

Iver Johnson and His Bicycles¹

By Gary W. Sanderson, and Robert McCullough, USA

INTRODUCTION

Iver Johnson was born in Nordfjord, Norway [Figure 1a & 1b], in 1841. He apprenticed as a gunsmith in Bergan, Norway, beginning in 1857, and he opened a gun store in Christiania, Norway, in 1862. In 1863 Johnson immigrated to the United States and settled in Worcester, Massachusetts, where he worked for the Allen & Wheelock Company, continuing at his gun making trade. Johnson's skills were valuable because a bloody civil war was raging in the United States (1861-1865) and guns were in high demand. The year 1868 saw Iver Johnson [Figure 2] marry Mary Elizabeth Spiers of Worcester, Massachusetts,² whose wealthy father was the founder of the Spiers Manufacturing Company which, along with many other products, made pneumatic safety bicycles in the early 1890s. Iver and Mary had four children: Frederick Iver, John Lovell, Wal-

ter Olaf, and Mary Louise, and all were to play important roles in the Iver Johnson companies.

In 1871, Johnson joined with Martin Bye, a fellow employee at the Allen & Wheelock Co., to form Johnson Bye & Company for the purpose of manufacturing guns.³ In 1873, the partners purchased the Armsby Building in Worcester, MA, and moved their company's operation into this building and expanded their line of products to include police equipment, fireworks pistols, carpenter's tools, ice and roller skates, children's scooters, toys, and fluting irons for clothing. Johnson spent much of his time designing both objects for sale and labor-saving machines for his company's operations. These two gunsmiths were both inventive individuals, and they were granted

several patents for special firearm features during their time together. In 1883, Johnson purchased Bye's share of the firm for US\$1.00, which was then re-named 'Iver Johnson & Company'. At the outset, this company's primary function was to manufacture guns, and guns were always a prime interest of the company [Figure 3]. From its beginning, the Iver Johnson Company made most of its products for, and to be sold by, other companies. In fact, from the beginning of the Iver Johnson Company's operations in 1871 until 1895, the majority of its output of guns, and later bicycles, was for the Lovell Arms

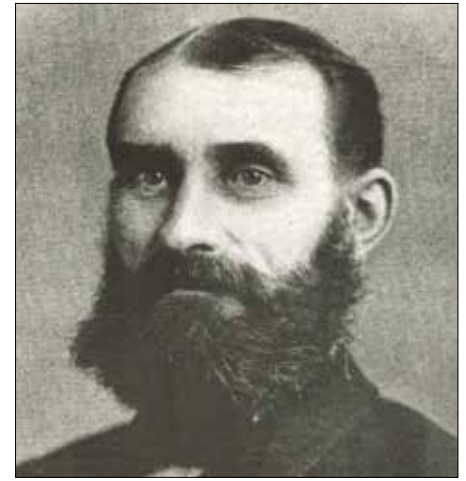


Figure 2: A photo of Iver Johnson when in middle age.



Figure 3: An Iver Johnson 'Bulldog' Revolver. This gun was manufactured from 1882 through 1886: It is one of the first guns manufactured by the Iver Johnson Arms Co., of Worcester, Massachusetts, and it may have been the gun carried by Thomas Stevens from San Francisco (California, USA) to Constantinople (Turkey) in the first part of his Bicycle Ride around the World in 1883-1885.

Co. of Boston, Massachusetts, and these products were labelled with the Lovell Company's name.

Iver Johnson was not only inventive, he was also ambitious. Johnson was always exploring the market place for new products that he could manufacture, thereby expanding his company. Products that Iver Johnson's company manufactured in the 1880s and 1890s included police goods, such as handcuffs, mechanical implements, and bicycles. All of these products were known for the quality of their construction, their functionality and durability, and finally, their reasonable cost. Most of this production was sold through the John P. Lovell Arms Company, whose main offices were in a grand five-story store near the corner of New Washington Street and Cornhill – part of the Dock Square District - in the center of



Figure 1a. A map of the area around Nordfjord, Norway, where Iver Johnson was born in 1841.



Figure 1b. A picture of the town of Nordfjord, Norway.

Boston [Figure 4]. Its products were made by others – the Iver Johnson company being the major manufacturer (perhaps the only manufacturer) of the John P. Lovell guns and other products, even though the John P. Lovell Arms Company litera-



Figure 4. The flagship retail store of the John P. Lovell Arms Co. located in the heart of Boston, Massachusetts, in the 1880s and 1890s.

ture always suggested that this company manufactured its own products [Figure 5a & 5b].⁴ Both companies prospered under this arrangement, with the Iver Johnson Arms Company manufacturing The Lovell Arms Company’s guns and other Lovell products, and The Lovell Arms Co. selling these guns and other Lovell products through its flagship store in Boston. They became one of the largest retailers of guns and sporting goods in the country.⁵

The Beginning of Bicycle Manufacturing for ‘Iver Johnson & Company’ and Its Successors:

As all bicycle historians know, high

wheel bicycle production in the USA began with Col. Albert A. Pope’s founding of the Pope Manufacturing Company in 1878 to manufacture these machines with the brand name “Columbia” [Figures 6a & 6b].⁶ By the beginning of the 1880s, the manufacture of these great machines was going forward and growing at a rapid pace. Other companies recognized the opportunities offered by the rise of a new bicycle industry, and several were fast to devote facilities to the manufacture of this new product that seemed to have so much promise for development into a major industry. Iver Johnson, an accomplished gun manufacturer with a factory and workers that together had considerable machining capabilities and inventive skills, was one of those who had the foresight to jump into this rapidly growing field. It required inventiveness to maintain a leadership position in the face of strong competition and steady innovation of this relatively new machine - the bicycle and its derivatives such as tricycles, ladies loop frame bicycles, tandems, etc.⁷ The question was: How best to enter this new industry? For Iver Johnson, the answer to this question was to manufacture bicycles for the John P. Lovell Arms Co.

