

SAH Journal



ISSUE 321
MARCH / APRIL 2023

\$5.00 U.S.

Contents

- 3 PRESIDENT'S PERSPECTIVE
- 4 KNIGHT VS. PACKARD
- 9 READER FEEDBACK: WHAT'S YOUR "AUTO" BIOGRAPHY?
- 10 RACING IS A BATTLE OF VALVE SYSTEMS—KNIGHT
- 12 BOOK R&R
- 15 IN MEMORIAM

Billboard

SAH in Hershey: The SAH Annual Awards Banquet will take place on Thursday, October 5, 2023, in the Picard Grand Pavilion at the Hershey Country Club. The SAH will be on the field again during the AACA Eastern Fall Nationals at our usual spot: OBB16-19, Tuesday through Thursday. For details and updates, check the website: autohistory.org.

7th Annual Michael R. Argetsinger Symposium on International Motor Racing History: August 3rd is the deadline for the presentation abstracts. The symposium will again be co-hosted by the SAH and the International Motor Racing Research Center (IMRRC), in Watkins Glen, New York, on November 3-4, 2023. For details on how to submit a presentation abstract for symposium consideration, see: racingarchives.org/assets/2023-Argetsinger-CFP2a.pdf. For additional details and updates, check the website: autohistory.org.

Helen V Hutchings sends this announcement: Congratulations are in order to *Matthew Kilkenny* whose 2022-written and self-published *Detroit Steel Artists* has been awarded the Gold Award in the Coffee Table Book category for best book in category by the Independent Book Publishers Association. We reviewed the book for you in *SAHJ* #315.

Kilkenny, who grew up in the hobby holding membership in SAH and CCCA,

Front cover: The 2023 Amelia Island "Best in Show Concours d'Elegance" was awarded to this 1935 Voisin C25 Aerodyne displayed by Merle and Peter Mullin of Oxnard, California. This car was also the 2011 Pebble Beach Concours d'Elegance "Best in Show" winner. Amelia's "Masters of Ceremonies Concours d'Elegance" *Bill Rothermel* (with microphone) and Justin Bell are seen behind the car. Mr. Mullin was the SAH Friend of Automotive History awardee in 2020. The selection of this car was inspired by our "Knight vs. Packard" article, as it uses a Knight sleeve-valve engine. For more on this car see: entrant.hagerty.com/entries/public/ADIAMgAzADY and for the Mullin Automotive Museum collection where it appears, see: mullinautomotivemuseum.com/collection/.

Back cover: A 1907 Columbia Mark XIX Surrey, owned by Mark Hyman of Saint Louis, Missouri, at the 2023 Pebble Beach Concours d'Elegance. Part of its description read: "This rare 1907 Columbia Park Surrey, formerly of the Henry Ford Museum, beautifully showcases the luxury of early electric cars in their prime. It is the only known Park Surrey extant..."

expressed his pride and pleasure: "My goal was to write and publish something that the car community would appreciate, but I had absolutely no expectations that it would be viewed so favorably outside the car world. It now has been recognized for just being a great history book in the form of a coffee table book. To have my book recognized by the book publishing community is truly humbling."

In his preface to *Detroit Steel Artists*, Kilkenny had written that the book he'd started to write was a history of 1930s Packard when he got side-tracked by the realization that he had sufficient material to create *Steel Artists*. Hopefully it will be our pleasure to read Kilkenny's first-intended book next.

Free digitizing service: The editor is seeking automobiles photographed by **John Adams Davis**, and other prewar photographers, too. Only digital images are needed. Accordingly, if you would like your antique automotive documents and photos digitized for free, just contact the editor at sahjournal@live.com to confirm the assignment. Then mail your material, and it will be mailed back to you with the digital media.

Wanted: Contributors! The *SAH Journal* invites contributors for articles and book reviews. With your help, we can continue to feature a steady and consistent stream of material. Please contact the editor directly. *Thank you!*

SAH Journal

ISSUE 321 • MARCH/APRIL 2023

THE SOCIETY OF AUTOMOTIVE HISTORIANS, INC.
An Affiliate of the American Historical Association



Officers

Robert G. Barr	President
Kevin Kirbitz	Vice President
Robert Casey	Secretary
Rubén L. Verdés	Treasurer

Board of Directors

H. Donald Capps (ex-officio)
Matt Anderson †
Bob Elton †
Carla R. Lesh †
Chris Lezotte Δ
David McGee Δ
John Mohr #
Dean Nelson #
Steve Purdy Δ
Robert Schmitt #

Terms through October (#) 2023, (†) 2024, and (Δ) 2025

Editor

Rubén L. Verdés
340 Royal Poinciana Way, Ste. 317-305
Palm Beach, FL 33480 U.S.A.
journal@autohistory.org
sahjournal@live.com
tel: +1.561.866.5010

Publications Committee

Thomas S. Jakups, Chair
Kit Foster
John Heitmann
Mark Howell
David McGee
Rubén L. Verdés
Steve Wilson

SAH Journal (ISSN 1057-1973)
is published six times a year by The
Society of Automotive Historians, Inc.
Subscription is by membership in the Society.

Membership dues are \$50 per year (\$60
per year outside North America & Mexico);
digital membership dues are \$20.

Dues and changes of address go to:

Society of Automotive Historians, Inc.
c/o Cornerstone Registration Ltd.
P.O. Box 1715
Maple Grove, MN 55311-6715 U.S.A.

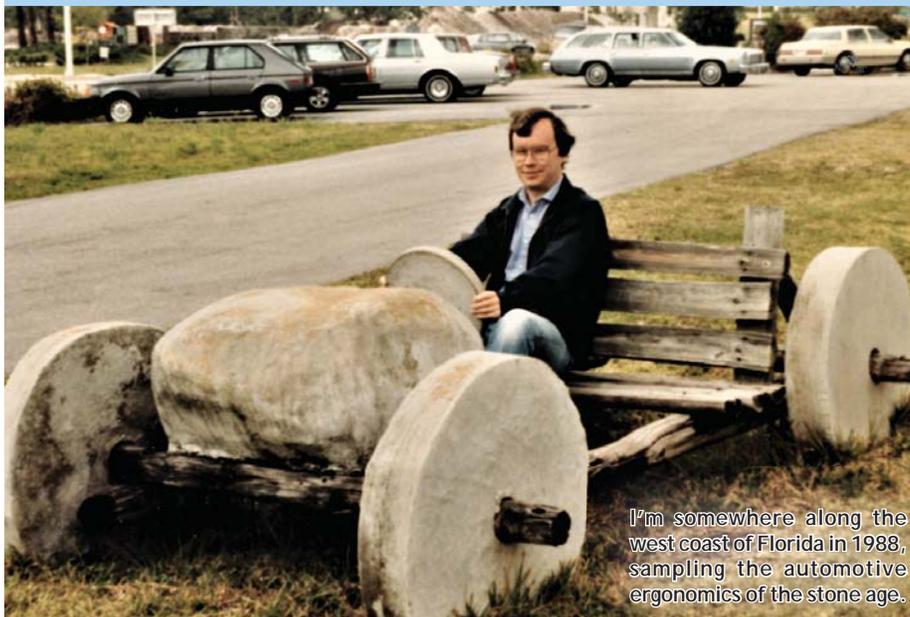
©2023

The Society of Automotive Historians, Inc.

www.autohistory.org

Join, renew and more right on-line!

President's Perspective



I'm somewhere along the west coast of Florida in 1988, sampling the automotive ergonomics of the stone age.

The SAH annual Book Signing during Hershey Week started at our Hershey flea market tent in 2011, according to recent research by Helen Hutchings. We missed 2020 and 2021 due to the pandemic, but to date we have had a ten-year run with this event. Always a draw for authors and members to meet and enjoy some camaraderie, our Book Signings have regrettably had limited results pulling Orange Field foot traffic into our tent. Over the years, those involved have cataloged a litany of reasons why this is, while tweaking various aspects of the event to address the situation. With this history in mind, we are very pleased to announce that our 2023 annual Book Signing will take

place in conjunction with the AACA Library and Research Center Yard Sale, along with the Buick Heritage Alliance (BHA). The Yard Sale is a very popular destination event at the beginning of Hershey Week; it is the Library's annual venue for selling duplicate material from its vast collections.

The 2023 Library Yard Sale takes place Tuesday, October 3rd, from 4:00 PM to 7:00 PM on the AACA Headquarters grounds. Sale attendees begin lining up well before 4:00 (I've done so myself), so our Book Signing will open just after 3:00 to benefit from the captive audience waiting in line for the Yard Sale. Please be aware that this Tuesday event will be in lieu of having our

annual Book Signing at our Orange Field tent on Thursday, as we have done in the past, although our tent will otherwise be fully operational during Hershey Week.

The AACA is providing the SAH with a 20x40 tent with tables and chairs for the authors, and convenient on-site unloading for the authors' book inventory. The event will be publicized in an article in *Antique Automobile*, the AACA bimonthly magazine, in the *Speedster*, the AACA e-newsletter, and with a half-page ad by *Chris Lezotte* which the SAH is running in the Hershey Region 2023 Flea Market Directory.

