JUNE 1950

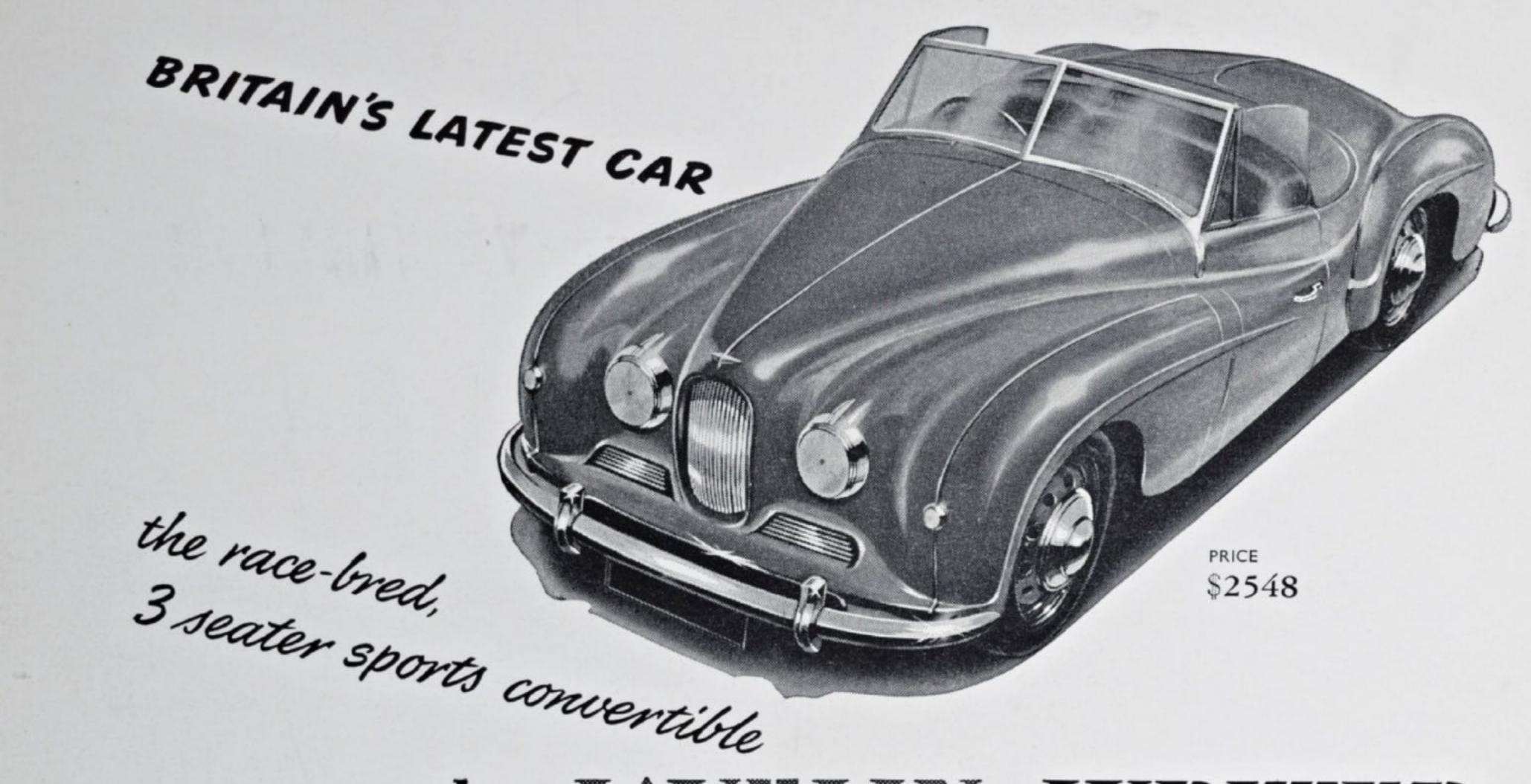
JUNE 1950 25 CENTS

The Magazine for a Motoring World



· What Is the Future Trend in Sports Cars?

page seventeen



the JAVELIN . JUPITER

is one of the world's supreme pleasures, and the Javelin ing with supreme comfort in all weathers and under all conditions.

The Jupiter, a product of the craftsmanship of the famous firm of Jowett Cars Ltd., England, is a development of the world-famous Jowett Javelin which gained 1st and 3rd place in the 1949 Monte Carlo Rally (1½ litre class) and 1st place in the 2 litre touring class (65.5 m.p.h. for over 1,500 miles) in the Belgian 24-hour Grand Prix at Spa, in the same year.

On the basis of the Javelin the Jupiter was evolved. The Javelin's horizontally opposed four cylinder engine has been increased from 50 to 60 B.H.P. and has been

THE THRILL of owning and driving a race-bred car fitted with two special carburettors; a special type rack and pinion steering gives precision steering at high speed; Jupiter has been specially built to give high speed motor- an absolutely rigid tubular steel chassis gives lightness and tremendous strength; the shock absorbers have been strengthened; bigger brakes fitted and a special oil cooling system installed. The Jupiter has an aero-dynamic lightweight aluminium body seating 3 abreast.

> The Jupiter will accelerate to 60 m.p.h. in approximately 15 seconds, reach over 90 m.p.h. and cruise at 80 m.p.h. as a matter of course.

On the walnut dashboard you will, of course, \$\footnote{1}\$ find all the instruments essential to high-speed driving—revolution counter, thermometer and oil pressure gauges. There is ample room for luggage, the upholstery is fine hide and the equipment is de luxe.

SOLE DISTRIBUTOR EAST OF THE MISSISSIPPI THE HOFFMAN MOTOR CAR CO., INC., 487 PARK AVENUE, at 59 ST., NEW YORK, 22. Branches: 1877 Broadway at 62 St., 65E South Water St., Chicago The special Tubular construction of the chassis (shown stripped) gives extreme rigidity.

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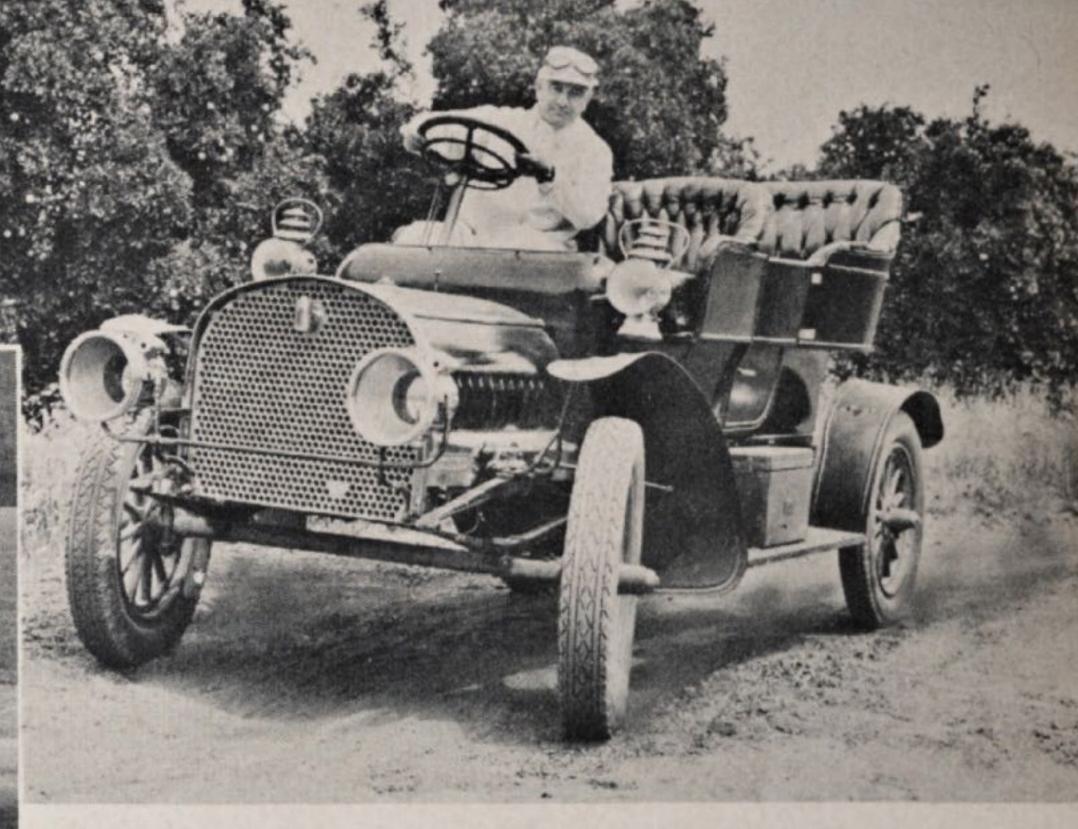


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Cliff Emmich

Four

Camshafts for the most part all look alike; however there is a great deal of difference in their performance qualities. The most important factor is in selecting the proper grind for your particular purpose.

The SEMI grind is a conservative grind intended for coupes and sedans when used for general driving and provides

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Motor Trend

IMPROVED ROAD TESTS

by the Editor

ROM the tone of many letters received from our readers, it is evident that road testing of cars is almost a requirement of such a magazine as MOTOR TREND. Many readers, however, suggest that these road tests should become more and more searching, so as to provide a comparison and an equitable basis to help a prospective car buyer make his decision.

Since first inaugurating this feature in the October 1949 issue of MOTOR TREND, we have tested several cars—the MG Midget, 1950 Studebaker Champion, 1950 Buick Special, 1950 Ford V-8, 1950 Hudson Pacemaker, 1950 Plymouth, 1950 Mercury and the Nash Rambler (in this issue) - and after testing them, we feel that each test has been more successful than the previous one. This has been made possible by several things: the addition of more equipment (a fifth wheel, the use of a chassis dynamometer, a fuel consumption meter), longer and more exhaustive tests, and by the placing of ourselves in the position of the prospective car buyer rather than the magazine publisher.

Two more good reasons are your desires and wants, and the addition to our staff of Don Francisco in the capacity of Technical Editor. Don adds to our magazine his many years of engine building experience, driving know-how, and all-around technical knowledge, not only for the purpose of helping us reach the ultimate in road testing, but also to furnish us with the type of technical articles that you have been requesting.

In our road tests we try to cover many things: the functional appearance, the feel of the car, engine accessibility, maintenance viewpoints, its road horsepower, its acceleration qualities, its top speed, its hill climb ability, steering, cornering, brake check, fuel consumption at various speeds and under different conditions, and any additional points that we think would interest a person in the market for a new car.

It may be that some persons are not concerned with acceleration, or top speed, or fuel consumption, but we feel that what one person is not interested in, another is. But what we would like to know from you is what you want to know about a car before you would buy it-something that you couldn't find out by looking at the car, from reading the manufacturer's specifications, or by asking the car dealer. We have had many good suggestions up to now, most of which have been incorporated-but we would like to have more. We know that anything and everything can be improved. Let us hear from you.

CALENDAR OF EVENTS

DATE	EVENT	PLACE
May 5-Me Road Ra	exican Pan-American ce	Juarez, Mexico
May 11-14 motive S	-Midwest Auto-	Chicago, Illinois
May 27-St Rally	CCA Indianapolis	New York, N. Y., 8 Washington, D.C.
May 29-Jul Trade Fo	ne 9—International	Toronto, Canada
May 30-3 Mile Aut	4th Annual 500- to Race	Indianapolis,
June 4-9-	SAE Summer	French Lick, Indiana
	CCA Bridgehamp- ts Car Road Races	Bridgehampton, N. Y.

Atlantic City,

New Jersey



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COVER: Putting the Allard K-2 sports twoseater through its paces on a California dry lake is Technical Editor Don Francisco. For his analysis of this car see page 14. Photo by Thomas J. Medley.

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Bob Roberts

Meeting

June 26-30-ASTM Annual

In the Winner's Circle

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this world-famous lubricant has provided superior protection in
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Some Famous Mobilgas Firsts

1st, 2nd, 3rd at Indianapolis, May 30, 1948 Mauri Rose, Bill Holland, Duke Nalon

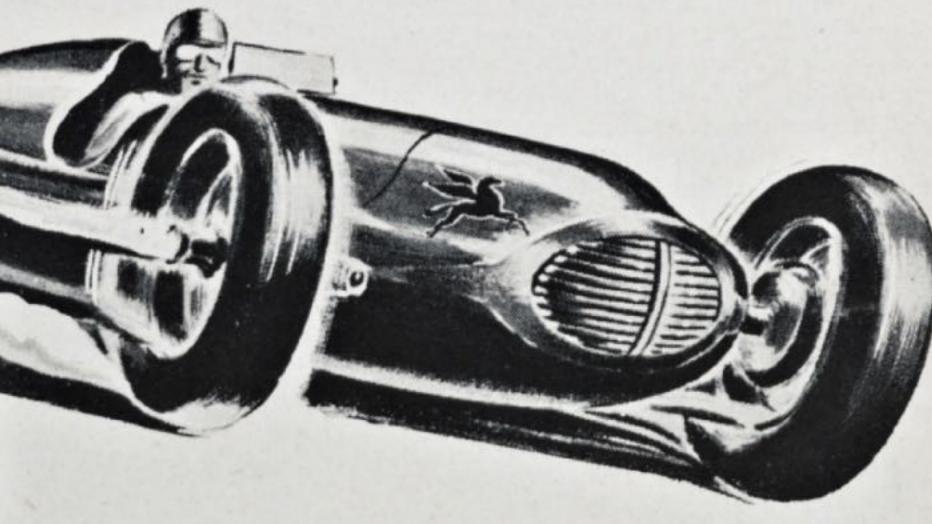
1st at Indianapolis, May 30, 1949 Bill Holland

1st in Bendix Air Classic, September 3, 1949 Joe DeBona

1st, 2nd, 3rd at Pike's Peak, September 5, 1949 Al Rogers, Lou Unser, Charlie Byrant

lst, Harmsworth Trophy International Speedboat Competition, August 1, 1949 Stanley Dollar, Jr.

1st to exceed 400 mph on land, Sept. 16, 1947 John Cobb



General Petroleum Corporation (A Socony-Vacuum Company)



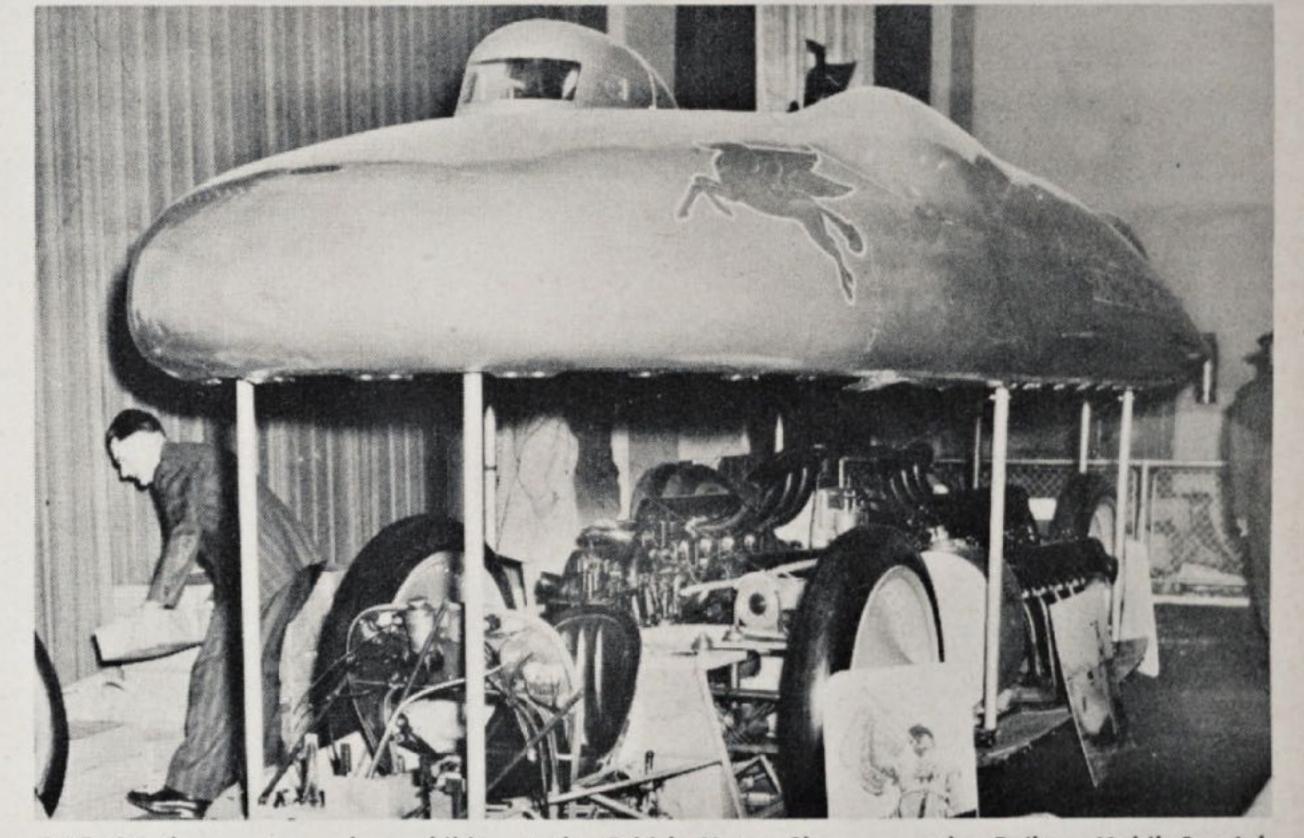
British motor review

Text and Photographs by 74. Wieand Bowman

MORE THAN one hundred different models of British-made cars, representing 23 different British manufacturers, served as a real eye-opener to the thousands of motor-conscious Americans who jammed the automotive show at New York City's Grand Central Palace, April 15 through April 23. Sir William Welsh, British representative for the British Motor Industry, stated that Great Britain's goal is 50,000 cars a year, roughly a tenth of Britain's present production, to be sold to the United States market. That this goal can be reached in 1950 is highly dubious as it would mean quadrupling the British 1949 sales record. But, with the presentation of such large or sleek awe-creators as the Jaguar, Aston Martin, Frazer-Nash, Bentley, Bristol and Rolls Royce, to mention a few, or the lesser-priced sports-styled jobs, such as the Jowett, Allard, Singer, MG and Austin, the British have made a terrific forward step in demonstrating to the American car public a combination of hand-customed luxury products and beautifully styled, high-performance economy cars.

One stumbling block remains. In general, the cars are more than a bit top heavily priced and the bulk of British products appeal still may be with the sports-car conscious or economy-interest groups.

The British representatives, almost to a man, were frank to admit that, in general, they cannot compete with the American automotive industry purely on a transportation basis. But there could be no question in the minds of any serious viewers of the show that fine quality workmanship and an exceptionally high degree of design and engineering skill were represented in practically every car at the exhibit. Striking examples of this are the half axles, internal brakes and outstanding frame and suspension design of the Lagonda, the unquestioned superior performance of the Jaguar, the safety features built into the frame design of the new soft top Jowett Jupiter, or the matchless and

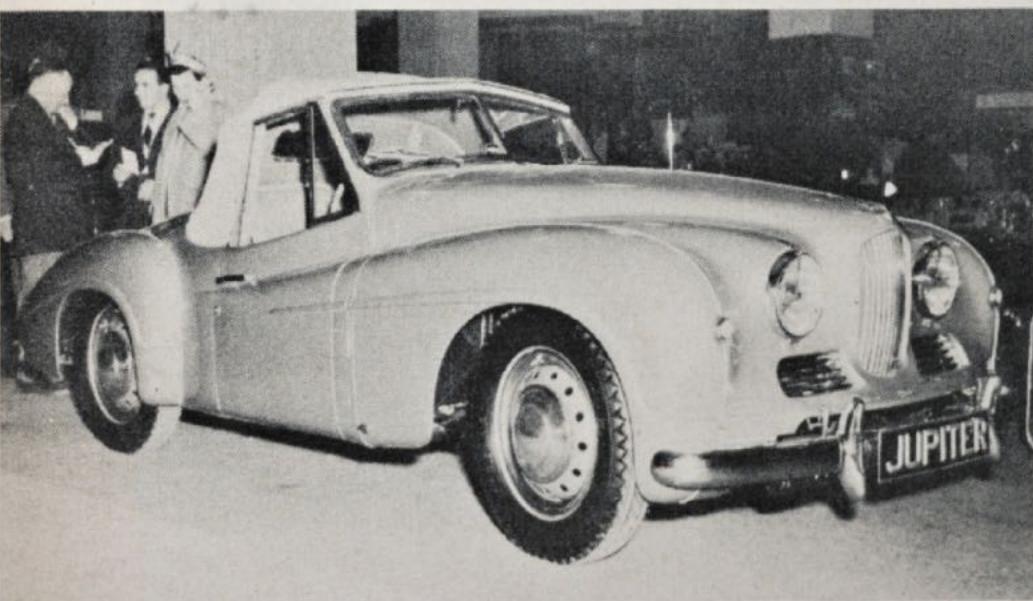


ONE OF the most popular exhibits at the British Motor Show was the Railton Mobil Special, the twin Napier engined, 403.1 mph, 28 foot 8 inch John Cobb race car. It is pictured here with the body in a raised position revealing the two 23,936 cc, 5½ inch bore, 5½ inch stroke engines. Interesting to the spectators was the crab-tracked chassis with the driver's seat in front of the front axle, which is 5 feet 6 inches in track. The rear axle is 3 feet 6 inches in track. All four wheels on the Cobb car are driven. Of interest, too, is the absence of the conventional radiator—cooling is produced by a huge 75-gallon ice-and-water tank located behind the rear axle

unchallenged engineering excellence of the Rolls, Bentley and Daimler. It was interesting to note comments of the spectators and realize that the resistance to the smaller British cars such as the Anglia, Prefect, the A-40 Austin, the Morris Minor, Hillman and Rover was being overcome by the desire for an easy-to-park, economical-to-operate, yet smart-appearing car.

