

Car Life Classic AMERICAN UNDERSLUNG

Safety Was A Campaign Item 60 Years Ago

IN THIS, THE YEAR when automobile manufacturers are responding to the safety furor with strident advertising claims, it is interesting to recall that more than half a century ago, the original American Motors Co. of Indianapolis, Ind., extolled the safety features of its car, the American Under-slung.

The company cited the Under-slung's low center of gravity as its outstanding safety feature. A small brochure, replete with mathematical formulas, diagrams and testimonials, devoted much space to the explanation of the Under-slung's resistance to overturning. Use of large diameter tires was another advertised virtue.

In a day when tire trouble occasioned more stops than running out of gas, the promise of increased tire wear through greater contact with the road and better load distribution was pertinent. Later models of the Under-slung featured dual concentric braking in the rear wheels, with a 16- x 2-in. drum for the foot-operated service brakes and a 12- x 2-in. drum for the hand-applied emergency brakes.

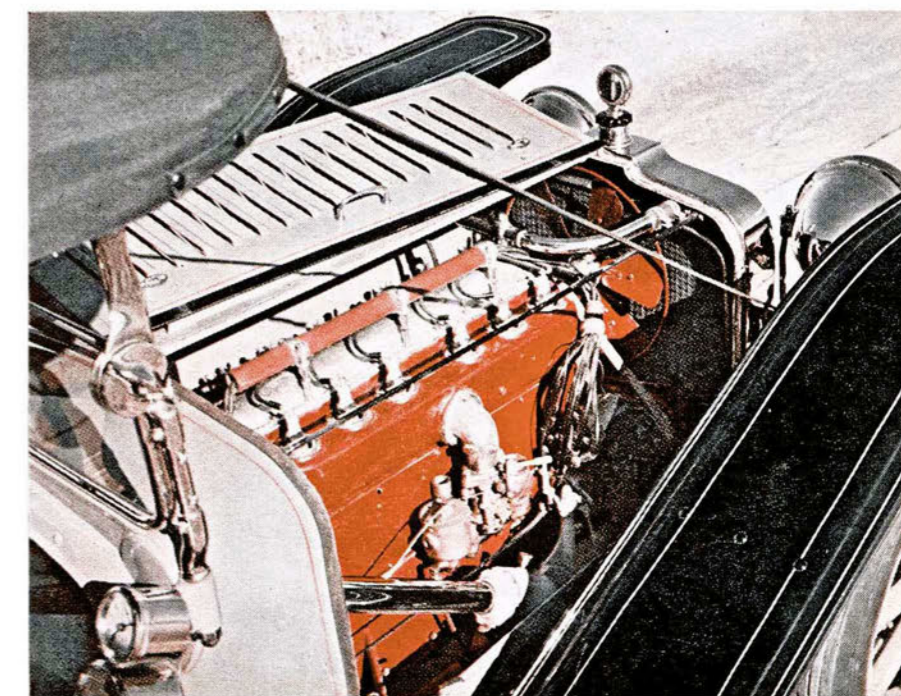
The design of the Under-slung is credited to the budding automotive genius of Harry C. Stutz, whose varied and productive career has been related in

earlier issues of *CAR LIFE*. The first American was completed in the summer of 1905. It was not underslung, but conventional in design. The car had a custom body, Garford axles and

