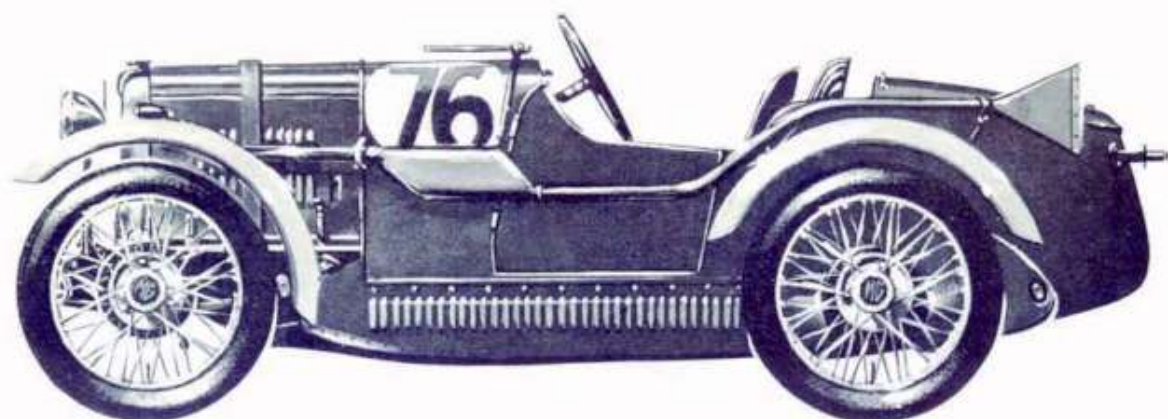


# The M.G. Midget 'M' type



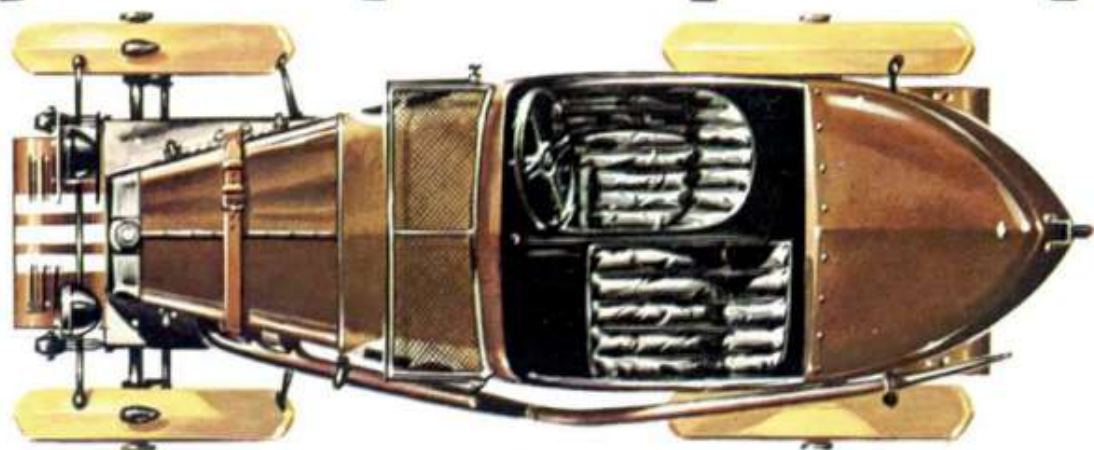
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# The M.G. Midget 'M' type

F. Wilson McComb

*Randall/Montgomery and Stisted/Black on the Brooklands banking during the 1930 Double-Twelve, when the Midgets won the Team Prize. Norman Black covered one lap at an average speed of 72.45 m.p.h. (Photo: M.G.)*

In the springtime of 1928, with an economic depression just around the corner, the motoring world in Britain buzzed with rumours that Sir William Morris was about to produce a rival to the brilliantly engineered 'baby car' which that other motoring giant, Sir Herbert Austin, had been building in quantity for more than five years. By the end of May the *Motor* had gleaned a few sparse details of the specification, and were moved to print an excruciating verse on the subject:

The Morris Ox and the Morris Cow  
Have often raised a laugh,  
But the serious thing about it now  
Is this new Morris Calf.

Then, on 31st August, the *Autocar* published a full description of the new Morris Minor, which was to be sold for the same price as the Austin Seven (£125) in four-seater tourer form, and £10 more as a saloon. Only two weeks later, the same magazine announced 'The Morris Midget... a sports model based on the Minor chassis and specially produced by the M.G. Car Co., Oxford.'

If they scooped the rest of the motoring Press in their announcement of the new M.G. Midget, the *Autocar* were somewhat behind the times in referring to it as a Morris. Cecil Kimber had been building highly successful sports versions of the 13.9 h.p. Morris Oxford for more than four years, they were well-known as 'M.G.s', and twelve months earlier the demand for these cars had grown sufficiently to justify moving into a brand-new, £16,000 factory at Edmund Road, Cowley. Kimber probably felt distinctly annoyed by this gaffe, having devoted considerable effort to emphasising the independent nature of his company. As for Morris, if he was amused by it he must have had to restrain his laughter, for at that time he was in hospital having his appendix removed.

