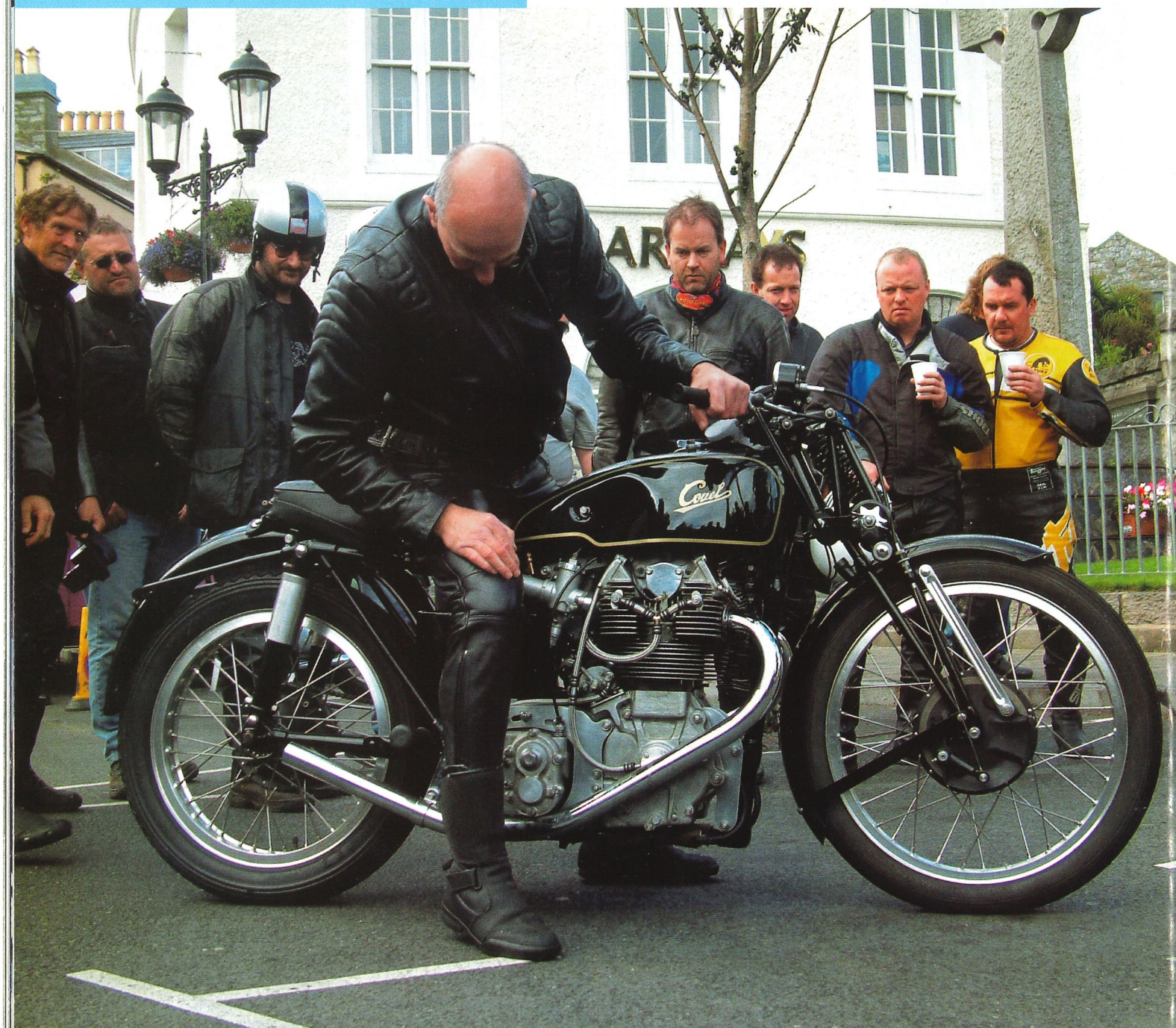




Words by Gerfried Vogt
Photography by Jorg Strehler

Doubling up

In the early 50s, a young Velocette employee was determined to build his own racer. He managed, but then the machine was broken up after only a brief racing career, ending up in bits, until an enthusiast spent years rebuilding it. The Covell, as it was christened, was shown to the public during this year's Manx Grand Prix.

