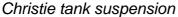
Morris at War







Nuffield Engineers on Comet Crusaders

In 1936 Britain's leading Tank expert Lieutenant-General Sir Giffard Le Quesne Martel attended the autumn manoeuvres of the Red Army in Russia. He was so impressed by the Christie style of tank they displayed that he approached Lord Nuffield about it. Nuffield brought Walter Christie over from his home in USA in 1937, along with a sample tank to see for himself.

The chief characteristic of the vehicle – indeed, the only worthwhile feature – was its novel form of suspension. Technically, this suspension may be described as comprising large diameter carrying wheels operating on swinging arms controlled by enclosed coil compression springs, as distinct from the then known small diameter wheels having small deflections and laminated springs. The Christie suspension enabled the tank crew to travel over rough ground and obstacles at high speed without the risk of being knocked unconscious.

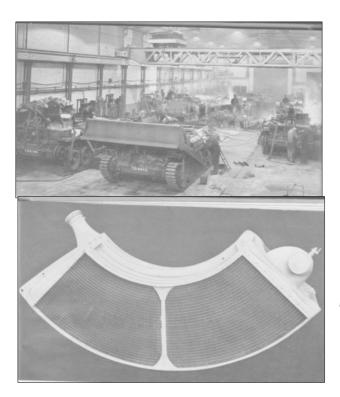
Walter Christie was over seventy when Lord Nuffield brought him over to England. He was a tall, lanky somewhat wild-eyed man, with a mop of white hair, erratic and impatient. His head was swimming with ideas, which were endlessly chasing each other. He loved to jot them down – with sketches, on the hotel bedroom

wallpaper – at the expense of his hosts who had to re-paper one bedroom.

An entirely new factory was built for tank production for the start of 1938. By early 1939 the first two service tanks, as distinct from experimental, were delivered to the Army and by the end of the year the total had risen to sixty-seven. Of these forty went to France with the British Expeditionary Force. These Cruisers and the two pounder guns they mounted proved to be thicker skinned and harder-hitting than the German *Panzers*, and did sterling work covering the retreat to Dunkirk. At the critical period of the war, when Britain stood alone, and for some time afterwards, Nuffield Mechanisations and its associates were responsible for more than a quarter of the tank output of the whole country.

The first of the newly designed Crusader was dispatched on May 5th 1940. Each tank required 50,000 different machining and assembling operations for the 6,200 parts they were composed of. While the design and manufacture of these tanks had been largely a Nuffield Mechanisations affair, the in-field servicing relied on Army Engineers.

After the Battle of Tobruk in late 1941, the Eighth Army's problem of keeping these tanks serviceable was aired in Parliament. Sir Miles Thomas, Nuffield's Managing Director, came up with a plan to fly experts and parts to Cairo. Two bombers were requisitioned and adapted as freight and passenger carriers, and six experts with 3 ½ tons of parts flew out. Only the tail-gun was retained for defence but they arrived safely. After three months at Alexandria, working with the Army Engineers, they had modified many of the 700 tanks there and returned to the factory brimming with suggestions to improve the machines.



Tanks into Bulldozers at the MG works

A Lancaster radiator from Morris Radiators



A small car carburettor is dwarfed by a Spitfire carb



Monty's Caravans were Morris Commercials

As the pictures show there was a wide variety of effort all focused on winning the war against Germany.

All three services benefitted from the Nuffield organization. Torpedoes and mini subs, fighter planes and bombers, tanks and guns as well as the everyday jerry-cans and ammo boxes. Little wonder that the cycle maker from Oxford became a much loved member of Britain's fighting home guard.

Photos and some text from "CALLING ALL ARMS" by Ernest Fairfax, Hutchinson 1945 (Sir Miles Thomas, Lord Nuffield's Deputy who created the Fairfax name wrote most of this book).

Contributor: Alan Gulleford (Kaikoura) 2018