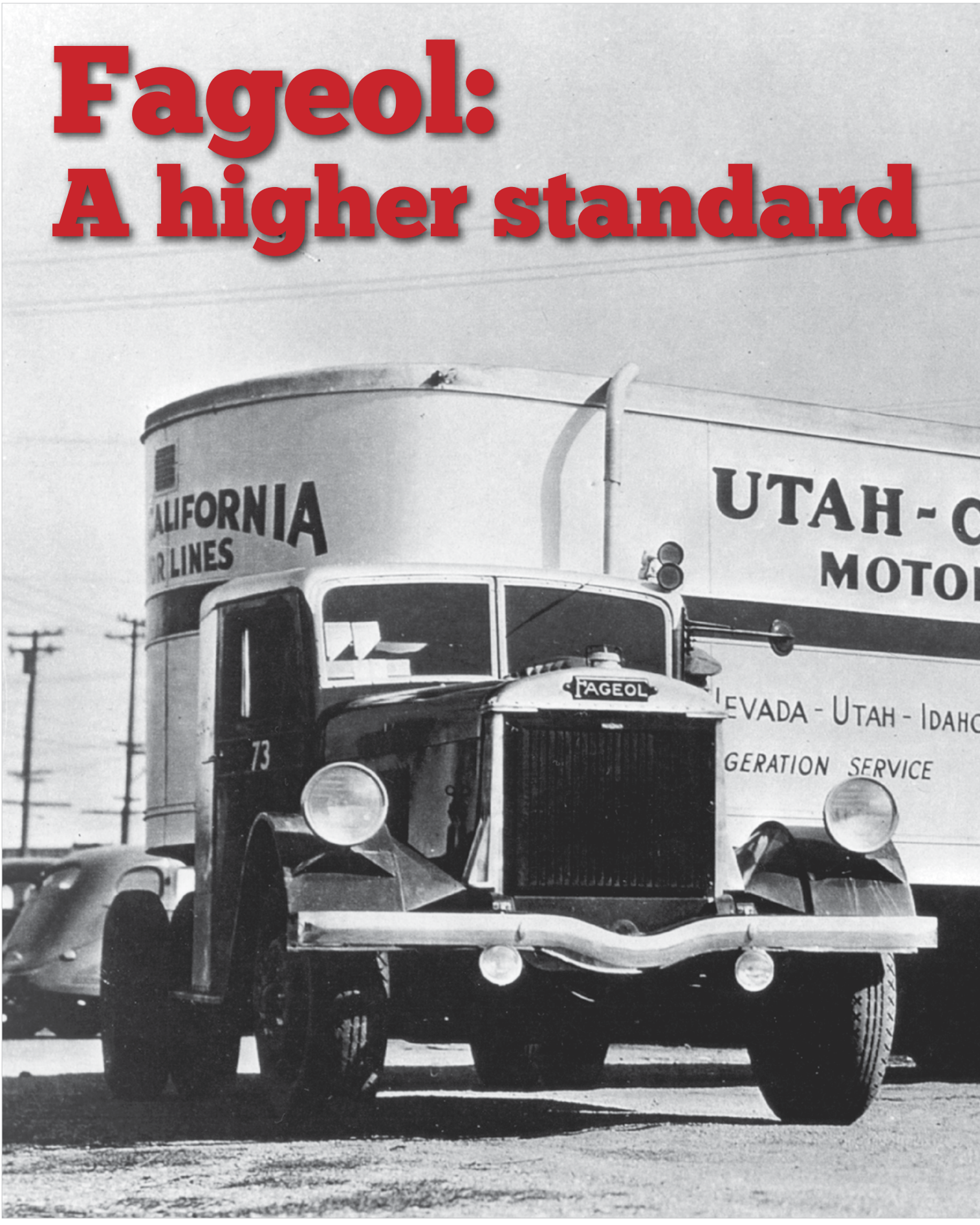
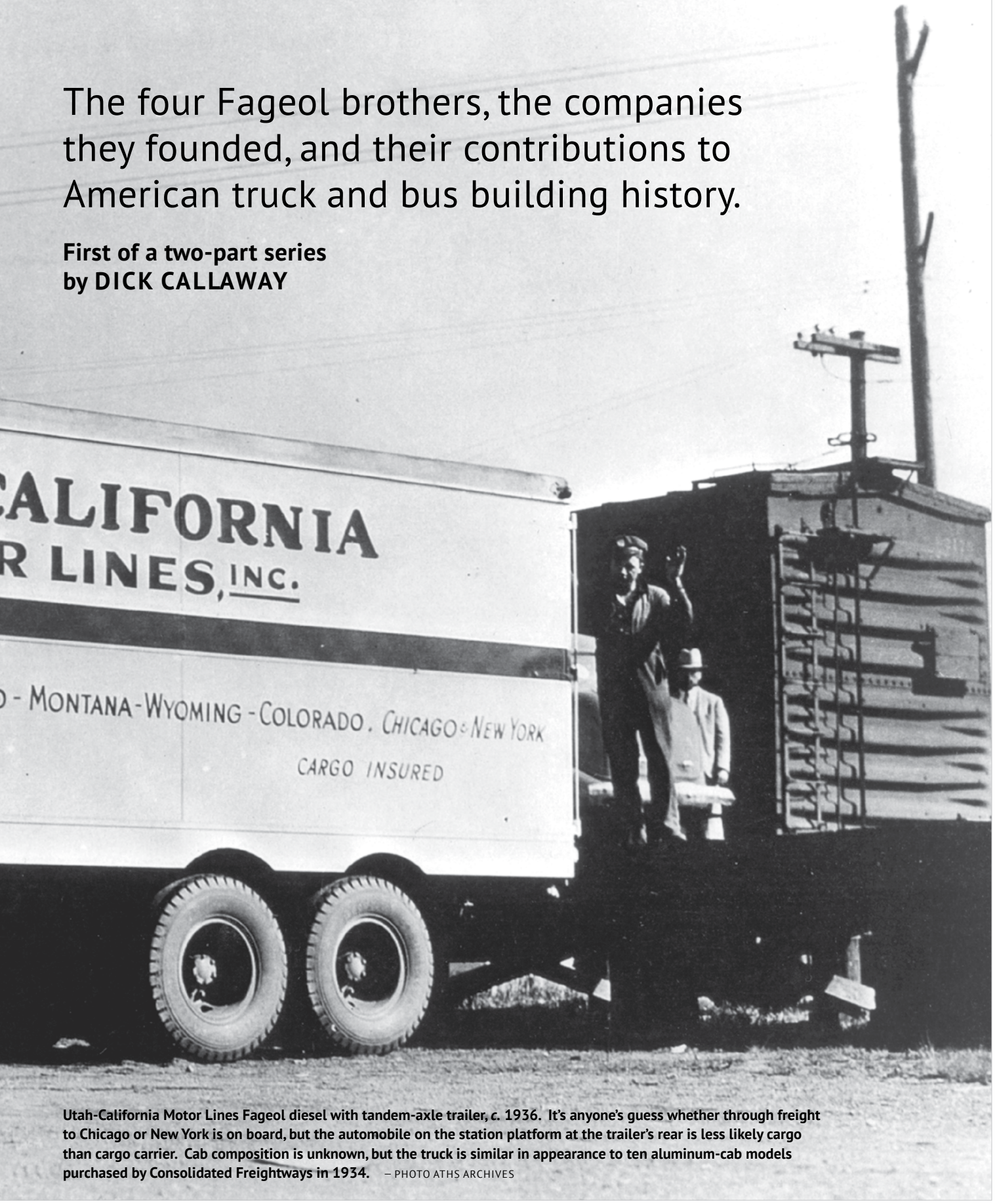
Fageol:
A higher standard



