# Roy Fedden, the Brazil, Straker Company, and the Straker-Squire 'Fifteen' 1906 - 1915

Over the seven years from 1908 to 1914 the 15 horsepower Straker-Squire became established as a leading model in the medium car segment of the burgeoning British automobile market. More substantial than the smaller and cheaper cyclecars and light cars, yet more affordable for middle-class professionals than the big, luxury, models, in the years leading up to the first World War this sector became highly contested by many aspirant manufacturers.

Designed by talented young local engineer Roy Fedden, the Straker-Squire "Fifteen" was produced in the Bristol factory of Brazil, Straker, & Co., and marketed by London-based company Sidney Straker and Squire. Gaining a reputation for high quality it came to be referred to as "the Rolls-Royce of the 15 H.P. class" and, with advertising slogans such as "The World's Best Medium Powered Car", during that period over 1300 of the cars were sold.

Like most automobile manufacturers of the time, Straker-Squire used motor competitions to help advertise and sell their vehicles, and participated in long distance reliability trials with standard or near standard cars; short distance speed hillclimbs, sprints and sand races with stripped down machines; and raced at Brooklands and also in the famous Tourist Trophy in the Isle of Man.

#### Brazil, Straker & Co.

After several years in London working for the celebrated hydraulics engineer Ralph Hart Tweddle, 24-year-old Dubliner Joseph (JP) Brazil moved to Bristol and, with Cecil Owen, set up the hydraulic and general engineering business Owen, Brazil, Ltd. at the Vulcan Ironworks in St. Philip's in the centre of the city.

Among his clients at the close of the 19<sup>th</sup> century was Sydney Straker, for whom he produced various parts for his Straker steam powered vehicles. In 1899 Straker also took a share in the Bristol firm, which now became Brazil, Holborrow & Straker.

By 1905 Straker had moved on from selling steam powered vehicles to using petrol internal combustion engines, renaming his London-based concern, the Straker Steam Vehicle Company, to Sydney Straker & Squire (Squire being Straker's business associate of several years, Lionel Squire). He initially reached agreement with the German Bussing concern to build their buses in the UK under licence, and in 1905 Brazil, Holborow & Straker erected a new factory at the Causeway, Fishponds, in the north-east of Bristol. Moving forward with their own designs, over the next few years thousands of Straker-Squire buses, lorries and vans rolled out of the factory. In 1907 a new company Brazil, Straker & Co., Ltd. was set up, taking over from Brazil, Holborow & Straker, Ltd.

### **Establishing the Straker-Squire marque**

In addition to building and selling commercial vehicles, Straker and Brazil also planned to move into the expanding automobile market. In mid-1906 the first step was taken with another design licensing arrangement. In this case Straker secured the British manufacturing rights from the short-lived French Cornilleau et Sainte-Beuve (C.S.B.) firm to produce their 25-32hp model in England. This was a large touring car, with a 5-litre four-cylinder engine. Initially, until an extension to the new Fishponds factory could be completed, a few French-built (Paris) cars were imported. To raise the marque's prominence in the motoring world Straker and Squire immediately entered a Straker-Squire 'C.S.B.' in some of the major British motoring events of the time.

The first event of significance was the Scottish Reliability Trial in June 1906, Sydney Straker completing the four-day, 670-mile event with just one unplanned halt, an eleven minute stop to replace a broken fan belt. The following year non-stop runs were completed on both the Irish and Scottish Trials, with Straker fourth in class in Ireland, while Straker & Squire Car Sales manager WT Lord was at the wheel in Scotland.

WT Lord on the French-made Straker-Squire 'C.S.B' leaves the start line of the Trinafour hillclimb on the 1907 Scottish Reliability Trial.

In 1907 Strakers also went racing with the 25HP 'C.S.B.' On 30<sup>th</sup> May Lionel Squire ran in the RAC's 'International Heavy Touring Car' race on the Isle of Man, alongside the Tourist Trophy. Scheduled to cover five laps of the 40.25 mile



course (201 miles), fuel consumption was critical, with only a strict amount of fuel allowed, equivalent to a consumption of 14.5 mpg. Although the Straker-Squire completed four laps without problem, it had been forced to run slowly to conserve fuel, averaging only 22 mph, and still ran out completely on the final lap.

On Saturday 6<sup>th</sup> July the first ever race meeting was run on the newly built 2.75 mile banked Brooklands circuit near Weybridge in Surrey. Lord was entered in a 'C.S.B' in the 3.3 mile Horsley Plate, and managed to finish second, about four feet ahead of the next car, collecting prize money of 50 sovereigns (£50). Afterwards Lord commented on the new circuit that "at the speed of the cars in my class, which was approximately 50 mph, I found I could with ease hug the inner edge of the track all the way round." A further appearance later that month was less successful, with Lord unable to finish in the first three in the 8¾ mile Hollick Plate.

