



MISCELLANEOUS RAMBLINGS

HAWTHORN . . .

BY A STRANGE quirk of fate, World's Champion Mike Hawthorn was killed in a car-truck accident shortly after he had announced his retirement. Mike was a young man with a tremendous zest for living-always full of fun. He will be sadly missed by all of his friends and fans.

THE VANWALLS RETIRE . . .

Tony Vandervell is known to our readers as the Englishman who put Great Britain back in the running for International racing prestige. Therefore, his recent announcement of total retirement came as a real shock. And it puts Moss and Brooks into the ranks of the temporarily unemployed.

The reason is straightforward enough: doctor's orders. Vandervell could not sit back and take it easy; he had to follow his cars and personally direct all activity. This is, or was, a strenuous life indeed. The Vanwall team is definitely retired and there is very little likelihood of their ever running again. Incidentally, financial considerations had no part in this decision. Vandervell himself has said he doesn't know what the project has cost him. and he doesn't care. (Some say he spent over \$1,500,000 all told.) He is a multimillionaire who built up his business of making engine bearings by having the foresight to take up a license agreement on an American patent, the "thin-wall" bearing.

THE MARK III VERSION . . .

The third model of General Motors' Firebird gas turbine car has received good publicity, but a few items have been generally overlooked.

1. The front-end styling looks extremely GP Ferrari-ish-perhaps a hint of things to come?

2. The G.T. powerplant develops 225 brake horsepower and weighs 600 pounds. The current Corvette fuel injection engine has 290 advertised hp (or about 240-250 net, as installed) and weighs 530 lb complete except for the flywheel.

3. The "simple" drive train includes a transaxle with a modified Hydra-matic transmission.

4. A solid front axle is used, with all steering components attached thereto.

(See Sports Car Design 18, Road & Track, February 1955.) Also, we once suggested (in Technical Correspondence) putting an MG-TD rack and pinion gear on the TC axle.

5. The braking system is probably close to the ultimate in known techniques. designed without regard for cost. It features a) cast aluminum wheels with integral drums and cooling passages; b) two expanding aluminum shoes for each drum, measuring about 11 x 4 inches (instead of disc or spot brakes); c) metallic linings cut into small rectangular areas for air flow, 32 pads per drum; and d) a sensing device on each wheel to eliminate wheel lock-up.

6. A separate 2-cylinder, horizontally opposed gasoline engine of 10 bhp drives accessories. This is an all-aluminum engine with integral heads and

no cylinder liners.

7. A unique single-stick control system has a single feature that might intrigue sports car devotees. Briefly, the "stick" has a 1.5-lb knob which swings over when one corners too vigorously and provides automatic correction of the steered wheels in the proper direction to eliminate a side skid. Imagine what Fangio or Moss would say!

THE NEW YORK SHOW . . .

As we did last year, we will have a booth at the New York Auto Show (April 4-12). From our own experience, we find such participation ex-tremely worthwhile. Last year's show drew enormous crowds and the current growth in stature of the "small" car should insure tremendous interest. We certainly feel quite perturbed to hear that Volkswagen will not exhibit. This is an extremely short-sighted policy. Once a year, the importers from all nations should unite in a concentrated effort.

Our May issue will feature imports introduced at the show.

BUGATTI DIESEL . . .

Late in 1955, a new building appeared on the grounds at Molsheim, ostensibly for the purpose of producing a new V-8 engine for Simca-or at least so we were told. At the same time. some of the old buildings were loaded with new machinery working at top speed on a large flat-8 engine for the BY JOHN R. BOND

French military. Nothing ever came of the Simca project, but now it has been announced that Bugatti will produce the British 1.6-liter Perkins diesel under a recent license agreement.

This is very good news, as the quantities involved are considerable (up to 20,000 per year). Since nothing more has been heard re the rumor of Bugatti-Ferrari cooperation, it may be that the firm will get down to business and revise their own 1.5-liter sports car project—Mme. Bugatti permitting.

200 TESTS . . .

With this issue, we pass another milestone. In 200 road tests, we have had one accident, one engine blow-up, one engine seizure, two rear-axle failures and (so far) no traffic tickets. The accident should not be charged off to road tests because it occurred when one of our staff let a friend try out the car. The engine failures were with a well known 722-cubic centimeter, 4-cylinder car with single overhead cam and a 2-cyl job that had no oil in the crankcase. The axle failures were on a 1952 American sedan and a sports car that is now an orphan. The ticket business was sheer luck. We were once grilled for two hours by the highway patrolprimarily because they thought the two sports cars we had were stolen. They were "borrowed"!