In the early 1880s, Iver Johnson was approached by Col. Albert A. Pope to manufacture high wheel bicycles for him,



Figure 5a. An advertisement for Lovell Diamond bicycles that implies these bicycles are manufactured by the Lovell Arms Co., The Wheel, Vol. VI, No. 2 (September 29, 1890), p. 14.



Figure 5b. Advertisement for Lovell Diamond Cycles showing John P. Lovell (Pres.), Col. B.S. Lovell (V.P.), and the John P. Lovell Arms Co. store in Boston, Massachusetts, Century Magazine, Vol. XLV (5), March 1893, ad. p. 44.

but Iver declined because he had dealings with Pope earlier that did not go well. So, Iver Johnson’s start with manufacturing bicycles began only in 1885 when his firm began to manufacture Springfield high wheel safety bicycles (i.e., the “Springfield Roadster”) that were lever driven rather than pedal driven [Figure 7]. The Springfield bicycle was the invention of two sewing machine tradesmen from Springfield, Massachusetts, Joseph L. Yost and Joseph B. McCune, who held patents issued in



Figure 6a. Advertisement for Columbia Bicycles from Harper’s Weekly (October 8, 1881). This small ad was repeated many times in Scientific American, 1880-1883.

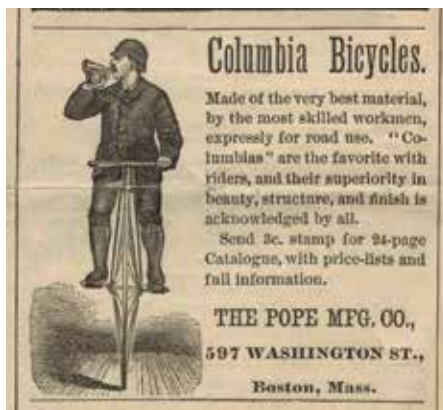


Figure 6b. Advertisement for Columbia Bicycles from Harper's Weekly (October 22, 1881). This is the first time that this author found this ad, but it was repeated many times after this date in several popular magazines of the time. This ad shows a person believed to be Col. Albert A. Pope riding an open headed Columbia high wheel bicycle which was the first style of bicycle manufactured by The Pope Mfg. Co.

1886 and reissued in 1887 for its unique design.⁸ [Figure 8] Actually, the Iver Johnson Arms Co. manufactured these machines for the John P. Lovell Arms Co. that had the contract with the Springfield Bicycle Manufacturing Company for the manufacture of these machines.⁹

Manufacturing Springfield bicycles was the start of the Iver Johnson Company's involvement with the manufacture of bicycles, and this arrangement continued only until 1888 when the Springfield Bicycle Manufacturing Company built a factory in Highlandville, Massachusetts, and began to manufacture the Springfield Roadster



Figure 7. An 1888 Springfield Roadster bicycle (Courtesy of Robert Sterba).

machines in their own new factory. By 1887, the Springfield Bicycle Mfg. Co. had developed a 'safety bicycle' version of the Springfield Roadster that was called the Volant [Figure 9a & 9b]. In its original form, the Volant incorporated a lever action for propelling the bicycle forward that was based on the system used to propel the Springfield Roadster. Soon, a revolving pedal drive variant of the lever driven Volant was developed¹⁰, but any hope of success for these two versions of the Volant was cut short by the Springfield Bicycle Company filing for bankruptcy in 1890. This author did not discover the cause of this bankruptcy, but it is likely that the cost of beginning a self-manufacturing operation was more than the investors could manage with the limited sales of products that were new to the market and rather costly to manufacture compared to the alternative products that were already established in the market-place.

However, in 1887, with the start given by the manufacture of Springfield Roadsters, the Iver Johnson Co. designed and began manufacturing a safety bicycle of its own. This was in keeping with the already long-standing arrangement between Iver Johnson and John P. Lovell, in which Johnson did the actual manufacturing and Lovell then did the marketing and sales.

This bicycle was called the Lovell Diamond Safety Bicycle [Figures 10a & 10b], and all ads for this bicycle suggested that it was manufactured by the J.P. Lovell Arms Co. [Figure 5].