How this all developed is a story unto itself. This past spring communication was initiated between *Kevin Kirbitz*, Steve Moskowitz (AACA CEO), Jennifer Wolfe (AACA Library and Research Center Director), *West Peterson* (AACA *Antique Automobile* Editor in Chief), *David Landow* (SAH member and AACA VP of the Library and Research Center), and myself, to explore the feasibility of holding our Book Signing at the AACA Headquarters. After some internal back and forth, David Landow made an overture to the AACA on our behalf and discussions quickly progressed, including two group Zoom calls. The AACA's invitation to the SAH to join the Yard Sale event, along with the BHA, soon followed.

We are very grateful to the AACA and have high hopes for this initiative; their generosity in offering us this venue and opportunity cannot be overstated. I hope to see as many of you as possible this October at our Book Signing at the AACA Library Yard Sale; Helen Hutchings has already recruited a full roster of authors!

—Robert Barr



You can see all past SAH publications at the website: autohistory.org.

Samuel Stansel (5164)
Colorado Springs, CO
samstansel11@gmail.com

Robert Ianuario (5165)
Inman, SC
robianuario@yahoo.com

Chris Breeden (5166)
Rock Island, TN
cgbreeden@gmail.com

Kurt Hohl (5167)
McLean, VA
us1787@yahoo.com

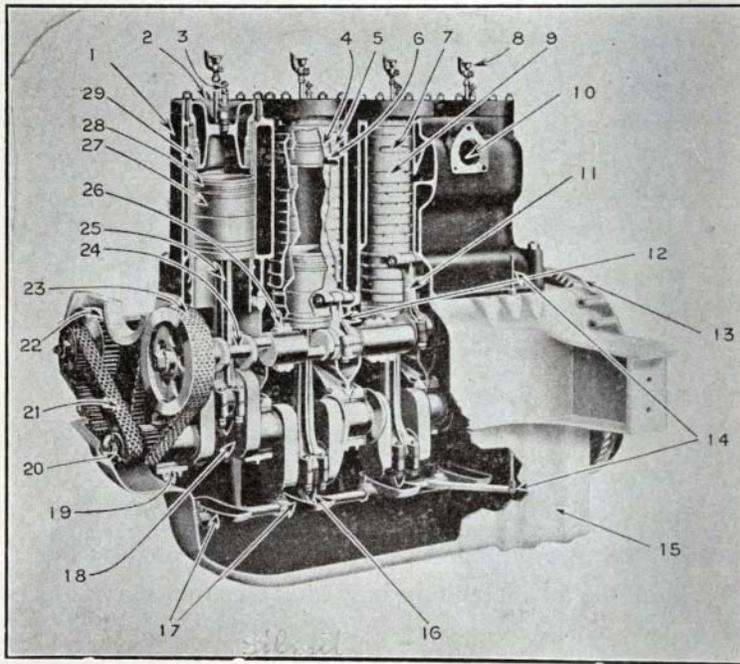
Dr. Peter Zubritzky (5168)
Mckees Rocks, PA
drpcz@alumni.pitt.edu

Preston Lerner (5169)
Burbank, CA
plerner@pacbell.net

Gregory Chambers (5170)
Fredericksburg, VA
gchambers426@msn.com

Erich Smith (5171)
Woodstock, GA
countyclassic@gmail.com

NEW MEMBERS



Sectional View of Silent-Knight Four-Cylinder Motor

- | | | |
|---|--|---|
| 1 Cylinder | 13. Fly wheel | 22. Silent chain driving sprocket for electric generator (on 4-cylinder models) |
| 2 Water-jacketed cylinder head | 14. Oil trough adjusting lever connected to throttle | 23. Silent chain drive for eccentric shaft |
| 3 Spark plug | 15. Lower part of crank case, containing oil pump, strainer and piping | 24. Eccentric shaft |
| 4 Inner sleeve | 16. Oil scoop | 25. Connecting rod |
| 5 Outer sleeve | 17. Adjustable oil troughs | 26. Bearing for eccentric shaft |
| 6-7. Port openings in sleeves | 18. Crank shaft | 27. Piston |
| 8. Priming cup | 19. Crank shaft bearing | 28. Piston rings |
| 9. Oiling grooves in sleeves | 20. Starting clutch | 29. Cylinder-head ring (junk ring) |
| 10. Port opening in cylinder | 21. Silent chain drive for magneto shaft | |
| 11. Connecting rod operating outer sleeve | | |
| 12. Connecting rod operating inner sleeve | | |

KNIGHT VS. PACKARD

Recently, while browsing some early automobile journals on the internet, I came across a book called *Facts About The "Silent Knight" Motor* by Eugene Ballou (1913: Toledo Legal News Co., Toledo, Ohio). Being an early Knight owner, I immediately downloaded it and read its 200 pages. (archive.org/details/factsaboutsilent00ball)

Mr. Ballou was obviously a staunch proponent of C.Y. Knight's sleeve valve motor design and states early in the book *"The invention of the silent sliding sleeve valve is undoubtedly the most wonderful stride in advance and improvement since the advent of the internal combustion engine."* (p. 5) His purpose in writing the book was to inform the average lay person of the merits of the new technology. The first half of the book attempts to do just that, with diagrams, charts, Knight's writings, and a full description of the 1909 Royal Auto Club tests of Daimler Knight engines that resulted in a Dewar award for Daimler.

However, it was the second half of the book that was most interesting. Pages 90–154 comprise a reprint of a pamphlet produced in 1910 by Knight & Kilbourne (creators of the Knight motor and owners of the Knight patent rights) entitled *The Knight Engine and The Packard Motor Company*. Following this is a 20-page document called *Supplementary Pamphlet to The Knight Engine and The Packard Motor Company*. These two documents provide some interesting insights into the early days of the American Auto industry, and the introduction of the Knight engine to the American market.

It should be noted that all of the information presented is from the Knight point of view, although much of it is reprinted from automobile magazines and some items are reprints of Packard's rebuttals. It's probably safe to say there were some "inaccuracies" being published by both sides, but the story is an interesting one.

Background:

Charles Yale Knight was an American inventor who spent years designing his double sleeve-valve "Silent Knight" engine. It is often said that although his engines were silent, Knight himself was far from it. He was a gifted and clever speaker and his speeches and writings always received close attention from others in the industry.

By 1904 Knight & Kilbourne had a running version and were trying to convince American automakers of the superiority of this sleeve valve design, with no success. It may be that the American companies were not interested because others had tried sleeve valve designs before, with poor results. In any case, Knight took his design to England, where the Daimler company took a long hard look at it before purchasing the license to use a modified version in their 1909 models.

From the start, the Knight-engined Daimler cars were well received and quickly attracted the attention of auto enthusiasts on both sides of the Atlantic. In the fall of 1908, representatives of three American manufacturers visited the Daimler factory to investigate the design. One of the visitors was Mr. Russell Huff, chief engineer of the Packard Motor Car Company. (A fourth visitor was Tommy Russell, General Manager of the Canada Cycle and Motor Company.) Throughout the industry many questions and criticisms were raised, leading to the 1909 Royal Auto Club tests—the most grueling tests ever done on an engine at that time.



Charles Y. Knight.

As a result of the Daimler visit, Packard (as well as the other companies) purchased a 38 hp Daimler Knight engine to enable them to do further inspection and testing at their own facilities. The engine was received in January 1909.

The Opening Strike:

On February 10, 1910, *Motor Age* magazine reported:

“A considerable furore in motoring circles was occasioned here today by the announcement made by a representative of the Packard Company to the effect that [Packard] controls basic patents covering the slide-valve or double-sleeve-valve type of motor, the report going still further to state the Knight motor is an infringement of the patent the Packard Company controls.”

The Packard Motor Company was claiming U.S. rights to the Knight sleeve-valve design.

The following week, *Motor Age* published a response by Knight & Kilbourne stating that months earlier they had indeed met with Packard lawyers about the patent issues. At that time the lawyers had revealed that Packard representatives had searched the U.S. patent records and found a 1901 patent application by Sydney A. Reeve for a double sleeve valve design for steam engines and compressors. In February 1909, just one month after receiving the Daimler engine, Packard had entered into an agreement with Reeve to purchase his patent, pending a successful re-issue of the patent with revisions that would cover the Knight design. Thus, armed with the re-issued Reeve patent, Packard announced that they held the patent for the design, and in fact the Knight patent infringed on theirs.

It should be noted that during this time other U.S. manufacturers were giving serious consideration to the Knight design. Packard’s announcement may have been aimed at their American competitors as much as at Knight

& Kilbourne. In Europe, companies like Minerva, Mercedes, and Panhard & Levasor were already producing Knight models as was C.C.M. (Russell) in Canada. Daimler was receiving a share of the royalties in these countries.

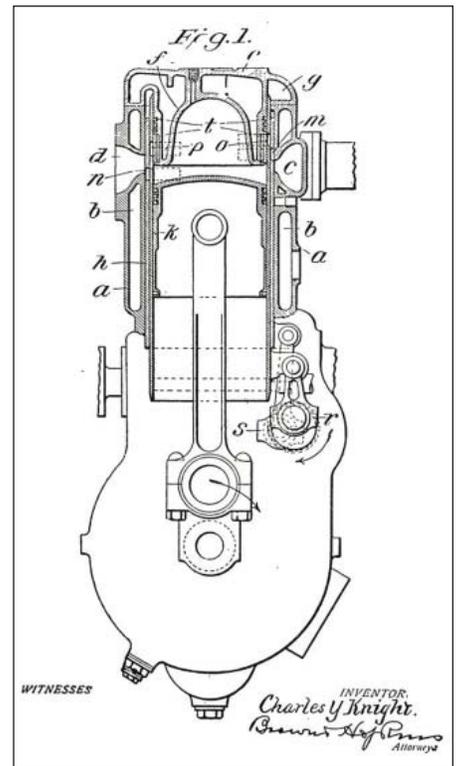
Behind The Scenes:

On March 12, 1910, *Autocar* published the Knight account of what had transpired in the time leading up to Packard’s public patent claim.

