





DISTINCTION

with a Difference

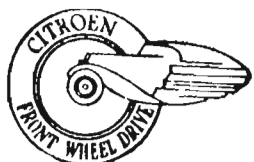
The individual and handsome styling of CITROEN gives a distinction that marks it apart from all other cars. But in addition to its external beauty, CITROEN design . . . still the most modern and most successful over the last eighteen years . . . sets it in a different class. Only the

fortunate possessors of CITROEN cars are able to appreciate the surging power—the superb, safe road-holding—the effortless high cruising speed—and the wonderful ability that belongs to CITROEN alone to make a smooth run on any road.

FRONT WHEEL DRIVE • INDEPENDENT FRONT SUSPENSION • TORSION BAR SPRINGING
DETACHABLE CYLINDER BARRELS

CITROEN

PRICES
"LIGHT FIFTEEN"
SALOON
from £1,047. 1. 2
"SIX CYLINDER"
SALOON
from £1,525. 18. 11
(inc. Purchase Tax)



CITROEN CARS LTD

Telephone : Slough 23811

SLOUGH BUCKS

Telegrams : Citroen, Slough

Chairman/Magazine.

John Dodson, North Cottage, Mongers Farm, Barcombe, Nr. Lewes, Sx.

Joint Editors.

Reg and Ginny Winstone, Sutton House Cottage, Iford, Nr. Lewes, Sx.

Secretary.

Tricia Brice, 27 Forest Hill, Tovil, Nr. Maidstone, Kent.

Treasurer.

David Shepherd, Flat 2, Field House, Esplanade, Bognor Regis, Sx.

Spares Committee.

Graham Sage, 55 Bower St, Maidstone.
John Gillard, 19 Carol St., London N.W.1.
Brynn Hughes, 49 Providence House, West Ferry Rd, London E.14.

Events Committee.

Tony and Maria Hodgekiss
94, Oving Road,
Chichester, West Sussex.

Tricia Brice, 27 Forest Hill, Tovil, Nr. Maidstone, Kent.

Bernie Shaw, 45 Green Lane,
Windsor, Berkshire.

Fred Annells, 86 Burnet

Ave, Burpham, Guildford, Surrey.

Standing Committee.

Graham Brice, 27 Forest Hill, Tovil, Nr. Maidstone, Kent.

Tom and Rosie Evans (Eastern Section)

The Cottage,
Hungate Road,
Emneth, nr. Wisbech,
Norfolk.

Welsh Section: Rhodri Prys-Jones,

15 Ty Hen, Waunfawr, Caernarfon.

Scottish Section: Walford Bruen,

Barns House, Ayr.



North Cottage, Mongers Farm,
Barcombe, Nr. Lewes, Sussex.

Floating Power

Volume Two Number Four

August Nineteen Hundred and Seventy Seven

We have had a good response from members on the spares questionnaire, but there still remains a proportion of people who have not replied to the questionnaire that we sent out. To jog your memories, the main points were:— Which spare parts do you have most imminent need of? Do you think £10 a satisfactory amount to contribute towards a spares shop? We should be very grateful if those who have not yet got in touch could do so as soon as possible; this will not only help us to get a more definite idea of what members want, but might prevent you kicking yourself pretty hard in the future. For those who have replied and expressed interest will obviously receive priority when wishing to buy Club spares under the scheme, so that it is really in your interest to let us have your thoughts on the matter. We shall be discussing it at the AGM, and will keep members informed through the magazine of how the idea is progressing.

News of social (and useful!) events both at home and abroad:

Sunday 11th September: TOC French Picnic, starting at 12.30 pm. Last year's event was so successful that we are repeating it in September — the French Picnic with its attendant Michelin Man and a Club stall will be held in the Old Park, Conyboro Farms, opposite the Rainbow Pub, Cooksbridge, Lewes, Sussex. (See map below). We hope to see some other pre-1955 French cars there this year, and if you have a stripey t-shirt or beret, or other ethnic gear, turn up in it . . . We shall have a couple of small prizes for the most "French" individual present, as far as dress goes, and the most original outfit (including car) on a French theme. Please bring food and wine — this is all "pooled" to make up one big feast . . . and keep your fingers crossed for fine weather.

Sunday 25th September: Grand Clear-Out Spares Sale. John Austin is holding an autojumble in his barn at Shirrel Heath, Southampton. There will be lots and lots of bits, and the local pub has arranged for a lunchtime extension to accommodate hungry (and thirsty) members . . . Will all those wishing to lunch send a 25p. Postal Order to John Austin, Wellington House, Shirrel Heath, Wickham, Hants., as soon as possible so that he can order the lunches. Please say whether you would prefer Ploughman's Lunch (35p.) or Salad with meat (75p.) The 25p. will be credited towards the cost of your lunch.

Lunch at 1.00 pm, Prince of Wales, Shirrel Heath.

Spares Sale 3.00 pm, Wellington House, Shirrel Heath. (For directions see map).

The Dutch are holding their Jaarfest on the 10/11 September — usually an impressive event, with an enormous line-up of tractions, and large spares shop. Anyone wanting further details can write to MN. Michon, De Perponcherstraat 80, Den Haag, Holland.

At the C.C.C. and T.O.C. Rally at Salisbury, Alec Bilney in a French Big 15 won the Traction event, (in spite of competition from Dr. Sellers in his roadster) and Bernie Shaw was the Concours winner of the T.O.C. framed photograph and C.C.C. cup. I think Bernie will fall through his monocoque with surprise when anyone actually beats him in the Concours! I know a lot of T.O.C. members (including the editors) who fantasise about the happy day when their car, gleaming and immaculate from roofline to Michelins, just beats Bernie's car to the Concours cup. . . .

Although I'm sure that many people have had happier experiences, our dealings with garages have tended to convince us more and more that we should do the work ourselves rather than leave it to often careless or indifferent mechanics. We are "guarding" a Slough Light 15 for a year for its student owner, and when he delivered it to us it had just passed its MOT, after some work on the halfshafts and front transmission by the test garage. On a short run a couple of days later,

it developed a very nasty noise in the front nearside wheel, which when stripped down, revealed that the stub axle had been liberally smeared with grease, and the brake drum assembly was, as a result, totating on the axle, carving large chunks out of itself and the stub axle. This could have resulted in a very nasty accident, and emphasises, I think, that you should submit your traction only to a garage that you know to be reliable, that will admit that you might just know more about some of the car's foibles than they do, and that, preferably, has some knowledge of the model. But this is in an ideal world. . . .

FOOTNOTE

The following car's owners very kindly filled in the register up-date form, but omitted to tell the Club Secretary who they were or where they lived. Could they just drop Tricia Brice a note, letting her know which car they belong to?

PNE 796; UEH 735 and PPP 275; LWT 238P; RYR 925R; ROK 205; JAB ?

(Green Light 15 saloon); KZ ? (from Ireland).

Leo Quinn, from Yorkshire, inspired no doubt by the success of the Scottish and regional sections, has suggested that there might be interest in starting a section in his area, kicking off perhaps with a pub meeting — he is writing to us with further details. Anyone interested in the meantime could drop us a note at the magazine.

Any technical enquiries should from now on be addressed to the Editors, and we will pass it on to the relevant expert if it surpasses our expertise; spares queries should, of course, be sent direct to the Spares Committee. They are, by the way, doing an excellent, if unpublicised job, chasing up sources and trying to arrange amazingly complicated swops with European traction clubs, and will do their very best to help anyone who is having trouble locating spare parts.

"Citroën: The Great Marque of France (Quai de Javel: Quai André Citroën)". £10.95 net. "Peugeot: Sous le Signe du Lion." £11.95 net. Both by Pierre Dumont. (E.P.A., Paris, U.K. Publishers Albion Scott.)

These two immensely important books are at long last available on the British market, though only *Citroën* comes in true "r.h.d." form with a competent translation of main text and illustration captions by Tom Ellaway. *Peugeot* is entirely in French apart from some rather funny translations of the picture captions: which latter defect should not deter anybody, since M. Dumont is a conscientious historian right up in the Maurice Hendry class, and with that reluctance to accept any well-publicised fact as gospel that we've missed (too often) since the death of the inimitable Tony Bird. (It speaks volumes for Mr. Ellaway's translation that it recaptures a good deal of the authentic Dumont).

The formula is, however, neither Batsford-Cassell-Macdonald nor *Automobile Quarterly*, nor yet Dalton Watson. It has the excellent art-paper production we have come to associate with Laurence Dalton's ventures, but while pictures bulk large, there is an extensive textual commentary, M. Dumont using his picture captions to cover detail points and (incidentally, to point out certain anomalies resultant from using pre-release photos to illustrate so-called "production" cars. This, especially in Citroën's case, has led us to believe in all sorts of odd sub variations one can't buy, and with Slough's reverse-blocks, even worse things happened).

Citroën is as comprehensive a company history as one may hope to achieve, from Type-A (and the A.C.D. prototypes which preceded it) right up to Wankel experiments and the latest GS/CX variants. Nothing is missed out, and we are introduced to all the oddballs—the original O.H.V. sports models (factory O.H.V., not accessory-shop conversions, which happened on both sides of the Channel) with pen-nib colour separation which anticipated E. L. Cord, Carbodies and William Lyons, though we doubt if any of these folk (or indeed many Frenchmen) had ever heard of it. Thence we progress to the

Caddy and the B14 sports, which weren't o.h.v. but were *légèrement poussés* (if at all) under their bonnets. Other curiosities were the four-cylinder 15CV which never happened, except in half-track form, and not very often then, the mysterious modernised 5CV which turns out to be a stock 1926 model with 1930-type sheet metal in which the police allowed the teenage Citroën children to trundle about Deauville at 10 m.p.h., and the "Chinese" wide-track B-14s which the Chinese decided they didn't want: since these were right-hand drive, the ensuing frustrated exports were blamed on Britain by the French. Then there was the 22CV front-wheel drive which very nearly didn't happen albeit even M. Dumont isn't quite sure what went on under the bonnet, though he's suspicious of the Ford V8 story). We'd always believed, by implication, that Citroën's disastrous plans to put the de Lavaud automatic transmission into his cars dated from B14 or C4 days (according to W. F. Bradley, the whole plan went up the spout when an early automatic died on Mme. Citroën, reducing André to apoplexy), but M. Dumont (whom we believe) associates the idea with the *traction*, a brave project which probably accelerated the company's bankruptcy. He hints at—but doesn't plump for—the story that Fisher styled or at any rate masterminded the styling of the C4/C6, and points out that Jules Salomon was *not* responsible for the 5CV, though it undoubtedly reflected his small-car ideas. (For that matter, Lucien Rosengart is confirmed as not having been responsible for the Peugeot 201, an idea probably inspired as much by its Austin-Sevenish chassis as by Rosengart's latter-day appearances on Gallic T.V.). Better still, the half-tracks and trucks are included in some detail, thus overcoming our recent criticisms of certain books, that commercial vehicles seem to be *infra dig* to some authors. (Last time we wrote a book we did *not* leave them out, so please, no Shavian sneers here!).