Indeed, during the latter part of 1928 Kimber was also engaged in designing another completely new M.G., the 2½-litre 18/80 Mark I, which nobody could accuse of being just a modified version of a standard Morris. Having made his name with fairly large and relatively expensive models built to near-luxury standards, Kimber was certainly breaking new ground in producing a very small, very cheap sports car. Possibly he reckoned that if there was a demand

for a baby Morris there might also be a market for a baby M.G. He may have been influenced by the announcement—earlier that same year—of the Austin Seven Sports Model, priced at £225 with Cozette supercharger, or £185 unblown. But he could hardly have foreseen that the baby M.G. would become such a howling success as to sweep all the larger models out of existence, so that today they are barely even remembered.

Whatever his motives, when the 1928 Motor Show opened in October the public who flocked to Olympia found on Stand 150 the old 14/40 Mark IV M.G., the new 18/80 or 'M.G. Six'—and the equally new M.G. Midget, with a £175 price ticket. Its mechanical resemblance to the £125 Morris Minor (also exhibited for the first time at the same Motor Show) was obvious to all, and the *Motor* were clearly finding it rather heavy going when they said: 'Such items as the suspension are materially altered so as to give increased road-holding at high speed, the steering wheel is of a different type, and the body has been specially designed by the manufacturers.' Nevertheless, if the differences were small they were truly significant, like all Kimber influences, and the *Autocar* were being more prophetic than they knew when they commented: 'The M.G. Midget will make small sports car history.'

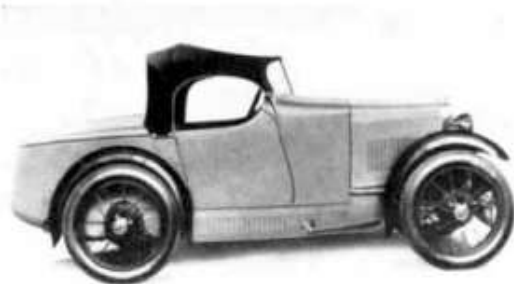
## 'A LITTLE GEM'

Kimber had realised that the new Morris Minor chassis formed an almost ideal basis for a small sports car. The channel-section frame with its five cross-

*The simple chassis of the Morris Minor-based M.G. Midget in its original form, with transmission handbrake. (Photo: M.G.)*



(See facing page): 1930 M.G. MIDGET 'M' TYPE. One of the two Midgets prepared by Abingdon for Le Mans 1930, this car was driven by F. H. B. (now Sir Francis) Samuelson and Freddie Kindell, and also completed the Spa 24-Hour G.P. a fortnight later.



Left: One of the two prototypes, showing the flared scuttle which was not adopted for production cars. Right: Another prototype picture showing the elementary hood (sidescreens were an optional extra!). (Photos: Tella)

members was quite rigid enough, and its already low centre of gravity was easily dropped still further. The power unit, for such a cheap car, was altogether exceptional—no simple side-valve job, this, but a well-designed o.h.c. engine in which the armature of the vertical dynamo formed part of the drive to the camshaft, and thus acted as a most effective damper at high r.p.m. It responded well to tuning, as countless racing successes were to testify in the years to come. The three-speed gear-box was no handicap, especially in a light car, for the torque range was excellent. Virtually all that Kimber had to do was to lower the suspension, drop and lengthen the steering column a little, modify the pedals and gearbox top, and fit a light fabric-on-plywood two-seater body with a cheeky boat tail which formed the luggage compartment. A set of M.G. hub-centres for the wheels, four cycle-type mudguards, a neat little vee-shaped windscreen with a highly elementary hood for the torque weather, a cleverly scaled-down version of the new M.G. Six radiator—and the job was done. No wonder *Motor Sport* hailed it as 'A little gem of a car, fit to take two people and their luggage anywhere, happy as could be.'

There was precious little justification for the type designation '8/33' quoted in the catalogue, and it has been suggested that this 8 h.p. car normally showed a 33 p.s.i. pressure on the oil gauge! A happy thought, but more probably Kimber was aware that the Austin Motor Co. claimed 33 b.h.p. for their supercharged Sports Model. In its original form the M.G. Midget

engine actually gave only 20 b.h.p. (which was 4 b.h.p. less than the output claimed for the unsupercharged Austin Seven Sports), but as the whole car weighed little more than 10 cwt. it was still capable of a lively performance. At the Show there was talk of 40 m.p.h. in second gear and 60 m.p.h. in top, with over 40 m.p.g., and subsequent road tests showed that these estimates were, if anything, on the conservative side. By the standards of the period this was an excellent performance, and if the ride was bumpy and windswept, well, sports car enthusiasts didn't expect to be pampered in those days.

Two prototypes had been built before the show; one for the stand and, presumably, one as a demonstrator. On these two cars the scuttle was swept up to the cockpit in a gentle curve under the windscreen, a feature which was not retained for production cars. Possibly it was found that this would add too much to the cost; it is on record that Carbodies of Coventry supplied Midget bodies to the M.G. Car Company at £6 10s. each!

