WOLSELEY OUT OF VICKERS—V & VM NOV 1971

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WOLSELEY—BY AUSTIN—OUT OF VICKERS

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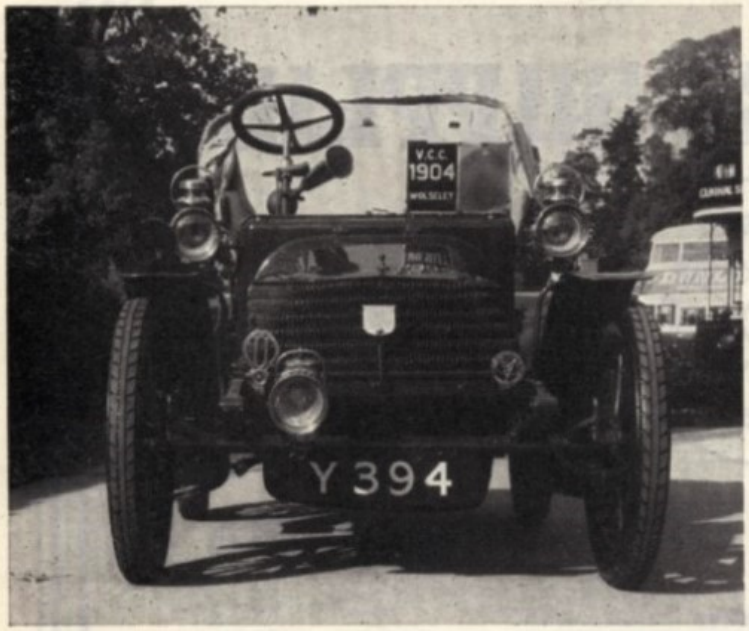


Aggressive Nose: the 1904 6 h.p. Wolseley might have been the inspiration for Gordon Buehrig's Cord.

THE CAR SHOWN ON THE COVER, a 1904 horizontal-engined, single-cylinder, 6 h.p. Wolseley, was designed by Herbert Austin and made by a subsidiary of the then-powerful Vickers, Sons and Maxim. Even 70 years ago the motor industry was a mass of wheels within wheels.

It is debatable whether the Wolseley Sheep Shearing Machine Company or the Lanchester Engine Company (to use their original names) were the first to sell motor cars of indisputably British design and construction to the public at the turn of the year 1900/01. The other principal claimants to the title of "first", Daimler and Napier, were still firmly wedded to designs inspired by Panhard et Levassor; and most other makes advertised as "all-British" would fail to qualify for passports under the new patrial laws. Wolseley cars in general are, therefore, at the root of the British motor industry, but the particular one illustrated is also at the root of the veteran car movement. It once belonged to the late Captain J. H. Wylie, who was a co-founder of the Veteran Car Club and its first secretary, and it was the first car to be placed on the register of that Club.

The Wolseley story goes back to 1895, but the first four-wheeled Wolseley car did not materialise until 1899. The first two efforts were experimental tricars, and the first of these was probably made between January and June, 1896. The Wolseley Company used to claim 1895 as the date, but this almost certainly refers to the year when they authorized young Austin, who had recently returned from their Australian branch, to look into the new horseless carriage business in France.

The result was very obviously inspired by the Léon Bollée tricar, and as that was not shown to the public until December, 1895 it is safe to put the date of 1896 on the Austin-Wolseley version. It is often said that the company did not persevere with this tricar because they feared they would be liable to pay royalties to Lawson's British Motor Syndicate which held the manufacturing licence for Léon Bollée's designs. A more potent reason, I suspect, was that whereas the Bollée tricar was often reluctant to stop, particularly in wet weather, the first Wolseley was chronically reluctant to go.

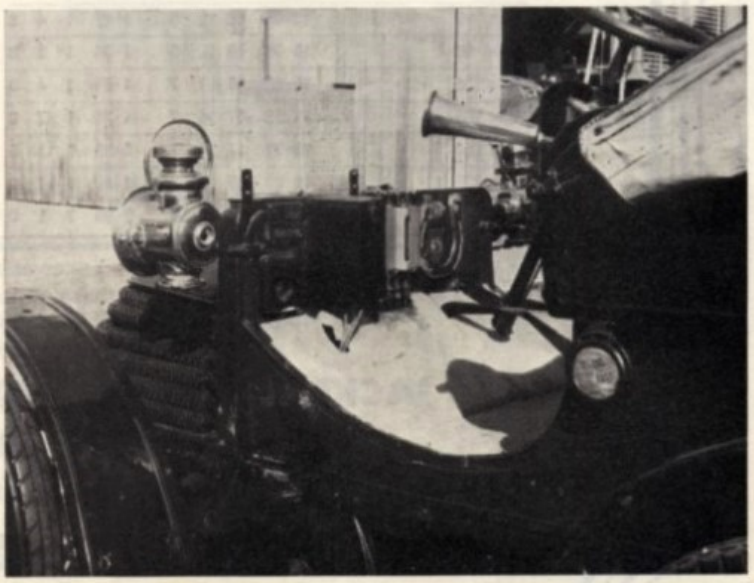
A more satisfactory tricar followed which ran well after its first transmission system had been replaced by a Benz-type belt and pulley arrangement. A little pamphlet advertised similar tricars for sale, but no business resulted and towards the end of 1898 Austin started work on his first four-wheeled car which formed the prototype for one of the two production models offered late in 1900. Sales do not seem to have started until after the motor-car side of the business had been bought by Vickers who set up their new subsidiary in a factory at Addington Park, Birmingham, under the new name of The Wolseley Tool & Motor Company.

