This poster shows Major Taylor, World Champion Bicycle Racer (born and raised in Indianapolis) and a circa 1911 race car at the Indianapolis Motor Speedway, Indianapolis, Indiana USA. The world famous motor speedway was built in 1909, inspired by the Newby Oval bicycle race track, built in Indianapolis in 1898. [The concept for this Poster came from Richard Peglow and the artist/designer was Brian Gessler, both from Indianapolis, Indiana, USA.]

Cycle History 31

Proceedings of the
31st International Cycling History Conference

Indianapolis, Indiana, USA, 2022

INTERNATIONAL CYCLING HISTORY CONFERENCE

Editorial Committee: Gary W. Sanderson, Thomas Baker, & Phillip P. Sanderson
Design and Layout by Greg Siple

REGISTRATION and CATALOGING NUMBERS:
ISBN: 979-8-88796-212-2
Library of Congress Control Number: 2022916839

PUBLISHED BY:
The ICHC Publications Committee
63 Fells Road, Verona, NJ 07044, USA

The eleven libraries that maintain
complete sets of the ICHC Proceedngs:

- The British Library
  London, England, UK.
- National Library of Scotland
  Edinburgh, Scotland, UK.
- Bodleian Library, Oxford University
  Oxford, England, UK.
- Cambridge University Library
  Cambridge, England, UK.
- Trinity College
  Dublin, Ireland.
- National Library of Wales
  Aberystwyth, Wales, UK
- US Library of Congress
  Washington, DC, USA
- Le Musee d'Art et d'Industrie de Saint-Etienne
  Saint-Etienne, France
- Zentrale Sportbibliotek der Deutschen Sporthochschule
  Köln, Germany
- Nationaal Fietsmuseum “Velorama”
  Nijmegen, The Netherlands
- Joseph P. Healey Library
  University Archives & Special Collections
  University of Massachusetts Boston
  Boston, MA, USA

FRONT COVER PHOTO:
A Portrait of Major Marshall Taylor from his autobiography: "The Fastest Bicycle Rider In the World", self published in 1928 at Wormley Publishing Company, Worcester, Massachusetts, USA. This picture is on the 4th page in this book opposite the Title Page. This picture of Major Taylor is especially significant because it was chosen by Major Taylor presumably because it showed him in his retirement from Championship bicycle racing as a thoughtful, serious person ready to succeed in the American business world in contrast to the many pictures of him in newspapers and magazines that show him as a muscular athlete in his bicycle racing outfit next to his bicycle ready for the next race.

BACK COVER PHOTO:
The attendees of the 31st International Cycling History Conference, held in Indianapolis, Indiana, USA, on July 16-20, 2022, in the band shell at the Rathskellar in the Athenaeum in Indianapolis prior to the banquet.

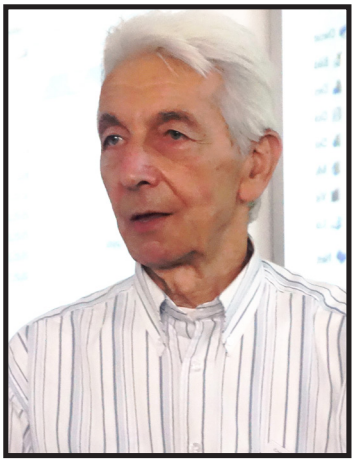
Table of Contents

Raymond Henry

Remembering an Inveterate Cyclist

Raymond Henry was a world authority on the history of cycle touring and the Fédération Française de Cyclo Tourisme (FFCT) and a frequent contributor to the International Cycle History Conference. His knowledge of cyclotourisme, early derailleur development and bicycle technology was built over a lifetime of serving as the repository of knowledge, years of excellent research and many kilometers of riding his 1952 Routens.

His first occupation was as a school teacher and his second occupation was as cycle historian. He was an outstanding handyman and builder, collector of cycling ephemera, cycling technology and classic touring cycles. In his collection were machines by Herse, Singer, Narcisse, Reyhand, Daudon and Routens.



Raymond Henry 1944-2020

Raymond's contributions to our understanding of French cycle history are without parallel. His classic book, *Du Vélocipède au Dérailleur Moderne*, covers the subject of early derailleur development and the contributions of Vélocio, Albert Raymond and others that previously had been forgotten. His work in bringing to light the Vélocio bicycle collection at the Musée d'Art et d'Industrie in Saint-Etienne is remarkable. Raymond's book *Vélocio, L'évolution du cycle et le cyclotourisme*, is one of the most highly researched cycling biographies ever written, and will serve cycle historians with a wealth of information for generations to come.

His knowledge of changements de vitesse, or derailleurs, also enabled him to make a significant contribution to the book *The Dancing Chain* on the history and development of the derailleur bicycle. Raymond said he was surprised that there was a worldwide interest in early French derailleur development and that no one had really made an effort to write about the subject. He certainly filled that void with his extensive writing on the subject and saved that knowledge from being lost.

Raymond made significant contributions to the International Cycle History Conference over decades. His fifteen papers covered the range of topics from a history of the FFCT, biographies of leading French cycling figures, stories of cycle constructeurs, and riding the diagonals of France. In addition to presenting papers, Raymond was also organizer of the 26 th ICHC in Entraigues-sur-la Sorgue, France in 2015. This conference celebrated the 150 th anniversary of the first long-distance velocipede journey and was one of the most successful conferences to date.

While it is worth remembering all of the cycle history contributions that Raymond made, it is also essential to remember his love of cycle touring, his accomplishment of riding all nine of the diagonals of France, riding Paris Brest Paris and his affable demeanor that led to friendships with a vast number of people around the world who shared his passion for all things cycling.

- Tom Baker

Authors' Bios

Thomas Baker (Arizona, USA) is a retired engineer who started riding in 1960. His main riding interest has been randonneuring and has ridden Paris-Brest-Paris eight times. His interest in bicycles has involved long-distance riding, bike commuting, fund-raising for charitable causes, frame building, the bicycle industry, and of course, cycle history. *rvan50@gmail.com*.

