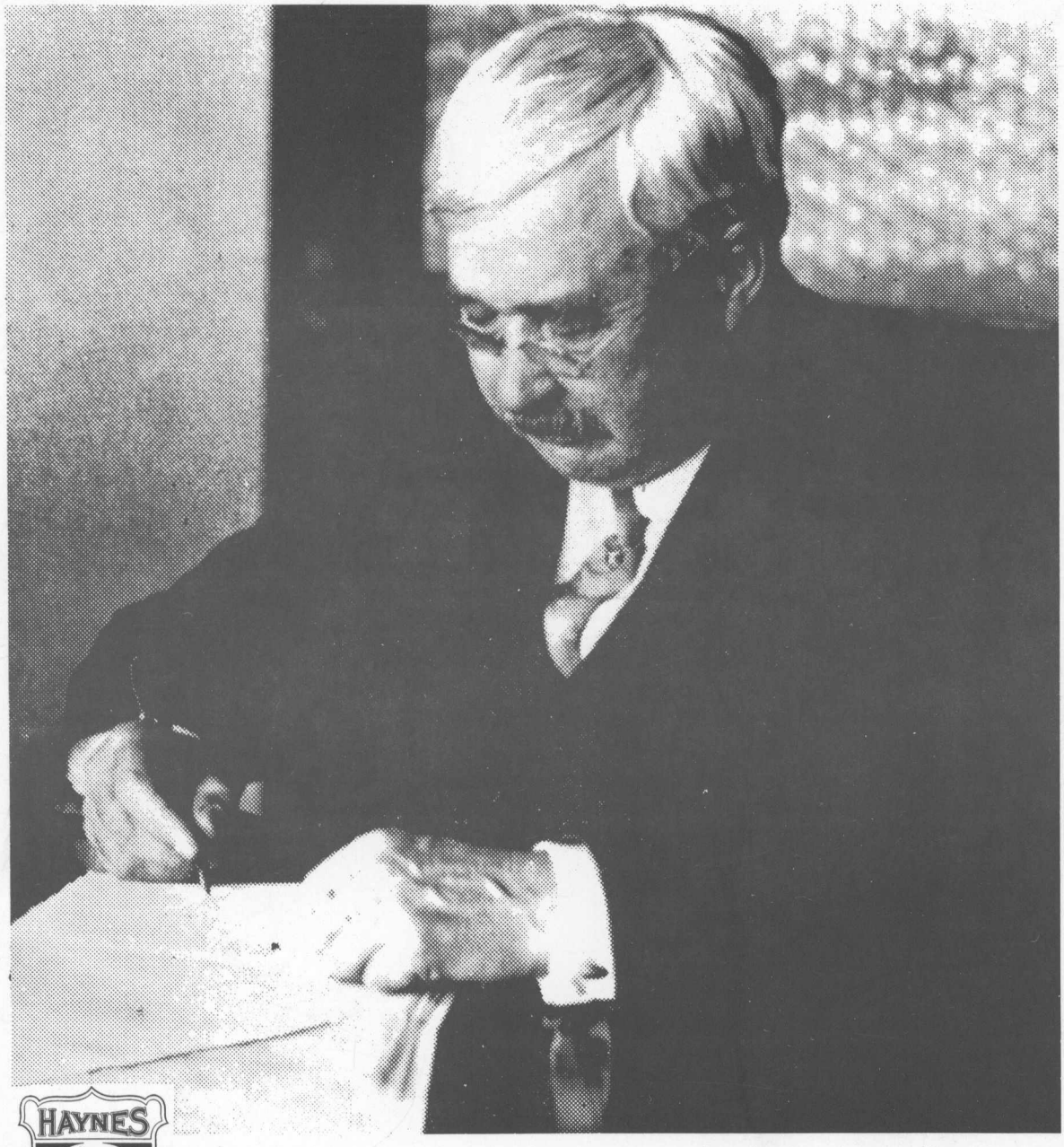
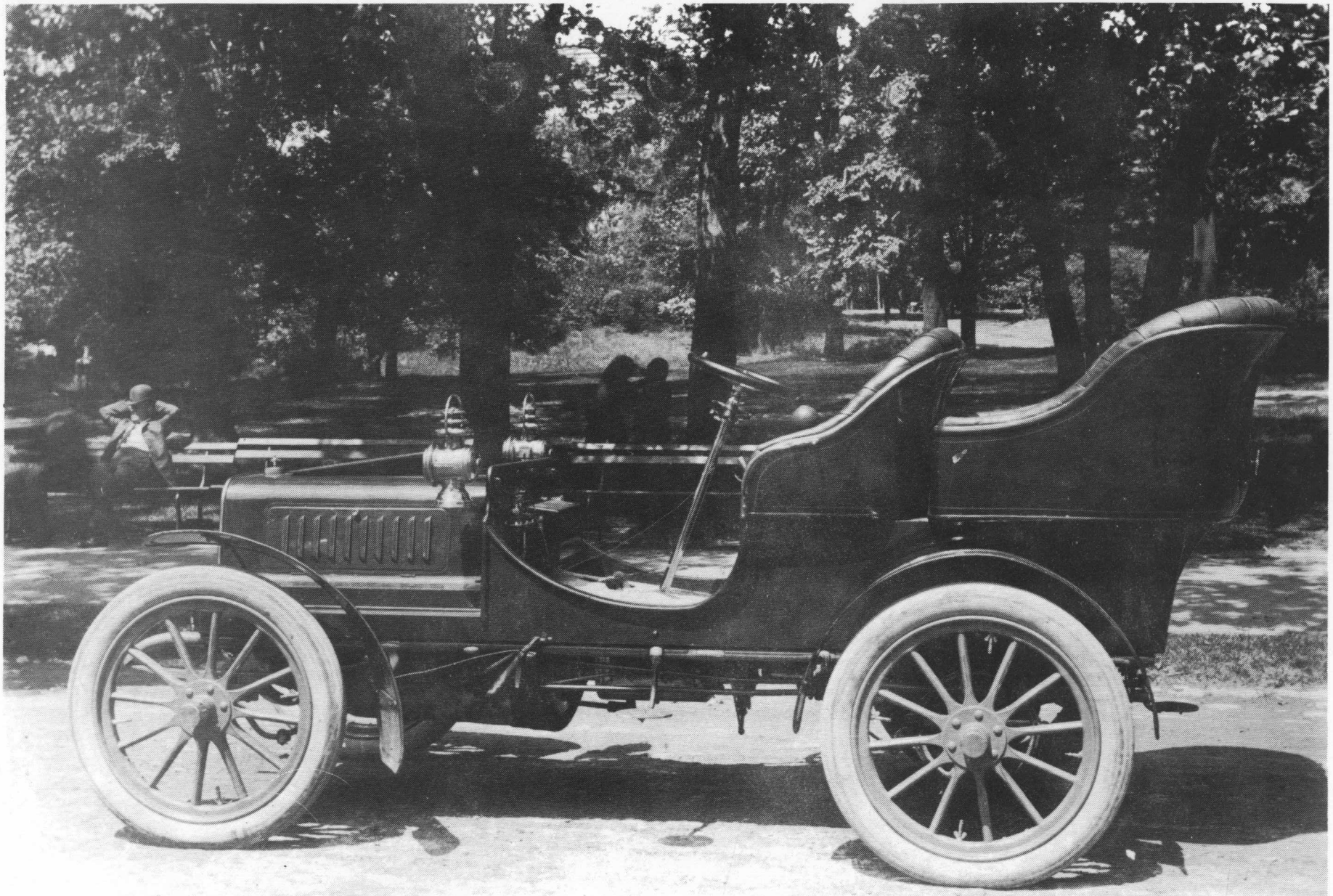
AUTOMOTIVE HISTORY *Review*

WINTER, 1973 - 1974 ISSUE NO. 1



ELWOOD HAYNES (1857 - 1925)

The Society of Automotive Historians



Walter Car

1902

Photo loaned by Jan Eyerman

AUTOMOTIVE HISTORY Review

A PUBLICATION OF THE SOCIETY OF AUTOMOTIVE HISTORIANS

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OFFICERS, 1974

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AUTOMOTIVE HISTORY REVIEW is printed by BRIGHAM PRESS, Marietta, Georgia. Address all correspondence to the SOCIETY OF AUTOMOTIVE HISTORIANS, P. O. BOX 1306, MARIETTA, GA. 30061.

THE BACK COVER -

The text of the advertisement on the back cover of this issue was first used by Cadillac in 1915. Since that time it has appeared in several different lay-outs and type styles. The Cadillac Division of General Motors still receives requests for reprints.

This ad, which has never included a picture of the product, was one of the very first to depart from what had become an almost standard form - a picture of the car, a brief list of specifications, a few claims of performance or accomplishment (probably exaggerated), and not infrequently a few comments about the inferior vehicles offered by the competition.

There are many automobile advertisements which will be remembered for their departure from the contemporary style, such as Jordan's "Somewhere West of Laramie" or Volkswagen's "Think Small" which was the first of a long series. At least one auto ad was unintentionally made famous by its bad grammar. This was an ad for the Great Western - "It Never Lays Down". And there was the Reo advertisement in which Ransom E. Olds was supposed to have claimed "This is My Best", with reference to the 1912 model, Reo the Fifth. The point was that in this design the ultimate had been reached, and that henceforth any changes in design or construction would be minor ones.

Each issue of Automotive History Review will feature such an advertisement on its back cover.

THE PRESIDENT'S MESSAGE

With this first issue of Automotive History Review, we take a new step in the right direction of historical research. This will be our permanent record of material that has been sent in by SAH members on certain automobiles, combined and edited by Dick Brigham, and published in this fine magazine for our own libraries.

After two hundred years of self propelled vehicle existence, this is the first group that cares enough to make an indelible mark on the history of our world. Collectively we will be able to put the published word, with our stamp of approval on it, at the fingertips of every automotive historian the future will spawn. I feel proud to be a part of it, and to know that oceans or continents will not make a particle of difference to us in our search for the facts of early automotive history around the world.