According to Knight, L. B. Kilbourne and a company lawyer were invited to a meeting in Detroit with Packard lawyers in October 1909. Knight described what they learned at this meeting:

“Packard had ... found a United States patent for a steam engine, which patent was applied for in 1901, and granted in 1908, and [Packard] had had this steam engine patent reissued to cover the use in America of the double sleeve as employed by the Knight motor.” ... “They did not claim that this was a patent under which an engine similar to the Knight could be built, or that their patent was practicable for any sort of internal-combustion engine, but that by re-drafting the steam engine claims they had so worded them that they could make trouble for Knight and Kilbourne in America.”

Knight went on to say that their company had determined that Packard had begun their patent search in 1908, at the same time as they had entered into discussions on the possible purchase of an American Knight license. During this time Knight and Packard reps met several times and Packard expressed great interest in acquiring more information about the Knight design. Meanwhile, the patent search had led Packard to Sydney Reeve’s patent No. 880824 “... covering a valve mechanism for engines and compressors, in which the ordinary steam piston worked in an open end cylinder ...”



C.Y. Knight’s engine, 1908.

By the end of 1909 the reworded Reeve patent had been reissued and Packard was in a position to present Knight & Kilbourne with a proposal. Packard’s initial demand was for a 50% interest in all American royalties on Knight licenses. This was immediately rejected and, after a few weeks of reconsideration, Packard came back with two options:

“1. The Packard Company to assign to Knight and Kilbourne all of its rights under the Reeve reissue patent, and to receive as a consideration 5 per cent, of the gross royalties derived from licenses under the Knight and Reeve patents, plus an amount equal to 75 per cent of all royalties which the Packard Company shall have to pay for its licenses under the Knight and Reeve Patents...”

Or—

“2. The Packard Company to assign all of its right under the Reeve patent to

KNIGHT & KILBOURNE COMPANY

Having developed the sleeve-valve engine by 1904, Charles Yale Knight took on an investing partner, L. B. Kilbourne, to produce it. Together they formed the Knight & Kilbourne Company in Chicago in 1905, and built not only engines but cars, designated as “Silent-Knight.” According to *Beverly Rae Kimes*, writing in the *Standard Catalog of American Cars 1805-1941*, “...the idea was not so much...to get into the manufacturing business themselves as to demonstrate the viability of the sleeve-valve engine and to grant licenses for its manufacture to a plethora of American Automobile manufacturers.”

Kimes cites the cars as “crudely put together,” and the example that entered the 1906 Glidden Tour “dropped out on the first day and resulted in bad publicity.” In 1907, Charles Knight commenced his efforts to market the design in England and continental Europe, resulting in its adoption by the likes of Daimler, Minerva and Panhard-Levassor. —Kit Foster

Knight and Kilbourne, and to receive 20 per cent, of the gross royalties received by Knight and Kilbourne from licenses under the Knight and Reeve patents or any of them; ...”

In both cases, there was a minimum payable clause which would ensure that Packard received at least \$10,000 per year for 5 years, or an amount equal to a Packard Knight license. These conditions were also rejected, and negotiations broke off.

Shortly after this a meeting was convened between Knight & Kilbourne and the other two American companies which had been negotiating for a Knight license (reportedly Peerless and Locomobile). Packard president Henry B. Joy attended, apparently invited by one of the other manufacturers. At this meeting Knight & Kilbourne were asked to name a price for their American patents but they refused to give one. There was no further communication until Packard published their patent claim over the Knight design.

(Note: According to Maurice D. Hendry’s article in *Automobile Quarterly* (Vol. 10, No. 4), Knight’s first choice for an American manufacturer had been Pierce-Arrow. That company had also purchased a 38 hp Daimler engine for testing in 1908 and had even built a six cylinder version for testing. They had determined that it wouldn’t meet their needs, but Pierce-Arrow Chief Engineer David Ferguson spoke very highly of the Knight engine’s qualities at a 1910 SAE meeting in Detroit.)

The Legal Side:

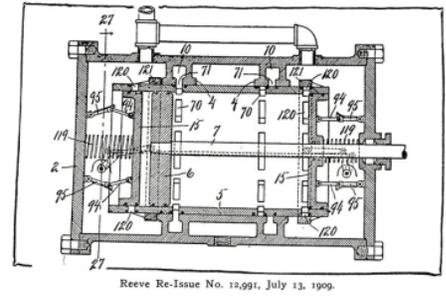
Under American patent law at the time, a “reissue” was a method by which an inventor could correct errors or clarify intentions on an earlier patent. Packard’s case, and their

offer to purchase Reeve’s patent, was dependent on a successful rewording and reissue of the 1901 patent. The 1901 patent was for an open-ended steam engine with two valves that would open and close automatically. There was no mention of its use in a combustion engine and of particular note was the statement, “*The principal advantages of my invention as applied to steam engines are ... the elimination of eccentrics as transmitters of power for operating valves.*”

This would appear to suggest that the Knight engine was not covered by the 1901 patent because key to the Knight design is the use of an eccentric shaft to drive the sleeves. However, in the 1908 application for reissue, the above “advantage” was no longer included. Also, the description was written much more broadly in an apparent attempt to apply to internal combustion engines and specifically to cover the design and components of the Knight engine. Terms like “sleeve valve” and “head” were introduced to better correspond with Knight terminology. Even so, several prominent engineers wrote that the Reeve design, which had never actually been built, could never work in an internal combustion engine, and may not even be possible as a steam engine.

Regardless, the reissue was granted in 1908 so Packard purchased the patent and began its negotiations with Knight & Kilbourne. It was Packard’s belief that the Reeve patent now “anticipated” the Knight design and thus Knight had no right to sell their engine in the United States.

Knight & Kilbourne, however, had legal opinions that the reissued patent could not stand up to a court test and publicly announced that they intended to continue to sell Knight licenses in the USA and would welcome any legal challenge put forth by Packard. In an article in *The Autocar*, March 12, 1910, Knight stated that “*failure to*



promptly do so would be accepted by Knight and Kilbourne, and doubtless by the public, as evidence of their lack of courage to present such a flimsy case to a court of competent jurisdiction.”

Packard’s Response:

On May 10, 1910, after the April release of the Knight vs. Packard pamphlet, Packard president Henry Joy wrote a letter to Knight & Kilbourne requesting copies of the pamphlet. He went on to say:

“I regret that you feel so annoyed at the Packard Company about the Reeve Patent situation as indicated by your article in a recent issue of the Motor Age ... there was and is no animosity on our part, and no intent on the part of the Packard Motor Car Company to do an injustice to anybody’ ...”

Joy stated that the “attack” published in *Motor Age* was entirely unwarranted and not at all in line with the facts. He added:

“We wish we could see the value of the Knight inventions through the same rose-colored glasses as yourselves. We hope we may be able to in the future, but our most diligent experimental efforts, at great expense, so far have been unavailing.”

According to Joy, Packard had no interest in pursuing a Knight license. He said that the company had approached its investigations with “free and unbiased” minds and

THE RUSSELL CAR

The Canada Cycle & Motor Company was formed in Toronto, Ontario, in 1899. Initial products were bicycles, tricycles and quadricycles with DeDion-Bouton engines. An Ivanhoe electric car was produced from 1903 to 1905, after which a 14-hp twin-cylinder car, named for general manager T.A. “Tommy” Russell came to market. Features included a steering column gear shift and shaft drive. It was phased out in 1906 after some 25 had been built. A 16-hp Model B twin followed, as well as a 24-hp four-cylinder Model C. By 1908, 40- and 50-hp models were available.

For 1909, Russel acquired the Canadian rights for the Knight sleeve valve engine. Offered in two sizes, its engines were actually supplied from Daimler in England. Poppet valve cars were continued, the sleeve-valves distinguished by the designation “Russell-Knight.” According to G.N. Georgano, writing in *The Beaulieu Encyclopaedia of the Automobile* (2001), they “proved unreliable.” Poppet-valve cars took over, and Russell sold his Knight patent license to John North Willys, who went on to build Willys-Knight automobiles. In any case, Russell automobile production ceased by the end of 1915. Tommy Russell’s company, however, continued to manufacture automobile components. —*Kit Foster*

spent their time and money on it but were not able to find anything worthy of their stamp of approval. He also pointed out that the patent situation had changed since their company had originally purchased a Daimler engine for inspection and testing:

"It is clear that so far as the patent situation goes, the Reeve Patent and the Knight pending Patent applications are both necessary to any sort of patent control of the so-called Knight motor."