Marie Concannon (Missouri, USA) has been a librarian for 32 years, formerly at the State Historical Society of Missouri and presently at the University of Missouri where she heads the Government Information and Data Archives department. She has given presentations to professional associations on patent searching and research in digital libraries. She is a lifelong bicycle commuter. Email: *concannonm@missouri.edu*

Gérard De Smaele (Belgium) In the head of Gérard De Smaele turns the epicycloidal train that inspired Henry Sturmey and James Archer. Inside his housing, the satellites are a five-string banjo, the restoration of works of art on paper, and the bicycle: activities he has practiced for decades and about which he has published many books and articles. In the eyes of some, the coordination of these seemingly incompatible areas might seem impossible, even suspicious, but for him it is a look at the world, an inner way of wisdom and freedom of mind. *desmaele5str@hotmail.com*

Tammy Haley (Indiana, USA) I started collecting antique and classic bicycles in 1897, and in 1989 I was a founding member of the Hoosier Antique and Classic Bicycle Club for which I still serve as Secretary/Treasurer. My time as a member of The Wheelmen has been fun and rewarding. It has led me to researching and writing about my passions and eventually to co-chair the 31st ICHC. *tamtam4bikes@gmail.com*

Annika Kruse (Austria) is a human movement scientist and post-doctoral researcher at the Institute of Human Movement Science, Sport and Health of the University of Graz, Austria. Moreover, she is currently a scholarship holder at the Karolinska Institutet in Solna, Sweden.

Since the start of her doctoral studies in 2014 in Graz, Annika Kruse follows her main aims to understand the mechanisms and adaptations that lead to the pathology of individuals with spastic CP and to contribute to the development and evaluation of efficient, easily applicable, and motivating treatment/training strategies. *AnnikaKruse@uni-gras.at*

Michael Kula (Washington, USA) is a graduate of Vanderbilt University and the MFA program in Creative Writing at Emerson College. His work has appeared in numerous literary magazines across the country, and his novel *The Good Doctor* was published by Urban Farmhouse Press in 2017. He is Associate Professor of Creative Writing at the University of Washington, Tacoma, and he is currently completing a book of narrative nonfiction about the life and travels of Kazimierz Nowak. *mkula@unr.edu*

Robert McCullough (Vermont, USA) is Professor and Director, Historic Preservation Program, at the University of Vermont, where he has been a faculty member since 1998. He teaches courses in American Architectural History, History of the Built and Cultural Environments, and Historic Preservation Law. He also writes about American landscapes, and his most recent book is Old Wheelways. Traces of Bicycle History on the Land (Cambridge: MIT Press, 2015). *robert.mcullough@uvm.edu*

Glen Norcliffe (Ontario, Canada) is Professor Emeritus and Senior Scholar at York University in Toronto. He is an economic geographer interested in production, trade, technology, and development. His current research focusses on the design, manufacture, and therapeutic use of adaptive cycles by persons with disability. *gnorclif@york.u.ca*

Richard Peglow (Indiana, USA) Born and raised in La Porte, Indiana, USA, Richard Peglow has a strong connection to the legacy of bicycle-making in his hometown. Richard's great, great, great Grandfather, Henry C. Peglow was affiliated with the beginning of Crown Cycle Company, and was a member of the Crown Cycle Club in 1895. Richard has been a historian since 1999 for the La Porte firms Crown Cycle Company, John Lonn & Sons, and Great Western Manufacturing Company. Besides a passion for bicycle history, Richard is also a fine artist, specializing in sculpture, and has earned a Master of Fine Arts degree. Richard resides in Indianapolis, Indiana. *crowncycles@att.net*

Paul Rubenson (Maryland, USA) is an historian of technology specializing in bicycle tires. He is curator of the Fire Museum of Maryland and the Vintage Museum at Bob's BMW Motorcycles, and he chairs a Baltimore preservation committee. He studied in Salzburg and worked for Peace Corps Kenya, the Smithsonian, the Maryland Historical Society, and the Historic Buildings Group in Kampala. Paul has presented at four ICHC conferences; has ridden, raced, and collected bicycles since the 1970's; and has ridden eight Tours of the Scioto River Valley (TOSRV). *paulandtrish@msn.com*

Gary W. Sanderson (New Jersey, USA) is an avid cyclist which has led to active participation in The Wheelmen, the V-CC, the IVCA, the ICHC, and other international organizations related to cycling. Active High Wheeling has been replaced by e-Biking, but there has been no change in a reading preference for books and other sources of cycling history including the friendships made through cycling. w*heelman gary@gmail.com*

Lorne Shields (Toronto, Canada) has been an avid collector and researcher of early bicycling history for about 55 years. He specializes in cycling photographica, pre-1890 cycliana focusing on the Hobby-horse and Velocipedes, as well as most related aspects of ephemera and memorabilia including the cycles themselves. His focus is on the history and development of manumotive and pedomotive cycles from 1816 to ca 1920.

Greg Siple (Montana, USA), inspired by his father's 1930s cycling scrapbooks and stories, rode his first 100-mile day in 1961 at age fifteen. He founded TOSRV with his father in 1962. He, with his wife, June Siple, rode from Alaska to Argentina, 1972-5, to become the second man to ride the length of the Western Hemisphere and June the first woman to do so. He is a co-founder of Bikecentennial (now the Adventure Cycling Association) where he spent most of his working life as art director, retiring in 2017. At ACA between 1982 and 2016 he shot a photo portrait collection of 5,000 visiting cycle tourists with their packed bicycles (See *Cycle History 20*, pp. 57-62). *ggsiple@gmail.com*

Kisha Tandy (Indiana, USA) is the Curator of Social History at the Indiana State Museum and Historic Sites. Kisha was the primary researcher for the permanent experience Souls Seeking Safety: Bringing Indiana's Underground Railroad Experience to Life at the Levi and Catharine Coffin State Historic Site in Fountain City, Indiana, and many other exhibits and programs in Indiana that deal with the African American experience in America.

