

PHOTOGRAPHY MARTIN BARWELL

# The Boy Racer's father

AS an admitted devotee of AMC racing machinery, the chance to ride Eddie Iffland's 1938 cammy 350 AJS was an experience I'd been looking forward to for many months, ever since he first broached the idea of a Racer Test. For as the owner of a big-valve Matchless G50, last of the AMC racing line, I'd always been curious about how closely it resembled the originator of its heritage, the pre-war ohc 7R.

Weren't no such beast as a pre-war 7R, I hear you say? Wrong. Contrary to popular belief, all thirties' ohc 350 Ajay racers were *not* called R7s, as Eddie, who worked in the AMC race shop for a seven-year spell between 1950 and 1957, explained. 'The first cammy Ajay racers were built in 1927,' he told me, 'but they were withdrawn for a while because they weren't competitive. Then they came back in 1929, were completely redesigned in 1933 with the magneto behind the

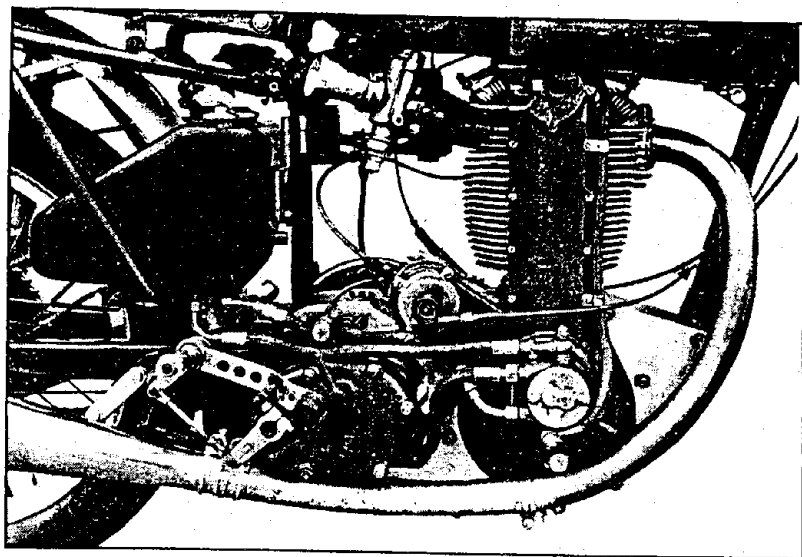
engine instead of in front, and at that stage they were called the 33/7. But in 1937, it was announced that the factory would be selling absolute replicas of their works bikes, with the all-alloy engine and megaphone exhaust, each of which was guaranteed to have been tested at Brooklands and achieved a minimum lap speed. That model was called the 7R, and as soon as I heard about it I knew I had to have one.'

Translating that desire into reality took some achieving, for at 90 guineas a new 38/7R was an expensive proposition for a man who had just finished his garage apprenticeship, even though the rival KTT Velocette and Norton models were priced at £120 each. But while it's hard to believe it of this courteous 67-year-old, now retired, at one stage he was the terror of the North London roads: 'I used to like a bit of speed when I was a lad,' admits Eddie cheerily as he puffs on his

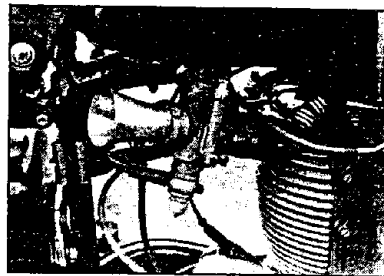
pipe. 'But I found my escapes were getting narrower and narrower, so I thought I'd better get on the track to satisfy my urges, before my luck ran out. Brooklands was perfect: once you joined Bemsee you could go down there any day of the week and have the run of the track, provided there were no record attempts going on. What a place it was.'

Such were the circumstances which led to Eddie's purchase of his 350 AJS, one of only 20 or so 7Rs made that year. With the exception of a spell during the 1950s when he worked for AMC, he's owned and raced it ever since, gradually updating and improving it along the way. So when I came to enjoy my much-awaited ride on the bike, it was on a machine which had received the benefit of several years' accumulated development from an AMC works mechanic.

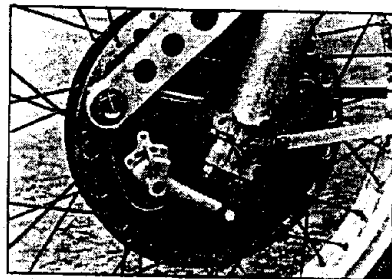
Eddie takes great care to warm the bike up thoroughly, entailing 20 minutes'



*The cammy engine looks like some Italian singles, but pre-dates them by ten years. Burman gearbox gives a clean change, although the pedal is awkward to use.*



*Rubber-mounting of the Amal TT carburettor is one of several modifications made to the engine.*



*The ex-works 8in disc front brake is very effective, but it causes judder and deflection in the ex-WD forks.*

*The engine feels surprisingly modern for a 45 year-old unit, and the updated chassis rides well on bumps and ripples.*

running on a cool day, before changing plugs. 'I remember that I had so little money left after I'd bought the bike that I couldn't afford more than one racing plug,' he recalled with a grin as he screwed in said component. 'I also couldn't run to any alternative sprockets, so I was stuck with the same gearing the bike had when it came. Fortunately, all my early races were at Brooklands, which the machine came geared for after it had been tested there.'