Joy's two final points touched on the cost and worthiness of a Knight license. He stated that the royalties would add approximately \$100, or 20%, to the cost of putting a 30 hp engine in their cars, for which there would be no advantage or superiority, and even:

"many objectionable features ... which have been already eliminated from our Packard motor and others, as for example: One of the tests has been to run the motor without water until it sticks or without sufficient lubrication until the same result occurs. These forms of neglect and carelessness of operation often occur, and in the Packard type of motor as soon as it has cooled off, water and oil can be replenished and the car is again ready for the road, whereas, in the English Daimler Knight type of motor the sticking of the pistons and sleeves reduces the engine to a state of wreckage necessitating towing it to a repair shop and extensive and expensive replacement of broken parts."

The Challenge:

Not surprisingly, C. Y. Knight wrote and published a lengthy letter of rebuttal to Henry Joy. He took issue with many of Joy's statements and re-stated his version of the



Henry B. Joy.



(For a period image of the Packard "Thirty" see bottom of p. 15.)

events as they had unfolded in the previous months. He also questioned Joy's numbers, revealing that the cost of a Knight license was set at \$60, not \$100, and for a company the size of The Packard Motor Car Company could go as low as \$45 per engine.

In response to Joy's final point about the shortcomings of the Knight engines, Knight pointed out that such a statement was inconsistent with Packard's stated interest in acquiring a Knight license and the negotiations that followed, and not in line with the findings of some of the major auto producers of Europe.

Knight finished his rebuttal by suggesting a challenge. He suggested that Packard would submit three stock 40 hp motors to be tested against three stock 38 hp Knight motors (presumably Daimler built) under the constant supervision of a local auto club or other independent body. The conditions of the test would mimic the 1909 Royal Auto Club testing in London:

- 132 hours of continuous bench-running, under load, constantly monitored and maintaining a specified hp output
- 2000 miles on the Indianapolis track averaging 40 mph or better
- five more hours under the initial bench testing conditions
- hp testing from 400 rpm to 1800 rpm in 100 rpm increments, for one minute at each speed (one engine of each make for this test)

- complete dismantling of each engine for careful examination of condition and amount of wear evident

Knight added this final component:

"With reference to running without water and oil, I regard this as a wholly unfair test to any engine, because it is not a condition to which any engine, in the hands of a user of ordinary prudence and common sense, is ever likely to be subjected. However, if you wish to carry out such a test, we are willing to meet you, and in that event I suggest upon completion of the final bench test, one of the Packard engines and one of the Knight engines be again installed in touring cars the water removed from the radiators and engines, the lubricating oil drained from the bases and the two cars run on the track on direct speed at 20 miles per hour until one of them stops, after which a careful examination shall be made of the condition of both engines."

Interestingly, this is a subtle twist on what Packard was claiming. Joy's comments referred to the damage caused by engine seizure. Knight's challenge would identify which engine seized first. Knight seemed to be banking on a hunch that an oil and water free Daimler would run longer at 20 mph in high gear than a Packard in a similar state. This may have been an expression of Knight's belief that his engines, by design, would run cooler than poppet valve engines.

Knight finished by inviting Joy to offer any modifications to the proposed challenge if he wished to change anything.

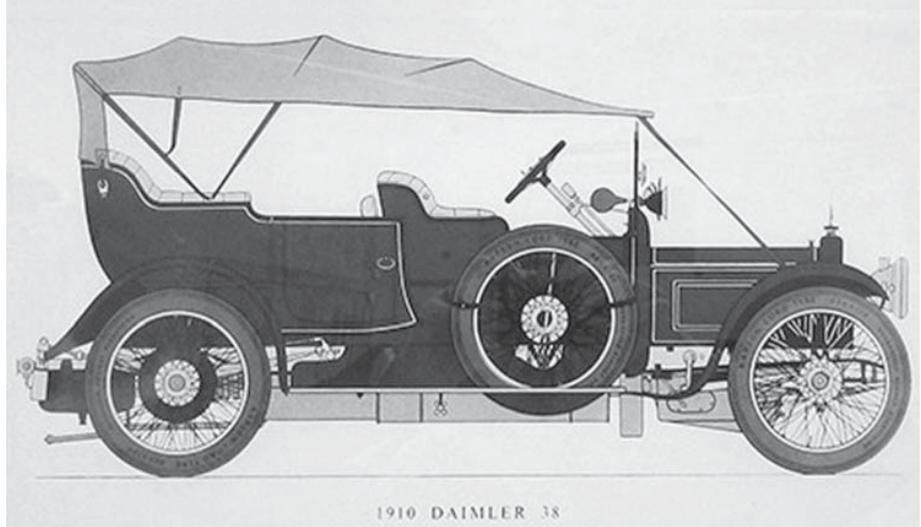
Conclusions:

All of the above information was republished in Ballou's book referenced at the start of this article. Nothing further is included, so it seems likely that the proposed challenge never occurred and that the "Knight vs Packard" battle was concluded.

We do know the following:

- in 1911 Columbia, Moline, Stearns, and Stoddard-Dayton purchased Knight licenses
- the Knight & Kilbourne patent, originally applied for in 1906, was eventually issued by the U.S. patent office.
- Packard's four-cylinder cars achieved great success in the years following the 1910 battle with Knight, and Packard continued that success with six cylinder cars in 1913 and the introduction of the 12 cylinder Twin Six model in 1915.
- Knight engines were used in some U.S. built cars (including Stearns and Willys) until the early 1930s and in Europe until WWII.

One can only speculate as to how things might have been different had Packard been success-



1910 DAIMLER 38

- ful in acquiring control of the Knight rights ...
- Would we have seen a sleeve-valve Packard Twin Six?
- Would we have seen a Packard Twin Six at all?
- Would any other American companies have been allowed to succeed with Knight engines?
- Would companies like Stearns and Willys have built Knight engined cars for the next 20 years, or would Packard-Knight have been the most recognizable of any of the Knight names all these years later?

The Last Word?

It was an age of proving one's product and many car companies were looking for ways

to demonstrate that their product was superior. Cross country road runs and endurance records were popular ways to do this as, was fully documented testing carried out by some "objective" body.

In May of 1913, *The Horseless Age* reported: *World-wide interest has been aroused by an official non-stop run of 300 hours, which was completed Friday morning, May 16, by a standard "38" Packard motor. This is a new record, more than doubling the best previous run of 132 hours made four years ago in England.*

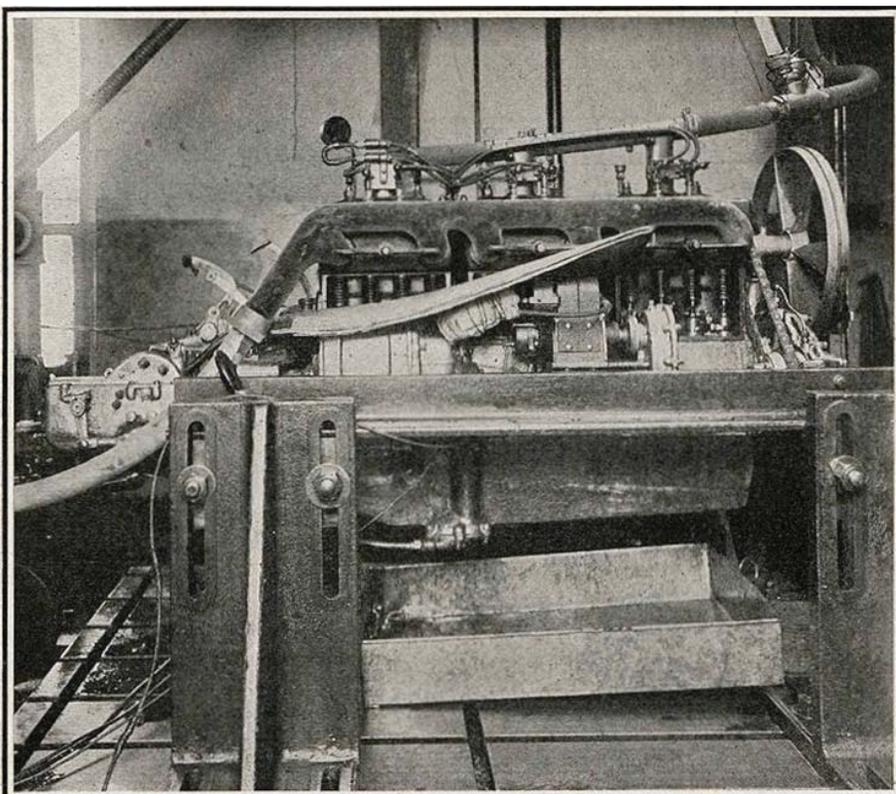
This reference to the English testing was Packard's way of proving that their 6-cylinder engine was better than the Daimler Knight as tested in 1909. For the 300-hour test, the Packard engine was run at full throttle for the duration and met all performance requirements. The test was carried out by the Automobile Club of America and was described as "the most severe ever given an automobile engine under official observance."

Not to be outdone, Moline-Knight ran their own testing in 1913. Their engine ran a record 337 hours at full throttle. Moline announced the "incomparable superiority of the Moline-Knight's engine over the poppet-valve design," and adopted the slogan "Wrecker of World's Records."