The four Fageol brothers, the companies they founded, and their contributions to American truck and bus building history.

First of a two-part series
by DICK CALLAWAY



Utah-California Motor Lines Fageol diesel with tandem-axle trailer, *c.* 1936. It's anyone's guess whether through freight to Chicago or New York is on board, but the automobile on the station platform at the trailer's rear is less likely cargo than cargo carrier. Cab composition is unknown, but the truck is similar in appearance to ten aluminum-cab models purchased by Consolidated Freightways in 1934. — PHOTO ATHS ARCHIVES

FAGEOL

‘We will never build to a standard lower than the highest ... we will produce the best equipment or we will produce nothing.’

— From the “Fageol Principle,” as featured in Fageol advertising

Older brother William B. Fageol (1880-1955) *top*, usually took a back seat in public, but was the engineering backbone of the Fageol ventures for 40 years. Visionary, entrepreneur, and salesman Frank R. Fageol (1882-1965) *above*, was the public face of the Fageol companies. Forward-looking, highly focused and always in motion, Frank traveled widely, while Will worked at home where he knew each company employee by name.

PHOTOS (C. 1918) WILLIAM B. FAGEOL III

How do you say “Fageol”? Well, let’s see. What about “FADGL,” rhymes with fragile? Yes, by George! I think you’ve got it!

Pardon the phonetics lesson before we even get started, but it’s not an original idea. It seems to have been what Edward P. Brinegar, holder of the transportation franchise for the 1915 Panama Pacific International Exposition, had in mind when he wouldn’t let the Fageol brothers — Rollie (R.B.), Will (W.B.), and Frank (F.R.) — spell their name correctly.

Brinegar mandated that the name be spelled “Fadgl” on the small tractors with their barrel-shaped hoods pulling the 17 three-car patented “Auto-Trains” the brothers were operating to convey World’s Fair visitors (at 10 cents per head) around the 630 acres of palaces and gardens lining San Francisco’s Presidio waterfront, just inside the Golden Gate.

The Fageol brothers’ contribution to the fair wasn’t the first, last, or only unique undertaking of their long careers. Will and Frank, at times working with older brother Rollie, father John, and younger brother Claude, were, for the better part of 55 years, the designers and builders of vehicles—cars, tractors, buses, and trucks—that were often as unusual as the family name, and more revolutionary.

