

THE HOLLYWOOD Graham of 1940 used the body dies that made the Cord one of the great American classics.

# GRAHAM

## The Might-Have-Been Car

**This Too-Early Arrival Was A Depression Era Supercar**

BY J. L. BEARDSLEY

THE GRAHAM brothers brought proven, highly successful truck manufacturing methods to the passenger car field with purchase of the Paige company in 1927.

The Graham-Paige, and later the Graham, produced by the fraternal firm were "the most copied cars on the road." The brothers built a succession of advanced models, some of which are prized Special Interest collectors' items today.

In its heyday, the Graham was the style leader, but even the leader found tough going in the depression-minded markets of the 1930s.

No manufacturer ever entered the passenger car field with such a vast amount of know-how and goodwill—stemming from a popular line of trucks which set new sales records almost every year. Added to this, the Gramhams always were ahead in mechanical design, economy and styling.

The Graham line offered something for every taste from low-priced economy models to custom, supercharged, luxury automobiles. Some of these cars were pioneers of streamlining features which still are in vogue today. Even these cars were reasonably priced. However, an alert, soundly conceived approach couldn't sell cars to the then conservative market.

The 1934 Chrysler Airflow always has been a classic example of "too much too soon," but a dozen Graham models also could qualify for this category. With a little luck the Graham could have been one of the big name U.S. cars of today.

In 1921, Joseph B., Robert C., and Ray A. Graham started a small truck body manufacturing firm. In only four years the business expanded from 13,000 sq. ft. of space to a plant of 250,000 sq. ft. which was acquired by the Gramhams on June 1, 1925. This was the former Dodge Ordnance Plant in Detroit. It was complete with a modern conveyor assembly line system. In the first year in the new plant, production climbed 128% over the previous output. Branch plants were established at Evansville, Ind., Stockton, Calif., and Toronto, Ontario, Canada.

Graham absorbed Dodge interests that year and, in 1927, bought the Jewett holdings in the Paige Co. for \$840,000. In addition, Graham took over the Paige-Detroit Co. The

Graham-Paige Motor Corp. was formed from these properties with Joseph B. Graham, president; Robert C. Graham, executive vice president; and Ray A. Graham, treasurer.

The new firm's first models were popularly priced automobiles of moderate size and substantial, but not remarkable, values.

One of the better sellers was a 1929 model 827 Coupe, with a straight-Eight 120-bhp engine on a 127-in. wheelbase. This car attracted affluent middle class buyers.

The Special Eight Sedan made its debut in 1930, with a reduction in engine power to 100 bhp for better economy and a price cut to \$1585 in a bid for a wider market. The Graham tradition was to offer improved cars, plus ingenious mechanical features and very advanced body styling, at lower prices.

The 1930 line introduced the rubber cushioned chassis, aluminum pistons with Ivar struts and 4-speed transmissions in the majority of cars in the line. Strength with lightness was the outstanding characteristic. In 1930, Graham offered economy in two Sixes, model 612 and 615, selling at \$695 base price. And something else was go-

2000 miles at 86.69 mph, and for 24 hours at 86.35 mph.

THIS WAS ACHIEVED at the Montlhery Speedway, near Paris, France. The record setting machine already had set the 200-mile record at Brooklands Speedway in England, with an average of 92.52 mph. Thus, for less than \$1600, a prestige automobile and world's fastest production car in its class was put within the reach of everyone.

The 1931 models were larger, with new all steel frames on the Eights and a new cylinder head design throughout that added power to the standard Sixes. A synchronizing mechanism for engaging third and high speed on the 4-speed transmissions was an added feature on the Special Six and both Eights. Prices for these were in the \$1200-\$1300 bracket.

However, Graham engineering was given recognition and meaning when speed expert and race driver Louis Unser chose a Graham to enter in the annual Pikes Peak Hillclimb race in 1931. With modifications it placed third in the racing division of the event.

ously a new car from the sloping V-shaped radiator and deep radiator front, to the rear end body treatment. In addition, there is the new air-foil front fender and full crown rear fenders."