Ronald Thompson (Maryland, USA)
The author has been a professional engineer, department of defense weapon system analyst, and program manager, as well as a lifelong cyclist and craftsman. In 2014 he began full time design, development, fabrication, testing, and evaluation of what would become the "Generation Four Bicycle" - the G4 Bike. The author and wife Peggy have enjoyed over 30,000 miles on G4 prototypes: They believe the configuration could be the future road bicycle. *ronaldthompson7641@gmail.com*

Lynne Tolman (Massachsetts, USA) a cyclist and journalist, is president of the Major Taylor Association, based in Worcester, Massachusetts. She is recently retired from the Worcester Telegram & Gazette, where she worked for 35 years as a reporter, cycling columnist, and editor. She is a graduate of the Medill School of Journalism at Northwestern University. She bikes with the Seven Hills Wheelmen, and one of her other hobbies is genealogy. *LTolman@LTolman.org*

Michael Unsworth (Michigan, USA) A Humanities Librarian at Michigan State University in East Lansing, MI, Michael is an activist cyclist with an abiding interest in cycling history. *unsworth@msu.edu*

A.C. Fairbanks: From the Manufacture of Banjos to the Manufacture of Wooden Bicycle Rims

By Gérard De Smaele, Fauroeulx, Belgium

Born of musical parents, Maurice de Vlaminck (1876-1958) was first a violinist and cyclist before becoming the great painter we know today. Separately, a link between the world of the banjo and that of the bicycle is not obvious. However, the informed observer will note many analogies between the manufacturing processes used by Albert Conant Fairbanks (born 1852 in Sterling, Massachusetts, died 1929 in Tonowanda, New York), a fervent cyclist, passionate about wood carving and the banjo, in the manufacture of sound boxes for banjos, and those implemented for the production, by the same person, of laminated wooden rims for bicycles. It is the relationship between these two sectors of activity that will be discussed below. The author of this article would also like to talk to you about the five-string banjo as much as about literature and cycling machines.[1] **[Figures 1 & 2]**

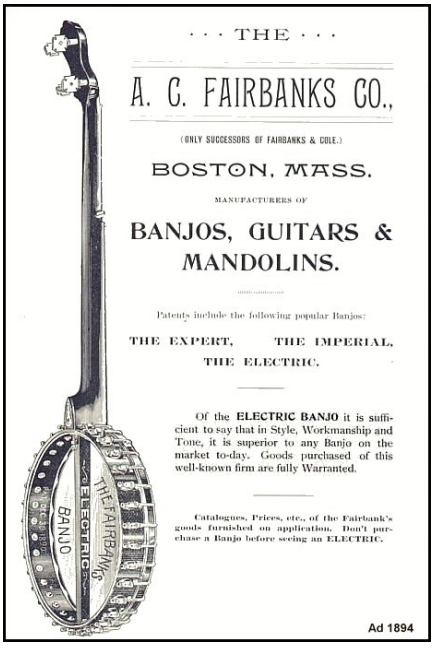


Figure 1. Fairbanks Banjo "Electric," 1894.

In addition to Fairbanks, other examples of this banjo-bicycle relationship come to mind.

At a time when the minstrel show was in vogue, William Esperance Boucher Jr. (1822-1899), a German from Hamburg who emigrated to the United States around 1840, opened in Baltimore, Maryland the first important workshop manufacturing banjos in the USA. He also made drums for the armies and was active in his adopted city until the 1880s. This character, well known to historians and collectors of the "Antebellum banjo," would also have claimed to have been among the very first American cyclists.[2] A century later, in the 1970s, Reed Martin (born in 1948), who is for us a "legendary banjo player,"[3] meanwhile, finished as winner of a Boston 100-mile amateur cycling race. For many years, his favorite instrument had been an old five-string "Vegaphone," a "tubaphone" with resonator built by Vega in the 1920s. **[Figure 3]** This great American brand had bought the one originally founded by A.C. Fairbanks. After beginnings in the production of medical equipment, then having innovated in the field of the banjo, our man radically changed course. Using his know-how, he excelled and also became just as well known in the industry of wooden rims for bicycles.

In the United States, in the 19th century, after the luster had faded from the minstrel show and a first craze for the banjo, the "classic style"[4] became the new fashion. At that time, the banjo became almost exclusively limited to five-string models: four long ones and a shorter chanterelle (thinnest and highest pitched string), adjoining the lowest string. Although this style of play spread and persisted in England until much later in the 20th century, it was first in the big cities of the American East that the "classic style" originated and remained predominant from the end of the Civil War to the First World War. These fifty years, from 1870 to 1920, marked by an "elevation" of taste and repertoire, will also be those of a first golden age of instrument making. Demand had to be met, and while countless small luthiers' workshops sprang up, larger firms also appeared, such as: Buckbee in the Bronx, N.Y. (established in the 1860s and considered the largest manufacturer of banjos in the 1880s), the Dobsons in Boston, S.S. Stewart in Philadelphia (1880s and 1890s) and Fairbanks, whose first production dated back to 1875, in Boston. Between the two great world wars, with the exception of rural areas in the South,[5] the five-string banjo suddenly became obsolete. It would then be the Vega firm (which bought the Fairbanks brand in 1904), as well as Lyon & Healy, Rettberg & Lange (which became Paramount), Bacon, Gibson, Bacon & Day, etc., which would water the new market opened by a burgeoning demand for tenor banjos. As a reminder, this instrument, as well as the plectrum banjo, (a five-string without its thinnest and highest pitched string), has four strings of the same length. Played together, the tenor and the plectrum were widely used within the first jazz formations and the dance orchestras of the interwar period.

With the great folk revival of the 1950s and 1960s, of which the singer/

Figure 2. Fairbanks-Boston laminated wood rims, 1893.