Peugeot is a more awkward subject. Despite the hesitancy of a recent English book on Citroën, it isn't really a terribly complicated make, with no more basic families of cars than, say, Austin. But

Peugeot and their ranges invite one to invoke the Deity.

The company itself publishes some useful booklets in French, listing all their car and truck products from 1899 to the present day, which run to three volumes and are strictly for the dedicated. M. Dumont makes the score 23 different types up to 1902, and another 83 up to September, 1914, in which analysis we could not but concur. There was a further frightening type-jungle in the Vintage era: alongside the Quadrilette, the luxury sleeve-valve, and the late-20s 201 and 12/Six (16 h.p. over here), a whole assortment of uninteresting little cars in the 8/10CV class saw the light of day, and can still be encountered in the darker recesses of private collections.

The 1930s are mainly a matter of styling, suspension, *bloctube* frames, and the mandatory bore-stroke shuffle, and since the War the story is crystal clear, except that all post-war 202s did not have hydraulic brakes, these only happened in October, 1946.

The upshot of all this complexity is that the author has to keep his nose fairly close to the grindstone, and doesn't get a lot of chance to digress, beyond pointing out, for instance, the ins and outs of the touring as well as the racing Lions, reminding us that Bugatti designed, even if he didn't actually produce, a 1½-litre for Peugeot, and that the 12-Six threw rods in a most disconcerting manner, helping the attractive if not very gutful 601 of 1934 off the scene faster than it deserved. He is most entertaining and enlightening on the bridal-train tail treatments of 1934-5, when Peugeot were out-Hillmaning Hillman in terms of limited production body styles, explains the Dar'omat 202 (something we'd forgotten), and again explores the trucks, with a chapter on early diesel experiments, from the Tartrais to the fairly conventional Swiss designs that found their way into late-1930s 30-cwt. trucks (the ones with 402 front ends which the Fighting French used in England in the late War). Intriguing was the low-loading 1543 with swing-axle back end and Latil engine which Latil later decided to make themselves, the C.L.M.-Junkers two-stroke diesel found its way into war-surplus Peerlesses just as the Gardner did over here, and this beast lingered on into 1962, though not in roadgoing vehicles. There was even the Fleischel automatic gearbox that found itself in some prototype 402s, though this one doesn't seem to have got beyond the 1935 Paris Salon.

The countless Veteran Peugeots are unravelling, admittedly in catalogue book form, but accompanied by some lovely photographs of monstrous sporting cars, including a chain-drive Six, and there are even pictures of the vast, rare, and Classic 22CV six, still catalogued in 1929: this we had dismissed as a buyers' guide entry, though we believe one still exists in Lausanne. Again, no complaints, even if some readers will complain that there isn't enough racing: unfair, all the essentials are there, including the triple o.h.c. Gremillon effort of 1920-21 which most people would prefer to forget.

We found only one suspect comment: surely Andreau's hideous, tail-finned 402 sports saloon was a 1936 Salon exhibit? (It was the prototype V-12 Delage that appeared in '37, or are we wrong?).

We've heard a lot of dark mutterings from France about the English writing books on their cars—Draper, Conway, and your Editor with his *Lost Causes*. To these, the naughty retort has always been that if they won't, we will, however badly we translate/mangle their language. For some time now, however, Serge Pozzoli's *Album du Fanatique* has been giving a fine lead to French historians, much of the meat of M. Dumont's Peugeot and Citroën material appearing within that magazine's covers. And now the French are producing top-grade works of history themselves. Both the present volumes are expensive—*Citroën*, indeed, has been out for some time, and has attracted wistful glances on sundry European bookstalls—but they are excellent value and highly recommended.

T.O.C TRACTIONS



As suggested in our last issue, we are to begin a regular column in the magazine devoted to our own cars; that is to say, details of specific jobs we have undertaken, problems encountered and sundry adventures had with our Traction. Committee members are hopefully keeping a log of such exploits, and we would much appreciate similar material from our readers. For this time, unfortunately, our deadline precluded getting any mechanical information of this sort, and so we will just introduce a couple of machines as they stand.

ADJ 355 is our Secretary's latest acquisition and is, as far as we know, unique. Graham and Tricia Brice relinquished their familiar Silver big boot Light Fifteen to buy this strange vehicle. As you can see, it is a

late thirties car with a large fabric roof and faired-in wings shrouding 19-hole pressed wheels and early-type press-on hubcaps. The bumpers are completely different from standard Slough issue — the rear one being mounted virtually below the bodywork instead of level with the boot hinges; and although the boot handles are English, it sports French 'curlies' on the doors. The rear lights have been repositioned off the wings, and there is a curved trim strip running beneath the doors. I've never seen a Traction exhausting on that side, either! The coachwork modification was apparently executed in Folkestone before the war (Maltby's?). Its new owners are researching its past history, which we will be able to give you as and when its restoration progresses.

WHITE ELEPHANTS

The principle of front-wheel drive has always attracted the more individualistic, not to say eccentric, design engineers, and this is partly what the writer finds to be fascinating in the subject. Accordingly, this month, in the second of our series of articles on the pre-war history of FWD, we feature the most esoteric vehicles of the breed, five of the most bizarre White Elephants which litter the saga of 'traction avant'; follies on a grand scale, extravagant, wholly impractical cul-de-sacs of design, dazzling feats of virtuosity which owe little to their more mundane contemporaries and everything to unbridled imagination.

Paradoxically, there is nothing elephantine about the proportions of the single-seater shown first – indeed, it merits inclusion precisely because of its lilliputian dimensions. The 1925 Tipo 11 Itala, built for the 1½ litre formula then in force, was a V-12, with minuscule cylinders of 50 x 55mm. and two horizontal valves per cylinder actuated by a single central camshaft. It was fitted with twin Bosch magnetos and a Roots-type supercharger, with the drive taken forward to the independently suspended front wheels via a four-speed gearbox. The chassis frame was wooden, for reasons of lightness, and the whole car tipped the scales at under 11 cwt. – a good 30% lighter than the competition. Had it been more successful on the track, Itala intended to market the '11' as a super-sports car, with an even tinier engine option of 1,050 c.c. (45 x 55mm.), an exquisite and sophisticated 'duodecicilindri' – which never reached fruition.

Five years later, at the Paris Salon, the palest pachyderm of the lot was unveiled – the 'Double Huit' Buccioli, the culmination of a series of unorthodox designs, all of them too far ahead of their time, by two brothers of that name at their Courbevoie works. Their first fwd car, the TAN 30, was built in 1928, and featured in addition to independent suspension on rubber to all four wheels – thirty years before Alex Moulton – a Sensaud de Lavaud infinitely variable automatic transmission, as on the prototype Citroen Traction (see 'Floating Power No.1 and February '77 'Classic Car'). The driveshafts of these cars were contained in articulated housings which pivoted on the differential housing (cf. Derby chassis illustrated in 'Floating Power' five). It was not a swing axle as on the later, though, as in addition to pivoting horizontally for steering, the outer joints allowed the hubs some movement in the vertical plane, controlled by long tubular members pivoting beneath the diff., which projected through the radiator. Steering was by separate drag links activated by a patented double steering box, and the mudguards steered with the wheels. Proprietary four- and eight-cylinder S.C.A.P. o.h.v. engines were offered and drove through four-speed gearboxes.

The awe-inspiring 16-cylinder chassis which concerns us, however, took the same concept several steps further. The power unit, architectural and 'cubist' in appearance (as befitting a motor car of so artistic an inspiration) seemed at first glance to be two straight eights yoked together; in fact, though the aluminium cylinder blocks are vertical, with a few inches between them, the barrels themselves are at 22 degrees, and there is only the one five-bearing crankshaft. In Georgano's 'Encyclopaedia of Motorcars', T.R. Nicholson states that the car used two 3.8 litre Continental cylinder blocks with *two* crankshafts geared together, but the 'Autocar' report of the time details the specification as above, and since Nicholson also cites the date of manufacture wrongly, we would prefer the former as being fact.

The car had two radiators, one being ahead of the transversely-mounted transmission, the other behind it; the fan shaft went through the rear radiator, as per the V8 Citroen (F.P.5) so that a second fan could be mounted between the two. The front-wheel drive unit was fully enclosed, and the wheels were cast aluminium alloy with integral drums. This exotic chassis was to be clothed in the most flamboyant of Saoutchik coachwork, reminiscent of the low-chassis Double Six Fifty Daimlers in that the wings rose higher than the bonnet and waistline – window depth proposed was a mere six inches in some styles! The Buccioli brothers themselves did not have the facilities to enter into series production with such a machine, and the prototypes were built in order that the licence be sold to an established quality car manufacturer; indeed, the Peerless Company took up the American rights (see also their part in the Ruxton story – F.P.6), but they themselves went into liquidation shortly afterwards as a casualty of the depression. Another dead end.

It is to the States that we next turn. Harry Miller is synonymous with transatlantic fwd between the war, and he is connected with the three rarities we are to consider, though only incidentally with the Packard. This company had been associated with fwd since their involvement with the racing Millers of the twenties, and in 1932 they produced as a one-off the sedan shown here. It was powered by a 'small' (by their standards – the current Twelve was over 7½ litres) V-12 engine. The front arrangements were designed by Cornelius Van Ranst, famous for his L-29 Cord (see F.P.5), and the body was styled by Alexis de Sakhnoffsky in such a manner as to give no external indication of the car's origins, though on close inspection, faint impressions of the famous Packard hexagon were discernible where they had been hammered out of the surface of the hubcaps. The entirely new six-litre sidevalve V-12 featured a zero lash hydraulic valve mechanism, which was in fact the only component of the prototype ever to go into production. The layout of the power train reflected the experience Van Ranst had gained with the L-29, and he achieved the desired 60-40% weight distribution (for adequate traction) by placing the engine further forward. He designed a unique final drive featuring four forward speeds. Two speeds were provided by the transmission and two by the differential, there being two sets of ring and pinion gears. The gear linkage was also unusual in

that it passed through the engine block, in the Vee, on its way to the transmission. The front axle was a massive De Dion tube suspended by single cantilever springs of generous dimensions on either side. The whole machine was certainly effective – consistently managing 105 m.p.h. – but the unfortunate reputation that the front-drive Cords had by then established must have contributed to the decision not to proceed with this project, for it too was doomed to sterility.

The machines we look at last of all, however, were never conceived with so banal an end in mind in the first place. In many ways, they are the most stunning of them all, not only for their technical brilliance, but for the fact that they were the product of the sort of extravagance only possible in a super-affluent country. The most creative engineering minds of the generation were commissioned to design, develop and construct these super-cars at the whim of an individual who wished for something out of the ordinary to cruise around in.