The original single-cylinder four-wheeler and a prototype two-cylinder 8 h.p. model were entered for the Thousand Miles Trial in 1900. The former ran well throughout and was praised for its hill-climbing; but the latter only joined the Run at Birmingham and "fired her bearings and was withdrawn before reaching Manchester", as a contemporary report has it.

Apart from a change from tiller to wheel steering, the principal difference between the prototype and first production cars lay in the primary transmission. This originally still had a touch of the Bollée about it as the primary transmission from horizontal transverse engine to gearbox was by flat leather belt which, like the final drive belt of the Bollée, could be slackened or tightened to act as a clutch for taking up the drive. This was done by having the gearbox arranged to tilt on trunnion bearings, and the hand lever which rocked the box also ruled the gears as it could be shifted sideways, as well as fore and aft, to select the speeds. The required gear having been selected the lever was pushed forward between the "prongs" of an affair rather like a coarse-toothed garden rake to tighten the belt. The rake formed a primitive kind of selective "gate" change and the prongs had ratchet teeth cut on them which engaged a pawl on the lever and so held it in place.

This system did away with the need for a separate clutch control, but although it was easy on the driver it was tough on the belt and all the production cars had chain primary drive with a conventional leather-faced cone clutch on the engine shaft. Or, indeed, two clutches, to reduce torsional stresses, one either end of the crankshaft on the big horizontally-opposed four-cylinder models of 1902 onwards. Renold inverted-tooth silent chains were used for the primary drive after 1901, and on all the types except the one illustrated the final drive was by side chains from a differential countershaft, mounted in the same casing as the change-speed gears, with the driven wheels revolving on a "dead" axle. The single-cylinder 6 h.p. of 1904/5 is the exception with single chain drive to a differential live axle. The disposition of parts made it logical and convenient to put the clutch pedal to the right of the steering column and the brake pedal to the left, to the undoing of some of those accustomed to the more usual arrangement.

The engines of all the Wolseley models were forward-mounted, horizontal and transverse; contrary to the belief which seems to prevail in motor advertising circles Sir Alec Issigonis did not



The "office" of a 1904 6 h.p. Wolseley. Piano-type pedals, a brass horn, brass oil lamps, and a battery of drip-feed lubricators figure prominently.

originate the idea of having the crankshaft parallel with the axles. The cylinder heads of the single- and twin-cylinder engines pointed forwards, and the four-cylinder 16 h.p., 20 h.p. and 24 h.p. types were horizontally opposed, which meant that their rearmost cylinders were under the front floorboards, which made them a little difficult to get at. Two, or possibly three, racing cars were made in 1902 with three-cylinder-in-line horizontal engines, but they appear to have behaved so badly that the company kept very quiet about them, and some historians say they did not exist.

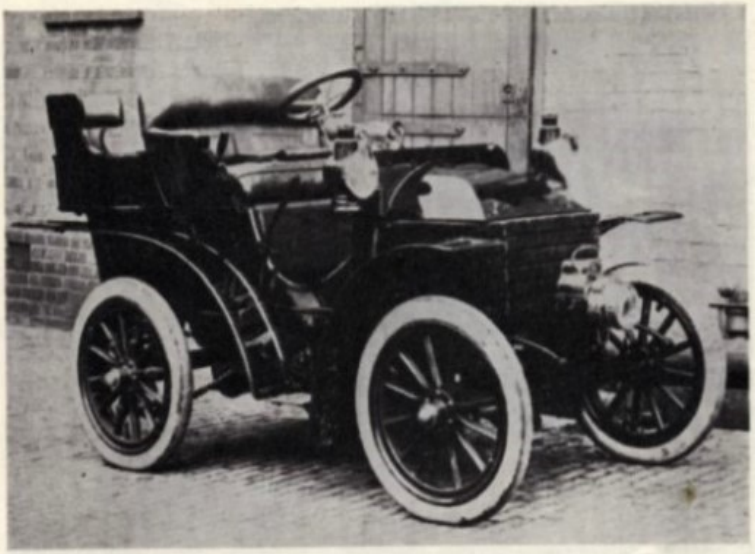
From the superficial point of view the horizontal engined Wolseleys seem a little crude by comparison with, say, a contemporary Panhard-Levassor, Mercedes or Lanchester. There is more than a hint of blacksmithery about their axles and some other chassis parts, exposed rim brakes as late as 1902 seem a little old fashioned and even their best friends could not call the Wolseleys quiet. One owner who wrote in praise of his likened its din to a traction engine. Also the gear change was rather awkward and although the cars were not exactly sluggards they were not as fast as some contemporaries of comparable specification. A closer look, however, shows numerous meritorious features which helped establish the cars' reputation for that dependability which was later regarded as the hall-mark of Austin products.

