SAH Journal
The Society of Automotive Historians, Inc.
Issue 199 July–August 2002

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Inside

High Speed Pure

by Ferdinand Hediger

On October 25, 1937 the young daredevil Bernd Rosemeyer set a new world record class B (5 to 8 liters capacity) of 406.32 km/h for the flying kilometer on the specially closed stretch of Autobahn Frankfort-Darmstadt. He was the first man to drive faster than 400 km/h on public roads. The car was the fully streamlined Auto Union "Avus" racer with a supercharged V-16 engine of 6330 cm^3 and 545 bhp. Designed by Ferdinand Porsche and Eberan von Eberhorst, the Avus had a length of 552 cm, a width of 183 cm, a height of 106 cm and a weight of 1070 kg. Its centrally placed V16 engine showed an angle of 45 degrees, a bore of 77 mm and a stroke of 85 mm with a Roots supercharger and Solex carburetor. Weight/power ratio was two kg per hp.

The new world record class B was one of 15 new best marks that Rosemeyer set using Auto Union cars in the B and C (three to five liters) classes with standing and flying starts during the record week of October 25–31. Distances of one kilometer, one mile, five kilometers, five miles, ten kilometers and ten miles had been measured and were fitted with the official timing devices. For the records with flying start there was a warm-up stretch of three and one-half kilometers and for all runs a braking stretch of about two kilometers. The speed was measured in both directions on the new autobahn between Frankfort and Darmstadt. As is well known, the talented racing driver Rosemeyer was killed in an attempt to regain the kilometer record from Rudi Caracciola in January 1938.

During World War II this record car and most of the Grand Prix racing cars of Auto Union were destroyed or lost. Audi Tradition, the department supporting collectors of historical Auto Union cars (Horch, Wanderer, DKW and Audi), started a very

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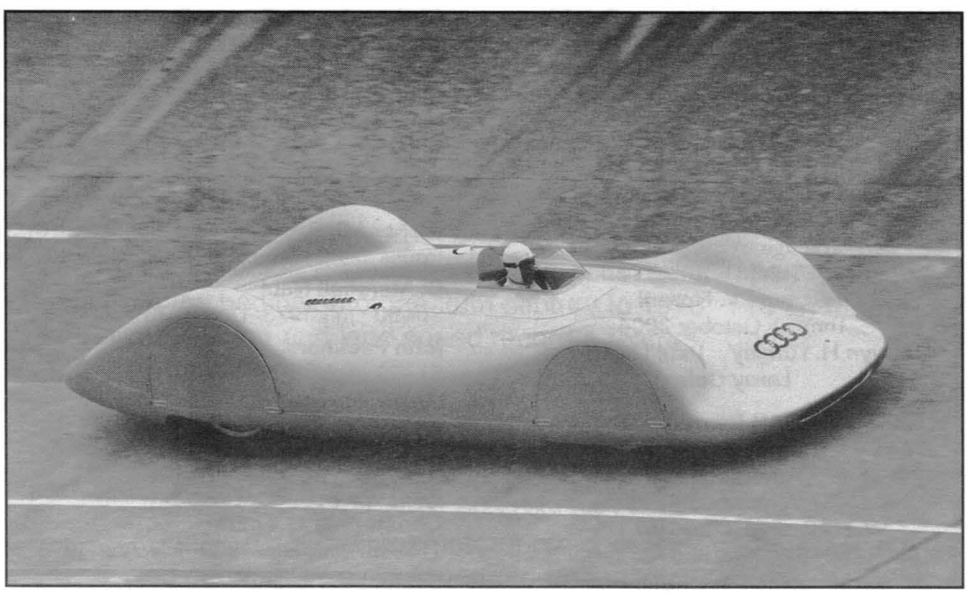

The reconstructed Auto Union "Avus" racer with supercharged V-16 engine *(photo courtesy Ferdinand Hediger)*

Summer Housekeeping

Thomas S. Jakups, Editor

This issue of the *SAH Journal* is the fourth since I introduced the new layout. The responses that I have received from the membership—through emails and notes as well as in person at the Auburn conference—have been overwhelmingly positive. I thank all the members who have taken the time to express their opinions.

One concern has been the quality of the photographs. After attempting several ways to solve this problem I accepted the fact that having the printer output to film before going to plates was really the only way to improve the quality of photographs and logos. I hope you noticed the difference in the last issue. Of course, this increases the printing cost—which was why I was trying to get around doing it—but I think you will agree that the improved quality merits the extra cost.

There have been a few other bugaboos—running heads missing on one spread in *Journal* 194, italics that disappeared on the way to the press in *Journal* 198—but they haven't deterred me from my goal, each issue, of putting out an error-free *Journal*.

This issue of the *Journal* is a bit different from recent issues in that there is no Society related or other pertinent news to report. That's to be expected with many members vacationing or out and about enjoying their various automobiles. In any event it has given me a chance to delve more deeply into my treasure trove of book reviews and articles from the members. I want all the members to know that their contributions to the *Journal* are most welcome and that I will try to fit in as many reviews and articles as space will allow. I ask that, if at all possible, you email me your copy in Word or similar word processing program, to save me from rekeyboarding it. I will, of course, continue to accept disks and typewritten—even legible handwritten—copy. If sending news related copy, please note the deadline for news in the masthead below.

Included in this issue are the biographies of the four members running for the three vacant slots on the Board of Directors and the Official Ballot along with a notice of the SAH Annual Meeting and Awards Banquet October 11th at Hershey.

The next issue of the *Journal* will be the 200th and I am open to suggestions on how to mark this special occasion. Please write or email me with your thoughts. I know there are members out there who have quite a few years invested in the Society and I especially look forward to hearing from them.

—Tom Jakups

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Copy Deadline for *Journal* 200
August 23rd

Dale K. Wells, President

Let's Go to the Car Show!

With the balmy summer now upon us Midwesterners, we like to see the antique cars out in parades and car shows. Many SAH members own antique cars, while others merely like to read or write about them. Either way, it is a form of study and appreciation of historic artifacts—antique and vintage automobiles. In general discussions with SAH members I get the impression that maybe twenty or thirty per cent of them do now, or have in the past, owned antique cars. Every state and every club has its own definition of what constitutes an antique, classic or vintage car. I will not go into that at this time, but merely defer to a line from Shakespeare, "...a rose by any other name...."

Car shows come in all different kinds and places, from air conditioned auditoriums to shaded country fields to blazing summer parking lots. Those living in the milder climates may enjoy car shows year around. We Midwesterners usually have only about five months to participate in car shows before chilly, inclement weather comes on, and the antique cars are quickly tucked away for storage until another spring rolls around. To me, the most enjoyable shows are outside, where cars are driven in from surrounding towns and engine and exhaust noises can be heard and appreciated.