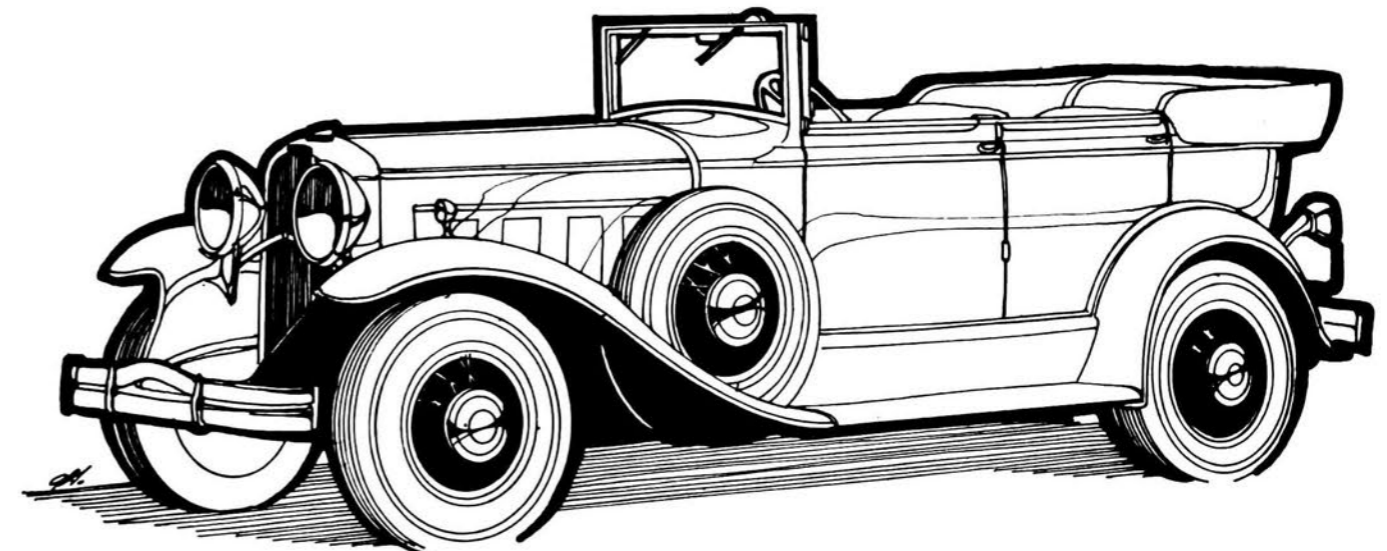
This was the first appearance of full-skirted fenders on American cars, but they soon were widely copied.

The body was lowered by an ingenious frame design with outboard spring mounts, and a greatly deepened web section of the side-rail with oblong openings cut through to allow the rear axle housing ample room for free vertical action.

Another innovation was the "centrifuse brake drum" with separately formed 2-in. drum, ring and back plate welded together into a unit of 111 in. of braking surface.

Wheelbase was 123 in. The standard 61-in. tread of the Gramhams allowed roomy interiors and comfortable seating.

The De Luxe Sedan, with an 8-cyl. L-head engine of 90 bhp at 3400 rpm displayed a gracefully rounded silhouette that was enhanced by the new skirted fenders. It was a sound car that looked expensive. A leading trade



THE GRAHAM Special Eight convertible for 1930 was delivered with a 100-bhp non-supercharged engine and was priced at \$2085. Other Special Eight features were a rubber cushioned chassis, 4-speed transmission and aluminum pistons.

ing for the company in 1930. This would have appealed to "youth market" and all performance-minded buyers of today. This was the world 24-hour stock endurance record.