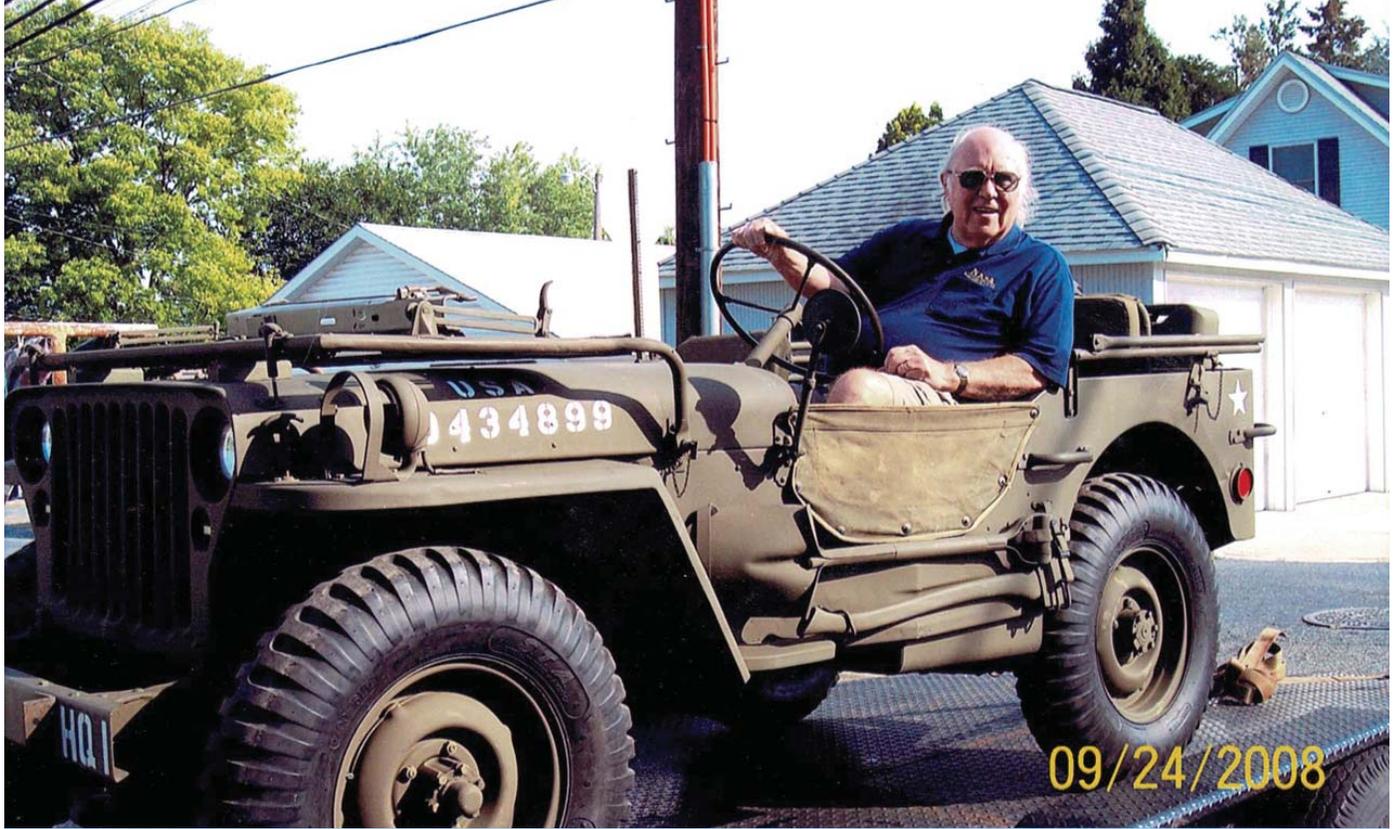
In Canada, the Russell Motor Car Company also got in on the testing, submitting a 1913 Russell-Knight engine to 300 hours of non-stop running and offering \$20,000 to any company whose poppet valve engine could match or better its performance. There were no takers.

Although the Knight vs Packard war had ceased, it seems that both sides wanted to get in one final shot.

—Peter Findlay



PACKARD 6-38 MOTOR ON THE TESTING STAND IN THE A. C. A. LABORATORY.



READER FEEDBACK: WHAT'S YOUR "AUTO" BIOGRAPHY?

Editor's note: The author is SAH founding member no. 2 (see SAHJ #300, p. 15), and he served as Editor of Antique Automobile (AACA publication) and The Classic Car (CCCA publication). Also, he worked with Gordon Buehrig on: Rolling Sculpture: A Designer and His Work by Gordon M Buehrig with William S. Jackson (ISBN 978-0877990451), published in 1975 by Haessner Publishing, and a second edition was published by the Auburn Cord Duesenberg Automobile Museum in 2008 (ISBN 978-1934703137).

I have been much enjoying President Bob Barr's "auto" biography pictures of the cars that have been a part of his life, from the toy Jaguar XK120¹, through his MGB Coupe² and right up to his latest, his ownership of a 1945 Willys MB U.S. Army Jeep³.

That last one really hit me, as I wonder how many of us in the SAH, perhaps growing up during the World War II years, didn't share the same desire to own one. I can point to one such person . . . me.

You have to go back to those World War II days when I was growing up in a small neighborhood in Clearfield, Pennsylvania. The older Woolridge Family had a son who had joined the Army Air Corps at the start of the war. With a college degree, he soon

became a flight officer and, in short order, a bomb group commander. His name was Colonel Ashley Woolridge and at one point he had the distinction of having the fastest advancement to full colonel in the Air Corps.

Colonel Woolridge became my childhood hero. He commanded the 319th Bomb Group in the 12th Air Force, flying B-26 Marauder medium bombers first out of North Africa, then Foggia, Italy, then England and finally France. He came home twice on leave and picked one night each time and invited us neighborhood kids to his parent's home and he told us about his air war, along with pictures, Air Corps memorabilia, even including pieces of German airplanes.

The most exciting part came following the war. When he flew out of France, he was billeted in the castle of a French couple. The husband, an officer in the French Army, had been killed in North Africa. Some kind of wartime romance must have followed, as the French widow came to Clearfield, implored Colonel Woolridge to marry her and return to France and a life of luxury. He turned her down and married his high school sweetheart.

He and his brother went into the coal strip mining business and, needing a vehicle suitable to visit the mining sites, they went

to Philadelphia to a government surplus auction and came home with a pair of 1945 Willys Model MB Jeeps. Fast forward a few years, and his Jeep had outlived its usefulness and was set aside. He gave it to his nephew, who restored it in military livery.

It took me five years and a princely sum for me to talk him into selling it to me, but I finally had it. In restored form it even carries Colonel Woolridge's front bumper identification: 12AF 319BG HQ1. His son had little interest in his dad's WWII experiences and, knowing he had been my childhood hero, gave me his "50 mission crusher" hat to go with the Jeep. (A "50 mission crusher" hat is an officer's dress hat with the spring steel reinforcement removed so you can pull down the edges in order to fit a pair of radio headphones.)

While his Jeep left me to go to a military vehicle collector a couple years back when I had to downsize, Colonel Woolridge's "50 mission crusher"—mounted on a Styrofoam head with his headphones—sits in my office to this day.

So, what's your "auto" biography?

—William S. Jackson

¹ SAH Journal No. 313 (Nov/Dec 2021) p. 3

² SAH Journal No. 317 (Jul/Aug 2022) p. 3

³ SAH Journal No. 320 (Jan/Feb 2023) p. 3

Racing Is a Battle of Valve Systems--- Knight

The Automobile Engineers' Forum

Inventor of Sleeve-Valve Motor Quotes Performance of Poppet and Non-Poppet Types in Tourist Trophy Race on Isle of Man—Racing Motors Must Reach 3,000 R. P. M. for Modern Racing

COVENTRY, ENG., July 4th—Road racing among automobiles has today resolved itself down largely to a battle of the valving system, namely, the side-poppet valve, the overhead poppet valve and the double-sleeve valve.

The recent 2-day Tourist Trophy race in which three Minerva cars with double-sleeve valves comprised the only team of three to finish in the race, has demonstrated that the sleeve-valve has possibilities in racing which have not been considered to date.

Contrary to the general assumption of would-be motor experts, the double reciprocating sleeves are not the limiting factor for power and speed in a motor, when designed and constructed the same as the high-speed poppet valve motors for speed work alone.

Special Knight Motors for High-Speed Work

The three Minervas which finished the Tourist Trophy race were the first examples of Knight sleeve-valve motors which have been designed especially for high-speed work, these motors having the weight of the reciprocating parts reduced, port area increased, and lubrication methods adequate for racing demands used.

These motors are a slight departure from standard sleeve-valve design in order to increase the port area, and consequently add to the capacity for high speed and power. A bottom exhaust port is added to permit for as much space in the top of the sleeves being used for intake ports.

Further, two eccentric shafts instead of one are employed for reciprocating in the sleeves. There is an eccentric shaft in either side, the shaft on one side operating the four inner sleeves and that on the other side operating the four outer sleeves. The two shafts are used to secure lightness and strength in the sleeves. Steel pistons are used, and pressure lubrication employed.

Smoke Could Have Been Eliminated

The protest against the three Minervas emitting too much smoke during the race emanated from one source only. The majority of the drivers of other cars refused to sign this smoke protest, but signed a remonstrance against it, and the committee, after investigating the matter, rejected the protest. While it is my candid opinion that no high-speed, four-cycle motor can ever be made a commercial success, with a bottom exhaust port because of loss of oil any more than can a four-valve-in-the-head poppet type become practical, yet the objectionable emission of smoke from the three Tourist Trophy Minerva engines could and would have been eliminated for racing purposes had time permitted.