Having now gained a foothold in the automobile market, in 1907 Brazil and Straker had the opportunity to expand their range, and begin building a different type of car, one of entirely British design.

### Roy Fedden

The son of a prominent Bristol businessman, Roy Fedden developed a great interest in engineering when in his late 'teens. Following an education at Clifton College, Roy made the unusual decision for a young man of his background at that time to pursue an engineering career. He obtained an apprenticeship with William Appleton's Bristol Motor Company, which in the early years of the 20<sup>th</sup> century designed and built complete cars at their Redcross Street works. Complementing the thorough practical experience he was gaining at the Bristol Motor Co., the young Fedden also studied automobile engineering at Bristol Merchant Venturers' Technical College night classes.

Fedden considered that, rather than the relatively expensive cars aimed at the wealthier owner, there ought to be a good demand for a smaller car at a price suitable for the private owner-driver of more moderate means. In 1906, during his spare time while at the Bristol Motor Company, he drew up a complete design for a simple two-seater medium-sized car which he named the 'Shamrock'. Early the following year he showed his design to Joe Brazil who, impressed with both the proposed car and the 22-year-old Fedden, took him into employment at Brazil, Straker and authorised the building of a prototype 'Shamrock'.

### Straker-Squire: 'Shamrock' to '15HP'

In November 1907 the prototype 'Shamrock' two-seater "runabout" was exhibited on the Straker-Squire stand at the Society of Motor Manufacturers & Traders (SMMT) Motor Show in London's Olympia exhibition hall. Priced at £250 complete, including windscreen, hood and all accessories, it was about half the price of the average car – the 'CSB' was priced at £650 complete. The four-cylinder, 1929cc "square" (85x85mm) engine, with the cylinders cast in pairs, was rated at 12-14 hp. A major attribute of the chassis, which featured a straight pressed steel frame and live rear axle, was its simplicity, with each part being a self-contained unit which could easily be dismantled without disturbing any other part.

Motoring press comment read: "The idea has been to turn out a little four-cylinder vehicle at a low figure, but of a really strong and serviceable nature. In designing the 12-14-h.p. Straker-Squire the desired end has been achieved, for the car has nearly all the refinements of a big machine, while the purchase price and cost of upkeep are most moderate." With the prototype having been very well received, a slightly revised 'Shamrock' went into production at Brazil, Straker's Fishponds factory in 1908.

The 'Shamrock' proved to be a good seller, and as few, if any, of Straker-Squire's other 'pleasure car' models, the 'C.S.B.' and a 16/20 HP<sup>+</sup>, were sold, from 1909 Straker's concentrated on just the single model, the 15 HP, with the 'Shamrock' name being dropped. Focusing on just a single chassis, running gear and engine, while having several different body types available - two and four-seater open runabouts to four-seater landaulettes - the car was progressively developed and refined every year for the next few years. Perhaps inevitably, the chassis grew longer, the engine bigger, with a new 2853cc 4-cylinder monobloc engine with five-bearing crankshaft introduced for 1911, and the price greater. But by concentrating on a "One model" policy, and winning a strong reputation for quality and reliability, Straker & Squire were able to promote the cars as "The World's Best Fifteen", and approximately 1,300 were built up to the start of the first World War.

(† One source<sup>3</sup> states that the 16/20HP model was designed in London, and 3 built; also, that no C.S.B.s were built in the UK.)

### Production model data

1 TOGGOTTOTT TITE						
	Model	Engine.	RAC	Wheel-base	Price	
	designation	Capacity	HP	(inch)	(Complete)	
		(Bore & Stroke, mm)	rating <sup>††</sup>			
1907 prototype	Shamrock	1929cc (85x85)	17.9		"£250"	
1908 model	Shamrock	2021cc (87x85)	18.8	92 & 106	£275-£310	
	12-14hp	, ,				
1909 model	14-16hp	2021cc (87x85)	18.8	106	£315-£345	"One model"
1910 model	15hp	2378cc (87x100)	18.8	108	£330-£410	
1911 model	15hp	2853cc (87x120)	18.8	111	£355	New monobloc engine
1912 model	15hp	2853cc (87x120	18.8	111	£363-£465	
1913 model	15hp	2853cc (87x120)	18.8	111	£378-£526	
1914 model	15-20hp	3053cc (90x120)	20.1	114 & 111 (Sport)	£455-£565	4-speed gearbox
++	- 0					

<sup>&</sup>lt;sup>††</sup> RAC HP = N x D<sup>2</sup> / 2.5, where N= number of cylinders and D = cylinder bore in inches.