On December 20, a Graham straight-Eight, owned and driven by English sportsman D.M.K. Marendaz, and two relief drivers, established world average speed marks in Class B for 2000 kilometers at 87.25 mph, for 3000 kilometers at 86.47 mph, for

Suspension, riding improvements and interior appointments were receiving attention from the Graham technical staff. The 1932 Blue Streak Eight series was the first to show results of these efforts in ride control and free-wheeling. There were a number of improvements on the previous designs, yet prices were reduced to \$995 and \$1170.

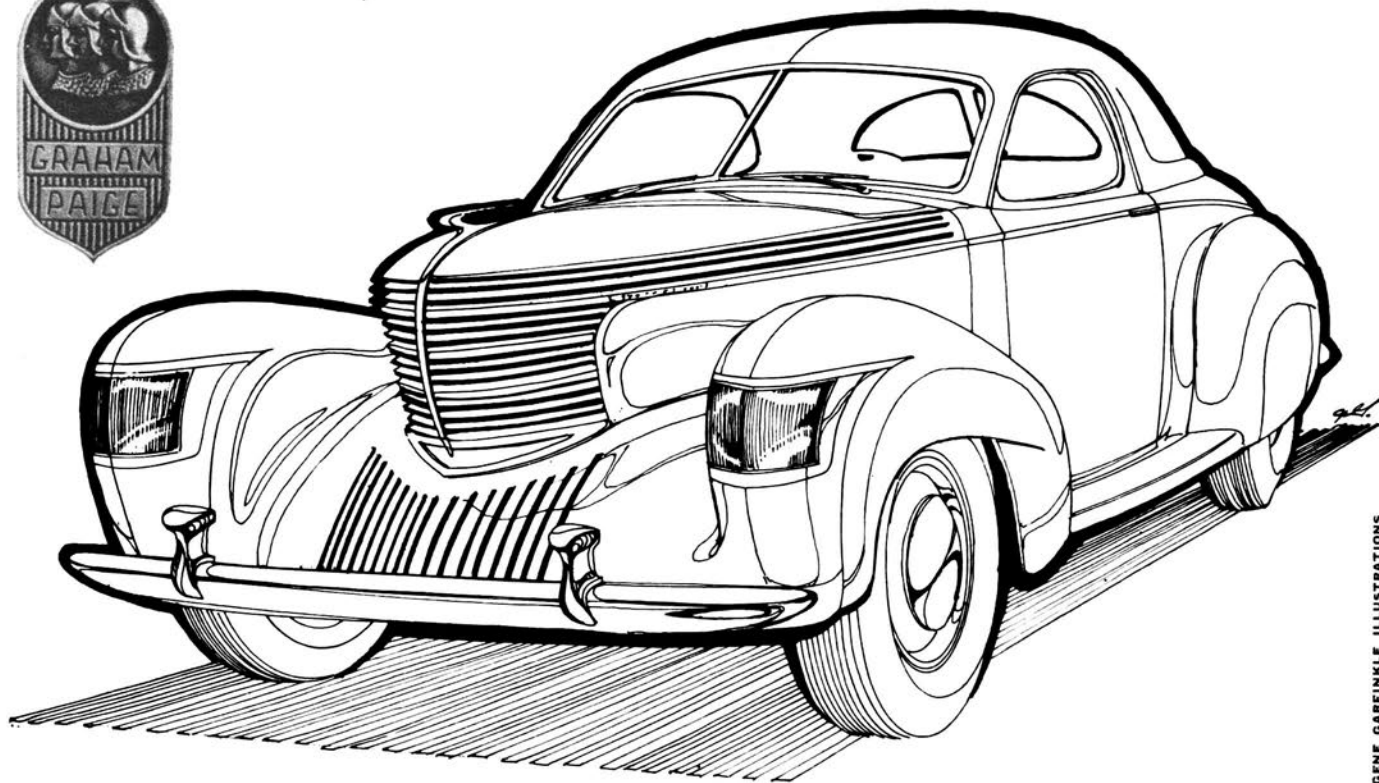
*Automobile Trade Journal* said, "The Graham Eight for 1932 is obvi-

magazine praised it as, "One of the best buys for the money on the market." At only \$1220, the automotive writer had a point.