Having passed the pronunciation test, we next need to look at the peculiarly tangled skein of products, places, and personalities that characterized the entire scope of Fageol activities. Who built what, and, when, where, how, and why did they do it? This, alas, is a more difficult exercise, one that will take up much of the story.

We’ll begin the saga in 1899 with 17-year-old Frank, 19-year-old Will, and 21-year-old Rollie building what is said to have been the first self-propelled vehicle in their native Iowa: a two-cylinder, 350-lb cycle car. This auto made use of an air-cooled Crest engine with a novel carburetor/throttle consisting of a lamp wick set in the top of the gas tank that was raised or lowered in the gasoline to regulate engine speed.

This first car has been described more than once as steam-powered, a point of confusion that most likely stems from Rollie and Frank’s having hauled passengers in two four-seat steamers at Iowa county fairs in 1898 and in an eight-passenger steam bus at the 1899 Iowa State Fair.

The Fageol brothers’ Panama Pacific Auto-Train, *above*, hauled 4.3 million visitors at the 1915 exposition in San Francisco, Calif. Its unique design included draw bars and diagonal-link steering on all trailers and draw bar controlled automatic braking. (Note the Southern Pacific building in the center of the photo and the Ghiradelli Chocolate building at right.)

PHOTO WILLIAM B. FAGEOL III

In a 1946 *Metropolitan* article, Frank Fageol was very clear that he and Rollie “operated” the 1898 steamers and “owned and operated” the 1899 model, but had built none of them.

Rollie Fageol, the oldest of the four gifted brothers — all largely self-taught in matters of mechanics and engineering — was beyond question an authentic mechanical genius, having been granted dozens of patents before his death in 1942.

Will, an unassuming man of few words, also held many patents in his own right. His talents and skills could not have been better matched to those of his far more outgoing brother, Frank, no slouch himself in the mechanical sphere but perhaps more gifted still as a businessman, visionary, salesman, and promoter.

Quite often, the Fageol ideas were Frank's in concept but translated into workable form by Rollie or Will. As a general rule, assigning 100% of the credit for any innovation to one brother alone is a risky proposition.

Claude, the youngest brother by six years, was a friendly man, liked by all, who spent many years as a salesman, dealer, and distributor for Fageol products, along with a great many other lines of cars and trucks. Later in his career, he headed the Experimental Department at Fageol Twin Coach.

Family patriarch John Jacque Fageol (1854-1925) appears to have been, by turns, a farmer, a carpenter, and a butcher. According to family lore, he moved his family from farm to town so his sons could have better educational opportunities. John Jacque seems to have possessed an entrepreneurial streak as well, and later assisted his sons in the sales end of their early ventures.

Rollie, Will, and Frank Fageol's patents included those for oil burners, transmissions, tandem drives, carburetors, cooling systems, bumpers (a particular enthusiasm of Rollie's), brakes, shock absorbers, and universal joints, along with children's toys and a fruit-juice extraction press. Among the three, they held at least 125 patents.

Rollie Fageol, at about the time his brothers started building trucks (1916-17), parlayed his World's Fair experience and patents into building a six-wheel vehicle for intercity bus service that operated on a tractor-trailer principle. In addition, he designed and sold gas-electric ore trains that were similar in principle to the Panama Pacific Auto-Trains. Slightly later, he designed

Fageol offices and plant at 10700 Hollywood Blvd., Oakland, Calif.; front, *above*, and aerial views, *below left*, of the now vanished complex. The facility was occupied in June 1917, grew in size over the years, and was eventually sold to Peterbilt, which used it until 1960 when it moved operations down the bay to Newark, Calif.

TOP PHOTO WILLIAM A. LUKE; BOTTOM PHOTO ATHS ARCHIVES

What appears to be the entire workforce of either the Portland or Seattle Fageol factory branch, late 1920s. Sales and management team, office staff, and parts personnel and mechanics total around 50 men — women apparently didn't qualify even for clerical positions. These employment numbers suggest an outlet doing a very respectable volume of business — one that would rival many a big-city Mack or White branch.
PHOTO ATHS ARCHIVES

an eight-wheel bus with two front steering axles.

Some of these products were successful, at least in the testing stage, but didn't enjoy the commercial success that his brothers' later bus creations did. For the last 20 years of his life, Rollie stayed busy designing heavy-duty axles, suspension systems, and drive trains—along with more bumpers—that were licensed to numerous manufacturers. In addition, he seems to have been the first person Will and Frank turned to with particularly vexing engineering problems.

FAGEOLS MOVE WEST

By the end of 1905 it appears that John J. Fageol, along with his wife, Mary Jones Fageol, daughter Hazel, and most, if not all, of his sons had moved to San Francisco.

Will was the first to go west, leaving Iowa in 1901 and working his way across the country. He found a job as a mechanic in 1904 at a San Francisco Rambler dealership. Later that year he secured a salesman's job in the same agency for Frank, who had just arrived in California with his new bride.

Frank's first sale, ten days after his arrival, was an eight-passenger Rambler touring car.