## The 'Fifteen' in Competition

### 1908

On Thursday 11th June Roy Fedden with a new four-seater, open-bodied 'Shamrock' was among the 46 contestants leaving London at the start of the RAC's International Touring Car Trial. With a route of 2000 miles through England and Scotland (the 770 miles through the Highlands also constituting the concurrently run Scottish Automobile Club Trial) to be covered in 15 days, and including eleven timed hillclimbs en-route, this was the longest and toughest such event to have taken place in the British Isles.



Roy Fedden and the special Straker-Squire 'Shamrock' on the 1908 RAC 2000 mile trial.

Use of a standard production model wasn't stipulated by the event rules, although an undertaking was required from the manufacturer that cars conforming to the specification used would be supplied, if ordered, for six months following the trial. Fedden took advantage of this to prepare a special car, with a four-speed gearbox

instead than the standard three-speed unit, and a special engine to enable the 'Shamrock' to run in the 13 to 16 HP class. This engine had a 79mm bore and 90mm stroke (capacity 1764cc), resulting in a 15.4 RAC HP rating, rather than the standard model's 87x85 (2021cc) unit rated at 18.8 HP.

Fedden and the 'Shamrock' encountered their first major problem when travelling north on the second day. At Darlington, at 25mph, one of the detachable\* front wheels suddenly came off, crashing into the front door of a blacksmiths shop. Although this only caused a ten minute delay, with apparently no significant damage to the car, the impact of the axle violently striking the road led to some of the problems that would occur in the days ahead.

<sup>\*</sup> The 'Shamrock' was fitted with patent detachable wire wheels. It was more normal for wheels to be fixed, and punctures dealt with by detachable wheel rims or removing the tyres; detachable wheels halved time to fix.

More severe problems began to be encountered in the Scottish sections. On Day 7 difficulties and delays on the hills between Pitlochry and Oban caused over an hour of road penalties. Then, the following day on the road to Glasgow, four hours were lost with a stripped bevel pinion and a broken front spring. That night they didn't arrive at the Glasgow halt until just before midnight.

The crew had to carry out all repairs themselves, using tools and parts carried on the car, and the following morning, as the other cars got underway again, Fedden was still working on the 'Shamrock'. Eventually leaving Glasgow after a 3½ hour delay, the Lake District hills were tackled with the broken nearside front spring "bolstered up with chocks and bandages"<sup>4</sup>. On the final day in the Lake District, in another setback, another 47 minutes were lost with a broken differential cage.

On the final day's run to the Brooklands finish, differential trouble intervened again, with a further delay of over two hours near Windsor. However, in a triumph of ingenuity and perseverance, Fedden and the 'Shamrock' eventually completed the 2000 mile run to be classified as a finisher. Unfortunately, the huge time penalties already amassed (16½ hours) precluded the 'Shamrock' from taking part in the concluding 150 mile race. It did, though, complete three laps to prove its capability of lapping at speed, and was placed third and final finisher in its class from six starters. (Further details of the 'Shamrock's performance in the 2000 Mile Trial is given in Appendix B.)

In a complete contrast, a month later Fedden was back at Brooklands for the race meeting on 1<sup>st</sup> August, intending to give the 'Shamrock' its race debut in the short, 5<sup>3</sup>/<sub>4</sub> mile, Allcomers' Handicap. Unfortunately, they were not allowed to start "owing to the number plate [for the competition number] not being sufficiently large"<sup>5</sup>!

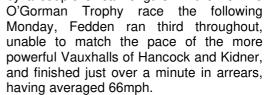
In October Straker-Squire announced their improved model for 1909, the '14-16HP', dropping the 'Shamrock' name, and Fedden appeared at Brooklands' final meeting of the year with a basically standard version of the new chassis, albeit with racing seats and an aluminium bonnet, and a tuned engine. In the second heat of the  $5^{3}/_{4}$  mile Allcomers' Handicap, Fedden, in a bunch 100 yards behind the winning 48hp Mercedes, finished third and qualified for the final.

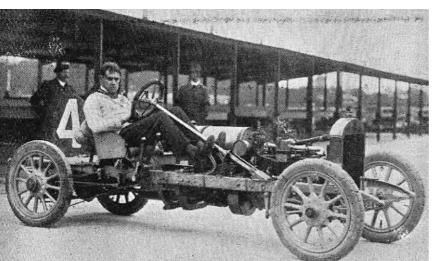
Benefitting from the handicap, in the final Fedden was first away, and maintained his lead until entering the Byfleet banking, when he was again overhauled by the powerful Mercedes which had started  $2^{1}/_{2}$  minutes later, and which went on to win by 250 yards. Unlike the heat, however, the Straker, averaging 60 mph, held on to second place, beating a 36hp Austin to the finish by 20 yards.

