

HIS EXCELLENCY'S STRANGE INVENTION

## The Wolseley Gyrocar

ONE warm evening in April 1914, six impeccably-dressed gentlemen stepped into their car in Regent's Park, London, and set off to make motoring history. The occasion was the first public outing of the Wolseley Gyrocar, the world's first, and to date only,

successful two-wheeled automobile. The story of the strangest car ever built by the British motor car industry began two years earlier, in 1912, when His Excellency Count Peter Schilowsky, a lawyer and member of the Russian Royal Family, commissioned the Wolseley

The Gyrocar on the road—a final test run before it was transported to London for a public demonstration in April 1914. Count Peter Schilowsky, the inventor, is seen by the side of the driver.

Tool and Motor Car Company, one of the oldest and most famous of British vehicle manufacturers, to produce a two-wheeled car to his own design. Such a vehicle, the count claimed, would be of immense military value in that it

By  
TERRY CLEMENTS

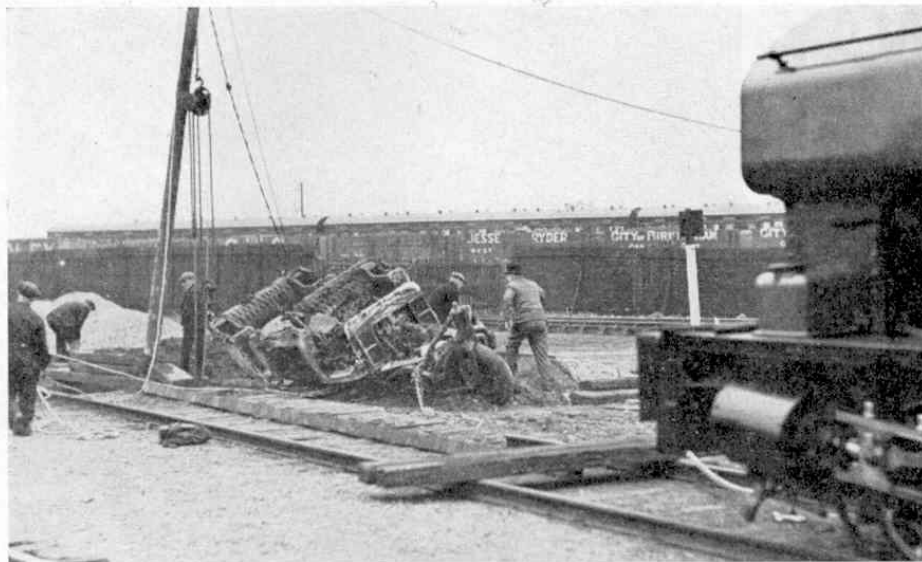
would be able to travel across terrain too difficult for conventional motors and yet be able to reach a higher speed with a lighter body and less powerful engine than a normal four-wheeler.

The plans that the count unrolled in front of the startled Wolseley engineers showed a cumbersome six-seat open body slung between two wheels in tandem, as in an ordinary bicycle. The front and central pairs of seats were separated by a locker that contained a patented gyroscopic mechanism to keep the car on an even keel. The gyroscope, which was driven at between 2,000 and 3,000 r.p.m. by a 1.25 h.p. electric motor, resisted the overturning movements of the car through a rack and pinion system which was connected to an ingenious but frail-looking arrangement of two pendulums and two cords. Sprags on each side of the car were automatically lowered whenever the gyroscope was stopped.

Motive power was supplied by a Wolseley-Vickers car engine mounted at the front of the car, ahead of the radiator, and driving the back wheel through a conventional gearbox and clutch. A



Resurrecting the decayed remains of the Wolseley Gyrocar in 1938.



Part of a railway track had to be removed before the Gyrocar could be excavated.

transmission brake was mounted behind the gearbox—as far as is known there were no brakes on the wheels.