In late 1905 Frank Fageol became a partner in a Rambler dealership across the bay in Oakland. It was not long after this that Frank and Will became unwitting heroes.

The day of the great San Francisco earthquake of 1906, Frank had driven from Oakland to survey the damage. He was commandeered by a soldier, who ordered him to use his car to haul dynamite for blowing up buildings that were fueling the accompanying fires. Frank also was able to transport injured earthquake victims.

Will, already in San Francisco, got into the act as well with his car. Neither brother got a wink of sleep for 72 hours.

Frank later told of a building collapsing into the street just after he passed by it, and then witnessing another crumbling to the ground in front of him. Just how he got himself and his car out of the rubble relatively unscathed, he never knew.

Calmer times returned, but evidently not calm enough for Frank's business partner. Spooked by the earthquake, he sold his share of the dealership to Frank and moved east.

To finance the purchase, Frank sold his lease on the building, ending up with the franchise and one demonstrator. For a while Frank operated the business from a tent beside his house, where brother Will joined him.

The Fageol dealership prospered, eventually becoming the largest Rambler sales outlet in the world. It was very much a family affair. Will ran the service end of the business, Rollie was a mechanic, John was a salesman; Claude may have been both.

In a move that was probably 50 years or more ahead of its time, Frank promised free maintenance on a new car for the first 10,000 miles. The customer had only to furnish tires and oil.

As the dealership grew, it added Detroit and Columbus Electric cars to its line in 1910, Overland automobiles in 1912, and Garford trucks in 1914. At some point, Grabowsky trucks — a GMC forerunner — were added.

The Jeffery truck, a product of the same company that built Rambler, was also handled. This would have included the giant Jeffery quad, a favorite of California miners.

By 1911, 29-year-old Frank had been in business for perhaps six years. At that time the Oakland *Tribune* made mention of him as "about the oldest dealer in the state of California."

The Fageols' association with Rambler and its successor automobile, the Jeffery, came to a close in 1916 after Charles W. Nash, the departing president of General Motors, bought the Thomas B. Jeffery Co. and renamed it Nash Motors. As far as can be determined, Nash had no problem with Frank Fageol, but evidently wanted to replace the former San Francisco Rambler distributor, Louis H. Bill, who had become assistant general manager of the Jeffery Company, with someone of his own choosing.

At this juncture, Frank and Will Fageol, who had already built several trucks, decided to form a manufacturing company with Louis Bill and Webb Jay, inventor of the Stewart-Warner vacuum system used at the time on 90% of American autos. Jay was also the man who had driven the White steamer race car, "Whistling Billy," to twice defeat the legendary Barney Oldfield.

The new enterprise was incorporated as Fageol Motors Co. on November 20, 1916. By one account, Louis Bill contributed at least 50% of the

Zerolene delivery at a 24-hour Standard Oil of California station, *above*, early 1920s.

The absence of the words "7 SPEEDS" on the radiators of this McNab & Smith fleet of Fageols, *below*, ranging from 2- to 5-tonners, suggests a pre-1920 date.

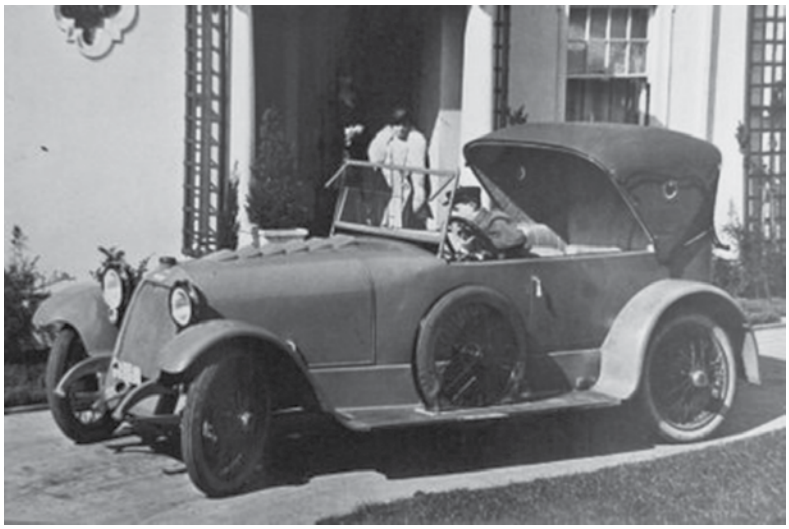
PHOTOS ATHS ARCHIVES

FAGEOL

new business' capital and financed the remaining share for the Fageol brothers.

Louis Bill was president of Fageol Motors; Webb Jay, vice-president; Frank Fageol, secretary and general manager; and Will Fageol, engineer and a director. Their intention was to produce automobiles, farm tractors, and trucks. Early on, the company built some tractors, perhaps 20 trucks, and two automobiles.

In June of 1917, Fageol Motors moved into its just-completed factory at 107th Avenue and Hollywood Blvd. (now MacArthur Blvd.) in Oakland. It appears Fageol turned out about 60 more trucks before year's end, establishing itself, after Moreland, as only the second truck manufacturer in the Golden State.