This paper was submitted in French and translated by Thomas Baker

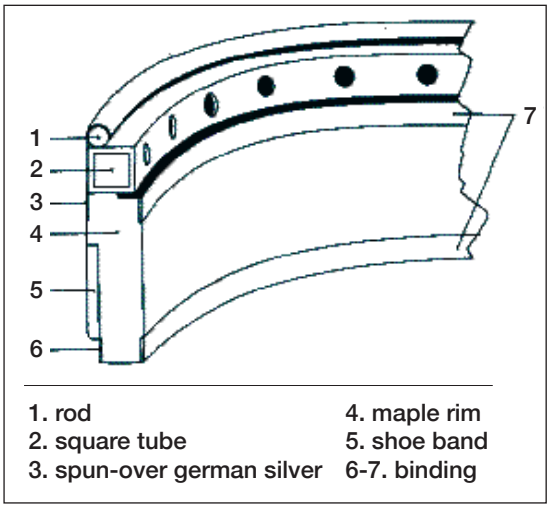


Figure 3. Section of the body (wood rim) of the "tubaphone," a tone ring later patented by Vega.

banjoist Pete Seeger was the figurehead, and the revival of traditional music from the South of the United States, the five-string banjo made its great reappearance, to remain the emblematic instrument that we know today. This "come back of the 5 strings" brought up to date the beautiful productions of the luthiers of the classical era, in particular those of Alfred Conant Fairbanks. Note in passing that the folk revival would carry the ideals of post-war youth, and would support, for example, the actions of Martin Luther King for the defense of civil rights. Marking an entire generation, the effects of the folk revival were more lasting than a mere fad. Many of Seeger's themes remain topical. **[Figures 4 & 5]**

After this brief overview of the general history of the banjo, let us return more specifically to A.C. Fairbanks. Let us add that he had left his flourishing company in 1895, to entrust its management to David L. Day (1865-1956), another famous actor in the evolution of Fairbanks banjos, who through the Vega and Bacon & Day firms, already mentioned above, would continue the innovative work of the founder. Against all expectations, and this from the beginning of the 1890s, the name of Fairbanks, which had become one of the most prestigious among the manufacturers of five-string banjos, appeared stamped on the wooden rims of the most beautiful bicycles of the time. Clearly, Fairbanks was an opportunity-seeking entrepreneur. His reputation and success in the field of rims spread both in the United States and in England, but also in France and elsewhere in Europe. That said, the historians of the bicycle will point out to us that the period stretching from 1870 to 1920 corresponds almost exactly to that of the blossoming of the velocipede[6] and to the metamorphosis of a new mode of locomotion, which would lead to the modern bicycle.

As a reminder, the draisine, the first self-propelled machine with two wheels in line, was invented in 1817 by the German Karl von Drais (1785-1851). However, it was not until the early 1860s that a long overdue improvement, the pedal velocipede, appeared;[7] it was in 1866 that the Frenchman Pierre Lallement (1843-1891), introduced the velocipede to the United States. It was not until 1867 that he appeared at the Universal Exhibition in Paris and that we began to see him wandering the streets of the capital. But, barely on its feet, the Franco-Prussian war of 1870-1871 interrupted the development of the Compagnie Parisienne, the company born from the association of Pierre Michaux and the Olivier brothers. The cycle industry then found a second impetus, this time in Coventry, England where James Starley (1830-1881) paved the way for a whole new industrial sector which would experience a fantastic boom in the last decade of the 19th century; this both in Europe and in the United States. There, cycle historians will call the phenomenon the "American bicycle craze of the 1890s." Boston, Massachusetts, and surrounding areas will be the epicenter. Boston, which inevitably brings us back to Fairbanks: its banjos… and finally its wooden rims.

Figure 4. An 1890s Fairbanks "Electric" banjo, disassembled. Above and from left to right: tone ring, skin on his hoop and stretcher band. From the exposition "The Banjo the People and the Sounds of America's Folk Instrument." Our Heritage Museum, Lexington Massachusetts, 2002. Coll. J. Bollman. Photo: Gérard De Smaele.

Figure 5. Banjo stamped "Fairbanks & Cole", from the 1880s. The "3 ply rim" is clearly distinguishable. Photo: Hank Schwartz: http://www.hschwartz.com/FairbanksBanjos/FandC.html

This last decade of the 19th century will also be that of the manufacture of elegant luxury bicycles. Alongside those in metal, there are others made of wood and/or bamboo,[8] whose brands were Old Hickory (Chicago, ca. 1896), Bentwood (Toronto, ca. 1897), Push-Thonet (Austria, ca. 1896), La Souplette (France, ca. 1895), and the M.D. Stebbins Manufacturing Co., one of the largest manufacturers of wooden frame bicycles, established in Massachusetts. The species of wood selected for the rims will be hickory (American white walnut) or alder, but most often maple, an abundant species, widely used by luthiers for the manufacture of banjos. Although the case turns out to be

special, we will sometimes find on some of these machines, metal rims painted in imitation wood. Finally, note that the maple chosen for the rims was strictly selected. Only 20% of the tree was retained, while the unused parts could be perfectly suited for other purposes, such as making furniture… and banjos.

In fact, it was around 1892 that the first wooden rims from Fairbanks appeared. **[Figure 6]** These were pierced with holes for the passage of fine metal spokes, and profiled to be able to maintain tires (solid or hollow) or tires inflated with air. These, a recent invention by Scotsman John Boyd Dunlop (1840-1921), began to show up everywhere, widely promoted after the first Paris-Brest-Paris in 1891, the first major international race run, for some competitors, on pneumatic tires. The winner was Charles Terront (1857-1932), on Michelin tires, followed by Jiel-Laval (1855-1917), equipped with Dunlop. But, the first tires were still expensive, difficult to repair and gained in popularity only gradually.