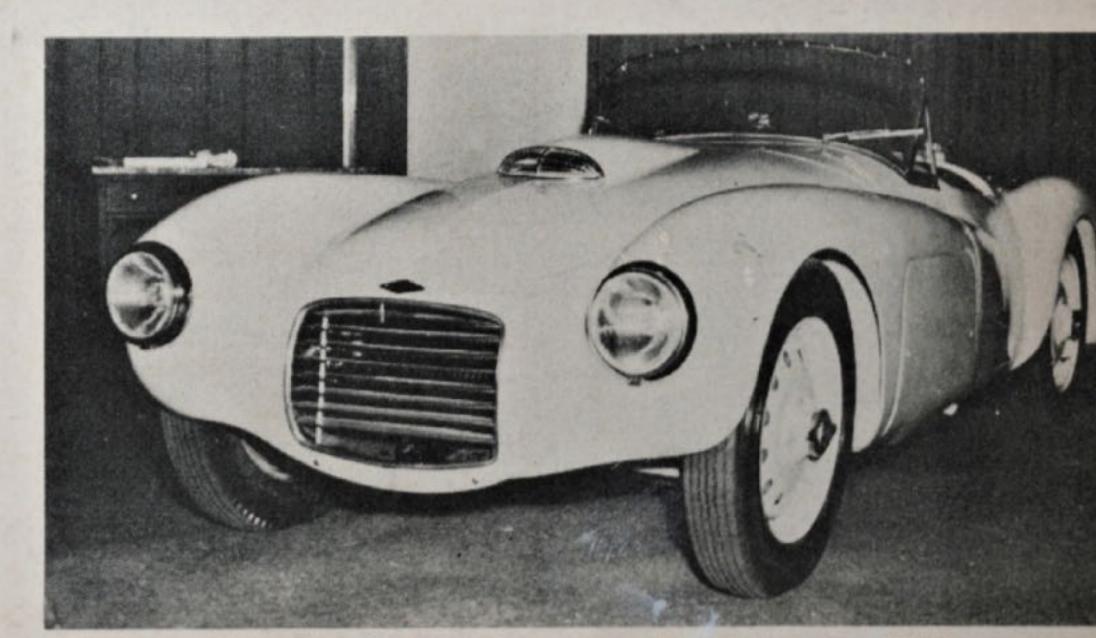
Few of the models exhibited were mere means of transportation—almost to a car,

each incorporated outstanding eye appeal, and soundly engineered and attractive mechanical features. Although the British manufacturers may not reach that 50,000 unit United States sales in 1950, there is no question that British craftsmanship on wheels had hit the American market with a tremendous impact. It is to be hoped, if for no other reason than a return to a sound sterling-dollar basis, that Sir William Welsh's industry's goal will be attained.



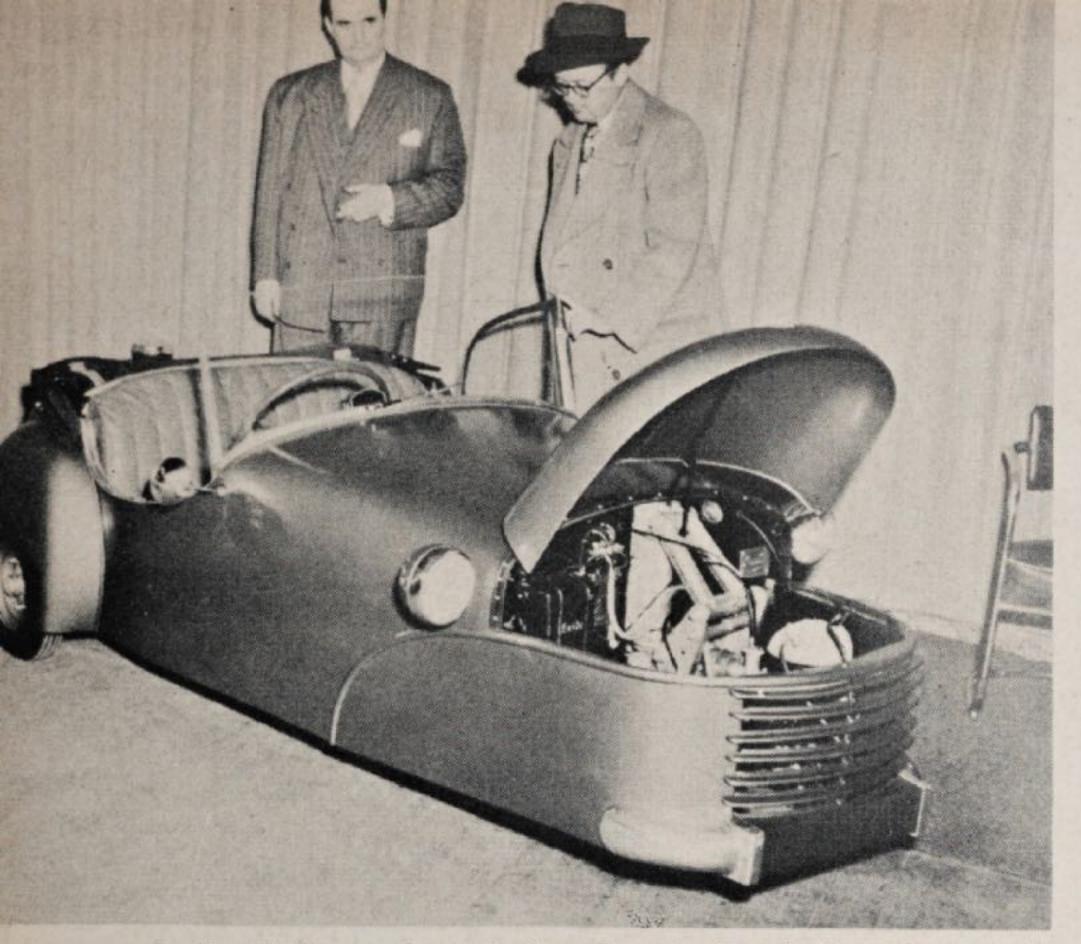
June 1950

A THREE-QUARTER view of the Jupiter showing its rakish lines

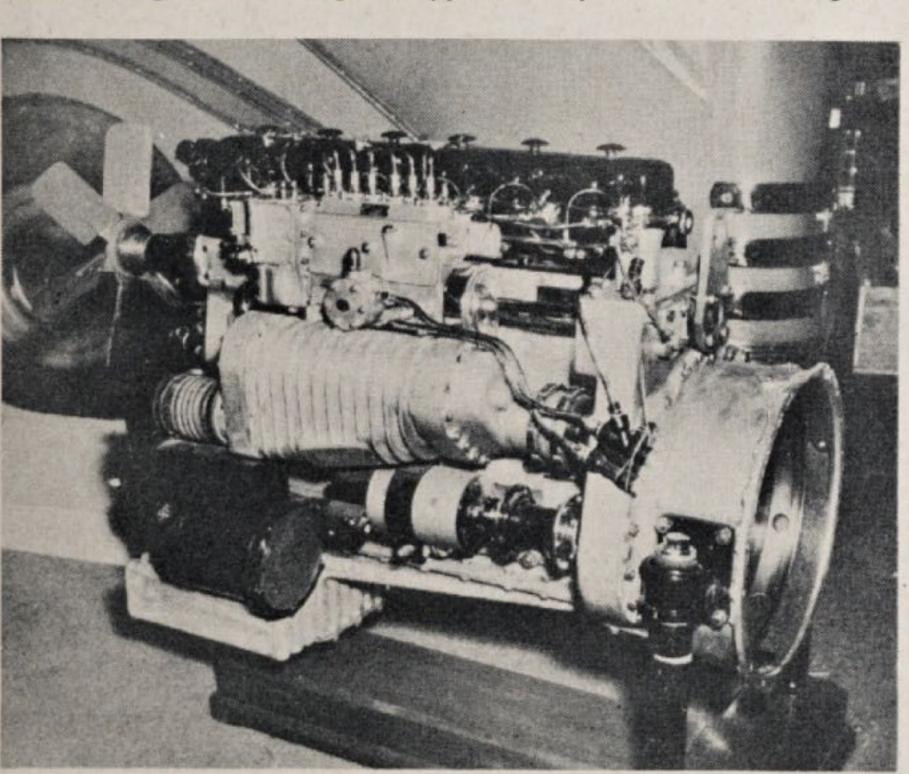


FRONT view of two-litre Frazer-Nash sports model, retailing for \$7650

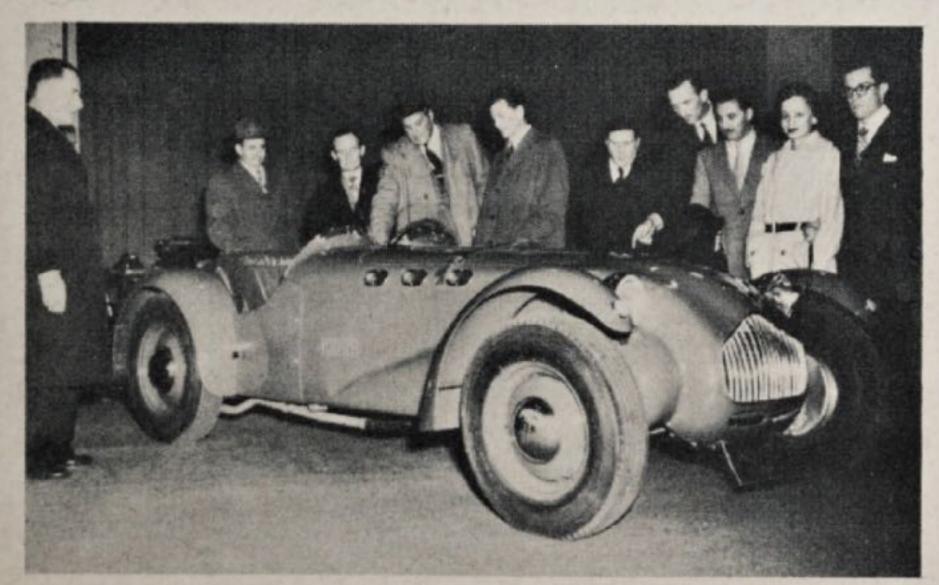
Motor Trend



F. E. STOTE, president, Indian Organization (Indian Motor Cycle, Indian Sales and Indian Acceptance Corporation) is pictured here as he describes the Bond Minicar to Emmett Greene of Motor Magazine. The Minicar, the smallest car in the show, is a three wheeler, one forward and two in the rear, powered by a one-cylinder, two-cycle 197 cc Villiers cycle engine. It is capable of a maximum speed of approximately 45 mph, develops 8 hp and is the acme in economy operation, with gasoline mileage at approximately 120 miles to the gallon

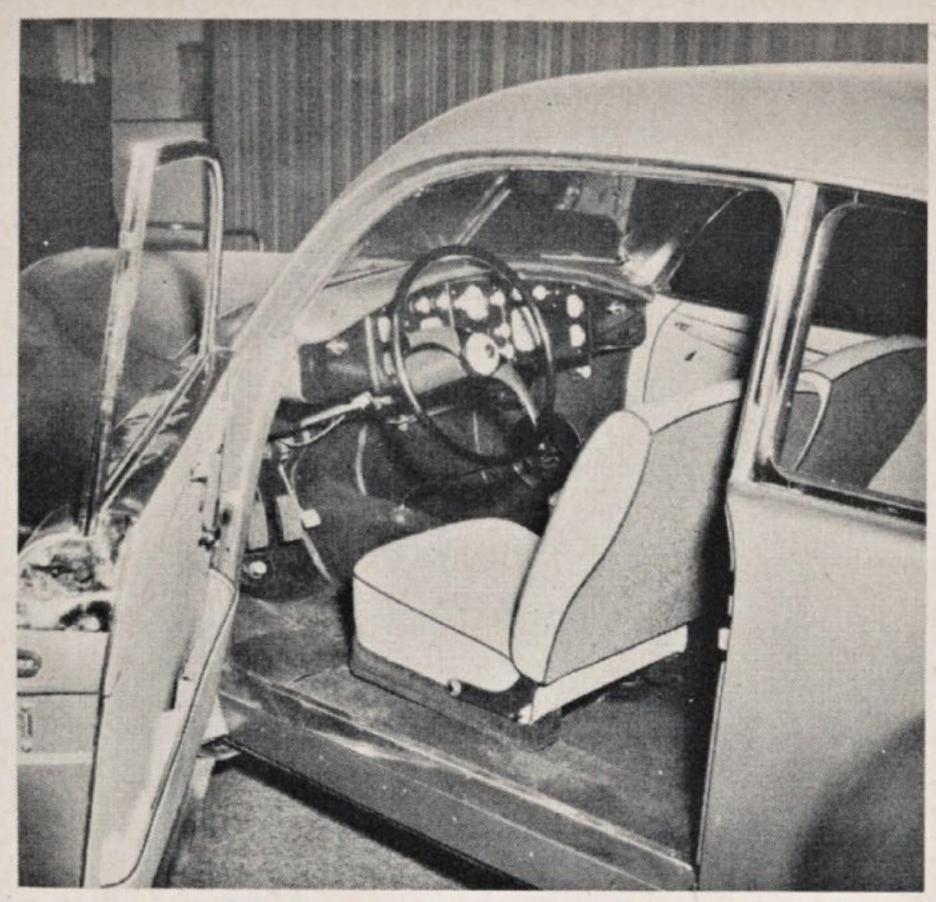


PICTURED here is the Foden two-stroke Diesel, two models of which later this year will be fitted into Mercedes-Benz and Rolls-Royce Sports cars. Foden engineers expect their 4090 cc, six-cylinder diesel to clock better than 120 mph. The engine at 2000 rpm develops 126 bhp

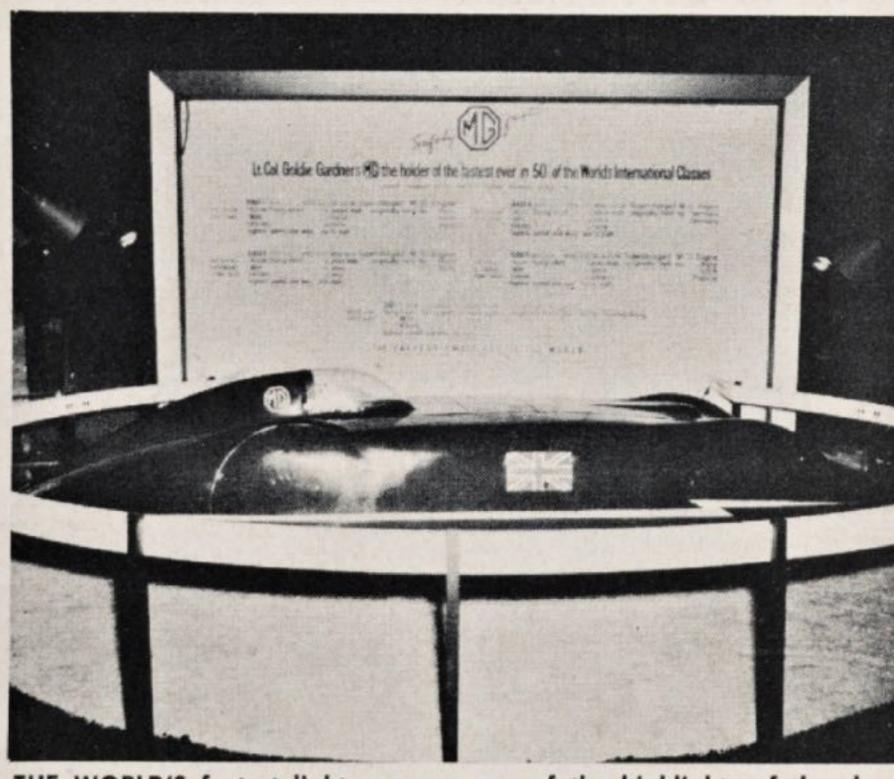


THREE-QUARTER view of Allard J-2, one of the show's standouts

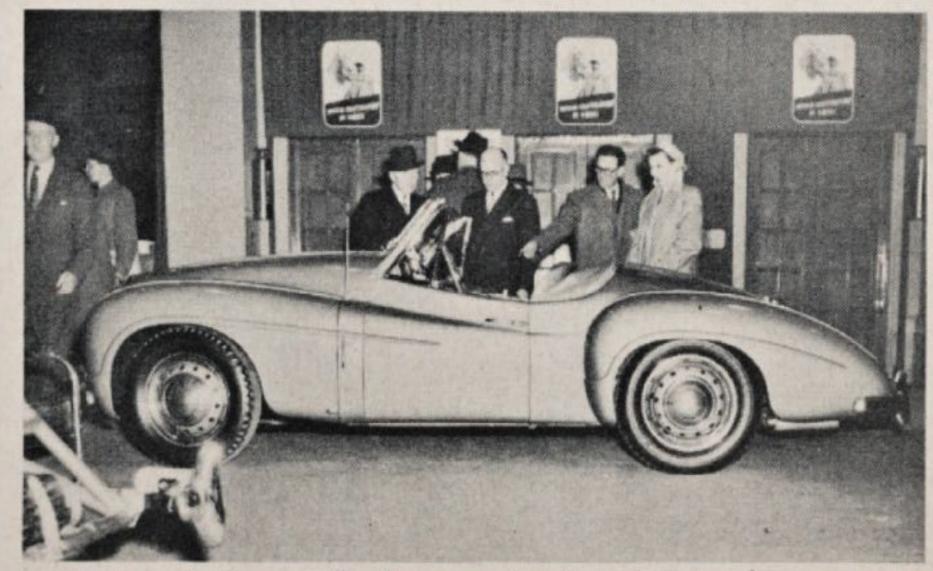
Eight



INTERIOR view of the Bristol 401 two-litre, one of the outstanding luxury cars of the show. The six-cylinder, overhead valve, 1971 cc engined car has already proved itself to be fast as well as beautifully styled. It took first place in the standard car touring class of the Tuscany Cup, a first and a second at the Como Lario Hill climb and a first at Poland's International Rally. The engine develops 85 bhp at 4500 rpm and gives the car a top speed of 92 mph, and high cruising speeds

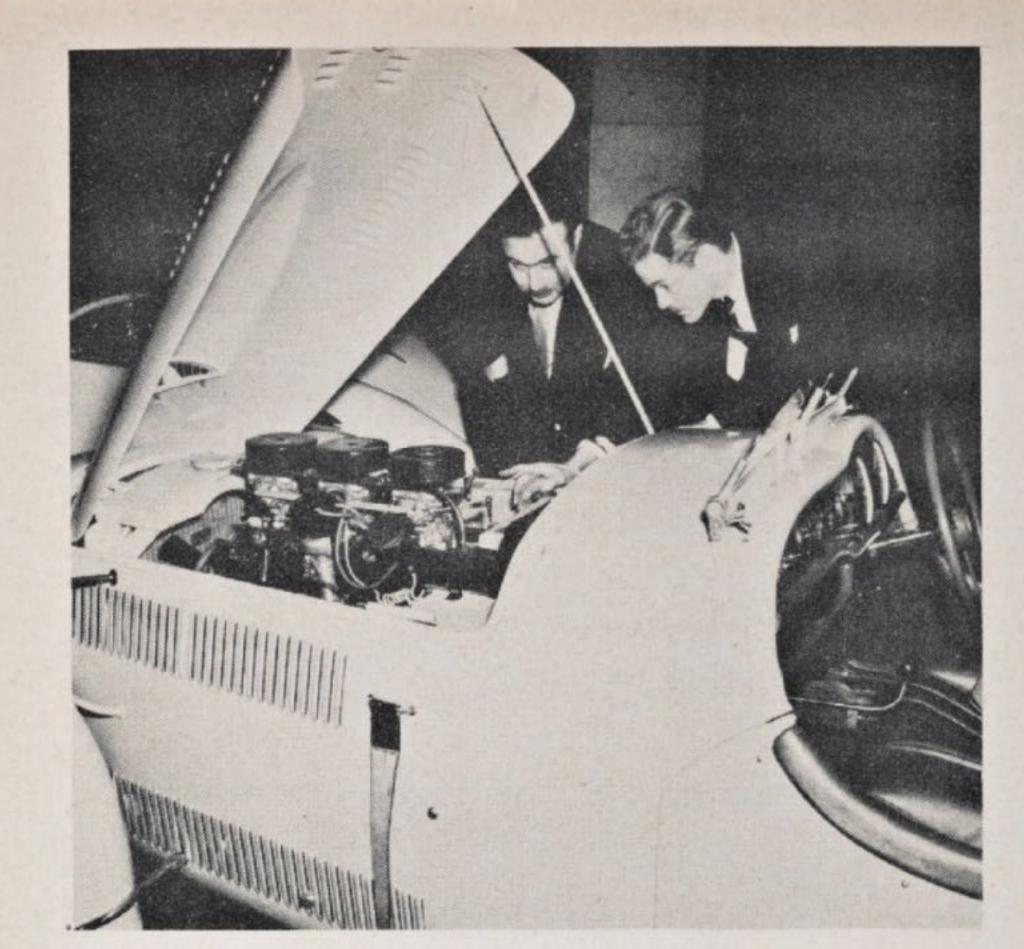


THE WORLD'S fastest light car was one of the highlights of the show, the famous Goldie Gardner MG which, with varying engines, holds 50 per cent of the international class speed records. These include Class I at 154.99 mph, Class H at 159.09, Class G at 203.5 and F at 204.2