As was commonplace in those days, full production was not commenced until the demand had been assessed following the Motor Show, and it was March/April 1929 before assembly got under way—still at the old Cowley factory, for the move to Abingdon took place later, in September 1929. Production of the 'M' type Midget (as it subsequently became known) continued right through to June 1932; well over 3,000 were built; many minor alterations were made during the model's production life, and they are by no means well documented. It would therefore be unwise, and quite possibly misleading, to dogmatise about the specification at any given period—the Company's own catalogues, for example, quote the fuel tank capacity variously as 4, 4½ or 5 gallons, while the Service Department data sheets plump for 4 gallons plus 2 reserve!

However, we can say that these early Oxford-built Midgets had rear-hinged doors, no fins on the brake-drums, a rather dreadful transmission handbrake, a not altogether satisfactory arrangement of rod-and-cable in which the front brake cables ran through 180 degrees to operate pendant cam-levers, and (possibly because of the brakes) white-faced instruments. Early dashboards were covered in leather-cloth, with the instruments contained in a polished brass fascia, the speedometer slightly below the level of the oil-gauge and ammeter. On 30th July 1929, the *Motor* published an enthusiastic road test report of 'this exceptionally attractive little vehicle'. They said the maximum speed was 65 m.p.h. and obtained 42 m.p.h. in second with 'only the vaguest suspicion of valve bounce'. Over 40

Under-bonnet view of an early (Oxford-built) 'M' type Midget. (Photo: Light Car)



m.p.g. was averaged during the test, which covered nearly 400 miles. Acceleration seems to have been brisk at first, though tailing rapidly off at the top end: 50 m.p.h. was reached from a standstill in 25 sec., but another 20 sec., was needed to reach 60 m.p.h. The brakes were described as 'quite good'.

The report remarked particularly on the fact that the Midget 'is built so low that one can sit in the seat and yet rest one's foot on the ground' (in some of today's sports cars, of course, it would be the elbow rather than the foot). The good torque range also attracted attention, for it was found that the 'M' would trickle along at 5 m.p.h. in top. Roadholding rated a special mention. . . . there is not the slightest feeling of insecurity when taking corners at speed, and, furthermore, the steering is finger-light and dead accurate, so that one can place the car exactly where required'. Hill-climbing ability impressed even more: 'The M.G. Midget is an absolute revelation on hills, and the Brooklands test hill, with its maximum gradient of 1 in 4, was taken as though it did not exist. . . . On the road we found that by changing down early it took cars in the £1,000 class to hold their own with it on gradients, while all ordinary main road hills could be taken at 45-50 m.p.h. on top'.

Even allowing for the lower standards of performance that applied in those days, the Midget must have been possessed of many good qualities to make such an impression on a hardened road-tester. Not surprising, then, that the *Motor* wound up their report by saying: 'In conclusion, we formed the opinion that the M.G. Midget fills a real niche in the sports car world, and is capable of holding its own with any other cars of similar type, whether of British or foreign origin. It is one of the most fascinating little vehicles we have ever driven.'

By early 1930, and perhaps from the 1929 Motor Show (when the price of the two-seater was increased to £185), the braking system had been completely redesigned, the doors were hinged at the leading edge, and the instruments were black, the speedometer slightly above the level of the other two. Testing one of the new Midgets for the *Light Car* of 14th February 1930, Rodney Walkerley found the modified brakes most effective, though the pedal pressure was high. He attained 20 m.p.h. in first gear, 42 in second and 62 in



*The hood stowed neatly in the boot lid, leaving a surprising amount of luggage space in the pointed tail of the Midget body.*  
(Photo: M.G.)

top. Acceleration from 10 to 40 m.p.h. occupied 11 seconds, and 36 m.p.g. was averaged during the test. He commented that '... very good average speeds can be maintained. We found that about 52 m.p.h. was a perfectly comfortable speed to maintain indefinitely on good roads, whilst on secondary roads it is easy to keep the speedometer almost continually over the 40 mark.'

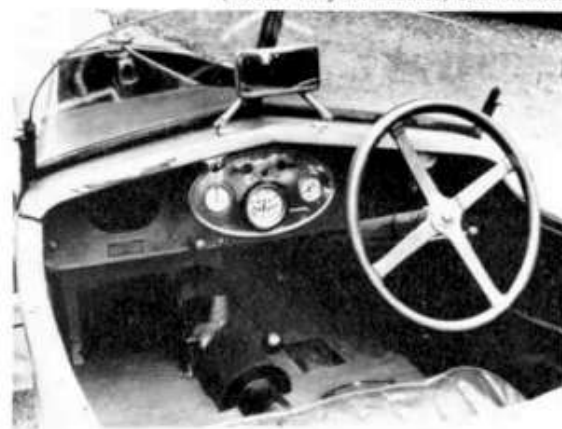
In *Safety Fast* of June 1961, Walkerley wrote: 'You may not think it, but that was quite something 30 years ago.' He recalled that in 1930 he used a Gordon England Austin Seven Stadium model, and it was not as fast as the 'M' type Midget of his colleague, Harold Hastings (one of the founder members of the M.G. Car Club). But as the Austin Seven had a three-inch exhaust, he consoled himself with the thought that it made a great deal more noise than the M.G.