The stupendous Fageol automobile, *above*, 1917. Priced at $12,000 and ingeniously designed and beautifully executed, the shortage of crowned heads still on the throne after World War I sharply curtailed its market.

PHOTO WILLIAM B. FAGEOL III

About those two automobiles: They undoubtedly would rank still among the largest, most luxurious, and, at $12,000 or more 1917 dollars (about $225,000 in 2013), the most expensive automobiles ever built. The chassis alone was priced at upwards of $8,500.

Their six-cylinder 825 cubic inch displacement Hall-Scott aviation engine churned out 125 hp (some sources say 150 hp) at 1300 RPMs and featured single overhead cam construction, a 7-main bearing crankshaft, and an oil cooler built into the intake manifold. With extensive use of aluminum, this engine tipped the scales at only 565 pounds. Ignition was by dual magneto, and there was a 12-volt lighting and starting system.

Each car was guaranteed to run at least 100 mph. One period road tester in fact claimed to have reached 116 mph!

Mahogany floorboards with silk and mohair carpeting, along with ivory door handles, latches, and control knobs, adorned the sumptuous interior. There was a mahogany toolbox and an under-the-hood lamp, not to mention a back-lit ivory radiator badge.

The traveling palace rode on a 145-inch wheelbase. The uniquely distinctive top-of-the-hood finned ventilators, commonly known as sawtooth vents or dragon's teeth — a feature destined to become an integral part of the Fageol identity — were present and could be collapsed in inclement weather.

As a dramatic demonstration of its capabilities, one of the giant machines — piloted by Claude Fageol, with three passengers and two spare tires and wheels aboard — charged up Mount Diablo in high gear. One can only marvel at the huge Hall-Scott's torque output.

One of these brobdingnagians was purchased by William Andrews Clark Jr., son of the Montana copper king and former United States senator, and reportedly driven off a pier. The other took up residence with a Cuban doctor, though, according one source it was sold initially to a member of the Swedish royal family.

There have been continuing claims that a third car was built, but Will Fageol explained in later years that while some parts had been manufactured for a third car, assembly was never attempted.

Fageol Motors may have built a few other automobiles; documentation is difficult to pin down. Numbers as high as 25 have been reported, but that seems extremely doubtful. This probably has been confused with the company's original intention of building 25 of the luxury masterpieces.

Whatever chance that plan may have had was crushed by the U.S. entry into World War I. The Hall-Scott engines were needed by the military for aircraft production, thus cutting off the supply to Fageol.

Planning for the additional autos never resumed. With World War I and the depression that followed, Fageol deemed wisely that there was little, if any, market for an automobile priced in the upper reaches of the neighborhood inhabited by Packard, Pierce Arrow, and Rolls Royce. So

it decided to move from the realms of splendor to the realm of the strictly practical, if not the strictly conventional.

In 1917 the Fageols laid plans to market a Lycoming-powered farm tractor that, true to form, displayed an unusual twist. It didn't roll, it didn't crawl — it "walked" on wheels with long blade-like teeth, designed to loosen rather than pack the soil in front of the harrow or plow.

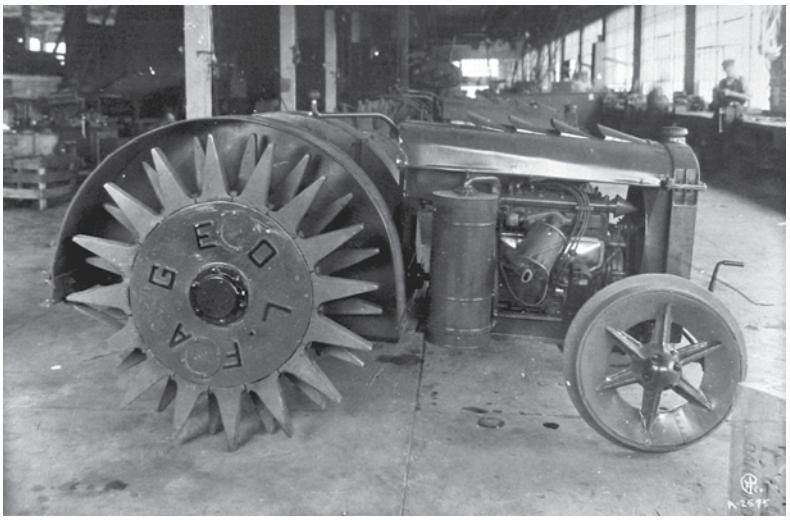
Rush Hamilton, farmer, mechanic, and Fageol director, was the tractor's inventor, with Fageol Motors acquiring the patent.

The initial version of the tractor, with blades on the front wheels, proved unsatisfactory. Fageol redesigned the machine with spike-like "grousers" on the rear (drive) wheels. This was more successful, but the tractor business was sold in 1923 to make room in the Oakland plant for additional bus production.

It isn't known how many of these formidable-looking beasts were built, but it's probable that Fageol again had priced itself out of the market. It seems unlikely that enough demand would have existed to justify a price tag reported to have been as high as $1,525, a sum that would have bought an upper-medium price car or two Fordson tractors.