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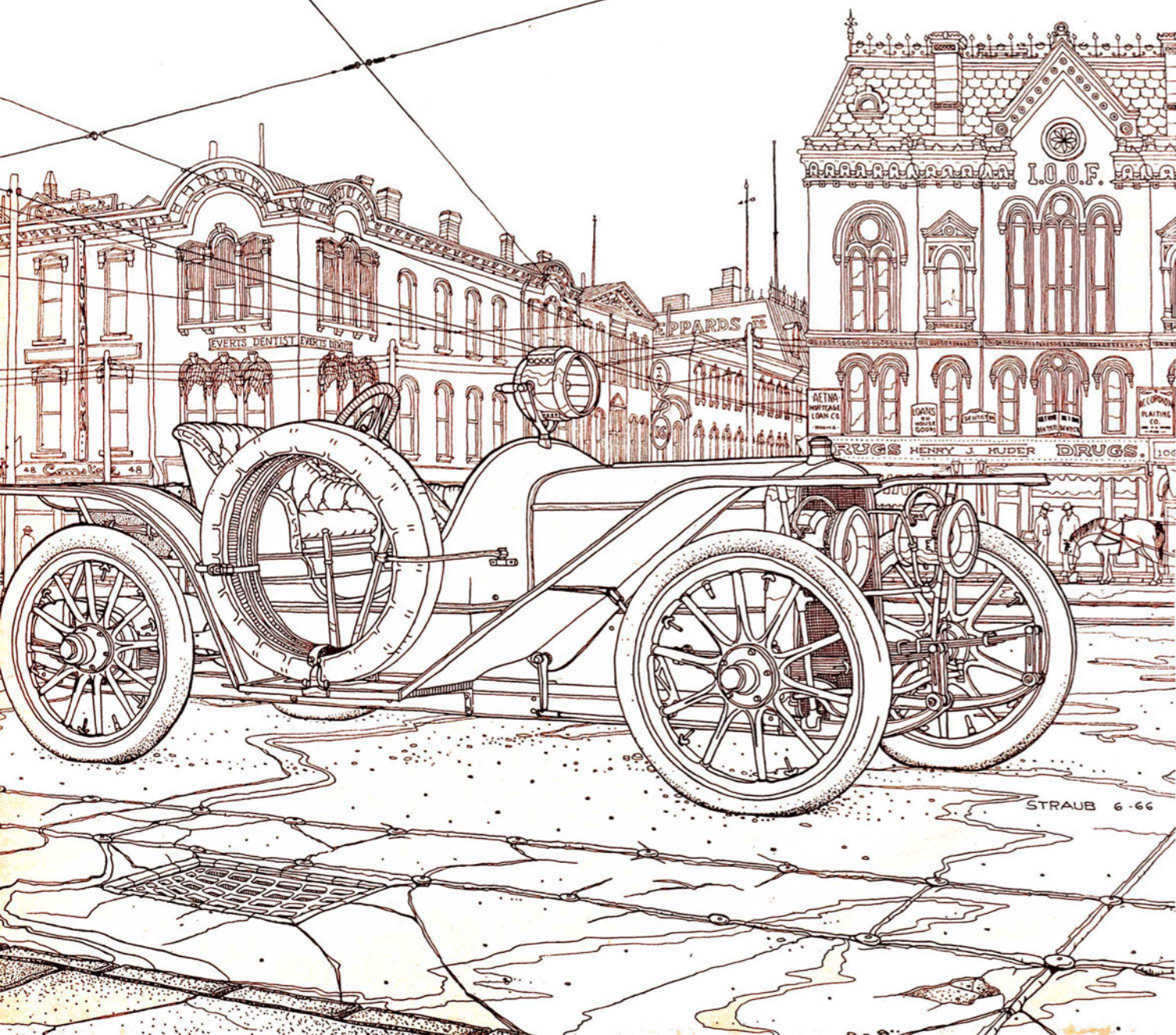
steering gear, an A. O. Smith frame and an engine which drew heavily on Renault for inspiration. The fledgling company reserved space in the fifth Chicago Automobile Show, conducted early in 1906. On opening day, Saturday, Feb. 3, American's stand in the Coliseum annex was empty. But the firm's cars arrived shortly thereafter and the American made its national debut. The limited production philosophy, which undoubtedly contributed to the downfall of the firm eight years later, was articulated from the very beginning. American would manufacture carefully constructed cars, but not in quantity.

The original American touring car carried a wooden body in a modified *Roi-des-Belges* style, with doors on either side of the tonneau. It was enameled in Brewster and Sage greens with accents in light red striping. A comment upon its "careful construction" was that no nail heads showed in its trimming! The engine was a 4-cyl. upright unit, cast in pairs and water cooled, with a bore and stroke of 4.562 in. x 5 in. It was rated 35-40 bhp at 1450 rpm. The engine and transmission were carried in a sub-frame. Semi-elliptic springs were used front and rear. Foot-actuated service brakes were on the rear wheels, with an external band brake on the drive-shaft for emergency use. Wheelbase



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THE ORIGINAL Underslung Roadster, of 1907, is shown at Pennsylvania and Washington, Indianapolis, the latter street birthplace of Harry Stutz, designer of the car.



was 111 in., tread 56 in. and curb weight 2300 lb.

The American Motor Car Co. was incorporated late in 1905 with a capitalization of \$25,000. Incorporators were listed as W. A. Moore, W. E. Barton and C. R. Cameron. According to F. F. Tone, writing in the Veteran Motor Car Club of America publication, *Bulb Horn*, the firm actually was organized in 1906 by Harry Stutz, V. A. Longaker and D. S. Menasco. Tone's father, Fred I. Tone, who designed the 1905 Marion, was hired as chief engineer. Longaker was president and Stutz was factory manager. Cecil O. Dale was chief draftsman and James Crawford, later to become chief engineer of Chevrolet, was detailer.

