

OFF THE RECORD

Some hitherto
unpublished incidents
in the life of
a motorcycle designer

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HAVE you ever found yourself tired, cold and wet, nose-down in a ditch alongside your motorcycle at two o'clock on a winter's morning, surrounded by illimitable acres of impenetrable blackness broken by not the vestige of a glimmer from the newly fitted electric lighting set which, until that cataclysmic moment, had afforded you illumination on a previously unparalleled scale for several hours of continuous riding?

Well, I have—and the moment at which the full realization of my predicament struck me was also the moment at which I decided, absolutely irrevocably, to retire from trials riding on the spot. This decision, if implemented, would have resulted in my possessing probably the shortest career as a trials rider ever recorded. But retirement seemed infinitely preferable to continuing without lights in the conditions prevailing in the vicinity, which was somewhere on a bush track near Ballarat, in Victoria.

However, a moment's thought indicated that it was manifestly impossible to stay there until daylight, so something had to be done. Up to then, I had relied (if you can call it that) on acetylene lighting and knew the remedies for all its many vagaries (including several not in the book), but this new-fangled electric set was a trifle outside my then limited sphere of knowledge.

The first approach was the *suaviter in modo* method—cautiously tweaking any wires which could be located by groping round in the dark. As this proved to be entirely unproductive of results, except annoyance, I reverted to the *fortiter in re* system and dealt the headlamp a resounding thump, whereupon “Lo” (as Omar Khayyám would no doubt have remarked had Fitzgerald been at hand to do the translation)

“the headlamp of the bike had caught the muddy highway in a noose of light”

or words to that effect. Not only that; the tail light also was aglow, the speedo. light shone like a good deed in a naughty world and after a few hesitant coughs, pardonable in an old gentleman who had been inverted in a ditch, the engine responded to the kick-starter.

Reflecting that while any fool could retire, it was only the 24-carat idiots who kept going, I instantly rescinded the decision re retirement and off I set, to arrive at the next control on time—though only just. What's more, I finished the course some 19 hours later with only a couple of points lost through failing to keep an eye on the watch when retightening some loose spokes outside a control. As only about 40 of the 70-odd starters even finished the course in this 1926 24-hour trial, it was perhaps a reasonably good maiden effort, especially on a device which a kindly soul had described as “a mass of crystallized metal screwed on to a dud sparking-plug.”

This description lacked accuracy in one particular. The plug was both new and effective but, as first the forks and then the frame broke a few weeks after, there are grounds for suspecting that as a whole the stricture was warranted. Hence the speedy acquisition of another mount, this time a “big-port” A.J.S., sold to me cheaply because its owner had, through stress of financial circumstance, lubricated it

exclusively with old sump-oil which he had not even bothered to filter. Luckily the damage proved less severe than I had convinced the seller it was and, after stropping and honing, this iron was used for touring, racing and scrambling impartially. In five years it had been ridden solo and sidecar, almost written off in a crash, sold, bought back again and finally disposed of to a gent who, after paying a small deposit and taking delivery, lost all further interest in the proceedings as soon as I departed for England in search of a little more technical knowledge about how a motorcycle was put together.



There luck was with me. With one or two racing successes on Velos on the credit side, I received a very sympathetic hearing from Percy Goodman at Hall Green. During the interview, after I had recounted our troubles with the overhung-crank 250 c.c. two-stroke—mainly with seizure of the mainshaft—P.J. remarked they'd had the same thing but had cured it quite easily. I asked how. He replied, "Oh, we just stopped making that model." Its successor was, of course, the delightful GTP.

This was in the heyday of that fabulous figure Harold Willis, who was combining the functions of constructor, tuner and rider of the KTTs of the period. A cautious man by nature, he was inclined to temper other people's enthusiasm with a modicum of reserve. He also tended to look with suspicion upon anything unconventional; he must have been the last rider ever to use a lever throttle in a T.T. On one occasion, when a suggestion to use cast magnesium for wheel hubs was made, he promptly squashed it with the observation that the stuff was only electrified dirt after all, and it was he who would have to ride on it.