It seemed plain that automobiles and tractors didn't represent Fageol's future. Trucks were selling, however. They appeared to be the company's obvious niche, but that didn't stop the ever-restless brothers from taking a flyer into the *bus* business.

This time their instincts were correct — they were, in fact, to change history — but that didn't mean the road ahead would be straight or smooth. In typical Fageol fashion, it curved and wound, and contained its share of potholes and detours.

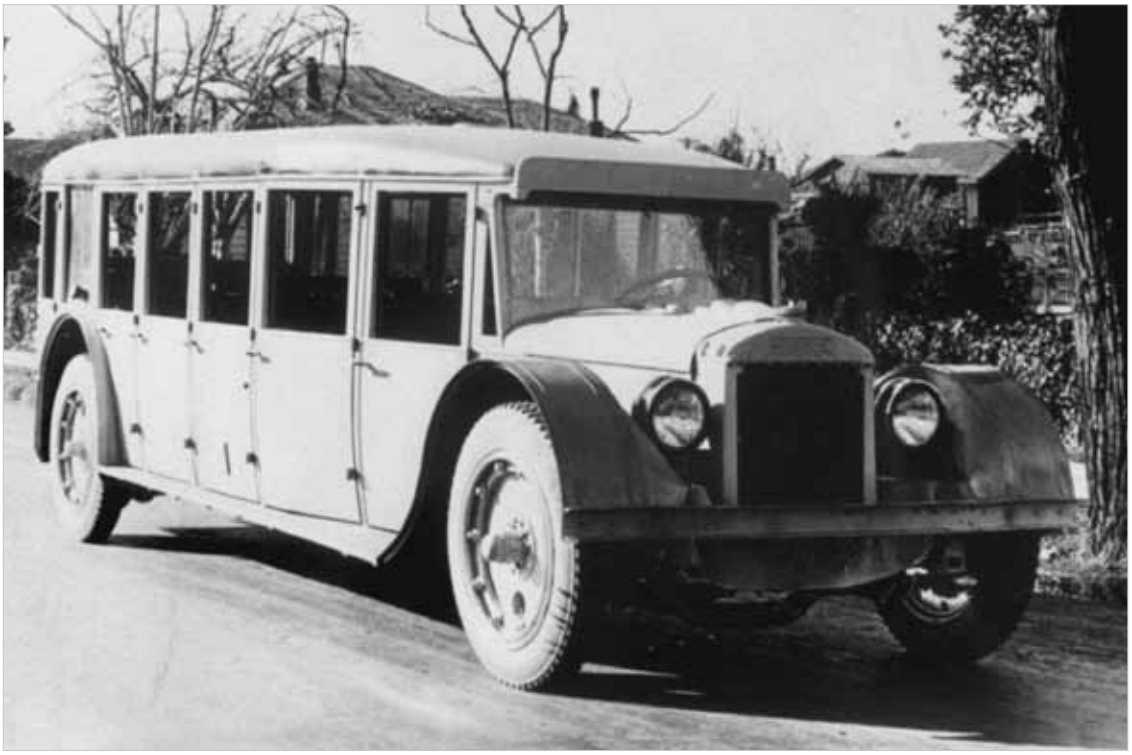


The Fageol farm tractor, *above*, *c.* 1920, used spiked wheels to break ground ahead of the harrow or plow. It was logical in theory, but reports on its effectiveness varied.

PHOTO WILLIAM B. FAGEOL III

VENTURE INTO BUSES

California was fertile ground for intercity bus transportation. Rail service was not what it was in the more densely-packed East, and cities were typically a considerable distance from one another.



Fageol's Safety Coach prototype, 1922, *below left*, clearly shows the individual curb-side doors featured on these early buses. It also illustrates the vehicle's extremely low center of gravity.

PHOTO WILLIAM A. LUKE

This was apparent to the Fageols, but they had noted something else as well: Buses usually were built on narrow-tracked, stiff-riding truck or extended touring car chassis, and were cramped and uncomfortable. Moreover, they were top heavy so they tipped over easily.

The solution seemed to the Fageol brothers to be just as obvious as the problem. In 1922, the Fageol Safety Bus — soon to be re-christened the Safety Coach — appeared and was unlike anything previously seen.

Built expressly for the purpose of intercity service, the bus had a low center of gravity with an extremely low, fully enclosed aluminum (wood-framed) body mounted between wide-tracked wheels. This, plus an arched frame and underslung axles, resulted in a floor only 21 inches from the ground. This made it possible, in turn, for each seat's individual door to extend down to the running board with an easy step of 14 inches to the ground.

The bus stood only 76 inches tall, road to roof top, with a wide 64-inch track.