With establishment of the American Motor Car Co. as an operating concern, its products underwent a complete redesign. The engine's bore and stroke were let out to 5 in. x 5 in., valves were moved to the right side and oil galleries, prefabricated from copper tubing, were cast into the aluminum crankcase. Power was rated at 40 bhp by the ALAM formula. The engines were built to American's design by the Light Inspection Car Co. of Hagerstown, Md., precursor of the Perfect Circle Co.

The touring car, now named the "Tourist," abandoned the sub-frame and mounted the broad base of the engine crankcase to its frame rails. A second model, the first "underslung," was produced in roadster form. This car, which retained the engine/transmission sub-frame (its chassis frame rails were the lowest point on the car), appeared to nestle between four large wheels. Its flying fender shapes undoubtedly influenced car designers for decades and the dashing little car established for American Motors Cars the style which lasted to the bitter end.

THE REDESIGNED Americans, carrying the slogan, "No noise but the wind," were among the 1907 model cars displayed at the AMCMA New York Auto Show in December, 1906. The American Motor Car Manufacturer's Association, organized by Henry Ford and his adherents to combat the Selden Patent controlling ALAM, managed to hold its exhibition at the Grand Central Palace a month before the "regular" show. There the wares of the young Indianapolis firm were introduced to the East Coast. Buyers had a choice of the conventional Tourist or the underslung Roadster.

Full production started in 1907. According to the younger Mr. Tone, the cars contained a number of foreign components, believed by his father and associates to be of better quality and reliability than domestic products.

Forgings were obtained from BND, a Belgian firm, springs from Siemens of Paris, ball bearings from Fichtel and Sachs of Germany (which makes Ferrari clutches today), and ignition from Simms-Bosch. Harry Stutz had left the firm by this time, to join the Marion Co.

The year 1908 saw introduction of a new engine, expansion of the line of cars and the firm's inauspicious attempt to enter motor racing. A larger version of the 4-cyl. powerplant was developed for this year, a few of which were installed in late 1907 models. Both bore and stroke were increased, to measure 5.25 in. x 5.5 in. The factory rated the enlarged engine at 50 bhp, although the ALAM formula gave it only 44.1. Selective 4-speed transmissions were provided for this engine, with the original 3-speed progressive transmissions retained for the 40-bhp chassis. The expanded line of American models now included two Roadsters with 40- and 50-bhp engines, 106-in. and 110-in. wheelbases and prices of \$3250 and \$3750, respectively; the still conventional Tourist with 116-in. wheelbase, similar engine options and prices; and a 50-bhp, 7-passenger Tourist, on a 124-in. wheelbase, which listed for \$4000.

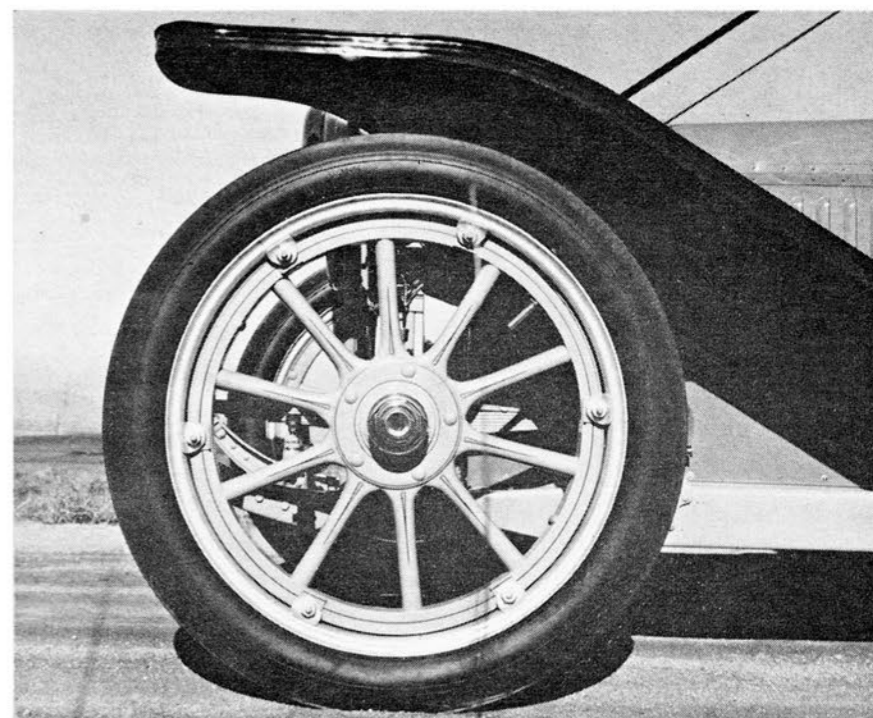
Savannah, Ga., was becoming a center of racing enthusiasm in the South. There, on March 15, 1908, the Savannah Challenge Cup Race was run over a road course. Fred Tone, with riding mechanic J. C. Linn, entered a stripped American Roadster, powered by the big engine. Though the car ran smoothly, it did not show