We know how much the weight of the wheels is a hindrance to the acceleration and speed of our pedal machines. At the time of Fairbanks, the metal rims were still quite heavy, and the wooden ones, although more expensive, were appreciated for their lightness. At first glance, they were criticized for a lack of rigidity and reliability, because those made of a single piece of bent wood were relatively fragile; they could more easily warp, deform and possibly split. Exposed to rain and sun, there was also the problem of the effects of water and heat on the wood of these rims.

The improvement of their quality was made by the arrangement and the lamination of thinner wooden slats. Obviously, this process, mastered by

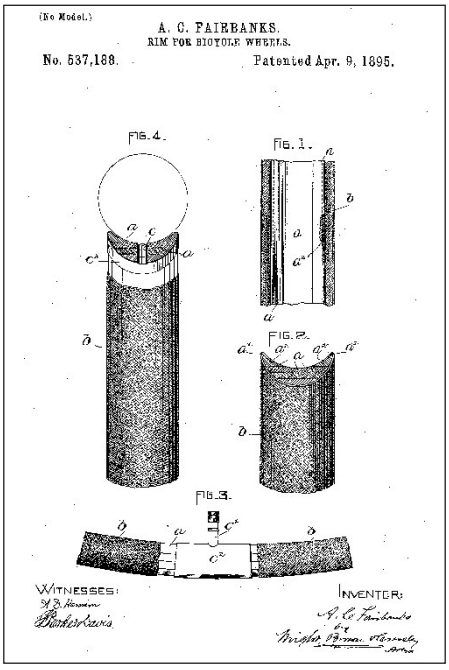


Figure 6. Patent of 1895. Laminated rim covered with canvas.

the manufacturer Fairbanks for the manufacture of resonance boxes for banjos, could be suitable for this other use. We know that the varnishing of the wood made its surface waterproof, but Fairbanks ended up preferring to cover the rim with a waterproof canvas, glued, then varnished on its surface; another innovation for which he filed an exclusive patent.

With regard to the banjo, let us remember that after the use of gourds and calabashes, the design of sound boxes was for a long time reduced to the simple bending of a thin wooden board, to which was given a circular shape: a concept of which William Boucher (1822-1899) – founder in Baltimore of the specialized workshop for the production of banjos– was the greatest protagonist. Around 1880 the "clad metal rim" became a characteristic element of of the banjo cases of the firm of Samuel Swain Stewart,[9] as well as other predecessors, who covered the fine structure of bent wood in the resonance boxes of their banjos with an external metal envelope. Until then, the wall of the boxes generally remained quite thin, and instruments lacked a real metallic tone ring.[10] **[Figures 7 & 8]**

Figure 7. Banjo Fairbanks. Inside of the body (clad metal rim) and its "electric tone ring."

In the 1890s, A.C. Fairbanks, in search of a more powerful sound as well as a more rigid structure, filed a patent for a body of more elaborate design: the famous electric tone ring. This metal piece rested on a relatively thick base, consisting of a structure of three layers of laminated wood. This tone ring, often associated with a clad metal type body, was followed by the "White Laydie," resting on a thicker wood (about ½ inch or more). The manufacture of this short hollow cylinder was done in several stages: debitage of selected woods, steaming at high temperature, bending, gluing, shaping. After drying, these wooden barrels were turned on a lathe, to be calibrated and profiled according to the future assembly of the turnbuckles and the tone ring. The varnishing and the drilling of the holes intended for the fixing of the stretchers of the skin (bracket shoes) completed the manufacturing process. **[Figure 9]**

A.C. Fairbanks will describe, almost word for word, this same sequence of

Figure 8. Fairbanks "Electric No. 1," from Benunzio Uptown Music, Rochester, N.Y.

Figure 9. Banjo Fairbanks "Whyte Laydie" No. 7, 1908. "The A.C. Fairbanks Co. Makers, Boston, Mass. / SN-24543. Photo: Elderly Instruments, Jan., 2019.

operations, both for the manufacture of its wooden rims for bicycles and for its banjo cases. There was, however, a huge difference in the magnitude of the production figures for bicycle rims. The whole process was highly mechanized, to be able to supply up to more than 1,500 pairs of rims per day, a figure which, to meet the demand, was constantly increased.

Fairbanks was very early on the ally of the biggest brands of bicycles established in the Boston area: the Columbia of Colonel Pope, the Victor of the Overman Wheel Company, as well as Dunlop (tires) and Constrictor (rims and tires), large manufacturers who equipped the cycles. Unlike the banjos, the Fairbanks rolled rims were manufactured on an industrial scale, at sites near Boston and in Pennsylvania. To supply the European market, a production unit was opened in 1894 in Draycott, Derbyshire, England, near Nottingham, where Raleigh had established itself in 1887. **[Figure 10]**

In England, these Fairbanks rims, fitted with Dunlop tires, were found not only on Raleigh cycles, but also on other brands of premium bicycles, such as Humber. These same tires and rims were also widely used by a large number of cycle manufacturers, including Clément in France. **[Figure 11]**

To conclude, let us remember that the wheels of the first velocipedes, from the draisine to those of the first Michaux and the Parisian Company of the Olivier brothers, were wheels, traditionally used on carts and horse-drawn carriages, whose wooden spokes are said to be "in compression". In 1869, the Frenchman Eugène Meyer (1844-1907) introduced the first metal spokes, "in tension," as well as iron rims, covered with solid rubber tires. In the 1870s, his compatriot Jules Truffault (1845-1920) stiffened and lightened this rim by making it hollow. With the same aim of reliability, the Englishman James Starley (1830-1881) began to cross the spokes of his tricycles. "Tangent" spokes were considered more stable than direct spokes and became widespread on bicycles.