Two hundred tests, plus another 20 that were not published, mean a lot of cars and we pride ourselves on the consistent accuracy of these reports. Our biggest problem is that we tend, perhaps, to be cynical and too critical. Nevertheless, we have yet to find a car which is without fault (in our opinion), even making due allowance for purpose intended or price limitation.

There is always a place for an honest difference of opinion. We try to be fair and still take the approach that we are interpreting a given car in a way that will be typical of the American viewpoint.

THE 1960 CORVETTE . . .

A recent magazine article purports to "tell all" about next year's Corvette. It is one of many pieces on the subject. We would like to state, most positively, that practically nothing in it is more than guessing. The 1960 Corvette will be substantially as before: the body will be fiberglass (not steel); and it will be a roadster with a removable hardtop (not a coupe).

The possible part of the story is this: Chevrolet is considering a steel coupe-type body, but the year will be 1962, if it happens at all. Also, if and when, it will certainly look nothing like the exceedingly impractical design which accompanied the article. The point is this: even Chevrolet doesn't

know what the 1961 or 1962 Corvette will be—so how could a private citizen know?

THE ULTIMATE . . .

Reference to the fabulous Scarabs and John Edgar's 5.7-liter Pontiac-powered Maserati brings up an idea our technical department has been kicking around. It is this: suppose someone should decide to build the "ultimate" sports car. By this we mean a machine which would produce lap records on any known course and would be built without regard to cost or existing regulations (such as the 3-liter limit).

The first consideration would involve building the lightest possible engine with a power output of about 400 bhp. That much power is about the top limit for a 2000-lb car and even then would mean that four-wheel drive would be an absolute necessity. Without going into a lengthy discussion of the problem, we envision an aluminum V-8 of large displacement with a single overhead camshaft on each bank and no supercharger. Roughly, a 400-lb engine of 350 cubic inches, 400 pounds-feet, and 400 bhp at 6500 revolutions per minute. This would mean 33% more power than the Mercedes 300-SLR, with perhaps 20% less weight.

The ideal "ultimate" gearbox would be fully automatic, but nothing like a passenger car's in action, particularly on downshifts. Here we see automatic downshifts occurring in proper sequence whenever the foot is off the accelerator, but only when the vehicle has slowed to the point that the downshift will not cause over-revving.

Then we have the problem of deceleration, and here the fact that we have four-wheel drive brings up the intriguing idea of using both inboard and outboard brakes, with eight drums in all! With the new Kelsev-Hayes combined wheel and drum shortly to be available, we have a good starting point even though they are 14-in. rims. (We understand K-H will market the new wheels for replacement on Ford. Chevrolet and Plymouth.) While we have no exact data, the K-H drums will undoubtedly have an 11-in, diameter. Eight of them, made of well finned aluminum alloy, should give over 360 square inches of lining and tremendous head dissipation capacity.

With no clutch pedal, we could give the driver two brake pedals. The left one would control hydraulically actuated outboard brakes; the right, mechanical inboards for extra safety and reliability. What a screaming-demon, accelerating-decelerating monster!

THE RIGHT TO RACE . . .

Senator Richard L. Neuberger of Oregon has been a forthright campaigner for many liberal causes. Even his conservative opponents will admit that he is usually no slouch at marshaling his facts.

In the January issue of Mechanix Illustrated, the Senator's name appears as co-author, with Lester David, of an article called "Auto Racing Must Be Outlawed!" The cause is not so liberal here, nor are some of the facts so sound ("... the 'open road' kind [of racing] has been practically abandoned in this country"). That's beating a once bloody but now dead horse. Then, too, Road & Track readers know how much time and money are going into driver and spectator safety measures, though Neuberger apparently does not.

But it is with the Senator's opinions on racing that we differ. "The exhibitions," he says, "are degrading to the human spirit . . . For every spectator who really understands and loves automobiles, there are a hundred who come because men are in constant peril of being killed or mangled."

Mingle with the spectators at a sports car race, Senator. Racing is indeed dangerous, but that isn't why it's exciting. You will probably see no accident at all, but instead will hear all around you at the end of the day, "A wonderful race, and nobody hurt."

It looks to us, Senator, as though you want to do away with the right to drive in, or even to see, events we all love in spite of their bad side. Racing is a contest of skill in engineering and driving, with moments of genuine greatness. Participation in it, active or passive, has always been entirely a matter of free choice—a basic democratic principle that we recommend to you, Sir.