## 1909

Fedden was back at Brooklands with the Straker-Squire racer for the 1909 season-opening meeting on Easter Saturday. The engine was still basically standard, except for separate exhausts for each cylinder. Demonstrating impressive acceleration away from the start of the 3-mile Easter Junior Handicap, the bigger and more powerful cars were unable to catch the Straker-Squire, which won fairly comfortably at a 60 mph average. Ninety minutes later the car was in action again, this time, no doubt with an eye for publicity, for a special timed trial up Brooklands' new Test Hill, recording a best average speed of 181/4 mph from a standing start up the steep gradient, which reached 1 in 4 at the top.

Returning on Saturday 31st July for the Bank Holiday meeting, and now running without a bonnet cover, Fedden placed second in the 5½ mile Junior Handicap, having held the lead into the final straight, only to be passed by a 25hp Darracq and lose by a couple of car lengths. In the 28-mile





Roy Fedden in the Straker-Squire at the 1909 Brooklands August meeting.

1909 Irish Trial. Roy Fedden on a 15HP Straker-Squire four-seater on the Speenogue hillclimb.

In May and June, in contrast to the tribulations of the previous year's RAC Trial, the Straker-Squire demonstrated excellent reliability with non-stop runs in both the Irish and Scottish Trials. Using the same 4-seater touring-bodied model in both



events, Fedden placed 8<sup>th</sup> of 12 in class in Ireland at the end of May, after a six-day, 930 mile circuit of the island. Then a fortnight later, six days and 1005 miles through the Scottish highlands produced a second non-stop performance. This nearly didn't happen though, as "On an awkward bend at Amulree [near Dunkeld] the mechanic got nervous and jumped out, but immediately got in again, so the car and driver were not penalised for his behaviour." Fedden and the Shamrock also demonstrated some speed in Scotland, with fastest time in class on the flying-start timed hillclimb at Cairn O'Mount on the first day, and fastest in class over the 980 yard Glendoe 'climb near Loch Ness on Day 4.

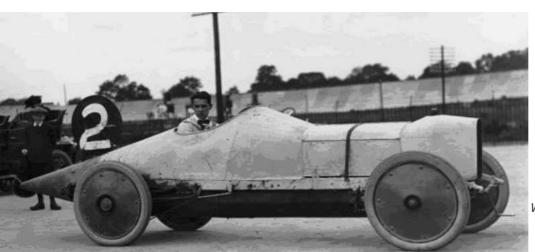


Competition successes were prominently highlighted in Straker & Squire's advertisements.

#### 1910

By now Fedden had been elevated to Works Manager at Brazil, Straker's Fishponds operation, but that didn't stop him racing at Brooklands. At the Easter season-opening meeting Fedden's Straker-Squire presented a totally new appearance. Whereas the previous year the car had little or no bodywork, the 1910 version had a central steering column and a very low driving seat with a smooth streamlined body closely wrapped around, and faired in chassis rails and wheel discs. The engine was still basically standard, but with modified engine lubrication system, and four separate exhausts leading to an expansion chamber outside the frame. The engine in the 1910 production model Straker-Squire (now actually designated '15HP') had been revised, with a 15mm increase in the engine stroke, raising the capacity to 2378cc. In the 11-mile March Handicap Fedden finished a close third, 8½ seconds behind Kidner's winning Vauxhall. Later, in the 8½ mile "21HP Rating" Handicap, he suffered a broken valve, and in pulling down off the track nearly collided with the car he'd just overtaken for third place.

The increased pace of the Straker-Squire was "rewarded" at the end of May Brooklands meeting by a greater handicap, placing Feddon on scratch for the "21HP" race. On this occasion the car was quick enough to overhaul the entire field, Fedden winning at an average of 70 mph, although in two later races he was only able to progress up to fourth place.

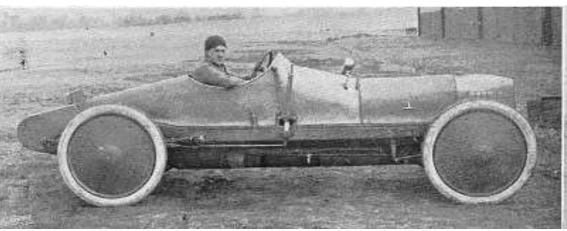


The 1910 racing Straker-Squire at the May Brooklands meeting.

Westcountry Motorsport History

#### 1911

For 1911 the production cars now had a new five-bearing monobloc engine - the previous unit had had the cylinders cast in pairs. Capacity was now 2853cc, although it was still rated at 18.8 HP.