Sixteen 6-Mile Mountain Climbs

The facts remain that in the Isle of Man race are sixteen terrible mountain climbs of over 6 miles each, wherein the

motors were turning over at 3,000 revolutions per minute and this required a different adjustment of the lubricating system from that ever contemplated at the Minerva works by the designer. This mountain-climbing work required a maximum of lubricant, and owing to the design of system this maximum could not be varied upon the level and down grades without complete re-designing of the entire mechanism, which, of course, was impossible.

Other cars did not smoke so much at times, nor did they with three exceptions out of nineteen, succeed in surmounting this mountain the necessary sixteen times in succession to a height of over 1,500 feet.

Engine Trouble Put Out Many Cars

Practically all of the poppet valve designs in this race were equipped with four valves per cylinder, and the severity of the race shows how these failed in the early parts of the contest, which was eight laps per day around a circuit of 37.5 miles. In the first lap three cars were eliminated from two teams, namely, two Vauxhalls and one Sunbeam, all with engine trouble. The second lap was just as disastrous, two German Adlers and one of the three Humbers going out with engine trouble. When thirteen laps were over the three Vauxhalls, three Humbers, three Adlers, two Stars, two Sunbeams, one Crossley, one Straker-Squire, and one S. A. V. A. were out, leaving Sunbeam leading, Minervas in second and third, and another Minerva battling for fourth place with a Straker-Squire.

No Adjustment to Two Sleeve Valve Cars

In short, in the field of twenty-two starters, of which nine were of the sixteen-valve-in-the-head construction, but a single one of that new type had withstood the rigors of thirteen successive laps; of the ten side-pocket poppet types, two remained in the race, whereas all three sleeve-valve types remained in the contest. Not a single adjustment of any sort was made to two of the Minerva cars, the bonnets not even being raised before starting on the second day's race. The other Minerva had a broken oil pipe, which compelled it to slow down but not to actually stop in the race.

Fastest Cars Were the Finishers

This Tourist Trophy race contained many interesting facts relative to motor mechanisms. It demonstrated that the fastest cars were not the ones to be eliminated but rather that they were the finishers in the race. The accompanying table shows that Sunbeam I was the fastest car, making a circuit at the average 59.3 miles per hour; Minerva III was second fastest, Minerva I third fastest, etc. In a word, the fastest cars, with the exception of Sunbeam III, finished the race in about the order of their capacity for speed, whereas, many might argue that the fastest cars would suffer more

The inclusion of this article—on this page and the next—was inspired by our "Knight vs. Packard" article. The article ends with a sign-off by Charles Y. Knight. Source: *The Automobile*, July 30, 1914, pp. 226 - 227.

from break-downs or accidents than those which covered the course at a materially lower rate of speed.

Motors Must Make 3,000 R.P.M.

An inspection of the designs of the motors in the recent French Grand Prix race, as well as those in the Tourist Trophy race, will reveal the limits of efficiency of present engine construction. Engines capable only of under 3,000 revolutions per minute stand no chance whatever in first-class competitions today. No motor, with large bore, has any chance of standing up under the severe heat and tremendous piston travel of these high speeds. Ball bearings are being employed generally in crankshafts with as much view to eliminating bearing troubles as reducing friction, but the question of the operation of valves at high speed is coming prominently to the front, and receiving principal attention.

Overhead Valves Mean Lifting Cylinder for Trouble

No designer of a poppet valve motor today would think of bringing forward to compete for speed any motor with other than overhead valve construction, with the accompanying spherical combustion chamber, for the reason that the limit of valve area of the side pocket type has been reached, and that construction is completely abandoned for racing, the same as side chain drive for the road wheels in a passenger car.

But the overhead valve racing design introduces a most disturbing uncertainty and many complications aggravated by the tremendous stresses placed upon it by the enormous speed and pressures met with. The breaking of one of the sixteen valves in the valve-in-the-head construction means the elimination of the car as the cylinder must be lifted in order to replace a valve. The cylinder must be raised to

Table of the Tourist Trophy Race Held on the Isle of Man, Showing Record of Each Car and Difficult Character of Course

Car	Number of Circuits	Fastest Circuit, Time	Fastest Circuit, m.p.h.	Total Time		
				Hr.	Min.	Sec.
Sunbeam I	16	37:55	59:3	10:37	49	
Minerva III	16	38:18	58:7	10:57	38	1-5
Minerva I	16	39:10	57:42	11:40	44	3-5
Sunbeam III	12	39:15	57:30	Retired		
Straker-Squire I	16	39:50	56:5	11:22	50	1-2
Minerva II	16	40:27	55:58	Retired		
Straker-Squire II	9	41:12	54:00	Retired		
Humber III	13	41:51	53:88	Retired		
Star I	6	42:31	52:92	Retired		
Vauxhall I	12	43:2	51:96	Retired		
Star II	4	43:21	51:72	Retired		
Humber I	10	43:24	51:68	Retired		
Adler III	10	43:39	51:54	Retired		
Crossley	10	44:7	50:94	Retired		
S.A.V.A.	2	44:48	50:28	Retired		
D.F.P.	16	45:2	50:00	12:24	15	
Adler II	1	46:38	49:20	Retired		
Humber II	1	46:47	49:00	Retired		
Adler I	1	50:22	47:84	Retired		

grind any of the sixteen valves, and the best designers can only meet this argument by promising to make the valves unbreakable and so that they will require but little grinding.

Stirrup Construction Uncertain

The use of the stirrup construction, whereby springs are eliminated, and the poppet valve is mechanically opened and closed by cam action, in order to get speeds of 3,000 revolutions per minute seems to introduce complications and on the surface it looks as if the remedy is worse than the disease.—CHARLES Y. KNIGHT.

Decisions of the Courts—Son Driving Car

By George F. Kaiser

NEW York Appellate Division hands down decision holding that a motor car owner is not liable when an accident occurs while the car is being driven by a person not acting for him.

An automobile, which was being driven by a 24-year-old son of the owner, ran down a man who was waiting for a surface car in a public street. The latter, having been somewhat severely injured, brought suit against the father for damages. It came out on the trial that the son lived with his family and that the automobile was used as a family car by the whole family. The son, however, was the only one who drove it, acting as a chauffeur for his father, or any other member of the family who wished to go out in the car. In addition to this, his father had given him the privilege of using the car on his own account whenever he so desired. At the time of the accident the son, using this privilege, had taken the car out and was driving a party of friends about town.

The Court held that, as the son was neither acting expressly or constructively as his father's agent at the time of the accident, and the car was not engaged in the father's use or service, the injured party's case should be dismissed; this, however, without prejudice to his right to sue the son.—*Heisenbuttel v. Meagher*, 147 N. Y. Sup. (New York) 1087.

Should Pass on Right

Pennsylvania Court holds that, under ordinary circumstances, a motorist should pass on the right of a vehicle or pedestrian coming in the opposite direction.

A motorcyclist who was struck and injured in a collision

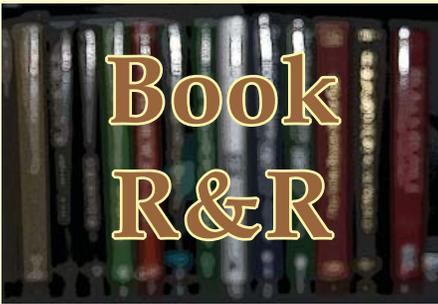
with an automobile while going west on the north side of Walnut street in Philadelphia sued the owner of the car for his injuries and succeeded in recovering judgment against the woman who owned the car, the Court holding that the chauffeur should have passed to the right instead of swerving over to the left of the street.

The chauffeur contended that a team was coming at a "terrible rate"; that he thought it was a runaway and was only trying to avoid a collision when he turned to the left side. The witnesses for the motorcyclist however stated that there was no team present at the time of the accident and the jury, adopting this view, found for him.—*Hazzard vs. Carstairs*, 90 Atl. 566.

Automobiles Not Liable to Tax

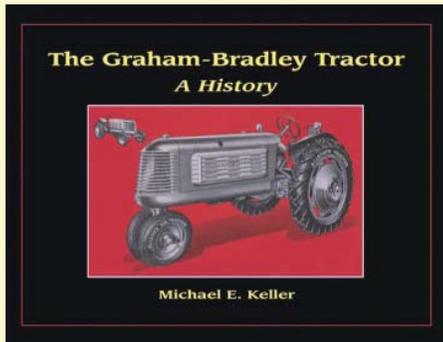
In a recent case in Idaho it was held that the State Legislature had the right to exempt motor vehicles from taxes by reason of the provision in the State's Constitution which gave them the power to exempt from taxes from time to time in any cases where such a procedure might seem necessary and just.

In this case a resident of Ada County petitioned for a mandate to compel the County Assessor and the Board of County Commissioners of that County to assess all motor vehicles that had escaped the 1913 tax under the Highway Commission Act. The petitioner was beaten, however, for the Court held that it was within the power of the Legislature to exempt automobiles, as there was a provision that registration fees of motor vehicles was to be in lieu of all taxes, general or local, it was only just to so exempt them.—*Achenbach vs. Kinkaid*, 140 Pac. (Idaho) 529.