HE SAW IT FIRST AND LOOKED puzzled but curious. My mate and photographer Jörg glanced at it, helplessly scratching his Swiss head. "What is it?" he asked, puzzled. Arriving at the Casteltown gathering and Concours d'Elegance, we could not miss it, right in the middle of town on this late Sunday in August. The odd, pitch-black twin-cylinder racer stood amidst a crowd of people, with the scene surveyed by an amused fellow who was obviously the owner.

At a glance perhaps its origin can be determined – it's a KTT Velo', surely? – but on closer inspection you'd see there is something missing – the bevel-drive. And there are two exhaust pipes. And you thought the only racing Velocette twin still alive was the Roarer, eh. People shook their heads with disbelief. It took Bill Dawson, owner of the machine and pictured above warming it up, quite a while to explain clearly what he'd rebuilt – or, in the case of some parts, built from scratch.

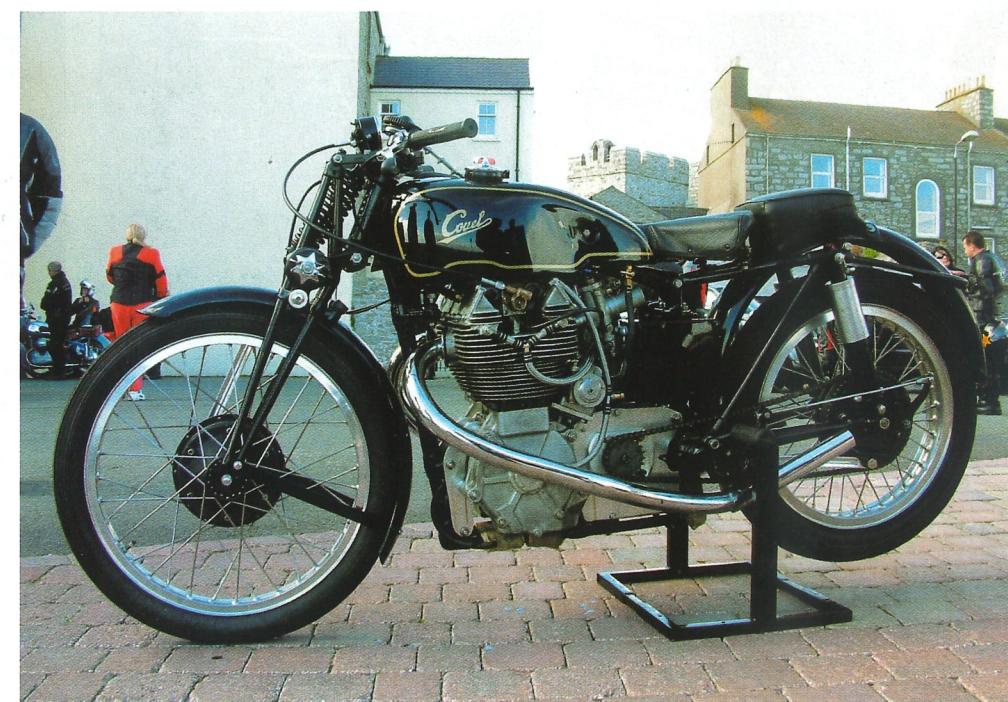
A TRUE BASKET CASE

A butcher and baker by trade, Yorkshireman Dawson was brought up with Velocettes. Since the age of 17, when he first rode a Venom, he's been a staunch fan of the marque and still enjoys his small collection of five bikes. "There was this odd but interesting twin engine unit and gearbox lurking somewhere in a box doing nothing," he recalls after being asked what made him start a rebuild as difficult as this. Many of you readers will have certainly experienced the rebuild of a bike; a relatively straightforward process if the majority of bits are there and in large lumps. Bill's start was humble with nothing more than an engine, featuring a very odd oil pump and a standard gearbox. "I started by gathering information on how the bike looked in the first place," the 57-year-old says.

LOOKING BACK: HEDLEY COX AND HIS IDEA OF A RACE BIKE

The origins of this unusual 500cc twin stems back from early post-war days when the Velocette KTT, in its final Mk VIII form, was still competitive, despite antiquated Webb girder forks. In 1948, Hedley Cox joined Veloce Ltd at the tender age of 20. Keen and enthusiastic, the factory racing team was his entry into the world of careful preparations of these black and gold racers. But he wanted more than 'merely' to be the man in the overalls to quickly solve problems or replace bits in record-braking time. Cox was eager to see how he got along piloting a fast single himself.