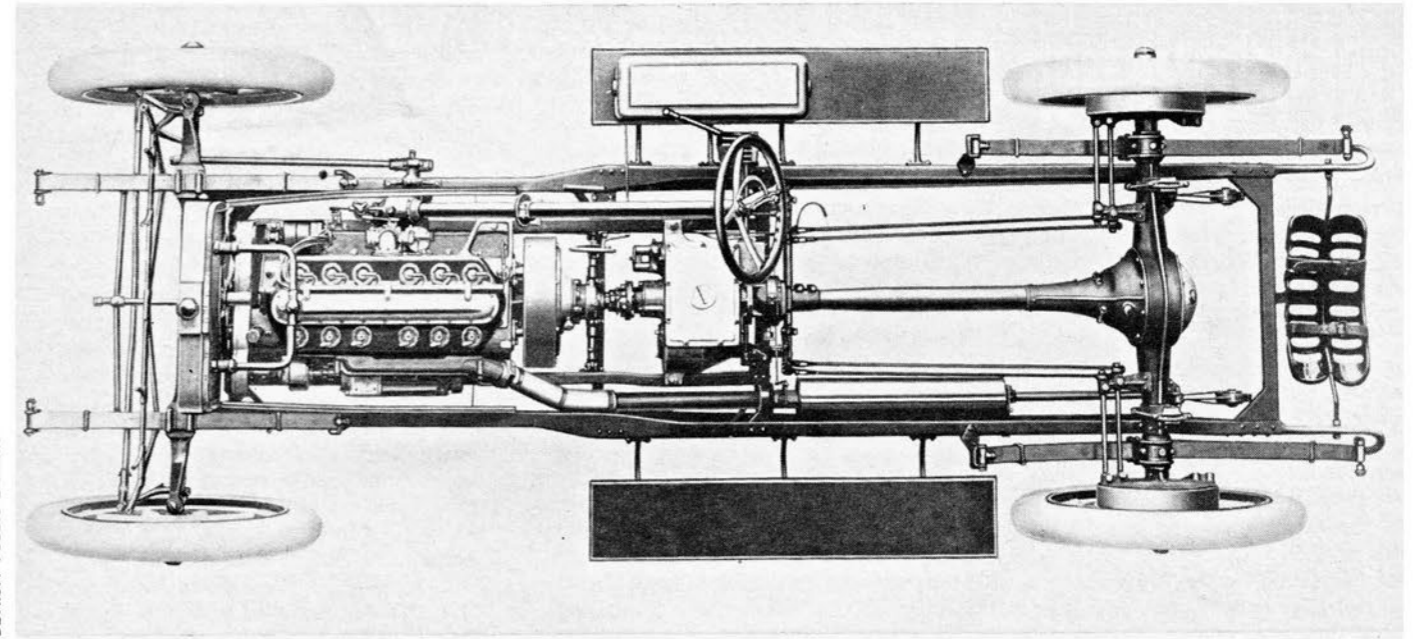
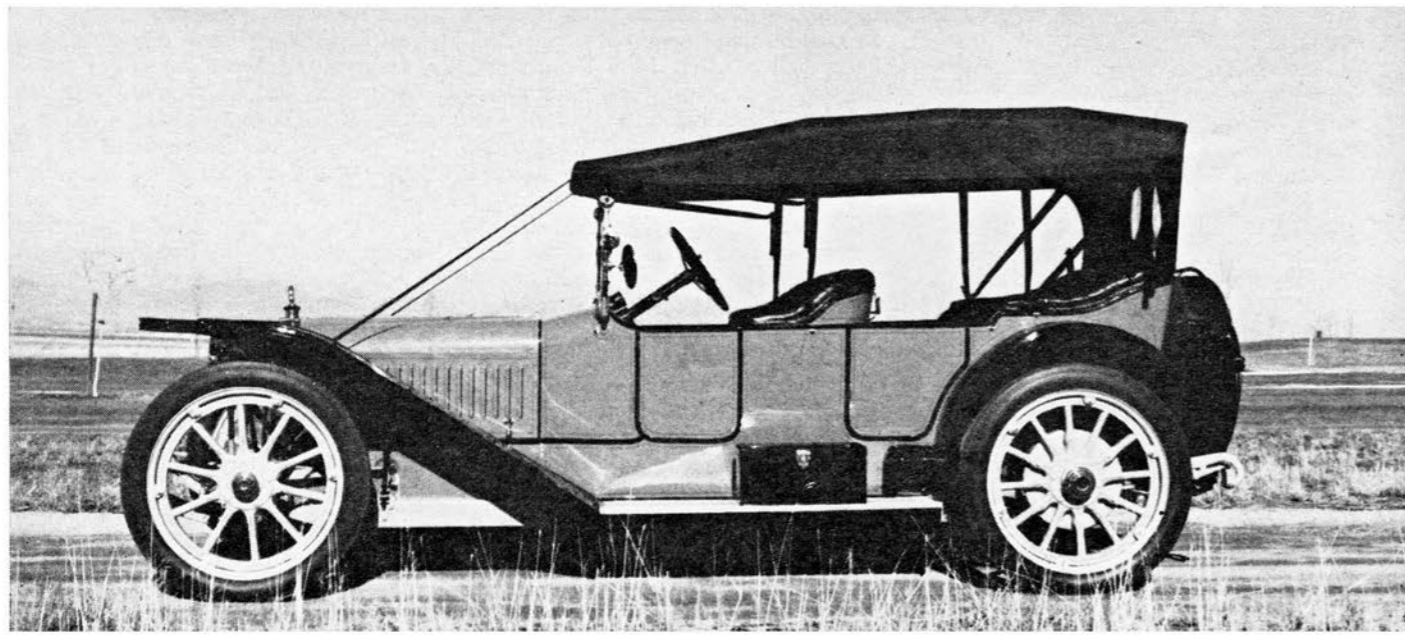
the necessary speed and was the slowest qualifier in a field of eight starters. One car dropped by the wayside. When the leaders took the checkered flag, Fred Tone tailed the field.