Having been an antique car owner for over forty years, I have driven to lots of car shows and in many holiday parades. Thirty some years ago, a local department store sponsored a holiday parade in which each antique car driver received a $50.00 check in person from the store owner. Other car shows would give us a free hot dog lunch and a soda. Those days now seem to be disappearing. Today, the more common practice is to charge the car owner $3, $4, $5, or even $8 just to put the car on display and perhaps win a people's choice ribbon. Of course, the big national car clubs often charge more like $50 to register a car, which is then judged and becomes eligible for a nice silver or gold trophy.

There are not only many choices of shows to attend, but also more frequent opportunities. Our small city is surrounded by many small towns of 2,000 to 8,000 people within a fifty-mile radius. Each year it seems more towns want to sponsor a parade or car show so now there is almost one or two choices every week within this area.

Some shows are well advertised and organized by people who know the car hobby well. Other shows, especially the newer ones, frequently are disorganized, poorly attended and cease to return the following year. A frequent cause of failure is when the show sponsors try to judge the cars and give out awards, but they do not know common judging methods nor do they have qualified judges. Many car owners become disgruntled in this situation and vow to never support those sponsors again. Owners have lots of money invested in well-detailed cars and can become very upset when in their opinion a car of lesser quality goes home with a better prize. Judging methods and criteria must be clearly known and understood in order to please owners of antique cars. That is where the national clubs have done a good job in developing their scoring systems and training their judges. Serious car collectors usually know this and affiliate themselves with national clubs if they are seeking to compete for first-place awards.

Another interesting aspect of car shows is the increased attendance by owners of street-rods and customized cars. This is a very painful development for the purist who wants to see only original and authentically restored cars. From an historic point of view, the customized car is an affront to purist values. Destroying or changing a piece of history would be considered a sacrilege to them. Often, the customizer realizes he may be creating something personal for himself but may be losing future market value. Often those owners will save all the pieces so a future owner can return the car to original; this bit of foresight can sometimes result in a better price for the customizer at the time of sale.

Some customized cars and street-rods seen today either contain lots of fiberglass panels or were built up from ordinary sedans. As nice as it is to see original and well restored sedans and all models of cars, collectors have historically sought sporty convertibles and coupes. Many fine old sedans were cut up for parts to restore those convertibles and coupes. Since sedan sales always exceeded open car sales after the late 1920s one might say there were too many to save anyway, so cut them up and do whatever you want with them.

So enjoy the car shows for what they are—a place to see someone's pride and joy, and witness the continuing panorama of automotive history "in the flesh." Just as a picture is worth a thousand words, a real automobile with all its faults or improvements is worth the time for historic viewing.

—Dale Wells

Louis Renault and His American Visitor

by Taylor Vinson

Recently, Renault historian *Patrick Fridenson* gave me half a dozen photos which he thought might be of interest to SAH members because they show Louis Renault and a somewhat younger U.S. army officer. According to Renault lore, the officer was George S. Patton, the famed armor commander of World War II. Patrick could provide no further information, and the photos were marked only with Patrick's source: Renault Communication. I decided to try my hand at sleuthing. The whole story is an excellent example of the networking that SAH membership affords.

Taken together, the photos show an inspection and climbing demonstration of a military tank by a river bank in a suburban setting. The foliage and Louis Renault's straw hat indicate a summer day. The tank is Renault's radical Type FT 17, developed during the last half of the Great War. The FT 17 differed from the war's first tanks, cumbersome 15- and 25-ton things, by being small (two men), and light enough (six tons) to be carried on a truck flatbed, hence suitable for quick deployment where needed. It was known as a *char d'assaut,* literally, tank of attack. Although it did not enter service until May 31, 1918, the FT 17 was considered a great success in the campaigns where it was used in the five months remaining in the war. Renault granted Berliet of Lyon and a couple of other French manufacturers royalty-free licenses to produce the FT 17. One of the 1,000 produced by Berliet is in the collection of the Fondation de l'Automobile Marius Berliet and displayed at Monteillier outside of Lyon. After the war, Renault featured a gold-embossed representation of the tank on the cover of its 1919 and 1920 sales catalogs.

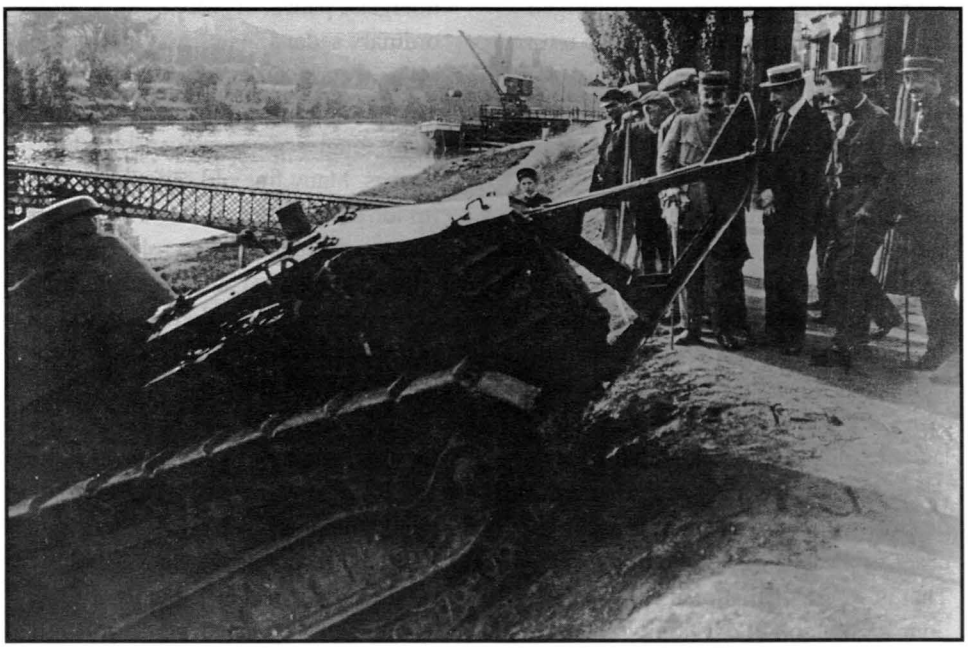
According to one source (Saint Loup, *Renault de Billancourt,* 1955), when the United States declared war on Germany in April 1917, the French envisioned the U.S. as a producer of the FT 17, still under development. Eventually, contracts and licenses (having no love for Detroit, Louis Renault insisted on a royalty of $100,000) were let for the construction in the U.S. of 6,000 tanks, 1,200 for the French army and 4,800 for ours. However, production in America was slow to get underway and only 150 tanks had been manufactured by Armistice Day, none of which reached France.