This first issue will be a challenge to all of us to keep the material flowing, and to make some rusted-out hulk live again. Viva!! le Automobile, or something!

Stanley K. Yost
President, SAH

EDITORIAL COMMENT

A STATEMENT OF PURPOSE

With this initial issue of Automotive History Review we introduce not just another magazine about old cars, but a publication unique in its field. This will be a record of the work done by the Society of Automotive Historians in exploring the history of self-propelled vehicles.

In this effort we will be concerned not only with the many makes of motor cars produced in the past, but also with the factories in which they were built and, perhaps most important of all, the men who designed and built them. We will study the lives of these men - their hopes and dreams, their successes and their failures. We will explore the history of various types of power sources, the innovations in design and construction, and the path of the evolution of the motor car - with its branches and dead ends. We will look at the ideas applied to the development of self-propelled vehicles; some ingenious, some impractical, and some downright absurd, but all having some effect on the future of the industry.

All of these facets of automotive history have been examined before, but by individual researchers working alone, and often duplicating the efforts of their contemporaries. The Society of Automotive Historians was organized to combine and coordinate the work done by its members. This magazine is intended to serve as a permanent record of this work.

The future of our organization is both challenging and exciting, and it is a privilege to be a part of it.

Richard B. Brigham
Editor

SOME QUESTIONS CONCERNING

The Cars of William Walter

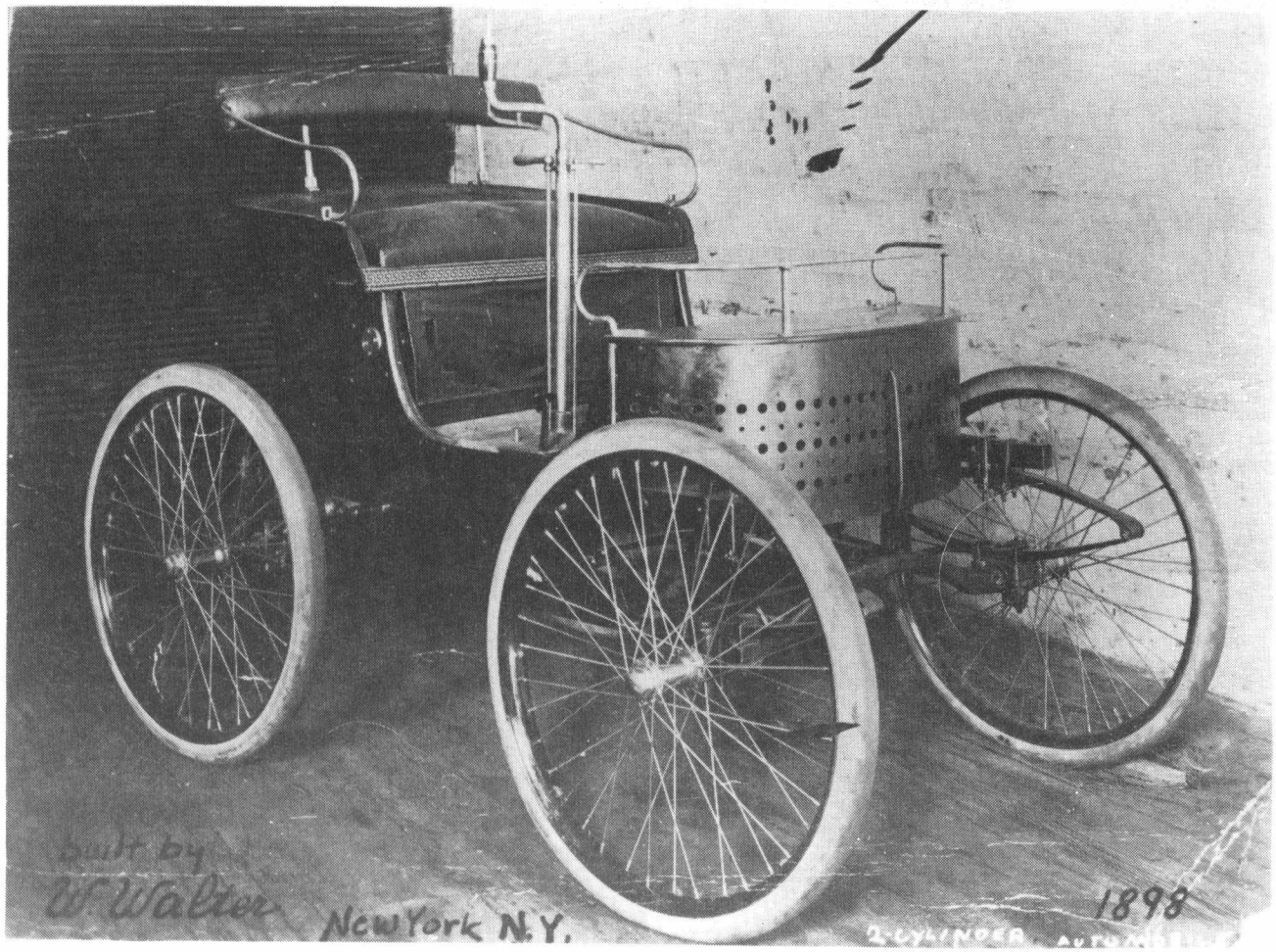
There are certain names which appear on almost every roster of makes for which practically no evidence is available to show that these makes ever existed. The Society of Automotive Historians has, through the research efforts of its members, removed several of these highly questionable names from its roster of automobiles made in the past.

We are reminded of a couple of such names by the excellent photos contributed by member Jan Eyerman, who has sent us the picture on this page plus the ones on the inside front and back covers of this issue. The Walter cars will be remembered as the original ancestor of the Mercer, and were made in New York City from 1902 to 1906. Then the production of the Walter was moved to Trenton, New Jersey, where, in 1909 the company (along with Roebling-Planche, a sub-division) was re-organized as the Mercer Motor Car Company.

The designer of the Walter was William Walter, and the cars were first built in the factory of the American Chocolate Machinery Company on West 66th Street, New York City. In consequence, the unlikely name of American Chocolate appears as the name of a make on most automobile rosters. Still another name which bobs up from time to time is Waltomobile.

The question is, of course - were there ever any automobiles which actually carried these names? If so, do any authentic photographs, advertisements or valid references exist?

Any and all information - including a complete article - will be welcomed. Send it to AUTOMOTIVE HISTORY REVIEW, c/o Brigham Press, Box 1306, Marietta, Georgia 30061.



VIEWPOINT
COMMENTS OF OUR READERS

THE PACKARD CLIPPER - MAKE OR MODEL?

Charles H. Hebb, Decatur, Georgia

Was there a Packard Clipper, or was there a Packard *and* a Clipper, each a separate marque? This controversy has puzzled a number of people for some years, and with some justification. However, by looking at Packard's literature and certain facts, we can come by what I think is an answer acceptable for all purposes.

First off, as to my own opinion, I am quite satisfied to brag on my 1956 Clippers as being Packards, just that they are the lower priced range of the Packard lines. The Packard name makes for that kind of pride.

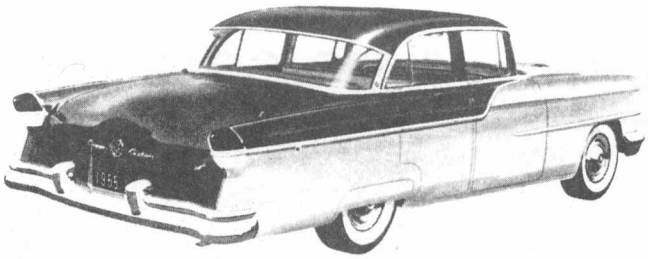
Packard's literature definitely establishes two periods in time for the car, the period from mid-year 1941 (introduction of the Clipper) until and through the year 1955, as distinguished from the year 1956. To take the 1941-55 period, look at the literature which establishes it as a Packard Clipper.

Charlie Hebb is a director of Peach State Packards (a region of Packard Automobile Classics) and editor of the monthly newsletter "Packard Profiles".

He is also editor of "Lincoln Continental Remarks", the bi-monthly newsletter of the Southeast Region of the Lincoln Continental Owners Club.

This item is a portion of a two-page spread, taken from Colliers, which introduces this "dazzling new motor car, Packard Clipper". Leaves no room for question, does it?

Then, let's take this 1942 color brochure, the final and most effective piece for selling a car. It is this piece which convinces a prospective purchaser, whether or not he likes the looks of the car. See what it says - Packard Clippers, Six and Eight - Special and Custom - for 1942.



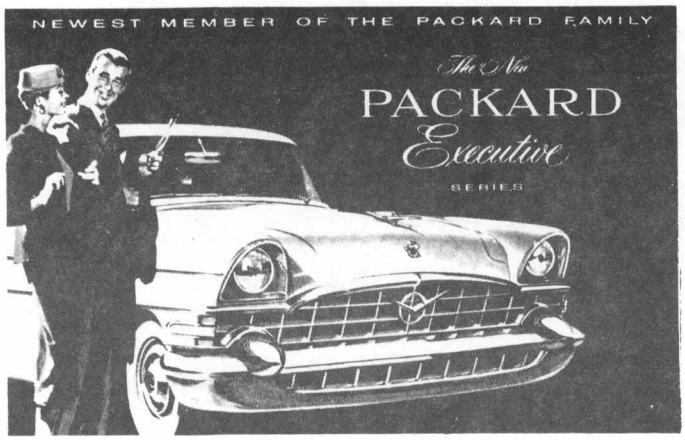
1955 Clipper, with Packard script at lower right of trunk lid, as shown on page 11 of Packard brochure PD-101R-255, right→→→→