Much of the engines' reliability came from very careful design of the water spaces, particularly round the valve areas, which protected them from the local overheating and distortion which afflicted so many early cars. They were also notable for a wet-linered structure which was ahead of its time, and the rest of the water cooling arrangements were also satisfactory. The radiator was based on a design which a Mr. Estcourt (who was later associated with the Brooke car) had had fitted to an old-type Daimler in 1898. It consisted of two small vertical water tanks mounted on the dashboard which were connected by a series of gilled cross tubes forming the front and sides of the bonnet. These tubes were vertically stacked on the first cars but were later staggered to give a tapered profile; they provided adequate surface area without waste of space, and promoted excellent natural circulation which helped the pump to do its duty.

The atmospheric inlet valves were vertically mounted over the exhausts, and the latter were closed by small leaf springs which Austin maintained were less liable to lose their temper under heat than coil springs. There was the usual total-loss drip-feed lubrication. In his little history of Wolseley the late St. John Nixon said that the racing cars had pressure lubrication, but the pressure part of the business was only concerned to lift the oil to the drip feeds; gravity and good luck did the business thereafter. Ignition was by wipe contact and trembler coil whilst an Austin-designed single-jet carburetter with sliding throttle looked after the fuel supply.

Although sales started with advertisements for single- and twin-

Surrey, but no Fringe. A 1902 10 h.p. Wolseley on solids.



Early Production: the characteristic bonnet had already made its appearance in 1901, but in those days it was higher and stubbier.

cylinder models, both of 4½ × 5 in. bore and stroke, the twins seemed to have been the mainstay of the company's business. Relatively few of the big four-cylinder models were made, and none was listed in 1905.

Unfortunately the business did not prosper in proportion to the good quality of the cars and it was courageous of Austin, in the teeth of some directorial opposition, to make and enter racing cars for some major continental races between 1902 and 1905. Apart from Napier no other British manufacturer tried to break the continental racing monopoly, and although the racing Wolseley Beetles never won, their attempts were gallant and their defeats honourable.

By 1903 it was clear that the trend of fashion was running strongly against horizontal-engined cars, and Austin unwisely resisted directorial pressure to design a new range of vertical-engined models. He strongly argued the case for horizontal engines in print but based his argument on a false premise; stressing greater longevity by comparison with the vertical type, which was problematical, and ignoring the virtues of space saving which were undeniable.

When J. D. Siddeley, who had already put his name on imported Peugeot cars, asked Vickers to make Peugeot-type cars on his behalf they agreed to do so, against Austin's advice, and set up a new motor department at their Crayford works in 1903. Some of the 6 h.p. horizontal-engined Wolseleys of the 1904 type shown on the cover were disguised with frontal radiators and sold as "Little Siddeleys".

After a few months of internal dissensions, and in face of falling sales of the horizontal-engined cars, Siddeley took over from Austin as general manager of the Wolseley car business early in 1905. The last of the old-type Wolseleys were sold in 1906 and Herbert Austin set up his own business to make the sort of vertical-engined car he had obstinately refused to make for Wolseley.

The Horizontal-engined Wolseley Models

Year	*Makers' rated h.p.*	*Cylinders*	*Bore and stroke*	*No. of speeds*
1900	4½	1	4½ × 5 in.	3
1901	5	1	4½ × 5 in.	3
1901	10	2	4½ × 5 in.	4
1902	5	1	4½ × 5 in.	3
1902	7½	2	4 × 4 in.	3
1902	10	2	4½ × 5 in.	4
1902	20	4	4½ × 5 in.	4
1903 as for 1902 with detail modifications only				
1904	6	1	4½ × 5 in.	3
1904	8	2	4 × 4 in.	3
1904	12	2	4½ × 5 in.	4
1904	16	4	4 × 4 in.	4
1904	24	4	4½ × 5 in.	4
1905 as for 1904 but without the four-cylinder models.				