Again the glamorous Graham proved itself on the open road when the famous highway record breaker, E.G. "Cannon Ball" Baker drove a stripped 8-cyl. roadster up the side of Mt. Washington, N.H., for a record run of 13 min., 26 sec.

As premier "transcontinentalist" of





GENE GARFINKLE ILLUSTRATIONS

ADVERTISED AS both "The Luxury Car in the Low-Priced Field" and "The Car of Tomorrow," the Graham for 1939 lived up to the economy billing with a \$965 base price, but whatever tomorrows the Graham could have had were lost in World War II.

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his day, Baker never risked his reputation by driving inferior machines. He refused offers of cars he disliked. Thus it was that the Graham Co. could be complimented on the great driver's acceptance of its roadsters for the record on the toughest climb in the East.

At a base price of \$875, the Graham 1932 Six offered a family car with the smooth lines of the Eights, though it was 5 in. shorter overall. It was powered by an aluminum head engine with a 6.5:1 compression ratio.

Ride control and free-wheeling were absent—for considerations of cost. However, there were a vacuum-operated clutch, hydraulic brakes with pedal control, Warner 3-speed transmission and the standard Graham 61-in. tread.

The 5-passenger sedan sold for \$995, but \$75 more bought the convertible coupe with wire wheels and other extras. The car carried four passengers with a rumble seat.

In 1933, *Automotive Abstracts* stated, "Graham, in spite of admitting to be the most copied car on the road, is still several jumps ahead of the rest of the streamliners."

The writer credited this to the superiority of Graham's design engineer-

ing staff. This recognition was confirmed by subsequent events.

Graham made an astute public relations move in February of that year by signing Cannon Ball Baker to a driving and promotional contract. As the holder of over 100 long distance road and transcontinental records in leading makes of American automobiles Baker had become a legendary figure in the automotive world and remained in the limelight for 30 years.

In 1933, Baker was assigned a tour of the nation's Graham dealerships to promote safe driving, but the manufacturers had a far more spectacular project for him. Baker was given an experimental supercharged Graham Eight that was being readied for market. Cannon Ball embarked on one of his cross country races with the clock. While this was to be a demonstration of reliability and economy, the amazing Baker found the car performing so well he couldn't resist keeping his foot on it a little more than he intended. He finished the run with a transcontinental record of 53.5 hours, a mark not beaten during the succeeding 15 years! Baker explained he would have made the trip in 53 hours flat, but he stopped to catch some sleep.

THE 1933 GRAHAM line offered three distinctive new chassis models—two Eights and a Six—but it was in 1934 that Graham made history with the first supercharged 8-cyl. engine ever to appear on an American car at a

competitive price. The supercharger was standard, not optional.

The supercharged Graham Custom Eight developed 135 bhp at 4000 rpm. The top of the line was the Custom Sedan, on a 123-in. wheelbase, that sold for only \$1330. The Standard Eight was built on an identical chassis, but sold with less power at \$925.

The supercharger was a centrifugal type, centrally mounted on top of the engine between the downdraft carburetor and the intake manifold. The rotor was of aluminum of great strength and accurately balanced. It turned on a vertical shaft with a cone worm gear running off the end of the chain-driven water pump shaft, which was driven off the crankshaft.

At 4000 rpm, the rotor speed was 23,000 rpm, using a 5.75:1 ratio. This Graham-built blower system delivered a water-heated fuel mixture at high speeds. Each cylinder was cooled by full-length water jackets.

This was the first of several Graham models that are ranked in the Special Interest group by today's collectors. These enthusiasts have an active club in operation to stimulate restoration of these near-classic cars.