The 1911 Brooklands racing Straker-Squire

During this year Roy Fedden, a keen and active sportsman, had an extended leave from Brazil, Straker & Co. following a serious rugby injury, and his seat for Brooklands races was taken over by the company's chief road-tester, Harry Smallwood. With the handicaps imposed by the Brooklands timekeepers in 1911 race wins were hard to come by, a third and a second (losing by "the thickness of a tyre") at the June meeting being Smallwood's best results. In May, though, he'd been lucky to escape unharmed from a nasty incident about halfway through the "100 mph" handicap. Running in close proximity with the evenly matched Sunbeam of Louis Coatalen, at the western end of the course on the banking by the aviation sheds he started to overtake "but Coatalen appeared to sheer up the bank, causing Smallwood to go higher still", getting to within about six feet of the top of the banking. As the wheels lost adhesion the Straker-Squire began sliding downwards: "it circled down the banking in a horrifying manner, turning right round at least thrice, and ripping three of the four tyres off the rims" and "came to rest at the foot of the slope" Smallwood was, though, unharmed, and strolled away none the worse. Coatalen's driving was later protested, and although the charge could not be substantiated, the £5 protest fee was returned.

At the Brooklands August meeting the car re-appeared with an uprated engine, with a 3mm increase in bore raising the capacity to 3053cc (90x120mm) from 2853cc (87x120mm), with the engine able to rev to 3,500 rpm. At the wheel was another ex-Clifton College pupil, Dick Witchell, who was now running Brazil, Straker's Experimental Department. Running in the 100mph Handicap races, it had such a large handicap applied that Witchell was never in contention. The increase in bore raised the

RAC HP rating from the standard 18.8 to 20.16 HP, moving the car into the 21HP class and at the end of October, attempts were made on three of the Brooklands "21 HP Rating" records, currently held by Percy Lambert in an Austin. With Bristolian Witchell driving, the Straker-Squire, known as the 'PDQ' (Pretty Damn Quick), bettered the flying kilometre and flying mile records, but failed by one second to set a new mark for the flying half-mile, although still managed a 97.09 mph average.

Dick Witchell in the 1911 record breaking 'PDQ' Straker-Squire

### 1912

In 1912, keen to raise the marque's sporting profile around the country, Strakers made fewer appearances at Brooklands, but extended their competition outings to other speed events further afield. Although Fedden was back at work at the Fishponds factory the main driving duties were taken by Dick Witchell. Throughout the summer Witchell and the Straker-Squire recorded a number of successes: third fastest overall at the Aston hillclimb; class wins in the 'climbs at Pateley Bridge,

Yorkshire and Caerphilly, South Wales; further class wins in races on the flat sandy beaches at Porthcawl, Weymouth, and Saltburn in Yorkshire. Fedden and fellow Brazil, Straker director Philip Williams also had occasional outings, both joining Witchell in the hillclimbs at Shelsley Walsh and at Upper Weston, near Bath.

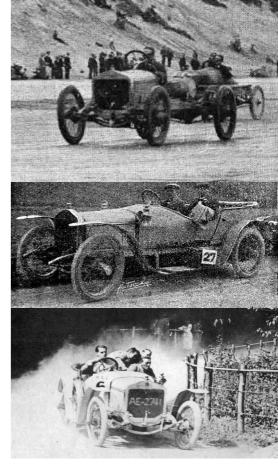
Straker-Squire '15' in action in 1912:

Top: Stripped of bodywork, Dick Witchell winning at Saltburn Sands in July.

Centre: With special four-seater touring body, Witchell at Pateley Bridge in July.

Bottom: Roy Fedden at Shelsley Walsh in June.

In July a car was entered in Brooklands' novel 100-lap, 277 mile "Standard Touring Car" race, to be driven by new chief test driver Frank Clement. Clement had joined Brazil, Straker from Vauxhall, having also previously worked for Napier's and Star Engineering; later he would achieve lasting fame by winning Bentley's first Le Mans 24 hour race. At Brooklands though, Clement didn't even get to start, the car being disqualified for having a higher, non-standard, gear ratio. In clarification Sidney Straker explained afterwards that the "non-standard" gear fitted was actually a listed option that was frequently specified by customers, but catalogued as a "racing type of gear"9.