I learned from a retired Army friend that at this time Patton volunteered or was selected to study the concept of a tank attack unit and that he was provided with 22 Renault tanks for training.

Although this information seemed to establish a plausible connection between Renault and Patton, the exact meaning of the photos remained unclear. I turned to SAH's expert in military vehicles, *Fred Crismon*, for advice. And a trip that Fred made to the Patton Museum at Fort Knox, Kentucky, eventually led to the answer.

The time was August 1917 and the setting, Billancourt, the site of the Renault works. But Louis Renault's American visitor was not George S. Patton, who was younger and taller. Fred learned that the officer was a Lt. Col. Frank Parker (West Point Class of 1894), and that some of the photos had appeared in *Camp Colt to Desert Storm: The History of U.S. Armored Forces* (1999), by George F. Hofmann and Donn A. Starry. Fred phoned Professor Hofmann (University of Cincinnati) who related that Col. Parker had been Chief of the American Military Mission in France and, in that capacity, was directed to acquire more specific information on the tactical employment and distribution of tanks. In his paper "Major General Frank Parker Theorist and Reformer," Professor Hofmann writes that Louis Renault gave Parker an extensive tour of the factory where the tanks were being built, and that Parker came away with a favorable impression. No doubt Louis Renault had a favorable impression as well: Parker was fluent in French.

This visit, recorded in the pictures, influenced the development by Parker in concert with others of new tactical approaches using tanks as an adjunct to conventional infantry and cavalry. It is not unreasonable to conclude that the favorable impression from the August 1917 visit led to the U.S. contracts as well. ■



Louis Renault demonstrates the climbing ability of his Type FT 17 tank for Col. Frank Parker, Chief of the American Military Mission in France. *(photo: Renault Communication)*

Henry Ford of Farm Tractor Fame

by Max Gregory

Whatever angle you approach it, the question of identifying the most significant figure in motordom is usually resolved in favor of Henry Ford. Although it is not clearly so obvious, his position in respect to farm tractors is very much the same.

As a farm boy he is known to have entertained notions of reducing the drudgery of farming chores and banishing the imposition made upon draft animals. His attempts to modify car components in the period circa 1907 have been recorded, but such lash-ups were unrewarding, even if the principle was later adopted by providers of aftermarket kits to modify the Model T car.

After 1917 his Fordson tractor, (then by Henry Ford & Son at Dearborn rather than the Ford Motor Co., Detroit) employed mass production principles to break through the first cost barrier and became as numerous in the fields as was the Model T on the roads. During the mid 1920s, for example, the Fordson commanded some 60 percent of the U.S. tractor market. A revised model was later manufactured at Cork in Ireland and at Dagenham in England, while a copy, the Krasny Putilowitz, was produced in Russia. Not only was the Fordson prolific, but it established the industry standard for construction design by mating the engine block, transmission housing and rear axle casting to form a single, rigid unit.

The original design had been penned in 1916 by Thomas L. Fawick, of earlier Silent Sioux and Fawick Flyer car associations, although the well-known Ford aversion to anything "not invented here" was a likely factor in the point not then being highlighted. Ford and his men, notably Joseph Galamb, carried out much development work, however, which included relocating the final drive worm to the bottom of the driven crown-wheel as its high position had caused such heat to be generated that its casing became a real health hazard. An integrated dash and control area incorporating the steering gear and rear fuel tank mounting was also designed; this feature became the subject of a patent claim relating to the Fordson. Ford's attraction to the Fawick design may have been due to his demonstrated inclination to that form of construction, as was made obvious in his own 1912 patent for a "Traction Engine." Fawick, furthermore, would have obviously been

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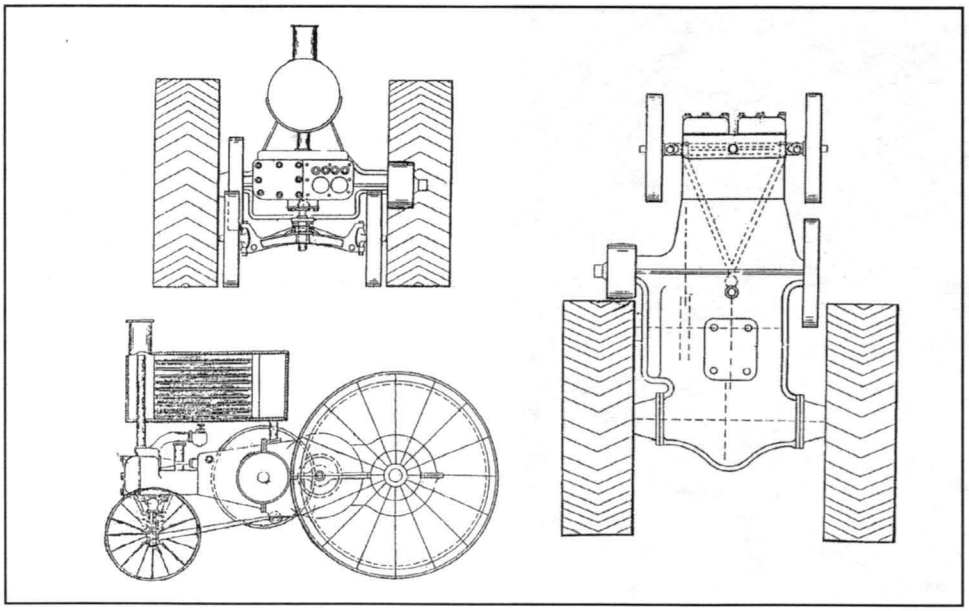


Australian Patent No. 6454/12 of September 18, 1912, which was taken out by Henry Ford for a "Traction Engine." ***(drawing: National Archives of Australia)***