In spite of the Heath-Robinson look of his invention, the count must have impressed the Wolseley engineers, for his strange order was accepted. Work began almost at once and went ahead on a trial and error basis. Throughout the year that it took to build the chassis, the count was a frequent visitor to the Adderley Park, Birmingham, works and although he would never allow his aristocratic hands to touch a spanner or screwdriver he proved an efficient, if slightly eccentric, foreman.

On at least one occasion he declared a half-day holiday at his own expense for all members of the Wolseley experimental department, while on other occasions he would fling one of his gloves into a crowd of apprentices and reward the youth who returned it.

Eventually, the chassis was ready and a

Wolseley test engineer took it for its first test run. This is the report he made:—

“On November 27th, 1913, I made an effort to move the car, which was successful, no derangement of the governing gear taking place. We drove the car backwards and forwards for a distance of about six feet many times. During these tests it was noticeable that one could stand on the side of the car and step into the body without any disturbance of balance. We then moved the car partially round a radius to the left, backwards and forwards. Eventually, we drove the car the whole length of the works, backwards and forwards, with four passengers. Then His Excellency decided to take the machine over on to the track, impressing on me that we must go very gently. We drove into the Arden Road, making two stops on the curve, and we had to reverse so that we should not use full lock. I then drove the car steadily up the Arden Road, going as slowly as possible and slipping the

clutch in first gear all the time. We took a wide sweep into the Bordesley Green Road, and suddenly, when opposite the Directors' mess room, the vehicle heeled to the nearside and dropped on its sprag. It was lifted by eight men, the engine restarted, and the car driven back to the experimental department, but it was supported by outside assistance as His Excellency did not attempt to balance the car in the street.”

The next five months from November 1913 were occupied in sorting out various teething troubles, building a body and fitting it to the chassis, and in redesigning the car's front suspension and steering gear to improve the cornering ability.

Then, on April 28, 1914, the Wolseley Gyrocar was publicly demonstrated for the first time before a large and interested crowd in Regent's Park, London. Throughout the next few weeks, the car and its designer were a familiar sight in the West End. Wherever they went, large crowds followed. However, the count always rode as a passenger alongside the driver and never took the wheel himself in public. In fact, it is not known whether he ever drove his own invention!

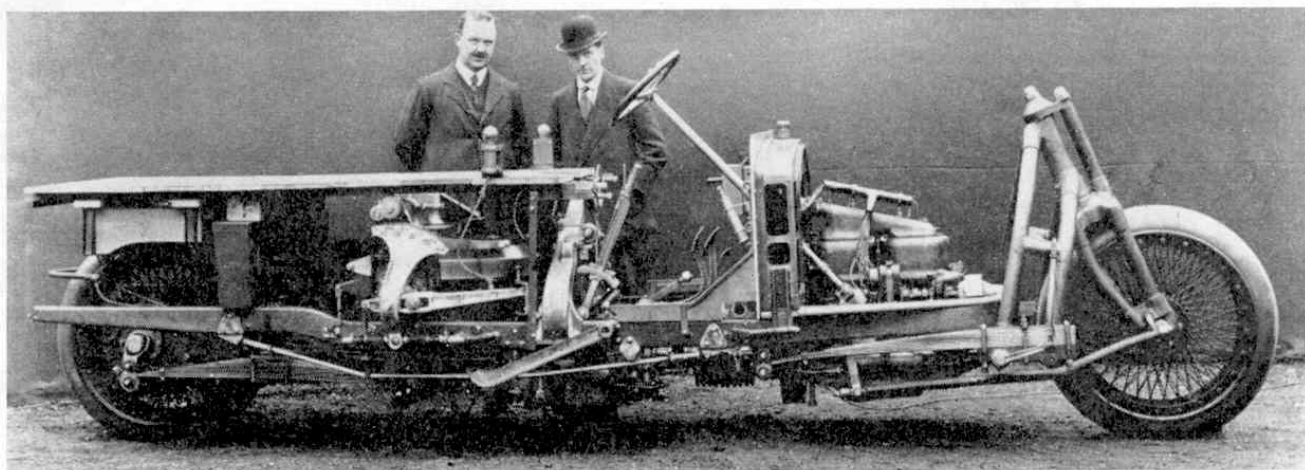
Satisfied with his achievement, Count Schilowsky paid off the company and made arrangements to ship the car to Russia where he intended to use it on his estates and also to demonstrate its military possibilities to the government. But the first world war intervened and he hurriedly returned home.