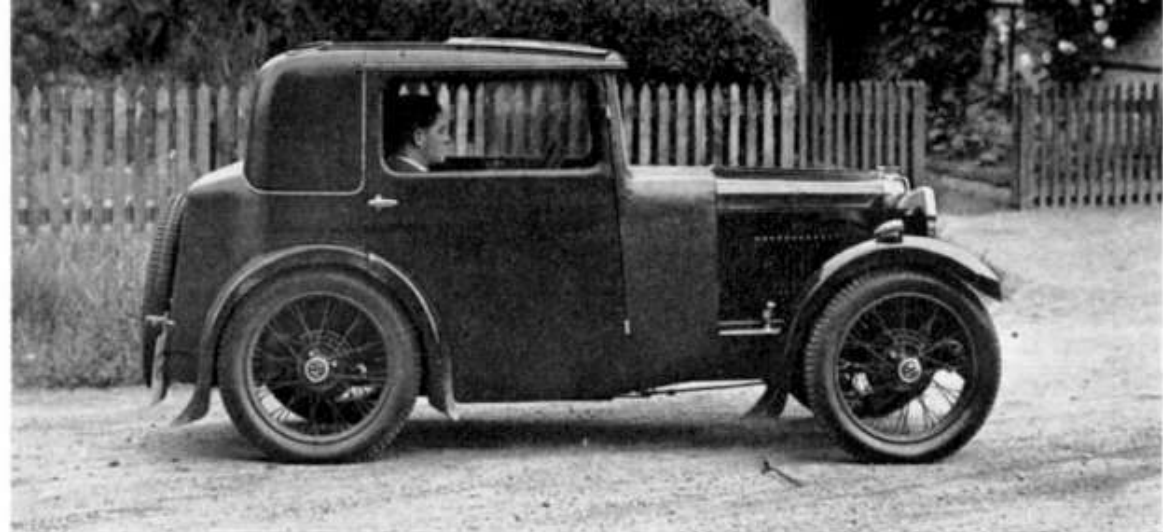
## THE SPORTSMAN'S COUPÉ

The Motor Show of 1929 brought a sister for the little two-seater in the perky shape of the M.G. Midget Sportsman's Coupé. At £245 it offered extra space in the back of the closed, fabric-covered bodywork for luggage or children, and the fittings and finish were generally of higher quality. A typical Kimber touch was the way the doors covered half of the rear mudguards, so that the ladies would not soil their dresses when getting in. The little Coupé was an immediate success, and seems to have made the same sort of appeal as the Mini of today, notable owners including Capt. Brand (chief test pilot of De Havilland), John Cobb and Earl Howe.

As for the open two-seater, nobody could have any doubts about its success. In the first full year of its production, the number of 'M' type Midgets built just about equalled the entire production of all other M.G. models over the first six years of the marque's existence. Kimber had certainly made a wise move in

*Cockpit view of an early Midget, showing the original instrument layout. The rear-view mirror is a non-standard addition.*  
(Photo: Mayfair Studios, Carmarthen)





*The Mini-Cooper of the 'thirties: an M.G. Midget Sportsman's Coupé in production form. It sold for £245—almost exactly half the basic price of today's Mini-Cooper.* (Photo: M.G.)

deciding to market a small sports car, and on 21st July 1930 the M.G. Car Company Ltd. was at last registered as a proper limited liability company, though still wholly owned by Sir William Morris. The larger M.G. models were to continue in production for a couple more years, but it gradually became obvious that their days were numbered.

By this time the Midget had even attracted attention overseas, and one of the earliest export customers was Edsel Ford, son of Henry himself. He bought a two-seater in February 1930 and used it as his personal runabout in the fashionable Detroit suburb of Grosse Pointe, where it must have startled the Cadillac owners more than somewhat. In 1933 he donated it to the Henry Ford Museum at Dearborn, Michigan, where it may still be seen today. With just 27,509 miles on the speedometer trip, it may well be the least-used 'M' type in existence.

It was probably at the 1930 Show that the Midget first appeared with some minor modifications such as a larger sump, moving the throttle pedal from between the other pedals to the right-hand side, and double-cranking the gear-lever to make it more convenient to use. The basic design had proved itself so well that nothing else seemed necessary, though a four-speed

gearbox was now offered as an option at £20, and, following some experiments by the Development Department at Abingdon, a supercharger installation could be had for £65. But not many customers wanted to pay £250 for a blown Midget when either the Coupé or the very dashing Double-Twelve Replica (of which, more later) could be had for a fiver less.

As a result of experience gained in racing and record-breaking, the M.G. Car Company brought out three new o.h.c. cars during 1931, all of them much more advanced in chassis design—the 'C' type or Montlhéry Midget racing model, the four-seater 'D' type, and the six-cylinder 'F' type Magna. The original Midget, however, was very far from being dead yet. It reappeared at Olympia in 1931—its fourth Motor Show, at a time when car manufacturers were expected to bring out new models almost every year—still with the same single-carburettor engine, the same three-speed gearbox (with the optional four-speed box now increased in price to £30), and the same chassis. Only the bodywork had changed, being now metal-panelled with a folding hood (instead of the old detachable type) and leather upholstery. The price was still £185, the Sportsman's Coupé was reduced to £235, and for a time the old fabric-bodied Midget two-seater was still marketed

*Five prototypes of the Sportsman's Coupé, all different, are lined up for inspection at the M.G. factory.*

(Photo: M.G.)