JOWETT PARTS . . .

We have had quite a few inquiries re parts for the Jowett since the company ceased passenger car production in 1953. Some parts are available in the U.S., but the British firm still exists and we understand they service about 100 cars per month (25,000 Jowett Javelins were built). If you're stuck, write Jowett Engineering Ltd., Howden Clough. Batley. England.

SMALL, OR COMPACT? . . .

Current terminology indicates a definite antipathy toward the words "small" or "economy" car. George Romney frequently uses the term "compact," which is astute: the most popular Rambler has a 108-in. wheelbase.

In this issue, we start the first of a two-part article on the R&T "small" car—wheelbase 100 in. This little project has stirred up more enthusiasm among our staff than anything we've done in years. Despite committee-type decisions, there was remarkable uniformity of opinion regarding the essen-

tial specifications. Readers should note, however, that a design such as this can at best be only rather sketchy. A full-blown program would entail a staff of at least 50 draftsmen, and about a year's time from idea to blueprints ready for release to production.

NEW CARS . . .

The first concrete result of Frank Costin's new association (he was formerly with Lotus) is evident in the accompanying photo of the 1959 Lister. The rule-cheating central bulge over the Jaguar engine is gone, presumably because Costin's well known proficiency in aerodynamics made it unnecessary—particularly in view of the raised rear end which has (almost) become his trademark.

For 1959, the Lister-Jaguar chassis is unchanged except for adoption of Dunlop disc brakes with hot-air scrapers and revised cool-air entry. The ducted air supply to the radiator has been dropped.

The double-curved, molded plexiglass windshield will be supplemented by a patented tonneau cover of undisclosed type which is said to be essential to the whole concept. There is no mention of the Corvette engine option of last year, but three sizes of Jaguar engines are available: 2986 cc, 3442 cc, or 3781 cc.

Colin Chapman has quite a few new developments for his 1959 Lotus lineup. In the meantime, we are still waiting for the first Elite coupe, which has been "on the water" long enough to

The 250,000th Volkswagen destined for U.S. delivery takes a run up the 30% grade on VW's new 60-acre proving ground at Wolfsburg, Germany. This new test area includes a 1.12-mile oval circuit, 29.5 feet wide. It has bankings at either end (one can be seen here) and enables speeds of 93 miles per hour to be maintained without side thrust. There are hills, skid pads, sections of various types of paving, sand, and facilities to create artificial rain. It is reported that each of the 2500 VW's produced every day is tested on this proving ground, but we doubt that each car is put through every test. The Lister-Jaguar for 1959 (see text) already shows evidence of Frank Costin's handiwork. A vastly improved new Austin A-55 Cambridge shows the Pinin Farina touch as applied to a production four-door sedan. The body, as before, is unit construction, but it is larger and has even more room for passengers, as well as increased luggage space. Engine output has been raised to 53 horsepower at 4350 revolutions per minute, and the brakes are bigger to cope successfully with the additional performance from the slightly heavier car. Floor shift is available on all models. In view of the large floor hump, it makes good sense.

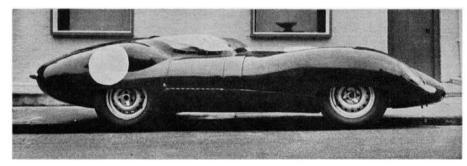
circumnavigate the globe. At any rate, the most interesting new Lotus is the Mark 17, a 1100-cc sports/racing machine which weighs only 750 lb, dry. The Lotus firm admits the new chassis was originally designed for the yet-tobe-produced 750-cc Coventry-Climax FWM engine (perhaps it's on the same boat). At any rate, after considerable vacillation, and compensating experience. Chapman has settled on a very sensible front suspension which is a paragon of simplicity. Geometrically this is the Cottin-Desgouttes system, sometimes (erroneously) called Ford-McPherson (Road & Track, October 1955). A simple coil spring combined with a telescopic shock absorber serves as a steering pivot and replaces the

usual upper wishbone. The lower wishbone is a single arm. This is combined with Chapman's favorite strut-type independent rear suspension and the net result is an 1100 model that is lighter, by 110 lb, and smaller (82-in. wheelbase). The new "17" looks extremely interesting to us and we would agree that it has even more efficient body lines and better road-holding. Unfortunately, it will not be available over here until the backlog of orders is filled.

PREDICTION . . .

We predict that the new Dutch DAF car will not have a belt-drive automatic transmission when it finally goes into production (delayed again). We may see samples here by summer.





PAUL WEST