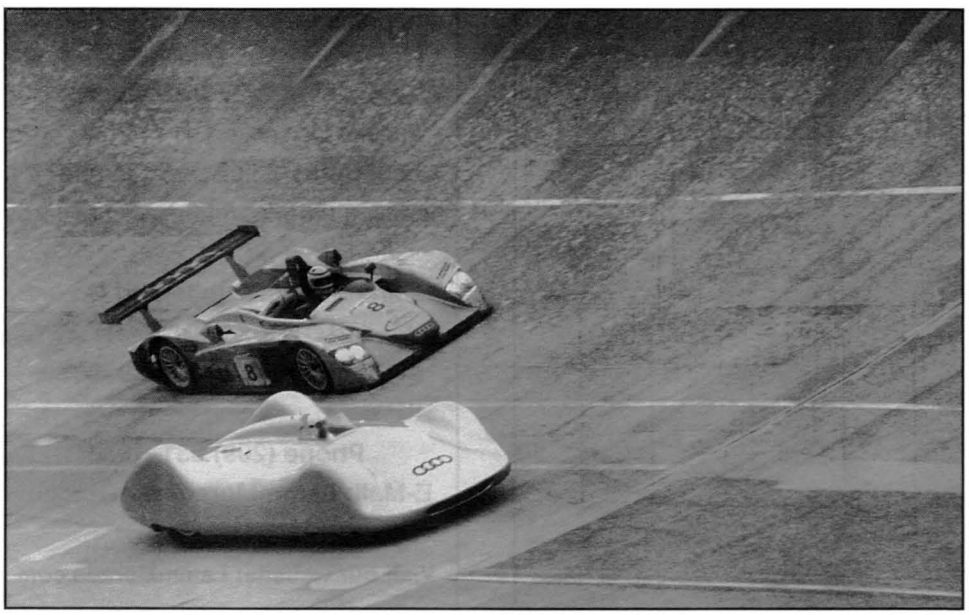
***AVUS** continued from page 1*

ambitious project five years ago. They wanted to reconstruct the most important types of Auto Union racing cars. The basis of the rebuilt record streamliner was the chassis of an Auto Union C-type racing car, purchased in 1995 in Riga. The marvellous body, which had been developed in the wind tunnel, was ordered in England. The very skilled workers had to rely on photographs as all the original drawings were lost.

This newly reborn sensational record car was demonstrated for the first time under its own steam at the Grand Prix de l'Age d'Or (Grand Prix of the Golden Era) on the only still suitable banked track of Montlhéry near Paris on June 24 and 25, 2000. There was a big audience to appreciate the looks and sound of this fabulous car. Concurrently the winning car of the famous 24 hours of Le Mans of that year, the AUDI R8, was also driven by one of the works drivers. It truly was a unique experience to watch the two silvery racers rushing down from the bank to fly past the grandstand. The Le Mans winner after having covered more than 5000 km in the race had been transported directly to Montlhéry and was still sporting the full "patina" of dirt and insects on its alloy skin. With this impressive demonstration of the two superb cars Audi gave a most handsome proof of their engagement in sports and racing events and also of their slogan "advance by technical progress."

Apart from the two "stars" of the Grand Prix de l'Age d'Or there were plenty of racing and sports cars to admire. In various heats of ten laps and in the practice sessions these cars were dispatched in several categories. The smallest, the cyclecars of 750 to 1100 cm^3, were mainly an affair of the French with Darmont, Sandford three-wheelers, Salmson, Amilcar, BNC and Lombard, but there were a few MGs, Rileys and a lone Fiat. The favorites were perhaps the Edwardian racing cars with their huge engines and their deafening exhaust note. With one exception they all were brought across the Channel by British owners and drivers.

The class of vintage racing and sports cars was most attractive as well. The light-footed Bugatti, Amilcar, MG and Frazer Nash cars were in the same field as the heavier Bentleys, Alvis, Talbots (London) and Invictas—all of them being rather ruthlessly raced on the steeply banked track. To cut down their speed there were some artificial obstacles on the track. The post-war cars started in various categories such as touring, GT, GTS, GTP, Lotus 7, Monomille, F3, Formula Junior etc. Here again the French had little international competition. ■



The Avus makes its debut at the Grand Prix de l'Age d'Or at Montlhéry alongside the Audi R8 that won the 2000 Le Mans. *(photo courtesy Ferdinand Hediger)*

The Racing Track of Montlhéry

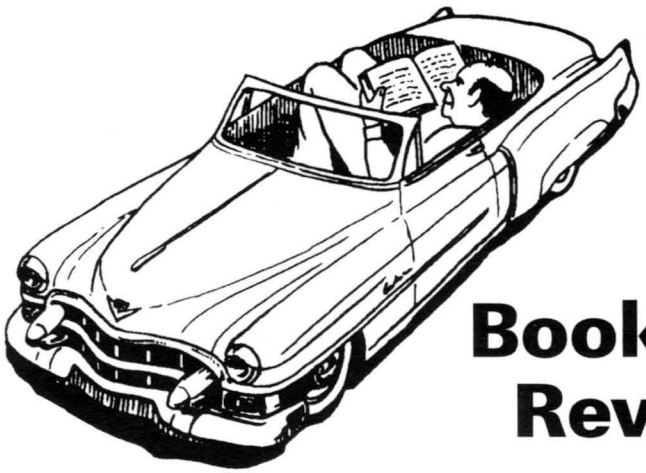
Monsieur Lamblin, owner of a car radiator factory, initiated the project. He bought a château and a substantial area south of Paris, and in May 1924 the construction started. Up to 2000 workers laid 35 meters of the track daily. On October 1924 the inaugural races took place.

The high-speed track with two steeply banked curves was designed for speeds up to 240 km/h. It measures 2.5 kilometers in length. Apart from it there is also a road-circuit of up to 12.5 kilometers in length. In the following years many national and international races took place here. This track was of course eminently suitable for all kinds of record runs. In various classes distances of one kilometer up to several months duration were covered at record speed. Many British and French drivers favored the comparatively short distances. A team of drivers drove around the bowl at an average speed of 173 km/h for 24 hours aboard their huge Renault 40 CV streamliner. André Citroen, always good for spectacular advertising ideas, wanted to prove the durability of his mass produced cars. "Little Rosalie" was driven by eight drivers from March 3 until July 27, 1933 covering 300,000 kilometers at an average speed of 93.4 km/h.

A most courageous woman, Gwenda Stewart, set the track record in her Derby Special, a front-wheel driven racing car with a supercharged Miller eight-cylinder-engine of only 1.6-liter capacity, with 237 km/h in 1934. This top performance was beaten only by Raymond Sommer, in an Alfa Romeo GP-car type 308C, three-liter capacity, with 238 km/h in 1939. (Apparently his time was only hand-stopped and there resulted some discussions and grumbles.)

In 1952 Stirling Moss, Jack Fairman and Bert Hadley covered 29,000 kilometers in seven days and nights in their Jaguar XK 120—for the first time with a speed higher than 100 mph.

Unlike the other high-speed tracks of Europe (Brookland GB, Monza I, Avus D and Sitges E) Montlhéry is still open for those who want to drive racing cars at top-speed. *F.H.*



Book Reviews

Elcar and Pratt Automobiles: The Complete Story, by *William S. Locke,* 2000 ISBN 0–7864–0956–8. Hardcover, 8½ x 11 inches, 322 pages, 555 b&w illustrations and 29 color photos. McFarland & Company, P.O. Box 611, Jefferson, NC 28640. $55 plus $4 shipping and handling in USA.