In 1950, he made his Isle of Man Manx GP debut, running as high as third but dropping back to 37th in the Junior class. He wanted to race in the Senior class though, on a 500cc



bike. But his request to his employers to borrow an old ex-works 500cc half-litre Velocette racer was met with a definite 'No.' So he decided he would build his own ohc 500cc machine, and he set about stockpiling factory rejects, collected from the scrap bins at Hall Green.

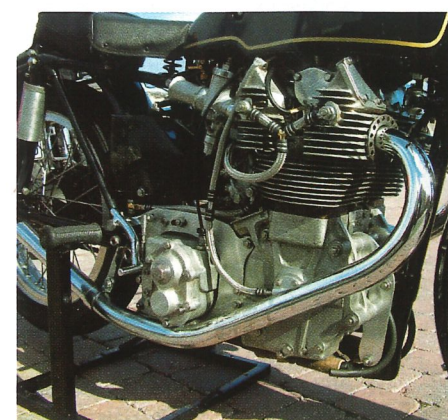
THE IDEA: JOINING UP TWO 350 SINGLES – NOT AN EASY TASK

With money tight, his plan was to use as many standard parts as possible. Sleeving down two 350cc singles was performed by reducing the stroke from 81mm to 58mm. As space was tight, the crankpin nuts were altered and MSS shafts used, internally connected with a sleeve linking the two bottom ends. With the aid of a straight-teeth MAC timing gear driven from the lefthand engine, so two more gears could be propelled. These gears were lined up

with two keyed sprockets onto the now welded halftime gear. So the necessary camchain could do its job just as well, as the BTH magneto had found a connection to provide both sparks. A Square Four spring tensioner cared for the camchain, the necessary bearing for the halftime pinion shaft sat on an outrigger plate incorporating a rubber washer to seal the lot. If this all sounds a bit odd, remember Cox was working with scrap parts and could not alter too much due to lack of funds.

Reversing the right-hand barrel was a necessity, and the matching cylinder head had to be altered extensively. Its plug hole was filled up with weld, and a new one was drilled in the former bevel housing space. An extended camshaft was connected to the left-hand section by an Oldham coupling, the lot being fitted with soft K 17/8 cams instead of high-lift items.

One man's answer to the lack of an available 500cc class machine – and what a good job he did.



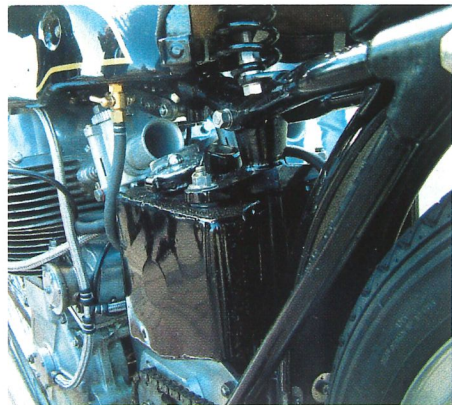
The Covell engine unit, made by the ingenious Hedley Cox.



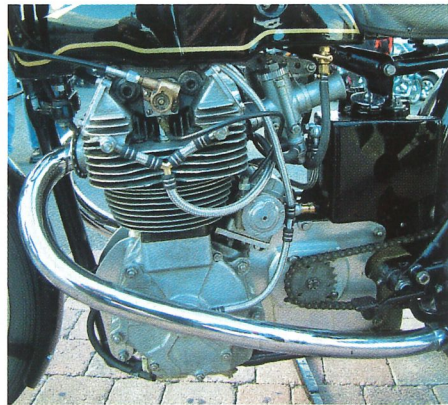
Twin carburetors are by Amal, though due to availability not as fitted in the machine's racing days.



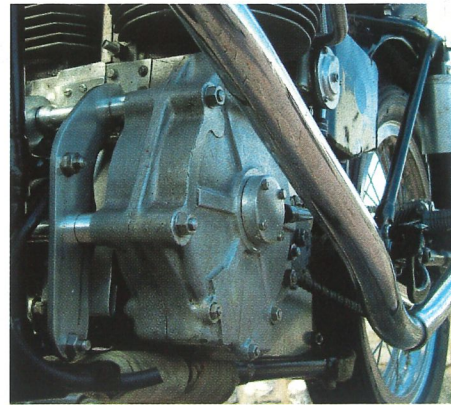
Rev counter drive is taken from the left hand side of the engine.



The oil-tank is MkVIII KTT item, found after extensive autojumble trawling.



The engine is functional in appearance, handsome in a cobby way.



Exhaust pipes are, of course, bespoke. Shot also shows separate crankcases.