Sales of Lovell Diamond Safety Bicycles grew rapidly from 1,000 manufactured in 1886 to 15,000 made in 1900,¹¹ which catalyzed two important events:

1. The company name was changed from 'The Iver Johnson Arms Company' to 'The Iver Johnson

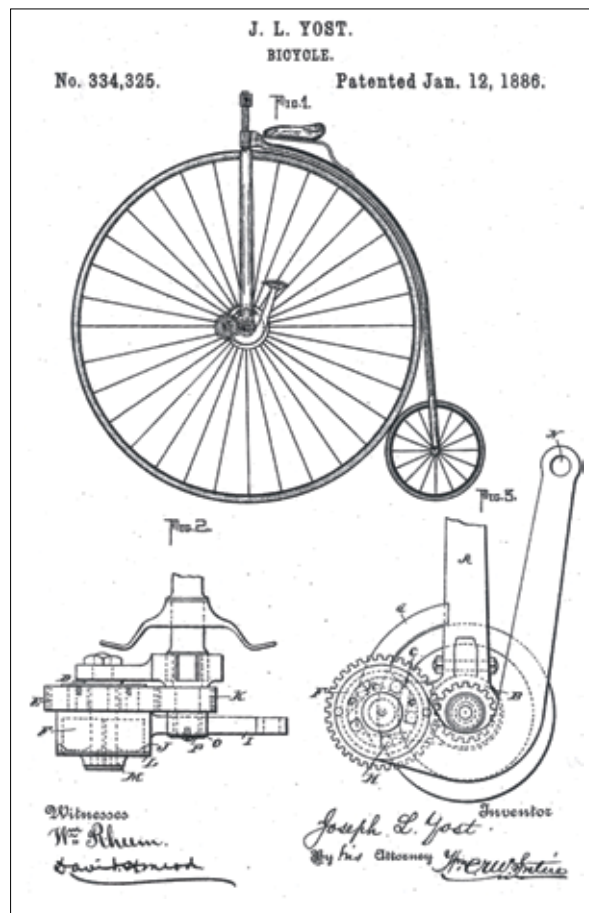


Figure 8a. U.S. Patent No. 334,325 for the Springfield Roadster shown in Fig. 6.

Arms & Cycle Works Company'.

2. The company moved from small, cramped facilities in Worcester, Massachusetts, to a new, much larger factory in Fitchburg, Massachusetts. [Figure 11] It is noteworthy that John P. Lovell's son Col. Benjamin S. Lovell, President of the Lovell Arms and Cycle Company that had been formed, was involved in the selection of the new larger Iver Johnson factory in



Figure 8b. Advertisement for the Springfield Roadster touting its safety and hill climbing capabilities. The Wheelmen's Gazette, Vol. III, No. 9 (September 1888)

Fitchburg, although Iver Johnson was always clear in pointing out that this factory belonged to the Iver Johnson Company with no outside investors.

Expansion: The Ascendancy of Bicycles Within the Iver Johnson Company's Operations, and Other Changes

As reported above, from 1900 onwards, bicycle production in the Iver Johnson Company became important along with arms production, marked by moving the company's manufacturing facilities from Worcester to Fitchburg into a complex of buildings that had housed the Walter Heywood Chair Co. factory on five acres of land, with a spur of the Fitchburg Railroad serving the factory.¹² [Figures 12 & 13] The move from Worcester to Fitchburg was monumental, but more changes were soon to come:

- Most importantly, Iver Johnson suffered with poor health for many years, and he died in 1895 (only 54 years old).
- With Iver Johnson's death came a



Figure 10a. 1901 Advertisement for Lovell Diamond bicycle by the Lovell Arms Co. (1891).

weakening of the bonds between the Iver Johnson Company and the John P. Lovell Company.

- Iver Johnson's sons took control of the business, and the oldest son Frederick became President of the company.
- John P. Lovell dies, and Frederick I. Johnson speaks highly of Iver Johnson's old friend and business associate.¹³
- In 1895, for reasons that were never publically disclosed, the Iver Johnson Company and the John P. Lovell Company dissolved their relationship that had been very close since the 1880s. It can be conjectured that Iver Johnson's children who took over the running of the Iver Johnson

Company after their father's death in 1894 wanted to market under their own unique brand name (i.e., the Iver Johnson Company) the products that they had been manufacturing for sale by the John P. Lovell Company, while the Lovell Company was insistent on marketing these products exclusively under their company's name.

This divergence of marketing objectives by the two companies could not be compromised, and so it led the two companies to terminate in 1895 what



Figure 10b. 1902 Advertisement for Lovell Diamond bicycle by the Lovell Arms Co. showing both men's and lady's models (Harper's Magazine, 1892, p. 72).

had been a very close relationship since the founding of the two companies almost 40 years earlier. Importantly, the Lovell Co. purchased a factory in South Portland, Maine, and set up to manufacture Lovell Diamond bicycles for themselves [Figure 14].

- In 1895, soon after this break-up, the Iver Johnson Company purchased a large retail space in Fitchburg and began to sell its products with their own distinctive name plate [Figure 15] directly to the public for the first time.
- In 1900, the John P. Lovell Arms Co. found itself in bankruptcy, and the Iver Johnson Arms & Cycle Co. purchased the entire company, all of its inventory of products, its stores, including its flagship store at 163 & 165 Washington St., Boston [Figure 16], and its 'good will'.¹⁴

Iver Johnson Co. Innovations for Bicycles

The Iver Johnson Company had always been active in innovating improvements in their products. Two of the most famous innovations that applied to bicycles were:

- Truss Frames: U.S. Design Patent No. 35,391, Bicycle Frame, Granted to Frederick I. Johnson (Dec. 3, 1901). The 'Truss Frame' was widely advertised over a period of years by the Iver Johnson Sporting Goods Co. with the slogan "Trust the Truss". An example is shown in Figure 17.