For more than ten years our "Book Reviews" section has presented full descriptions and reviews in limited space. To cover more ground, we're trying something new: "Book R&R," where the "R&R" stands for "recommendations and reviews." Recommendations means that we'll solicit and accept titles our readers submit, along with a pithy recommendation, presented with the same header of information, and a link to a review if one is available. Reviews will still be printed where a review from a historian's perspective is desired, but not available elsewhere.

The Graham-Bradley Tractor: A History by Michael E. Keller, foreword by Chad Elmore M/T Publishing Company, Inc. (2022) mtpublishing.com
344 pages, 11¼" x 8¾" hardcover, dustcover
372 b/w illustrations
Price: \$44.95
ISBN-10: 1957962070
ISBN-13: 978-1957962078



Elliott Kahn would have loved this book. Our late Florida member #407 (1926-2011) was opinionated, and one of his opinions held that "automobile" described any wheeled vehicle that moves under its own power ("any" included riding lawn mowers). I tend to agree with him except, perhaps, about the lawn mowers.

To his mind (and mine), tractors qualify as automobiles. I grew up in rural New England, where small farms were common. Within a five-mile radius I could see John Deere, Farmall, Oliver, Case and

Massey Harris tractors daily. In my teen years I worked for a neighboring farmer and spent many happy hours at the wheel of an ancient Farmall F-12, plowing, harrowing, mowing hay and, best of all, raking with a side-delivery rake, making windrows for the baler to scoop up.

There are plenty of tractor books about John Deere, Farmall, Case, Allis Chalmers, Ford and Fordson, Massey Ferguson, even Cockshutt tractors. Until now, however, the Graham-Bradley tractor story has remained largely untold. Kudos to Michael Keller for filling the void!

Michael is well known in our midst as the expert on Paige, Graham-Paige and Graham automobile history. His book *The Graham Legacy: Graham-Paige to 1932* won the Society's Cugnot Award for 1999; a follow-on volume published in 2003 took the story from 1932 onward. His latest title, *The Graham-Bradley Tractor: A History*, continues the tale in another direction.

The Graham-Bradley tractor was a culmination of Sears, Roebuck & Company's desire to become a major retailer of mechanized farming equipment. In the process, Sears purchased the David Bradley Manufacturing Company, from which they had purchased and resold implements, in 1910. To fully serve the farming community, Sears then sought a gasoline-powered tractor. What became the Bradley tractor was actually developed by Dent Perrett, who had worked at Massey-Harris. Initial models were built by the Ross Carrier Company, a manufacturer of straddle carriers for the logging industry. The new Bradley tractor, introduced in 1931, was a row crop (tricycle design), two-plow machine sold exclusively by Sears, Roebuck.

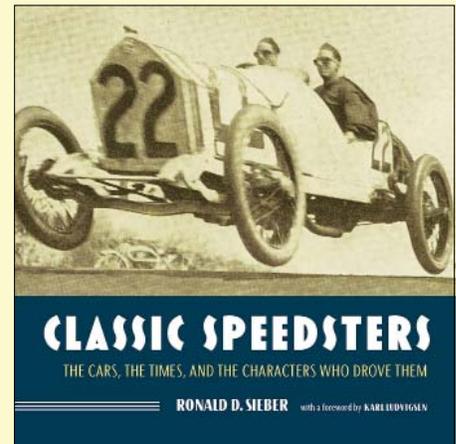
The Graham Brothers, meanwhile, had sold their truck business to the remnant of the Dodge Brothers enterprise and set out as the Graham-Paige Motors Corporation, building six- and eight-cylinder motor cars. Faced with dwindling sales during the Great Depression, they considered a farm tractor as a complement to passenger cars. It was not a completely new direction, as Ray Graham had briefly entertained a similar effort in the mid 'teens. Meanwhile, the Bradley tractor sold by Sears, Roebuck had been unsuccessful. A new partnership was forged between Sears and Graham, leading to the introduction of the Graham-Bradley tractor in July 1937. The story is fascinating, and far too intricate to explain here. Appendices

include a chapter on Graham-Bradley toys, scale models and pedal tractors, as well as a complete shop manual for tractor models 503.93 and 503.103. You'll find some surprises, too, like the appendix on Frazer tractors. *Say what?* You'll just have to read the book.

Published, like the earlier volumes, by Mark Thompson's M/T Publishing, the design and quality of this book are top-notch (full disclosure: Mark also produced this reviewer's Stanley Steamer book back in 2004; the quality and graphics from that time continue to delight). Written in Keller's expressive style, the book is a good read. Nine appendices cover the many intricate details, background material and related ephemera. Finally, there's a comprehensive index that other historians would do well to emulate.

—Kit Foster

Classic Speedsters: The Cars, The Times, and The Characters Who Drove Them by Ronald D. Sieber
Steering Wheel Press LLC (2021)
ClassicSpeedsters.com
304 pages, 10¼" x 10¼" hardcover
289 b/w & 61 color images, References (bibliography), index
Price: \$80
ISBN-10: 1737983400
ISBN-13: 978-1737983408



Ronald Sieber doesn't claim his *Classic Speedsters* is the definitive history (or even a comprehensive history) of every real speedster ever built. Rather, it is a celebration of the magic of open-air spirited motoring in machines that have captivated him since he was but a lad. Now fully retired, Sieber decided it was high time to share his lifelong fascination with others in book form.

His manuscript evolved—but not overnight—as he searched trying to determine “Just what *is* a speedster?” for only then could he show and write the dozen chapters, each focusing on a different marque. Haynes-Apperson leads off, followed by Knox, Marmon, Mercer, Stutz, Model T, Kissel, Franklin, Packard, Auburn, then Duesenberg, with Porsche the concluding chapter. Each chapter concludes with a profile of an individual particularly associated with that marque—not all of them are men either—hence the subtitle; *The Cars, The Times, and the Characters Who Drove Them*.

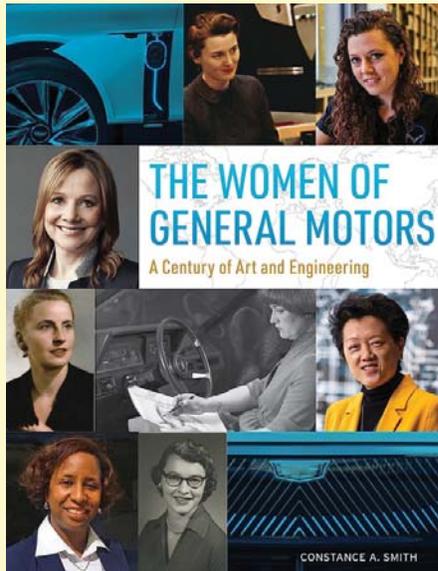
Sieber shared his manuscript with *Karl Ludvigsen*. Sufficiently impressed, Ludvigsen scribed the foreword to this beautifully produced, generously illustrated, and well- and entertainingly-written book all while presenting in equal parts automotive, cultural, and social history. It’s a joyful read.

SAH member Ronald Sieber also maintains a website that is well worth the time to visit for there he posts additional speedster-oriented images and stories. That site is also that of the publisher—for Sieber not only wrote the book, he *is* Steering Wheel Press. You’ll enjoy looking at and reading each and every page, be it purely for pleasure or to actually learn, as Sieber has included detailed references grouped separately for each chapter as well as photo credits and other resources. Plus, his index is thorough and detailed.

—Helen V Hutchings

The Women of General Motors: A Century of Art and Engineering
by Constance A. Smith
Schiffer Publishing, Ltd, (2022)
schifferbooks.com/ 610-593-177
336 pages, 8¾" x 11¼" hardcover, dustcover
85 b/w & 368 color images, chapter end notes, indexed, errata, photo credits
Price: \$36.99
ISBN-10: 0764364286
ISBN-13: 978-0764364280

Constance Smith’s first book, *Damsels in Design*, introduced readers to just over 20 ladies in General Motors employ. Some had been Smith’s contemporaries for she, too, had been employed for a few years during the 1970s within GM Styling, as she details in her own profile in this *The Women of General Motors*. Many of the *Damsels* pages are republished, essentially verbatim,



forming one-third of this new book before the timeline progresses beyond that of *Damsels* enabling Smith to present awareness of an additional 139 ladies whom the General did or does employ in design, while also now including additional women who fulfill engineering functions. One surname caught my eye immediately; *Kirbitz*. Quickly turning to that page, I discovered a talented and fast (as in racing) lass who is our own current SAH vice-president *Kevin Kirbitz*’s daughter-in-law. To say he’s button-popping proud is an understatement.

Of these new profiles, those of women with whom the author established contact, as indicated by her chapter end notes, are more fulsome and interesting than those of ladies with whom there’d been no direct contact

between author and subject. The end-notes for them indicate information sourced from other publications both within and external to GM. Although publisher Schiffer’s presentation is handsome, it also proved frustrating because of a useless index. The index is merely an incomplete re-jiggering of the table of contents to alphabetical order, and moreover has no entries for such as Harley Earl, Bob Lutz, Pete Brock, or Bill Mitchell and so many others important or integral to the historical narrative.