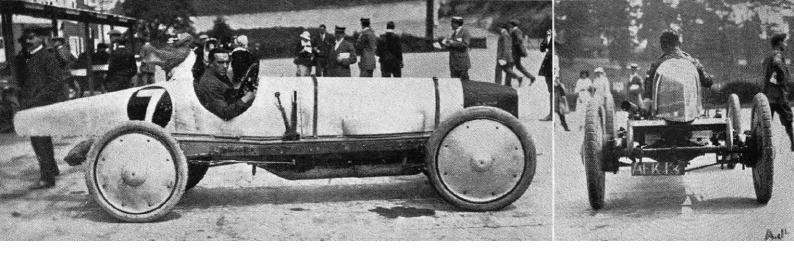
Witchell, however, was more successful at Brooklands in the September meeting's 10-lap, 30-mile O'Gorman Trophy race for under 3-litre cars. As the Vauxhalls quickly got away from the start, Witchell, hampered by a slipping clutch, was very slow off the line. Once up to speed, and lapping at 93 mph, he slowly decreased the lead of Lambert's Vauxhall, although by now was too far behind (half a lap) to seriously challenge. He would have finished second, however on the final lap he missed the turn into the finishing straight and carried on to complete an unnecessary extra circuit. There was some satisfaction for Straker-Squire though, as during the course of the race he had set a new Class D (maximum 175 cu.in./2868cc) ten lap record at 87.95 mph. Returning to the track in November Witchell and the Straker-Squire added another three class records, including the flying start half-mile at 96.62 mph, but was unable to improve on his existing ten lap record.

### 1913

Roy Fedden's ability, and importance to Brazil, Straker & Co., was acknowledged in 1913 when he was elected to the Company board as Technical Director; he was still only 28 years old.

While Dick Witchell appeared in a few speed events in 1913, gaining a class win at Saltburn in July, and tying for the Goff Trophy at Rosslare, Wexford, in September, the main focus for the factory car returned to Brooklands. The engine in the racing Straker-Squire was a special one, with "a single enormous inlet valve in the head of each cylinder, both the ordinary valves being used for exhaust" 10. An extra cooling tank was placed just behind the radiator, while during the season fitment of four separate carburettors was also experimented with and at the August Bank Holiday meeting the car appeared with new, five inches narrower, aluminium bodywork and cut-away tail.

As usual at Brooklands, many of the races were run on handicap, with the aim of providing close finishes, which frequently occurred. This also made it harder for any one car to dominate, and Witchell only managed one outright race win during the year. In August, with increased speed from the new slimmer bodywork, Witchell won the first heat of the "100mph Long", and then looked on course for second in the final until a spark plug failed. However, consistently rapid performances over the season in the "100mph Long Handicaps" were rewarded with the Pratt's fuel company's "Points Prize" – although the Straker actually ran on Shell's product!



Dick Witchell in the Straker-Squire with revised bodywork at Brooklands in August 1913.

The year was rounded off with a series of attempts on the Brooklands Class D records in October. First Witchell improved on the Straker-Squire's four existing records, the fastest being the flying half-mile which he raised to 98.74 mph. Then, a few days later, a new record was added, the 50 miles standing start, at 92.02 mph, running on ordinary Dunlop tyres, which *just* lasted the distance.

### 1914 and the Tourist Trophy

After a six-year gap, the RAC re-introduced their Tourist Trophy race in the Isle of Man in June 1914. The race was over 600 miles, sixteen laps of the 37½ mile circuit, and held over two days, Wednesday and Thursday, 10<sup>th</sup> and 11<sup>th</sup> June, with eight laps on each day. For the winner there would be a £1,000 prize (today's equivalent would be £100,000) presented by the Daily Telegraph newspaper. As an international event it attracted entries from France, Germany and Belgium in addition to leading British marques such as Sunbeam, Vauxhall, Crossley and Humber. Engine capacity was restricted to 3310cc, while weight, without fuel, had to be over 21½ cwt. (2,408lbs), so it was a suitable event for the Straker-Squire and two cars were entered from Bristol. Although Lionel Squire had run in the 1907 fuel-limited Tourist Trophy with the 'CSB' model of French origin, the 1914 race would be the first time Straker-Squire had a serious attempt at an all-out long distance road race.

Two cars were specially built for the race, not to a special new design, but using the standard 1914 model chassis, clad with a compact two-seater body. The standard chassis was drilled out for lightness where practical, the differential removed, and the leather cone clutch replaced by a Hele-Shaw multiple disc unit, while the two intermediate gears in the four-speed 'box were special ratios.

The engines for the 1914 production model Strakers had been revised, with the bore increased by 3 mm to give a 3052cc capacity. The engines prepared for the TT cars were listed with a further 3 mm increase in bore, raising the capacity to 3260cc. In other respects, they were the standard Straker-Squire Sports model engine, apart from a special camshaft and higher compression.

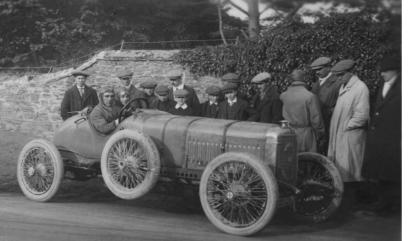
Additionally, though, a special overhead valve engine had also been developed, with 4 valves per cylinder actuated by a single central overhead camshaft driven via a train of gears at the front of the engine, rather than the two side valves per cylinder of the standard model. This experimental unit had been bench tested to give 83 bhp at 3200 rpm, and it was the intention to use this in one of the team cars, while the other retained the more standard unit.