Arguing with Harold when he thought he was right definitely paid no dividends. When a very eminent member of the trade gave it as his opinion that it should be easy to make an engine which would win the T.T., he could find no answer to Harold's rejoinder: "Is it? You ought to try it some time!"

Yet he did take excursions into new realms himself, as witness the invention of the positive-stop foot gearchange now so commonplace that the majority of present-day riders have never used anything else.

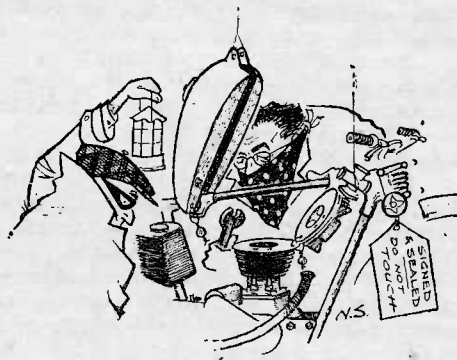
Remember "Whiffing Clara," the supercharged model which subsequently came into the hands of the Velo fellos, The Archers of Aldershot? Clara was born of an idle conversation in a near-by hostelry, and the first-fruit of this was about the wildest lash-up one could possibly conceive. A KTT engine, mounted on a test-bench in the small corrugated-iron "din-house" which then constituted the experimental section, drove a commercial vane-type vacuum cleaner, using the outlet as the pressure side feeding air to a gallon oil-tin and thence through the carburetter to the cylinder, Harold being of the opinion that the blowing-up of a gallon of explosive mixture if the engine back-fired would put the rider off his stroke, to say the least.

This hurried experiment resulted in a jump from 24 to 32 b.h.p., so work was promptly instituted to design the whole thing properly, with the blower in front of the engine and the

"official receiver" located where the oil-tank used to be. The layout called for a new frame, but when this was finished the power-unit could not be fitted because the engine-bolt centres were about a quarter of an inch too close to each other, though everything *appeared* to measure correctly to drawing sizes. The frame-builder took much umbrage at any suggestion that his work could be wrong, particularly as he had bought a new and shiny two-foot rule especially for the job, but when matters had passed the conversational stage and reached an angry deadlock it was found he had purchased a pattern-makers' contraction rule which, through some oversight, had not been branded as such and had been foisted on an unsuspecting public by a cut-price store!

Where the "Clara" part of the name came from deponent knoweth not, but the "whiffing" came from the odd hisses and squeaks which arose after the bicycle was stopped. To maintain correct carburation, the receiver, float chamber and petrol tank were connected by balance pipes so that they were all under pressure, but some complicated drill with various taps had to be gone through when stopping—and also when starting—in order not to upset the carburation so hopelessly that a restart would be impossible. The Archers subsequently put the carburetter in the right place, on the blower inlet, and so far as I know they never had an explosion in the receiver, so Harold's fears of physical mutilation were probably ill-founded.

There was, at a much later date, an explosion in the external brick-built chamber used as a silencer alongside a new and larger test-house. Not that those inside were aware of this; all they knew was that an engine required for Donington next day suddenly dropped about a thousand revs. and never regained them, despite pulling down, checking and reassembling everything possible. Eventually, in disgust, they gave up for the day, but on leaving found that the concrete roof of the exhaust chamber had fallen down—it had to, the walls were almost non-existent—and partially blocked the exhaust outlet from the engine.



Lots of odd things happen in test-houses—and they're not always recorded, either. I can remember how, at another time and place a fellow-conspirator and myself dismantled by stealth, at dead of night, an engine which had shortly before been officially wired and sealed in preparation for a 100-hour test. Suspecting that all was not well internally, we had arranged the wires with such devilish cunning that it was just possible to eviscerate this prime mover without breaking the seal. Sure enough, the fault was there and was duly rectified.

But the job left us no time to play with. We were just able to lock up, drive out of the place, wait along the road for a minute or two and then make an innocent arrival coinciding with that of the inspector-in-charge. The test started at 10 a.m. At 10.30 my accomplice observed airily, "Well, there's only another 99½ hours to go." They went. And the engine stuck it for the full distance. I'm afraid that we were rather pleased with ourselves.