



Geoff Cornes had owned an AJS vee-twin for 20 years when he was offered another.



The 1937 Model 72 has fully adjustable handlebar links for complete comfort.



Identical twins

PHOTOGRAPHY: MICHAEL BAILE

Jonathan Jones meets a pair of AJS side-valves

THERE WERE two brothers at my Sunday school in the Fifties. Their shaved heads were as bald as headlamp shells, a radical cure for lice, but there was something else about them that made my eyes pop. They were identical twins.

I experienced the same fascination when Geoff Cornes pulled open the doors on his 990cc AJS Models 362 (below, on the left) and 372 (right). The interest lies both in the similarity between them, and in the differences. Psychologists have written reams about the human habit of assem-

bling sets of things, but classic motorcyclists will know that collections also have a way of accumulating spontaneously.

Geoff had owned the 1936 AJS Model 362 for about 20 years, and he didn't particularly need another one. But when he advertised a set of exhaust pipes he'd bought that didn't fit his own machine, he made contact with the owner of an almost identical 1937 model. Some time later, the man decided that he was never going to get the 372 completed. Guess who bought it?

This side-valve AJS vee-twin was first on sale in 1933 as the Model 332, following a period of financial trouble and the takeover of its manufacturer. A J Stevens & Co of Wolverhampton were expanding their successful motorcycle business into light cars, coach chassis and radio sets when



the Depression hit in the late Twenties. It was not an opportune time to invest large sums of money, and by 1931 AJS were considering a merger with BSA in nearby Birmingham. But it was Matchless of London who eventually bought the goodwill and manufacturing rights of AJS motorcycles.



Improved cylinder head finning and positive valve gear lubrication for 1937.

Announced in July 1932, the new top of the range model was in direct competition with Matchless' own Model X. Powered by a 50 degree vee-twin with square bore and stroke dimensions of 85.5mm — producing 990cc — the Model 332 had dry sump lubrication. An instrument panel on the tank included a bell-tale button, to provide a visual check that the lubrication system was working, and to reassure those riders accustomed to watching the drip of a sight glass. A chain driven Lucas Magdyno supplied electrical power.

When the weekly *Motor Cycling* took a model out on test, hitched to a launch sidecar, they commended the interchangeable wheels but thought that the 7in brakes could be more efficient. Starting was easy and the operation of the four-speed, hand change Sturmev-Archer gearbox was smooth, although first gear was so low that it was not used once. There was praise too for the transmission shock absorber, smoothing the drive down to a snatch-free 10mph in second gear.

When the twin was really revved, snappy performance resulted, with 30mph in the 7.1:1 second gear, 52mph in the 5.7:1 third gear and

a sustained speed of 63mph in top. Cruising at 50mph demanded nothing of the driver. Steering was light, due to reduced trail created by long lower fork links, but the handlebars showed no tendency to wave about, and the steering damper was not used.

An Export model was also available. The main differences between this and the standard product were footboards instead of footrests, a foot clutch, and the hand change mounted on the left side of the tank.

The detachable cylinder heads on that first Model 72 was claimed to give smooth power and freedom from detonation. The spark plugs were in an unusual position, on the inlet side of each combustion chamber. We may presume that this was not a success, because in describing the following year's AJS 342, *The MotorCycle* noted that the chief alteration was "a new sparking plug position, to obviate pinking." The latest twin also had a back plate to the rear chain guard to protect the lower run, and shorter fork links, to enhance rigidity.

For 1935 the 352 got a beefed up drive side mainshaft and bigger main bearings. Sturmev-

Identical TWINS

Jonathan Jones at a stately, unruffled 50mph on Geoff's 362 990cc AJS vee-twin.



Archer lost the contract to supply the gearbox. In its place came a four-speed unit from Burman, already providing the clutch. An option on the Export model was a three speed and reverse gearbox. The chain line was widened to accommodate 1.00in section tyres. An improved saddle mounting allowed for longer, more comfortable springs. That brings us to the 1936 models, and we don't need archive material to fill the picture, because Geoff Comes has provided the real thing.

Geoff's 362 didn't look like this when he bought it in 1971 after a tip-off from a workmate. It was out in a shed, supporting a board used as a workbench. Geoff paid \$55. He still has the receipt, with the seller's name signed over a postage stamp.

The worn out carburettor was sent away to Anul. Following essential work, the AJS was usable, although far from standard. Geoff rode the twin once or twice, but it never saw continuous service. An interest in off-road riding meant that there was always service and repair work to do on his trials irons, but he kept an eye out at autojumbles.

