

# SPARKPLUG

The newsletter of the Letchworth Garden City Classic & Vintage Car Club



JANUARY 2025

## More Sceptre news

### Keith Halsey

I have had four Humber Sceptres over the years. The blue, grey.....and red Sceptre was bought for banger racing but was too far gone even for that.



*Sceptre Mk I bought and scrapped*



*Sceptre Mk II bought to sell*



Built at the Rootes Ryton-on-Dunsmore plant, near Coventry from 1963. The engine is a 1592cc 4 stroke, in line 4 cylinder petrol engine with twin carburetors and was made by Hillman



# Ackerman Angles Explained

Pete Smith

The name Georg Lankensperger is not one that springs to mind when thinking about the steering systems fitted to virtually all motor vehicles. Old Georg was a German maker of high class horse drawn carriages, and in 1816, had invented and developed a method for improving the stability of four wheeled carriages.

Previously, all such vehicles had the front axle mounted on a turntable with a centre pivot, but this arrangement can be unstable on tight turns, especially if the majority of the carriage's weight is on the front axle.

Lankensperger's design gave each front wheel its own steering pivot, or kingpin, and was very much the same principle used on vehicles today.

A problem he overcame was that of eliminating the scrubbing action of the front wheels when turning a corner. If the wheels are connected together as in diagram 1, then on cornering, one or both wheels will be forced sideways, damaging the tyres and the road surface, and possibly breaking the wheels or stub axles.

With more modern vehicles, instability at speed is likely to be a problem, due to each front wheel trying to follow a different path when cornering.

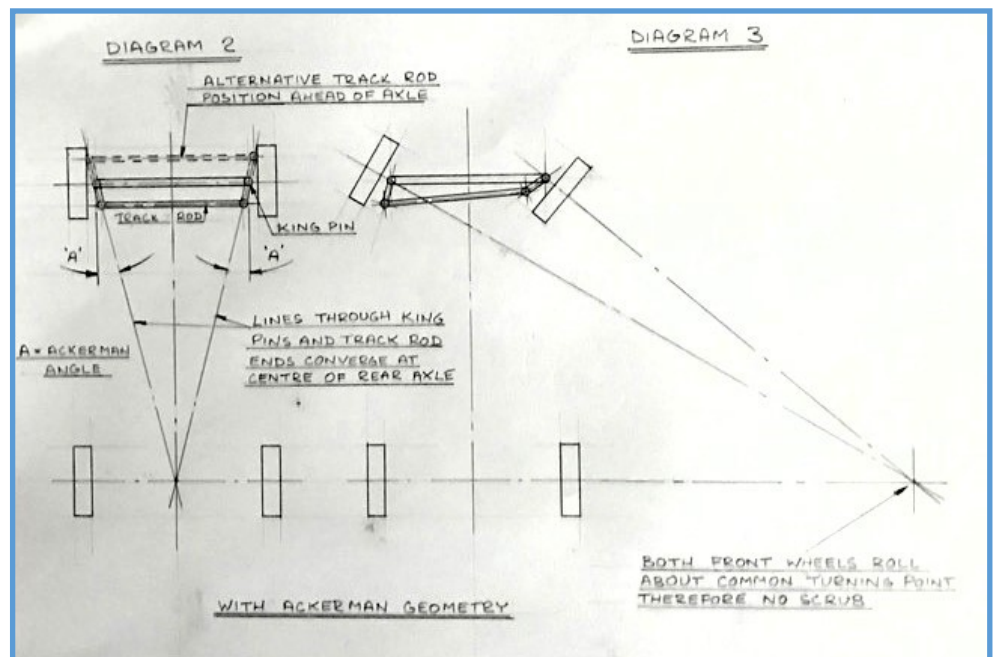
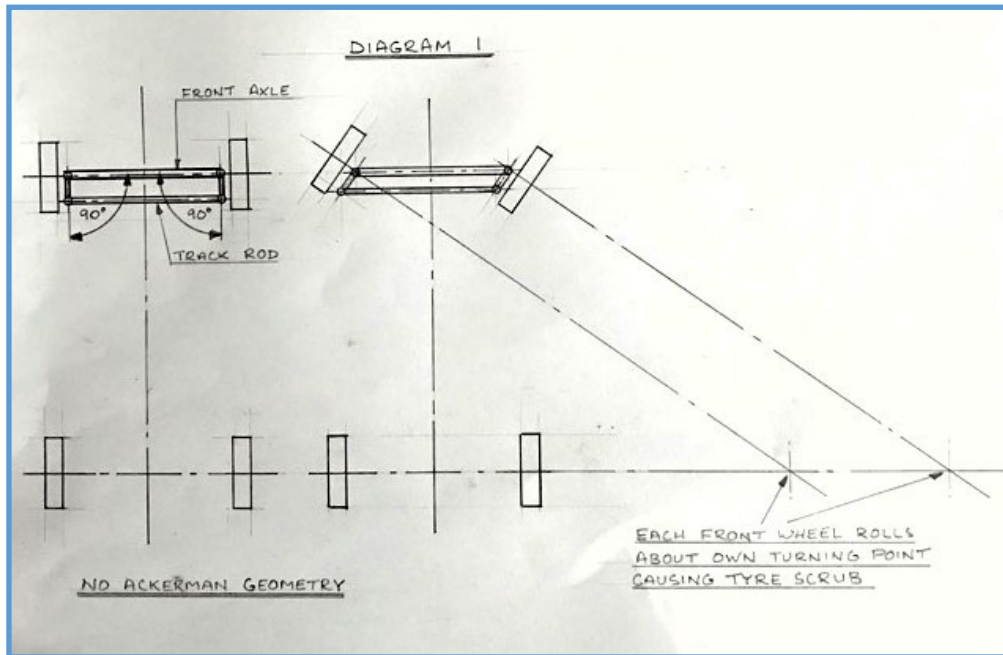
Diagram 2 shows how the angle is arrived at, and diagram 3 shows how it works in practice.