Philip Chancellor, a Gatsbyesque Californian of impeccable taste and seemingly boundless wealth, was this individual. In 1928 he commissioned Miller to produce the ultimate road car on the same avant garde principles as his successful racers; and Miller, romantic as he was, readily agreed despite the stern caveat of the man who had always been responsible for translating his dream into nuts and bolts, Fred Offenhauser: "It is no more possible to construct a touring car along the lines of a pure competition machine than to do the reverse. We must stick to what we know best – how to build racing cars".

Miller took no heed. The challenge was too seductive. It is probable that he did, in fact, have eventual production ambitions, for this was the era of Cords and Duesenbergs, the pre-depression euphoria when all seemed possible – and it is known that he wished to become a constructor. Certainly the 30,000 dollars that Chancellor gave him to finance the project could not have been the incentive, for despite the enormity of the sum (when Rolls Royce Phantom chassis were retailing for £1200 or so), it hardly covered the initial design study costs.

The proposals Miller's team came up with were approved by the client before his departure on an expedition to the Gobi desert. The chassis design had been coordinated and finalised by Lee Goossen, and Gerald Kirschhoff, ex-stylist from Murphy's Pasadena coachbuilders, was responsible for the unique two-seater body. The car was to be the best Front Drive ever. Goossen and Cornelius Van Ranst (cf. Packard, above) had made a detailed analysis of the problem, having between them the greatest experience of the practical implementation of fwd in the entire continent – one on Millers, the other with the Cord. The latter had many shortcomings attributable to the technical compromises that had to be made to accommodate cheaper proprietary components in its design. It had a De Dion type tubular front axle with inboard brakes and the final drive, gearbox and straight eight cast iron Lycoming were all in a line behind the centre point of the front wheels (see F.P.5), resulting in excessive length and abominable weight distribution – whence poor handling and traction.

The Miller was not to suffer from the same faults.

A beautiful 5-litre aluminium V-8 was specially built, whose racing heritage is evident in its four overhead cams; it was found to deliver 250 b.h.p. at the wheels! But, most important of all, its transmission differed radically from either Millers or Cords, for the former were just as inadequate in this respect as the Cords, though for different reasons. The gearbox of the racing Millers was, not unnaturally, conceived for the specific requirements of American racing on oval speedway tracks like Daytona or Indianapolis, and the exigencies of such courses were completely different from their tortuous European equivalents. There was no necessity for rapid and efficient changing of driving ratios, as once on the move, the cars were driven more or less flat out. Consequently, the gearchange on a Miller was of notorious difficulty, both fragile, obstructive and very difficult to achieve at any speed. This type of transverse arrangement with its inherent limitations was obviously totally unacceptable for a road car, and the Chancellor cars were made with a new box with hypoid differential which overhung the axis of the front wheels, as on Citroen tractions, thereby endowing the front wheels with optimal adherence.

At this point, with the chassis only two-thirds completed, Miller himself accepted a half-million dollar offer for his organisation, and left for the Mid-West, leaving Offenhauser to complete the task; this he achieved six weeks before Chancellor's return, during which time Kirschhoff was able to construct the aluminium body. It made extensive use of structural duralumin castings (Sensaud de Lavaud first used Alpac in this way, I think. Subsequently Gregoire used the same principles with the Amilcar 'Compound', the Hotchkiss-Gregoire fwd, and post-war Dyna Panhards were similarly constructed, too). Lightness and lowness were the twin keynotes of the design – a complete front wing, for example, weighed less than 11 lbs. It was also equipped with the first disappearing roof, a phenomenon not to

