

Modern icon was invented 'on back of envelope'

April 7 2008

Autobiographical notes written by the Lancashire inventor of the high speed diesel engine have been recovered from a garage in Manchester after lying forgotten for 25 years.

University of Manchester Historian Dr Yaakov Wise - who made the discovery – says the Charles Chapman manuscript gives a unique insight into the 1932 'world beater'.

Dr Wise, who worked at the legendary Perkins Engines where Chapman was based was given the document in 1983 - four years after the inventor died aged 82- but rediscovered it after clearing out a garage 25 years later.

Though an engineering genius, Chapman faced unemployment in the depression of 1932 after the company he and his collaborator Frank Perkins worked for went bust.

According to the manuscript Perkins took the train to Chapman's home in North Kent where they spent a day discussing ideas and making rough sketches on the 'back of an envelope'.

The sketches evolved into the system still used in the lorries, buses, taxis, ambulances, fire engines and ships of today.

Soon after the visit, the pair started an engine business in a tiny back street workshop in Peterborough setting a deadline of two years to



transform it into a going concern.

Chapman wrote that he resigned as a director of F Perkins Ltd in 1942 to devote his energies to war work which included developing miniature submarines for the Royal Navy.

The company though went on to become the largest diesel engine manufacturer in the world and was eventually taken over by the giants Massey Ferguson and later Caterpillar.

Dr Wise, who is a Research Fellow at the University's School of Arts, Histories and Cultures said: "Frank Perkins and Charles Chapman could not have anticipated the amazing success of the company they started in a back street workshop.

"Perkins was an enterprising and flamboyant businessman, but Chapman was the opposite: a shy, engineering genius with a great idea, but no money.

"The manuscript offers a unique insight into the germination of their world beating idea which, incredibly, began life as a drawing on the back of an envelope.

"It also reveals that fascinatingly, the pair made a pact that they would give up after two years if the enterprise failed to make money —luckily for the world it did not."

He added: "The manuscript also details how they launched their rudimentary business in 1932 in a back street of Peterborough.

"They needed, according to Chapman, an office, a typewriter a technical draughtsman, and an office junior - as the rather grand Frank Perkins could not be expected to make his own tea or buy his own tobacco as



well as a covered space in which to build an engine.

"Perkins also convinced Chapman to eliminate design trials with a single cylinder experimental engine - then normal industry practice - and start directly with a prototype four cylinder.

"But it was a high risk strategy as every adjustment would have to be made to all four cylinders before re-testing could begin.

"The rest is history."

Source: University of Manchester

Citation: Modern icon was invented 'on back of envelope' (2008, April 7) retrieved 13 March 2024 from https://phys.org/news/2008-04-modern-icon-envelope.html

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