In principle, a perfect Ackerman angle is achieved when an imaginary straight line passes through the track rod end and king pin, and is then projected to cut the vehicle's centreline at the rear axle. In practice, a certain amount of leeway is allowable, and it will be apparent that altering the wheelbase will affect the angle's accuracy.

Why is this called the 'Ackerman Angle'?

Enter, our other hero, Rudolph Ackerman (1764-1834).

Ackerman was the British agent for the Lankensperger company. He was obviously a very astute bloke, and could see how important this steering arrangement would be in the future, and took out a British patent in 1818. Ever since then it has been known as the 'Ackerman Angle'. Poor old Lankensperger never gets a mention!





## Chateau Impney

### Nick Salmon

Nick took these fantastic pictures whilst attending the Chateau Impney hill climb, near Droitwich, in August last year.



*Man and machine in elegant combat.*





## The Great North Road and the Old North Road

### The Editor

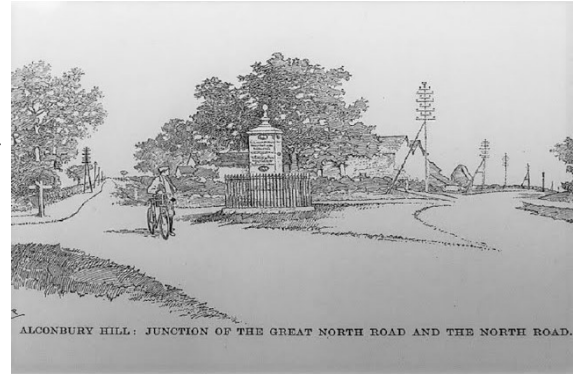
In olden days, really Olden Days; we are talking 'The Life of Brian' here, the intrepid traveller from London to 'The North' had a choice; use Ermine Street to Huntingdon or, later on use the Great North Road to just north of Huntingdon. The difference in distance travelled was not great although the Old North Road appears to be much more direct. What did the Romans ever do for us? Well, they built lots of long fairly straight sections of road. Ermine Street was one of them and it ran from Bishopsgate, through one of the seven gates in the wall surrounding Roman London, to Lincoln, via Godmanchester and Huntingdon. Sadly, the Romans didn't call their streets Streets, these were names given to them by the Anglo Saxons. Its Old English name was Earninga Stræt. Approaching Godmanchester the road is now known as the A1198. Leaving Huntingdon, it is demoted to the B1043. The Great North Road gained precedence over Ermine Street because the terrain that it ran over was more suitable (not so many 'clarts') and it went through more populated and prosperous towns and villages. Just before where the two roads met on Alconbury Hill there is an impressive c1770 mile post. It catered mainly to the South bound traveller and gave a choice of a left or a right fork to take to what, when I was young, was known as 'The Smoke'.

It looks rather forlorn now as it is perched between Ermine Street and a huge expansion of the A1(M), as shown in these pictures.



*The Pop on a very quiet Ermine Street by the once important but now redundant mile post. The bridge in the distance is where the fork used to be.*

*View looking South from a bridge where the two main roads once diverged. On the left, Ermine Street, running as straight as the Romans built it. On the right, the multi lane A1(M)*



*North face inscription: 'To London 64 miles/ through Huntingdon/ Royston & Ware/ To Huntingdon 15 miles/ To London 72 miles/ through Cambridge/ To Cambridge 21 miles/ To Stilton 7 miles'. This face, the West face inscription: 'To London 68 miles/ through Buckden/ Biggleswade & Hatfield/ To Buckden 7 miles/ To Stilton 7 miles'.*