Bicycle tires are one of the most important comfort and safety factors for the user. We first thought of increasing the section of the solid tires, then of making them hollow. These "hollow rubber" or "cushion tires" were solid but were not yet inflated with air. It was the appearance of the chain-driven bicycle in 1885 and Dunlop's invention of the pneumatic tire in 1888 that would revolutionize the world of cycling, making it much more efficient, safe and comfortable. These two elements, capital of the evolution of the cycle, essential for its propagation, paved the way and allowed the industry to flourish fully. In the 1890s, mass production drove down the price of a means of transport, which until then had been reserved only for the more affluent classes of society. Unlike William A. Cole (1853-1909), a banjo player who was his first associate, Fairbanks was perhaps more passionate about sports (and high finance) than music. The prospect of a new economic opportunity would explain why Fairbanks definitively committed itself, in 1895, to the manufacture of wooden rims… thus turning its back on the banjo?

Figure 11. Fairbanks Jantes en Bois (wood rims) advertisement.

Like any industrialist, Fairbanks had to face competition: small producers,

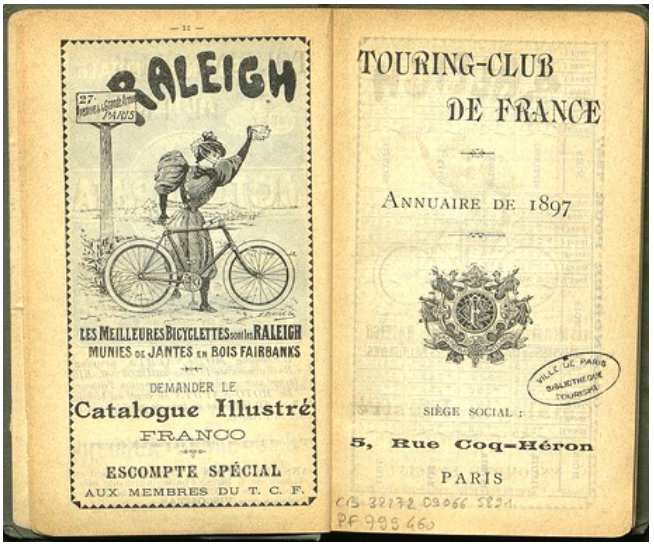


Figure 10. Advertisement for Raleigh cycles and Fairbanks wooden rims, in the directory of the Touring-Club de France of 1897.

but also other important companies, including that of Théodore Kundtz (1852-1937), a large manufacturer, financier and philanthropist, originally from Hungary, who came to settle in nearby Cleveland, Ohio, and after having launched into the manufacture of furniture for sewing machines, diversified into the production of furniture for communities, churches and schools. Its production line for wooden rims for bicycles was the largest in the United States. Théodore Kundtz was also part, with Lobdell, Indiana and Fairbanks, of the American Wood Rim Company (also for steering wheels and car wheels), a trust from which our man ended up divesting himself. After 1900, he ended his career at the head of the management of a paint production firm, the Waterproof Paint Co., located in Watertown, Massachusetts, of which he ended up as president.

In France, the rims of Fairbanks and Kundtz both would be marketed, around 1910, by the "Cie Franco-Américaine des jantes en bois – Paris." **[Figures 12 & 13]**

In the 20th century, the wooden rim was improved by adding a metal profile to its inner circumference, but being unsuitable for clamp brakes, it was gradually abandoned. Although we continued to use - until the 1960s and 1970s - wooden rims on track bikes (having no brakes), their use on the road dropped sharply at the end of the Second World War. They now belong to the realm of curiosities, however they retain their real aesthetic appeal. Take for example the Ghisallo rims, currently produced in Italy, which are sought after for their vintage look, and are appreciated during the "Tweed Runs" and various "retro parades", which flourish here and there, in London, Philadelphia, Portland and other trendy cities.

If these wooden rims are somewhat neglected today, the Fairbanks name is still closely associated with the five-string banjo, the many surviving examples of which remain one of the most important sources of inspiration for modern banjo luthierie. The takeover of the Vega brand by Martin Guitars in the 1970s (production from 1970 to 1979), then by Deering Banjos (production from 1989 to today) have enabled this prestigious innovator to perpetuate its imprint until today. For many contemporary luthiers, Fairbanks remains an essential reference, as well as an ideal to pursue.

The fact remains that outside "banjoland," evocation of the name of Fairbanks essentially brings us back to the field of bicycles. ●

Figure 12. Fairbanks Boston wood rim.

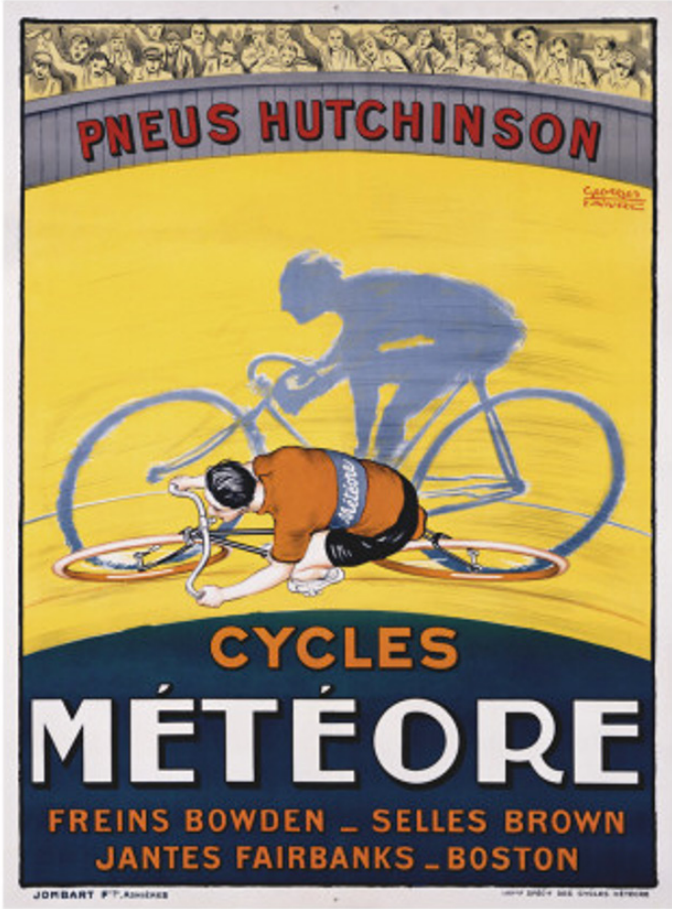


Figure 13. Cycles Météore with Fairbanks rims.