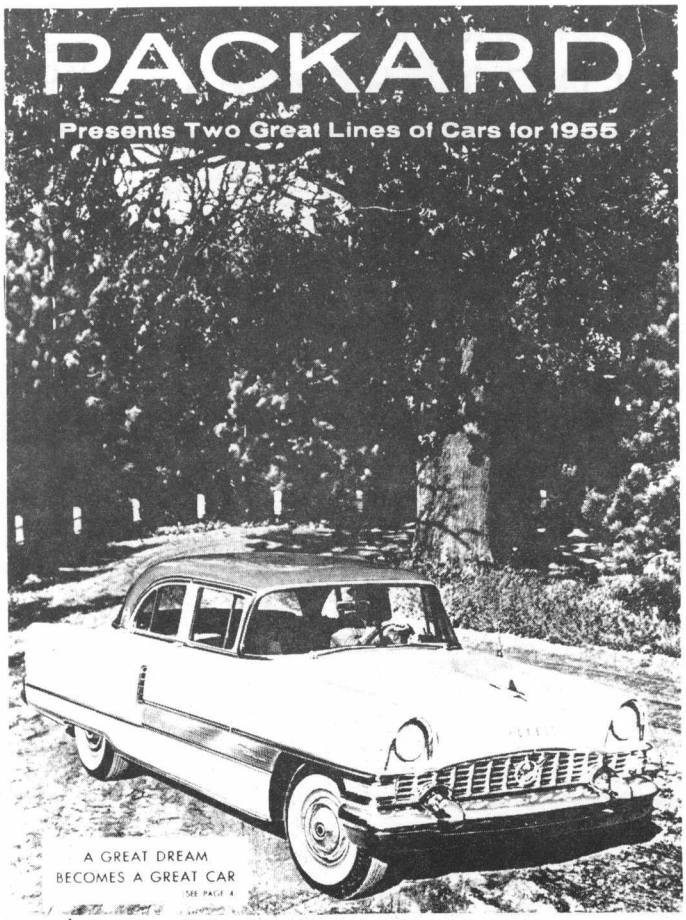
The same continues, so let's jump up to the 1955 model. Here see the first sales literature. One piece covers both the Packard and the Clipper cars. Here we refer specifically to the large brochure, PD-101R-255, and look at the picture on page 11. The Packard name appears in script on the right lower trunk lid. That should adequately establish it as a Packard, even though it is a Clipper, too. And this is a Packard-produced publication, so we know it's Packard authorized.

Then, let's go to the 56s. There are three distinctively different sales brochures here. Clipper shows nothing *but* Clipper, and there is no script on the trunk calling it a Packard. This would tend to support the separate-marque side (more on this later). Then there is the Packard literature showing the Patrician, the 400 and the Caribbean. No mention of the Clipper. Look now at the equivalent brochure introducing the Executive. It says, "Newest Member of the Packard Family,the new Packard Executive Series". Nothing said about Clipper in it.

These brochures are enough to tell you that Packard intended to make the Clipper a separate marque. Some publishers even thought so. This quote from Dell Buyer's Guide - Complete Road Tests, 1956 cars,"Clipper has long been Packard's lower priced line of cars, and the 1956 Clipper is, in effect, still a smaller edition of Packard. However, now that Packard and Studebaker are in the second year after their merger, the new corporation has established the Clipper as a separate make in its own right...."

To further substantiate this view, I look at the 1955-1956 Packard Parts and Accessories List, Plates 7, 8 and 9, the actual pictures with parts groupings indicated. Here you will see no "Packard" on the trunk, as was the case in 1955. No official Packard name appeared anywhere on the external part of this car, in fact. Clearly, they had wanted to let it be distinctive in its own right.





However, here let's throw water on this fire.

1. Packard NEVER FRANCHISED A CLIPPER DEALER. Clippers were sold and serviced by Packard dealerships.
2. Though the trunk "Packard script was now absent from the Clipper trunk, it was not included on the Packard Executive, either, and this was definitely a Packard.
   (Some people had 1956 Clippers which carried this script. I had two 5622 Deluxe Clippers, identical otherwise, but one had it and the other didn't. I haven't found anything from Packard to explain it. Maybe a dealer, maybe a modification from a service letter. At any rate, it would be evidence against the separate marque theory).
3. The Packard Executive used the Clipper body, taillights and much if its trim, with the main distinction being the grille and overhang above the headlights.

The absence of franchising clinches the argument for me. The other things I can see as arguments both ways, but feel that the preponderence of Packard's own literature points to the fact that it was their intention to establish it as a separate marque, but just that their untimely end had taken care of all intentions.

So let's say one marque, in the absence of absolute proof, and be proud to admit that we have Packard Clippers, with that characteristic superiority in engineering that was Packard. Anyone owning or driving one of the cars can't help but be astounded at the economy of upkeep and operation of these Clippers. This was Packard's economy car, and it attained its goal as such.

THE COVER PICTURE -

ELWOOD HAYNES - HIS CAR and HIS COMPANY

Elwood Haynes was born on October 14, 1857, at Portland, Indiana. Here his interest and aptitude in science became apparent at an early age. At 15 he invented an apparatus for making oxygen, and also built a furnace and blower which could melt brass, cast iron and high carbon steel.

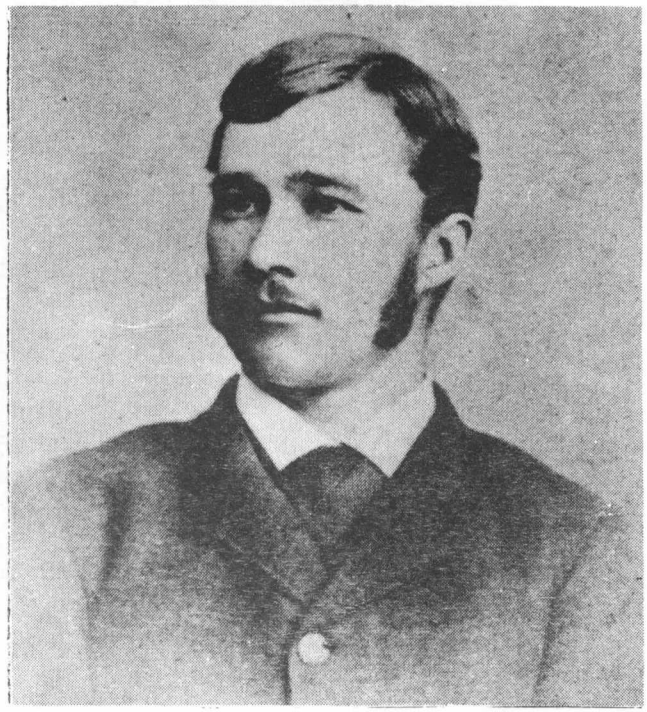
After only two years of high school he entered Worcester (Mass.) Polytechnic Institute. He graduated three years later, in 1881, and in that year he discovered the formula for tungsten chrome steel.

Haynes taught school until 1884, then entered Johns Hopkins University in Baltimore, Md., for a year of graduate work. He then taught at the Eastern Indiana Normal School at Portland, but left in 1886 to organize a company to supply natural gas to that community.

In 1890 he moved to Greentown, Indiana, not far from Kokomo, to become superintendent for the Indiana Natural Gas and Oil Company. It was while working in this position, and travelling to neighboring counties by horse and buggy, that Haynes turned his thoughts to the design of a horseless carriage.

In the fall of 1893 the design of his first automobile was ready. Drawings and engineering data were delivered to the Riverside Machine Works in Kokomo, a machine shop operated by the Apperson brothers, Elmer and Edgar. The first Haynes car was successfully driven on July 4, 1894.

Although Haynes automobiles were in continuous production until the latter part of 1924, Elwood Haynes' metallurgical inventions and developments were his most important contributions to industry. Stellite, an exceptionally hard tool steel, was developed in 1906, patented in 1907 and further improved in 1912. He developed and patented the formula for stainless steel in 1919.

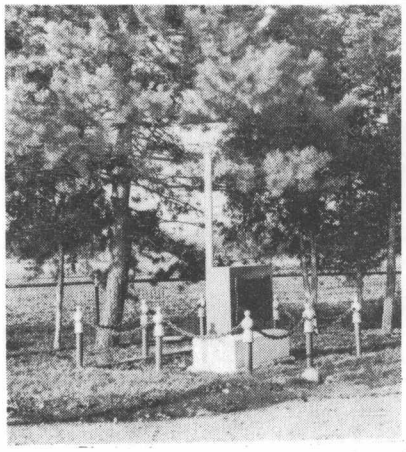


Haynes' graduation picture, Worcester Polytechnic Institute, 1881

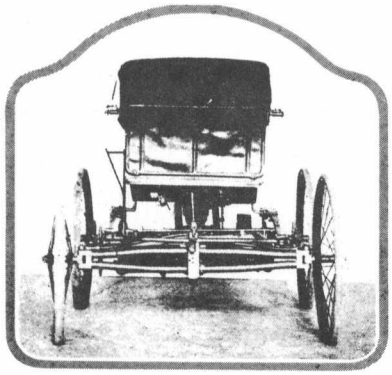
The Haynes Stellite Company became a subsidiary of Union Carbide in 1920. Today Stellite alloys are in use wherever an extremely hard, heat-resisting metal is required, from surgical and dental tools to well-drilling equipment, jet engines, and parts for rockets and missles.

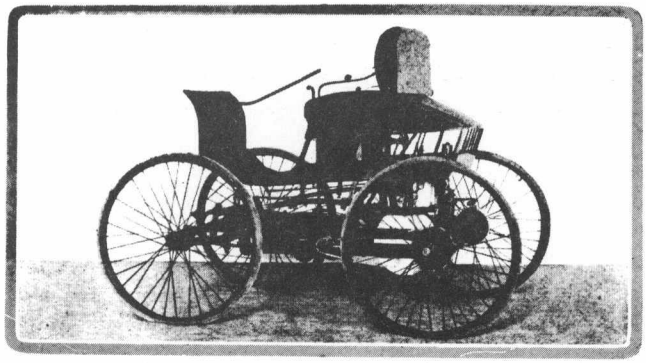
Haynes was married in 1887 to Bertha B. Lanterman of Portland, Indiana, and to this union were born two children: a son, March, and a daughter, Mrs. Glen (Bernice) Hillis.

Mr. Haynes died on April 13, 1925.



This monument stands on the Pumpkinvine Pike near Kokomo, Indiana, and marks the point at which the first trial run of Mr. Haynes' car began. The monument was dedicated in 1922 by the Indiana Historical Commission and the Hoosier State Automobile Association.