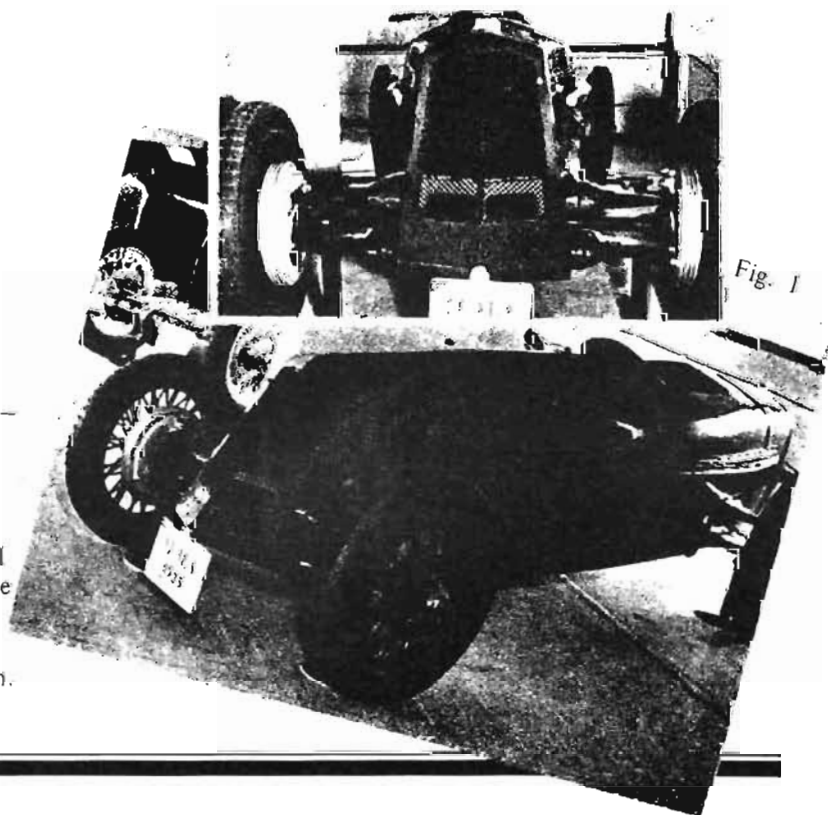


Fig. 1

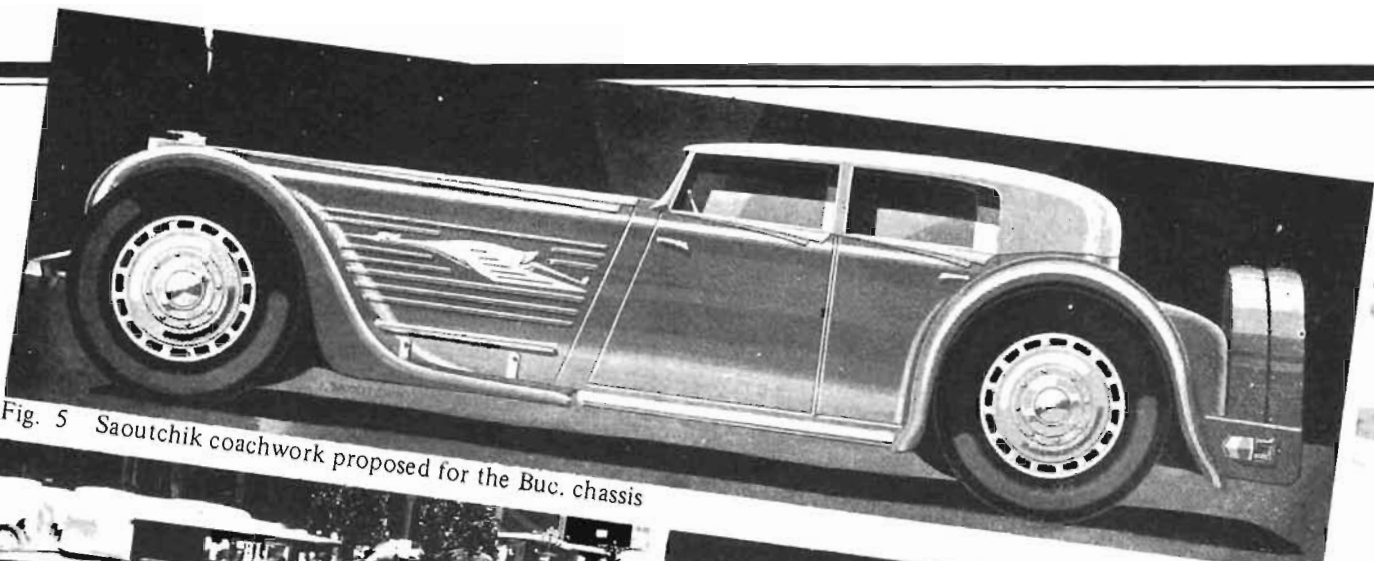


Fig. 5 Saoutchik coachwork proposed for the Buc. chassis

Fig. 8

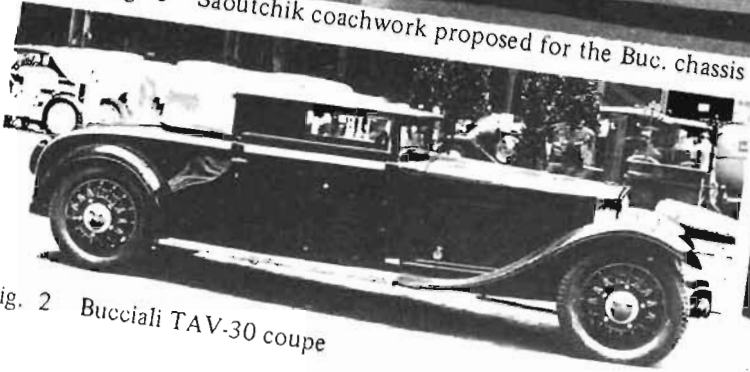


Fig. 2 Buccioli TAV-30 coupe

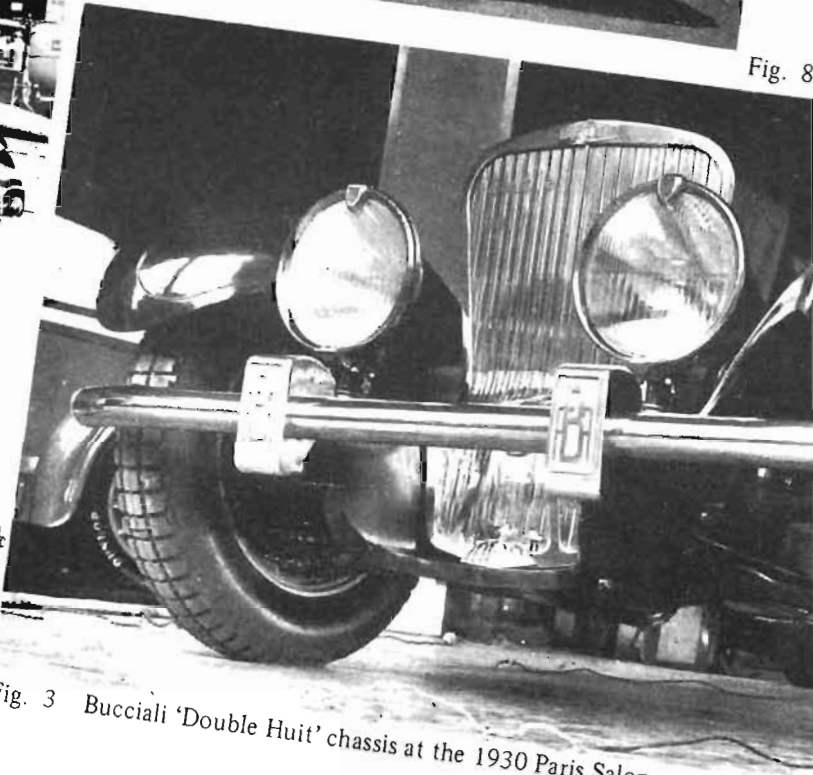


Fig. 3 Buccioli 'Double Huit' chassis at the 1930 Paris Salon

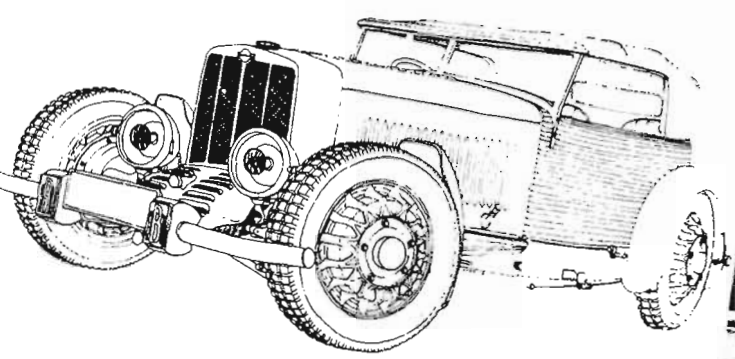


Fig. 4 The 'Double Huit' unit

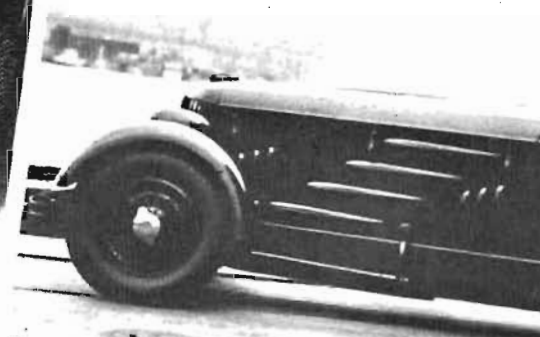
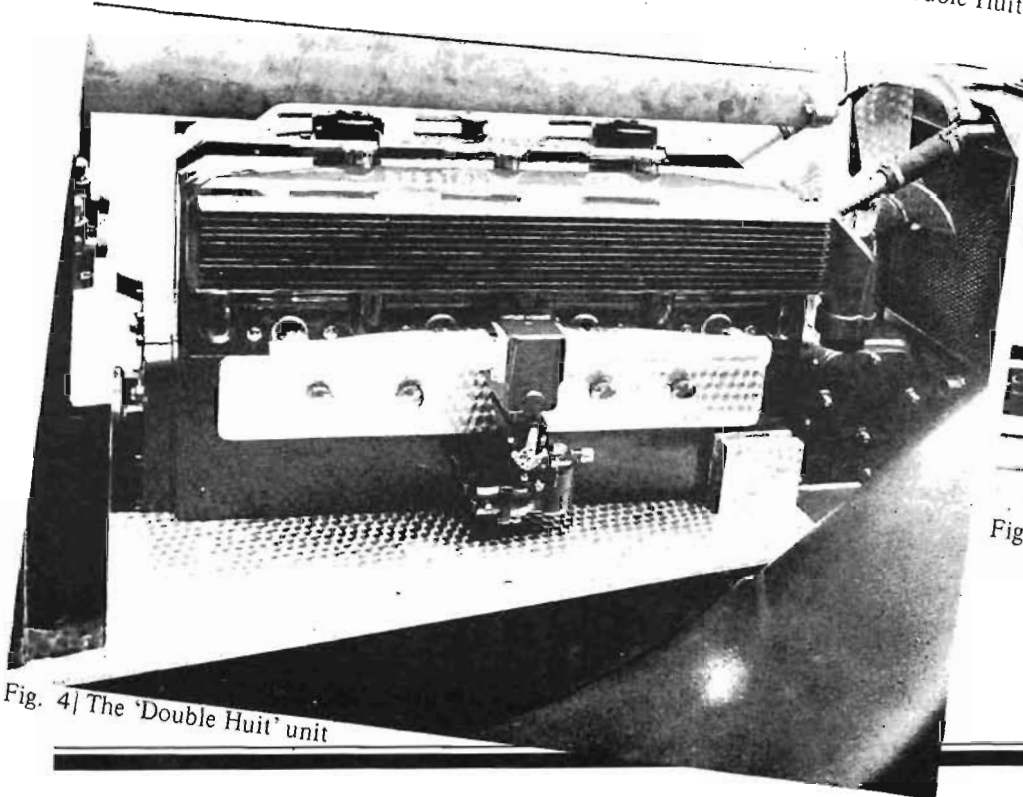