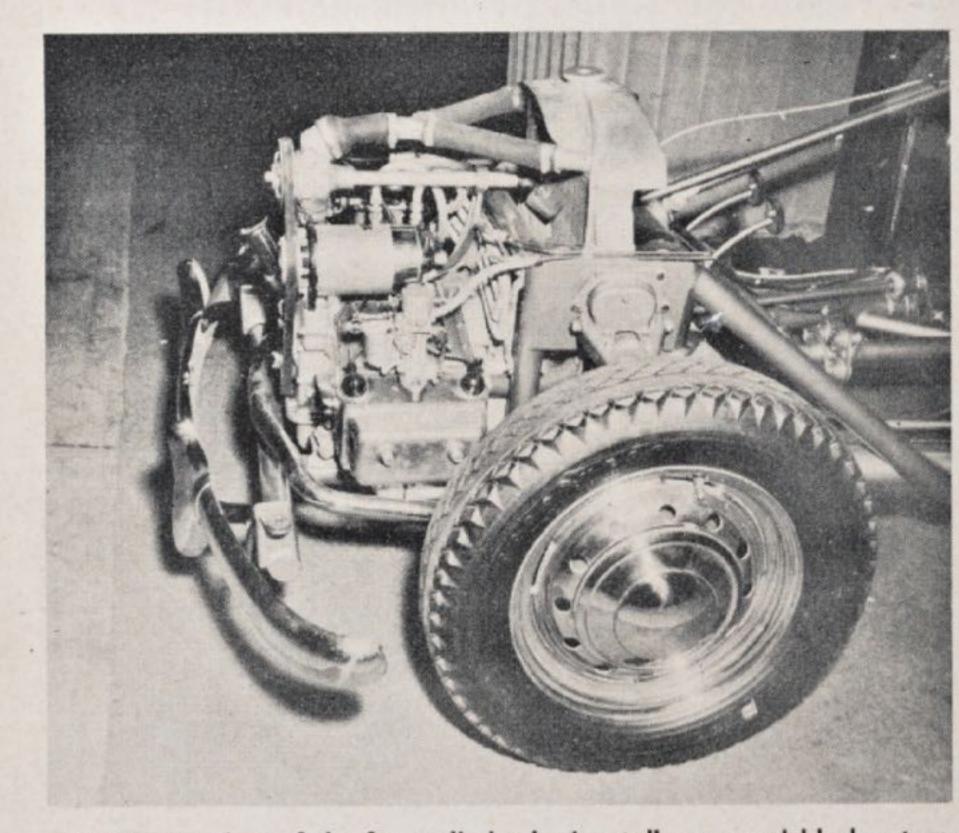


SIDE view of the metallic brown painted Jupiter Javelin sports car

Motor Trend



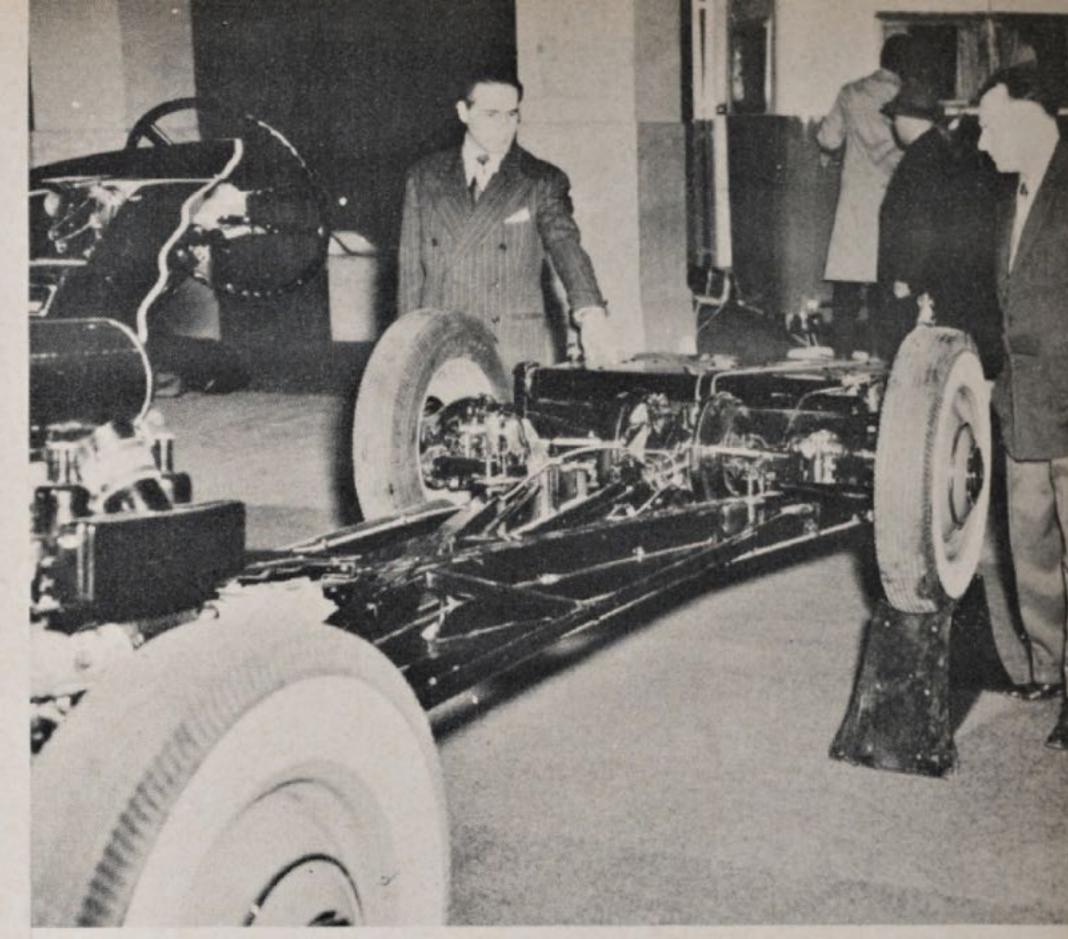
DEMPSTER Singleton (right) U.S. distributor, points out the triple carburetion of the new two-litre Frazer-Nash road racer. This car is an exact replica of the LeMans Frazer-Nash, which was the first English car to finish the 1949 classic and placed third among the sixty-three starters. This car is actually a slightly redesigned version of the B.M.W.



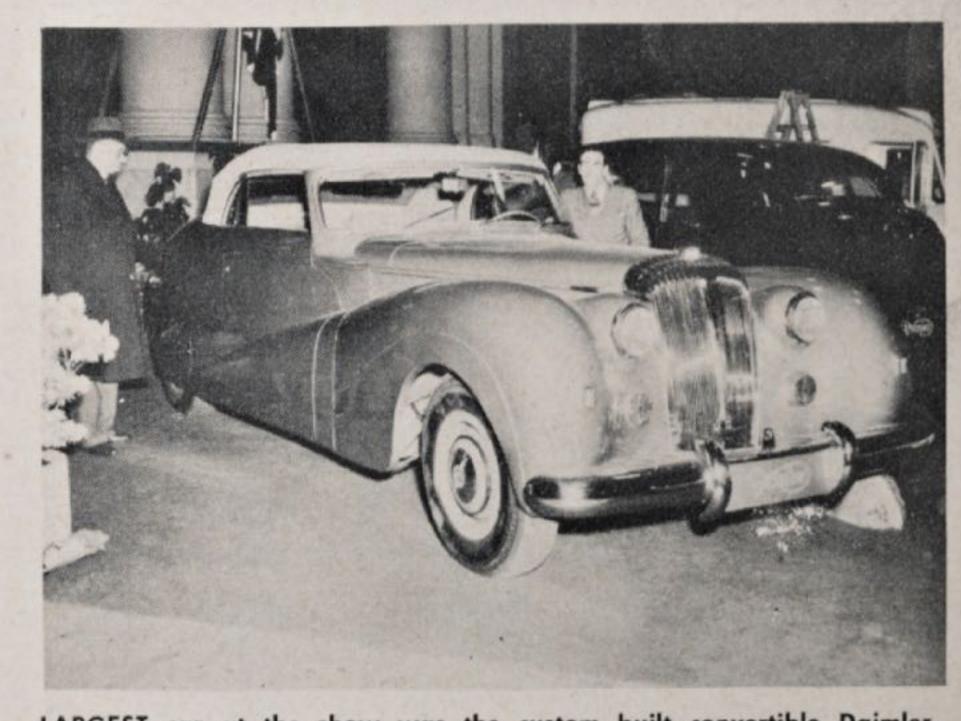
A CLOSE-UP view of the four-cylinder horizontally opposed block set-up of the new Jowett Jupiter Javelin which is expected to retail in the United States for \$2548. This sports car has a manually folding top



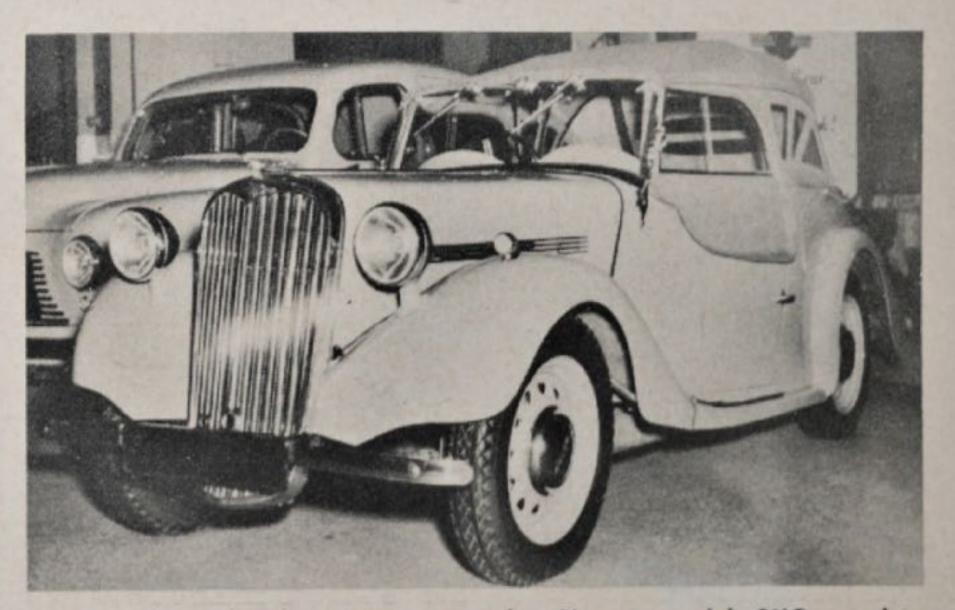
STRIKING eye-catcher was the Hillman Minx ghost car which offered spectators an X-ray eye view of the four door body and chassis



FAMED Bugatti driver, Harry Grey, points out the interesting chassis construction of the Lagonda 2½-litre to Doc Edwards, nationally known speed boat racer. Full independent suspension is featured with frame mounted in rubber at three points on the rear axle and one on torque tube assembly. Note flexible half shafted drive and the internally located hydraulic brakes. The entire chassis is automatically lubricated from a reservoir located near the radiator. The engine of the Lagonda develops 105 hp at 5000 rpm. The inboard located brakes give added roadability and traction by cutting down the amount of unsprung weight

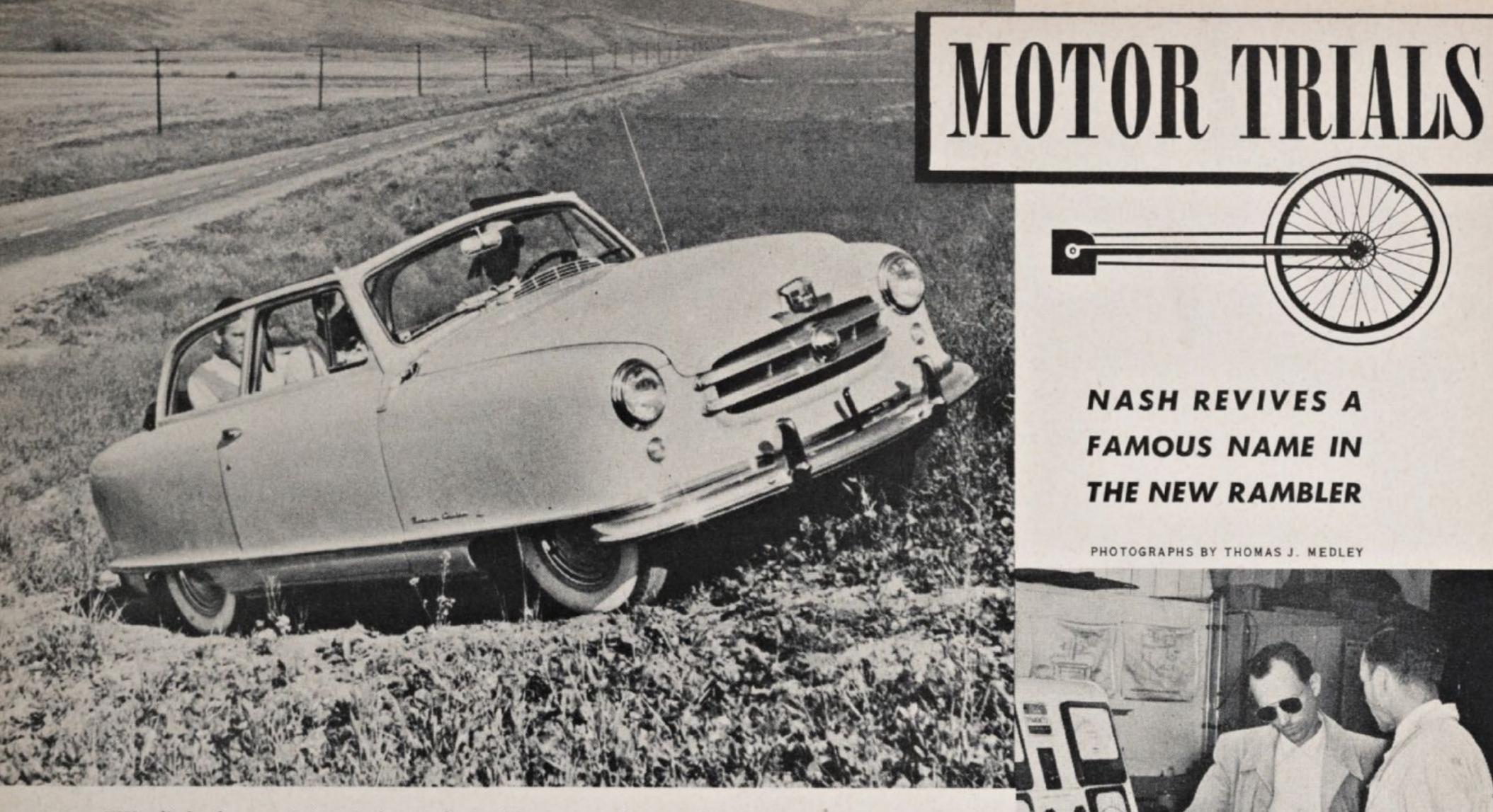


LARGEST car at the show was the custom built convertible Daimler, body styled by O. F. Rivers and built by Hooper and Co. Coach Builders, Ltd. The paint job is a dark green; car is beautifully appointed



IN THE lower-bracket range was the Singer, model 9HO roadster (Continued on page thirty-one)

June 1950 Nine



HILL climb characteristics of the Nash Rambler are evident in this test up a steep dirt road

by Walter A. Woron, Editor

TASH'S newest venture in the automotive field should find a definite market: the persons who are looking for a reasonable convertible; those who want an economy car with good performance; and those who just prefer a smaller sized car or second car for getting around in traffic. Although the Rambler, a revival of the famous Rambler of 1902, is a small car in appearance, it definitely is not a small car in performance and comfort.

Several days in advance of the road test, we arranged to pick up the car from Peter de Paolo Nash in Glendale. In the meanwhile, we conditioned our thinking to that of a prospective buyer in search of a car of this type. We studied the specifications of the Rambler and laid our plans for the

The Rambler we used for the road test was a cream five-passenger convertible, the first model in this new Nash series. (Other models to follow later this year include a station wagon, hardtop sedan, and coupe.) With a wheelbase of only 100 inches, it still maintains room for five passengers. The foremost feature of this new landau-type model is the convertible top. This electrically operated top is raised and lowered by means of steel cables that slide in tracks along the side rails that frame the top of the side windows. With the top down, the window frames are still in position, providing the safety of a steel-top sedan.

Anxious to get the car on the road when we arrived at Peter de Paolo's, at 622 So. Brand Blvd., we nevertheless took time to study the car from the viewpoint of appearance, the feel behind the steering wheel, engine accessibility, and entry into the trunk compartment. We looked under the car, checked the suspension, the Airflyte (unittype) construction, and the wheels.

Technical Editor Don Francisco and I agreed that the car was definitely functional. For example, although the front wheels are enclosed, a bumper jack can be used for changing the tires with no trouble. The

Ten

grille appears to be of sufficient opening for adequate cooling, and a chrome bumper strip all around protects the fender, door and body panels from damage in parking lots. (This full fender type of construction, as with most cars, costs more to repair, so

With the hood lifted, the engine becomes readily accessible. All components are within easy reach and the only apparent diffi culty in working on the engine might be in the tappet adjustment. No dust pans are used, making it simple to get at the lower engine components, although their use might help to eliminate road noises.

of the combination key and spring-releasetype handle, it displays a somewhat small compartment, which has been purposely limited to provide more passenger space. The compartment, however, is sufficient for small luggage and groceries, and when the top is up, storage space is provided in the area behind the rear seat.

and the odometer reading was recorded, we headed out into the city's traffic. The ease with which the Rambler accelerated, handled and braked was very gratifying. It is easy to reach all of the controls, although the gearshift coming out of an extension of the dash appears strange at first because of its posi-

as it is on most cars. The amount of legroom, both front and back is good, with none wasted. Headroom is ample in both seats. Although the interior is made to seat long trips it is more comfortable to just have two persons sitting in front. The front seat is wide, however (58 inches), and the rear seat is 53 inches wide.

The steering ratio of the Rambler is tageous, for it will definitely be called upon

that this bumper strip is very advisable.)

When the trunk lid is opened, by means

After the fuel and oil levels were checked

Vision to front, sides and rear is as good three persons in front and two in back, on

about average, but because of the fact that the car hugs the road good at high speeds, a slightly quicker ratio would be advan-



NASH REVIVES A

FAMOUS NAME IN

THE NEW RAMBLER

PHOTOGRAPHS BY THOMAS J. MEDLEY

ED CLINE, of Clayton Manufacturing Company, discusses the readings shown on the vehicle analyzer after dynamometer check with the Editor

for fast driving. A short turning radius (18 feet, 7 inches) provides for easy parking. Sidesway and body roll are kept to a

minimum through the suspension system and proper distribution of weight. Long coil springs are used at the front, located at the heavy steering knuckles to take direct vertical loads. Semi-elliptic springs are at the rear, coupled with the Hotchkiss drive to transfer driving and braking loads to the body. Damping action is by four direct-acting tubular shock absorbers.

Stopping at the Clayton Manufacturing Company in El Monte, we drove the Rambler on the chassis dynamometer rolls to correct the error in the speedometer and to find the road horsepower. This figure is the net delivered hp at the rear wheels of a car and is a true measurement of its performance. Road hp takes into consideration normal losses through the transmission, differential, and the rolling resistance of the tires to the road. It is, therefore, lower than the advertised horsepower rating of the engine, which is measured at the flywheel and is the maximum power an engine, in perfect condition, will develop at maximum

Through the use of the chassis dynamometer, different load conditions were applied to the engine. The basic unit, or point at which most cars are checked, is at 2000 rpm, full throttle. The observed road hp for the Rambler at this condition was 39.5,

Motor Trend

with the car climbing a simulated hill at 40 mph. At 1200 rpm, observed road hp was 24.5, with a speed of 24 mph. These two rpm's are the best basis for comparison, for it is at these engine speeds that the car is usually operating. Maximum road hp was 49, with a car speed of 58 mph, and a tachometer reading of 2900 rpm.

Various fuel consumption checks of the car, with the use of Mobilgas Special, were made under different conditions and speeds -through traffic (from light to heavy), and at speeds of 30, 45 and 60 mph. Fuel consumption in traffic ranged from 18.15 mpg to 25.18 mpg, with the average through all types of traffic being 22.22 mpg. Complete figures are shown in the "Table of Performance."

Along open stretches of highway, we let the Rambler have a free rein. Here, and in the fuel consumption checks, this car certainly shows its mettle. With no effort whatsoever, it climbs to 60 mph and on up to its top speed. Handling characteristics at this speed are good, riding qualities are

TABLE OF PERFORMANCE

DYNAMOMETER TEST

2000	rpm-24 rpm-40 rpm-58	mph mph	(maximum		24.5 road 39.5 road 49.0 road	hp	
		ACC	ELERATION	TRIALS			
-							

Standing Start, 1/4-Mile 0-30 mph through gears (first only)	:21.53 :05.23
0-60 mph through gears 10-60 mph in high	:19.38
30-60 mph in high	:14.43

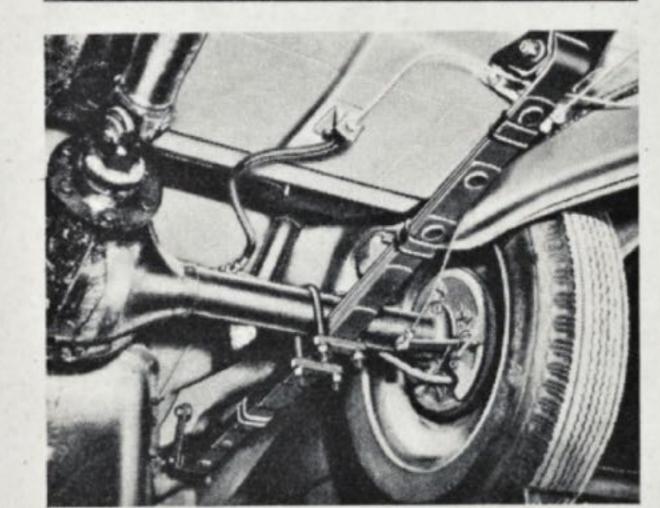
83.47 mph

21.95 mpg average

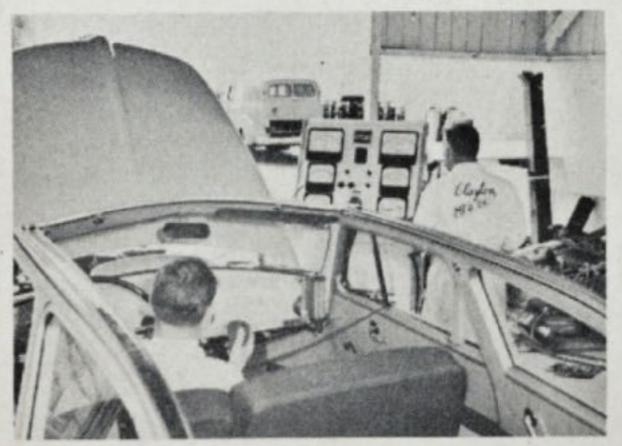
TOP SPEED Average of four runs

BRAKE CHECK Distance required for stopping at 30 mph, 31'10" Distance required for stopping at 60 mph, 213' 7"

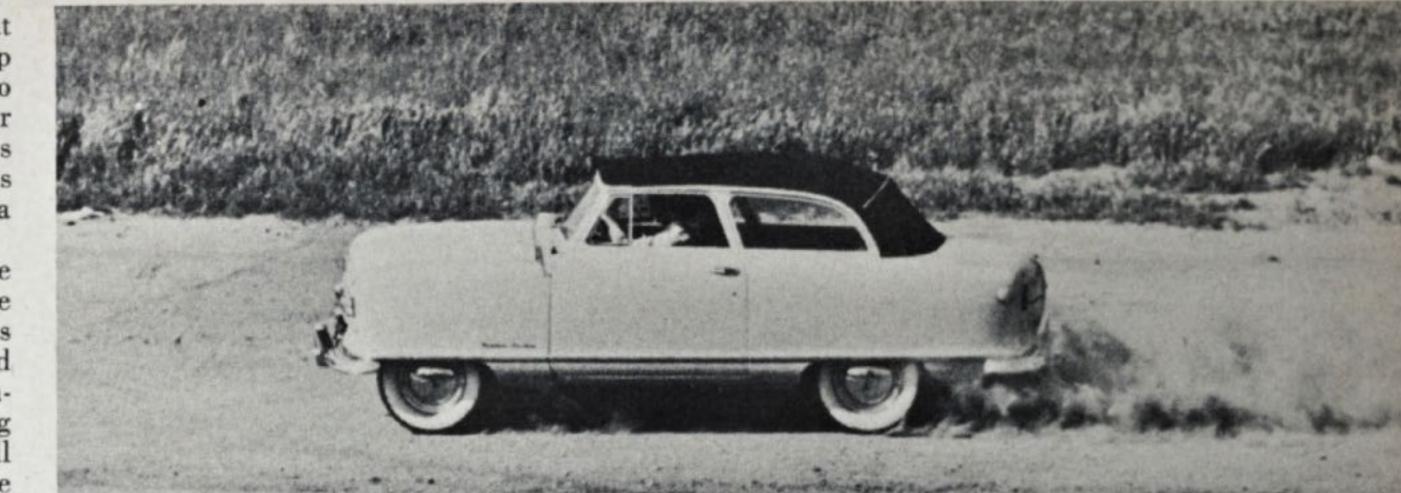
FUEL CONSUMPTION light to heavy traffic 18.15 and 25.18 mpg 22.22 mpg average Through light to heavy traffic At a steady 30 mph 26.41 mpg average At a steady 45 mph At a steady 60 mph 25.20 mpg average



AT THE front of the leaf-type, semi-elliptic rear springs on the Nash Rambler, oversize rubber bushings are used to prevent transmission of road noises to the body. Hotchkiss drive used



ON THE Clayton Dynamometer, the speedometer is checked and the road horsepower figure is found. See copy for further explanation



THE Nash Rambler has good acceleration qualities, as can be seen in this test made on dirt

unusual for such a short-wheelbase car, and road and wind noises are at a minimum.