This is one of the best books describing an auto company's history in minute detail that I've seen in a long time! Furthermore, the description of how a small independent survived as long as it did throughout the economic ups and downs of its times is scholarly.

Elcar, and its forerunner, the Pratt, evolved from the Elkhart Carriage and Harness Co., of Elkhart, Indiana, which was owned by two brothers named Pratt. Its first "horseless carriages" were high wheelers which in 1909 adopted conventional lines of the automobile, first in Pratt-Elkhart and in 1911 just Pratt. These were fine cars and although production was small the car consistently found a satisfied clientele. Pratts were produced as four-cylinder cars, sixes and by 1915, their final year, V8s. In 1916 the company switched from Pratt to Elcar and started with a line of creditable cars, much like many others of its class then. Production was limited as the company was also producing military ambulances. With the end of World War I and the government cancellation of the ambulance contract, production ensued with a whopping 5,000 units completed by the end of 1919. Elcar would never reach that figure again.

Reorganized in 1922 as the Elcar Motor Company, the car became a leader in contemporary design with performance to match. Its selection of models was a wide one for its several series and there was a wide range of prices. Augmenting the regular passenger car output, the Elcar taxi became popular in a number of cities. In 1924 its four- and six-cylinder offerings were joined by a straight eight.

In 1930 Elcar joined with the Lever Motor Co. to form Elcar-Lever. It was an attempt to promote a series of cars powered by an engine, invented by a southern clergyman, Rev. Alvah H. Powell, which introduced leveraged mechanical advantage into an internal combustion chamber. The Lever option was backed by the availability of the standard Elcar series. A car was shown at the auto shows and a brochure was distributed. The public, however, wasn't attracted to the Lever option and the Elcar-Lever marriage ended in divorce.

Although 1930 turned out poorly for Elcar, the company still had ideas. At the New York Auto Show it introduced the Series "140" with a straight eight engine that developed 140 bhp, a wheelbase of 135 inches and a low profile. Despite the fact that the "140" was the third most powerful American car for 1930, production was apparently limited to pilot models.

At the same time work was underway on a new Mercer, an attempt to revive the earlier car of that name which built its last cars in 1925. The Mercer convertible coupe and a chassis would star at the 1931 New York Auto Show, but the Mercer plan failed. Author Locke is the owner of both the car and the chassis along with his Elcars.

The Elcar threw in the towel in 1931, although for some years the factory remained open for taxi production by other groups into 1933. Unsold Elcars or new cars from existing parts would be sold as 1932 and even 1933 models. Later the factory would build campers and house trailers.

Mr. Locke has contributed a valuable piece of automotive history with this book. I recommend it very much.

—Keith Marvin

The Wankel Rotary Engine: A History, by John B. Hege. 2002 ISBN 0–7864–1177–5. Hardcover, 7 x 10 inches, 182 pages with 78 black and white photographs and figures. McFarland & Company, Inc., P.O. Box 611, Jefferson, NC 28640. $35 plus $4 shipping and handling in USA.

While doing some research on modern fuel cell technology, I kept finding quotes calling this the powerplant that will replace the internal combustion engine in cars. It seemed odd that similar quotes had been around for other powerplants like turbine and rotary engines. Thirty-five years ago many major manufacturers studied the turbine engine's potential in automotive applications. It was only about 30 years ago when rotary engines fell into the same category.

As luck would have it, John Hege's history of the rotary (or Wankel) engine arrived at just about this time. Since history tends to repeat itself, it doesn't hurt to read up on when last we traveled around these parts. In other words, how is the development of the modern fuel cell similar to and different from the rotary engine of thirty years ago? You'll have to make the comparisons, but *The Wankel Rotary Engine: A History* gives you much of the needed information about part of this comparison.

Hege, a life-long fan of the rotary engine, takes previous histories and builds upon that foundation. In his

quest to locate a proper archeology of Felix Wankel's engine, he found none to bring the story up to modern times. He admits to finding "out-of-print histories" (Nicholas Faith's *Wankel* and *Jan P. Norbye's The Wankel Engine* among them), but they only followed the rotary's development into the 1970s.

The Wankel Rotary Engine takes this story up to the year 2000 and includes recent prototypes and concept cars from Mazda. But the story doesn't limit itself to automotive engines since Curtiss-Wright (aircraft), Deere and Company (military applications), and Rotary Power International (various uses) have also developed rotary engines.

Chapters within this book include each of the major corporate players including NSU, Toyo Kogyo (Mazda), Citroën, Daimler-Benz and Rolls-Royce. It also includes developments using hydrogen and diesel as fuels.

Sometimes technical (Hege is an automotive technician) and very historical, *The Wankel Rotary Engine* provides an excellent background on this alternative powerplant. While educational, Hege's book is also a good read.

—Sam Fiorani

Getting the Bugs Out: The Rise, Fall and Comeback of Volkswagen in America, by *David Kiley.* 2002 ISBN 0-471-40393-8. Hardcover 6 x 9 inches, 302 pages, 17 b&w photos. John Wiley & Sons, 605 Third Avenue, New York, NY 10158-0012 $27.95 USA/$43.50 Canada.

Readers Wanted! And you'll be glad you did because whether or not you have ever owned a Volkswagen, you will find David Kiley's book most informative and fun to read, chock full of marketing strategies, corporate goings-on and intriguing personalities.

The key point of the book is that for Volkswagen of America, it was not about selling cars, it was about selling the brand—and that the Beetle was vital to the brand. This marketing of the brand would bring Volkswagen to prominence in the United States in the '60s, threaten its very survival in the U.S. in the '80s and bring it back, stronger, in the '90s.

First the rise. In true David vs Goliath fashion Volkswagen takes on Detroit with a car that is, well, nothing to write home about. But in the hands of its ad agency Doyle Dane Bernbach, the Volkswagen is marketed as sound, reliable, unpretentious and an honest value in ads that are witty and conversational, likable and memorable. Volkswagen becomes a leading player in the cultural revolution that is defining the '60s and garners brand recognition worth millions of dollars.

Then the fall. Although the falling dollar and Japanese competition begin to take their toll on Volkswagen sales in the '70s the key factor in Volkswagen's sharp decline is that the Beetle's successors, the Rabbit, Scirocco, Dasher, Jetta, were none of the things that Volkswagen had been marketing for 20 years. Exacerbating the problem is the corporate culture clash between Volkswagen of America and its parent in Wolfsburg, Germany and the obvious disconnect between U.S. consumers and the engineers in Germany building the cars. VW's very survival in America is at stake.

Finally the comeback. The new Beetle, along with vastly improved Golfs, Jettas and Passats, are marketed by Arnold Fortuna Lawner & Cabot, as personal cars for people in tune with their cars and driving—Drivers Wanted.