The Gyrocar lay neglected and rusting in a corner of the factory through the war and for some time afterwards, until the Directors of the company finally assumed that the inventor had been killed in the war or the Russian Revolution. Nevertheless, as long as there was the possibility of the count still being alive, they could not dispose of what they considered was a “white elephant”. Therefore the car was buried.

It was quickly forgotten. In the early 'twenties there were more pressing problems to consider than the fate of an eccentric Russian; the company, whose quality-built cars had been used by

*(Continued on page 446)*

The chassis of the Wolseley Gyrocar, showing the gyroscope and rack and pinion mechanism in the centre of the vehicle. The pendulum balance weights are hidden by the chassis members. This photograph was taken shortly before the car's first test run in November 1913. The inventor is on the left.



## The Wolseley Gyrocar—

(Continued from page 407)

Royalty, was badly hit by the recession in the motor industry and, like so many other well-known firms, it was bankrupt. The owners, the great Vickers armaments and aircraft combine, sold the company to the late Lord Nuffield, whose Morris cars had become a household word.

Then in 1938, nearly twenty years after its internment, someone remembered the Gyrocar and decided that, after all, it could be of some value, if only as a curiosity. The order was given for the strange vehicle to be resurrected from its grave. This apparently simple process was complicated by the fact that the area in which the car had been buried had been turned into a railway goods yard. However, part of the track was removed and the decayed remains were brought back into the light of day.

Many pounds were spent on the car's restoration and, although it never again took the road, the Gyrocar was accorded the place of honour in the company's museum.

According to factory rumour, the count reappeared again shortly after this. An old man living in exile, and deprived of his estates, he is supposed to have visited the factory one day to see his invention. Then, he disappeared again—this time for good.

The Gyrocar survived the second world war, emerging unscathed from the heavy air raids that damaged the factory in 1940. But, with the coming of peace, the words "white elephant" were again used, and the long and eventful life of the strangest vehicle ever produced came to an undignified end, in 1948, when the Gyrocar was finally broken up for scrap.

## Devil's Copper—

(Continued from page 411)

through the reaction chamber so that there is a steady stream of pure nickel—at least 99.97 per cent. pure—to the tune of 11,000 lb. per day from each decomposer.

At Clydach, there are sixteen decomposers which are fed by 44 volatilisers and twelve reducers. Much of the operation of the decomposers is dealt with automatically from a central control room where there are many elaborate safety devices.

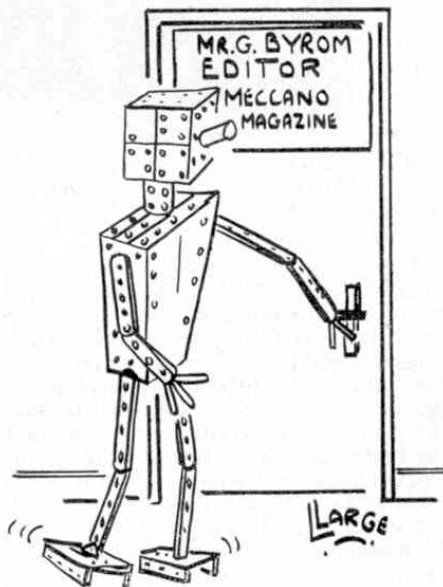
The main function of the Clydach plant is to produce pure nickel pellets, but there are also important subsidiary products—nickel and iron powders—which are used mainly in the electrical and electronic industries.