Elwood Haynes' first car, 1894. (Pictures from *The Haynes Pioneer*, October, 1919)

THE CAR and THE COMPANY

The first Haynes car was designed by Elwood Haynes during 1892 and 1893. The engine was a one horsepower, two-cycle Sintz marine engine. This, and the buggy chassis which was the basis of this car, were the only items not specifically made for Haynes. Some modifications were made to this engine, among them a cast aluminum crankcase made at the Ford and Donelly Foundry. The muffler and carburetor were made by George Kingston, and the bicycle-type wheels and tires were supplied by D. C. Spraker. All the rest of the car was made to Haynes' specifications in the Riverside Machine Works at Kokomo, operated by Elmer and Edgar Apperson, who billed Mr. Haynes at the rate of 40¢ per hour for their labor.

This first Haynes was completed in 1894,and on July 4th of that year it was towed to a point three miles southeast of Kokomo on the Pumpkinvine Pike. From there it made a successful run of several miles carrying three passengers at about seven miles per hour.

Other experimental cars were made, each an improvement of the previous one. Haynes and the Appersons formed a partnership known as Haynes & Apperson, renamed the Haynes-Apperson Company in 1896, and finally incorporated as the Haynes-Apperson Automobile Company in 1898. Production of standardized models seems to have begun about 1895.

In 1899 Mr. Haynes drove a Haynes-Apperson car on a trip of about 1000 miles, from Kokomo to New York City. Two years later the Apperson brothers made a similar trip in 73 hours. Both of these trips were considerably longer than the one made in 1901 by Roy D. Chapin in a curved-dash Oldsmobile from Detroit to New York, but for some reason attracted far less attention.

Late in 1901 Elmer and Edgar Apperson left the company to establish their owm business. This was the Apperson Brothers Automobile Company. The name of the original Haynes-Apperson Automobile Company remained unchanged until September of 1905 when the company was reorganized as the Haynes Automobile Company. New models were called Haynes cars, and the Apperson portion of Haynes-Apperson disappeared as old models were discontinued.

For the most part, the Haynes vehicles were good, solid automobiles of conservative design. Some of the early models had a few unconventional features, but this was at a time when all motor car makers were experimenting. Before 1905 all Haynes-Apperson cars were chain driven and used an unusual type of constant-mesh transmission in which gears for the three forward speeds and reverse were clamped to the driving shaft by leather faced, contracting band clutches. This system provided easy and noiseless shifting, but it may have been troublesome, and expensive to produce. Both chain and shaft driven cars of 1905 used this device, but it was not used on any later models. Another innovation was a roller gear used on the shaft driven models of 1905 in place of the more conventional bevel gears. The pinion gear had a set of rollers in place of the customary teeth, and the ring gear teeth were cut concave to match these rollers. Presumably this arrangement was quieter than the bevel gears of the day, and the frictional losses were probably less. On the other hand, the cost of manufacture was obviously much greater, and there may have been maintenance problems as well. For whatever reason, standard bevel gears and sliding gear transmissions were used on all 1906 and later models.

Four-cylinder engines were used in Haynes cars of 1905 and later, replacing the earlier two-cylinder models. The first sixes appeared in 1913 and after 1915 there were no more fours. A large 12-cylinder model was added to the line in 1917, and was built through 1922.

The depression of 1920 dealt a fatal blow to many established automobile manufacturing companies, and Haynes was among them - as was Apperson. A plan to unite Haynes, Winton and Dorris in a merger to be known as Consolidated Motors Corporation was approved by the stockholders of all three companies, but funds were not available and nothing came of the plan. The Haynes Automobile company was declared bankrupt in 1924.

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(One of the mechanics who worked on the first Haynes car was Jonathan D. Maxwell, who later was employed by R. E. Olds at the Olds Motor Works. In 1902 he left Olds to found the Northern Automobile Company in Detroit. In 1903 he joined forces with Benjamin Briscoe to establish the Maxwell-Briscoe Motor Company. Maxwell-Briscoe, in turn, was a remote ancestor of the giant Chrysler Corporation. The roots of the present day industry go deep).

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We acknowledge, with thanks, the contributions of SAH member Wallace Spencer Huffman, who supplied the pictures and much of the information contained in this account.

The GRANT

by Richard B. Brigham

Although the Grant Motor Car Company was just another one of the several thousand small producers of assembled cars, its life span of nearly 11 years puts it in the class of the more successful ones. Organized in Detroit late in 1913 by George and Charles Grant, the company took over an existing factory in Findlay where it rapidly solidified its position as a full-fledged builder of automobiles.

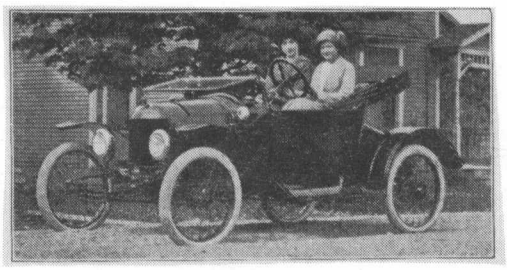
The buildings occupied by the Grant Motor Company (north plant) were originally a nail factory, built around the turn of the century at the end of Santee Avenue by the Wetherald Nail Company. A few years later Wetherald combined with the Salem Nail Company. Financial difficulties soon followed, and the company ceased operations.

The plant was then taken over by the Findlay Stave and Handle Company, which operated two plants in Findlay. In 1910 L. M. Ewing of Cleveland, Ohio, purchased the facilities. His company, the Ewing Motor Company, succeeded the Cleveland Auto Cab Company (1908-1910) of Geneva, and later of Cleveland. Ewing was a builder of trucks, and soon merged his company with the American Motor Truck Company of Lockport, New York. A steel stamping company was also absorbed, and the combination became the Findlay Motor Company.

This company built Ewing gasoline trucks, and American trucks, both gasoline and electric powered, with capacities of 2, 3½ and 5 tons. Financial problems plagued the company, and in mid-1911 it was reorganized as the Ewing-American Motor Truck Company. Truck production was continued.

An order for 100 trucks was received from a company engaged in the hauling of mail for the New York City Post Office, but only six were delivered. Failure to receive payment for these six trucks plunged the company into bankruptcy early in 1913.

At this point the Grant family entered the picture. George Grant had been employed in the sales departments of both White and Cadillac. In 1907, George and Charles A. Grant held the Detroit dealership for the E. R. Thomas Motor Company of Buffalo, makers of the famous Thomas Flyer cars. Eventually they decided to enter the automobile manufacturing business with a small car of their own design to sell for less than $500. To this end they organized the Grant Motor Company in August of 1913, with George D. Grant as president; Charles A. Grant as vice president. Then, with the collapse of the Ewing-American venture in Findlay, the Grant company purchased the plant from the receivers on November 26, 1913, for the sum of $50,000.



The Grants wasted no time in getting things under way. By December 11 retooling of the plant for the production of the small roadster was begun. Four prototypes were built at once for promotional purposes.

One of the foremost and far-sighted plans of the Grants was to set up a large dealership before actual production of cars got under way. The prototypes were displayed and early production was promised. By January of 1914 - less than two months after the plant was purchased - the Grant Motor Company was shipping cars to dealers, and the rate of production had reached 15 cars a day.

The 4-cylinder model had a two-speed plus reverse transmission mounted on the rear axle, which proved to be troublesome. A 6-cylinder model of quite different design was announced, and it was a complete success. The company had already acquired the factory of the Churn Manufacturing Company on Western Avenue. This became known as the south plant, while the original Santee Avenue buildings were the north plant. The new south plant was an assembly point, where chasses were delivered to be turned into completed cars.

Hundreds of cars were shipped from the Western Avenue plant. The overhead-valve six soon became the most popular model, with wood wheels and a three-speed transmission. The small four was discontinued.

The method of transferring completed chasses from the north to the south plant was accomplished by tying four cars together with rope. The lead car served as the locomotive of the train. It is said that the citizens of Findlay were not particularly enthusiastic about this system, and their horses were even less so.

The small 4-cylinder Grant was priced at $495, and the 6-cylinder touring car sold for $795. In 1915 the Cabriolet was announced, at $1025. This was a closed car with roll-down windows and a trunk in which the spare tire was carried. The touring car was reportedly the lowest priced six on the market at the time.

In May, 1916, the Grant Motor Company became the Grant Motor Car Corporation. In the same month, although production in the Findlay plants was high, a decision was made to transfer operations to Cleveland. A seven acre property at Colt and Kirby Avenues was purchased and a large building was erected. By November of 1916 the move was complete. A truck plant was purchased, and a Grant truck was now offered. During World War I passenger car production was suspended and only trucks were made. The old plants in Findlay made shells for the War Department.

In March of 1920 the engine manufacturing business of the H. J. Walker Manufacturing Company came under the control of the Grant Motor Corporation. This plant had a capacity of 150 engines per day, and it was planned to use 80 of them in Grant cars, with the balance to be sold elsewhere.

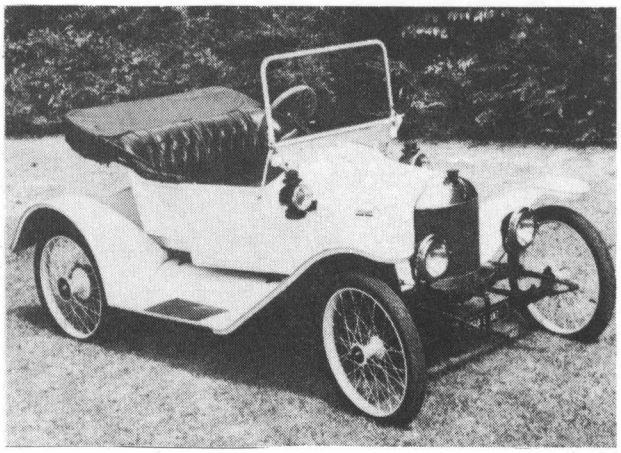
The post-war depression of 1921 was the nemesis of many small automobile makers, and Grant was among them. The company entered receivership in October of 1922. The end came in 1923, when the Grant Motor Car Corporation was declared bankrupt.