During the acceleration and top speed runs, no difficulty with overheating or brake fade was noticed. Shifting of the car was done with no effort, although in second gear, your knuckles come quite close to the dash. All runs were made with the top up and windows closed.

Brake checks followed the above runs and were quite surprising. The brake has a soft pedal, but is firm, providing a quick, safe stop. There was no evidence of brake fade at any time during the test.

Through Cajon Pass, on a seven per cent test grade, we tried the car's climb ability. Although we had to slow down several times for cars and trucks ahead of us on the highway, we were able to maintain a speed of 59 mph in third gear. An interesting point about this test is that a fuel consumption check showed that with this full throttle-load condition, the Rambler averaged 19.9 mpg.

The Nash Rambler is a comfortable carthe more you drive it, the more you like it. And probably, outside of its good performance, one of its chief selling points will be the fact that it is the lowest-priced American five-passenger convertible available on the market today. Priced below today's convertibles, this car includes in its standard equipment such items as an air heater, radio, directional signals, clock, foam rubber cushions and other extras. Overdrive is optional and the one extra item. The two overdrive gear ratios available give 3.06:1 or 2.87:1.

GENERAL SPECIFICATIONS

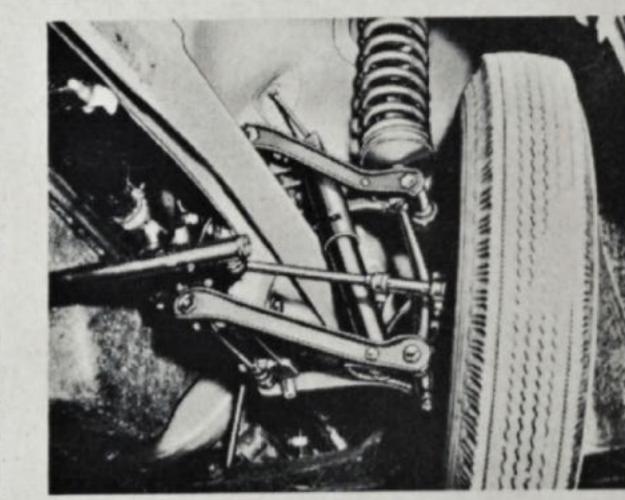
ENGINE

Туре	L' head
Bore and Stroke	31/8×33/4
Stroke/Bore Ratio	1.2:1
Cubic Inch Displacement	173
Maximum Bhp	82
Bhp/Cu. In.	.47
Pounds/Bhp	30.5
Compression Ratio	7.25:1
DIMENSIONS	

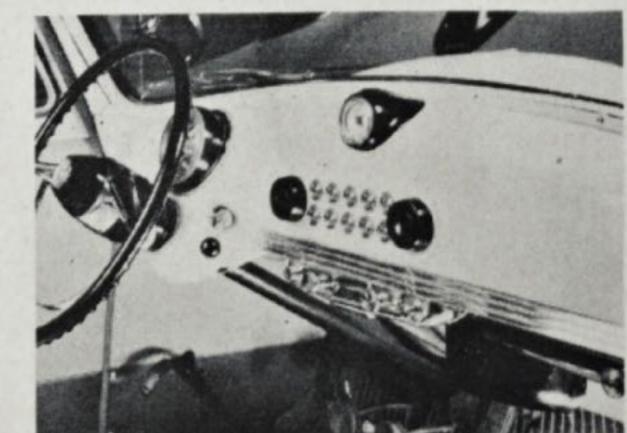
Wheelbase Front-531/2 ins., Rear-52 ins. Overall Width 731/2 ins. Overall Height 593/4 ins. 176 ins. Overall Length 73/4 ins. Road Clearance, empty 18 ft. 7 ins. **Turning Radius**



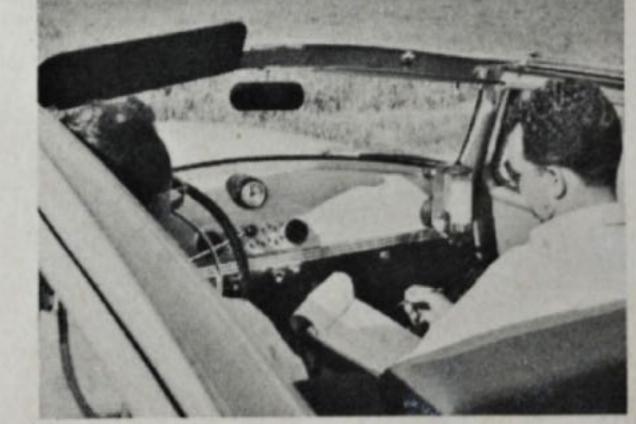
CONVERTIBLE top is guided into place at front by two "plate hooks" engaging pins in the rails. Clamps are provided at each side to hold the leading edge to the windshield header



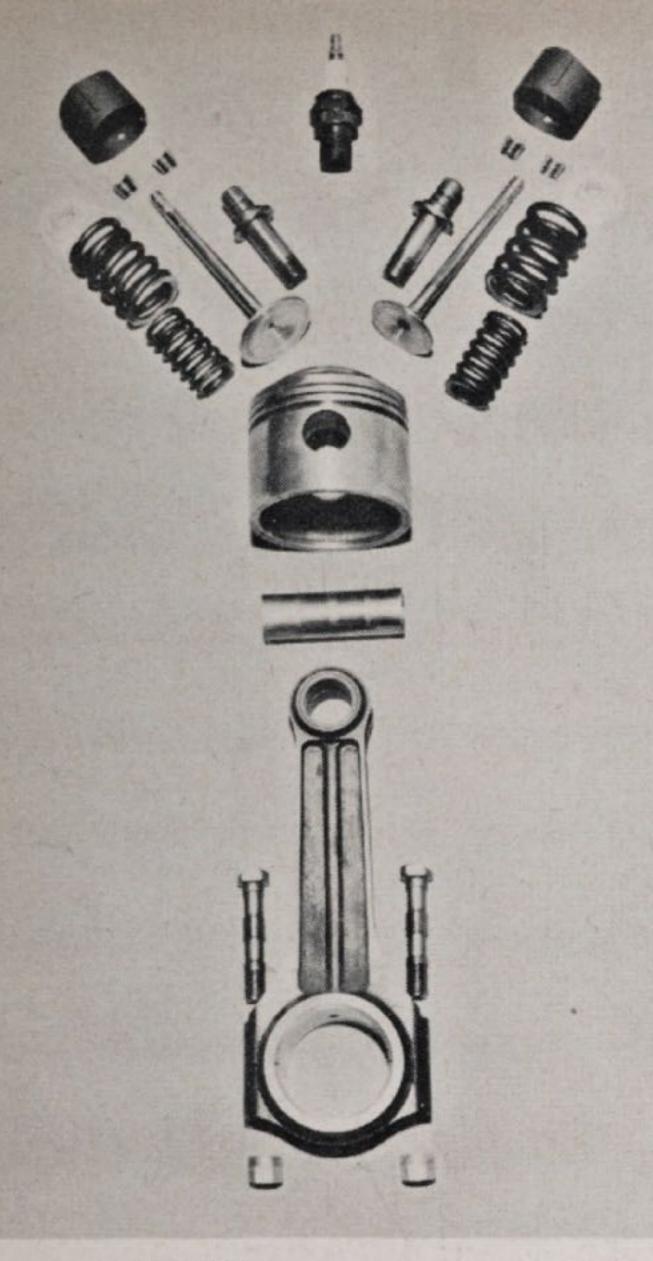
UNDERSIDE of the Nash Rambler at front shows how the new spring suspension eliminates the usual heavy front crossmember. Wheels are suspended by control arms directly to the body

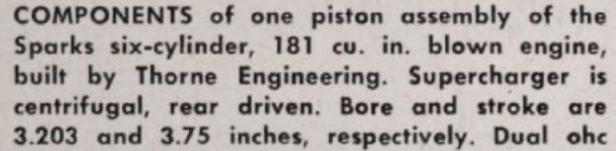


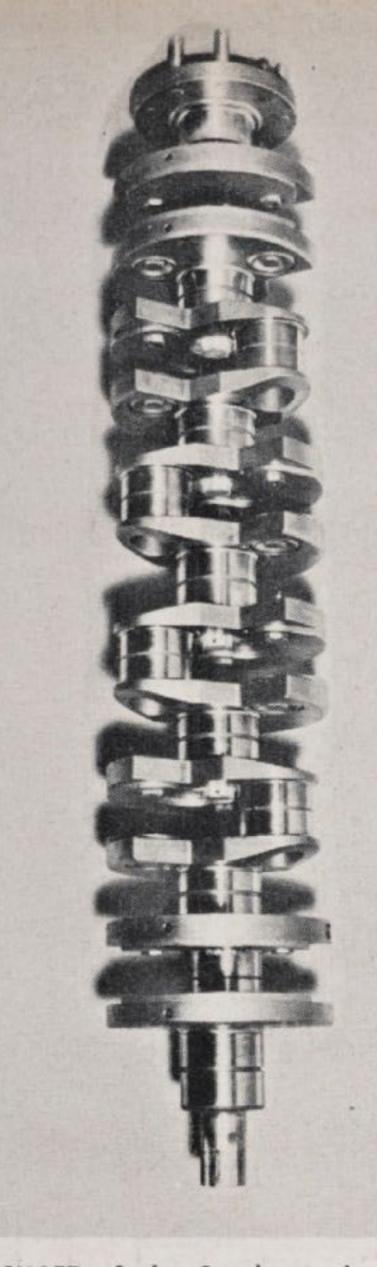
DRIVING instruments are located in compact cluster in front of driver on section that conceals steering column and houses gearshift



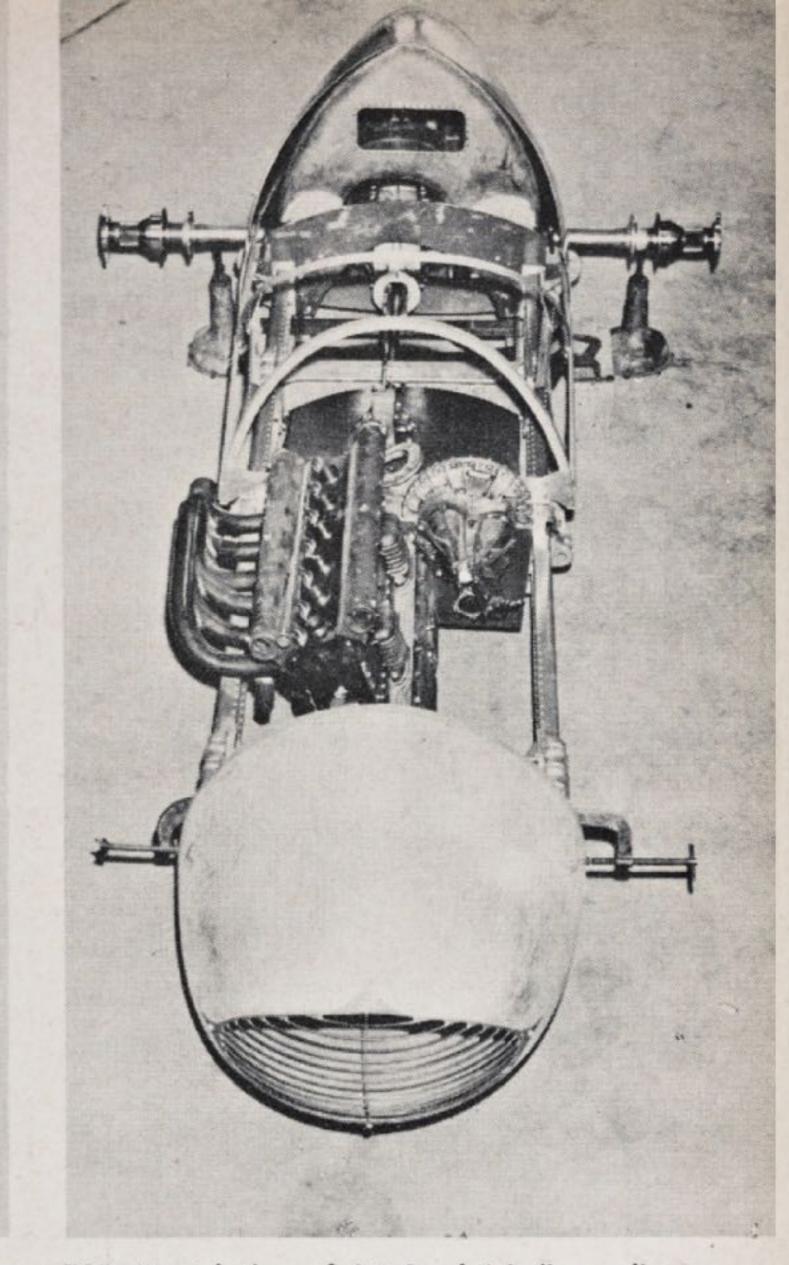
TECHNICAL Editor records mileage reading after one of the fuel consumption runs. Note fuel foaming up as it fills consumption meter







CRANKSHAFT of the Sparks engine was the first counter-weighted racing crankshaft used in this country. The counterweights for this crank are bronze pieces bolted into position. Imagine the tedious balancing that is necessary



TOP-Frontal view of Art Sparks' Indianapolis car shows the unusual layout of the Thorne engine and blower. The engine is canted 16 degrees to the right so that the blower can clear the channel frame. Body and frame, built by Diedt-Schroeder, Inc., are unique in that they are made of aluminum and magnesium. The longitudinal frame members consist of .091-inch 61ST nested inside .144-inch 24ST, riveted in position. All load is localized through the sturdy cast magnesium crossmembers. Front wheels are independently, torsionally suspended, with radius rods tying into rear engine mounts

PREVIEW of "THE 500"

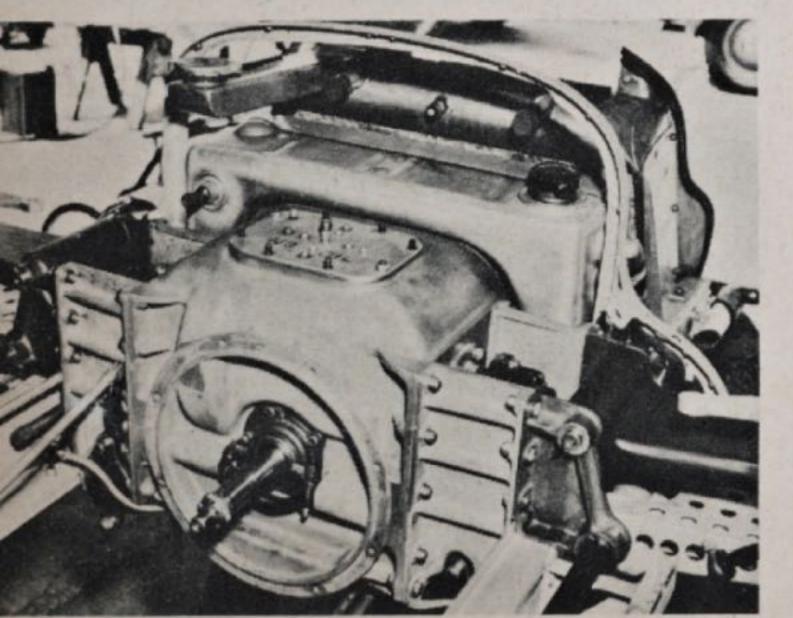
PHOTOGRAPHS BY THOMAS J. MEDLEY

AS THIS issue of MOTOR TREND goes to A press, feverish activities are taking place in race car garages throughout the U.S. Owners, builders, and mechanics of Indianapolis-type cars think nothing of working 14 to 18 hours a day to prepare their entry for the "Big Classic."

been created because of the entry of two foreign cars and because of several new creations. The foreign entries include two three-litre Maseratis (similar to the 8 CTF 8-cyl. blown) to be driven by Farina and Franco Roll.

Unusual cars that will appear at Indian-This year more interest than usual has apolis for the first time include a six-

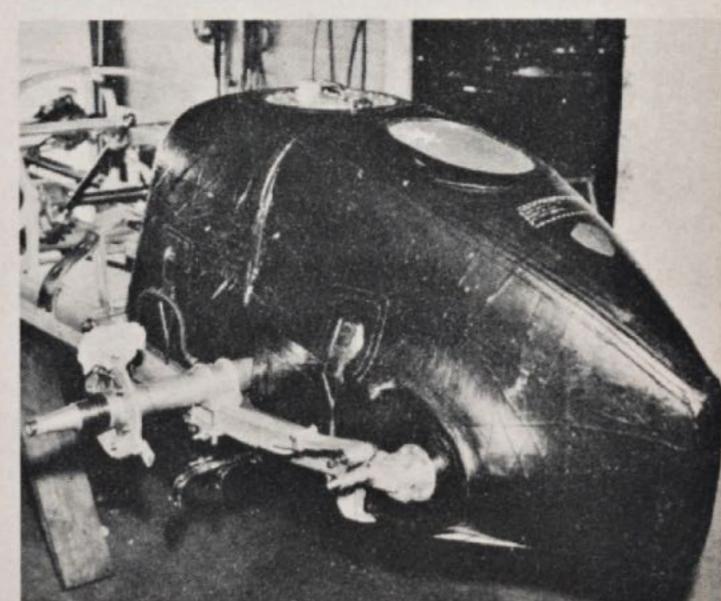
cylinder diesel in a Kurtis-Kraft tubular chassis, a four-cylinder blown Meyer-Drake installed in a Kurtis-Kraft tubular chassis and one in a Maserati chassis, and a Thorne six-cylinder engine in a Diedt-Schroeder aluminum channel chassis. Motor Trend takes you to a behind-the-scenes look at some of the interesting cars.