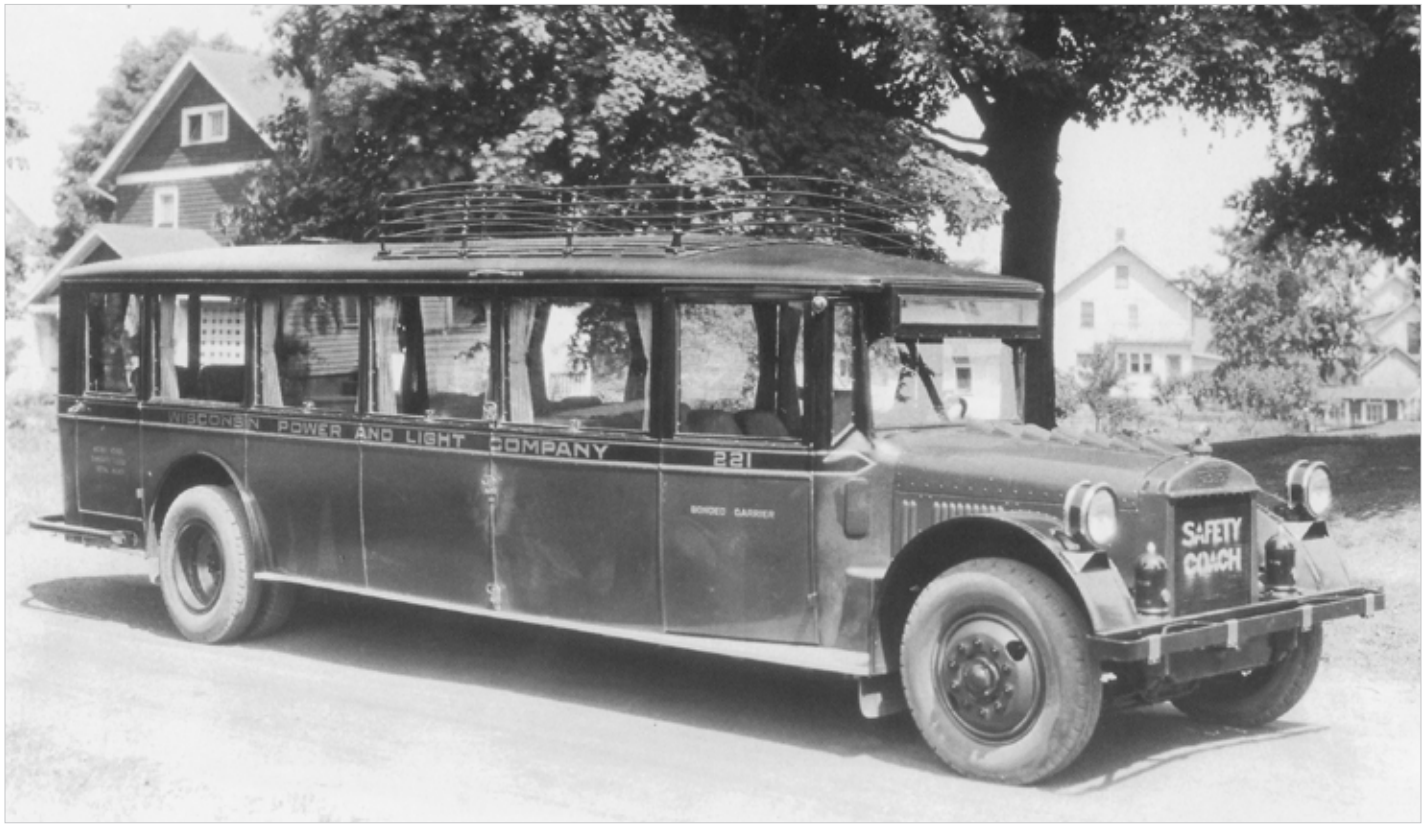
The Fageol Safety Coach featured leather-covered bench seats and wide windows plus interior lighting and adjustable side and ceiling vents. Each seat was accessible through its own door on the curb side of the bus. Passengers sat four-abreast in five (later seven) passenger rows.

A subsequent version, introduced in early 1924, featured a single passenger door, a center aisle with individual seats on each side, and almost enough headroom for standing. A third version — the so-called "parlor" type — contained movable (and removable) wicker chairs.

Finally, there was a city transit, or "streetcar," variation with a steel body; solid rubber tires; spoke wheels; higher, narrower windows; and a somewhat higher roofline.

The Safety Coach rode on a 184-inch standard wheelbase (218 inches, 230 inches, and perhaps other hub-to-hub options became available), with pneumatic tires providing the road contact for the intercity editions.

The Safety Coach was almost as advanced mechanically as it was in other areas. Power sufficient for 50-mph highway speeds was supplied by an overhead cam Hall-Scott four, driving through a Brown-Lipe four-speed transmission, fourth overdrive, to a built-for-Fageol Timken underslung worm-and-gear rear end with a reduction of 5.4 to 1.



In the mid-1920s, Wisconsin Power and Light Company offered extensive bus service, known as "The Orange Line," throughout central Wisconsin with 29-passenger intercity Fageol Safety Coaches, *below*.
PHOTO WILLIAM A. LUKE

The Fageol-designed Hall-Scott was advertised as being able to drive the coach, fully loaded, for 300,000 miles— a remarkable claim even today for a gasoline engine. By late 1922, at least one Safety Coach had been equipped with four-wheel air brakes, designed in conjunction with Westinghouse — a probable first for any production bus.