In 1935, the supercharger was exploited as a new means of economy and better performance, but the Eights gave way to the less powerful Sixes in the 1936 Series 110, though these carry the Special Interest label due to their unusual lines and the supercharger prestige car feature.

Graham always was able to back up its claims of economy. It was no advertising gimmick, because, in 1936 and 1937, Grahams won the Gilmore-Yosemite and U.S. economy records with 23.95 miles per gallon.

The supercharger gave the 110 a power boost of 32% to 112 bhp at 4000 rpm; the 6-cyl., but non-supercharged, version of the engine in the Cavalier series was capable of only 85 bhp.

**T**HE 70-BHP Crusader Six was given the aluminum head engine with the 6.8:1 compression ratio and was in the modest \$695-\$795 price range.

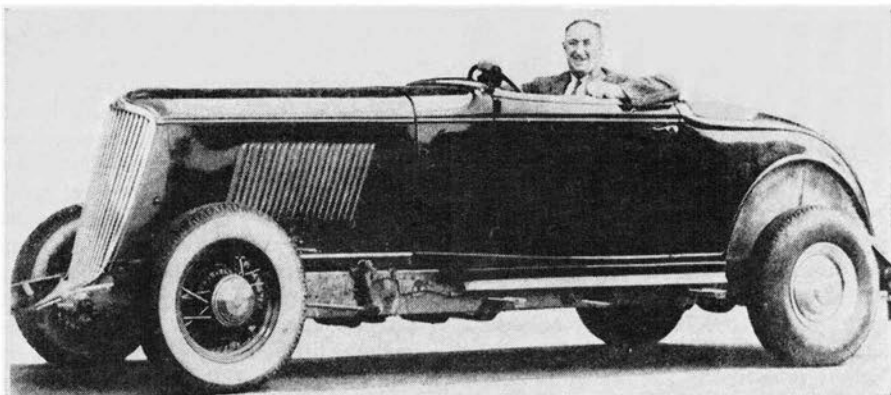
And, these were the years that the British enthusiasts recognized the bold concepts of the supercharged Graham, even if the American market was unimpressed with a car 25 years ahead of its time.

*The Autocar* announced in the issue of Sept. 25, 1936: "A new company has been formed, under chairmanship of Lord Avebury, to produce an Anglicized version of the supercharged 6-cyl. Graham, rated at 26 bhp. This is an American car of unusual character."

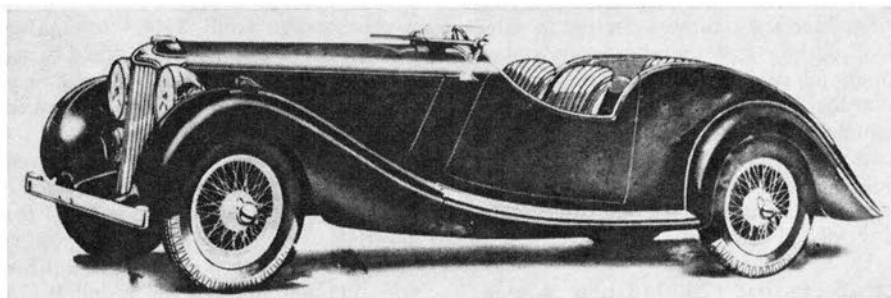
Lammas, Ltd., was the firm organized to build chassis and bodies around the Graham engine and transmission for the British market. Lammas added to the stroke of the engine to produce 128 bhp at 4400 rpm, making it considerably more powerful than engines for the American 110 series.

The firm produced coupes and "sports saloons" in the closed luxury car idiom, but the Lammas-Graham tourer was an open automobile in the true sports car tradition.

Charles Follett, the London distributor and a sportsman driver with long experience on the speedways, set out on Brooklands Speedway, Nov. 4,



**CANNON BALL** Baker set the Mt. Washington, N.H., hillclimb record of 13 min., 26 sec., in 1932 with this stripped-down Graham Eight roadster.