The Santee Avenue plant in Findlay still stands, and the name of one of the original nail manufacturers is still faintly visible on the roof. The buildings are presently occupied by the Differential Steel Car Company, builders of special types of railway freight cars. The name of this company appears frequently in lists of truck makers and is occasionally listed among the builders of passenger cars. An official of the plant has stated that the only non-rail vehicles the company ever made were industrial tractors for pulling small trains of trailers inside large factories, plus a few not-too-successful three-way dump trucks which could dump their loads to either side or to the rear.

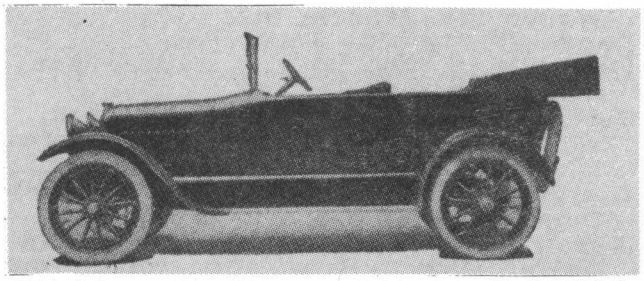
ACKNOWLEDGEMENT

Much of this account is based on an article which appeared in the Findlay (Ohio) Republican-Courier, as the result of the efforts of Thomas J. Miles, William Phillips, (who owns a 1914 Grant) and Don Smith, who has researched much of Findlay's early history. Their work was aided by the contributions of former Grant employees, concerning the north and south plants of the Grant company in Findlay, and the company's move to Cleveland.

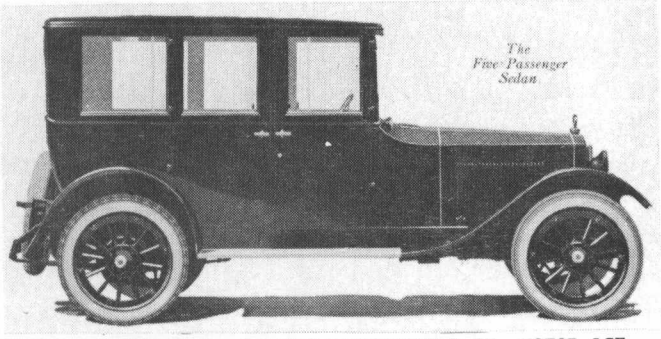
Additional information was provided by members of the Society of Automotive Historians, Harry J. Mann, Cleveland, Ohio; Ray L. Newburn, Glendale, California; Frank T. Snyder, Jr., of Chandler, Arizona.



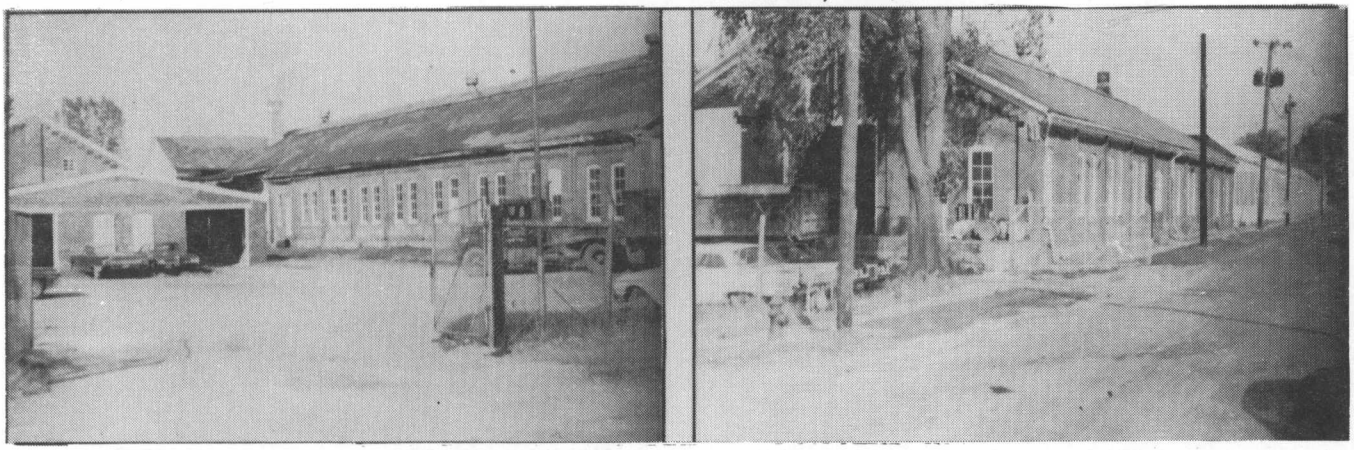
1914 GRANT FOUR CYLINDER ROADSTER, OWNED BY DR. FRANK OLIPHANT, CADIZ, KENTUCKY.



1916 GRANT SIX (FROM ADVERTISEMENT IN CHILTON'S AUTOMOBILE DIRECTORY, OCTOBER, 1916).

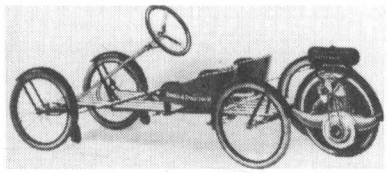


1920 GRANT SIX (FROM ADVERTISEMENT IN MOTOR AGE, JANUARY 1, 1920).



THE SANTEE AVENUE FACTORY (NORTH PLANT) OF THE GRANT MOTOR COMPANY AS IT APPEARS TODAY. THE NAME OF THE SALEM NAIL COMPANY IS STILL FAINTLY VISIBLE ON THE ROOF. THESE PICTURES WERE MADE FROM THE SAME POINT, AND ALMOST MADE A COMPOSITE PICTURE, ALTHOUGH WE DIDN'T PLAN IT THAT WAY.

A WRAP-UP ON
The RED BUG



Issue No. 27 of the Newsletter of the Society of Automotive Historians included an item about the affairs of the American Motor Vehicle Company of Lafayette, Indiana. This company produced a line of juvenile automobiles, two of which can be identified in the pictures used with the article. These are the American Junior and the Red Bug.

The next two Newsletters contained more pictures and information on the history of these little cars and the subsequent production of the Red Bug by several other companies, although the name was changed several times.

The following account is a compilation of material contributed by:

Wallace S. Huffman, Kokomo, Indiana
James Altman, New Kensington, Pennsylvania
G. N. Georgano, London, England
Frank T. Snyder, Jr., Chandler, Arizona
William S. Jackson, Hummelstown, Pennsylvania

The Red Bug was a buckboard of the simplest possible construction. The chassis, which was practically the entire car, consisted to two axles connected by hardwood slats which made up the floor of the vehicle and also served as springs. A pair of bucket seats was located just back of the middle of this chassis. The steering column was simply a shaft with the steering wheel at the top end and a short crank at the lower end which was directly connected - without benefit of reduction gears - to a simplified version of a conventional steerable front axle.

Bicycle-type wheels with cycle fenders were used. Brakes were actuated by a pedal, connected through a linkage which pressed the front ends of the rear fenders against the tires. This arrangement seems a bit crude, but it was probably adequate for a very light vehicle with a top speed of only 25 miles per hour.

This little car was propelled by means of an engine powered fifth wheel which was attached to the rear. By means of a lever, the driver could raise and lower the fifth wheel. With the wheel in the raised position, the engine could be started by turning the wheel.

This powered wheel was the idea of a man named Wall in England, circa 1910. It was known as the Wall Auto Wheel, and was manufactured by the International Auto Wheel Company, Ltd. It was designed as an attachment for bicycles and was very popular in Great Britain.

The A. O. Smith Company, Milwaukee, Wisconsin, purchased the American manufacturing rights in 1914. Production of the Smith Motor Wheel began in October of that year. Bicycle and motorcycle shops across the country became sales agents for the Motor Wheel, and sales were so large that the A. O. Smith Company opened a separate plant to manufacture them.

The American Motor Vehicle Company of Lafayette, maker of juvenile automobiles, used the Smith Motor Wheel to power a small car called the American Junior. This machine had a semblance of a body - a dummy hood, cowl, and an enclosure for the seat. It also had full elliptical springs. The Motor Wheel was attached to the rear of the vehicle.

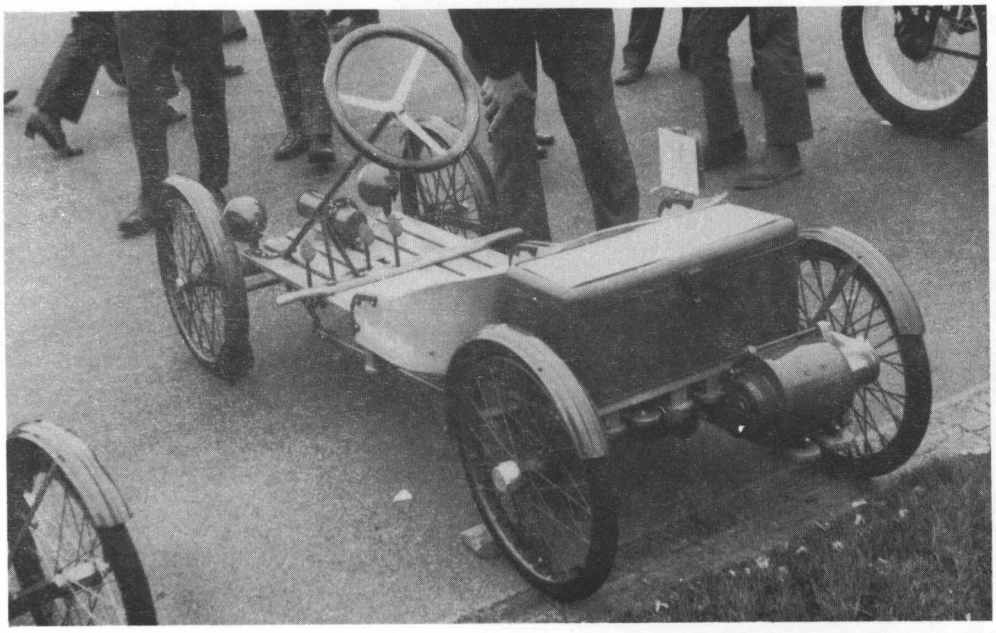
In 1916 the American Motor Vehicle Company designed and placed on the market the buckboard known as the Red Bug. Shortly thereafter the A. O. Smith Company acquired the design, and the Red Bug name was changed to Smith Flyer. As of May 1, 1917, the price of the Smith Flyer was $135, of which $65 was for the car and $70 for the Motor Wheel.