Fig. 9 The William Burden Miller 16-cylinder

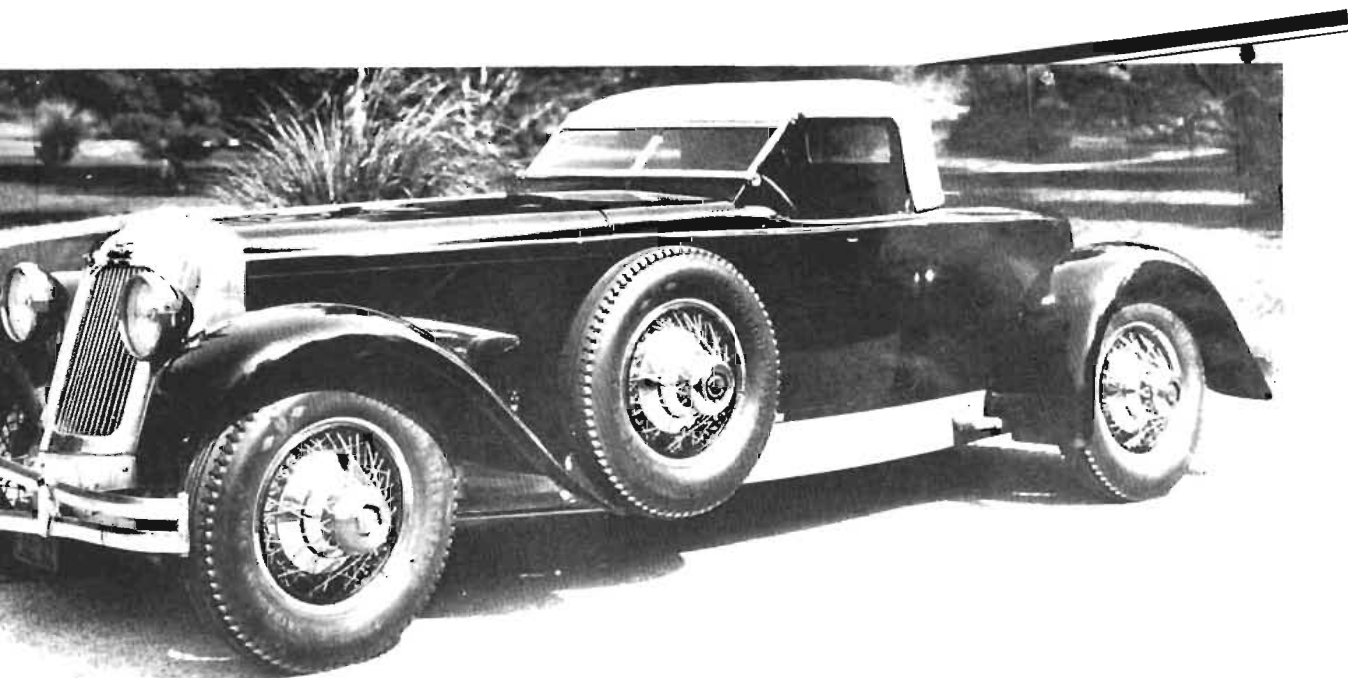


Fig. 6 1932 f.w.d. Packard Twin Six prototype

Miller-Chancellor

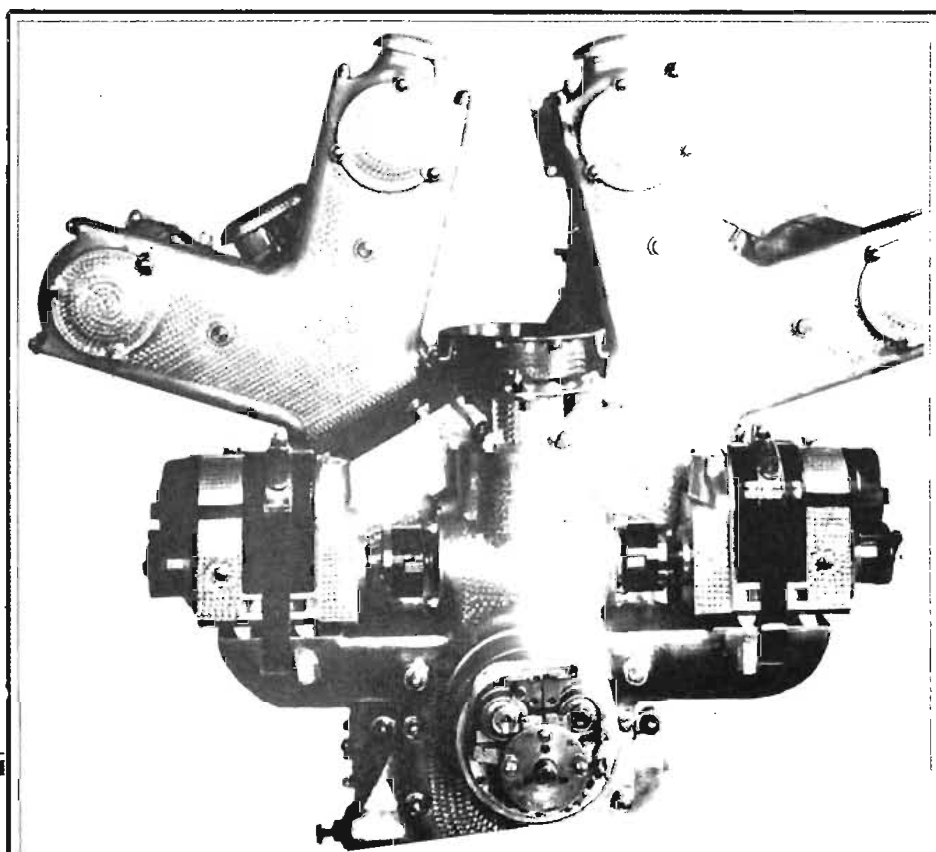
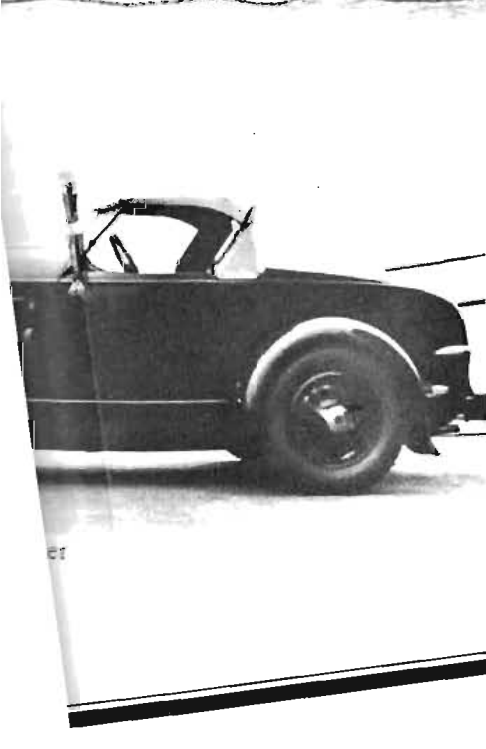
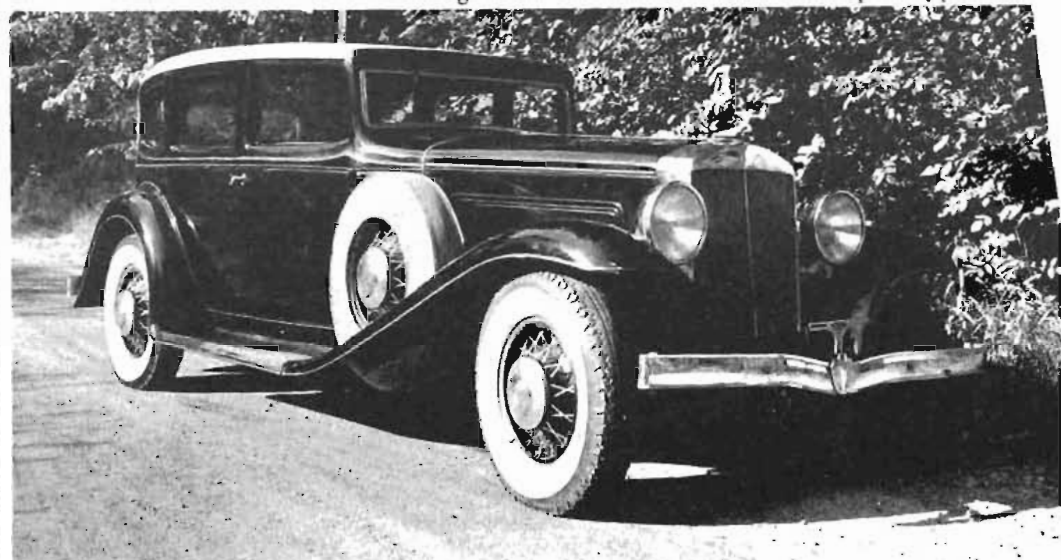
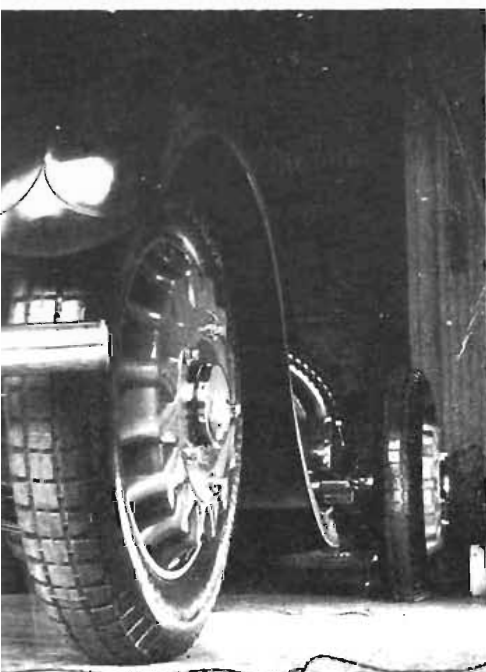


Fig. 7 The sixteen cylinder Miller engine

reappear again until Detroit's fifties dream car, with the rigid head being stowed mechanically into the boot.

Chancellor collected the car on his return, settled his account, and commenced his drive home along the Pacific coast to Santa Barbara. Nobody had noticed at the works that a fitter had absent-mindedly fitted all the hubs wrongly, so that the right-handed threads were on the right and vice versa! Such a small oversight, like Adrian Squire having designed his marvellous engine without provision for an oil filling orifice, of the sort which sometimes mars great concepts; a question of not seeing the trees for the wood, I suppose. The inevitable happened. As the proud owner was extending his new toy along the desert road, a front hub nut worked loose, and the wheel parted company with the rest of the car. Chancellor was unhurt, and the car wasn't irreparably damaged, but he lost all confidence in the machine and determined never to drive it again. He sold it, at a fraction of its cost, to a local estate agent, one W. Hollingsworth, who drove it into a bus. It was re-repaired, fitted this time with a prosaic Ford V-8 in lieu of the gem which powered it before, and had it endowed with pontoon wings. The car was resold to the film star Jimmy Sullivan in 1939, who eventually had it cut up into small pieces because he couldn't "bear to have anyone else own it".

There is a sequel to this tale. This time, the patron was the distinguished American diplomat and art collector William Burden. It was 1932, and Miller had by now returned to the liquidated company to start afresh on a new project — a four wheel drive Indianapolis contender, powered by a 4 o.h.c. V-16 — two of the Chancellor-type eights in tandem on a common crank, in fact. Sponsorship came from two sources for this development: the Four Wheel Drive truck manufacturing company, and Burden, who wanted his own supercar. Again, Offenhauser objected, but Burden's 35,000 dollars constituted the decisive argument. The result was virtually an Indianapolis racer with a thin veneer of civilisation — classic De Dion axles in the Miller tradition front and rear on incredibly stiff quarter-elliptics. The characteristic enormous ribbed drums were fitted to cope with stopping the machine from its maximum of over 135 m.p.h. (the engine, fitted with a Roots supercharger, was estimated to develop in excess of 400 b.h.p.). The aluminium coachwork was executed by Emil Diedt, and was only three quarters completed, as was the chassis, when ... and history repeats itself uncannily throughout this saga ... Miller himself disappears again, this time because of personal bankruptcy. Burden finally took delivery of this monstrosity at the end of 1933 or the beginning of '35. He had had to supervise the termination of the project himself, in very adverse conditions, and to spend an additional fifteen thousand dollars. He kept it three years, but only drove it 1000 miles, because it was so frightfully dangerous to drive. The chassis was too flexible, the transmission infernally noisy and troublesome and the steering defective to an almost lethal extent. A disillusioned Burden sold it back to Miller for a mere 400 dollars — he kept the engine to power another projected Indy car, and disposed of the rest.

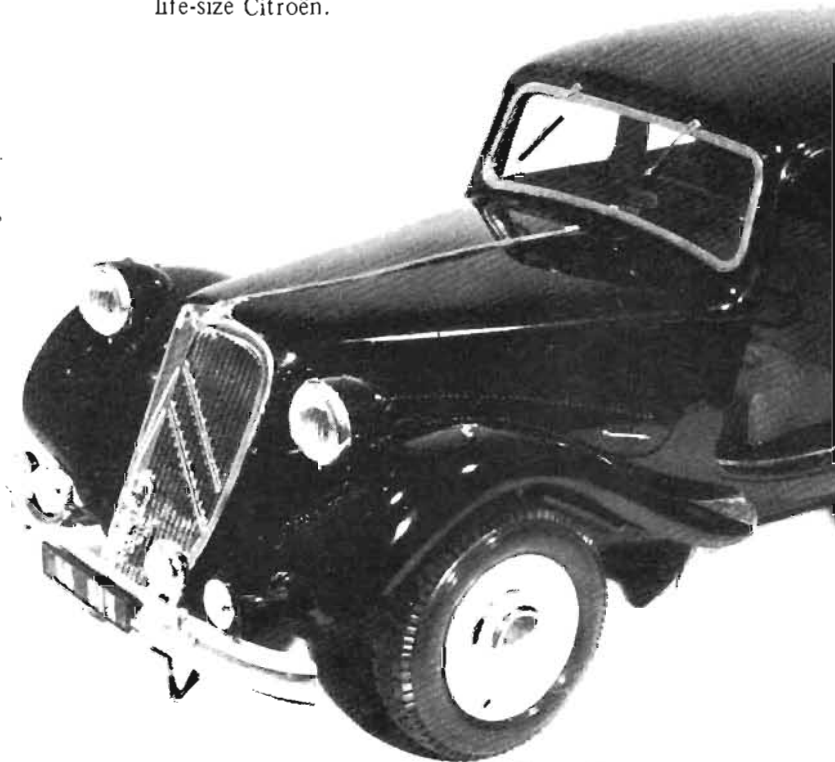
And that's it. A glimpse of five of the most spectacular failures of 'traction avant' — burdens one and all, as it were — but what fabulous beasts!

A SCALE SIX

The French company of Heller have recently introduced onto the market what has been hailed as something of a breakthrough in model-making technology. The 1061 plastic parts of the kit combine to produce a 1/8th scale "Quinze" whose wealth of fine detail is apparently hitherto unprecedented. The completed model, over 20" long, can be constructed as any one of three versions — 1948, 1951 and 1952, though no Oleopneumatic alternative is offered. If one can judge from the photographs, the fidelity certainly seems astonishing, achieving the sort of finess that only injection moulded plastics can produce — the bonnet sides, for instance, with actual slats in the louvres, would be impossible with the otherwise more desirable cast metal. Besides having moving steering mechanism and wheels, the model has hinged and lockable bonnet, boot and doors, movable rear armrest, lockable glove box, carpets, jack and tools, and all hydraulic and electrical circuits in full. Not a model for the novice, but one which is of the very highest quality by all accounts, apart from the ultra-expensive Pocher masterpieces; such accuracy does not come cheap, however — the likely retail price is over £40. The U.K. distributors are Cavalcade, of Foremost House, Thomas Rd., London E14 7BL.

This unprecedented collector's piece called for tooling costs of some 2 million French francs. 6,000 hours were required to measure up dimensions and sections on two full size vehicles; hundreds of impressions were machined and etched by 40 specialists working solely on this job for over 18 months; 14 large presses were used to produce moulding of the parts.

A contest for the best-assembled models will be judged by a jury of motor-car and model-making specialists and journalists in autumn, in three major cities of France. First prize, in each case: a contemporary, life-size Citroën.



Correspondence

All letters to the Editor, Sutton House Cottage, Sutton House, Iford, Nr. Lewes, Sussex.