—Tom Jakups

Pioneers of the U. S. Automobile Industry, by *Michael J. Kollins.* 2002 ISBN 0-7680-0904-9.Hardcover four-volume set, 9 x 11 inches, profusely illustrated. Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096-0001 (www.sae.org). $119.00 plus shipping and handling in USA, 20 percent discount to SAE members.

This four-volume set is the result of over a decade of research and writing. Having met Mike when he was 81, I was concerned that the book be finished in his lifetime. He finished it, as he assured me he would, and turned 90 on March 21, 2002. Recently I sat with him reviewing the set and for three hours he recalled name after name of outstanding and background personalities. I could only wish for such recall when I am 64!

These books are a delight to read. Peggy Greb, responsible for editing and design, did her usual outstanding job. The SAE has become a leader in publishing automotive history books and their quality is well known. The "book" turned into a set of four volumes, namely

Volume I
The Big Three
Volume II
The Small Independents
Volume III
The Financial Wizards
Volume IV
The Design Innovators

The volumes are also available individually for $39.00 each.

Michael Kollins is a very readable author and his style is easy to follow. His research is fresh, mostly gathered from original publications and personal interviews. In the introduction Mike states that, "The purpose of this publication is not so much to furnish statistics and technical information on automobiles, as these can be found in libraries and many technical publications, but to expose the warm, human, compassionate and romantic relationship of the persons involved and the products of their labors."

These volumes will compliment the rest of your library without supplanting any volume. They are unique in their detailed information and yet not a reference-only book. Mike has accomplished what he set out to do from the day he was encouraged by his son to retire fully and write the book.

In writing the *Pioneers of the U. S. Automobile Industry,* Mike has condensed into these four volumes the dynamics of the motor car grown into the automobile in-dustry. Thumbs up and lots of stars to this capstone of Michael Kollins' long and successful career in the automobile business.

—Leroy Cole

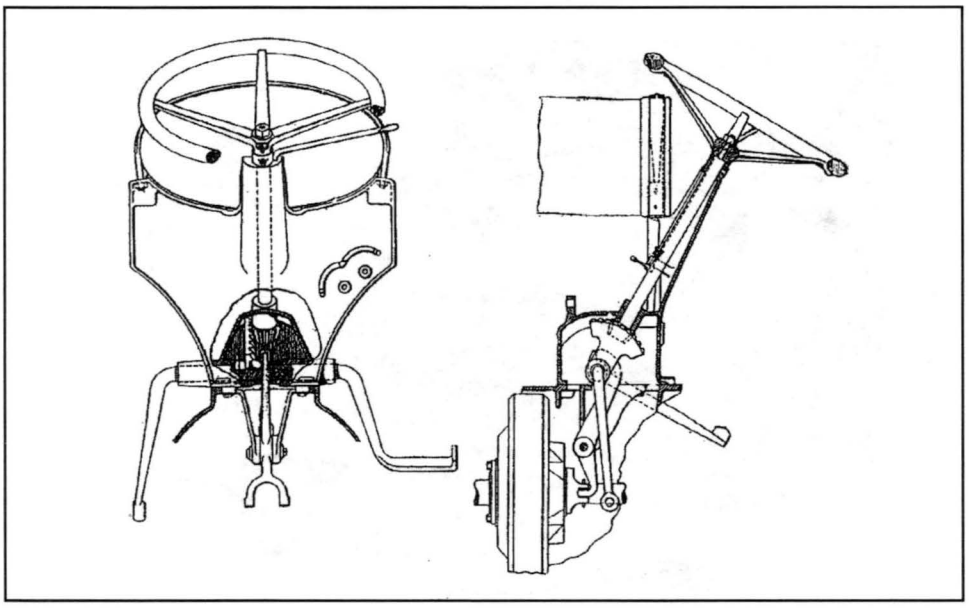
***Fordson** continued from page 5*

seriously inhibited in exploiting his design due to the prior Ford claim. Indeed, Ford was probably the only client available to Fawick due to his design being in breach of patent provisions.

The drawings attached to the 1912 Ford patent application reveal that the engine and transmission were unitized, although the huge size of the housings would have involved serious weight and cost penalties. The rationale behind the patent claim seems to have been to secure the rights to that form of construction as the drawings are quite lacking in detail. However, they reveal the layout for a tractor with a four-cylinder horizontal engine, having its cylinder heads to the front and a transverse crankshaft fitted with an external flywheel on one side and a belt pulley opposite. The transmission case extended from the crankshaft to the rear axle and was of massive proportions, largely due to its remarkable width. With the benefit of hindsight the design does not appear to have been a particularly good prospect for the manufacture of a low-cost tractor, possibly the reason for its not entering into production.

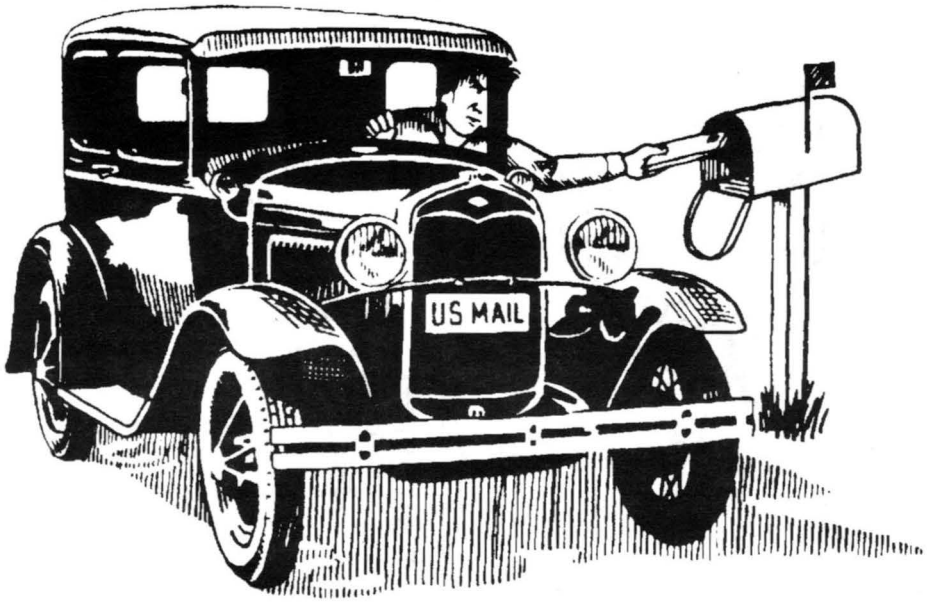
Although U.S. manufacture of the Fordson ceased in 1928, Henry Ford was not finished with farm tractors, as his famous "handshake" agreement with Harry Ferguson indicated. Featuring a built-in implement mounting and lift linkage, the Ferguson system's centerpiece was an automatic hydraulic draft control which, by precisely monitoring loads, allowed smaller, lighter tractors to perform the tasks of larger machines. The automatic draft control was, to the efficiency of tractor operation, the equivalent of a governor on an engine subject to varying loads. The automotive volume production methods were again applied to the 1939 Ford Ferguson to ensure affordability, and so the Harry Ferguson design repeated the Fordson experience by again setting an industry standard.