A REPLICA OF Fred Tone's race entry, called the Speedster, was cataloged in the 1909 line of American's offerings at \$5000. For the same price a buyer could have the Limousine, a tall, impressive machine on the 124-in. wheelbase, conventional Tourist chassis. This was the first closed body offered by American. The Gadabout and the Wayfarer joined the Tourist on the overslung chassis, providing 4-, 5- and 6-passenger models. The Roadster was continued as before and a new, 4-passenger underslung model on a 124-in. wheelbase chassis, called the Traveler, was added. This was to become the leader of the American line.

According to the firm's advertisements for 1909, the powerplants were standardized with the 50-60-bhp engine, now with an increase in bore to 5.375 in. The company avowed that 60-80 mph was on tap and that production would be held to 200 automobiles for 1909. The American was, in the firm's words, ". . . frankly, a car for those few men of means in each community who will not be deterred (by the first cost) from owning an automobile which will be awarded precedence in any distinguished company in which it may appear—native or foreign."

There were significant changes in the 1910 line. The most noticeable alteration was seen in the shape of the





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radiator shell. It was changed from a simple arched top tank to one with a raised portion in the center. This gave the radiator a much more distinctive shape and caused an accent panel to be carried rearward on the hood, as can be seen in the accompanying photographs of the 1914 model. Another change for the 1910 Americans was the return to two engine options. A bored out version of the 50-bhp engine, now measuring 5.75 in. across a cylinder, also was offered. Some idea of the size of this bore may be ob-

tained by noting that a modern sealed beam headlamp could be lowered through a cylinder without touching the walls! The valve train of this larger engine was revised to incorporate rocker-actuated intake valves directly above the exhaust valves. This engine was rated 60 bhp at 1000 rpm. Important improvements were made in both engines with the addition of a positive lubrication system having a gear-driven oil pump in the sump. The Roadster and Traveler series featured a pressurized fuel system. The Limousine and Tourist used gravity feed.

The proliferation of models was cut back from 1909 with the elimination of the Gadabout and Wayfarer. Instead, the Traveler and Roadster each were given "Special" versions featur-

ing the 60-bhp engine and the latter was actually the Speedster of the previous year. Of this car the company said, "We leave it optional with purchasers whether we equip Roadster Specials with fenders, running boards, exhaust header and muffler, or prepare the car with extra pumps, engine exhaust through the hood, etc., for racing purposes." The Roadster's occasional rumble seat was replaced by a 30-gal. gasoline tank. The Tourist and the Limousine were continued as the only conventionally sprung models.

Whatever their troubles may have been, and there were problems within the company, the management of the American Motor Car Co. could not have been said to be standing still in its marketing efforts for 1911. The firm's

most dramatic move was to introduce closed coupe bodies on the Traveler and Roadster chassis. And in these closed cars, American switched to left-hand drive, locating the gear shift and emergency brake levers in the center of the car for operation by the driver's right hand. The Traveler Coupe was most interesting in configuration for it was a 3-window design with the door in the center. This resulted in the driver being considerably aft of the windshield and having a second window forward of the one opposite his face.