Dear Editor,

Last Friday evening I set sail from Felixstowe with my family and Light 15 to participate in the Club Belge rally at Ypres. What a marvellous weekend, such hospitality and slick organisation. Perhaps slick is the wrong word but the amount of hard work and preparation before the event became very evident as the rally progressed.

Commencing with a reception at the town hall the first day of the rally was a tour of Houblon with various stops at places of interest (and refreshment). A quiz and treasure hunt was incorporated for added interest. We were the sole car to have made the trip from England, others came from France and Switzerland including that splendid Lagenthal bodied Big 15. Bengt Olsson of the Swedish Club was there but had not journeyed specifically for the rally as he was staying to study French.

The gastronomic experience took place in the evening and was followed by a dance at which many of the younger participants were shamed by the energy of the oldest competitor in the rally, a gentleman of 85 who had driven himself, alone from Paris to take part. His Traction looked about the same age at a glance but closer inspection showed it to be mechanically faultless and boasted a complete set of new Michelin X's.

An early start on Sunday morning commencing with a staggering line up of Citroëns in the market square for photographs was notably short of conversation amongst the forty odd red eyed, dry mouthed competitors. As rain began to fall we departed at one minute intervals. I managed to detach my exhaust system from its brackets in the first thirty yards by driving of the pavement instead of the lowered kerbs off the square. Lashings of wire and suchlike got us on our way and indeed survived to see our safe arrival back in Nottingham.

Sunday morning consisted of a map reading exercise in the Huppeland with a short Tulip card section ending at a place of refreshment once again, following which there was a marked improvement in the general moral. As if to test the sobriety of the entrants the next section was preceded by a test which required the driver to maintain a course through the high street with his passenger – side front wheel on the white line. Points were lost for any deviation from this line. This test of course required the majority who were in left hand drive vehicles to perambulate on the wrong side of the road with their passengers out of open doors shouting instructions. Whilst this caused considerable alarm to other road users who were fortunately few the inhabitants crowded every doorway and window to witness this extraordinary occurrence.

The next stop was at a brewery (with sampling) then a few short kilometres to the lunch stop (with wine) before the final run back to a Citroën garage on the outskirts of Ypres where there was prizegiving (with champagne) and eats. Final photos and goodbyes here before leaving. We followed two other Tractions in

convoy as far as Brugges and stopped for final goodbyes and photos before we headed for Zeebrugge and the midnight ferry to Felixstowe.

An incredible and unforgettable weekend during which we covered 500 miles plus the sea trip.

As the last Floating Power dealt with Citroën commercials what do you think the vehicle is on the enclosed photograph of a Michelin service van? My feelings are that it is a B14 of about 1928/9. Michelin cannot confirm this. How about "This Month's Mystery Vehicle" as a mag. feature?

Good Luck,
Graham Carr.



Dear Ed,

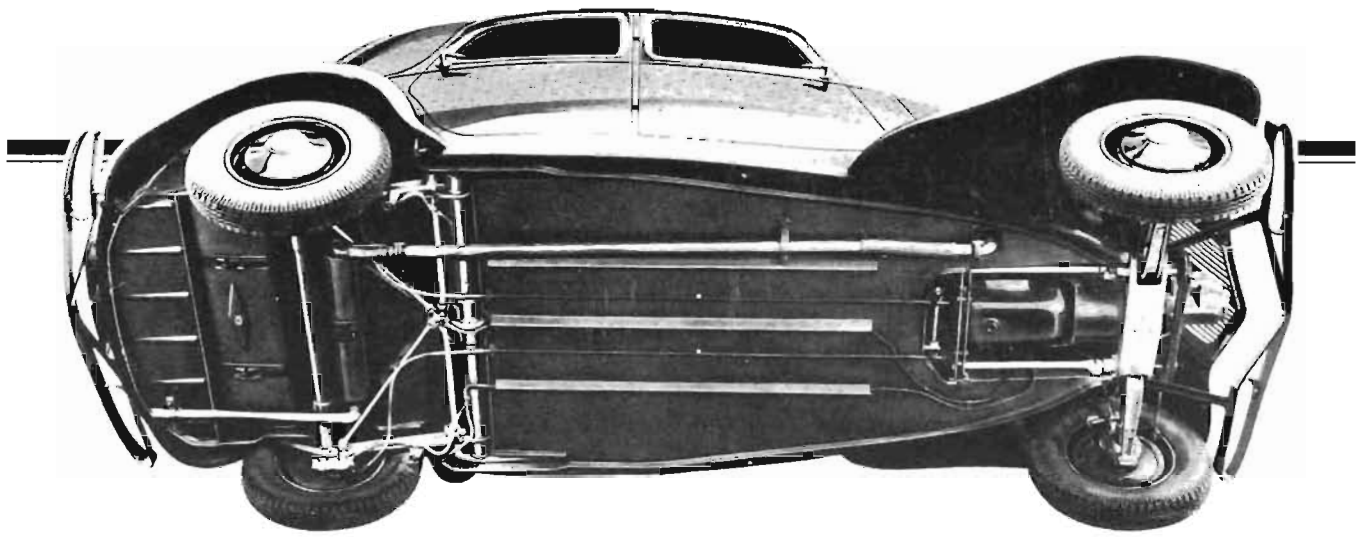
As I've got your address from Mrs. Patricia BRICE I'm now writing to you in hope to get some valuable help.

Since long I've been collecting original CITROËN literature of all models 1919 – 1957. I'm not a salesman only a collector as a matter of fact I'm a teacher. Do you by chance have any literature for sale or exchange? There are some literatures in my collection for exchange both pre-war and post-war of different CITROËN models. If you have anything please let me know and I'll send you my list in return. My special interest is of course "Slough" produced literature of which I have very few, some owners manuals and some tests of the Autocar.

The Floating Power is a very nice revue and I've got the last two numbers from Bengt OLSSON of the Swedish TA Club.

Hope to hear from you and till then with compliments and thanks.

yours sincerely
Christer Ottered



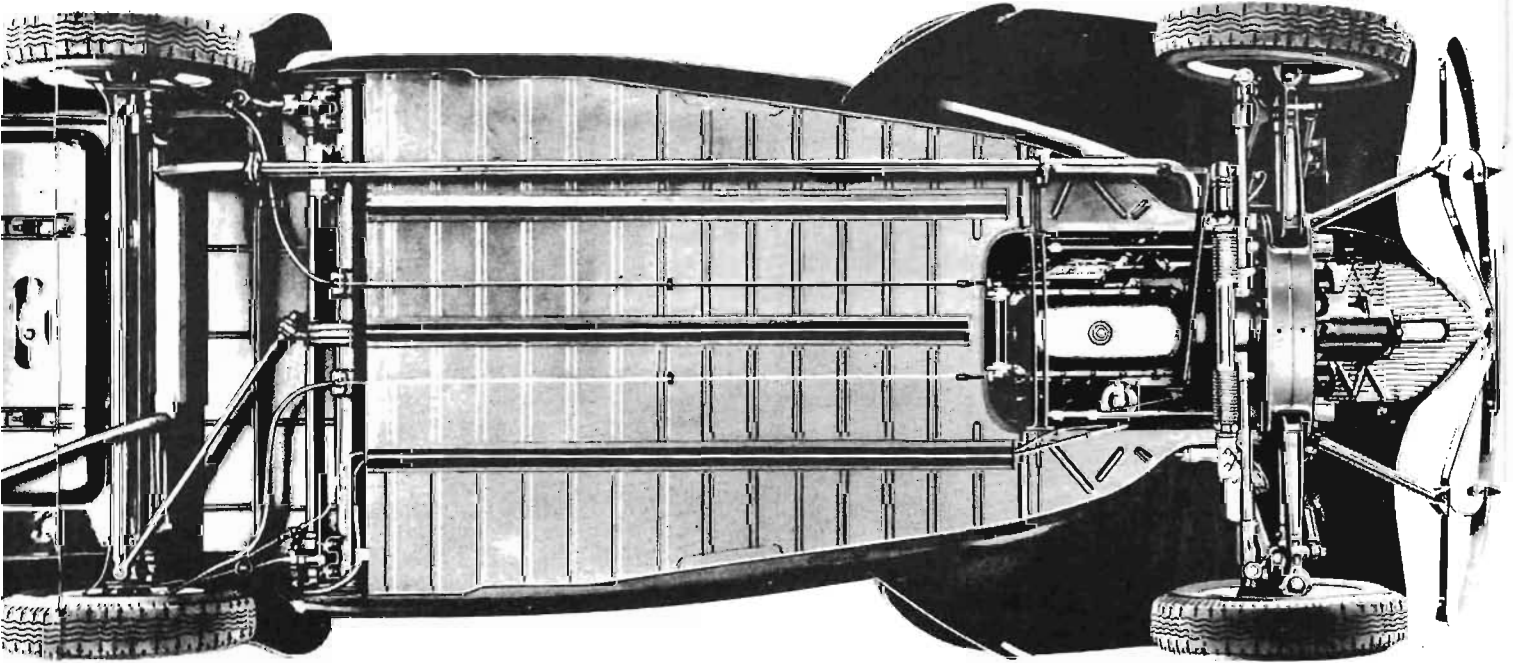
WORM'S EYE VIEW

Close examination of these two rather rare pictures reveal not only the elegance and simplicity of the basic design of the Traction, but also several of the modifications made to the original concept between 1934 – the Light Fifteen shown here – and 1954 – the Big Fifteen viewed directly from below. The floorpans only differ in that the '34 method of construction was without lateral strengthening grooves, and the most obvious difference is the presence of the steering rack on the Big Fifteen, replacing the cumbersome overhead arrangements of its predecessor in 1936. These are not visible from the angle illustrated except for the tie rod above and ahead of the near side wheel of the 'Legere'. It is only with this superseded system that the famous trick of the early publicity material – whereby the engine, transmission front cradle and wheels are 'driven' away from the rest of the car simply by undoing the four nuts retaining the cradle – is possible. You try it! – the steering gets in the way of the sump. Also visible at the front of the earlier car, below the gearbox and in front of the cradle, are the Hartford-type friction shock absorbers yoked together on the end of the silentbloccs, as compared to the hydraulic type on the '54 – the Hartfords were phased out very early on.

You will notice too the fact that the exhaust down-pipe emerges from the floor of the off-side front member in the original model, simply because with the conventional rearward exit of its exhaust manifold, there simply was not the space between the block and the side member; it was not until the adoption of the forward-exit manifold that the outside arrangement was possible. The distribution of pipework in the V-shaped longitudinal conduits along the floorpan differ, too, with the brake line going through the central channel rather than with the fuel line.

The other most significant change is at the rear. In addition to the sheet metal alterations involved in the Big boot underpan and the noticeably wider rear wings of the late car, the suspension differences can be seen. Instead of the familiar cross-shaped axle and flat trailing arms, the '34 has a tubular axle, smaller, I-section trailing arms and two Panhard rods instead of one, a much more complicated system.