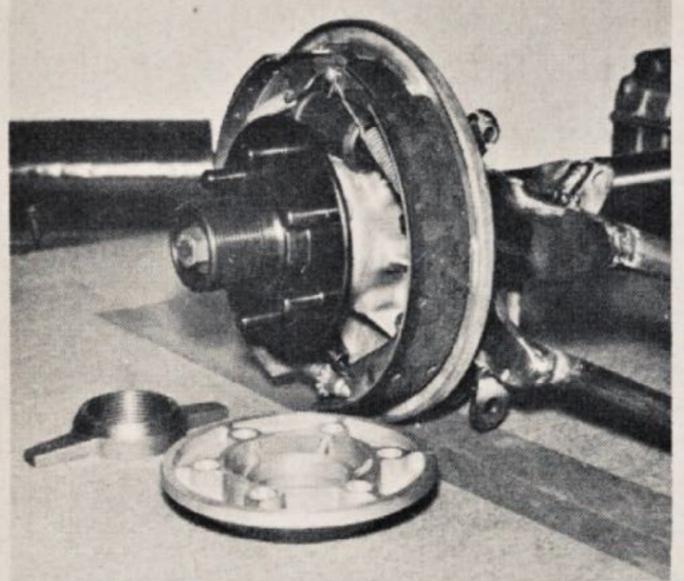
Twelve

LEFT-Front-drive Novi uses Rzeppa constant velocity 'U' joints in drive to front wheels, with suspension by torsion bars. Clutch is multi-disc; steering is by fore-and-aft drag links. Frame side members are six-inch channels of .078inch chrome-moly, body braces are chromemoly, and body panels are aluminum. Radiator has 41/2-inch core and water capacity of five gallons. Oil tank has capacity of 121/2 gallons

RIGHT-Firestone fabric fuel tank of 116-gallon capacity has unique quick-release filler cap, designed by Bud Winfield. Both Novis were built by Winfield and Jean Marcenac. Wheelbase is 106 inches, tread, 64 and 66 inches, weight, 1950 dry. With a tire size of 7.50x18 and axle gear ratio of 4.11, car will cruise at 127 mph while turning only 6000 rpm. Rear suspension by longitudinal semi-elliptic leaf springs



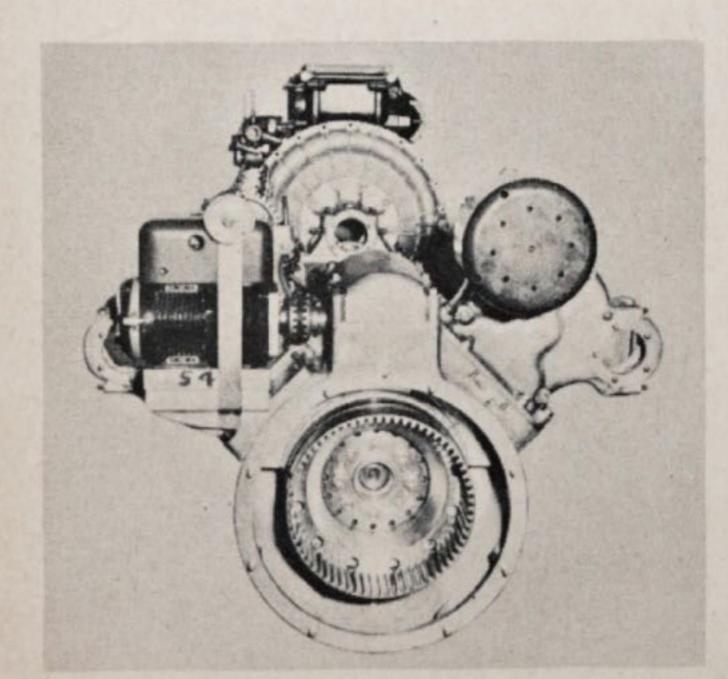
RIGHT-Talking over engineering and construction problems are (left to right) Joe Ward, Frank Kurtis and Ed Walsh. The car is one of the new Kurtis-Kraft tubular chassis creations in the Championship Class. Wheelbase is 100 inches and total estimated weight is 1,750 lbs. The frame is 134-inch O.D. 4130 chrome-moly steel of single-unit construction. Suspension is by torsion bars-individual in front, with control arm and spindle as on stock cars. Steering is by two pitman arms, with a drag link directly to the spindle without the use of a tie rod

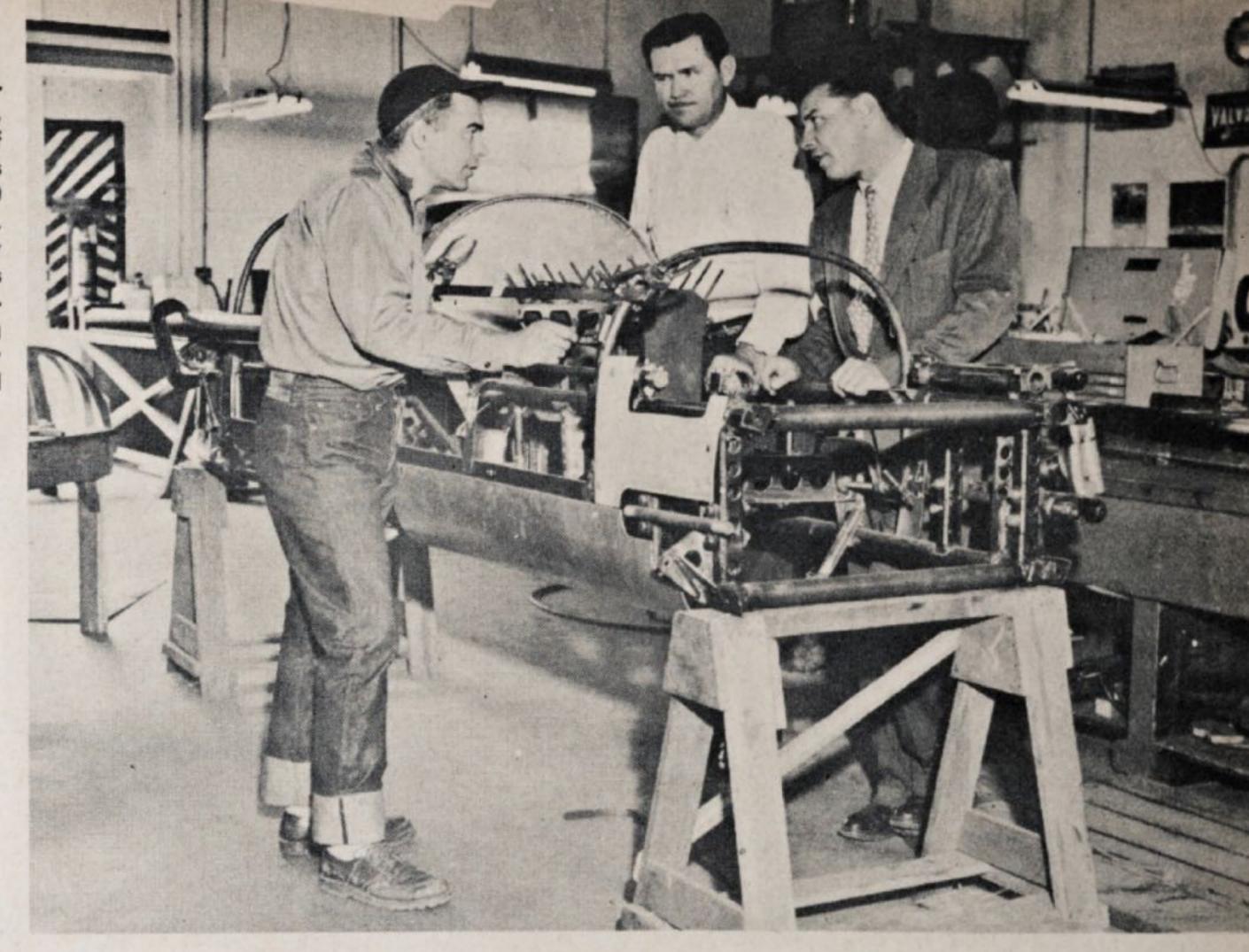


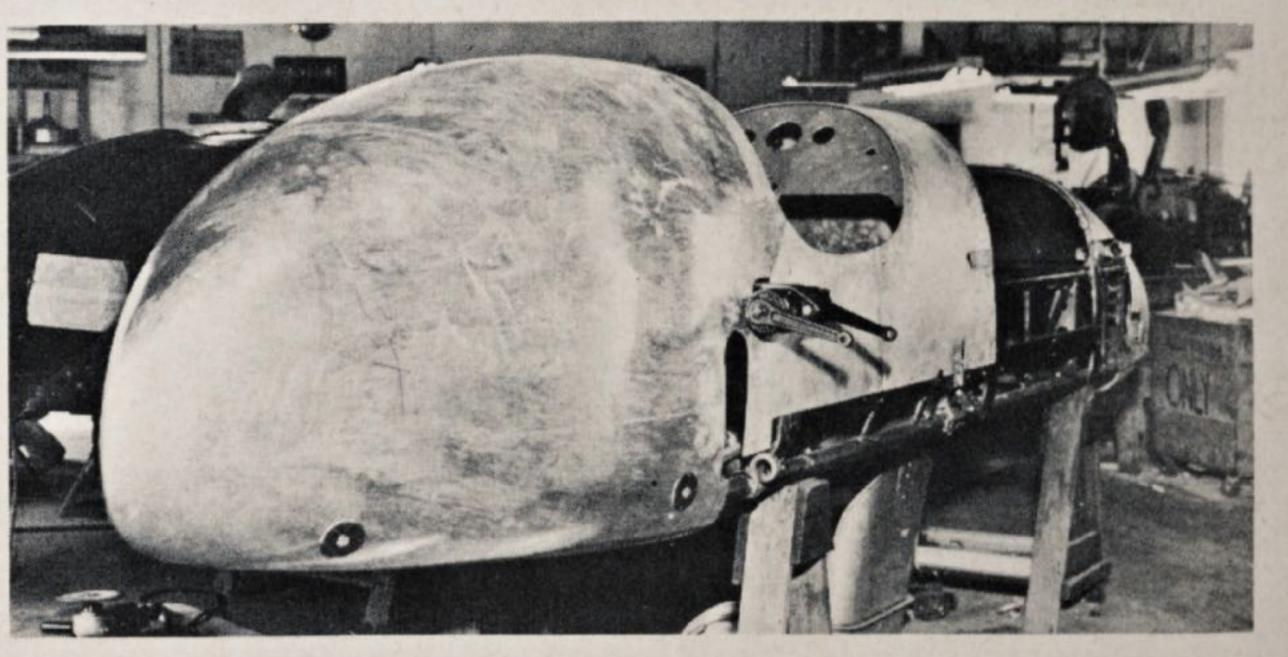
ABOVE-On the Kurtis-Kraft-built cars, the real wheel hubs are mounted on a straight-through axle, torsionally suspended. The torque tube absorbs driving torque and the radius rods absorb braking torque and maintain alignment. Cast magnesium wheels are used, which are driven with lugs attached through holes in the wheel. The cap holds the wheel in place and, in turn, is held on by the knock-off hub. Complete tire and wheel weigh only 45 lbs.

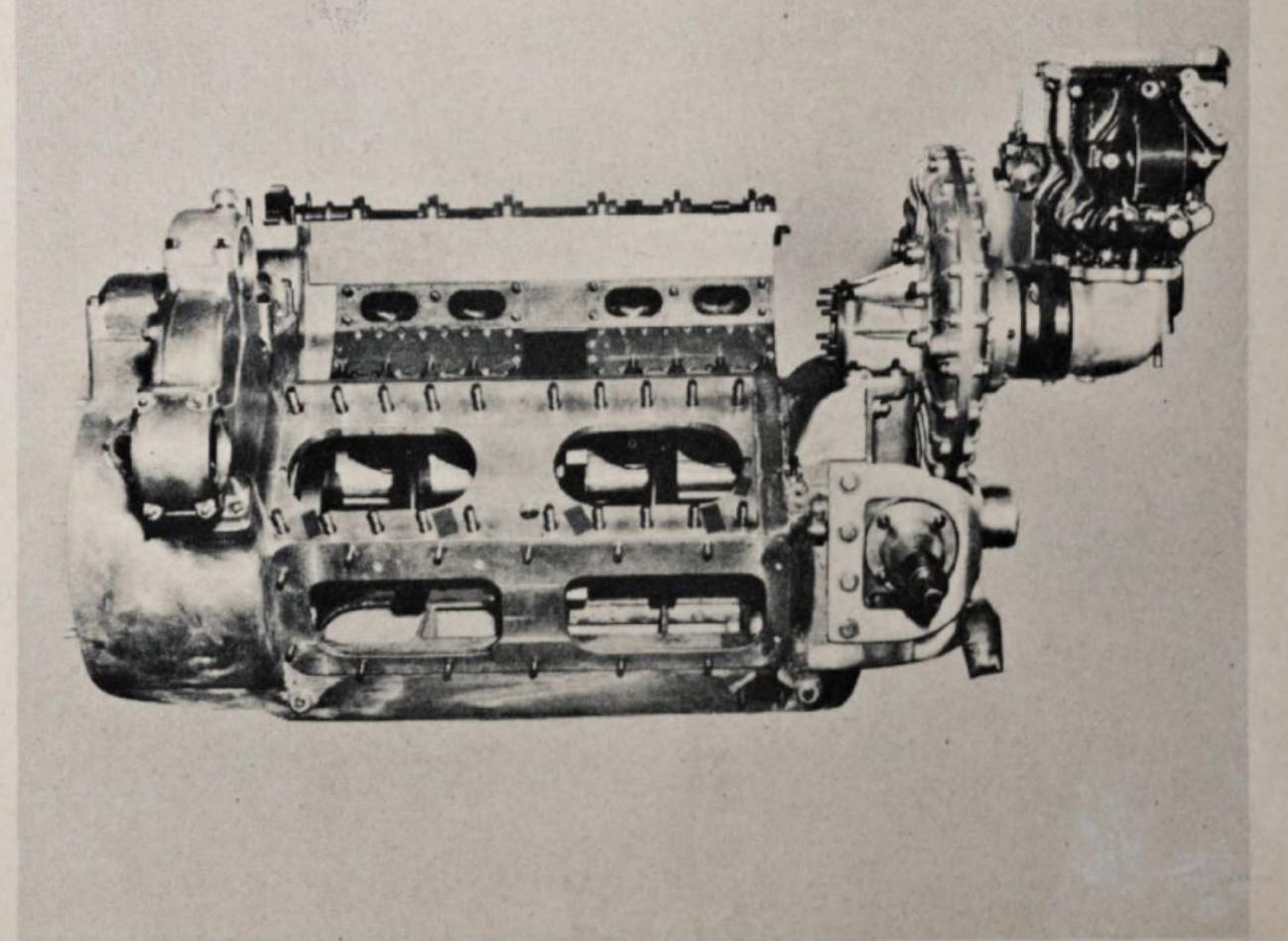
RIGHT—Body panels on the new Kurtis-Kraft cars are .064-inch 25 or 35 1/2H aluminum alloy, all fastened on by means of Dzus fasteners. Under the tail cowl a Firestone rubber and fabric tank, weighing half as much as steel, is mounted. The outer structure of this tank is bonded with a laminated material. Brakes are Bendix full-energizing in the rear and two-leading shoe-type are used on front wheels

DEFINITE contenders at Indianapolis this year will be two Novi-Governor Specials, both powered by 90-degree V-8 engines as shown at right and below. Displacement is 180.2 cu. ins., with a bore of 31/2 inches and stroke of 2 15/16 inches. New feature on engines this year is the special floatless carburetor. It utilizes ram air from a scoop, forcing the air-fuel mixture (methanol, benzol and castor oil) to the centrifugal type blower, turning at 5.1 times engine speed. Output is about 575 bhp at 8000 rpm









Motor Trend Thirteen June 1950

ANALYZING THE ALLARD

MOTOR

TREND

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B. HOEPPNER

point of view the Allard is very well laid out. When the alligator-type hood is raised the engine and components are readily

accessible. The hood is locked in position by means of two latches, one on each side at the front. A safety latch must be released before the hood can be lifted. Two jack pads, one on each side of the frame under the doors, are provided to facilitate wheel chang-

on the steering wheel hub. The 20-gallon

fuel tank incorporates a reserve supply,

which is controlled by a switch on the in-

From the mechanic's or service man's

strument panel.

ing. The spare tire is carried in a recess on the turtleback.

Like most cars of its type, the Allard is a little harder to get in and out of than conventional American passenger cars, but, once seated, one gains a feeling of confidence in the machine. The four-spoke steering wheel is slightly smaller in diameter than average and has finger grips on the underside, which provide a non-slip grip on the wheel. With the top down, vision is unobstructed in all directions and both front fenders can be seen while sitting in a normal driving position. Shoulder room was found to be slightly inadequate for two averagesize men, but caused no discomfort. Leg room on the passenger side is sufficient to allow a six footer to straighten his legs and place his feet on the firewall. The passenger compartment is well insulated as regards engine

noise, and ventilation is provided by two small ventilators on the sides of the body forward of the doors.

Once the various controls and switches were located, a flip of the ignition switch and a slight push on the starter button brought the engine to life with a low, deepthroated rumble that was very pleasing to the ear. The exhaust of this car is not noisy, as many dual systems are, but has a low, powerful sound of its own which is as audible while driving as it is from the outside of the car. The remote gearshift lever, which is approximately eight inches long, provides a short, fast, and easy change of gears. Shifting with the left hand might seem strange at first, but soon becomes quite natural.

The steering gear ratio is fairly high but does not require undue effort for fast turns at any speed. The long hood, combined with the seating location, which is just forward of the rear wheels, tends to give a peculiar sensation, when rounding curves or turning corners. The car handles with ease in traffic,

(Continued on page twenty-six)

CINCE the arrival of the first Allard K-2 sports two-seater model at San Pedro harbor on March 12th of this year, we at MOTOR TREND had been waiting with illconcealed impatience for the opportunity to analyze the performance characteristics of the car. Our wishes were granted just recently when we were allowed the use of the car for a full day.

The Allard, which is notable for its use of Ford engine and chassis parts, was delivered to Moss Motors Ltd., 3200 W. Olympic Blvd., Los Angeles, equipped with a stock 85 hp Ford V-8 engine. To increase the performance of the car, this engine was replaced with an Edelbrock converted 1950 Mercury. The block is relieved and the ports polished. Compression ratio was increased to 8.5:1 and a dual intake manifold, with late Ford carburetors, was installed. Bore and stroke are standard. The engine is placed farther back in the chassis than is customary with standard passenger cars, which improves the handling characteristics. Engine torque is transmitted through a conventional Ford clutch and three-speed floor shift transmission to a torque tube type Ford rear axle, equipped with 3.54:1 gears.

Springs, front and rear, are transverse, semi-elliptical leaf type and provide a smooth, easy ride without body sway. The

Technical Features of the K-2

by Don Francisco, Technical Editor

front axle is novel in design, being essentially a Ford T' beam cut in two at the center and provided with suitable ends, which hinge in a bracket attached to the front crossmember. The frame is a conventional channel type complete with 'X' member. Lockheed hydraulic brakes of large diameter are fitted front and rear. Wheels are 16-inch, bolt-on type with 6.25 tires.

The passenger compartment has two leather upholstered bucket-type seats, which are quite comfortable. Seat cushions contain rubber bags, which may be inflated to suit the individual. Fore and aft position of the seats can be adjusted by removing and replacing the mounting bolts. All controls are easily reached from the driver's seat and the right hand drive steering wheel is mounted on a telescopic shaft which can be adjusted to suit. (Although this model had a right-hand drive, later models will be

speedometer, a tachometer and the usual ammeter, oil pressure gauge, heat indicator, and gasoline gauge. The instrument panel also has a small electric clock. A combination switch on the dash controls the lights and ignition while the dimmer switch, horn button, and turn indicator switch are mounted

left-hand drive.) The turtleback forms a small luggage and tool compartment which is concealed by a fabric curtain behind the seats. Gears are shifted by means of a simple, but very practical, remote lever mounted on the driveshaft tunnel in a convenient location. Clutch and brake controls are easily reached and it was not found necessary to raise the foot from the floor to transfer from the throttle to the brake. The combination parking and hand brake, located at the left of the gearshift, was found to be somewhat short for effective competition use.

ENGINE .V-8, L-head Bore and Stroke. Displacement. Compression Ratio. Instruments consist of a large diameter DIMENSIONS Wheelbase. Tread.. Overall Width. Overall Height. Overall Length. .. 2780 lbs. Weight.. Fifteen

GENERAL SPECIFICATIONS

ANSWERS TO ... "HOW TO RESTYLE"

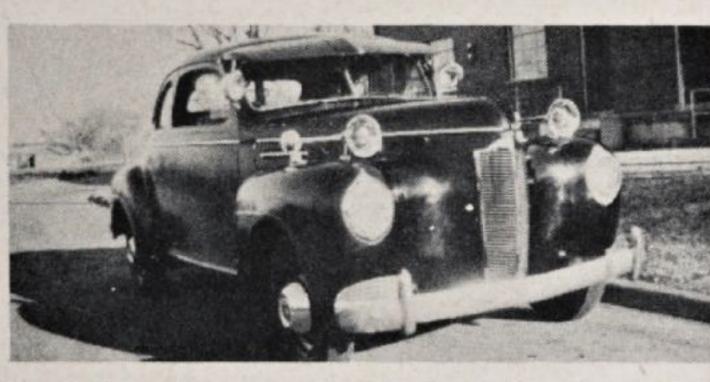
NOTE-In the March 1950 issue of MOTOR TREND, an article was published that asked the question, "How to Restyle?" You, the readers, were asked to voice your opinion. Since that time we have been deluged with letters rushing to the defense of both schools of thought. On this page are some of the photographs and comments of various car owners.—Editor



IN ANSWER to the question "How to Restyle?" Al Witt of Chicago, Illinois, sends a photo of his Oldsmobile 88. The grille is his own idea, "simple, but effective." Other things he has done to the car are: addition of Buick parking lights, luminous wings in the hood ornament, an inside trunk latch, and dual exhaust mufflers and pipes



FROM Azusa, California, James Cambis writes that his 1941 Ford V-8 shows the way to restyle. The top has been chopped 31/2 inches, using a Carson top and the chrome has been removed from the hood. The grille, with the top bar removed, is from a 1948 Ford. In place of conventional tail lights, small motorcycle lights are mounted above the bumper



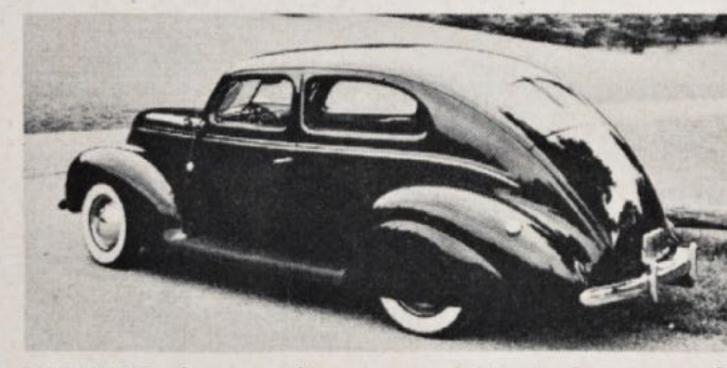
FROM the front and from the rear, this '40 Plymouth presents two different schools of thought: chrome and dechrome. The rear deck has been smoothed off, but although the front has a '41 Packard 'Clipper grille, large air horns were added to the fenders. The car was customized by Marc A. Janet of Oklahoma City, Oklahoma



CHICAGO is the backdrop for this '49 Ford, with chrome strips on the fender skirt creases, fender flaps, venetian blinds, fender fins and chrome window strips. A chrome porthole pipe is added to the side of the front fender. Owner Nick Kolbasuk writes that all this, plus front center light makes his Ford not have too much nor too little



ANOTHER Chicagoan, Dale S. May, sent in this photo of his "19491/2 Ford," and writes that since reading the article he removed the hood and chrome strip radiator ornaments. At present the car has three foglights, two spotlights, chrome wheels, a rear windshield wiper, and a special Lincoln Continental type mounting of the spare tire on deck

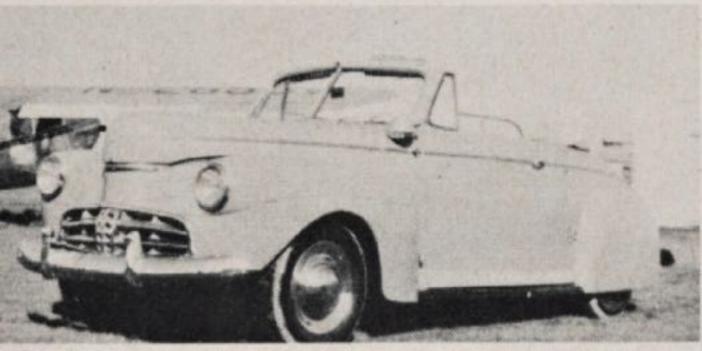


SHOWING that restyling is not limited alone to California, but extends to the east coast, is this photo of George W. Jackson's '39 Ford V-8 from Silver Spring, Maryland. He writes that his car is one of the first restyled cars, which, although not changed considerably, has been smoothed off and sports a twenty-coat lacquer paint job



ANOTHER Californian (from Lynwood), Erney Gustafson, writes that his car is not particularly "custom," but that he goes for the "Californiastyled" cars. His car, a 1947 Studebaker Champ, partially dechromed

Sixteen



SPORTING a restyled '49 Lincoln grille is a '41 Ford owned by Lorin Andrew of Burlingame, California. Bumpers and guards are '48 Chevy. The nose has been shaved. Interior is done in imitation leopard skin

TRENDS in SPORTS CAR

by George Finneran

SPORTS car is a sports car is a sports A car is a sports car—that's the way I feel about the whole thing. With all the vammer-vammer and yuk-yuk that's been going on lately, things have come to a pretty pass. Some poor hack writer like myself sits down at the typewriter with orders to write an article about trends in sports car design—and what happens? What's a "trend," I ask myself, twitching nervously. What's a "sports car"? Who said so? What's "design" mean, I ask my dog, who twitches nervously. Placing a gun to my forehead, I type a note of resignation. I repeat, things have come to a pretty pass . . .