If this all sounds a bit weird to the uninitiated, the lubrication system is even stranger. Cox was not going to use two oil pumps so he made one out of three pumps (in 1½ bodies) and some clever ideas in mind. As the magneto was being bolted to the left-hand engine, the space on the right-hand engine was still vacant. Mating the scavenge half with a 'tongue' to the drive shaft of a complete MAC pump formed a unit. At the rear of the pump body the pressure supply divides into four feeds which supply each big end at the outer crankcases and cams plus rockers of each cylinder

head. The other two sections return the lube via sump and the cylinder head oil drains. The dry clutch was in line with the right-hand engine and inaccessible for adjustment as surgery was needed to provide an outrigger for the final drive sprocket as the normal four-speed box was still to be used.

PERFORMANCE AND BAD LUCK

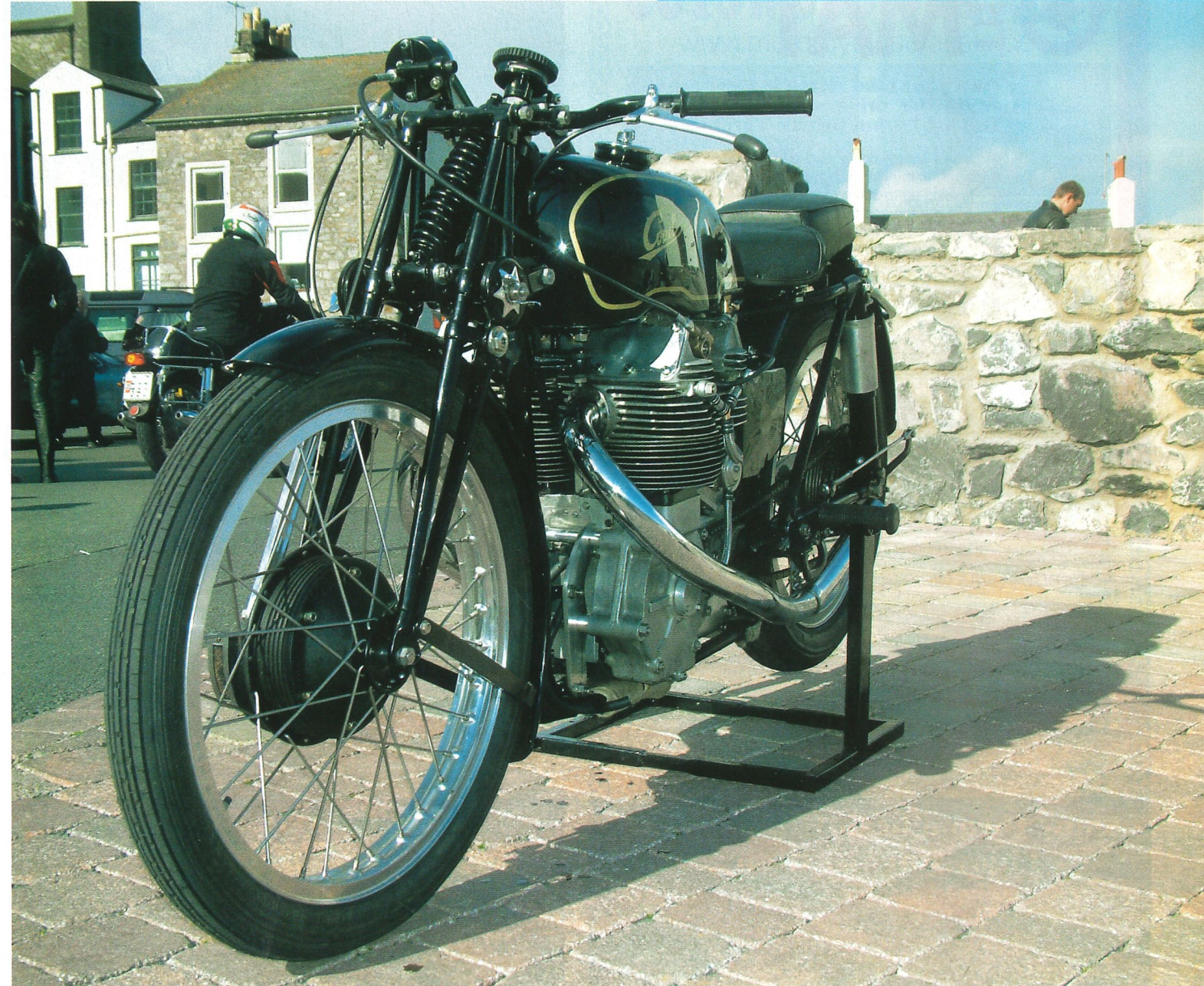
The complete lump was bolted in a KTT frame and the builder was eager to use it in the 1951 Manx GP. At first, he wasn't doing badly at all, as *The Motor Cycle* joyfully reported in

