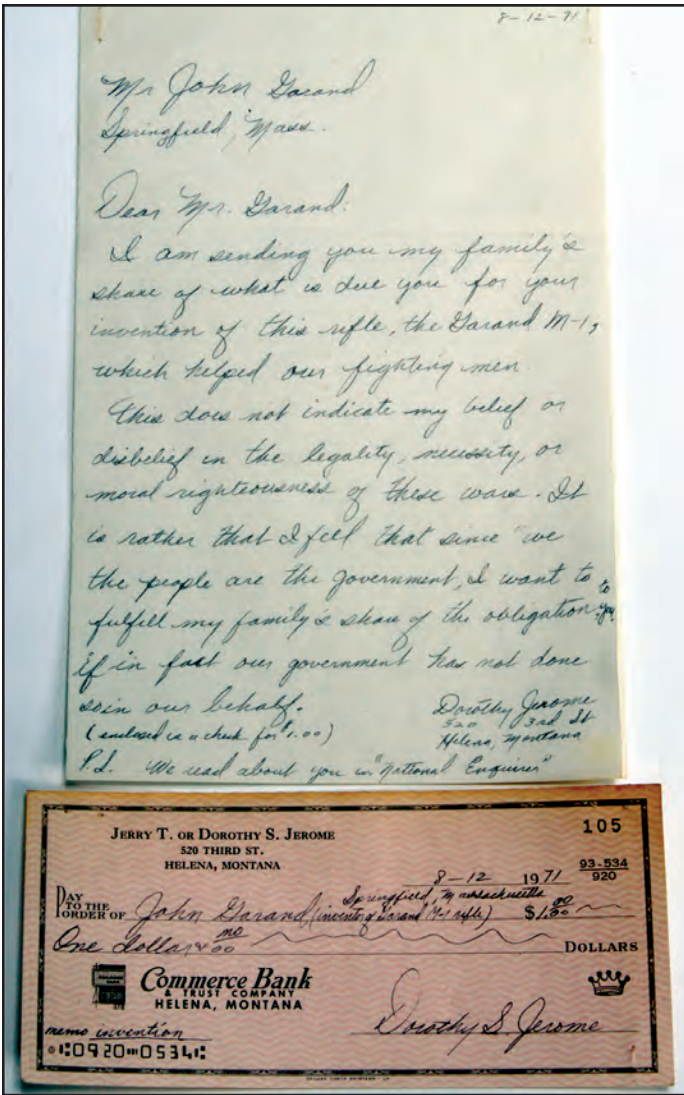


Figure 39. Letter and check from Dorothy S. Jerome to Garand.

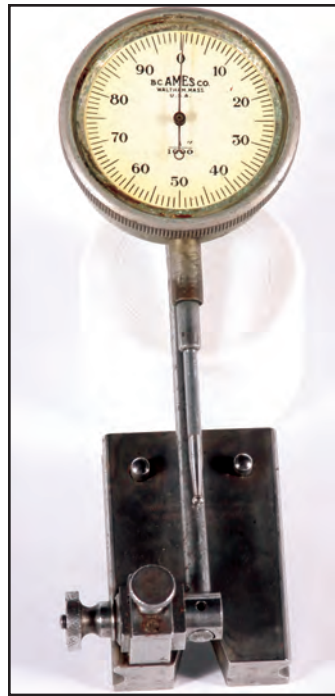


Figure 41. Garand's dial indicator.

PRONOUNCING HIS NAME

To this day, there is disagreement about the proper pronunciation of the famous inventor's last name. The most commonly heard pronunciation has the accent on the second syllable. i.e. "gar AND." Major General Julian S. Hatcher's *The Book of the Grand* (first edition, August 1948) addresses this issue in a footnote on page 1.<sup>17</sup> He was a close personal friend of the designer, therefore his comments should have some weight on the matter.



Figure 42. Plastilube sent to Garand from the Warren Refining & Chemical Company.



Figure 40. Garand's drafting tools.



Figure 43. Garand's automobile bumper medallions for entry to Springfield Armory.



Figure 44. Garand's social security card, 1923 Christmas card from Major and Mrs. Julian Hatcher and various personal cards.

*"Pronounced with the G hard as in go and the stress on the first syllable, to rhyme with parent (except that the final sound is d instead of t)."*

Furthermore, in the September 1943 edition of the NRA's *American Rifleman* magazine, John C. Garand responded to this seminal question in the "Powder Smoke" question and answer section, page 34 (Figures 47 and 48).

However, when I met with the inventor's son Richard, in 1999, I asked him how he pronounced his last name. He answered: "gar AND." I then asked how his father pronounced his last name. He again answered, "gar AND." In both answers the accent was on the second syllable. So you decide how you will pronounce the name of an extraordinary man and his extraordinary rifle!

PHOTO CREDITS

Philip Schreier, Arlington, VA



Figure 45. Garand's employee badge, Springfield Armory.



Figure 46. The reverse side of Garand's employee badge.