The year 1911 also saw introduction of front doors on the Roadster, Traveler and Tourist. The 122-in. wheelbase used for the Traveler series was eliminated in favor of standardiz-

ing 112 in. for 2-passenger cars and 124 in. for the more capacious models. Detail improvements were made in the clutch, transmission and rear axle. American, long an exponent of the cone clutch, switched from leather to asbestos linings with rubber inserts beneath to cushion the engagement. Spiral bevel gears were used between the lay shaft and the main shaft in the transmission, a practice termed somewhat new by *Motor Age*.

In March, 1911, for reasons unclear at this writing, the American Motor Car Co. was reorganized as the American Motors Co. New officers elected were: President, J. I. Handley; Vice President, D. S. Menasco; Treasurer, J. D. Bright and Secretary, J. E. Kepperly. This new management is-

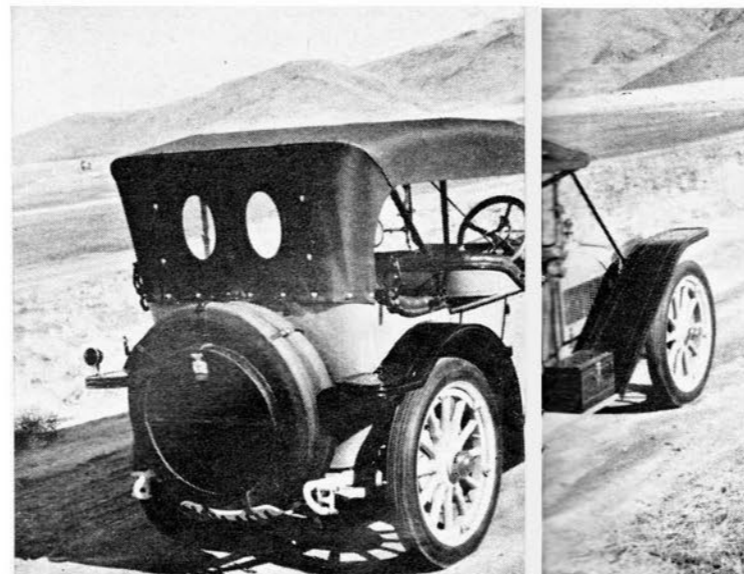
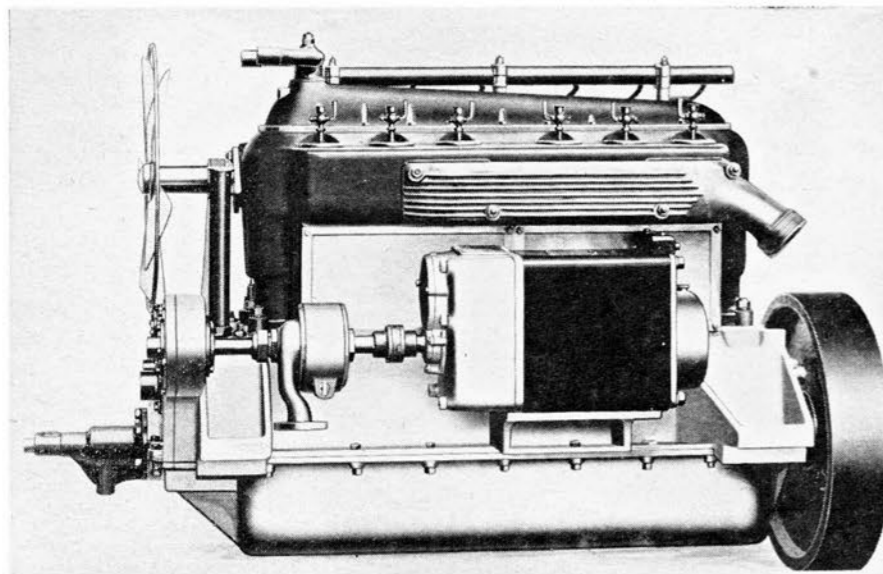
sued a policy statement in its 1912 catalog as follows:

"For seven years we have clung rigidly to the belief that quality is bound to win; and we find it pays. We have built each year a limited number of high-grade, high-class cars and sold them to particular people; the kind who insist that the things they buy and use shall bear the stamp of genuine merit."