Obvious differences in the 1930 model include a redesigned braking system (the front brake-rod no longer protrudes through the body valance) and front-hinged doors. (Photo: M.G.)

at £165. Production then continued until June 1932, when the 'M' type was discontinued to make way for the even more attractive 'J2' Midget. In all, 3,235 were built including the Coupé and the Double-Twelve Replica.

### COMPETITION SUCCESSES

Although the original M.G. Midget was above all things a production sports car, designed to provide cheap but enjoyable motoring for the average young man, its story is not complete without reference to its competition record, which contributed so much to the model's ready acceptance and overwhelming commercial success. That story begins early on, for the first 'M' types made their appearance at Brooklands within a couple of months of quantity production having commenced.

The occasion was the Junior Car Club's Members' Day at Brooklands in June 1929, at which was held a very popular event known as the High-Speed Trial. Like similar events run today, this was alleged to be 'not a race', but as it took in most of the Brooklands Track including the Outer Circuit, and everybody drove like a maniac, the innocent spectator could be forgiven for finding it difficult to appreciate the distinction. Five Midgets were entered, for the Earl of March (now the Duke of Richmond and Gordon, owner of Goodwood), Callingham, Parker, Dunham and Scott. All five gained gold medals, and three of them finished well in the lead. At the M.C.C.'s somewhat similar event, also at Brooklands later in the season, five

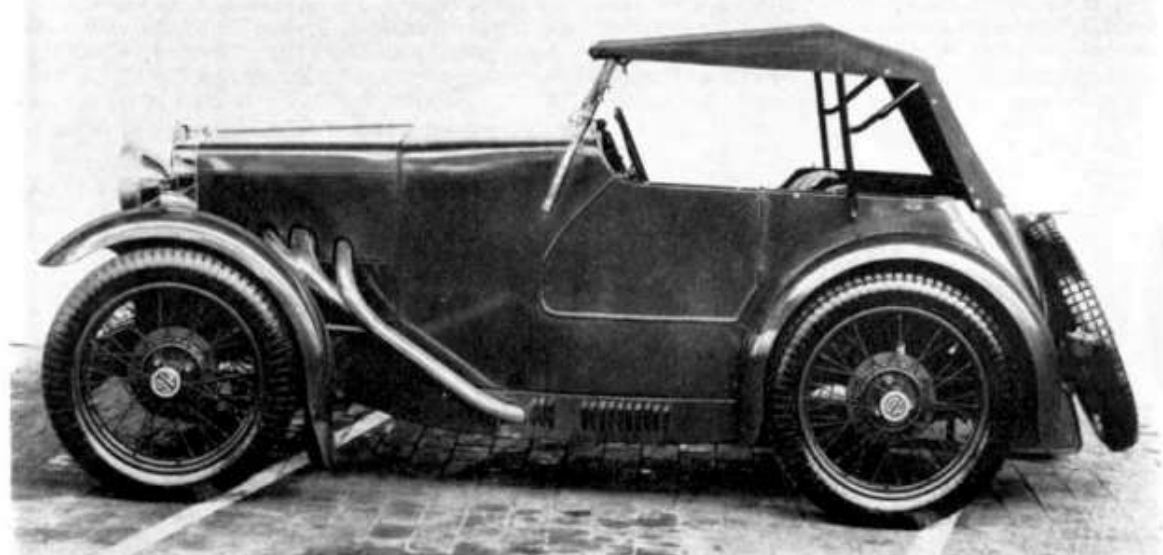
Midgets were again entered and again all five won gold medals.

With its unusually good hill-climbing ability, the Midget began to appear in the rough, mud-plugging 'reliability trials' of the day and usually gave a good account of itself. In January 1930, F. M. Montgomery entered one for the Monte Carlo Rally; at the traditional Mont des Mules speed hill-climb which followed the rally, he not only won the 1,100 c.c. class with a record-breaking climb, but beat the winners of the next three higher capacity classes. During the first half of 1930, Midgets scored six outright wins in reliability trials. No less than 30 were entered for the long-distance M.C.C. Land's End Trial at Easter; 18 of them won gold medals, four took silver, and two were awarded bronze medals.

Meanwhile, as John Thornley relates in *Maintaining the Breed*, H. N. Charles had come to Abingdon as chief designer and was horrified to find that the original Morris Minor valve timing included a 2-degree period when both valves were shut. He therefore designed a new camshaft giving a moderate overlap, which raised the power output from 20 to 27 b.h.p. right away. The new valve timing was tried out in a spare works Midget (affectionately known as 'Shinio'), and incorporated in production Midgets by late 1930.