All manufacturing rights to the Smith Motor Wheel and the Smith Flyer were sold, in 1919, to Briggs & Stratton. Now the little car was called the Briggs & Stratton Flyer, and the engine became the Briggs & Stratton Motor Wheel.

The Flyer had a top speed of about 25 miles per hour, and the manufacturer claimed fuel economy of 80 miles per gallon.

Early in 1924 both car and engine were acquired by the Automotive Electric Service Corporation, North Bergen, New Jersey. The original name, Red Bug, was re-instated - only this time it was called Auto Red Bug. An electric model was added to the line by Automotive Electric, in which the Motor Wheel was replaced by a 12-volt electric Northeast starter motor as used on the Dodge Brothers car of the period.

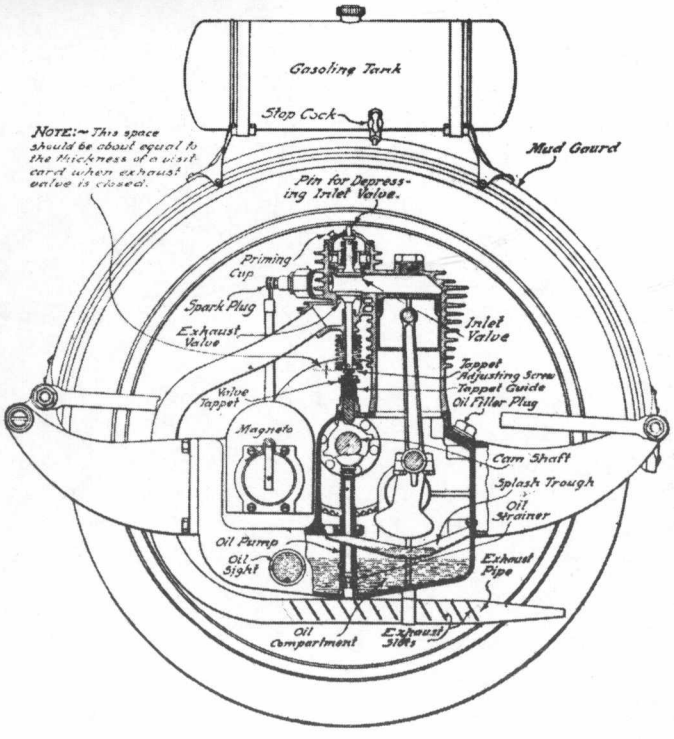
There is evidence that the Auto Red Bug was made as late as 1928.



Electric model of the RED BUG

Information provided by Mr. James Altman says that this car is owned by Mr. Boyd Muir, of Ligonier, Pennsylvania, and has won 12 National Senior Awards at meets held by the A.A.C.A.

S. F. Briggs (driving) and H. M. Stratton in a Briggs & Stratton Flyer, circa 1920.
(Briggs & Stratton photograph)



Sectional view of 1917 Smith Motor Wheel
(From James Altman Collection)

The ARGONNE »Power and Speed With Economy«

by G. Marshall Naul

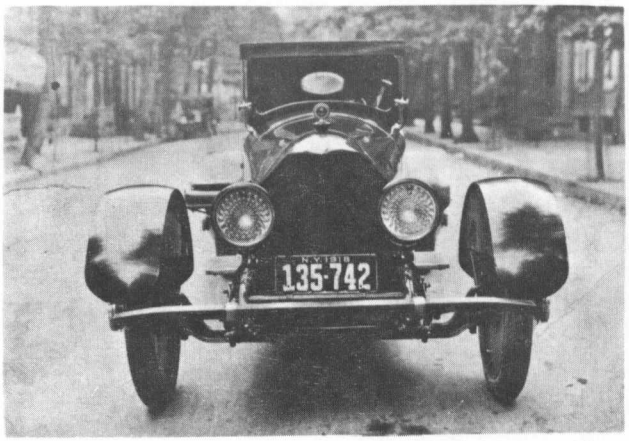
(1) THE HISTORY OF THE ARGONNE FOUR

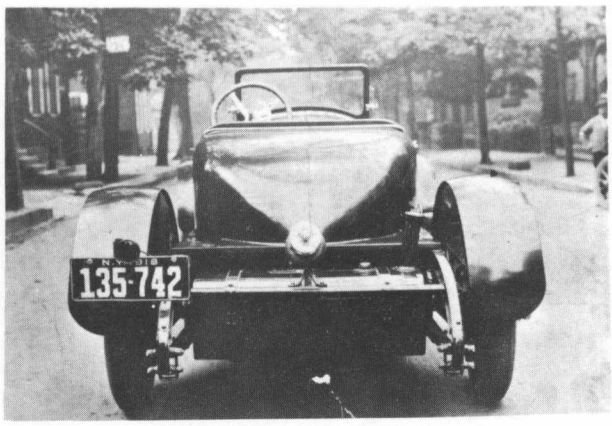
In the period immediately following World War I there were a number of new makes of automobiles launched with high hopes of immediate acceptance. Many of these makes are virtually unknown, as their life-span was too short to have produced more than a very few chasses. A typical example is the ARGONNE, named after the French forest in which U.S. troops fought their greatest battle in Word War I. The ARGONNE, as a produced make, existed for less than two years, during which time only 24 cars were constructed. In many technical details the ARGONNE was unusual. The very few which reached the road made it a very rare automobile, even during its short life.

The earliest press release on this auto gave the name of Otto R. Bieler as the designer (ref. 1). It is claimed that Harold E. Porter was actually the spark-plug behind the launching of this car (ref. 2). The ARGONNE was to have been manufactured by the Automotive & Machinery Engineering Company, of Long Island City, N. Y. (ref. 1). Apparently the prototype car was built by or for this company, and this is shown in photographs 1 and 2. This particular car shows cycle fenders, the front ones turning with the steering as described in the initial press information. Three months later it was announced in the automotive press (ref. 3) that the ARGONNE would be built by the Jersey City Machine Company, 113-115 Plymouth Street, Jersey City, N.J. It was still to be marketed by the former company. The first full description was in a press release in June, 1919 (ref. 4), and this was followed by a full page advertisement in Motor World of June 11, 1919 (page 162). This ad was straight from Madison Avenue:

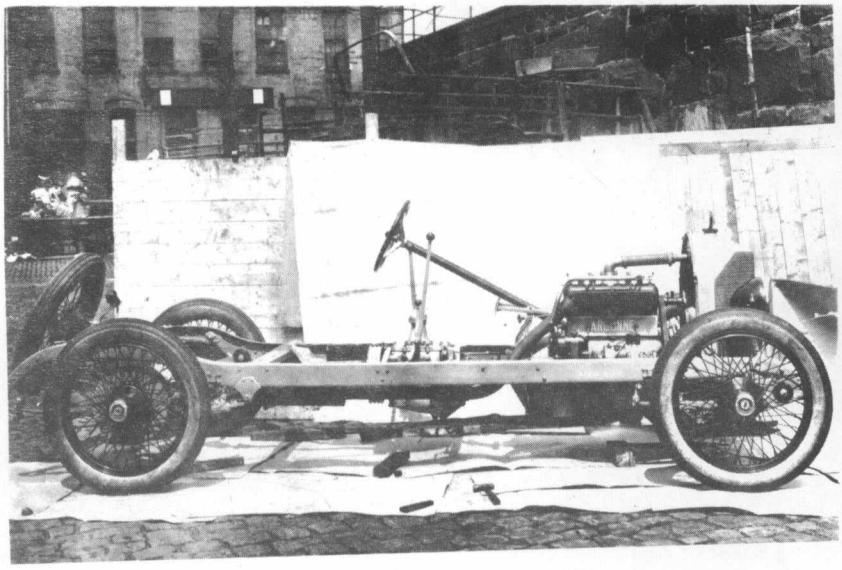
> ANNOUNCEMENT - A new car designed by a master automobile engineer of of recognized accomplishments and ability in the motor-car world. He has embodied his progressive and practical ideas in the 'Argonne Four', which marks a distinct forward step in automobile construction and represents
>
> THE HIGHEST TYPE OF MODERN ENGINEERING SKILL
>
> The 'Argonne Four' is of foreign design throughout with a sweet-running four-cylinder motor of tremendous power. The chassis is sturdy but light and well balanced. And the graceful flowing body-lines "suggest" its high speed.
>
> The "Argonne Four" has many improvements over present-day motor-car construction, which make for great Power with Economy, Strength with Simplicity, Speed without Vibration, and Long Life without Excessive Weight.
>
> OVER 20 MILES ON A GALLON OF GASOLINE AND A SPEED OF 70 MILES PER HOUR - GUARANTEED.
>
> A Solid, well-financed organization is in back of the Argonne Four. They know how to build cars and how to sell them by broad-gauge methods. They are producing a carefully and painstakingly built car - a car which will sell readily and easily to those who can afford to pay the price which superiority demands. Essentially a gentleman's car in appearance, detail, construction and performance.
>
> The ARGONNE Four $4000
> "Sells Without Demonstration"
> The Argonne Motor Car Co., Jersey City, N.J.

(Just when the Argonne Motor Car Co. was formed is not known. Apparently the Argonne Motor Car Co. was the marketing portion, while the Jersey City Machine Co., Automobile Department, remained the manufacturing part of the organization.)