Let's compromise. If you're the type of character with enough money to own a car in which you can compete in some of the approximately fifty events a year that are being held in the United States-a car, I might add, which may or may not be the type vehicle in which you can pull up in front of the Stork club or LaRue's without blushing at the doorman-if you can afford to run a pure sports car, then read no further. We are going to discuss a different type of beast-a sports-model car This makes it very easy on me; now I don't have to define a sports car.

A sports-model car is a car which looks superb on the street and performs fine at events, be they hill-climbs, gymkhanas, roadraces or anything else. See, this is a different kind of car; looks are important as well as performance, something which has been ignored in all other discussions. I disagree with the current trend of opinion in which it is automatically assumed that if a car looks good, i.e., sporty, it will never perform well and conversely, if a car looks wickedly efficient-no fenders, demountable everything, hood strapped down, bucket seats-if it looks like a turret lathe on wheels, then it's automatically a good performer and a welldesigned sports car. I can't be convinced that there is no compromise, so I'm going to attempt to envision that compromise.

The Jaguar XK-120. There's part of my argument right there-performance and looks. Why not any other car? The Jag is a good jumping-off point for us as car owners interested in driving a car with good looks and good performance. Too much emphasis on performance has been made lately to a point of impracticability. How many times a year do you use performance in the United States-how many events are held near enough to your home base so that you can use your car for sports events? How many miles do you drive your car other than at these few sports meets? If you can own two cars, one for the street, one for sports, as I say, you're in a class by yourself. When you're proud of something, it helps a lot if you have an audience to be proud in front of-you can't go around with signs all over your car reading: "It may not look good, but it got First Prize in the Smithinsville Hillclimb and Clutchburning Contest, December 1922." Your car should look sporty as well as have the guts to perform.

The designs shown on the next two pages are suggestions along the lines of this theory. They aren't supposed to be the last word, nor are they everyone's concept of what a sports-model car should look like—they merely point out trends existing in sportsmodel design with a little forecasting thrown in. There are many other ways a car which is used for both transportation and com-

petition could be dressed up. For instance: Chrome is pretty for trim, sure. But what about copper, gold, silver, brass for plating? All these plates are available now and are becoming cheaper as their popularity grows. Used in contrast to the paint scheme, a sports-model car, already set off from other cars by its design, could become twice as effective. Blue paint-gold trim, very effective. Cream and copper, red and burnished silver or aluminum trim-both different and yet, carefully applied, not out of place on a sports-model car.

It isn't shown on any of the designs accompanying this article, but I have an answer to that terrible sidewalk question: "Hey Bud, er, what's under da hood. What kinda engine ya got, huh?" Clear plastic panels either on the side or the top of the hood are the answer, as soon as material is available which will resist heat. Besides, this makes chroming, painting and general dressing up of an engine a practical thing to do; not only will someone else see the result of your careful Sunday morning work, but it will save you a lot of silly questions.

I've always liked disc wheels. They're supposed to be impractical on a sports car because they interfere with drum cooling. Take a leaf from the Italians' design book and louver the discs.

Most sports cars today are two-seaters. If more people are to be able to afford a

getting sunburned. Another possibility is the sedanca de ville top: a three-quarter solid, one-quarter convertible job. With this design, you could either leave the whole thing home, use just the rear three-quarter section in place, or completely close the car in by attaching the one-quarter section in place over the driver's seat.

Paint jobs for sports-model cars are very important. Although a day's driving up some gravel-surfaced hillclimb area can be tough on a car's paint, to say nothing of oil, grease, spilled gasoline and other trials of a trials event, if your sports-model car is your only car, you shouldn't be afraid of color. This doesn't mean you should run around town blinding pedestrians with a chartreuse-lavender combination (come to think of it, that wouldn't be bad at all, or would it?) but the old-fashioned concept that if you drive a car with a sporty body you should paint it black (the idea is that the car's individualistic enough without calling attention to the fact with a bright paint) is ridiculous, if you don't happen to like

Those are just a few of the minor items of design that a sports-model car owner can consider. Let's do a little prognosticating on general design for sports-model cars. Still working under the original conception that you can afford only one car, let us assume that you have the powerplant, running gear, and mechanical refinements you want, all mounted in their proper place. Assuming still further that you have a choice of body styles, let's examine current

If you have an internal combustion engine mounted in the front of your car,

See drawings on next page

sports car as their only car, the car should be at least a three-seater (with an armrest for the driver one-third the way across the front seat) or a four-seater. It should be possible to create a four-seater without disturbing the fore-and-aft weight distribution of the car.

Sports-model cars are almost required to be open cars—somehow, driving a closed car, no matter how knocked-out its body may be or its performance, just isn't right-don't ask me why. However, for those in severe climates, those with a tendency to catch cold easily, and for those of us with long hair and/or long-haired womenfolk, there should be some way to compromise. One suggestion would be two tops-one a Carson-type solid demountable affair and another top, very elementary, just a few bows and a piece of canvas, which could be used if the solid top has been left home and one finds oneself driving into precipitous cloud formations-or if your nose is

there are several body designs from which you can branch out. Using current model cars as an example, you can use the Healey Sportsmobile, Edwards Sports car, Kurtis Sports car fender and body designs and work from there-in other words, the continuous, without-a-break fender line almost flush with the body line. Or, as with the Jag. your fenders could have a slight fadeaway to the rear fenders.

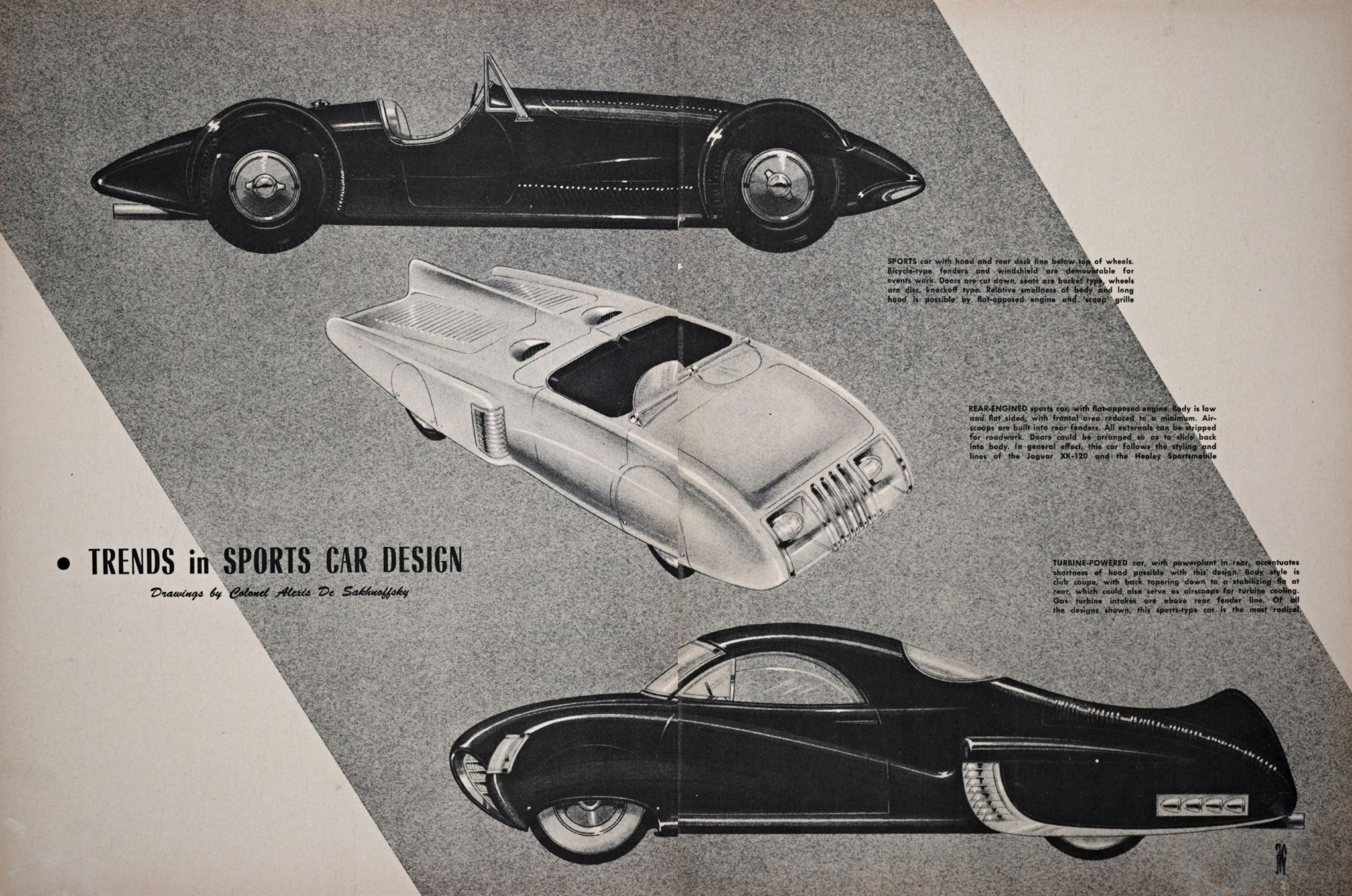
Racing enthusiasts are very partial to the cycle-type fender because it fulfills the function of a fender (mudguard) without adding to the weight of the car. It may be functional, but it isn't pretty-some refinement should be made to the cycle fender to bring it into the general overall design.

Too much frontal area is a common fault of American-designed cars-foreign jobs are cutting down the bulk in front without reducing the air-intake capacity by bringing the front surface to a point or series of

(Continued on page twenty-seven)

Motor Trend

June 1950



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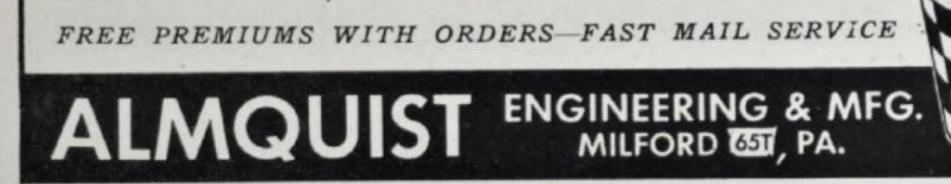
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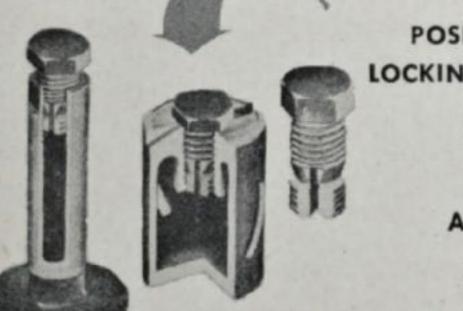
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PALM SPRINGS ROAD RACE

by G. Thatcher Darwin

PHOTOGRAPHS BY THOMAS J. MEDLEY

C TERLING EDWARDS piloted his custom-built S-E sports car to victory in the Palm Springs Grand Prix on April 16th. The Beverly Hills sportsman and his sleek grey Ford V8-60-powered machine covered forty laps of the grueling 1.6-mile road circuit in 1 hr., 26 min., 41.89 secs.



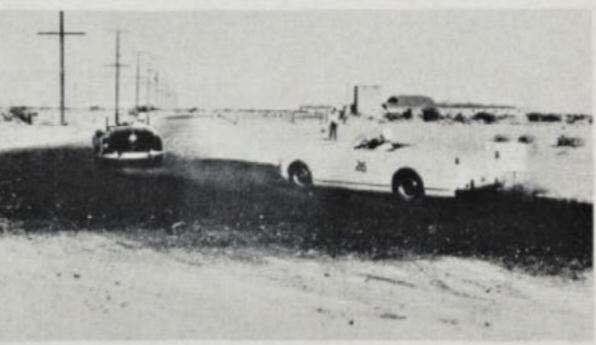
PETER DE PAOLO gives the checkered flag to Sterling Edwards, who won 40-lap feature event

Second place was captured by the Australian, E. Forbes-Robinson, who drove a very consistent race in his new MG-TD. Third place went to heavy-footed William M. Pollack in his Shorrock-blown MG-TC, and who drew spontaneous applause from the spectators on several occasions during the long grind for his plucky efforts.

Jim Van Trees (MG) ran a hard-earned fourth after covering the last half of the distance with no brakes, and John Paanaker put his fleet grey MG in fifth spot.

The race was marked by numerous retirements, caused principally by the devastating desert heat, which played havoc with brakes and cooling systems. Some of the fastest contenders were unable to start in Sunday's races after Saturday's practice in blistering hot weather.

The handsome new Allard, capably piloted by Tom Frisbey, took the lead at the start, followed by Edwards and Roger Barlow's Jaguar XK-120. This group was in turn pursued by a howling pack of MG's, led by the flying Pollack. The Allard's lead was not unexpected, since it had turned its qualifying lap over three seconds faster than any other production sports car. During the early stages of the race, Frisbey increased the Allard's lead over Edwards, who in turn drew away from Barlow. Pollack detached himself from the pack and become a determined fourth.



ALLARD is followed by S-E Sports Car (V-8 60 powered) into first turn of first lap. Allard was later forced out of race with ignition trouble

This order prevailed until lap 12, when the Allard drew into the pits for water, surrendering the lead to Edwards, who

(Continued on page twenty-eight)

Motor Trend



by Griffith Borgeson

THE B.R.M. is the hottest news in I racing since Germany dominated the speed scene in the Thirties. As a machine it is in a class by itself, some of its more interesting specifications being: 16 cylinders, two overhead cams per block, bore and stroke about an inch and a quarter each, 400 bhp at 12,000 rpm, bhp to weight ratio of about 1:4. And just as unique as its design is the way it has been produced.

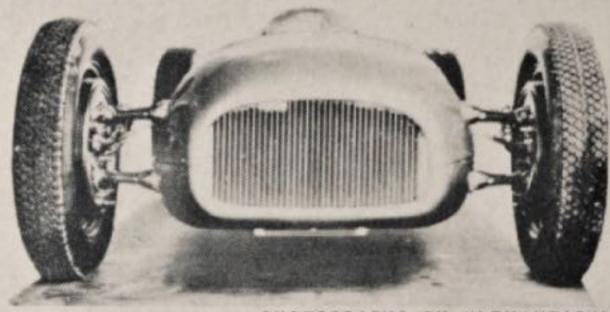
Raymond Mays gets credit for most of the B.R.M. achievement. Mays is the holder of many English track, road racing, and hill records, and who, with Peter Berthon, conceived and built E.R.A. racing engines before the last war. Germany proved that enough money, combined with good engineering talent, could produce world-beaters. Mays came up with the solution to the money problem in '46, when he organized the British Motor Racing Research Trust. The visionary scheme was that manufacturers could band together and contribute components, according to designs laid down by a central planning board. Design, assembly, and operation of the vehicles would be handled by the board and the financial end of the operation would be floated on popular support.

Oddly enough, the plan has worked. One hundred and sixty of Britain's best machinery-makers have produced the parts, one car is assembled and running, parts for two more and plenty of spares are in the bins. There probably isn't one British motor club which hasn't voted funds to the B.R.M. experiment, and sport-minded Britons everywhere are rallying round the exchequer. They'd better: it costs a large fortune to enter all the important races in a season, and the B.R.M. should begin to show its mettle this year.

For Englishmen, whose ancestors practically invented the idea of sportsmanship, and for whom motoring can still be high adventure, the announcement of B.R.M. specifications came as food for the soul, and even to less partisan observers they look extraordinarily promising.

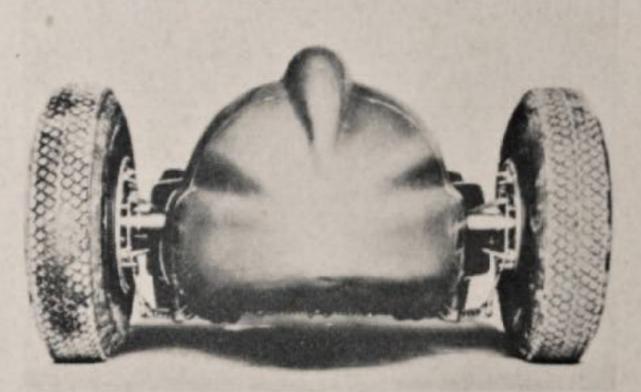
The car is small . . . wheelbase is just 98 inches, and she stands 30% inches high at the cowl. Frontal area, a crucial factor, is lower than on any previous Grand Prix car . . . 10 per cent lower than the superfast prewar Mercedes. Suspension smacks strongly of the same period in German design, Porche-type independent in front, de Dion at the rear. Springs and shocks are replaced by Lockheed oleo-pneumatic struts, each assembly weighing nearly four pounds. There's worm-and-nut steering, a ZF limitedslip differential. Frame side members are made up of 21/2-inch steel tubes placed one above the other, joined by welded steel sheets pierced with flanged holes.

The blocks of the V-16 engine are so flat



PHOTOGRAPHS BY KLEMANTASKI

GRAND PRIX suspension and body design at their best are seen in this frontal view



FEW PARTS extend beyond the shell. Aside from a bit of axle, only suspension linkage and multiple pipes project at the rear of the car

that their heads just clear the frame. Power plant amounts to two V-8 units coupled by a central drive gear, the power take-off for camshafts and many auxiliaries. This design traces back to the brilliant engineer, Sir Harry Ricardo, and was dabbled with by Maserati in the Thirties.

Staggered blocks let the connecting rods lie side by side on the crank throws. There are ten main bearings, eight overhead camshafts, two valves per cylinder in domed combustion chambers. The valve gear has been run up to 18,000 rpm.

Two-stage centrifugal blowers, furnished by Rolls-Royce, provide a savage boost to the very high-revving 92 cu. in. engine, are lighter and more compact than positive superchargers. Ignition is by coils since magnetos are out at these rpm. And although carburetors are being used on the first-assembled car, it's expected that a fuel injection system will be adopted in practice, feeding fuel directly to the blowers. The little car will do over 200 mph.

(Continued on page twenty-two)

Twenty-or-

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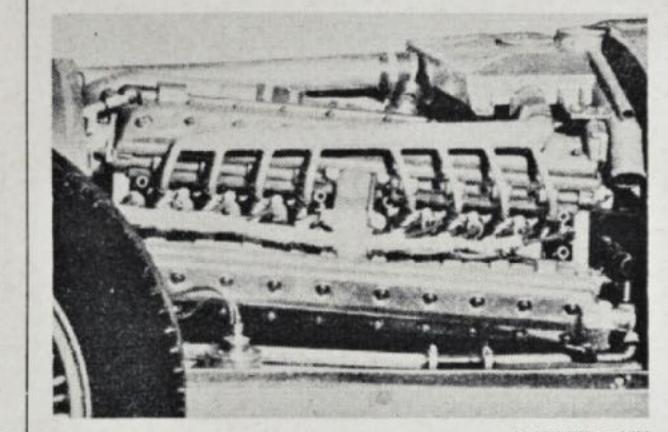
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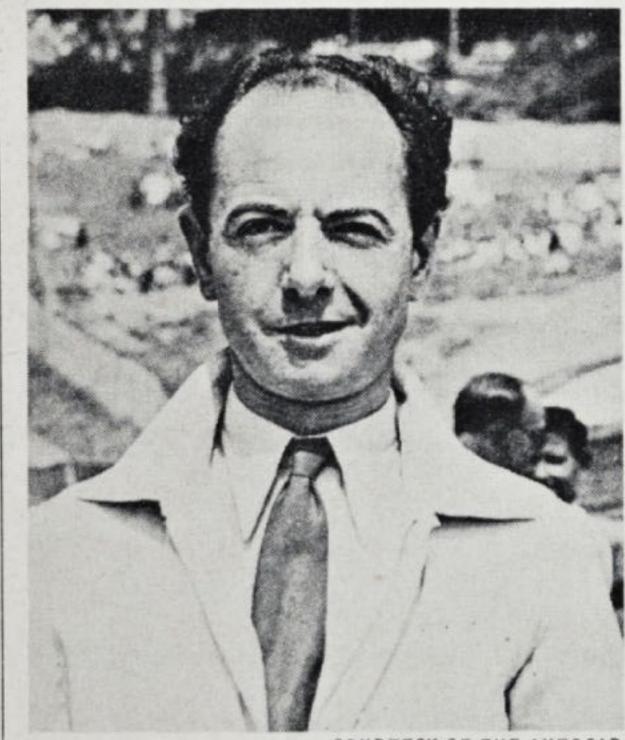
(Continued from page twenty-one)



KLEMANTASK ALMOST-FLAT V-16 reclines at a slight angle

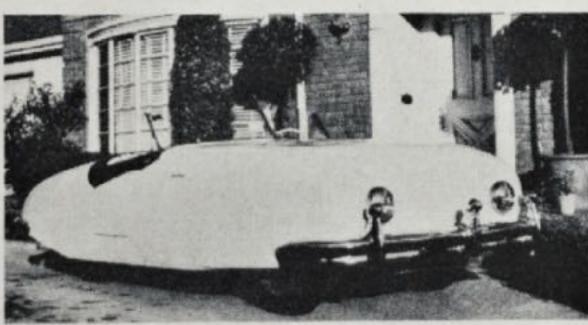
Two major problems still face the B.R.M. controlling board. First: drivers. This will be one of the toughest cars of all time to handle and the men who get the job should be familiar with all important Grand Prix circuits. There are few of this class in England . . . if the crisis creates the man, this crisis has a job on its hands.

The second problem is the one of finance and here this "people's car" becomes a people's responsibility. Interested parties are welcome to contribute to the first car ever to represent the Empire in international Grand Prix racing. The address is 113 Park St., London, W. 1, England.