*An artic' in a hurry on the multi lane Southbound A1(M)*



## The Gravelly Hill Interchange (Spaghetti Junction)

### The Editor

I recently took part in a ground level walking tour of this famous or infamous junction. Many of us have used this interchange at road level but few venture beneath. Gravelly Hill was a quiet residential area until 559 concrete columns appeared, to hold up 13.5 miles of road, on five different levels spanning two railway lines, three canals and two rivers. One stipulation in construction was that the canal towpaths running underneath the junction needed to maintain sufficient clearance to allow horses to pass as they were still occasionally used to haul narrow boats. Well known throughout the



land for its hold ups or somewhat confusing layout the Gravelly Hill Interchange was planned in the late 1950s. Construction started in September 1968, the road being officially opened on 24 May 1972. It was designed by Sir Evan Owen Williams the designer of the original Wembley Stadium. It was the final part of the motorway system to take traffic passed, and into, Birmingham. One of the main spurs off the interchange runs to the A38(M) Aston Expressway; the only motorway in the country without a central reservation. Additionally, it is the only motorway with a fixed 50mph speed limit. The junction was originally built to last at least 150 years and to handle 70,000 vehicles per day. It now has 200,000 vehicles per day passing through it. £7M is spent annually on the structure's maintenance with a constant presence of engineers beneath the concrete and steel edifice. Leading up to the interchange from the west the M6 is elevated for 3.5 miles on the Bromford Viaduct, or bridge, along the River Tame valley, which makes it the longest bridge in Great Britain, being 0.25 of a mile longer than the Second Severn Crossing.

Walking through it at ground level is slightly unnerving. It is not peaceful with a constant rumble of traffic noise and the clunk clunk of lorries rolling over the bridge joints on the main M6 above. However, there is a human side to it as a Morris Side dances in a circular part of the interchange called Salford Circus as they consider it a henge. In a tunnel bridge covering the Tame Valley Canal there is an almost spiritual sight where a square hole in the roof of the tunnel allows daylight to shine onto a patch of wall. This patch has been adopted by a local artist who has, over the years, written messages here. Our group actually saw this transitory figure making his way back along the narrow opposite bank of the canal having just painted out his previous message. What it said we will never know. As well as some surprising flashes of nature and greenery, our tour was an interesting intermeshing of 18th Century canal architecture, Victorian road and railway viaducts and the functional concrete high modernism of Spaghetti Junction. It is all rather dystopian and as such has been used as the setting of several films. I would not want to be down there on my own during the day and, at night I would feel as comfortable as an Austin 7 would be on the roads above.



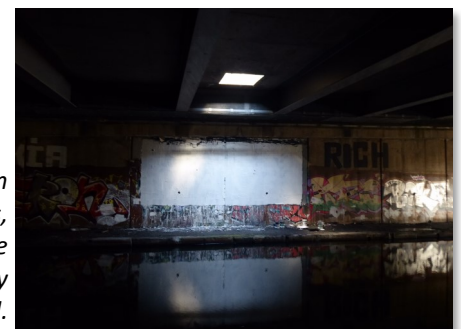
*The henge inside Salford Circus.*

*The start of the Aston Expressway the A38(M) as seen from a footpath at ground level. An extra set of supports appears to have been installed.*



*One of the nearly 600 substantial pillars holding up, in this case, the M6. The Birmingham and Fazley Canal comes in from the left and joins the Tame Valley Canal running away under the Salford Bridge which spans the River Tame and the canal. Just past the bridge can be seen an island which was a toll point in the busy days of the waterways at the turn of the 19th Century.*

*A subterranean artist's canvas, reflected in the Tame Valley Canal.*





## From The Autocar in 1932

### As noticed by Andrew Croysdill

Cheerful Sportsmen – ‘Riley’ Streatham, expresses his appreciation of the action of four real sportsmen who cheerfully gave him great help when, on a recent night run, he encountered three tyre bursts in succession. First, he wishes to thank the garage proprietor a short distance east of Bampton, Devon, who repaired a tube and fitted a new cover at 11:30 on Sunday night with utmost cheerfulness, next the owner of an Austin Ten who took him into Andover at 3am, the garage hand at a garage near Andover Station who got out of bed at that hour to supply another cover, and, finally a super sportsman, a naval officer, in an MG J2 Midget, who took him one and half miles back to his car and then, not content with what he had done, stayed to assist and share some food, although he had already travelled some 300 miles.

### The NEC Classic Car Show November 2024

In amongst the gazillion vehicles at this years show this car, this 1922 GN Thunderbug, on the Vintage Sports Car Club stand, attracted me the most. To quote the VSCC information the spec is:

4.2 litre engine made from a Riley crankcase with cylinders from WW1 Liberty V12. Running on Castrol ‘R’ with total loss splash lubrication. Lightning quick dog change transmission, geared to 60mph/1000rpm in top, giving one bang every 5 feet (or every fence post). Light and fast (1/2 turn lock to lock). Excellent brakes, but on rear wheels only. Weight—495Kgs.



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The current Sparkplug may be viewed and downloaded from the club website.

Items for Sparkplug can be sent to: [editor@lgccvcc.co.uk](mailto:editor@lgccvcc.co.uk)

### The 10 Rules of Classic Car ownership

#### List provided by Andy Bevan

1. There's always something to fix, but not right now.
2. You should sell it when it's running well, but you won't because this experience is why you own it in the first place.
3. No, you are not going to make any money out of it.
4. One in 10 parts will not arrive for the weekend.
5. That rattle.
6. There are always better examples for sale.
7. You can never have enough spares.
8. You are never going to use all those spares.
9. Rust is an enemy worth fighting to extinction.
10. That rattle.