First, however, it had to be given a more thorough test, and an excellent opportunity was provided by the J.C.C.'s Double-Twelve Race on 9th/10th May. This event, first held the previous year, was an attempt to emulate the famous 24-hour Le Mans classic, but had to be staged as two 12-hour races because local residents objected to night racing at Brooklands. An enthusiastic amateur named Randall asked Abingdon to prepare a team of three cars for the event, and the experience gained with 'Shinio' was used to good effect on these. In addition to engine tuning, the cars were fitted with regulation Brooklands exhaust systems, a folding windscreen, bonnet strap, cutaway doors, 9-gallon fuel tank and an undershield, while the headlamp brackets were reversed, presumably to reduce the frontal area. The drivers were C. J. Randall himself with F. M. Montgomery, Lt.-Cdr. Townend with Robin Jackson, and G. Roberts with A. A. Pollard. Two similarly-prepared cars were driven by H. H. Stisted and Norman Black, Miss Victoria Worsley and

One of several special bodies on the Midget chassis was the Jarvis, marketed by the well-known Wimbledon M.G. dealers at £225. (Photo: M.G.)





*M.G. Midgets on the production line, 1930. Today's assembly methods at Abingdon differ surprisingly little, though nearly thirty times as many cars are produced each week.*

(Photo: M.G.)

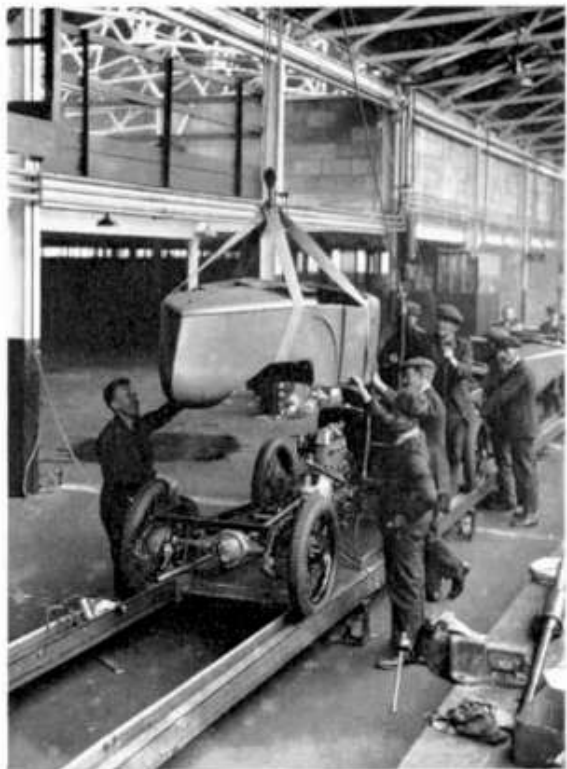
D. G. Foster. A sixth Midget, often forgotten by historians, was driven by F. Ivins and E. A. Hearne; this may not have been prepared to the same specification.

The result was one of the 'M' type's greatest triumphs, giving a tremendous boost to the model's already considerable popularity. Randall, Stisted, Townend, Roberts and Miss Worsley finished 3rd, 4th, 5th, 6th and 7th in their class behind two Riley Nines, 14th, 17th, 18th, 19th, and 20th overall, and the Randall trio won the Team Prize. In the 24 hours the fastest Midget covered 1,445.63 miles, the slowest 1,385.31, so their average speeds varied from 60.23 m.p.h. down to 57.72 for the race, and the Stisted/Black car actually covered one lap at 72.45 m.p.h. As for the Ivins/Hearne car, it ran for nearly 11 hours before retiring.

As already recorded, the new valve timing was incorporated in production Midgets before the end of the year. Kimber also decided to market a Double-Twelve Model 'M' type or 8/45 Midget, which was a replica of the successful Brooklands cars. About 18 of these were built between the end of August and the beginning of December, and they sold at £245.

## TWO MIDGETS AT LE MANS

Meanwhile two extremely smart Midgets were built for the 1930 Le Mans race—no Double-Twelve, this, but the real thing! The first M.G.s to race in France had fabric bodies with a steeply flared scuttle, the spare wheel mounted on the nearside, and an 18-gallon tank in the tail. One was driven by F. H. B. (now Sir



*Farther down the line, the Midget body is lowered into position on the chassis. So light were the bodies that they were delivered to the factory in crates which held three of them.*

(Photo: M.G.)

Francis) Samuelson and an M.G. employee, Freddie Kindell, the other by R. C. Murton-Neale and Jack Hicks. The venture was not a howling success. Samuelson ran his big-ends after fracturing an oil-pipe at dusk. Murton-Neale damaged the steering in a crash, then over-revved because of clutch-slip and finally broke the crankshaft early the following morning.

Samuelson, however, seems to have developed a taste for long-distance racing, for he immediately cabled an entry to the Belgian 24-hour G.P. a fortnight later. He took the damaged engine out of the Midget, shoved it in the back of his old French Talbot and set off for Abingdon, one hand on the steering wheel and the other on the M.G. engine. At the M.G. works they must have pulled out all the stops—Samuelson arrived at noon the Thursday after Le Mans, and at 10 p.m. on Friday he was on the night boat from Newhaven to Dieppe, complete with Talbot and rebuilt

*The first Midgets to run at Brooklands were these three cars, prepared for the J.C.C. High-Speed Trial in June 1929. In the cars are Cecil Cousins (now M.G. Works Manager), Reg Jackson (now Chief Inspector), and the late Frankie Tayler, killed at the 1934 Mannin Beg race.*

(M.G. files—photographer unknown)





*A mixed batch of Midgets at Abingdon, 1930. Some are new and unregistered, some are customers' earlier models.*  
(Photo: M.G.)