Air and ignition levers are fitted to the bike, and both are employed when starting from cold. Once the engine is warm, however, only a slight retard is necessary to fire up on the line. Leaping aboard, I was immediately struck by the riding position, which seemed very modern for a pre-war bike, till I realised that Eddie had replaced the original sprung seat and bum-pad with a one-piece alloy job incorporating the rear number plate. This had

been done immediately after the war, when a set of telescopic forks was also fitted in place of the original girders. While the more modern forks give a much improved ride and steer better over bumps, I was less impressed with them under braking, particularly as the bike boasts a massive, and very effective, 8in single-leading-shoe front brake with 2½in-wide linings. This component originally graced either a works 350 or one of the 500cc AJS V4s; Freddie Neill, service manager at AJS after the war, offered it after Eddie had complained about the original unit's ineffectual performance in post-war cut-and-thrust at places like Haddenham and Blandford. But braking hard for Paddock or Druids, the forks seemed much too flimsy for the power of this front stopper, and juddered and deflected quite noticeably. When quizzed about this, Eddie chuckled: 'I should say they were a bit frail,' he agreed. 'When I

fitted them in 1948, the only teles I could get hold of were off a WD G3L Matchless. But the biggest improvement to the handling came with fitting the Monty and Ward spring-frame conversion, with their own home-made dampers. They were the best you could get in those days, and not bad value for thirty quid.'

Indeed not, and the hydraulically-damped 'candlesticks' gave an excellent ride over Paddock Bend's bumps and the ripples that resurfacing has failed to disguise at Bottom Bend. Less of a success in my book was the reduction on wheel-rim diameter to 18in at the rear, coupled with a 19in front. Ground clearance on the right became a problem with the relatively low-slung megaphone, even with a Bridgestone rear tyre, which tended to impair my enthusiasm on what was otherwise a very nice-handling bike.

But it was that lovely-looking engine which really impressed. Shown a picture

# RACER TEST

of the pre-war cammy **AJS** unit, most people would insist it was Italian in origin: it looks downright Latin in character, with the tall cover to the camshaft drive (by chain, with Weller tensioner as on all later AMC racing singles). Yet designer Phil Walker's unit easily pre-dates post-war Mondials and MVs with similar appearances and with its deep finning and compact crankcases is the forerunner of the post-war 7R and G50 engines. Here again Eddie Iffland's development talents have been at work.

'I almost won my first race with the bike, at Brooklands in '38,' recalls Eddie. 'But I'd reckoned without the talents of "Ebby" Ebbelwhite, the handicapper. I had the chequered flag in my sights, having led all the way, when suddenly four bikes zoomed past me in the last quarter mile. After that I was re-handicapped, so over the winter I converted the bike to dope, with a 10.5:1 piston, which brought me several good results and my first win, at Brooklands in July '39.'

Rebuilding the bike for post-war racing, Eddie fitted a 7:1 piston to cope with 68-octane pool petrol, later raising the compression ratio to just under 10:1 once fuel improved. He also made manganese-bronze floating bushes with oil scrolls inscribed, to replace the needle-roller bearings in the rockers, which had a tendency to skid sideways. The inlet port was opened up, post-war 7R valves of larger dimensions were fitted, and a rubber-mounted 1-1/8in Amal TT carburettor replaced the fixed 1-1/16in unit previously employed. The exhaust valve was now sodium-filled, flywheel oil scrapers were fitted to reduce drag on the crankshaft, and two additional crankcase breathers were installed, with flap valves. 'I like to have the flywheels running in a partial vacuum to prevent pumping losses,' explains Eddie.

A host of other mods included the

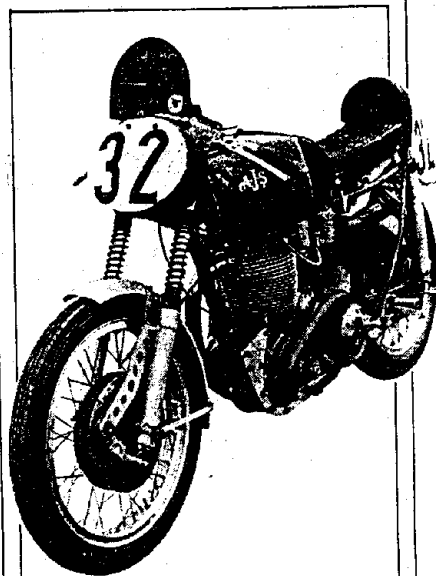
fitting of a works-type four-speed Burman gearbox and coil valve springs instead of hairpins, although the latter are used at present.