The two drivers for the race were to be Dick Witchell and Frank Clement, accompanied by riding mechanics G Brown and Fred Preston respectively. Fedden spent a week on the Island at the end of February surveying the course in a Straker-Squire with a "racing four-seater body"<sup>11</sup>. Then in early April, during the Easter holidays, drivers Witchell and Clement had visited the Island to practice in a

standard two-seater Straker tourer.

Dick Witchell and G Brown in the 1914 TT Straker-Squire.

At the end of May, with two weeks of official practice leading up to the race, the Straker-Squire equipe arrived on the Island, setting up base at Fairleys Railway Hotel in Kirkmichael, approximately half-way around the course.



Fedden, Straker and Squire were accompanied by Brazil, Straker, & Co.'s Chief Draughtsman Leonard Butler and his wife Clara, with the rest of the contingent from Bristol comprising fitter Tom Rudman and Messrs. Turner, Warren, Winstone and Wiltshire.

#### Practice.

Practice was allowed in the mornings from 4.30 to 7 am, and on the first day, Monday 25th May, Frank Clement, preparing for his first ever car race, was among the first out, putting in three laps. His car (no. 14) had the 'standard' engine. Witchell's car (no. 3), with the experimental engine, didn't arrive on the Island until Tuesday morning, and on the Wednesday he was only able to get out in time to complete one lap. Clement meanwhile was managing three laps daily, lapping in around 39 to 40 minutes, approximately a 55 mph average. On the Monday morning at the start of the second practice week, Witchell tried Clement's car. Concluding it was better than his own with the new ohv engine, he decided to switch to a 'standard' engine for his car too, and after Wednesday practice reported that his car was now much better<sup>12</sup>. On Friday morning Clement was among the first to arrive at the scene of a nasty crash just after the Hairpin. One of the Adlers had overturned, trapping the German crew underneath, and he helped to extricate them and transport them to Ramsey Hospital.

During the Monday morning practice at the start of race week Witchell, encountering a "wet and greasy"13 patch of road at Crosby, "experienced a skid some seventy yards long, turning completely round twice in the process", demolishing a brick wall and badly twisting the front axle. Fedden effected a repair "by forging two plates and bolting them fore and aft in the slot provided by the H section of the axle"14, a weight addition of 8 lbs. At the official 'Weighing-in' next day, Clement's car tipped the scales at 2856 lbs (just over 11/4 tons), with Witchell's 28 lbs heavier. Both cars were well above the minimum allowed (2408 lbs.) and also significantly heavier than the Sunbeams and Minervas which looked like being their strongest opposition. Based on practice times it appeared that the three Sunbeams had a good performance advantage - after Wednesday practice Clement, with the car geared for acceleration rather than speed, reckoned he'd only been able to reach a maximum of 80mph, while the Sunbeams were reputed to reach 95mph<sup>15</sup> - but the two Straker-Squires seemed to be very evenly matched with the three Belgian Minervas.

#### The Race.

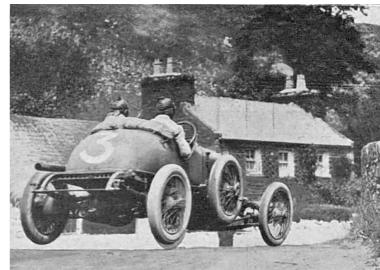
The race was due to start at 9am on Wednesday morning. Over the previous week the weather had been quite stormy, and a gale and downpour over Tuesday night left the roads sodden ahead of the start. Most cars now sported crude front mudguards for driver protection, although not the Strakers, possibly their side-mounted spare wheels aiding in this respect. To help on the difficult surface most cars were using two Dunlop steel studded tyres, mixed diagonally with two grooved all-rubber covers, although the Sunbeams had studded tyres all-round.

Fortunately, the weather had improved by nine o'clock, and the cars were dispatched from the start line at the top of Bray Hill at ninety second intervals. Both blue Straker-Squires got away cleanly, with "no spluttering of the engine, no slipping of the wheels." 16 Following practice form the Sunbeams were ahead at the completion of the first lap, Kenelm Lee Guinness leading brother Algernon, although Dario Resta's car was already out. Clement and Witchell were fourth and fifth, trailing the leading Minerva. On the next lap Witchell moved ahead of Clement and steadily gaining ground on Jean Porporato's Minerva passed it into third on lap 4. Clement had begun to suffer with a broken valve tappet, making a short stop to ask for a spare (one wasn't available) and had dropped back to seventh by the end of lap 5. While the Minervas were able to run non-stop, the Straker-Squires had to pit to replenish petrol and oil, Witchell stopping for 1½ minutes on lap 6, and Clement on the next, resuming in fourth and seventh places, Clement's exhaust note sounding rough. He was still trying hard though,

on the last lap of the day skidding at High Bailiff corner (near Ramsey): "The machine veritably danced and jumped, turning half round, going right over the parapet, but Clement, by providential skill, managed to negotiate the corner cleverly, and went ahead, to the great relief of the excited spectators"17

the Ramsey Courier reported.