their issue from 13 September, "Typical of the real Manx spirit behind young Hedley Cox's effort with his homemade twin for the Senior, is the fact that he has only one set of wheels and rear suspension for his two machines. On Monday, he did 1½ laps on the Covet and indeed, seemed very pleased that it had completed a lap, bearing in mind that it had never been run on the road at all before that previous day. Last year your scribe prophesied that HJ Cox was another Duke in the making. That view is still held."

If practise seemed to be promising, bad luck struck during the Junior when he crashed and found himself in the care of nurses and doctors of Noble's Hospital. So the start had fallen through, and so had his job at Veloce when the Goodman's noticed his secret racing mount. The bike was later raced by the Australian John Nairn at Swansea in 1952, as Cox was still under doctor's order not to race. However, he used it at Cadwell Park in April 1953, as well as for Crystal Palace two month later and thereafter, at a Silverstone event.

Soon after that, Cox went to Canada and later became permanently resident in the United States, where he worked for AMF-Harley Davidson. A deal was struck with the Velocette Owners Club for shipping the engine and gearbox unit to their headquarters in Huncote, Leicestershire.

From there, Dawson collected the engine and gearbox in the early 1990s. "I reckon I tried to obtain a KTT frame for more than two years, until I got fed up and decided to make a replica," the man from Bridgefield remembers. Then, he got hold of the address of Bob Jolly from Wingfield, Australia, who supplied him and Alec Swallow with the essentials for the restoration job. "He got us the works drawings and new, unmachined lugs,



as well as the seven inch brake hubs." After making their own jig, Swallow and Dawson finished the frame in 18 months, then completed the chassis. Items like an original KTT oil tank came from autojumbles, others, like the slim petrol tank, much more suitable for the Covet than the Cox-used item with a huge cut-out, were made to order. The petrol tank, for instance, by specialist Peter Kyte from Pershore, Gloucestershire. "I knew he would do a good job, as he made the tanks for Dave Kay's four-cylinder MVs," so the present Covet owner recalls. Refurbishing the engine was quite straightforward though not all plain sailing. "I was reluctant to dismantle it in the first place but later was thankful that we did, with many components completely worn like the cams and most of the bearings: The former all had to be re-profiled, the later knocked out and replaced. The

left-hand cylinder head had a large crack which was difficult to weld, the oil-pump was, Bill Dawson says, "a minefield". All the plumbing needed replacing with proper steel threads inserts.

Finally, the bike was ready on brand-new 21 and 19 inch-Akront rims respectively, with straight-through exhaust and the 'wrong' set of carbs as Bill Dawson was unable to track down a set of original Amal 1 3/32 10 TTs. However, after nine years of extensive work the Covet was back and running in summer 2002. Dawson sent information, prints and a 'Fishtail' (the Velocette OC magazine) to Hedley Cox in the States. "He was very pleased and mentioned that now, at the age of 74, is still riding one of his eight bikes every day unless it was raining," Dawson says, "And he commented that it didn't rain much there!"

THE EXPERT'S VIEW

"Many will appreciate that the machine has been finished after all these years," Velocette expert and club president Ivan Rhodes states. "I think Bill Dawson, Alec Swallow and all the people involved in the re-creation are to be commended." He remembers that back in 1991 Hedley came back to England and tried to restore his pride and joy after it had been laid up for almost two decades. "He arrived out of the blue, and we supplied him with the things he needed – a Venom rolling chassis and a workshop he could use. There, he worked on the bike but couldn't finish it – it only ran on one cylinder due to a faulty magneto," Rhodes recalls. A promise from someone to finish it wasn't held so the engine and gearbox unit went into storage again, until Bill Dawson took over.

So here we are – the Covet might still remain somewhat of an idiosyncrasy for many members of the club, but it is back in one piece and will certainly be heard and seen within the next few years at various events. It was a shame I wasn't able to ride it, but one familiar face in the classic scene already has: Bill Swallow, brother of Alec, put the twin through its paces at Mallory Park. His riding impressions will appear in a future issue of sister publication *Classic Racer*.

Considering it's effectively two engines joined together, the Covet isn't overly wide.