Despite the updating, this engine is still 45 years old and I was surprised by its modern feel and performance. In spite of the very long stroke (for a 350) of the 70 x 90mm unit, with its over-long, whippy conrod, it revved very freely without seeming to slog. Eddie regularly took it to 6,800rpm in its heyday, with the occasional safe burst to 7,000 on the last lap. But in deference to the age of the electron cases, works-engined components obtained from the AMC scrapheap, he asked me to keep the revs down to 5,800-6,000 for the test. The bike still accelerated smartly through the gears, though there was a noticeable patch of megaphonitis from 3,500 to 3,800rpm. However, this was nothing like as bad as the early post-war 'Boy Racers', with their cavernous megaphones that, according to Eddie, meant there was precious little power below 5,500rpm, with a 7,400rpm redline! The long-stroke bike, on the other hand, pulled readily from as low as 3,000rpm, and made trickling round Druids hairpin in second gear very easy, with just a touch of the clutch lever needed to get the engine back on song for the drop down to Bottom Bend. Bottom gear is rather low, and in any case changing gear was a bit uncomfortable: the problem isn't the change itself, the Burman swapping cogs cleanly and lightly, but the way the gear-lever bends outwards to clear the selector box.

But more than anything else, it was the overall feel of the bike that impressed, rather than any single aspect. Admittedly it's had the benefit of post-war updating, but if you'd sat me on the bike blindfolded, I'd have said it was an early sixties special rather than a pre-war production racer. It certainly served Eddie Iffland well — he gained a Manx GP finisher's

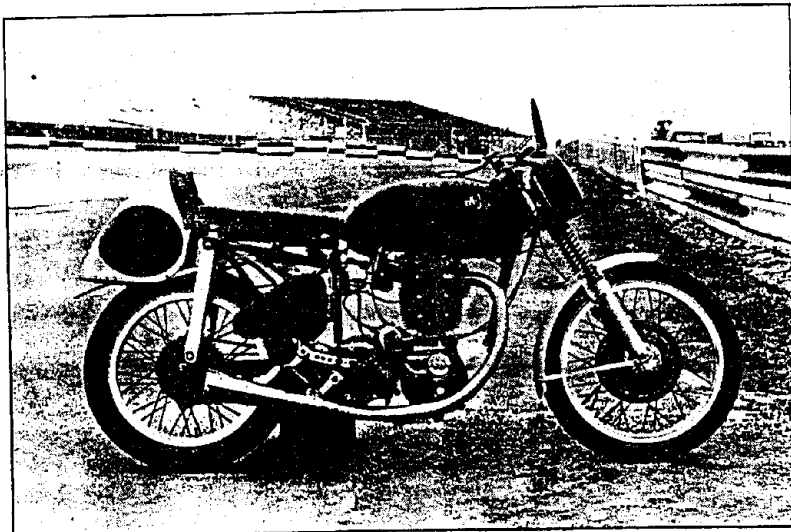
award on his first visit to the Isle of Man in 1946, and a string of successes on short circuits in the late forties, including three wins in a day at Haddenham in 1949, and seventh in the Hutchinson 100 at Silverstone the same year. He capped his career with a fourth place against the works bikes and post-war 7Rs at Silverstone Saturday in April 1950, winning the Bemsee trophy for the day's most meritorious performance.

Two months later Eddie joined the AMC race shop, and reluctantly sold his faithful old machine. He then repurchased it, with a blown-up engine, ten years later after he'd retired from AMC after a bad bout of tuberculosis. Having rebuilt the bike to its present trim, just as he last raced it in 1950, Eddie's **AJS** is a frequent participant in vintage and classic parades, though probably few of the people who've witnessed it in action had any idea of its remarkable history.



## Specification

Engine.....	sohc single
Bore x stroke.....	70 x 90mm
Capacity.....	346cc
Compression ratio.....	9.9:1
Output.....	30-32bhp @ 6,800rpm (est)
Carburation.....	1-1/8in Amal TT
Ignition.....	BTH magneto
Gearbox.....	4-speed
Clutch.....	multi-plate, dry
Frame.....	open cradle
Suspension	
(front).....	telescopic
(rear).....	swinging-arm
Brakes	
(front).....	8in s/s drum
(rear).....	7in s/s drum
Wheels	
(front).....	3.50 x 19
(rear).....	3.50 x 18
Weight.....	290lb dry
Top speed.....	110mph
Year.....	1938
Owner.....	Eddie Iffland, London.



Post-war modifications include AMC telescopic forks and a Monty and Ward spring-frame conversion.