

## **William Watson's Story**

**William Watson worked for Noel Macklin and was responsible for designing the Invicta S Type.  
He also designed the post-war Invicta Black Prince.  
This is an exact transcript of his hand written document dating from the late 1960's.**

On and off I have been thinking of writing the history of the Invicta car, and this months issue of the magazine has jerked me into doing so.

The inception of a car with the performance which the Invicta ultimately had was conceived by Capt Macklin and myself just after the First World War in about 1920. At the time I was amusing myself by building a 'V' eight cylinder motorcycle of 1000cc when I saw an advertisement in the Daily Mirror for someone who would be interested in helping to build a super sports car.

The Daily Mirror then had opened its page free to anyone having jobs to offer and Macklin put in a short notice as above. I had an interview with him and his friend Hugh Ore-Ewing who was helping him. I took along with me the crankshaft of the 'V' 8 bike engine and that secured the job for me.

Macklins idea was to buy up some 7 HP pre war (1914) Swift chassis and fit a 1500 cc Coventry Simplex engine which after being tuned up a bit turned it into a bomb. We used to clean up nearly all the old time hill climbs and short sprint car races. The car was called the Eric Campbell. The performance was so good it was decided to start to manufacture on a small scale and the aircraft firm of Handley Page was persuaded to take it on. Unfortunately the gearbox was handed over to the Moss Gear Co to produce without telling them it had already done some umpteen thousand miles, and what they actually made was a gearbox with thousands of miles of wear built into it. Macklin overcame this disaster by handing over the whole thing to Handley Page and starting out on a new car which was an Eric Campbell with a different radiator and was called the Silver Hawk.

We were still predominant in hill climbs and sprint events and established the standing start ½ mile record at Brooklands as a kick off and then we competed at the forerunner to the Le Mans 24 hours, but it was then called the Circuit De La South. Rene Thomas was the star driver but all the cars broke up and that really was the end of the Silver Hawk venture.

There was then a general break up of our little company and I took on various jobs including the design of the Bayliss Thomas 11 HP cars and whilst there Macklin asked me to come to Cobham to meet two gentlemen whom he said wanted to build a copper bottomed first class car. These two gentlemen were Oliver and Philip Lyle and they really meant it and were prepared to spend quite a hefty sum on the project.

It was there and then decided to build a steam car and in order to know something of what was involved a Doble and a Stanley were ordered from America. The White car as mentioned by Cushman was not ordered and it did not come on the scene until much later.

These two cars eventually turned up and there then began a long series of tests and investigation into what steam really meant. Our efforts were mainly concerned with the Doble which really was a magnificent piece of work. I made quite a number of detail drawings of the most vital parts, but after very deep consideration of what such an undertaking really meant the whole project was abandoned. We all agreed that if only it were possible to control the supply of steam as and when required in the same easy manner that the petrol engine is controlled by an accelerator pedal the performance of the Doble would be the ideal car for the future. I must say that those who have not driven a steam car such as the Doble, have no conception of what motoring can really be like, even the famous 'Best car in the World' could not equal its velvety silent effortless progress. Progression would be a better description.

Well it then looked as if we should all go our separate ways again, until Macklin suggested we at least tried to get as near as we could in performance with a petrol engine car, and after much argument and persuasion the Lyles agreed to go on provided we could build a car which would climb Mount Street, Guildford from a standing start in top gear.

For those who knew Macklin this was no sooner said than done and thus began the car which was eventually to be called the Invicta, and there and then on the spot I was appointed Chief Designer and Engineer of the small Invicta Co with instruction to get the first cars running as soon as possible.

As mentioned earlier I had been working for Eric Walker on the Bayliss Thomas car and I was able to get some chassis frames of the 11 HP cars on which we proceeded to build up our idea of a sports car. The first engines used were some Coventry Climax 2 litre six cylinder engines with a Moss gearbox and rear axle. Alford and Alder supplied the front axle. These chassis were roughed up with test bodies weighing the same as we could guess what the finished car would be like with a four seater touring body. Things were going along very nicely as regards performance, etc, until one night they were all frozen up and we lost all six engines. This in itself turned out in the long run to be a good thing because we felt that the Coventry Climax engine did not give the kind of torque at low engine speeds which we were after and was central to our idea of top speed performance. Speed, that is max m.p.h. was not thought to be of such importance as superior acceleration and pulling power at low road speed.

So as we needed more power and the Coventry Climax engine could not be enlarged, we decided to go for the 2 ½ litre Meadows engine and this for a time satisfied our requirement.

Inevitably the need for more and more power became apparent as the chassis and bodies became bigger and heavier, thus the engine went through two stages of enlargement first to 3 litre and then to 4 ½ litres. All this work was spread over many years during which time all kinds of ideas were discussed, including a rather lovely Italian engine – F.A.S.T. – Fabbrica Automobile Sport Torino (3.5 litre four cylinder two exhaust valves and one inlet, overhead camshaft) and even using Parry Thomas' big straight eight, but Oliver Lyle (by then Philip had almost dropped out) always stuck to the original Invicta idea, and it took me a long time to persuade him to let me build what was eventually called the 100mph S Type Invicta although I had designed it more than two years before it appeared.

The achievements over the years of the Invicta in sporting events are too well known to mention in detail except to say in the hands of Donald Healey it did some wonderful performances in the Monte Carlo – Apline Trials and for a time was the only British car to win the Dewar Trophy twice.

The car that never was though, was the big supercharged job of 5 litres, which was to be a joint effort between Invicta, Raymond Mays and Meadows (also another design was the all aluminium chassis with 2 litre o.h.c engine) A committee was formed between Raymond Mays/Berthon/ on one side and Macklin and myself on the other side, with Railton as technical adviser and Sammy Davis as team manager. Berthon and Meadows were responsible for the engine design and I and my assistant were responsible for the chassis.

Humphrey Cook was responsible for the funding of this project, but Macklin somehow or other managed to muddle up the account of Invicta Co and the project to such an extent that Cook called a meeting to discuss the matter, the upshot of this was that the project was abandoned and what would have been another world beater was eventually called E.R.A.

Invicta like a good many other causes was badly hit by the world depression of the early 30's and in order to try to save the ship the 12 HP car was introduced, the engine of which was designed by George Hatch of Blackburne motorcycle engine fame. This was a good car but lacked proper development owing to lack of finance and eventually the whole thing was taken over by Lord Fitzwilliam, who already was handling service and sales, and so the first Invicta came to an unhappy end.

After the Second World War another Invicta was started and this they called the 'Black Prince'. Actually design work was begun during the latter part of the war with Meadows again building the engine to a design worked out by two brilliant designers from Bristol Aircraft Co.

Among a host of novel features it incorporated an automatic transmission being the first British car to use this kind of drive. It was announced in 1946 and was fitted with a six cylinder twin o.h.c engine of 3 litres.

(This has all been typed word for word from William Watson's original hand written notes)