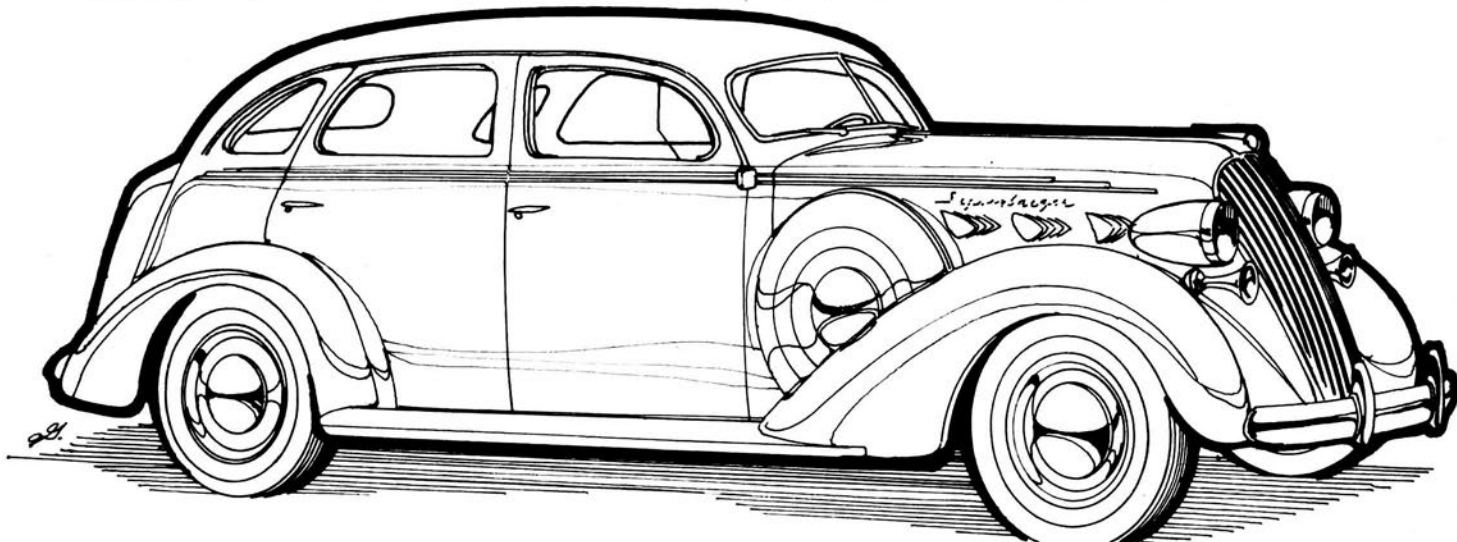


**AN ENGLISH** builder, Lammas, Ltd., in 1936 was licensed by Graham to build sports cars with the U.S. firm's engines stroked to produce 128 bhp.

**FLANKED BY** a 1933 Packard, left, and a 1931 Auburn Speedster, a 1941 Hollywood Graham doesn't seem out of place in classic car company.



**TOP OF** the line in 1937, the \$1190 Graham Custom Supercharged 120 4-door sedan was fitted with a special fifth spring to minimize side sway, and telescopic shock absorbers and rubber cushioned spring shackles to deliver a boulevard ride.



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1936, with an official timer, to allow a production sports model to unwind. In one hour he had set a new record of 95.78 mph, and continued for three hours to log 260.76 miles at an average speed of 86.92 mph. Afterward, Follett praised the Lammas-Graham's quick acceleration speed, comfort and absolute stability.

In the U.S., Graham still was trying to reduce the ominous decline in sales by building still more modern styles, high in performance, economy and comfort. The company's 1937 Custom Coupe and Sedan are Special Interest cars today. The Convertible Coupe sold in such small numbers it now is very rare, but then it could be bought for only \$1170.