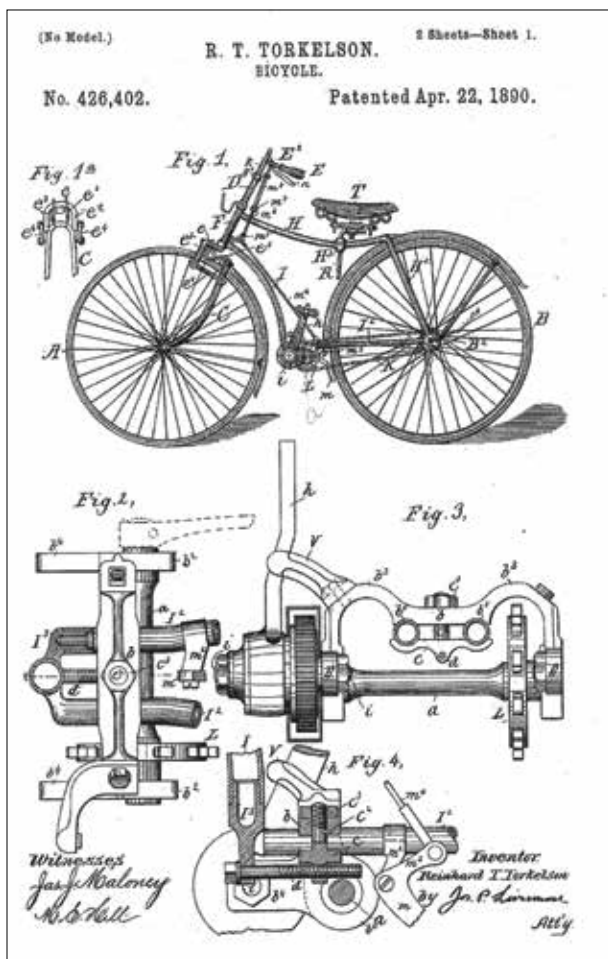


Figure 9. U.S. Patent No. 426,402 for the Volant Safety Bicycle made by the Springfield Bicycle Co. in this company's new factory located in Highlandville, Massachusetts.

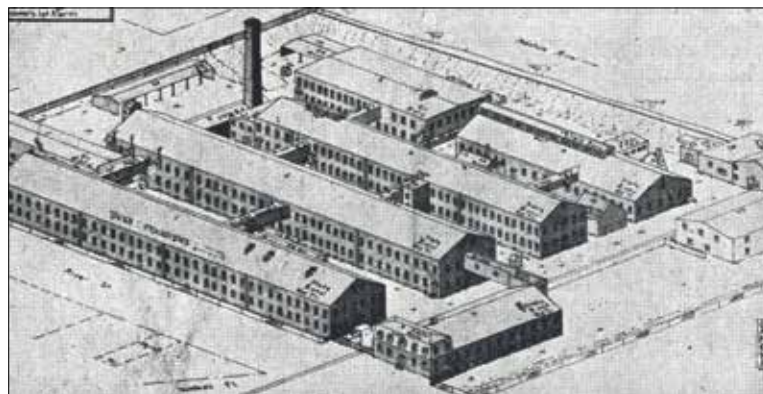


Figure 11. Aerial view of the Iver Johnson Arms & Cycle Works Factory in Fitchburg, Massachusetts in 1891.

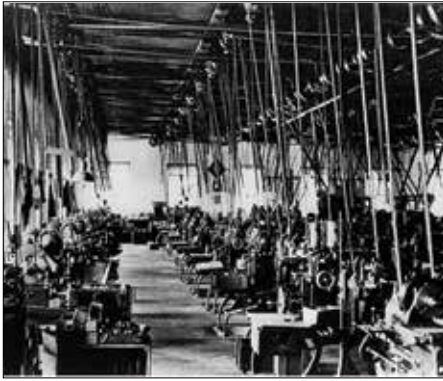


Figure 12. The interior of one of the buildings in which the Iver Johnson Arms and Cycle Works in Fitchburg, Massachusetts, manufactured its products. Shown here is a room with some of the large number of machines employed in this very large factory.



Figure 13. A scene from inside the factory of the Iver Johnson Arms and Cycle Works in Fitchburg showing bicycles being assembled.

P. Lovell Arms in manufacturing and selling Lovell Diamond bicycles at this time.

• Lovell Adjustable Handlebars: See *Scientific American*, December 28, 1895, p. 410 [Figure 18], and U.S. Patent No. 586,162 granted July 13, 1897, to Lyman H. Cobb of Portland, Maine. It is interesting that this invention was given the name 'Lovell' Adjustable Handlebars, which is additional evidence of the close association of the Iver Johnson Co. and the John

Iver Johnson Moves Into Manufacturing Motorcycles

The first Iver Johnson motorcycle was introduced in 1907 [Figure 19], six years after the Hendee Manufacturing Co. had begun (in 1901) to manufacture Indian Motorcycles [Figure 20] in Springfield, Massachusetts,¹⁵ and four years after the Harley Davidson Co. began to manufacture these machines in 1903 [Figure 21] in Milwaukee, Wisconsin.¹⁶ The sales of Iver Johnson motorcycles did not meet the goals set, and this venture was terminated in 1924. Authorities in the field generally acknowledge that Iver Johnson motorcycles were well made machines with many innovative features, and they were strong, well-built, and capable of giving good dependable service on the poor roads typical of most roads in America at that time. The Iver Johnson motorcycles were favored by tradesmen and rural postal workers who needed dependable service on the typically poor roads in America at that time. While Iver Johnson motorcycles had many positive properties and innovative engineering features, these properties did not attract the larger number of riders who favored the machines that were more famous for their performance on the race tracks of America such as Indian, Harley-Davidson, and Excelsior. Harry Sucher in his book on the motorcycle industry from its inception in 1900 up to 1990¹⁷ put it this way:

IVER JOHNSON: Iver Johnson Arms and Cycle Works, Fitchburg, Massachusetts, 1907-1925: this well-known fire arms manufacturer first diversified into bicycles and later motorcycles with some very well made single cylinder machines,



Figure 15. The distinctive Iver Johnson head badge for bicycles.

and in 1912 produced heavyweight V-twins. Of strictly utilitarian type, they were noted for their high quality and longevity rather than performance. Their highly advanced two speed 61-cubic inch twin of 1915 [Figure 22] was available to special order as late as 1925. It was a favorite of rural mail carriers.¹⁸

At its height, the Iver Johnson Co. only made a few thousand motorcycles. By 1918 World War I was raging and the demand for arms was taxing the ability of the Iver Johnson Co. to manufacture enough guns to fill the orders, so it

OUTING ADVERTISEMENTS.

This Name Plate



Means the Best

1840. JOHN P. LOVELL ARMS CO. 1898.
131 Broad Street, Boston, Mass.

The Wistful Review of Commerce (one of the most reliable commercial papers in this country), after a thorough and complete examination of the "Lovell Diamond" bicycle, to describe "No. 100 in the best bicycle," and additively: "The greatest credit ever was to that of the Lovell Diamond, manufactured by the John P. Lovell Arms Co. of Boston, Mass."

Lovell "Diamond"	\$50.00
Lovell "Diamond"	\$75.00
Lovell Razors	\$85.00
Lovell Tandems	\$125.00
Lovell Kettles	\$35.00
Lovell Knives	\$25.50
Lovell Knives	\$25.50
Lovell Knives	\$19.50

STORES AT

Boston, Mass. 131 Broad Street
 Worcester, Mass. 111 Main Street
 Portland, Me. 111 Main Street
 Portland, R. I. 45 Broad Street
 Worcester, R. I. 141 Main Street
 Portland, Me. 131 Main Street
 Bangor, Me. 111 Main Street

Agents almost everywhere. If there is none in your town write to us. Our catalogue, "Famous Diamonds of the World," free for the asking.

All Lovell "Diamond" Bicycles have been made in our own factory at South Portland, Me., since January, 1895.

A Complete Line of Bicycle Sundries.

Figure 14: An advertisement by the John P. Lovell Arms Co. for Lovell Diamond bicycles published in *Outing Magazine*, Vol. XXXII, No. 3 (June 1898), p. x, informing the public that all Lovell Diamond Bicycles are made in a Lovell Co. factory in South Portland, Maine, since 1897.

was decided at this time to abandon the manufacture of motorcycles. After WWI in 1919 the company resumed production of bicycles. These bicycles resembled the



Figure 17. One of the many advertisements for Iver Johnson Truss Frame Bicycles touting 'Trust the Truss'. (Everybody's Magazine, p. 72, April 1909)

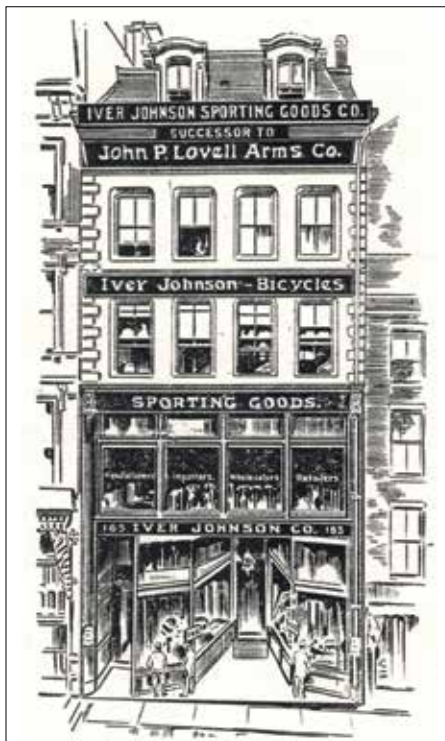


Figure 16. The grand store formerly owned by the John P. Lovell Arms Co. in Boston, Massachusetts, (see Figure 4) that was transformed into one of the Iver Johnson Sporting Goods Co. stores in 1900 when the Iver Johnson Co. bought out the Lovell Co. when it filed for bankruptcy.

bicycles being made in the United States during that time. When the United States entered WWII in 1941, the Iver Johnson Co. ceased production of bicycles for all time and again devoted all its resources to producing guns for the Allied Forces fighting Hitler and his Nazi regime. The Iver Johnson Co. celebrated its 100th Anniversary in 1971, and the company was sold in 1973 to interests apart from the Iver Johnson family and heirs. The company continued for some more years but with no involvement by anyone directly related to Iver Johnson. So ends this story. A good summary of the major events in the life of the Iver Johnson Co. is found in the book by W.E. Goforth.¹⁹

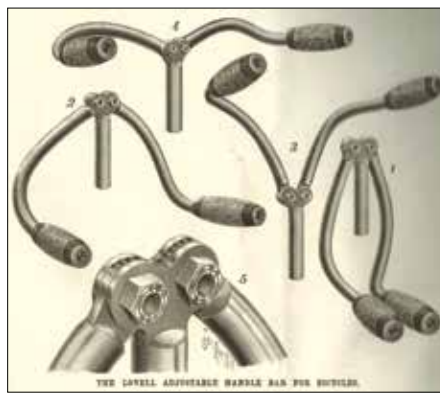


Figure 18. Adjustable 'Lovell Handlebars' (Scientific American, 12/28/1895)



Figure 19: An early (ca. 1907) Iver Johnson motorcycle.