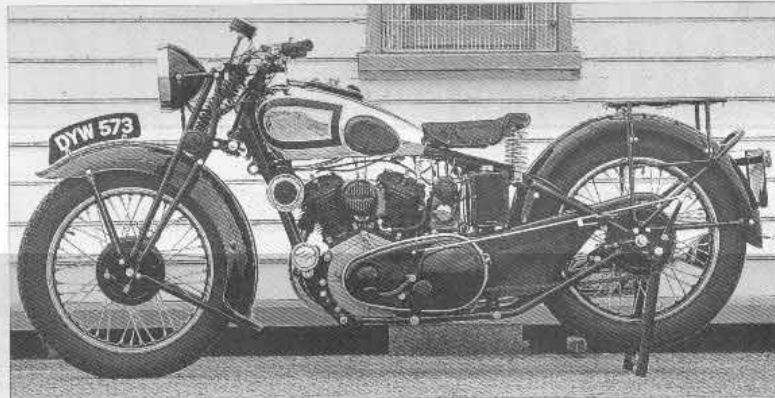
Geoff picked up the three gallon tank at a Beaulieu Autojumble seven years ago. He describes finding the correct tank as a bit of luck. The Model 372's tank capacity was increased to four gallons. Later he found six new Dunlop rims, two of which he passed on to a friend. In the late Eighties he decided that he had enough original parts, and the time was right for a full restoration.

Mostly it was just steady graft, but some problems called for a bit of ingenuity. "I cut the Magdyno storm shields from a length of three-inch street lighting pole," says Geoff. "There was no carrier either, so I made up a plywood pattern using catalogue pictures, and kept offering it up until it matched. Then I got a local firm to bend me some tube."

When it was all assembled Geoff took the painted parts away to have them blasted, prepared and stove enamelled. He's not really interested in doing that kind of work, and thinks it's better to stick with what you enjoy.

Geoff used 3.50 x 19in tyres on the 362, but they looked lost under those wide mudguards. A frequent visitor to Europe, it was a German friend who found him the Czech made 4.00 x 19in block tread Barums.

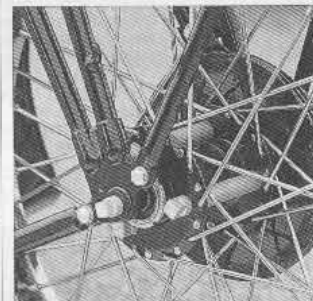
When Geoff ran the 362 before he restored it, wet sumping was a persistent problem. The oil tank would drain into the crankcase within two days, sometimes as quickly as two hours after a run. There was no way to turn the motor over without draining it, and the sump plug went in and out until the thread stripped. Now it's Helicoiled, and Geoff has



Both twins feature the familiar leak-prone pressed steel primary chaincase secured by a light alloy band.

fitted the one device that is guaranteed to leave motorcyclists throwing up their hands in horror, an oil line tap. Before we take the big twin out across the bleak marshes of Dungeness, he slips a length of rubber tube from that tap's lever, a reinforcer to turn the oil out.

First gear is redundant. It's the first heavy hint that this machine was designed for hauling sidecars. In 1936, to drive home the point, AJS added a Commercial model, with painted tank and no instrument panel, on which the three speed and reverse gearbox was standard. On this solo first is a ploughing gear in



Interchangeable QD wheels fore and aft: a good idea, especially on a sidecar tug.

the four-speed box. You could load half a ton of anvil and mobile forge on to a sidecar platform and pull it up a 1 in 3 farm track. The side-valve twin wouldn't turn a hair, despite the fact that Geoff has increased the size of the engine sprocket by two teeth, raising the overall gear ratio. Like the man from *Motor Cycling*, I soon learned to leave first gear alone.

The clutch lever has a long movement, yet the work is all done just as it approaches the handlebar. Take up is progressive for all that, but it did show a slight tendency to slip, though there was plenty of free play at the lever. It sorted itself out after a while.

The side-valve twin is a willing starter and

the sound of its valve gear was soon drowned by the meaty rumble of twin fishtail exhausts. How much more attractive they look, to my eye, than the single silencer on the 372.

The long wheelbase — five feet between spindles on the 362 — makes shifting the AJS around by hand a chore. On the move, it is of little consequence. The 372 is 1/4in longer. A hefty weight carried low down and resting on the road at two well separated points on broad tyres gives a ride that is unruffled by choppy surfaces and unmoved by dramatic changes in camber. One rough and ready road repair made the fork spring clash with the spindle housing, but for most of the time the AJS flew straight and true, stuck on the course I'd selected. Naturally the big twin won't change line too quickly.

Low gearing shows itself all through the gearbox, with effortless cruising at 50mph. The vee-twin engine humbles sweetly on and could get a rider into trouble. For although engine braking is effective, there's a lot of weight to pull up in a hurry. Brake shoes running in newly skinned drums gripped adequately, but challenged the strength of the structure. Used firmly, the front brake added a fresh twist to fork stresses. When I took my hands off the handlebars while cruising, there was just a hint of bias towards the white line.

Positive lubrication of the valve gear, improved cylinder head finning, a cast cradle type frame, beefed up forks with double sided damping and fully adjustable links on the handlebars were all listed by AJS for the following year's version, the 372. Restoration of this later model is not quite complete, so I wasn't able to make a comparison on the road. But it shows how hard Associated Motor Cycles — as the Matchless-AJS combine became in 1937 — were trying to maintain their market-share. Such modifications don't come cheap.

I played the psychologist, probing Geoff Comes' interest in collecting matching sets. Did he understand what I was talking about? It was hard to tell. But surely he was he pulling my leg when he confided: "I've never let anyone else ride this one before, but you're okay. You've got a beard, like me." ■