Thanks to Shawn Sweeney and to Pryor Dodge for providing some valuable bibliographical guidance on Fairbanks.

Endnotes:

1. See the author's website: www.desmaele5str.be, accessed August 27, 2022.
2. Exposition cartel, Making Music: The Banjo in Baltimore & Beyond, presented in 2014 at the Baltimore Museum of Industry, principally focused on W. Boucher and the banjo of the minstrel show.
3. Martin, Reed, Old Time Banjo, Cabin John, CD 101, Maryland, 1998; Glenn Godsey, "CD review: Old Time Banjo, Reed Martin", in Banjo Newsletter, XXVI/4, Feb. 1999, pp.6-8; Ken Perlman, "Reed Martin", in Banjo Newsletter, XXV/4, Feb. 1998, pp. 8-13 et XXV/5, March 1998, pp. 8-12; Fred Geiger, "Reed Martin", in Banjo Newsletter, X/8, June 1983, pp. 5-8.
4. A playing technique also known as "finger style", specific to "banjo classic", derived from the classical guitar, therefore of European origin; to be distinguished from "minstrel style" or "stroke style" from the African inspiration. See G. De Smaele, The Wayne Adams 'Old Banjo Collection' (Frémeaux, FA5816, 2022) - https://www.fremeaux.com/download/88b671fdcb-0b11a35f602a3bfd135e38fd95843b , accessed

on August 27, 2022.

5. At the same time and after the Civil War, what we call Country Music began to develop in the rural southern regions. With the arrival of radio and records, this music, which often uses the five-string banjo, spread across the country. Its commercial development was blocked following the great stock market crisis of 1929.

6. De Smaele, Gérard. Le cheval bleu: du vélocipède à la bicyclette, Paris, L'Harmattan, 2018.

7. This invention has long been attributed to Pierre Michaux (1813-1883), without however being able to prove it.

8. Beautiful specimens are kept at the Fietsmuseum Velorama in Nimègues, Netherlands.

9. S.S. Stewart did not patent this innovation because he was not the inventor.

10. The tone ring is the circular piece, usually metallic, on which the skin of the banjo rests directly.

Bibliography:

Fairbanks / Banjos:

Dating A.C. Fairbanks and Vega Banjos: http://www.mugwumps.com/acf_date.html, accessible sur August 27, 2022.

Stuart Cohen. American Banjo Makers from the Civil War to WWII: http://www.trussel.com/bti/banmaker.htmx, accessible sur August 27, 2022.

Gérard De Smaele. Banjo Attitudes. Paris : L'Harmattan, 2015.

Gérard De Smaele. A Five-String Banjo Sourcebook. Paris: L'Harmattan, 2019.

G. De Smaele, The Wayne Adams 'Old Classic'Banjo Collection. Vincennes: Frémeaux & Associés, FA5816, 2022 - https://www.fremeaux.com/download/88b671fdcb0b11a35f602a3bfd135e38fd95843b, accessible sur August 27, 2022.

Phil Gura, James Ballman. America's Instrument. The Banjo in the Nineteenth Century. Chapel Hill / London: The University of North Carolina Press, 1999, 303 p.

Elias Kaufman. « The Fairbanks and Vega Companies ». Mugwumps, VI/2, Spring 1978, pp. 18-20.

Elias Kaufman. « A History of the Fairbanks and Vega Banjo Companies ». in The Five-Stringer, No. 123 (Fall 1976) and serialized in succeeding issues through 1979.

Hank Schwartz. Fairbanks Banjos: http://hschwartz.com/FairbanksBanjos/Fairbanks-Banjos.html, accessible sur August 27, 2022.

Robert Lloyd Webb, James Ballman. Ring the Banjar! The Banjo in America from Folklore to Factory. Cambridge, Mass.: MIT Museum, 1984, 101 p.

Cycle History / Fairbanks wood rims:

American Cyclist (The), Hartford, Conn., 1890s.

H.W. Bartleet. Bartleet's Bicycle Book. Ed. J. Burrow and Co. Ltd, 1931, p. 93.

Bicycle News (The).

Louis Baudry de Saunier, « La jante en bois », in La Nature, n° 1080 from 10 Feb. 1894, p. 164.

Bougier H. Cycles et motocycles. Paris: H. Dunod et E. Pinat, 1911, pp. 68-69.

Bulletin Officiel de l'Union Vélocipédique de France, year 1894 and after.

Cycle Age and Trade Review (The), USA, 1890s. [Cycling Life and Bearings merged to form the Cycle Age]

Cycling Age (The), Chicago, 1890s.

The Cyclist and Athlete.

Gérard De Smaele. Le cyclisme dans les livres et les revues, Paris: L'Harmattan, 2015.

Gérard De Smaele. Le cheval bleu: du vélocipède à la bicyclette, Paris: L'Harmattan, 2018.

Pryor Dodge. La grande histoire du vélo, introduction by David V. Herlihy, translated from English by Frédéric Deschandol. Paris: Flammarion, 1996, 217 p.

Grace Guide to British Industrial Industry : http://www.gracesguide.co.uk/Main_Page, accessible sur August 27, 2022

Tony Hadland, Hans-Erhard Lessing. Bicycle Design. Cambridge, Mass., MIT Press, 2015.

David Herlihy. Bicycle: The History. New Haven, London: Yale University Press, 2004, 470 p.

Losifidis Kyriakos. The Wooden Bicycle Around the World. Image Publishing Group, 2017, 272 p.