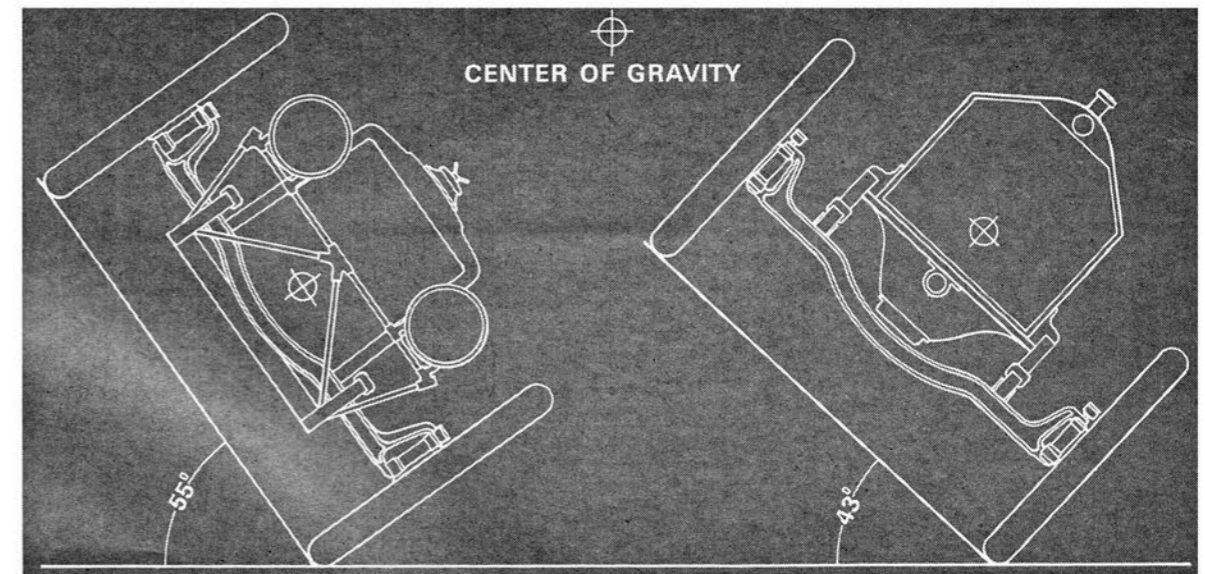
In any case the management was to be proven wrong, for in another year the firm was in serious trouble. It is quite likely that quality was being produced at the expense of excessive manufacturing costs. American had a huge plant where the Traveler models were built, another where the Tourist and Scout models were assembled, and

HOPES FOR company revitalization were based partly on this "Light Six" engine, introduced with the Type 642 Roadster and Type 644 Touring of 1913.

THIS CLASSIC has been uncompromisingly restored for the Harrah Collection.



EXTOLLED AS the chief safety feature of the Underslung was its low center of gravity. The company's brochure advertised resistance to overturning up to 55° of tilt as compared with only 43° for the conventional competitor.



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a third for sheet metal and body work.

From these factories in 1912 came five models. The Travelers, Types 54 and 56; the Tourist, Type 34; the Roadster, Type 32 and a new model, the Scout, Type 22. For the first year all chassis were of the underslung design and the management, recognizing the popularity of the description, incorporated it into the cars' name, American Underslung. Coupe models were not cataloged. Again the lineup of engines was changed, with the 60-bhp model dropped and the 50 bhp, with its 5.375 in. x 5 in. bore and stroke installed in the Travelers only. The Roadster and Tourist, which now shared the same chassis, had new T-head engines, cast as a unit, with bore and stroke of 4.5 in. x 5 in. These were given a factory rating of 40 bhp at 1200 rpm.

The new, and for American, diminutive Scout was a very attractive 2-passenger roadster. It had its own engine, an L-head, cast as a unit of 3.75 in. x 4.5 in. bore and stroke. Its ALAM horsepower rating was 22.4. The Scout did not use the sub-frame mounting for engine and transmission, and the latter was a less expensive 3-speed design. The Scout was intended to "... fill a long felt want. There are men and women in the world who, while to them the cost of a chauffeur's hire is of no concern, want a little car to drive themselves. But they want it *good throughout.*"

ONE CAN SENSE, on reviewing the five years of vacillation between chassis, body and engine offerings, that the new management tried desperately to bring some order out of the confusion. The 1912 line of cars was the most coherent market spread, with the expensive Traveler, less costly Tourist and Roadster and relatively inexpensive Scout.

Improvements for 1913 were highlighted by the adoption of self-starters

and electric lamps. The line of cars continued the same as for 1912, except that the Traveler was updated with a 6-cyl., T-head, unit cast engine of 65 bhp at 1000 rpm. Bore and stroke were 4.5 in. x 6 in. A combination starter/generator was added, though magneto ignition was retained for running. The generator provided starting current to a separate set of spark plugs and supported the lighting system. The Underslung Six, Type 666, as the revamped Traveler 6-passenger touring car was called, was the most improved and best car built by American.