In view of Henry Ford's great impact on farm tractor design and production it is, perhaps, rather sad that the name has now been lost to that application. Due to Ford's corporate strategy decision, the company withdrew from that field, along with several others, to concentrate wholly on cars, and so the present-day successors of Fordson and Ford tractors carry the New Holland name.



Australian Patent No. 11719/19. The drawings attached to the patent for a "dash assembly and controlling devices for a tractor" granted to Henry Ford on July 8, 1919. (drawing: National Archives of Australia)

Credit to the late SAH founder *Richard Brigham* for the origins of the Fordson design, as revealed in *Journal* 5, January 1970, and to the National Archives of Australia for providing the copies of Henry Ford's tractor patents. ■



What Are We Waiting For?

The bride—or bride and groom, actually. *Karl Zahm* writes about the car on the back page of *SAH Journal* No. 198: "The photo was taken of my car in front of Emmanuel Lutheran Church in Rockford, Illinois, on June 29, 1963. The occasion was my sister's wedding. This Full Classic Packard has a body by Edgerton B. McNear (of Brookline, Massachusetts) and is a one-of-a-kind. The body was removed from a 1924 Locomobile and transferred to the Packard chassis, albeit with a lot of work involved, including splitting the body lengthwise in order to fit the Packard's wider chassis. Despite extensive investigation, the original coachbuilder has never been determined. McNear re-skinned the body and reupholstered the interior in accordance with the owner's wishes in the same style and design as the former Locomobile. At the time the photo was shot, the Packard had approximately 38,000 miles and, except for the tires and repainted rear fenders, was essentially an unrestored original car."

SAH webmaster *Dave Duricy* reports seeing the car last year in a parade in his hometown of Hamilton, Ohio, and Karl confirms that it is now owned by a couple from Grove City. Others who recognized the car, though not the occasion, included *Fred Roe, Randy Ema* and *Hayden Shepley.*

—Kit Foster

More on Oakland Pioneers

The item on Oakland, California, pioneers (*Journal* 198) struck me because I've pursued them for a number of years.

In regards to the Elliott I'd like to add the following information:

Horseless Age 4/97 (pp 11, 13) Exhibits car with 30" wheels and non-puncturable Morgan & Wright tires after three years of experimenting, three speeds—4, 8 and 16 mph., 2 hp Otto engine. Illustrated on page 11.

Horseless Age 4/12/99 (p 12) Building two carriages, one for himself and one for a patron.

Horseless Age 4/26/99 (p 6) Illustration 4 hp, 2 cyl.

Horseless Age 10/4/99 (p 13) Illustration 1200 lbs.

Motor Age 10/10/99 Reprinted in *Horseless Carriage Club Gazette* Nov./Dec. 1959 (p 32) Illustration of both 1897 and 1899 vehicles. Climbs Mt. Hamilton to Lick Observatory with all kinds of mechanical problems.

Autobain 10/99 (pp 14–15) Illustration and details of trip up Mt. Hamilton.

Town Talk (San Francisco) 12/29/00 (p 18) Designing a car in which he plans to cross the continent.

Town Talk 1/5/01 (p 16) Has orders for 14 stages and freight wagons and is looking for backing.

Motor Review 11/7/01 (p 59) Took car East and came back without it. Now is a mobile demonstrator. Transferred his rights to manufacturer (to whom?)

For anyone wishing to expand on the history of the Pacific Special, I offer the following:

Motor World 5/11/11 (p 442) Announces car to be built in Fruitvale, California.

Motor Field 8/11 (p 69) California Motor Car Company building a factory in Fruitvale. Sachs, Schram, Ball incorporators.

Motor World 11/16/11 (p 530) Capitalized at $250,000. Propose to manufacture a touring car.

Automobile Topics 9/28/12 (p 438) Is now manufacturing. First cars are being tested.

The Automobile 9/9/13 (pp 142–143) Models A and B, 4 cyl., 4" x 5", 121" wheelbase, 2700 lbs, L-head in pairs, Bosch magneto, Stromberg carburetor, 32 x 4 tires.

California DMV 1/15 (p 273) Eleven cars registered in California.

1917 California Registration Book shows two registered, one roadster #160, and one touring car #111.

Harry Pulfer had a colored slide of a radiator emblem showing the sun rising above the words, Pacific Special Oakland, California.

—Ralph Dunwoodie

Photographic Archives of Dr. Seifert for Sale

Due to old age, and with considerable reluctance, Dr. Eberhard Seifert has decided to put up his life-time work for sale. For decades this well-known German automotive photographer and journalist has contributed his photographs to many European publications.

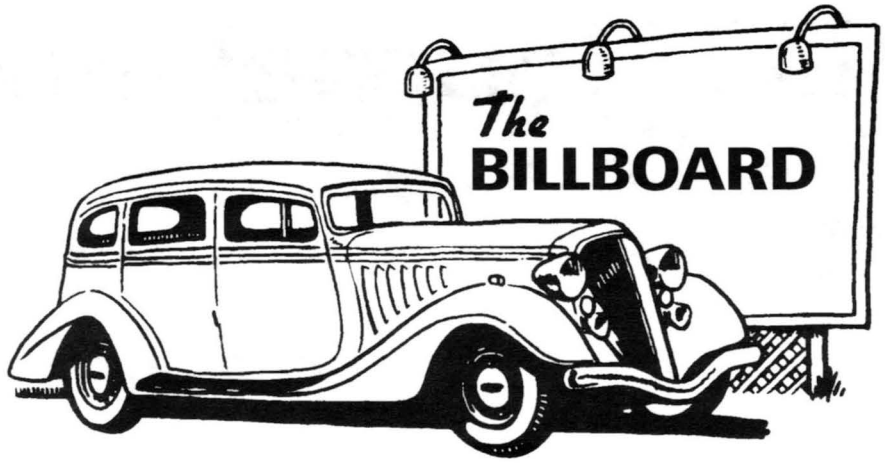
The principal items of the huge and unique archive are the "photographic harvest" of 116 European automobile shows and salons which he attended between 1950 and 1990. Apart from photographing complete cars Dr. Seifert had a special eye for taking pictures of details such as grilles, fenders, wheels, instrument panels, interiors, steering wheels, lamps, etc. as well as styling developments and safety features. He made uncounted picture reports of new models, collector cars, prototypes and concept cars—always with many details. Whatever was important in the world of

the automobile in forty years, it is covered by his photography.