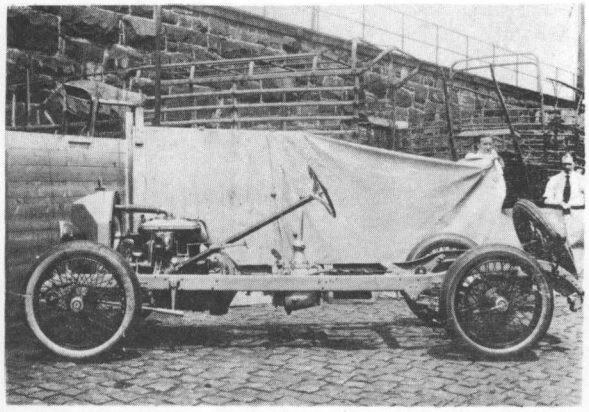




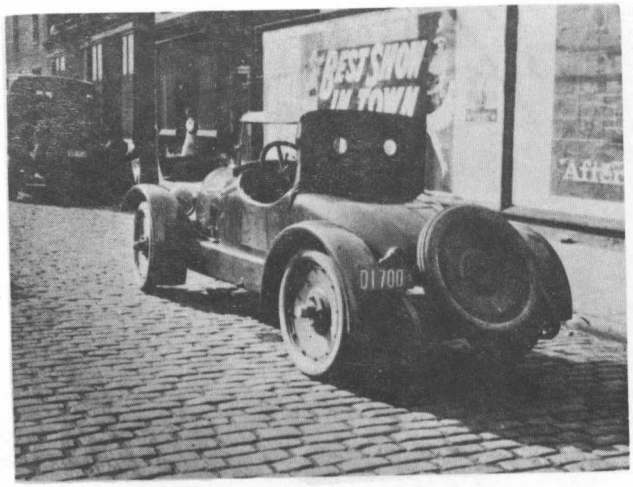
The prototype ARGONNE as initially described with front cycle fenders mounted on the wheels to turn with steering. Head lamps differ from later versions. This particular car has a sliding mother-in-law seat seen at the left between headlight and fender.

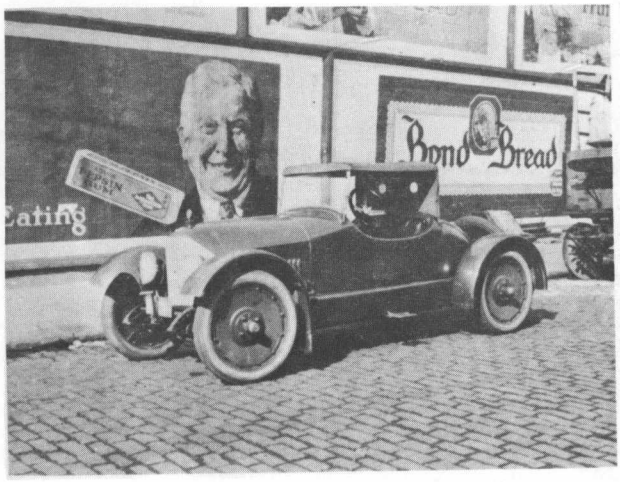


Right side of chassis, probably in plant yard in Jersey City.



Left side of chassis. Unfortunately the two persons at the right are unidentified. Chassis photos used in the two-page catalog, and were taken at least as early as late 1919.





Completed car fitted with disc wheels. Year and State of license not legible, but type would indicate New Jersey and D is then a dealer's license. -3 after number shows three plates with that number. Cobblestones tie in with other photos of the chassis, and this was taken in the vicinity of Plymouth Street in Jersey City.

Later, in July and August, others of the automotive journals ran short descriptive articles (ref. 4). The full advertising of the ARGONNE was built by full-page ads in the prestigious (and expensive) Vanity Fair of September and October, 1919. These ads were aimed at buyers, while the above quoted one was obviously aimed at potential dealers. All of this was a build-up for the first public display which took place in January, 1920, at New York's Commodore Hotel. The ARGONNE shared the spotlight with the WASP and the LA FAYETTE. These two better-known cars were also making an initial appearance. This sort of introduction must have been a considerable drain on the capital of a company which was probably not in lush financial condition. The lone two-page catalog of the ARGONNE was printed for this exhibition.

Shortly after this show Mr. Bieler died, and a Charles S. Singer took over as General Manager of the Jersey City Machine Co. (Was this the same Charles Singer who had been head of the Singer Motor Car Co. of Mount Vernon, N.Y., makers of the SINGER?) The new manager apparently did not have a liking for the existing design of the ARGONNE, and thought the car should be revamped to take the larger Duesenberg four-cylinder engine. This required changes in the chassis and resulted in the cancellation of a number of existing contracts with suppliers. In turn, the suppliers brought legal action to recover damages. The Jersey City Machine Co. lost the suits, and, unable to sustain these losses, went into involuntary receivership in July, 1920. The last ARGONNE was assembled in March, 1920, and the last two chasses did have the Duesenberg engine.

In 1922 an auto journal printed a reader's request concerning spare parts for the ARGONNE. (The reader was from Danville, Virginia). The magazine's reply stated that the firm of Brisk & Beckelman, 31st Street, New York City, had bought all of the remaining parts at a sheriff's sale. This is another puzzle, as B & B was a dress-making organization. The legal history of the ARGONNE lies buried in the New York District Court (ref. 5).

At least one ARGONNE car was in existence until the late 20s in the Albany, New York, area, and possibly one was in the neighborhood of Norfolk, Virginia, at a later date. Somewhere there may be an extant example of the uncommon ARGONNE.

(2) TECHNICAL

The recorded specifications for the ARGONNE seem to have been quite flexible and show considerable differences. Most of the following information has been taken from the only available ARGONNE catalog, a two-page display, which was probably the only literature issued on this car. By a rare coincidence it is possible to compare this catalog with the typed original write-up and with the proof sheets. There were some changes in both of the preliminaries.

Engine: Originally Buda, although the Jersey City Machine Company claimed that it used its "own" engine. This had four cylinders of 3 3/4 in. bore and 5 1/8 in. stroke, giving a displacement of 226 cubic inches. The valve arrangement was L-head. The chrome-nickle crankshaft had three main bearings, and was counter balanced. Pistons were of "Magnalite" and the crankcase was of aluminum. This engine was rated at 50 HP, but without indication of RPM. At first an "Argonne-Gillis" carburetor was used, but this was soon changed to Rayfield, and was variously stated as being by Zenith or Stromberg.

Electrical: Westinghouse 12-volt system with Exide battery and Eisemann magneto.

Drive: Borg & Beck single plate clutch with a four-speed transmission built by the Reading Gear Works. Third gear was direct with an over-all ratio of 4.41:1, while fourth gear was an over-drive with a ratio of 3.41:1. Special Argonne-designed universal joints in drive shaft.

Brakes: Foot brake operated a single expanding drum at the rear of the transmission housing. Emergency brakes operated the drums on the rear wheels. Brake and clutch pedals adjustable.

Steering: Worm and segment by Gemmer.

Tread was 56 inches; wheelbase given variously as 118 and 119 inches for the two-passenger model, 128 inches for the four-passenger model.

Radiator mounted on ball bearings.

Standard Equipment: Hartford shock absorbers; Waltham combination clock and 80 MPH speedometer; Complete set of tools, tire pump, inspection light with cord, two lights in engine compartment, dashboard gasoline meter "showing season and trip consumption".

Tires: 32 x 4 Silverstone; wheels, disc or wire.

Headlights have two bulbs. Muffler cut-out standard.

Colors: Gun metal body, satin finish. Fenders and wire wheels, black; disc wheels gray with black rims and hubs. Other colors optional. Upholstery of Spanish leather, any standard color.

Speed: 70 MPH, guaranteed. (V. Sivertsen says that the ARGONNE attained 90 MPH on the Long Island Vanderbilt Raceway. Based on a calculation of gear ratio and tire diameter, this would mean an engine speed of 2540 RPM in fourth gear. This is not an unreasonable value).

Gasoline Consumption: 20 miles per gallon, guaranteed.

Special Features: Oil may be drained from crankcase by means of a valve on the side of the engine. Both brake systems adjustable by knurled nuts under floor board.

Weight of Chassis: 1850 pounds.

Prices: (1920) 2-door Special Roadster, $4500
Four-Passenger Sport Model, $4700
Chassis, $4000
"Closed Car Prices on Application"

(The two-passenger bodies were built by a company on West 50th Street, New York City, named either Moore or Holmes, according to V. Sivertsen).

A letter to Motor Age signed by H. E. Porter states that the closing serial number for ARGONNE 1919 models was No. 110, and the beginning number for the 1920 model was No. 2011.

REFERENCES:
(1) TA 10-10-18, p654
(2) Private letters from Mrs. Steele; V. Sivertsen
(3) MW 7-16-19, p11
(4) ATJ Jly 19, p237-8; MoToR Aug 19, p75
(5) Private letter, Al Arnheim

(3) ARGONNE Personnel:

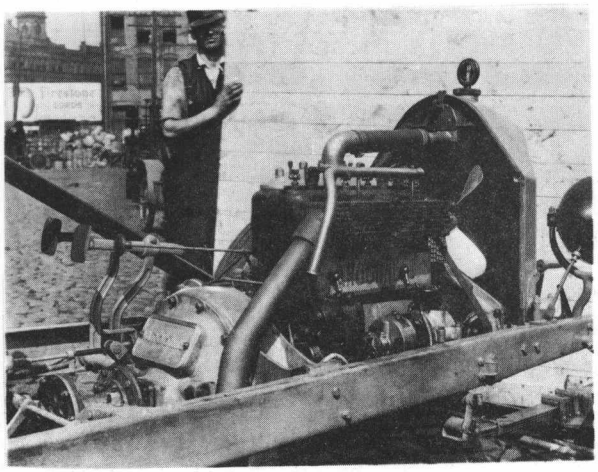
Otto R. Bieler - Formed Automotive & Machinery Engineering Co. in 1918. Had previously been a designer with BIDDLE, which probably accounts for some external similarities of the two makes. With Harold Porter designed the ARGONNE.

Harold E. Porter - Designer with Bieler of the ARGONNE. Had, in 1905, been the designer of the BLISS automobile. Was vice-president of Jersey City Machine Co., 1920. One of the partners of the Argonne Motor Car Co.