Midget engine. Back at Le Mans, in the Morris Léon Bollée works, he and Kindell re-installed the engine and then drove to Spa through a series of extremely impressive thunderstorms. In the race itself he lay third in the 1,100 c.c. class for 20 of the 24 hours, lapping the Spa/Francorchamps circuit at something over 55 m.p.h. average, then found that the Midget—like its sister car at Le Mans—was beginning to suffer from clutch-slip. All the fire-extinguishers that could be begged or stolen were squirted into the clutch housing, but the average speed was drastically reduced and the Midget eventually finished fifth in its class. However, it *did* finish, and it was the smallest car ever to do so in a 24-hour international road race.

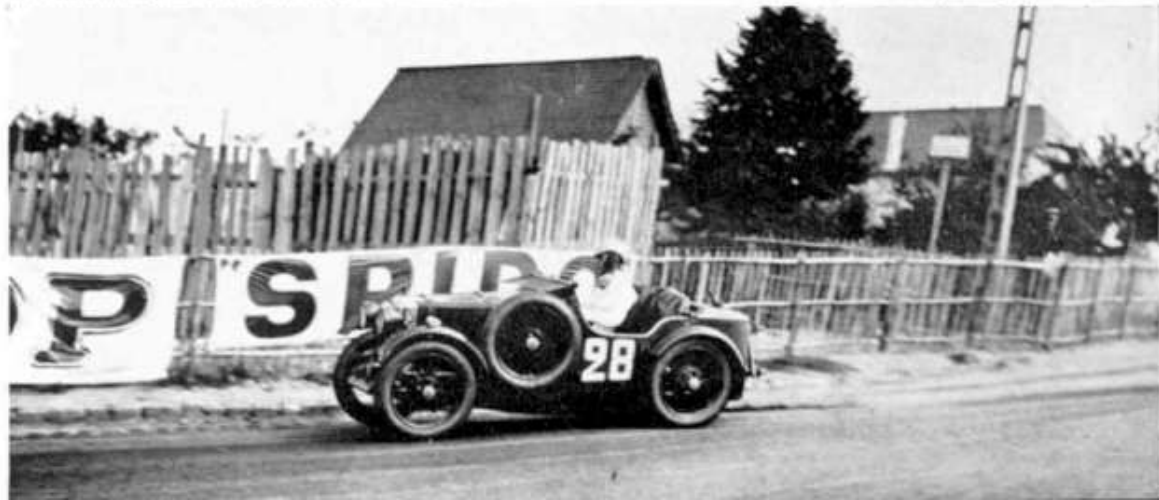
Almost unbelievably, the Samuelson car turned up at an M.G. Car Club meeting 32 years later, in virtually original condition: the same engine, the same body, windscreen, lamp brackets, fuel tank—even the same exhaust system. It is now being restored by a plastic surgeon in Oxford, incorporating components from its sister car, which had unfortunately been sadly

bogged a few years earlier by a less well-informed enthusiast.

During 1930, other achievements by the 'M' type included several class wins in a South African hillclimb, a class win in a Czechoslovakian hillclimb, and second overall in a similar event at Singapore. Though it was not strictly a competition, one should not forget the R.A.C.-observed demonstration staged on 29th May 1930, when Kenneth Marsh made 100 consecutive ascents of the Beggar's Roost trials hill in Devon—and all without stopping the engine, which ran for 7½ hours. Three days later, H. S. Linfield of the *Autocar* took this same car through the London-Edinburgh Trial, and shortly afterwards won a gold medal with it in the J.C.C. High-Speed Trial at Brooklands. This car also survives, though it lost its body in a fire.

Undoubtedly, many other successes were gained by private owners of the 'M' type Midget in trials and in races, both before the end of 1930 and in the years to follow. But the 'official' record ends with the 1931

*Murton-Neale at Le Mans, 1930, in one of the two Midgets built specially for this race. Some parts of this car are being used in the restoration of the sister car, which still survives today.*  
(M.G. files—photographer unknown)





Sir Francis Samuelson also drove an 'M' type in the 1931 Monte Carlo Rally, but preferred the comparative comfort of the Sportsman's Coupé. This was his third Monte in an M.G.; he had previously driven 18/80 saloons.

(Photo: Henry, France)

Monte Carlo Rally, in which the indefatigable Samuelson drove an 'M' type Sportsman's Coupé. And while the little Coupé was trundling over the mountains to the sunshine of Monaco, the M.G. development team were at the Montlhéry track preparing for the first-ever 100 m.p.h. record in International Class 'H', with a very special Midget which was, in fact, the prototype for the new model that eventually replaced the first of the M.G. Midgets.

© F. Wilson McComb, 1966

#### SPECIFICATION:

**Engine:** 847 c.c. four-cylinder, with overhead camshaft operating valves through adjustable rockers. External oil filter. No water pump. Rotax or Lucas ignition (6 v.) by coil and distributor. Single S.U. carburettor, 1½" dia., with gravity feed from scuttle tank. Two-bearing crankshaft.