Curious whether any of the ladies in this book had appeared in the previously read and reviewed SAE-published titles (SAHJ #305 and #317) about women in the auto industry, I discovered there were but six. Thus, a reader of *The Women of General Motors* gains awareness of many heretofore unheralded. Organized by decades 1920 to the current day, each chapter presents women most associated with that particular decade enabling perceptive readers to follow GM’s evolutionary changes. In what’s likely a sign of the times when it’s become normal for individuals not to spend an entire career

If you thought you knew everything about automobiles...

Explore us:

RARE & UNIQUE VEHICLES

www.rareandunique.media

with one company, a noticeable percent of those profiled in *Women* are no longer in GM's employ, having moved on to other positions with other companies.

Might we be witnessing the leading edge of a new approach to what's sometimes referred to as feminist literature with the focus now shifted to telling of accomplished women who are succeeding in all walks of life and industry?

—Helen V Hutchings

The Spirit of the Age: The Definitive History of the Rolls-Royce Silver Spirit, Silver Spur, Silver Spur, Bentley Mulanne, Turbo R and Derivatives

by Davide Bassoli

Nubes Argentea (2021)

nubesargentea.com

262 pages, 9" x 12¾" hardcover, slipcase

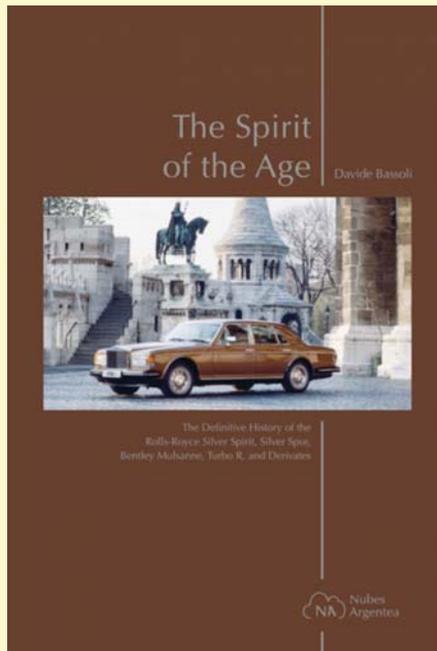
360 color images, 24 drawings, 19 tables

Price: €190

ISBN-10: 8894456714

ISBN-13: 978-8894456714

"Hardly the sexiest Rolls-Royces and Bentleys ever but for their buyers they were the only game in town at that segment of the market. Over their 20-year production run many modifications were made, not least the first-ever disappearing mascot."



This title is recommended by the editor. For the review, see: speedreaders.info/23903-the-spirit-of-the-age/
Also, use this QR code with your smartphone (bottom/left):



The Spirit of the Age



Discovering Lost Automobiles

Discovering Lost Automobiles And Their Stories

by Michael Ware

[Pen and Sword Transport (2022)

pen-and-sword.co.uk/ [In US: Casemate]

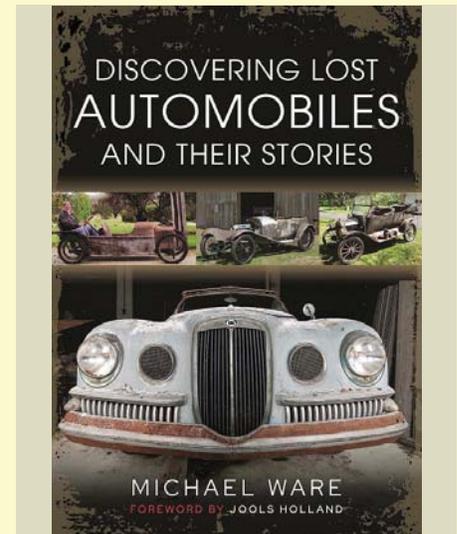
214 pages, 6¾" x 9½" hardcover

50 b/w & 405 color images

Price: \$54.95 / £28

ISBN-10: 1399019007

ISBN-13: 978-1399019002



This title is recommended by the editor. For the review, see: speedreaders.info/26624-discovering-lost-automobiles-and-their-stories/ Also, use the QR code (left)

Reliving History with Automotive Memorabilia



Automobilia and petroliana industry professionals write about history, current values, and the sheer joy of collecting!

Includes detailed auction reports, industry news, and up-to-date automobilia event and auction calendars.

Printing 6x annually with quality photography and graphics on beautiful high-end paper stock.

The perfect magazine for automobilia collectors and enthusiasts!

USA PRINT MAGAZINE SUBSCRIPTION: 6 issues \$36 or 12 issues \$59

Canada 6 for \$56 or 12 for \$96 • UK 6 for \$70 or 12 for \$123 • Rest of World 6 for \$92 or 12 for \$149

ANNUAL "DIGITAL FLIP" SUBSCRIPTION INCLUDING ACCESS TO 8 BACK ISSUES \$29

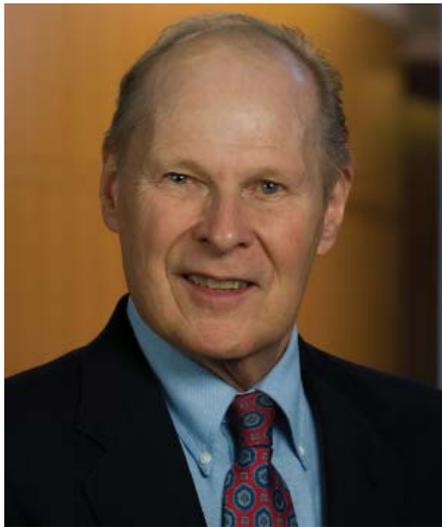
AutoMobiliaResource.com

AutoMobiliaResource@gmail.com • Subs Line 224-558-8955

OFFICE: 954-579-5280 • 1217 CAPE CORAL PKWY. E., #178, CAPE CORAL, FL 33904, USA

In Memoriam

David L. Lewis (1927–2023)



David Lanier Lewis, PhD, University of Michigan business professor, Ford and GM public relations employee, and past SAH president (member 108H), died on April 13, 2023, in Ann Arbor, Michigan, where he lived for more than 70 years.

David L. Lewis was born on April 5, 1927, in Bethalto, Illinois, and grew up in Du Quin and Sesser, Illinois. His father was a schoolteacher who taught English and History, thus he was immersed in and loved history from a very young age.

Additionally, he served in the U.S. Navy at the end of WWII (1945–1946).

His post-secondary education included a BS in journalism from the University of

Illinois, MA in public relations from Boston University, and an MA in history & a PhD in Economic History from the University of Michigan. He was also a Fulbright Scholar at the London School of Economics and Political Science.

He was a professor at the University of Michigan's Graduate Business School for more than 40 years, where he established their Global Automotive Industry course and taught other courses, including Business History. He previously worked in Public Relations for Ford Motor Company (1950–1955) and General Motors Corporation (1959–1965).

David joined SAH (member #108) soon after it was established and served as president 1981–1983. He received SAH's Friend of Automotive History, Cugnot Award, and an Award of Distinction. He also served for many years as chair of the SAH Friend of Automotive History and Cugnot Committees, and as a member of the former Student Essay Committee.

He wrote *Cars & Parts Magazine's* monthly "Ford Country" column from 1974–2010, authored or co-authored nine auto related books, and had over 4,000,000 words and over 400 articles, relating to Ford History topics published.

After the publication of his first book, *The Public Image of Henry Ford: An American Folk Hero and His Company*, in 1976 he remained THE Authority on Henry Ford and Ford Motor Company history for the rest of his life.

David Lewis also served as a trustee of the Detroit Public Library's National Automotive History Collection; director of the

Model T Ford Club of America; and was a founding member, board member and historian of the Henry Ford Heritage Association.

As the owner of a 1921 Ford Model T Touring from 1972–2006, he felt that "Old-car hobbyists are among the finest people on the face of the earth."

Additionally, he received awards from the Antique Automobile Club of America, Model T Ford Club International and the Model A Restorers Club for editorial contributions to their publications and the Duryea Award from the Antique Automobile Club of America. Also, he served as Associate Editor, *Cars and Parts Magazine*, 1978–2010; and Associate Editor, *Model T Times*, 1972–2000.

He was predeceased by his wife of 69 years, Florence Yuri (Tanaka) Lewis, and is survived by his four children: Kim Dunn (Peter) Ypsilanti Township, MI, Lani Walczak (Douglas) Farmington Hills, MI, Sumi Lewis Navato, CA. and Lance Lewis Ann Arbor, MI, and four grandchildren.

A memorial service will be held at Muehlig Funeral Chapel in Ann Arbor, MI on Friday, June 9th. This service will be streamed live through the funeral chapel's website, and a recording of the service will then be available for those unable to attend. Interment will be at Forest Hill Cemetery, Ann Arbor, Michigan.

Memorial donations may be made to SAH; the Ford Piquette Avenue Plant; the National Automotive History Collection, Fair Lane: The Home of Clara and Henry Ford; or the Benson Ford Research Center at The Henry Ford.

—Mike Skinner



GROUP OF PACKARD "THIRTY" RUNABOUTS READY TO BE SHIPPED FROM THE FACTORY OF THE PACKARD MOTOR CAR COMPANY.

Inspired by the Packard "Thirty" image on p. 7, this image and caption is from p. 937 of the December 27, 1906, edition of *The Automobile*.