THE TOURIST and Roadster chassis received electric lights and were equipped with Disco gas self-starters. This system operated by piping acetylene from a Prestolite tank to the cylinder head through the priming cups. Electric starters were optional at \$150 extra. Traveler and Tourist Limousines were reintroduced (the larger car apparently retained the Traveler name). The Scout received a larger engine and a coupe body was optional.

In 1913, Frank E. Smith, who had gained the reputation as a successful automotive trouble-shooter, was brought in as vice president in an attempt to save the company. The first move made was to play up a 4-passenger version of the ex-Traveler as a "Little Six" for 1914 with a very early pre-season announcement in April, 1913. Initial response seemed good and the American Motors Co. had high hopes for a revitalized position in the market. The full line for 1914 was announced in mid-September, 1913. It included the light Sixes in Roadster, Type 642 and Touring, Type 644 chassis with 4-in. x 6-in. bore and stroke engines; the Type 646 with 6-passenger body and a 4.5-in. x 5.5-in. engine; the Type 666, a "big" Six with a 6-passenger body and a larger 4.5-in. x 6-in. engine, and the little Scout, updated with electric lights and a compressed air starter, now called the Type 442.

But even Smith's capabilities were not enough to revive the moribund

American Motors Co. and it went into receivership in November, 1913. He was successful in reducing American's liabilities during his tenure as receiver and managed to sell off the physical assets for 20 cents on the dollar.

In the July 23, 1914, issue of *The Automobile* there appeared an advertisement directed to "American Underslung Motor Car Owners." It stated that the company was now reorganized under new management and was prepared to furnish first class service for all repair parts for American Underslung cars.

The advertisement carried the sentence, "New cars built only on special order," and was placed in the name of the American Motors Parts Co., S. Meridian Street and Belt R. Ry., Indianapolis, Ind. It was a last gasp.

CAR LIFE's classic, restored for Harrah's Automobile Collection, Reno, Nev., is a handsome example of the last series American Underslung. It is a beautifully proportioned automobile and appears to be crouched on the road, wheels ready to leap from under its high flying fenders. It abounds in interesting details. It has the fore-runner of the glove box between the front seats. Was this the first "console?"

The cowl lamps are carefully integrated into the base of the folding windshield. The large, wood-rimmed steering wheel contains elegantly sculptured throttle and spark controls. With exception of speedometer and clock, which are mounted to the right-hand side of the cowl, controls, instruments and gauges are found on the finely textured aluminum floorboard. At the front, the headlamp, fender brace and cranking shaft support bars combine to form a rich accent to the well-studied radiator shape.

ANY REMARKS concerning the condition of the Harrah Underslung would be completely superfluous. It has been totally and uncompromisingly restored, as the photographs so strikingly reveal.

The demise of the American Motors Co. was the sad but typical fate of far too many quality manufacturers in the course of automotive history. Personal mobility is a basic drive in human beings and it must be served by mass market transportation. Every luxury car which survives today had its periods of doubtful existence. The high-priced market always has been limited and the responsibility for failure in the marketplace must lie with ineffective management. Only the most astute, determined and flexible could hope to succeed. A debt is owed those who tried and failed, for through their efforts the American automobile enthusiast has gained a rich heritage. ■

TECHNICAL SPECIFICATIONS American Underslung Type 644

Engine..... American, 4 main bearings
Type..... 6 cyl. in line, T-head, cast
 en bloc
Bore and stroke.... 4 in. x 6 in.
Displacement..... 354 cu. in.
Taxable horsepower. 38.4 SAE
Brake horsepower... 60 @ 1000 rpm
Carburetor..... Rayfield updraft
Crankcase capacity... 6 qt.
Fuel capacity..... 24 gal. (incl. 5 gal. reserve)
Transmission..... 4 speeds forward, 1 reverse
Gear ratios..... 1st—3.8, 2nd—2.1, 3rd—
 1.3, 4th—1:1, reverse—
 5.15:1

Axle ratio..... 3.6:1
Frame..... Stamped steel, underslung
Front suspension.... 40 in. semi-elliptic springs
Rear suspension.... 53 in. semi-elliptic springs
Wheelbase..... 132 in.
Tread..... 56 in.
Ground clearance... 11 in.
Tires..... 4.50-38
Curb weight..... 3700 lb.
List price..... \$2750
Warranty..... 6 months, repair at factory
 or replacement parts
 only if done elsewhere