The Dr. Seifert archive consists of 130,000 black and white negatives made with Rolleiflex or Hasselblad cameras. Apart from the enormous size and wealth of the collection, its fabulous and fastidiously made index with dates and files according to themes makes it a truly unique source of picture information. Every negative is in a transparent pouch, bearing the written details and date, together with a black and white paper copy showing the best frame for enlargement. There are also some 40,000 blow-ups, size 5x7 in.; these are filed and organized according to subject, In addition, 100 complete themes with photographs and text are available in separate cabinets. For identification purposes the full range of the *Swiss Automobil Revue* annuals from 1947 onward is used.

This truly unique, top-quality photographic archive is offered complete with full copyrights as an entirety only (strictly no sale of single negatives, parts of the collection, marques or themes only). As it is the work of a lifetime by a professional photographer, nobody should expect a bargain price. Dr. Seifert is gladly willing to study your proposal, but please respect his desire that only serious offers by affluent persons or parties should be made. Dr. Seifert can be contacted by Telefax No.++49 88 41 62 132.

—Ferdy Hediger



UK Chapter Goes Global For all those SAH members who are compulsive reader/collectors of all published automotive history, the U.K.Chapter—The Society of Automotive Historians in Britain—are producing their newsletter as a sixteen-page magazine. They are offering it to SAH membership worldwide. If you would like your name included on their mailing list please send $10 to SAH—Quarterly, 1102 Long Cove Road, Gales Ferry, CT 06335-1812 USA. MasterCard, Visa, AmEx accepted; be sure to include expiration date. Like to see a trial page? email jeremy.baconsahb@btopenworld.com

Literature for Sale Disposing of 66-year collection of magazines and books. Fifteen four-drawer file cabinets of research material: 99+% of U.S. cars, some foreign. Components of collection include wheels/rims, body/coachbuilding, instruments, lamps, firsts, motorcycles, aircraft, alternate fuels. Drop-ins are welcome, no obligation. Send SASE with specific needs. Racing and truck files are gone. ***Ralph Dunwoodie*, 5935 Calico Drive, Sun Valley, NV 89433-6910**

Information Wanted On the ACME motorcycle that was built in Australia in the 1940s. These were made by a Sidney firm called Bennet and Woods and are different from those made in the UK. ***Ron Skala* 3910 Summitview Suite 210, Yakima, WA 98902; email rskala1@yahoo.com**

Information Wanted Make and year of the car the Archduke Franz Ferdinand was riding in when he was assassinated in 1914 to start World War I. ***Frederic Davis* 1812 Center Street, Walla Walla, WA 99362**

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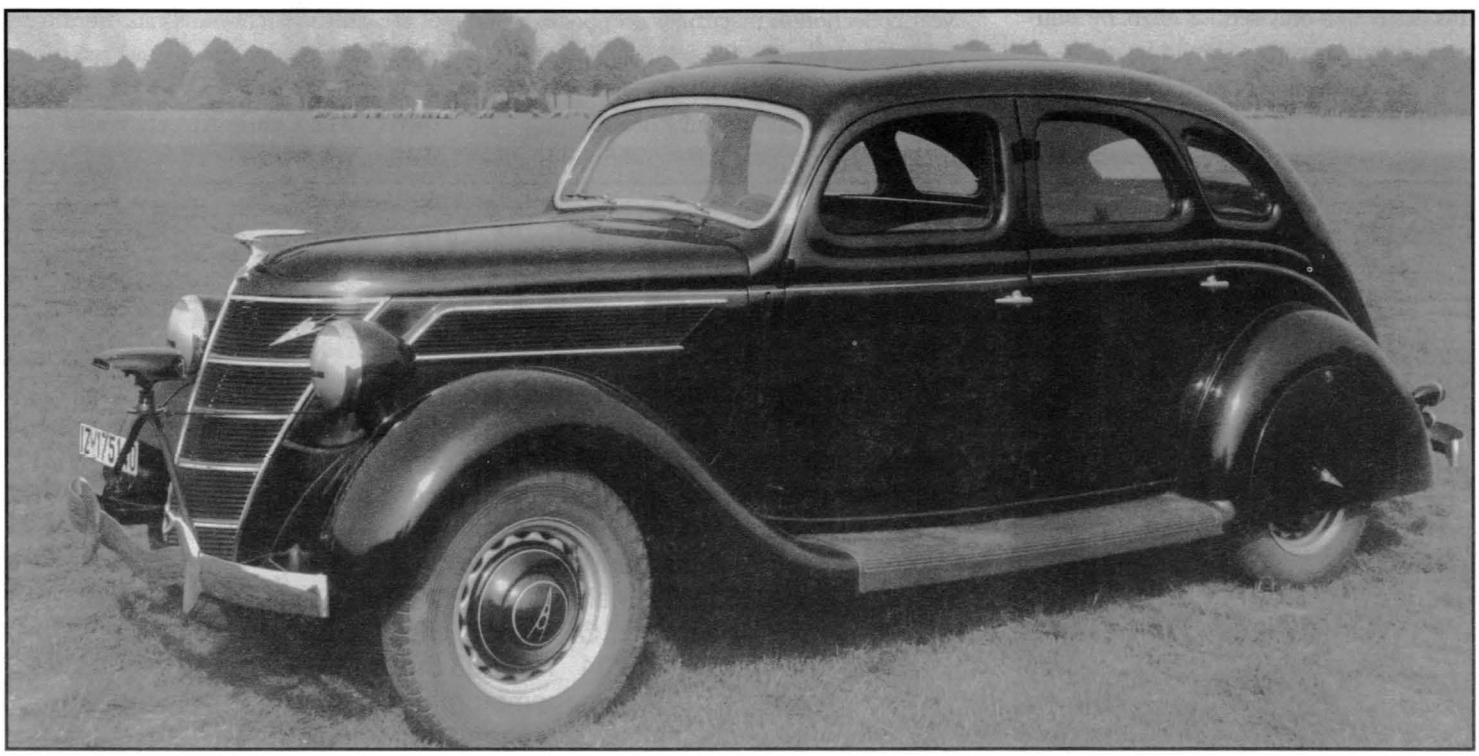
West Hartford, CT 06107



Deutsch Treat: The German Ford V8 Spezial of 1938–39 is an interesting variation on the US-built Model 78, powered by the same 3.6-liter engine. But what's that apparatus mounted on the front bumper? (*Kit Foster collection*)