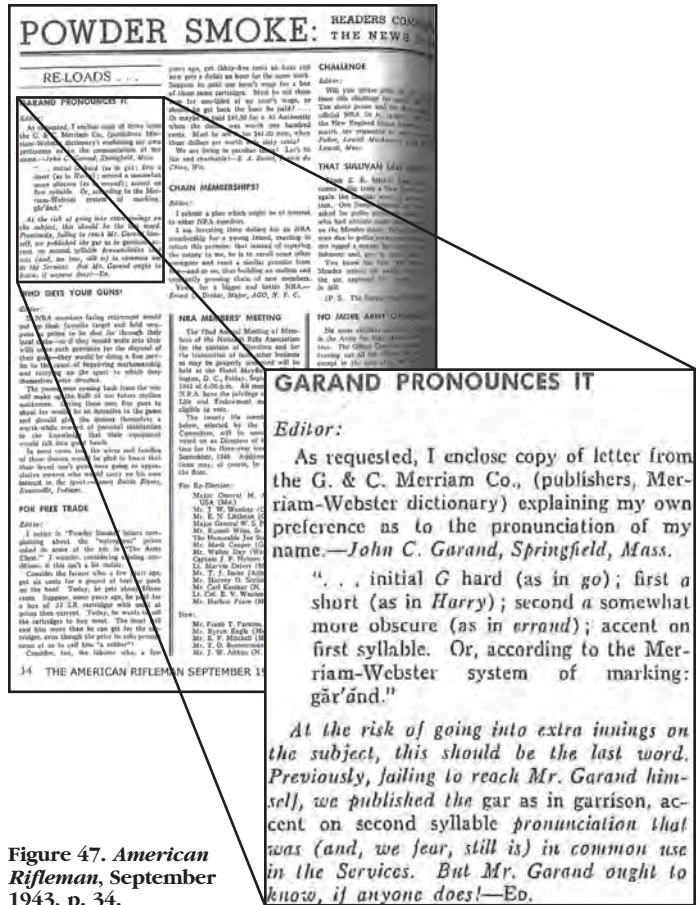


Figure 47. *American Rifleman*, September 1943, p. 34.

FOOTNOTES

1. Transcript of Proceedings, The Lord and Taylor Annual American Design Awards Luncheon, May 22, 1942. Waldorf-Astoria Hotel, New York, NY, p. 17. Author's collection.
2. Pyle, Billy, *The Gas Trap Garand*, Collector Grade Publications, Ontario, Canada, 1999, p. 17.
3. John C. Garand, personal diary entries for April 5 and April 12, 1919. Private collection.
4. *Ibid*, personal diary entry for October 27, 1919. Private collection.
5. *Ibid*, personal diary entry in 1925. Author's collection. Garand recorded the names of the soldiers who tested his model 1924 primer-actuated rifle. "Rifle man (sic) used at Benning on semiautomatic rifles test beginning May 25, 1925" and "Sgt. Iserger, Sgt. Rividinierd, Capt. Duff, Sgt. Johnson, Sgt. McNulty, Capt. Wessels."
6. Kellerstadt, Bert, letter to author, February 16, 2002.
7. Hatcher, Major General Julian H., *The Book of The Garand*, Infantry Journal Press, Washington, DC, 1948, p. 74.
8. Lord & Taylor, 1957 Award Luncheon brochure. Author's collection. Other recipients of this award for Military Design went to Glenn L. Martin in 1942 (Airplane Design), Igor Sikorsky in 1943 (Helicopter Design) and William F. Gibbs in 1943 (Ship Design).

9. Macpherson, Col. William J., Acting Commander of the U.S. Army Ordnance Center and School. April 16, 1973 letter notifying Garand of his selection to the Ordnance Hall of Fame. Author's collection.

10. *Transcript of Proceedings*, Lord and Taylor, May 22, 1942, p. 18.

11. Hatcher, p. 31.

12. *Ibid*, p. 120.

13. *Congressional Record*, United States Congress, January 19, 1974, page E704. Remarks of Congressman Boland on the death of John C. Garand.

14. *Springfield Union*, Springfield, MA, July 29, 1971, p. 18.

15. *The New York Times*, June 27, 1971.

16. Jerome, Dorothy. August 12, 1971 letter to J.C. Garand and check. Author's collection.

17. Hatcher, p. 1.

## BIBLIOGRAPHY

Canfield, Bruce N., *Complete Guide to: The M1 Garand and the M1 Carbine*, Andrew Mobray Publishers, Woonsocket, RI, 1998.

Canfield, Bruce N., *Garand vs. Petersen*, American Rifleman magazine, National Rifle Association, July 2009, p. 52 et. seq.

Duff, Scott A., *The M1 Garand: World War II*, Scott A. Duff Publications, Export, PA, 1993.

Duff, Scott A., *The M1 Garand: Post World War II*, Scott A. Duff Publications, Export, PA, 1989.

Pyle, Billy, *The Gas Trap Garand*, Collector Grade Publications, Ontario, Canada, 1999.

*GCA Journal*, Official Journal of the Garand Collectors Association, [www.thegca.org](http://www.thegca.org).