\* \* \* \*

In the present age nickel, although it is not discernible to the layman, is everywhere. It is used in radio and television sets; it strengthens the pin in a pair of spectacles and the steel girders of modern bridges; it is used in machines and containers where food is manufactured and prepared; it is in motor car engines, jet

engines and diesel-electric locomotives; it makes things brighter, stronger, rust-proof and heat-resistant. Nickel has a thousand and one uses, sometimes alone but usually alloyed with steel, aluminium, cast iron, copper, brass, bronze, molybdenum, cobalt, titanium and gold.

Nickel may once have been Old Nick's Copper to the miners of ancient Saxony, but to today's engineers and designers, who have recognised its amazing physical properties, it is a godsend.



## Cycling Through the Gateway to Normandy

(Continued from page 414)

had gone yet again, I headed for a cycle shop, and later found myself some lunch. The castle keep was not open, unfortunately, so I contented myself with a view from the battlements, imagining that I was an archer in the Middle Ages.

After lunch there were more climbs to the source of the Fouillebroc river in the Forest of Lyons where, for mile after mile, one can ride through tall trees which shelter flocks of rooks, badgers, foxes, deer and even moars, an animal now unknown in England. There was little or no traffic to spoil the coolness of the forest, and no foreign sound save the swish of my tyres.

I spent the night at a little village called La Feuillie, on the N 30 out of Rouen—only 1,100 people, yet an area the size of Paris and a church steeple, fully slated, the height of Nelson's column (more than 175 feet); and a gem of a French commune whose little bistro found me a room for the night and gave me an enormous dinner. The gendarme told me about the huge spanner, used to tighten the brace bolts of the church steeple, which is itself five feet tall, and I managed to take a photograph of it.

My bed was of feathers, and the noises of the farmyard outside lulled me to sleep

after my dinner. With breakfast it only cost me thirty shillings. As the gendarme, the hairdresser, the café proprietor, two farm workers and a truck driver waved me off in the morning towards Dieppe, I felt quite a touring character.

Then followed more of the same beautiful rolling countryside, obviously made for dairy farming. I followed the Andelle Valley into Dieppe, where the boat was awaiting my arrival, or so it appeared, for it left within half an hour.

I rode up from the coast into London, where it seemed quite cool after France. In three days on the road I had packed in 290 miles, yet I did not feel really tired, nor, oddly enough, was I saddle-sore, perhaps because I had lost about half a stone.

All I had spent was the cost of the boat trip and a couple of night's bed and breakfast. During the day I ate bread, fresh fruit and cheese and got plenty of Vichy water and fresh air. But in those three days I had visited another world.

## Railway Notes—

(Continued from page 417)

Railway enthusiasts of all ages, one is glad to note, continue in large numbers to pursue many aspects of their studies or hobby. The large Societies and other bodies around the country, with commendable co-operation from British Railways and other operators, have recently chartered, and have usually carried through successfully, quite a number of long or short distance special trains of far from ordinary character!

Not only are parts of the routes selected often exceptional, including some normally "closed" or freight-only tracks, or a combination of main and secondary lines with perhaps a high-speed section, but the locomotives (steam if possible) may be anything from a Pacific to a "Terrier" or an 0-4-0 dock tank and may range far from their usual haunts.

## New Hopper Wagon—

(Continued from page 439)

tain of the window openings are the representations of the bars fitted across inside the window glass on the real vehicles in order to prevent any damage that might be caused by the handling of luggage, etc. inside the van.

The bodysides are finished in B.R. maroon, and the van carries an appropriate London Midland number. The six-wheel underframe is finely detailed, and the axleguards, with axleboxes, springs and battery boxes are represented.

This new van will be found most useful for adding to the luggage capacity of your passenger train, while it is ideal for use in conjunction with other vans, particularly the bogie No. 4075 Passenger Brake Van, in the formation of trains for mails, parcels, milk and so on. In addition, it will be quite in order for you to use the new six-wheeler at the tail of your most important express freight trains.