Outing & the Wheelman: An Illustrated Monthly Magazine of Recreation.

Pall Mall Gazette, April 15, 1896.

Referee (The), USA, 1890s.

Revue du T-C F, June 1894, p. 109.

Andrew Ritchie. King of the Road. Berkeley CA: Ten Speed Press, 1975, 192 p.

Jacques Seray. Deux roues : la merveilleuse histoire d'une machine nommée vélo. Vélizy: Seray, 2013, 160 p.

Véloce Sport (Le), from 1894 : http://gallica.bnf.fr/ark:/12148/cb32887197v/date.item.r=Fairbanks, accessible sur August 27, 2022.

The Wheel and Cycling Trade Review, 1893: https://archive.org/details/wheelcyclingtrad-12251newy, accessible sur August 28, 2022.

Leonard Wieth. A.C. Fairbanks, 2008: https://acousticmusic.org/research/history/large-shop-guitar-builders/a-c-fairbanks/, accessible sur August 27, 2022.

Wood Rim Makers: http://thecabe.com/forum/threads/toc-wood-rim-makers-info.61555/, accessible sur August 27, 2022.

Conference Flash Back • ICHC 2014

Photo by Greg Siple

The 2014 ICHC in Baltimore, Maryland, featured a lively demonstration of fully functional vintage machines for the general public. The Maryland Historical Society, the conference venue, included a large parking lot perfect for the show.

Addenda

The velocipede was early introduced to the United States, by a time when the five-string banjo was also in full expansion. Although these two industries are quite distinct from each other, there are some unexpected links between them. Since the 1960s, I have been interested in the history of this instrument, and in 1984, at an exhibition displayed at the Massachussette's Institute of Technology in Cambridge, collector James Bollman presented a remarkable collection, much of it from Boston, also home to the Columbia-Pope Manufacturing Company. He pointed out that Albert Conant Fairbanks (1852-1919), after having created one of the most prestigious brands of banjos, had finally converted to the industrial production of wooden bicycle rims. To do so, he was simply inspired by the manufacturing processes already used to make his banjos rims: cutting, bending, assembly, turning…
This brief communication has no academic pretensions, but being occupied for decades by the history of the banjo - more particularly by the original five-string version - it seemed interesting to me to highlight this concordance: that of a man who will have put all his skills as a luthier at the service of the cycling machine. While the 1900 Paris World Fair shone under the brilliance of the “Electric Fairy”, the patent for the “Electric tone ring” -for an instrument of purely acoustic design- also emphasized the modernity of his time. But Fairbanks was also an avid cyclist. This other passion eventually prevailed, at a time when some of the finest bicycles were made of wood.

Le vélocipède fut tôt introduit aux États-Unis, à une période où le banjo à cinq cordes se trouvait lui aussi en pleine voie d’expansion. Bien que ces deux secteurs d’activité soient bien distincts l’un de l'autre, il existe cependant entre eux quelques liens inattendus. Depuis les années 1960, j’ai été amené à m’intéresser à l’histoire de cet instrument et en 1984, lors d’une exposition au Massachussett’s Institute of Technology, à Cambridge, le collectionneur James Bollman y présenta un ensemble des plus remarquables, provenant pour une bonne part de Boston, également fief de la Columbia-Pope Manufacturing Company. Il fit alors remarquer qu’Albert Conant Fairbanks (1852-1919), après avoir été à l’origine de la création d’une des plus prestigieuses marques de banjos, s’était finalement reconverti dans la production industrielle de jantes en bois pour bicyclettes. Pour ce faire, il s’était tout simplement inspiré des procédés de fabrication déjà mis en œuvre pour la confection des caisses de ses banjos : découpe, cintrage, assemblage, tournage…
Cette brève communication n’a aucune prétention académique, mais étant occupé depuis des décennies par l’histoire du banjo – plus particulièrement par celle de la version originale à cinq cordes –, il m’a semblé intéressant de mettre en évidence cette concordance : celle d’un homme qui aura mis toutes ses compétences de luthier au service de la machine cycliste. Alors que l’Exposition Universelle de Paris 1900, brillait sous l’éclat de la “Fée Electricité”, le brevet de son “Electric tone ring” – pour un instrument de conception purement acoustique –, soulignait lui aussi la modernité de son époque. Mais Fairbanks était également un fervent cycliste. Cette autre passion finit par l’emporter, à un moment où certaines des bicyclettes les plus raffinées étaient en bois

Gérard De Smaele

The International Cycling History Conference

Shining light on bicycle history since 1990

1990 • Glasgow, Scotland, UK
1991 • Saint Etienne, France
1992 • Neckarsulm, Germany
1993 • Boston, Massachusetts, USA
1994 • Cambridge, England, UK
1995 • Johannesburg, South Africa
1996 • Buffalo, New York, USA
1997 • Glasgow, Scotland, UK
1998 • Ottawa, Ontario, Canada
1999 • Nijmegen, The Netherlands
2000 • Osaka, Japan
2001 • Pigna, Italy
2002 • Muenster, Germany
2003 • Canberra, Australia
2004 • Vienna, Austria
2005 • Davis, California, USA
2006 • Toronto, Ontario, Canada
2007 • Tampere, Finland
2008 • St. Etienne, France
2009 • Freehold, New Jersey, USA
2010 • Prague, Czech Republic
2011 • Paris, France
2012 • Roeselare, Belgium
2013 • Lisbon, Portugal
2014 • Baltimore, Maryland, USA
2015 • Entraigues-sur-la-Sorgue, France
2016 • North Haven, Connecticut, USA
2017 • Mannheim, Germany
2018 • London, England, UK
2019 • Znojmo, Czech Republic
2020 • Canceled due to COVID
2021 • Canceled due to COVID
2022 • Indianapolis, Indiana USA

CHILLICOTHE, OHIO, 1888 - COURTESY OF THE ROSS COUNTY HISTORICAL SOCIETY