**T**HE CUSTOM 120, 116 bhp, 4-door, with supercharged 6-cyl. aluminum head engine, was almost a gift at \$1190 f.o.b. the factory. These top models featured the Graham-designed "Cradle Ride," achieved by the "gyrolator," or fifth spring, which prevented side sway and body roll on curves. This component was aided by equal weight distribution, extra length outboard springs, airplane-type tubular shock absorbers, rubber-cushioned

spring shackles and a body wider than it was high.

Oversize cushions, striking upholstery and all interior appointments were in the luxury class; all were encased in an all-steel safety body which protected passengers with steel roof, sides and floor. "Lite-tough" hydraulic brakes were standard and Graham drivers were given dual-ratio steering, with one ratio for road travel and a second ratio of greater mechanical advantage for ease in parking.

The custom 120 Series included 2- and 4-door sedans with optional trunks, a business coupe and a sport convertible coupe with rumble seat in a price range from \$1005 to \$1190. This line was duplicated in the 116 series, though with 10 fewer horsepower with supercharged engines, and priced from \$1015 to \$1080.

The Cavalier 95 Series was powered by an L-head Six of 85 bhp with the Business Coupe at \$850 up to \$935 for a 4-door.

In 1938, the 218-cu. in. 90-bhp Six was retained, though an added 0.125 in. went into main bearings. Bohnalite Auto-thermic pistons were installed in all models. Dual exhausts were featured on the 120 supercharged line.

An improved, extra-braced, all-steel body was given a very distinctive front end treatment. The radiator was tilted forward rakishly and headlamps were molded into front fenders.

With the body lowered an additional 2 in. the new streamlining drew this

comment from one motor trade magazine: "To say the re-designed (Graham) body is unusual is an understatement—it amounts to motion caught in flight."

This is a major reason that 1938 Gramams survive as Special Interest models, today.

The advanced Graham retained its eye-appeal in 1939, when the 4-door standard sedan, with trunk and 90 bhp, was advertised as "The Luxury Car in the Low-Priced Field." Graham wasn't kidding because the car sold for only \$965. A supercharger, giving 26 additional bhp was available for \$130 extra. A Special Equipment Group of performance-building options was available, but this modern approach didn't pay off in the days before the horsepower race began.

As did many other auto builders on whom time was running out, Graham produced its best model as the last. Graham's was the 1940-41 Hollywood sedan with body formed from the former Cord dies, which the dying Hupmobile firm had used on its Skylark for a time after Cord collapsed in 1937.

**G**RAHAM ACQUIRED the dies from Hupmobile and, with slight modifications, they gave the last of the glamorous Gramams an affinity with one of the great classics. These beauties sold for only \$1250 in 1940 and \$1045 in 1941.

Powered with the same Six which developed 116 bhp with supercharging and pushed previous models to over 87 mph, the smoother lines of the Hollywood should have made the car the fastest of all the Gramams.

With the advent of World War II the Graham plant was converted entirely to war production.

Two years later a group headed by Joseph W. Frazer bought the stock held by Joseph B., last survivor of the Graham brothers, and finally, in 1947, the Graham-Paige properties were incorporated into Kaiser-Frazer Corp.

Announcement was made that the Graham line would be revived, but cars never materialized. Had the Graham firm survived the war intact and had it been able to offer the post-war market the advanced, modern automobiles for which it was famous, many experts believe Graham might have burgeoned into one of the giants of the industry.

The Graham line would have been a natural for that car-hungry public, teeming with pent-up enthusiasm after four years of gasoline rationing, enthusiasm impossible to develop during the Depression years. The Graham appeared 10 years too soon, and so became another "might-have-been" in the history of the automobile. ■

**THE CENTRIFUGAL supercharger, standard Graham equipment in 1934, used an accurately balanced rotor of aluminum driven off the water pump shaft.**