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STRIPPED down to the bare chassis, this creation by Duke Savage was an Amphibian Duck. Powered by a Ford Jeep engine, the body of this car was molded from flat sheet stock. In place of a grille, an airscoop is used. Bumpers are 1946 Chrysler. The car seats four people



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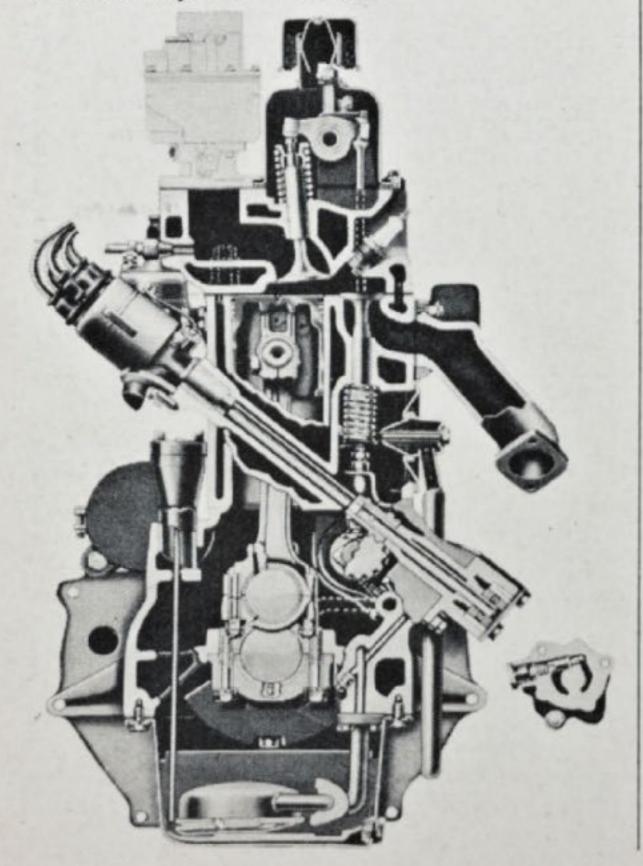
Motor Trend



W/ITH the introduction of the 1951 Kaiser "No-Name-Car," Henry Kaiser has made the statement that production will start at 400 cars per day in June of this year. If the car meets with public approval, plants on the West Coast will also be used for production of this new low-priced car, the price of which has not yet been set.

ACCORDING to preliminary tabulations of a small percentage of questionnaires sent out on Nash Motor's N.X.I., the motoring public likes the car but wants modifications in it. Among the thousands of suggestions, blueprints and drawings sent to the company along with the questionnaires, greatest emphasis was laid on the following: Instead of the divided front seat, motorists ask for a single front seat, providing seating for three passengers instead of two. They suggested somewhat wider tread and a wheelbase five or six inches longer. Also requested was provision for an auxiliary two-passenger seat in the rear compartment. Very definite preference was expressed for the 36 hp engine over the 18 hp engine. "If we build the car," Mr. Mason said, "such changes as the public prefers will be incorporated in the design, within the limits of a \$1,000 price tag." Look for Nash to shelve the idea of the N.X.I. and concentrate on the Rambler, or a similar model stripped to barest necessities.

MORE DETAILS on the Willys-Overland "Hurricane" engine: Intake valve in head is directly over piston and is unusually large in diameter, providing good engine breathing directly into cylinder at all engine speeds. Exhaust valve in block is entirely separated from intake valve, allowing ample cooling of valve seat in cylinder block. Combustion chamber can be reduced in size to obtain higher compression ratio for higher octane fuels. Intake passage from carburetor to intake valve is short and direct, leading downward. Under these conditions, less liquid fuel collects on intake passage walls and less heat is required around intake passage walls to vaporize the fuel.





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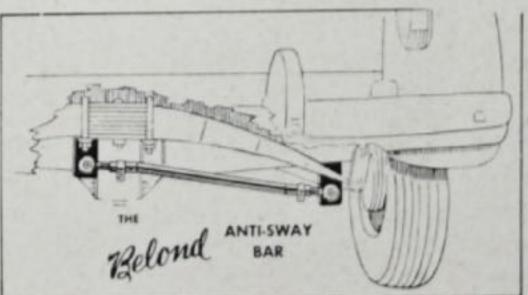
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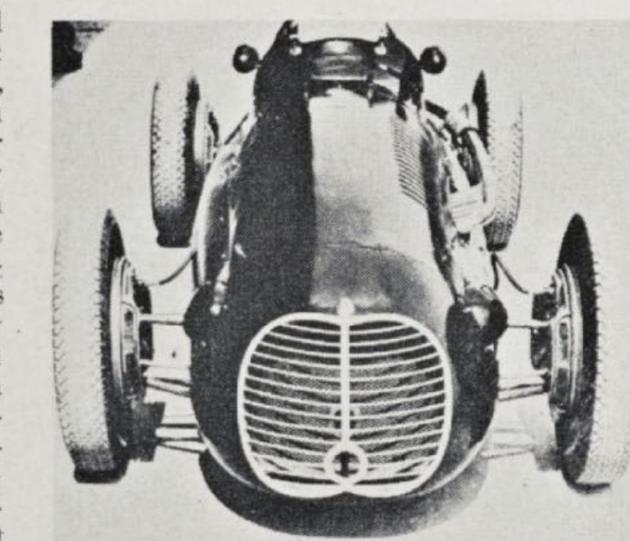
TRANSATLANTIC

RANCE: This item should be boxed in black. The CTA Arsenal, the very promising gov't-sponsored racing car, has died of money malnutrition. The design seems to have been sound, if not superior, but the car's two public appearances indicated that much remained to be done before rear axles and suspension would be really roadworthy. At any rate, the beautiful remains (one car. tons of spares) are for sale, yours for 10,-000,000 francs. . . . One of the more exciting developments in post-war autos is the M.A.P. experiment. Primarily manufacturers of diesel engines for farm machinery, last year they mounted one of their flat-four, moderately winding diesels on a Delahaye frame and running gear and took it to the races. Result: It broke 15 world records for its class, topping 120 mph. Being practically vibration free, cheap to operate, and with huge power reserves, this type of engine will probably find its way into the better class of French cars, those that are built to give maintenance economy as well as fuel economy. An interesting detail: the M.A.P. engine actually has two cylinders, each with two pistons. How does it work? . . . Speed equipment and custom accessories for all the popular French makes are abundant and available. For example: racing heads for Renaults; automatic transmission conversions for Citroens; low-priced centrifugal blowers for small displacement mills, to give around a 30 per cent increase in power and speed . . . And now there's the Rallye Gastronomique, an 878mile route well-spotted with wine-cellars, dinners, and feasts-and, incidentally, driving tests on the Le Mans circuit. Vive le bon

GERMANY: Attracting international attention is the new Kleinschnittger "microcar," to coin a term. Its rather startling specs are: overall length 7 feet, 1 inch; displacement 98 cc or about 6 cu. in.; weight (including tools and two gallons of gas) 220 lbs. Top speed is 43 mph and fuel consumption a mere 146 mpg! Near future improvement will be a duraluminum body which will drop the weight to 187 lbs., and a super

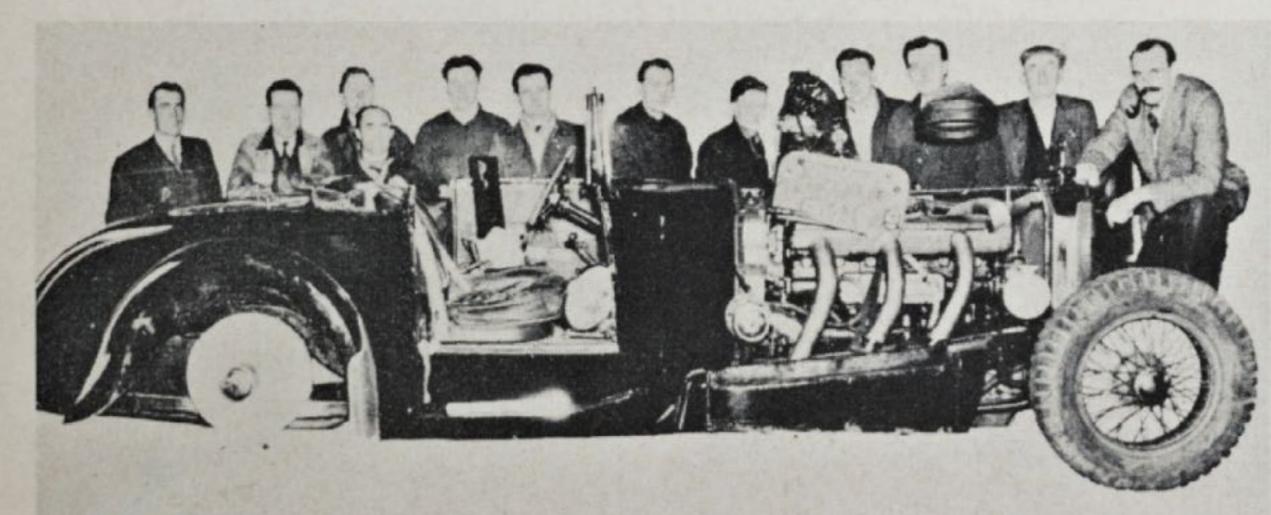
by A. Devereux

model with the huge displacement of 7.6 cu. in. is in the planning stage. This sounds fantastic, but the authoritative Export Anzeiger, Hamburg, is our source. We're checking it... Borgward, until recently the only privately owned auto factory in Germany, is now a corporation, and is producing the Hansa, which claims to be the first absolute-



THE 4CLT Maserati, along with Ferrari, was last year's star Grand Prix performer. Bore and stroke are a square 3 5/64-inch and, stock from the factory pulls 260 bhp at 7000 rpm. It is two-stage Roots blown; does 160 mph

ly new car here. Aimed at the mediumpriced market, it's not an austerity car, and most of its newness seems to be in its blending of Volkswagen ideas with tried and true ones of the American industry. . . . Following the popular trend, another new car is the Wendax (makers of trucks, cycles) "Aero." It weighs about 1100 pounds, is powered by a two-cycle, air-cooled twin mill which gives around 30 mpg.



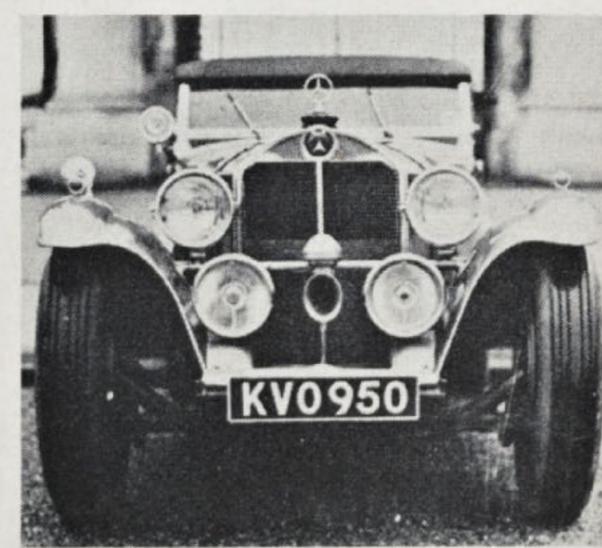
THE MEN of Beardall Motors and an SS Mercedes being converted to diesel operation

RUSSIA: The Pobieda, in the Ford class, is not Russia's only car. Still in production for the very privileged is the huge ZIS 110, a 150 hp 8 that's pure pseudo-Packard right down to the radiator grille.

ENGLAND: We're not being reckless

NEWSLETTER

when we say that one of the most significant events in the long history of land transport took place on March 8, when the Rover prototype gas turbine car was officially revealed to the world, via the popular press. Official information on this car is that it attained 90 mph with ease and that it made 0 to 60 mph in 14.6 seconds, all of which is not bad for something the first of its kind. Press releases to this country stated that the Rover is powered by two turbines—This is rather misleading, since the power unit is basically similar to the Boeing engine described in last month's Motor Trend—there is just one driving turbine. And, like the Boeing, the Rover engine (of around 200 hp) features no mechanical connection between the compressor and the driving turbines, the detail which gives this design its unusually high torque characteristics. And once and for all, these are NOT jet engines . . . On the heels of the announcement in the U.S. of a production Ford "hot rod" (for police use), comes word of a production "special" now being built in England. "Trials specials" are The Isles' counterpart of our own stock cars



A BEARDALL oil-burning SS Mercedes-Benz

modified for high performance, and since good highways and dry lakes are absent in England, performance tests for amateurs are generally hill-climbs. The English "special" has been chiefly developed for this sort of rough-and-ready work, is marked by light weight, short wheelbase, large reartires, sometimes dual rear wheels, and bedrock rear end ratios. The new production model is called the Dellow and is based on the very adaptable English Ford "Ten." Idea behind it: to bring the joys and thrills of competition to the man of modest means. Price: \$1190, a bit more with a blower. We might as well be sporting and let it

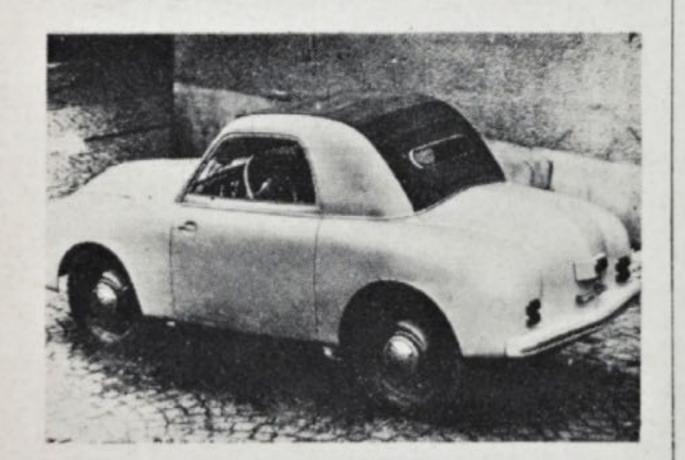
Motor Trend

out, although we'd like them all for our very own: a small stockpile of S and SS Mercedes engines has been located in the hands of Beardall Motors, Ltd., selling for a little over \$200 each. Beardall is in the business of rebuilding the big Merks and installing powerful diesel engines in them, so that they can be driven where gas is scarce-in England, for example. The same conversion has been perfected for the Humber Super Snipe. Devotees of the Rolls-Royce Silver Ghost and the R-R Twenty have formed a club to encourage preservation of their pets. A very remarkable gadget is on the English market: a tire pump which does its job while the car is moving. The pump is a little up-and-down number which takes its drive from the fan belt, but an airtight universal joint accounts for the newsworthiness of this item. In case of a flat, you snap the 'U' joint into place on the ailing wheel by means of spring clips, attach hose to valve stem and pump, chug off to the nearest service station for more lasting repairs. Gismo is called the Mopal Compressor Kit, sells for about \$14.

HOLLAND: Our own Kaiser-Frazer is moving in on the light car field here, as at home. The K-F Co. has a plant in Rotterdam and has arranged with the French Simca people to assemble the Simca 8 there, and production is now going on. K-F is building an assembly plant in Israel too.

ITALY: As we've pointed out before, Alfa-Romeo was sadly out of the Grand Prix picture last year. But its compatriots Ferrari and Maserati have done such an allout job of bringing renown to the Italian industry that the govt, has seen fit to grant a good sum of money to Alfa, so that wonderful old marque will again show its mettle in the coming season. Two impressive designs are on the boards, one of them a ferocious flat twelve engineered by Colombo, who did the Ferrari. Alfa has definitely entered a team for the Mille Miglia on April 23. Sixes of 2.5-litre (152.5 cu. in.) are said to be the choice . . . the drivers: Farina, Taruffi, Sanesi. Cisitalia, long languishing in the financial doldrums, is out of the red and back in production of the 1100 cc model. A new factory is going up in Argentina for the assembly of their sports and racing cars. The brothers Maserati, having left the company which bears their name, are heading the OSCA firm, producing high performance cars with 1100 cc (67.1 cu. in.) and 4.5 litre (274.5 cu. in.) ohc engines. The big one is the first engine of its size created purely for racing since well before the war. It will be seen for sure in sport car events this year, and there is serious talk of its being groomed for G. P.

MISCELLANY: Addresses of manufacturers, clubs, etc., on request.



GERMANY'S newest venture into the minicar field is the Gutbrod "kleinwagen," which is powered by a two-cylinder, two-stroke, 36.6 cu. in. engine. The little car carries three passengers and lots of luggage, and should be an important contender in the export arena



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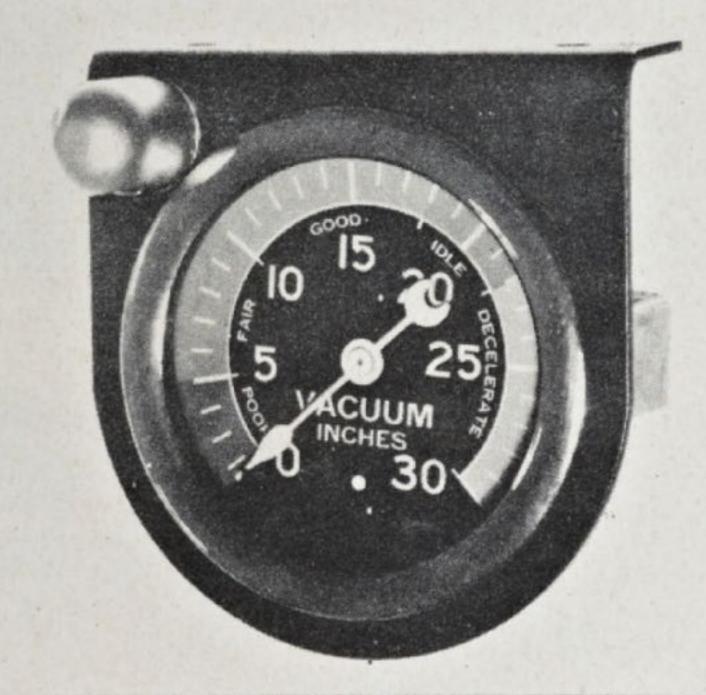
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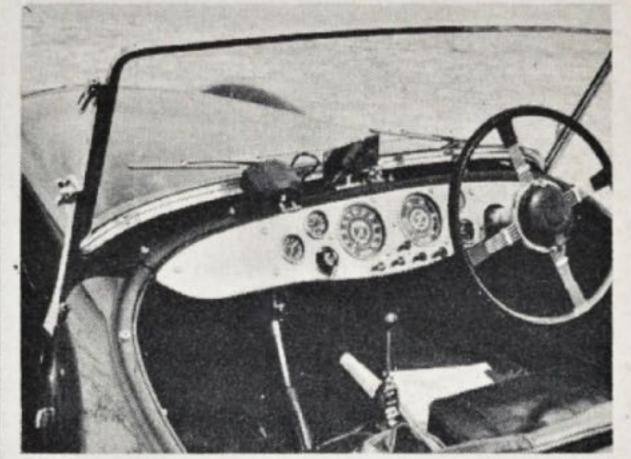
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Analyzing the Allard

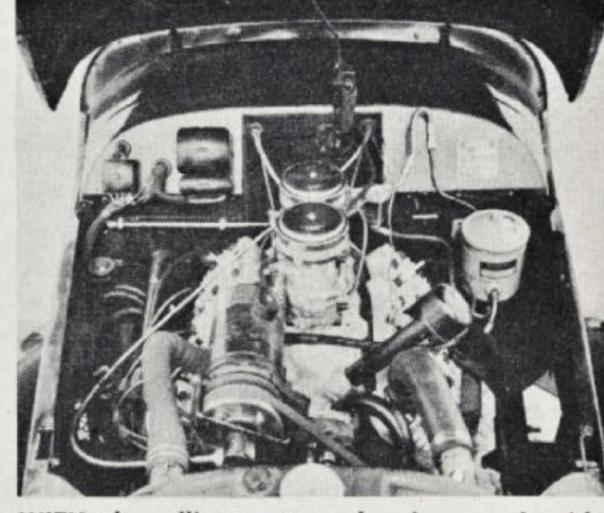
(Continued from page fifteen)



DASH and cab compartment of the Allard K-2 shows the neat arrangement of instruments and convenient gearshift lever on floor

having good acceleration in any gear and ample braking capacity for quick, safe stopping. The engine in this car was new, so high speed driving and acceleration tests were postponed to a later date. Cornering on winding mountain roads was very good and was accomplished without any tendency toward skidding or wheel fight.

It was noticed when driving over sharp bumps, such as chuck holes or railroad tracks, that the impact was transmitted to



WITH the alligator type hood opened wide, easy access is permitted to all parts of the 1950 Mercury engine converted by Vic Edelbrock

the steering wheel and caused a definite reaction. Although severe in some instances, this reaction did not occur so often as to become objectionable, nor did it cause the car to deviate from its path.

The Allard K-2 should be received with enthusiasm by the sports car fraternity as its design permits it to be adapted, through minor modifications and adjustments, to suit ones driving habits and desires.

MG RELIABILITY RUN

N SUNDAY, March 19th, the newly formed Long Beach MG Club held its first event, a reliability run and picnic to "Inspiration Point" above Lake Elsinore. The route was perfect for the road-hugging MG's, as the last 33 miles were on a winding road which climbed 2600 feet to the top. The sixteen teams competing were so enthusiastic that it is planned to hold a similar event each month.

The winner with a perfect score was Mrs. Dot Dickinson, with able navigation by Dan Dickinson. Second went to Coz Bartlett and Jeanne Chapman, who won the toss over Leslie and Norma Reedhead (tied for second in point standings).

What Next in Cars?

(Continued from page seventeen)

knife-edges. This is going to be rough on pedestrians, but it's the only logical frontal area to date.

The treatment of doors has been neglected for years. Outside of the cut-down door, there isn't anything sporty-looking as yet A possibility that has been ignored is a door design that would become logical if the door slid forward or backward into the fender (or overlapped body) area.

For visibility's sake, as well as design's, the hood-lower-than-the-fender-line is slowly but surely coming into fashion. A car that could give the impression of being a body slung between the wheels would be very effective in design-and, more than likely, in achieving this effect, the car's roadability would be favorably affected.