Figure 20. An early 1902 Indian motorcycle with Oscar Hedstrom, the designer.

Some Special Events in the Life of Iver Johnson Sporting Goods Company and Its Products

Some of these events were caused intentionally by the Iver Johnson Sporting Goods Company and some came to it through no special effort of the company.

- The Iver Johnson Co. was the first American company to contract with an African American sports hero to represent its products, namely its bicycles: In 1900 following Major (Marshall) Taylor becoming the World Champion Bicycle Racer by winning the 1-Mile Sprint at the 1899 World Championship Races in Montreal, Canada,²⁰ the Iver Johnson Sporting Goods Co. engaged Major Taylor to pursue world records for sprint distances and to win major international bicycles races riding Iver Johnson built bicycles [Figures 23 and 24]. This engagement of Major Taylor was consummated by the President of the Iver Johnson Co. (Fred I. Johnson) paying \$500 to the League of American Wheelmen to satisfy a fine that has been imposed on Major Taylor for violating



Figure 21. An early ca. 1906 Harley Davidson motorcycle.



Figure 22. 1915-1916 Iver Johnson Motorcycle, the last motorcycle made by the Iver Johnson Sporting Goods Co.

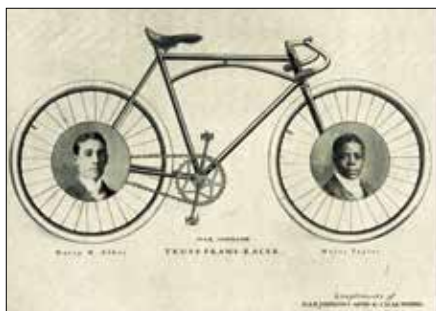


Figure 23. Major Taylor and Harry D. Elkes shown in the wheels of an Iver Johnson Truss Frame Racing Bike. This advertising card was created in 1900 by the Iver Johnson Sporting goods Co. shortly after the company engaged these two famous American bicycle racers to ride Iver Johnson bicycles when racing or setting records.

one of the League's rules on racing. This allowed Major Taylor to ride in L.A.W. sanctioned events once again, and now Major Taylor would be riding on an Iver Johnson Truss Frame racing bicycle that was specially built for him.²¹

This was a brave and risky undertaking by the company because of rampant racism among the general population in the United States, and this action might have

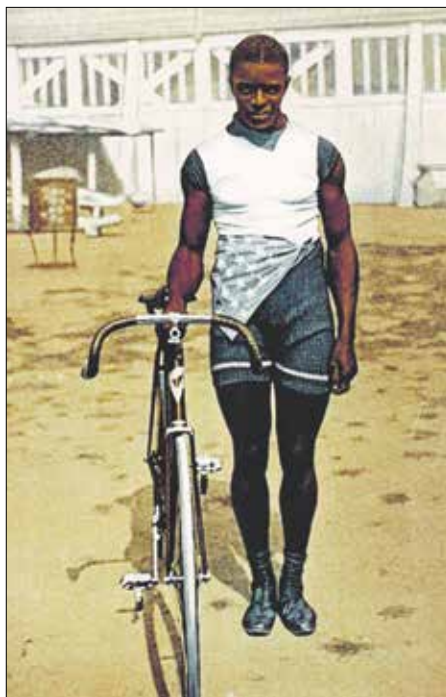


Figure 24. Major Taylor shown on the cover of *La Vie au Grand Air*, 18 September 1901, when in France competing in all the big races. Note that Major Taylor is holding an Iver Johnson bicycle in this picture: Presumably this is the bicycle that he is racing on while in France.

caused many people to react by not buying Iver Johnson bicycles and other Iver Johnson products. For instance, a leading bicycle industry magazine wrote an article explaining the cause of poor bicycle sales in the American south in the following way, "A Chicagoan has claimed that southern whites abandoned cycling when negroes began to ride."²² As it turned out, Major Taylor did go on to set many new world records and to win many international races, making him a real international bicycle racing star. All indications are that the company did benefit from its association with Major Taylor because the company's bicycle sales continued to prosper.

- Clarence (Crazy Horse) Wagner crossed America in "record time" riding an Iver Johnson bicycle. See G.W. Sanderson's article in *The Wheelmen Magazine*²³ and the article in *The Bicycling World and Motorcycle Review* 1922²⁴ [Figure 25] for more information about Crazy Horse Wagner.

- William McKinley [Figure 26], 25th President of the United States, was assassinated on September 6, 1901, in Buffalo, NY, when visiting the Pan American Exposition. The assassin was Leon Czolgosz, an anarchist, using an Iver Johnson pistol.²⁵ This certainly was not encouraged by the Iver Johnson Sporting Goods Co.

- There was an attempted assassination of Franklin D. Roosevelt [Figure 27], the 32nd President of the United



Figure 25a. Clarence 'Crazyhorse' Wagner with his Iver Johnson bicycle on his record ride across America (*Motorcycling & Bicycling*, September 19, 1923, p.61)

States, in Miami, Florida, on February 15, 1933, by Guiseppe Zangara who despised all wealthy capitalists. Five shots were fired: Pres. Roosevelt was unhurt, but five people were injured and Anton Cermak, the Mayor of Chicago, was killed. The weapon used was a 32-caliber pistol made by the US Revolver Co., a subsidiary of the Iver Johnson Sporting Goods Co.²⁶ Certainly this was not encouraged by the Iver Johnson Sporting Goods Company.