**Transmission:** Single-plate dry clutch. Three-speed, non-synchromesh gearbox. Open propeller shaft with fabric disc universal joints. Spiral bevel final drive. Four-speed gearbox available as optional extra.

With this 'M' type, F. M. Montgomery completed the 1930 Monte Carlo Rally and made a record-breaking run in the Mont des Mules hillclimb after the event. (Photo: A. Well, France)



**Chassis:** Steel channel with channel-section cross-members. **Suspension:** Non-independent all round by semi-elliptic leaf springs, pivoted at the front, shackled at the rear. Hartford friction shock absorbers.

**Brakes:** Rod and cable operated with 8 in. drums and transmission handbrake on early cars. Later, cable-operated with handbrake operating on brake cross-shaft.

**Body types:** Open two-seater and Sportsman's Coupé, plus specialist models by Jarvis and University Motors. 'Double Twelve' sports-racing version also available. Early cars in fabric-covered plywood. Later metal-panelled.

**Wheels:** Bolt-on wire spoke, 19 in. diameter.

#### DIMENSIONS

**Wheelbase:** 6 ft. 6 in.

**Track:** 3 ft. 6 in.

**Weight:** 10 cwt. (two-seater); 11½ cwt. (coupé). Panelled bodies, approx. 1 cwt. more.

**Bore and Stroke:** 57 × 83 mm.

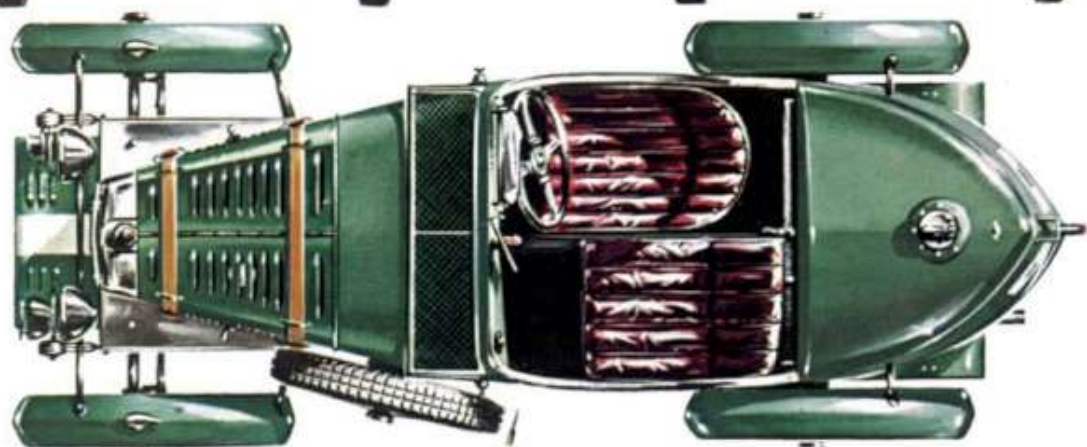
**Power Output:** 20 b.h.p. at 4,000 r.p.m. (27 b.h.p. at 4,500 after Engine no. 2024).

**Compression ratio:** 5.4 to 1.

**Tappet clearances:** Inlet and exhaust, 0.004 in. (hot).

Three days after the Beggar's Roost demonstration, H. S. Linsfield of the Autocar drove the same car in the London/Edinburgh Trial. (Photo: believed Autocar)









L. G. Callingham and the Earl of March (now the Duke of Richmond and Gordon) enjoy themselves with Double-Twelve Replicas at a J.C.C. Members' Day at Brooklands, 1930. (Photo: Sport and General)

**Valve timing:** Inlet opens at t.d.c., closes 50 deg. a.b.d.c. Exhaust opens 43 deg. b.b.d.c., closes 7 deg. a.t.d.c. (This is the 'Double Twelve' valve timing adopted for all engines after No. 2024. Early models had a no-overlap camshaft giving an inlet valve opening 9 deg. a.t.d.c., closing 35 deg. a.b.d.c.).  
**Ignition timing:** Fully advanced 30 deg. b.t.d.c. Points gap, 0.020 in.

**Tyre size and pressures:** 400 x 19 in. Front, 24 lb.; rear, 28 lb.  
**Rear axle ratio:** 4.89 to 1.  
**M.p.h. per 1,000 r.p.m.:** 16.4.  
**Castor angle:** 3 deg.  
**Toe-in:** 1/2 in. **Carburettor needle:** M.5.  
**Capacities:** Fuel, 4 gall. + 2 res. Water, 2 gall. Oil, 4 qts. (engine); 1 1/2 pts. (gearbox); 1 1/2 pts. (rear axle).

An unusual exercise carried out in 1930: this 'M' type made 100 consecutive ascents of the Beggar's Roost trials hill without stopping the engine, which ran for nearly eight hours. (M.G. files—photographer unknown)



(See facing page): 1930 M.G. MIDGET 'M' TYPE. Driven by C. J. Randall and F. M. Montgomery, this car was highest placed of the three Midgets which won the Team Prize in the 1930 Double Twelve Race at Brooklands. It averaged 60.23 m.p.h. for the 24 hours.

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