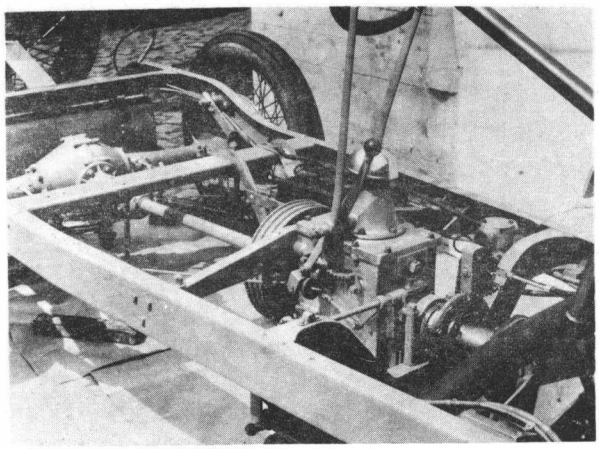
Howard Parker - President of Jersey City Machine Co., 1918-1919.

Charles S. Singer - General Manager of Jersey City Machine Co. in 1920.

Volmer Sivertsen - One of the partners of the Argonne Motor Car Co.

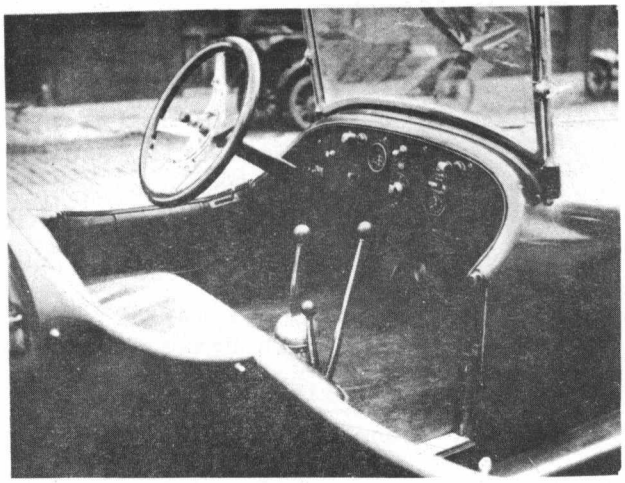


The 4-cylinder Buda engine with Argonne identification on valve plate and on clutch housing. Seen behind the clutch housing is one of the special universal joints mentioned in the technical description. Low on the side of the engine is the Eisemann magneto and the Westinghouse generator, connected in tandem. Fan was a casting. On manifold is the firing order, 1,3,4,2.



Behind engine - large drum behind transmission is the service brake. lever nearest camera is the emergency brake which worked on the rear wheels. The short lever between the gear-shift lever and the brake lever is a mystery. It seems to operate a dog-like mechanism in front of the transmission. This possibly may have been for the fourth gear.

Nameplate of the Argonne. The same design was used on the hubcaps.



Interior of the ARGONNE showing simple and neat dash. Doors on this car have hidden hinges and this hints at above-average quality. The levers for the transmission and emergency brakes are shorter than shown on the bare chassis. Examination of all of these photos shows considerably more attention to detail than for most assembled cars of this period.

ACKNOWLEDGEMENTS: Even an account as short as this requires the willing assistance of many individuals to make a complete story. For this I would like to thank the following:

Mrs. Austin Steele, Cambridge, Maryland. (Mrs. Steele is the daughter of Harold Porter.
Volmer Siversten, Virginia Beach, Virginia
Dale Price, Cambridge, Maryland
Mary M. Cattie, Free Library of Philadelphia
James J. Bradley, Detroit Public Library
Alvin J. Arnheim, New York City
Donald Berkebile, Smithsonian Institution
Keith Marvin, Troy, New York

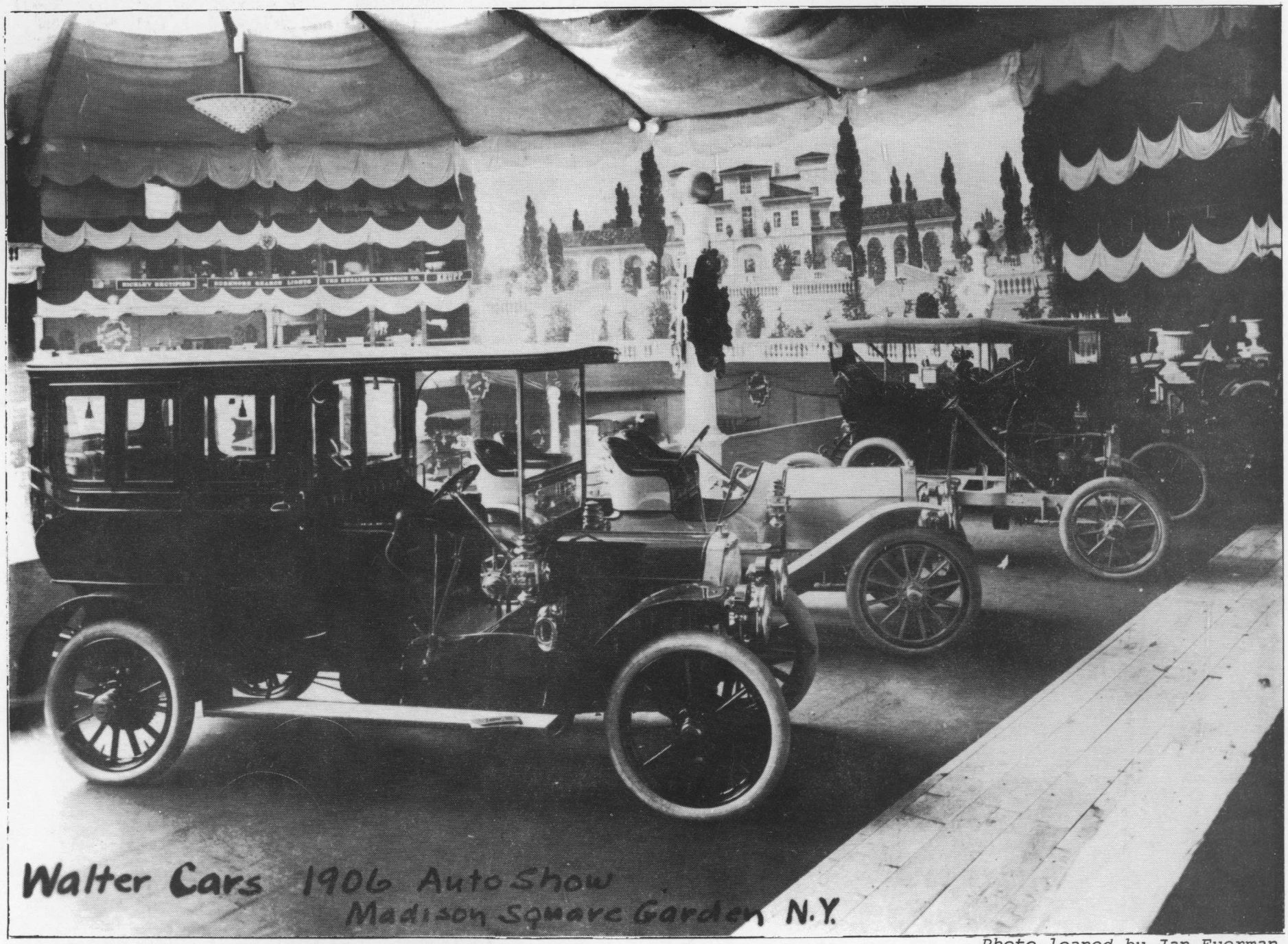
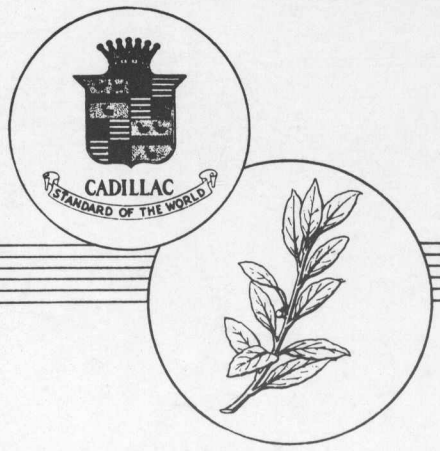


Photo loaned by Jan Eyerman



The Penalty of Leadership

IN EVERY field of human endeavor, he that is first must perpetually live in the white light of publicity.

Whether the leadership be vested in a man or in a manufactured product, emulation and envy are ever at work.

In art, in literature, in music, in industry, the reward and the punishment are always the same.

The reward is widespread recognition; the punishment, fierce denial and detraction.

When a man's work becomes a standard for the whole world, it also becomes a target for the shafts of the envious few.

If his work be merely mediocre, he will be left severely alone—if he achieves a masterpiece, it will set a million tongues a-wagging.

Jealousy does not protrude its forked tongue at the artist who produces a commonplace painting.

Whatsoever you write, or paint, or play, or sing, or build, no one will strive to surpass or to slander you unless your work be stamped with the seal of genius.

Long, long after a great work or a good work has been done, those who are disappointed or envious, continue to cry out that it cannot be done.

Spiteful little voices in the domain of art were raised against our own Whistler as a mountebank, long after the big world had acclaimed him its greatest artistic genius.

Multitudes flocked to Bayreuth to worship at the musical shrine of Wagner, while the little group of those whom he had dethroned and displaced argued angrily that he was no musician at all.

The little world continued to protest that Fulton could never build a steamboat, while the big world flocked to the river banks to see his boat steam by.

The leader is assailed because he is a leader, and the effort to equal him is merely added proof of that leadership.

Failing to equal or to excel, the follower seeks to depreciate and to destroy—but only confirms once more the superiority of that which he strives to supplant.

There is nothing new in this.

It is as old as the world and as old as the human passions—envy, fear, greed, ambition, and the desire to surpass.

And it all avails nothing.

If the leader truly leads, he remains—the leader.

Master-poet, master-painter, master-workman, each in his turn is assailed, and each holds his laurels through the ages.

That which is good or great makes itself known, no matter how loud the clamor of denial.

That which deserves to live—lives.