- Robert F. Kennedy [Figure 28], a U.S. presidential aspirant was assassinated



Figure 25b. Advertisement telling of Clarence "Crazyhorse" Wagner riding across America in record time on an Iver Johnson bicycle (*Motorcycling & Bicycling*, September 19, 1923; p. 58).

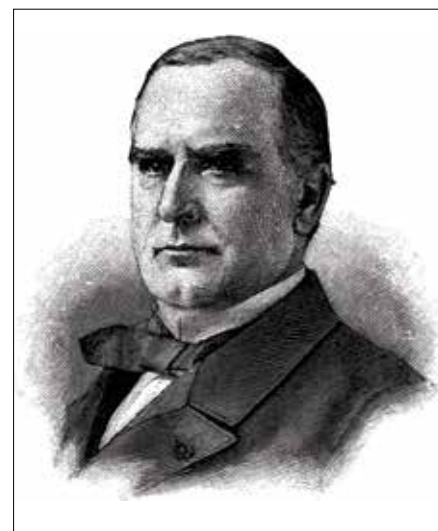


Figure 26. William McKinley, 24th President of the United States, assassinated with an Iver Johnson revolver on September 6, 1901.

on June 5, 1968, by Sirhan Sirhan in the kitchen of the Ambassador Hotel in Los Angeles, CA, for unknown reasons. The assassin shot Mr. Kennedy with an Iver Johnson 22-calibre pistol.²⁷ This was certainly not encouraged by the Iver Johnson Sporting Goods Co. ●

Acknowledgement

We wish to thank Bill Smith, a Wheelman from Michigan (USA), who loaned us his collection of papers on Iver Johnson for use in researching the subject of our paper. The ten full folders of papers were an invaluable help to understanding Iver Johnson and his operations.



Figure 27. Franklin D. Roosevelt, 32nd President of the United States, survived an attempted assassination with an Iver Johnson revolver on February 15, 1933. This picture is a copy of photo taken on January 19, 1937.



Figure 28. Robert F. Kennedy, an aspirant for the U.S. Presidency, was assassinated with an Iver Johnson revolver on June 5, 1969.