If we are going to have rear-engined cars, either turbine-powered or using the conventional engine, our concepts of design are going to have to undergo a complete change. There is nothing as silly as a rear-engined car designed to look like a car with the engine in front. Let's face it-if the engine's in back of us, we should sit as far forward as is practical to a weight distribution plan for the car. A buffer area is perfectly acceptable and almost a requirement for safety's sake, but let's not keep extending this area back until we've cunningly achieved the effect of a front-engined car again. Norman Timbs' rear-engined custom job described in the October issue of MOTOR TREND is an excellent example of what I call facing the facts-the engine is in the rear of that car; you can tell by looking at it.

In winding this up, I wish to reiterate a point. It's all very well for the performancepurists to insist that a car be designed with only efficiency of performance during competition in mind. If a man can afford a car designed solely for the few hours a month it is in competition-good for him. If, on the other hand, there are to be more sports events here in the United States, there will have to be more owners of sports cars than there are now. Sports car competition is an expensive business anyhow; the car should be able to take some of the financial sting off of its purchase price and operating costs by being useful as a street car as well. If you like to drive a car that looks different and has a high degree of performance compared to a stock car, then a sports-model car should be available to you as an amateur enthusiast-when you get in the chips, you can graduate to a Ferrari, a Veritas, a Nardi, an Allard J-2, and so on.

Right now, we need a car that can be entered in competition against other goodperformance cars and yet still be practical for everyday use. That way, we can all get in the game. And the more of us that can get in, the more games there'll be. Design seems to be the answer-Detroit, how about this?

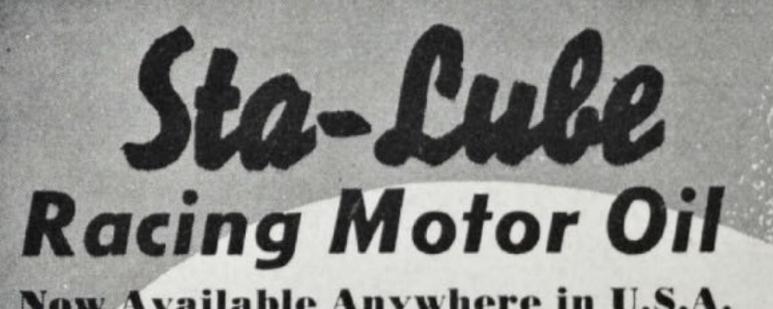
DID YOU KNOW?

AS FAR back as 1902, when 9,000 automobiles were manufactured in this country, the "Silent Northern" introduced such items as three-point engine suspension, integral engine and transmission assembly, running boards and 'T' head cylinders. The following year, such up-to-date features as sliding transmissions, mechanically operated intake valves and shock absorbers were adopted generally. The Buick Motor Company began making cars with valve-in-head engines this same year.

June 1950







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HONEST CHARLEY SPEED SHOP

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Palm Springs Road Race

(Continued from page twenty)

promptly took the advantage and put his right foot down hard. Barlow also speeded up, so that the gap between the leaders remained about the same. After a long pit stop, the Allard rejoined the fray, but retired shortly thereafter with a sheared igni-

Edwards continued, relentlessly pursued by Barlow, who kept the Jaguar in an ever threatening position. Forbes-Robinson, in the



MASS start of the Novice Class Race, limited to drivers of sports cars with no such previous driving experience. Bill Pollack won this race

MG-TD, moved into fourth spot, now sporting a collection of desert shrubbery around the radiator as a result of a brief excursion off the course.

In the twenty-sixth lap the Jaguar menace disappeared when Barlow's throttle stuck, and, with fading brakes, the car left the course at the end of the fastest straightaway, plunging into the underbrush. Barlow fought the car to a stop without overturning, but it was an untimely end to a fine effort.

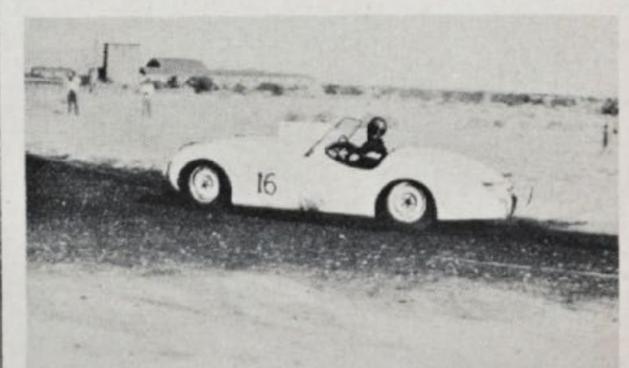
In the final stages of the race the Edwards car blew a gasket, but continued noisily at only a slightly slackened pace. Pollack stopped briefly at his pit, putting Forbes-Robinson into second place. This order continued to the end.

The novice race, run earlier in the day, provided some very good action, finally being won by Bill Pollack, followed by Robert Doidge and George Hearst, all in MG's.

The production car race resulted in a runaway win for Jack McAfee in a '49 Cadillac over John Edgar's '50 Ford.

The third race for special sports cars proved to be a fiasco. Gil Schick's very fast Alfa-Romeo, powered by a full race Mercury engine, stalled on the starting line, and Willis Baldwin's special was forced out with ignition trouble in the first lap, leaving the very popular D. G. Satcher an easy but welldeserved win with his Mercury special.

This race was disappointing because these three cars were the fastest qualifiers, the Baldwin machine having put in a scorching lap at 1 min., 44.39 secs. Satcher and Schick's specials tied at 1:52.41. Other fast qualifiers were the Allard, 1:57.06; Pollack's MG, 1:57.74; Barlow's Jaguar, 2:00.29; McAfee's Cadillac, 2:02.55; and Edwards, 2:02.96.

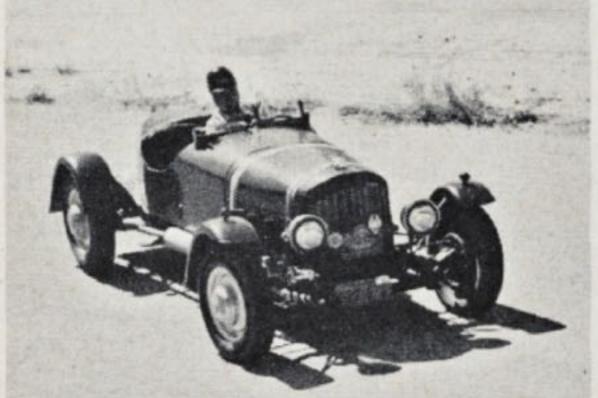


JAGUAR XK-120, with Roger Barlow at the wheel, takes a fast 90-degree turn at start

SANDBERG HILL CLIMB



AS SPONSORS of the Sandberg Hill Climb on April 2nd, the California Sports Car Club played host to 35 local enthusiasts. Surrounded by beautiful scenery, the event was conducted up a 6/10-mile course, which included an interesting variety of curves, and put a high premium on power and handling characteristics. Entries included Jaguar XK-120's, the new Allard K-2, various specials, and many MG's



CAS SERMAK

WINNING car, with a time of 43.4, was the Beetle, driven by G. Thatcher Darwin, seen here on fastest turn of course. This sports car has 1940 Mercury powerplant of about 175 bhp

RESULTS

Large Sports Cars	
1. G. Thatcher Darwin—Beetle	:43.4
2. J. Robinson-Jaguar XK-120	:44.8
3. Roger Barlow—Jaguar XK-120	:45.4
Small Sports Cars	
1. Robert Doidge-MG (blown)	:53.2
Eliott Fisher-MG	:53.2
3. R. F. MacMillan—MG	:53.5
Large Touring Class	
1. Donald O'Connor—Bugatti (Ford 6)	:50.3
Small Touring Class	
1. D. B. Albee-Austin A-40	:65.7

Bridgehampton Road Race

TY7 ORD has just been received from W the Sports Car Club of America that this year's Bridgehampton Sports Car Road Races will be held on June 10th. The first race starts at 10 A.M. of this date and all entries MUST be in before May 15th. Practice, inspection, and drivers' meeting will be held Friday, June 9th.

Application blanks may be obtained by writing to the Secretary's Office, 200 Furnace Street, Sharon, Mass.

Last year's feature event, held over a roughly square course of four miles, was won by George Huntoon of Miami, Florida, in an Alfa-Romeo.

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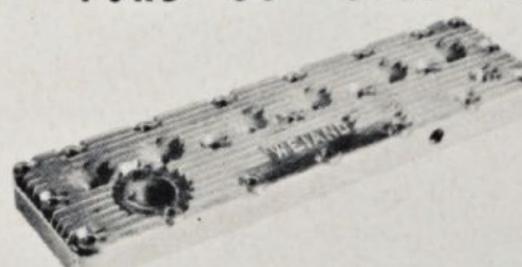
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A Note 70 Our Readers

Each month, MOTOR TREND prints a listing of available back issues. For those who have only recently discovered MOTOR TREND, and for older readers who wish to replace damaged or wornout back issues, we are happy to provide the convenient order blank below. Check desired issues and mail your order today.

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Thirty

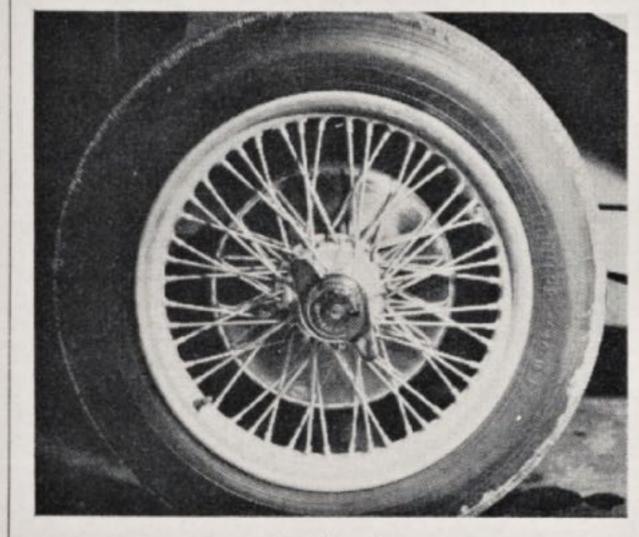
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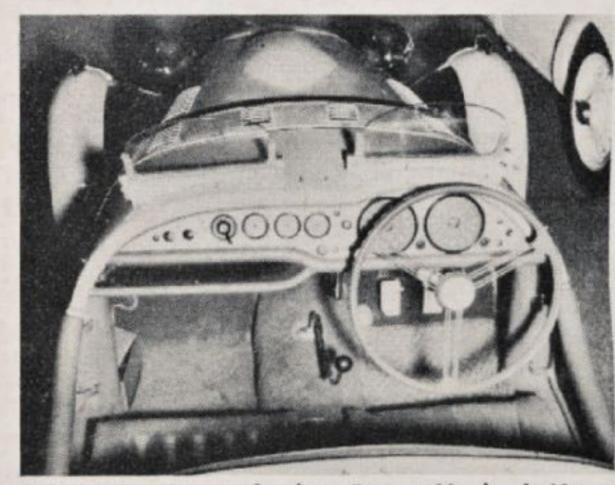
Write: IMP MOTOR SALES San Fernando Rd., Glendale, Calif. British Motor Review

(Continued from page nine)





ZORA DUNTOZ, designer of the Ardun OHV V-8 engine, is pictured here pointing out the twin carburetion, twin manifold set-up on the Ardun equipped Allard. Maximum rated power of this installation is 175 hp at 5200 rpm with 225-foot-pounds of rated torque at 2500 rpm



COCKPIT view of the Frazer-Nash LeMans model, a two-litre, 120 bhp job. This road racer model will sell for \$6750, in New York City



INTERIOR shot of beautifully upholstered A-90 Austin sports sedan. Miss Austin (1950) inside

June 1950



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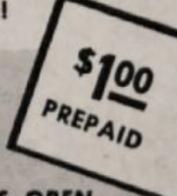
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Motor Trend

June 1950

Thirty-three

LETTERS...

FROM OUR READERS...

Letters published in this department are the opinions of the writers and are not to be construed as those of the editors. Address correspondence to: Letters From Our Readers, MOTOR TREND, 1015 So. La Cienega Boulevard, Los Angeles 35, California.

A PRODUCTION SPORTS CAR? Gentlemen:

Your article in the April issue, "A Production Sports Car?" had a familiar ring. I felt as though I had read it somewhere before. It was back in the thirties that we heard the same story over and over again in the motorcycle field. They said American riders won't buy those small foreign machines; they don't like small motors; they want a lot of iron for their money; and on our roads we need big machines. Well, look at them now. What are all these 500's doing on the highways and tracks? I would say the manufacturers guessed wrong. So, let's not take these predictions . . . too seriously. Alfred Larson

Temple City, California

Gentlemen:

Thirty-four

Having just read the very interesting article entitled "A Production Sports Car?" I must beg to disagree with the reasons given why Europeans make sports cars. The answer does not lie in the roads-not at all. English roads, twisty as the Devil's bait, are better surfaced than the ones here.

The answer, to my way of thinking, is this. There is no open country speed limit in England. This means that Graduate A of Oxford University can say to Graduate B, "My record to London is 21/2 hours." And

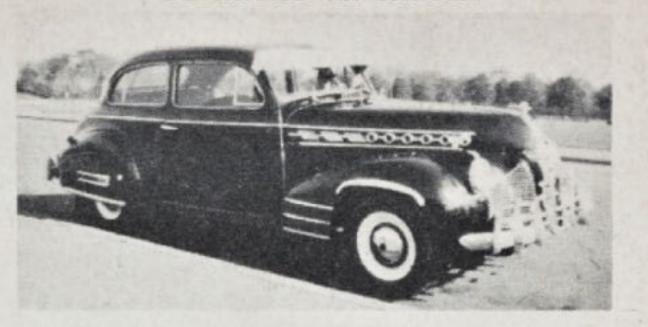
that's why we have sports cars. We like the sport of motoring. That is not true of America. If it were, you would have your own sports cars. The motor cars here are purely utilitarian jobs to get you from A to B, as comfortably, as warmly, and as silently (until someone turns on the radio) as pos-

One day let's hope your designers will scrape all the extras off the exteriors of the cars, fit some proper sized wheels to themand then no more European sports cars will be needed.

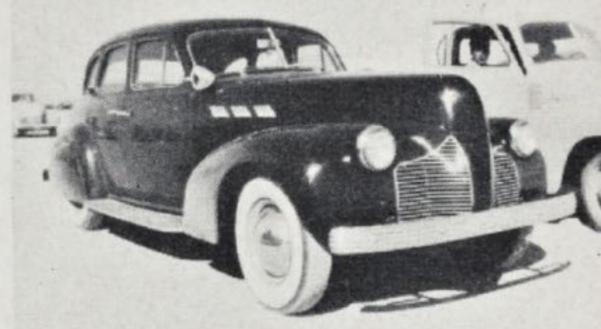
Patrick Braddoll Washington, D.C.

WE'VE MOVED!

Due to expansion of MOTOR TREND and our companion publications, HOT ROD MAGAZINE and CYCLE, it has been necessary for us to move to larger quarters. Address all future correspondence to: 1015 So. La Cienega Blvd., Los Angeles 35, Calif.



DECHROME VS. CHROME



In your "Letters From Our Readers" section of MOTOR TREND, March 1950 issue, you have a letter from William Ingram under the title of "Chrome or Dechrome."

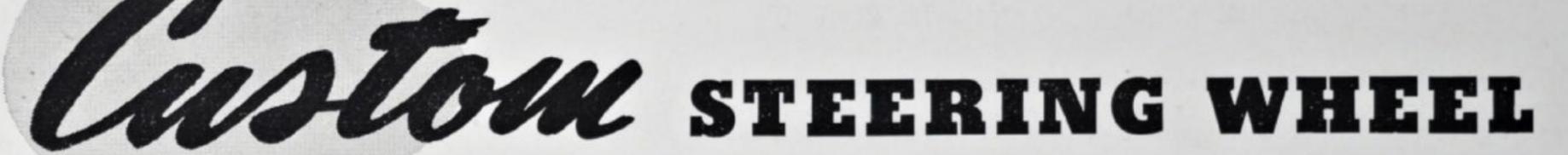
Mr. Ingram prefers the addition of chrome to enhance the beauty of a stock automobile. We prefer the removal of chrome to create an effect. Enclosed is a photo of a '40 Pontiac built by Ray Hamer of Inglewood, California. We think it shows a good comparison.

Bob Constable Charles Whitesell Inglewood, California

-Top car is William Ingram's car; bottom photo is one sent in by readers Constable and Whitesell.-Editor.

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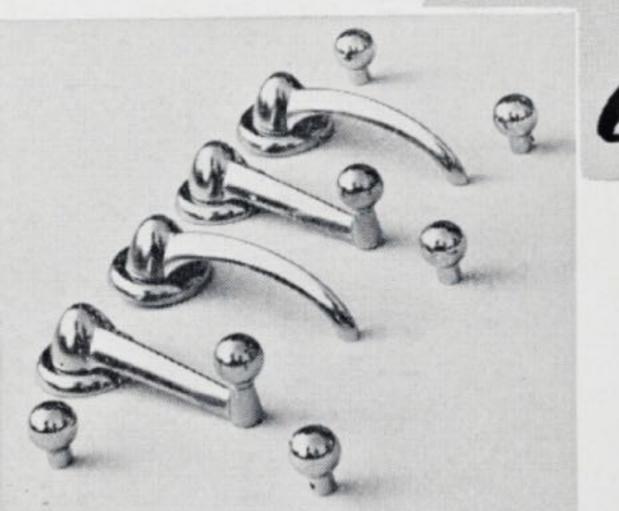
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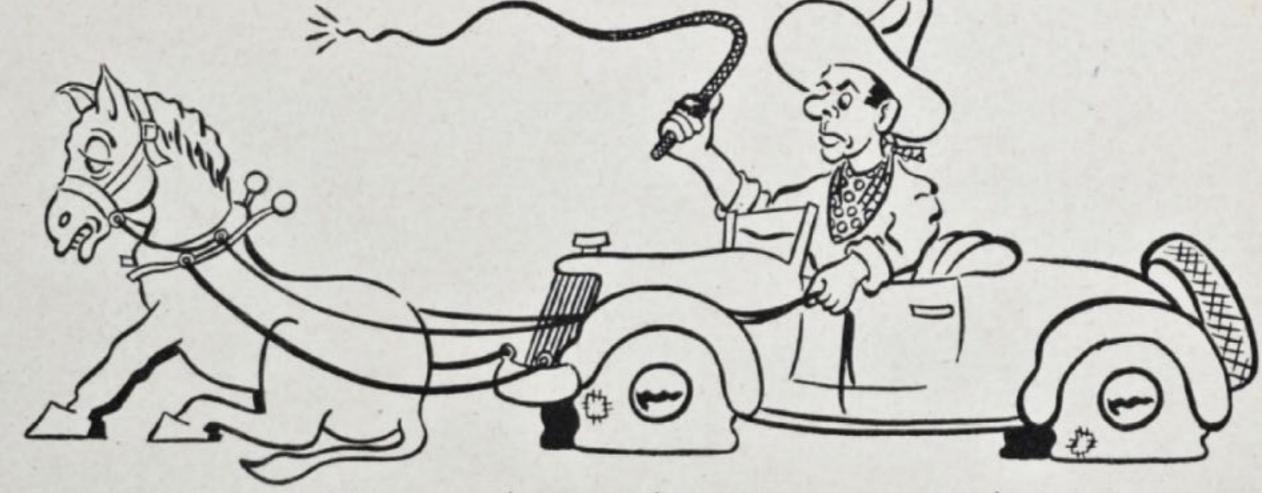
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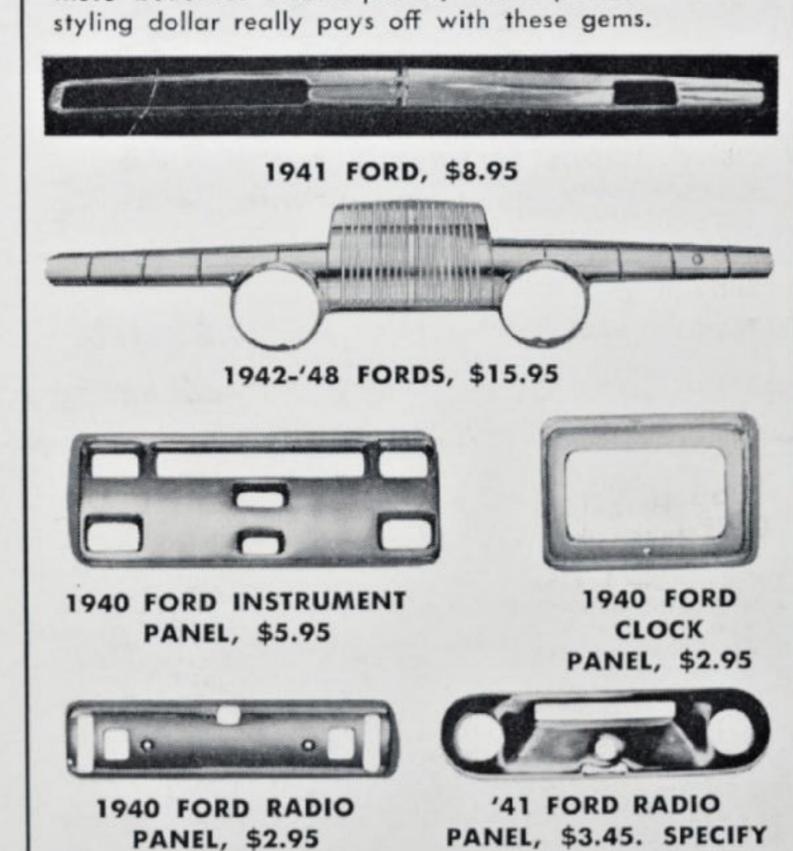
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Motor Trend

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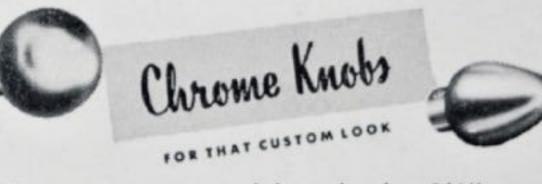
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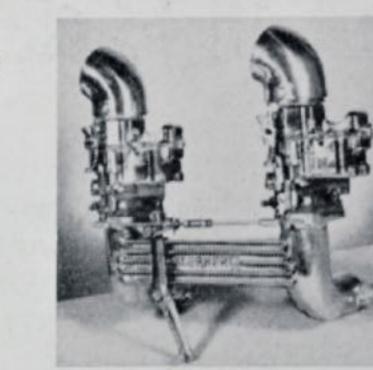
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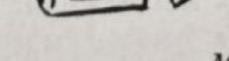
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