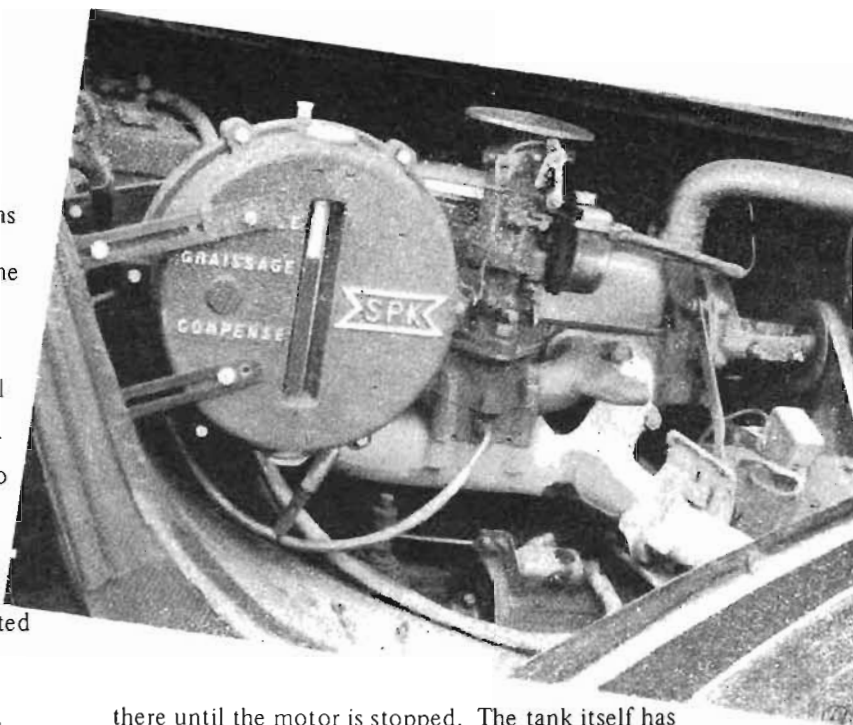
Though ostensibly the same, then, these two cars at opposite ends of the production run vary in several important respects – and these are only the most obvious. A glance through the spare parts catalogue reveals extensive changes and development in almost every major component, some bringing obvious advantages, logically updating a concept thirty years old, others apparently pointless – the reasons behind which remain obscure.



THE S.P.K OILER

The odd and cumbersome device illustrated here was produced in 1949 and enjoyed a limited success during the early fifties. It has no particular name as its functions are numerous, and its advantages seem very peripheral for such a relatively complex piece of mechanism. Its one indisputable asset is that, by doubling the amount of oil in the crankcase when the motor is at rest, ensures total lubrication of the main and big end bearings for those few seconds after the engine is first started before the oil pump has had time to supply oil under pressure to these areas in the normal way. Obviously, this short period of very partial lubrication is very crucial, and is reckoned to account for a large part of the wear in the crankshaft bearings on any car – though a system of complete immersion as a means of obviating it seems a bit drastic! And, of course, while the crank is thrashing about in its oil bath, the cylinder walls themselves are amply lubricated by the splashing and frothing.

It would be utterly impractical for the engine to operate in these conditions for more than a few seconds, of course, and the excess 'huile' has to be dealt with. The big circular bulkhead-mounted tank has three take-off pipes: one to the inlet manifold, to provide the necessary vacuum, another with a one-way valve to the drilled sump drain plug, and a third through the crankcase itself, extending to the normal oil level in the sump. The SPK works in this way. The round tank is filled with engine oil, and runs, because of gravity, down the feed tube to the sump via the drilled drain plug, thereby doubling the internal oil level of the engine. Once the engine is started, however, and the essential job done, the surplus oil is sucked back into the reservoir until the normal level is reached, and the excess quantity remains

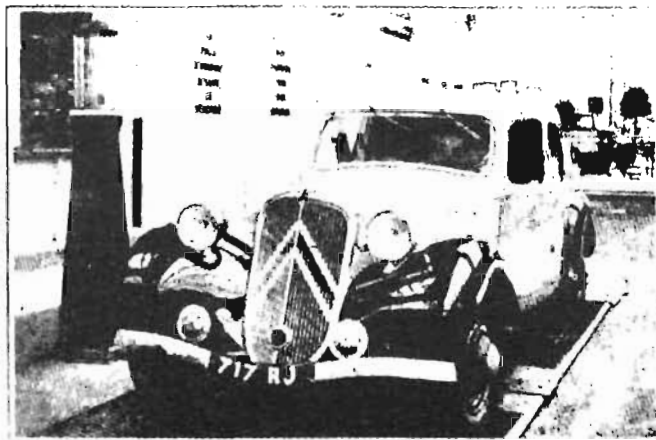


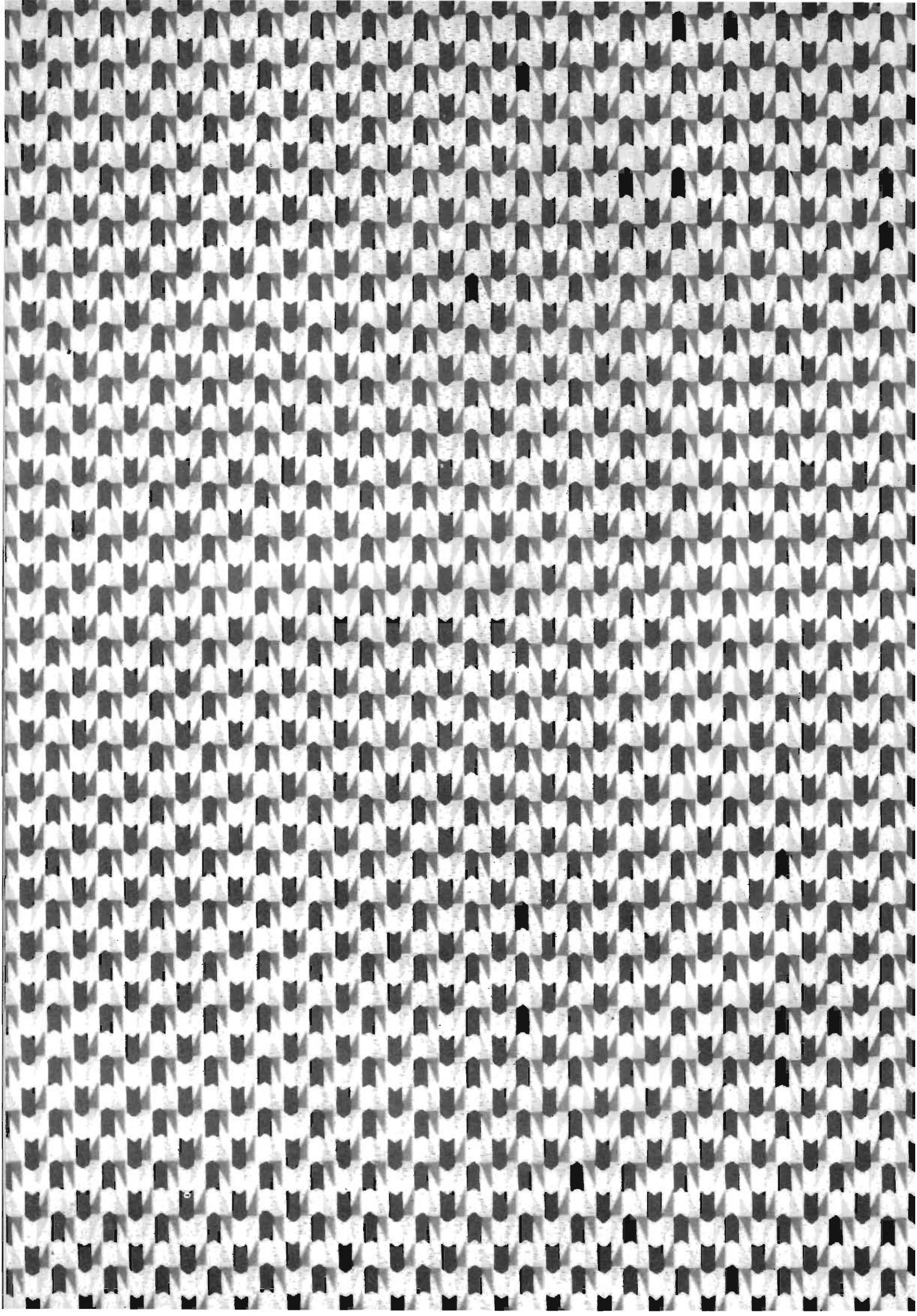
there until the motor is stopped. The tank itself has inset a visual indicator of its contents, and in practice it ensures that, so long as there is some oil (preferably Yacco, of course!) in there, engine oil loss is always automatically compensated for, being steadily maintained at its optimum level. No more fiddling with dipsticks! A warning light connected to an internal float warns the driver that his SPK needs replenishment.

Although the apparatus has incidental advantages – simply because the amount of oil is doubled, it consequently gets less hot, for example – its primary function is to ensure complete cold-start lubrication, and with the cost of remetalling bearings nowadays, that can be no bad thing.

A RARITY

Reported recently in the newspaper 'La Vie Automobile' was a southern French car club's acquisition of the classic two-tone early Traction illustrated. It is interesting insofar as it is one of the very earliest survivors, being a 7B which rolled off the line on the 14th August 1934. Not only that, but until last year, it only had one owner! He was the chief of Police of Toulon, who offered it on permanent loan to the Automobile Club du Var 'on condition that it shouldn't be destroyed'. Some chance!





TRACTION OWNERS CLUB:

Rules of the Club

- 1) The name of the Club shall be The Traction Owners Club, hereafter referred to the Club.
- 2) Constitution. Ladies and gentlemen of not less than 17 years of age shall be eligible for membership. The membership shall consist of a) Honorary members
b) Ordinary members.
- 3) Management. The authority and responsibility for the transaction of the business of the club shall be vested in a committee.
- 4) Election of officers. The President and Vice-President of the Club, the Treasurer, Secretary, and Committee shall be elected at the Annual General Meeting, the Committee will have the power to co-opt members as they deem necessary. The retiring officers and other members of the Committee shall be eligible for re-election.
- 5) Committee. The Committee shall consist of not less than eight and not more than eighteen, exclusive of the President, Vice-President, Treasurer and Secretary, who shall be ex-officio members of the Committee. The Committee shall elect from among its own members a Chairman and a Vice Chairman. One half of the Committee shall form a quorum. Nominations of candidates for election to the Committee must be received by the Secretary not less than seven days before the A.G.M. with an intimation in writing signed by each member nominated that he or she is willing to serve. Nominations of candidates shall also be signed by the member proposing them, who shall not be their spouse.
- 6) Meetings of the Committee. The Committee shall meet whenever summoned by the Secretary who may convene a meeting of his or her own accord, or shall do so by direction of the Chairman, or on a requisition signed by not less than half the Committee.
- 7) Absence from the Committee. Any member on the Committee who shall without sufficient reason absent him or herself from three consecutive Committee meetings, will be understood to have resigned his or her position.
- 8) Secretary. It shall be the duty of the Secretary or his or her deputy to attend all Committee meetings and to take minutes of the proceedings. Such minutes shall be entered in a book and presented for confirmation at a following meeting.
- 10) Banking. It shall be the duty of the Treasurer to bank all the moneys of the Club in the name of the Club, and no disbursements, other than those needed for the normal day to day running of the Club, shall be made without the consent of the Committee.
- 11) Voting at a Committee meeting. Each member present shall be entitled to exercise one vote. The Chairman or acting Chairman shall not vote except in the case of a casting vote. The Committee shall vote by ballot if any one member present so demands. A majority vote will be binding.