Endnotes

- 1 The exact name of the Iver Johnson company is noted in this paper at the beginning of the period that it was in force, and thereafter the company's name is shortened to 'Iver Johnson Co.' for convenience.
- 2 Mary Elizabeth Spiers of Worcester, Mass., was almost certainly the daughter of the owner of the Spiers Manufacturing Co. of Worcester, Massachusetts, a manufacturing company that made bicycles in the 1890s.
- 3 For a brief history of Iver Johnson and his companies, see the book BY Goforth, W. E. *Iver Johnson: Arms & Cycle Works – Firearms 1871 – 1993*, Hudson, Wisconsin: Gun Show Books Publishing, 2006, 224 pp. This book is most thorough in its description of Iver Johnson guns produced throughout the life of the companies that bore Iver Johnson's name, but it does have much important information on the man Iver Johnson himself. Also important is the Wikipedia entry: *Iver Johnson*, https://en.wikipedia.org/wiki/Iver_Johnson. Accessed August 25, 2018, and another good, short summary of Iver Johnson and the Iver Johnson Arms & Cycle Works, Inc. is by Perkins, Jim. *American Boys' Rifles: 1890-1945*, Pittsburgh: RTP Publishers, 1976, pp.209-213.
- 4 It is clear that Iver Johnson and John P. Lovell were good friends and maintained the best of business relationships. Iver and Mary even named one of their children John Lovell Johnson.
- 5 Anonymous, *Guns and Hunting Supplies: John P. Lovell Arms Co.*, 1890 Catalog, Princeton, New Jersey: The Pyne Press, 1971. A 5-page summary of John P. Lovell's life and his company is included at the back of this publication.
- 6 See, for example, the book by Epperson, Bruce D. *Peddling Bicycles to America: The Rise of an Industry*, Jefferson, NC: McFarland & Company, Inc, 2010, 294 pp.
- 7 A good general reference to the important early development's in cycles is the small book by Clayton, Nick. *The Birth of the Bicycle*, Stroud, Gloucester, UK: Aberley Publishing, 2016; 127 pp.
- 8 U.S. Patent No. 367,883, *Bicycle*, granted to J. L. Yost and J. B. McCune, August 9, 1887.
- 9 An article in the June 12, 1891, issue of the *Fitchburg Daily Sentinel* clearly states the relationship between the two companies: "Mr. Johnson wants it thoroughly understood that he is the sole proprietor of the Johnson Arms Co. The Lovell company of Boston has no interest in the concern, but simply acts as a medium for the sale of the goods. The Johnson company makes all their firearms and bicycles for [sale through] the Lovell company, and all other goods for a New York house. Mr. Johnson says he holds patents on whatever he manufactures."
- 10 Announcement in *Bicycling World and L.A.W. Bulletin*, 12 July 1889, p. 304.
- 11 Edsall, Barbara. A Short History of Iver Johnson, His Manufacturing Companies in Worcester and Fitchburg, and His Entry Into Bicycle Manufacturing (unpublished). Written on the occasion of the donation of an unrestored ladies Lovell Diamond bicycle to the Fitchburg Historical Society in 1994.
- 12 The impressive Fitchburg factory complex, erected with brick and stone after a fire destroyed its predecessor, included three main buildings (pragmatically called One, Two and Three, front to back), each two stories and 300 feet long – the first two fifty-feet wide and the third forty feet; an engine house with steam engine fabricated by the Putnam Machine Company in Fitchburg; a French Second-Empire style office with Mansard roof and attached warehouse; several second-story bridges joining each of the main buildings; and various sheds, stables and other outbuildings. Expansive enough to accommodate 300 workers, the buildings stood largely completed by the early months of 1871, a credit to Fitchburg brick masons Wetherbee & Derby and stone masons Samuel A. Wheeler & Son, the latter quarrying on Rollstone Hill within view of the factory; the chair company's carpenters completed most of the interior finishing. Spur tracks of the nearby Fitchburg Railroad served the works, and concern about fireproofing led to the use of slate shingles on building roofs and to the installation of Halls sprinkling systems in the main buildings and private hydrants on site. Johnson renamed the complex, added a forge shop (also accessible via a bridge); a small addition to Building Three for the setting and drying of enamel; and Walworth automatic sprinklers in Building One, where bicycle assembly took place on the second floor, at least initially. By 1894, he also had installed a new steam engine and two, 500 horse power dynamos for electric lighting. References: "The New Heywood Chair Shop," *Fitchburg Sentinel* (August 6, 1870): 3; "Heywood Chair Company," *Fitchburg Weekly Sentinel* (August 13, 1870): 3; "Building Improvements," *Fitchburg Sentinel* (December 17, 1870): 2; "Walter Heywood Chair Co.'s Works," *Fitchburg Weekly Sentinel* (May 27, 1871): 2; Sanborn-Perris Map Co., Maps of Fitchburg, Massachusetts (1887), Plate 16; and (1892), Plate 18; and "Fitchburg. Prosperous Concern," *Worcester Daily Spy* (December 14, 1894): 5.
- 13 "Johnson Speaks of Lovell," *Wheel and Cycling Trade Review* 25, February 22, 1900: 30; "Iver Johnson Company Buys Lovell Stock," *Wheel and Cycling Trade Review* 25, March 15, 1900: 28; "Iver-Johnson's Purchase," *Boston Globe*, March 15, 1900: 8; "All Sporting Goods Here," *Boston Daily Globe*, December 18, 1900: 7; and "Marvelous Collection of Iver Johnson Company's Store," *Boston Daily Globe*, December 22, 1908: 7.
- 14 *The Bicycling World*, Vol. XL (24), March 15, 1900; "John P. Lovell," *Iron Age* 60, August 5, 1897: 34; *Lovell v. Johnson*, 82 F. 206, 1897; and 91 F. 160, 1898; "The Lovell Failure," *Wheel and Cycling Trade Review* 24, December 28, 1899: 13; "Sweeping Victory for Iver Johnson," *Wheel and Cycling Trade Review* 24, January 5, 1899: 21; and "Lovell Factory is Closed," *Wheel and Cycling Trade Review* 24, January 4, 1900: 20.
- 15 Wikipedia, https://en.wikipedia.org/wiki/Indian_Motorcycle_Manufacturing_Company. Accessed August 25, 2018.
- 16 Wikipedia, <https://en.wikipedia.org/wiki/Harley-Davidson>. Accessed August 25, 2018.
- 17 Sucher, Harry V. *Inside American Motorcycling and the American Motorcycle Association, 1900-1990*, 1st Ed., 1995, Laguna Nigel, CA, USA: Infosport, pp. 30, 40, 62, & 388.
- 18 Endnote 12, p. 388.
- 19 Endnote 3, p. 216-217.
- 20 Anonymous. "The World's Championships," *The Cycle Age and Trade Review*, Vol. XXIII, Issue No. 16, Aug. 8, 1899, p. 400.
- 21 Anonymous. "Champion of the World on an Iver Johnson Bicycle," *Fitchburg Sentinel* (Fitchburg, Massachusetts), June 13, 1900, p. 6.
- 22 Anonymous. *The Cycle Age and Trade Review*, Vol. XXIV (4), November 23, 1899, p. 102; Anonymous. "Re-enter Major Taylor", *The Cycle Age and Trade Review*, Vol. XXV (8), June 21, 1900, p. 208.
- 23 Sanderson, G. W. "Clarence "Crazy Horse" Wagner: A Home Town Bicycle Champion from Terre Haute, Indiana", *The Wheelmen Magazine*, No. 75, Nov. 2009, pp. 4-17.
- 24 Marshall, Don. "Wagner's Coast to Coast Record Breaking Bike Ride," *MotorCycling and Bicycling*, Vol. XXV, No. 22, Sept. 19, 1923, pp. 61-62.
- 25 Wikipedia: *Assassination of William McKinley*, https://en.wikipedia.org/wiki/Assassination_of_William_McKinley. Accessed August 25, 2018.
- 26 Wikipedia: *Giuseppe Zangara*, https://en.wikipedia.org/wiki/Giuseppe_Zangara. Accessed August 25, 2018.
- 27 Wikipedia: *Assassination of Robert F. Kennedy*, https://en.wikipedia.org/wiki/Assassination_of_Robert_F._Kennedy. Accessed August 25, 2018.