Twenty-two passenger Safety Coaches with the four-cylinder engine were offered initially. A bit later—most likely in 1924—a 29-passenger version with a standard 196-inch wheelbase and Hall-Scott six-cylinder power became available.

The Hall-Scott six used the same pistons as the four, which greatly simplified maintenance in fleets. Both Hall-Scotts — four and six cylinders — were used in some Fageol trucks as well.

Safety Coach prices clustered in the vicinity of $10,000. This would be the equivalent of perhaps $150,000 today, but evidently it was little enough to allow many operators to turn a profit.

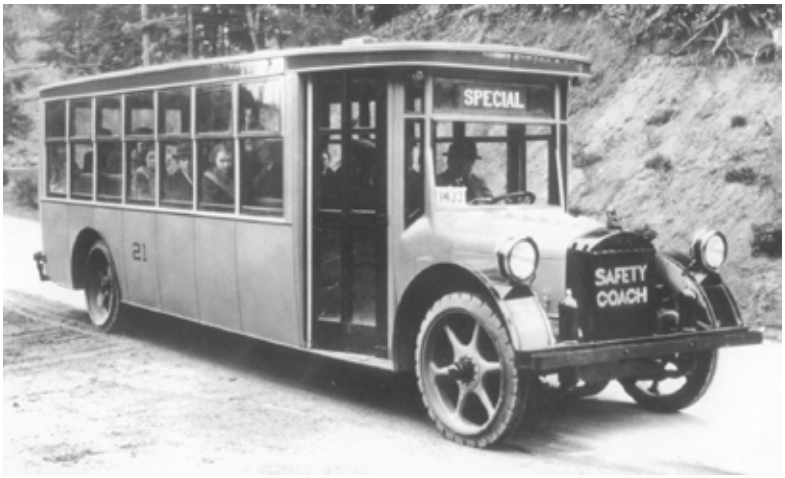
In its first two full years of production, 763 Safety Coaches were turned out. The Oakland *Tribune* of November 11, 1923, disclosed that the Fageols' pace-setting bus had received mention in 22 national magazines.

In 1926, after the American Car and Foundry merger — detailed in the next installment— but still using the Fageol name, a hybrid version of the Safety Coach was introduced. It relied for propulsion on a Westinghouse generator linked to a six-cylinder Hall-Scott through a flexible coupling with two Westinghouse electric motors amidships, connected through two shafts to a dual-drive rear axle.

A 2,500-mile demonstration run was successful, and the bus proved popular, but just how many saw regular service is unknown.

Bus sales quickly spread east from the Pacific coast and became particularly common in the snowy upper Midwest. There, the Safety Coach may have given birth to one of the 20th century's best recognized brand names.

According to persistent legend, someone observing the sleek, low silhouette of a Safety Coach, owned by a small Wisconsin bus line, compared it to a greyhound dog. E.J. Stone, owner of the Wisconsin line, evidently mentioned this to Ed Eckstrom who, in 1924, was in the process of buying Stone's business. Eckstrom soon founded the Safety Motor Coach Line in Michigan and incorporated the greyhound idea into his marketing.



A city transit or "streetcar" version of the Safety Coach, *above*, *c.* 1922. Note the higher roof and front folding doors as well as the spoke wheels and hard rubber tires.
PHOTO WILLIAM A. LUKE

Meanwhile, in 1914 in Hibbing, Minn., C.E. Wickman and others had begun a jitney service called the Hibbing Transportation Company, using a Hupmobile touring car. The new firm soon was incorporated as the Mesaba Transportation Company, and in 1926, after much rapid growth and many acquisitions and realignments, it became a holding company known as Motor Transit Corporation (MTC).

MTC's first purchase was Ed Eckstrom's Safety Motor Coach Line. Finally, in 1929 MTC became The Greyhound Corporation.

Eckstrom had used the greyhound dog, the greyhound name, and the slogan "Ride the Greyhounds." These symbols and slogan, along with Eckstrom's blue and white livery, were imported whole into the Greyhound system.

The Fageol Safety Coach had thus contributed inspiration to an empire and an enduring icon to the American cultural scene.

IN THE NEXT ISSUE:
The Fageol "7 SPEED" truck conquers the West, the Twin Coach revolutionizes urban transportation, and the all-aluminum truck foretells the future.

Writer **DICK CALLAWAY** is an ATHS member in Louisville, Ky., and a regular contributor to *Wheels of Time*. He is particularly indebted to William B. (Bill) Fageol III and D.B. (Doc) Rushing for information and editorial assistance. Others supplying valuable information and advice were John D. Fageol, Louis R. (Ray) Fageol, William A. (Bill) Luke, Don Coffin, Charles Wotring, Harvey Eckart, Roger Sackett, Don Meyer, Skip Marketti of the Nethercutt Automotive Research Library, Don Schumaker of the Mack Museum, Walter R. Turner of the North Carolina Transportation Museum, Paige Plant of the Detroit Public Library's National Automotive History Collection, and ATHS librarian Lee Young.