- 12) Subscriptions. Subscriptions shall fall due on the 1st day of April each year in full. The Committee reserve the right to alter the subscription rates as necessary without recourse to balloting the membership.
- 13) Honorary members may be elected by the Committee. i.e. all members of the Royal Family, any person distinguished by their political, scientific, literary industrial, and administrative capacities, and those who have distinguished themselves in promoting the cause of motoring or of the Club.
- 14) Spouses of fully paid up members may become joint members, entitling them to the right to vote at the A.G.M., and to participate in club business and functions, and to serve if elected on the Committee. They will not be entitled to an additional magazine. Any spouse wishing to take advantage of this option must inform the Secretary in writing not more than 31 days after applying for membership. Joint membership will then stand for all periods in the future providing one spouse is a fully paid up member and unless the Secretary hears to the contrary.
- 15) The Committee reserve the right if it be in the interests of the Club to refuse membership. The Committee also reserve the right to expel members on the same grounds, providing the said member has been given at least seven days warning to offer explanation of his conduct. The Committee shall vote and the expulsion is only valid if the majority is at least two thirds of those present against the member retaining his or her membership.
- 16) The Annual General Meeting. The A.G.M. of the Club shall be held each year upon a date and at a time to be chosen by the Committee. The A.G.M. shall:
 - a) Receive from the Committee a full statement of accounts duly audited, showing receipts and expenditure for the year ending 31st March.
 - b) Receive from the Committee a report of the activities of the Club during the year.
 - c) Elect the President and Vice-President, and the Secretary and Treasurer of the Club, and if appropriate the Solicitor and Auditor.
 - d) Elect the Committee.
 - e) Decide on any resolution, which may be duly submitted to the meeting as hereinafter provided.
- 17) Special General Meetings may be convened by direction of the Committee, or on a requisition to the Secretary stating the business for which the S.G.M. is required, signed by not less than 12 members. If the meeting so requisitioned is not convened within 21 days without good reason, the said 12 members may convene such a meeting. 15 members shall form a quorum.
- 18) At least 21 days notice of all General Meetings shall be given but the non-receipt of such a notice shall not invalidate the proceedings.
- 19) When members wish a matter to be discussed at an A.G.M., the text of such matter shall be sent to the Secretary not less than 14 days before the A.G.M., and signed by two paid up members.
- 20) Every person present at the A.G.M. with a right to vote (i.e. fully paid up members and spouses if the latter have previously notified the Secretary of their wish to be joint members) will be entitled to one vote per item. The Chairman will not vote except in the case of a casting vote.

- 21) At any General Meeting not less than 12 members may demand a poll, thereupon the meeting shall be adjourned by the Chairman and a new time and place chosen by the Chairman. The postal vote should be taken by all members and the decision of the postal vote reported to the adjourned meeting.
- 22) Observance of the rules and interpretation. Every member binds himself to abide by the rules of the Club and also by any modifications thereof made in conformity with such rules, and also to accept as final and binding the decision of the Committee in all cases of dispute or disagreement as to the interpretation of these rules.
- 23) Any alteration of these rules may be made at an A.G.M. providing that the said alteration is on the Agenda for the said meeting, and providing the alteration is passed by a two-thirds majority. The Committee reserve the right to alter the rules if necessary in the best interests of the Club without recourse to balloting the membership.
- 24) Every member shall be furnished with a copy of the rules.
- 25) Dissolution. The Club may be dissolved by a Special General Meeting convened by direction of the Committee, or on the requisition of the majority of the members. If the resolution of dissolution be duly passed, the Committee shall forthwith liquidate the affairs of the Club, and if there be any surplus assets on realisation, these shall be disposed of at the discretion of the Committee.

Objects of the Traction Owners Club.

The objects of the Club are to promote interest in pre-1957 water-cooled Citroen cars, and to promote and foster fellowship between the owners of such cars. These objects to be achieved by the publication of a Magazine and the organising of social and motoring events for the mutual advantage of members.



S T O P ++ P R E S S

FOR SALE : 1953 Slough built Light 15, black. In sound condition and in every day use. Good points: taxed, MOT to Dec. '77. Rechromed lights, bumpers and hubcaps. Overhauled brakes - new linings and cylinders. Solid floor and sills. 5 good Xs. Bad points: Engine a bit long in the tooth, but nevertheless entirely reliable. Bodywork needs tidying. Reason for sale: Halfway through restoring another Light 15 and running out of cash. Asking price: £500. Part exchange for 2CV or R4 or similar considered. Nick Gundry, Beech Cottage, Holbeech Hurn, South Lincs. Tel: Holbeach 23519.

WANTED : for 1952 Light 15, one or two new universal joint crossheads, part no. 380868. This has 16.71 dia. pins (0.658") and is 69.83 long (2.750") and has a dia. hole through the middle. H. Hunt, 67 Church Road, Newton Abbott, Devon.

WANTED by Belgian enthusiast who has a private collection of slides and photographs of all types of Citroen cars - photographs or colour transparencies of your car, together with details of year, country of manufacture, etc. He is very keen to receive pictures of English cars. Write to : J.M. Spileers, Evergemse Stwg. 258, B. 9030 Wondelgem, Gent, Belgium.

(P.S. from editor whilst you are about it, a photograph to the magazine would not come amiss!)

Traction Trailers : well, not entirely appropriate, but we have news of Martin Lloyd's C4G, which he regularly sends us progress reports on. He has repaired the petrol tank, carburettor and steering of this car, some parts being obtained from Depanoto. The steering has been temporarily repaired with new tapered roller bearings found at a local bearing supplier's, and Depanoto are looking out for some with which to effect a permanent repair. If anyone knows of a source ... Martin Lloyd is taking the car to the Classic Car Concours, so keep an eye open for him, as he is anxious to make contact with other members of the Club.

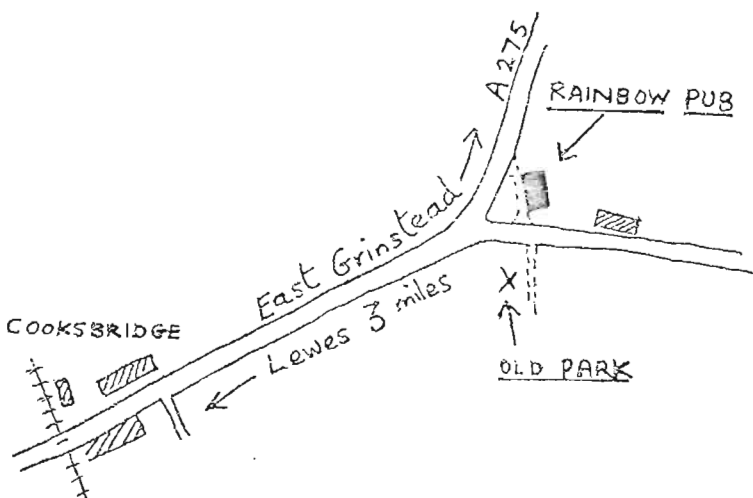
SOCIAL EVENTS : On August Bank Holiday, Banbury Old Motor Enthusiasts are holding a run in the area, to which they are inviting all classic cars, and prizes will be awarded to the most desirable cars taking part. The run leaves Banbury Cross at 1 p.m. on August 29 (Monday). For further details write to: David Millar, 4 South Bar, Banbury, Oxon.

Don't forget the French Picnic, or your stripey tee-shirts, berets, Pernod umbrellas, etc., etc. Anybody you know who has a European car of pre-1955 who would like to come along, is welcome. Bring food and wine, (onion strings?) and hope for fine weather. Sunday September 11th, at the Old Park, opposite the Rainbow Pub, Cooksbridge, Lewes, Sussex. (See map).

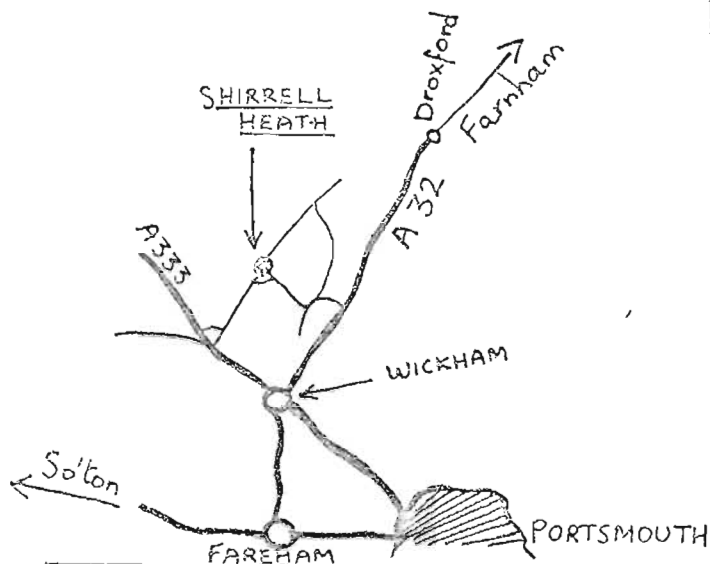
cont.

Classic and Thoroughbred Car Concours, August 21st : there is a special car park for interesting cars at this event, so if you are not actually entered, make sure that you head for this car park, and we shall attempt an entirely Traction line-up (plus the C4, of course).

Autojumble at John Austin's barn (for further details see editorial) - don't forget to let John know if you are intending to have lunch at the pub beforehand. If you have anything that you want to sell at the event, could you get in touch with either John or Fred Annells well in advance, and they will inform you of the arrangements.



FRENCH PICNIC



AUTOJUMBLE

The Annual General Meeting will be fully reported in the next issue of "Floating Power" - in the meantime, rules of the Club are enclosed.

EXCHANGE : 1955 Big 6, in good condition, with grey velvet interior, for Light 15 in similar condition. Contact Jeremy Johnson-Marshall, Bristol 41811.