Witchell and Brown in the 1914 TT Straker-Squire at Ballig Bridge



The first day's racing was completed with Witchell in fifth place, now 90 seconds behind the second of the Minervas, while Clement, hampered by his defective tappet, had dropped to tenth. The two Sunbeams of the Lee Guinness brothers were well clear at the front, but behind them, after 5½ hours racing, the two leading Minervas and Witchell's Straker-Squire were covered by less than three minutes.

The fine weather of Wednesday afternoon continued into Thursday's second day, with the restart in the running order at the end of day one, and at 9 am the cars were flagged away at three-minute intervals. However, as no work on the cars had been permitted in the interim, all were immediately pushed to their respective pits for fuel, tyres and any necessary repairs. Like the other cars, the Sunbeams now changed to a diagonal mix of studded and grooved rubber tyres. Witchell and Brown, keen to challenge for fourth place, spent the shortest time of any in the pits (3 mins 21 sec), but Clement and Preston, who had to put in a new lifter between the valve cam and tappet, and adjust the brakes, lost 25 minutes.

At the end of the first lap (lap 9) Witchell was now fourth, and Clement tenth, but on the next round Clement, pressing on, while cornering at Bray Hill "made an ominous swerve towards a seat on which were J [Julian] W Orde [the race Clerk of Course] and other officials. They dispersed in all directions" the Ramsey Courier reported. Clement's demise came later that lap, when a piston broke near Ramsey, punching a hole in the cylinder head. The Ramsey Courier again: "He stopped up by May Hill then managed to creep as far as the Hairpin, where observing it was hopeless to proceed he abandoned the race, driver and mechanic walking into Ramsey."

Witchell, meanwhile, had caught up with the lead Minerva, tying for third place at the end of lap ten. Then, shortly after pitting for fuel, water and a new tyre, just down Bray Hill a petrol pipe broke. Mechanic Brown sprinted back up the hill to the Straker pit for some rubber tube, but they had none. Sportingly, Sunbeam chief Louis Coatalen provided some tubing and copper wire to allow them to make a repair. After that delay, then another when held up by an ambulance attending Hancock's Vauxhall accident near the Bungalow, and although the second-placed Sunbeam had just retired, Witchell fell back to fifth spot, 45 seconds behind the third Minerva of Leon Molon. By the end of the race, after over eleven hours of racing the gap was down to just 30 seconds, and with both having passed Porporato's misfiring Minerva on the final lap, Witchell finally took fourth place at an average speed of 52.75 mph, a good result for the Straker-Squire team.



Although not catching Molon in the race, Witchell did have some satisfaction in beating him in the Henry Edmunds hillclimbing competition, an aggregate of all sixteen 6½ mile climbs up the Mountain Road from Ramsey to the Bungalow during the course of the event. In this he bettered Molon by over three minutes, to place third.

Despite not finishing the Tourist Trophy in the first three, it was a noteworthy performance with an engine of normal touring car side-valve configuration rather than the more specialised racing type engines of the Sunbeams and the sleeve-valve Minervas. Straker-Squire were able to make much of their "brilliant achievement" in this important and arduous race in their advertising, and particularly emphasised the use of a "standard design chassis". (Further details of the Straker-Squire performance in the TT are given in Appendix C.)

Advertising the Tourist Trophy performance.

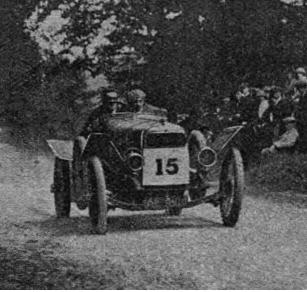
The TT cars were in action again before the end of June, both Witchell and Clement appearing in the South Wales brace of speed events at Caerphilly and Porthcawl. Witchell placed second overall in the Caerphilly hillclimb, where Clement was unfortunate to lose a rear wheel when a hub broke during a

with Germany.

violent skid. Two days later in the speed trials on Porthcawl Sands it was Clement's turn for a class win, with Witchell third. Then, on Yorkshire's Saltburn Sands in July, Witchell scored again with a class win and two second places. The final appearance of a factory car then came on 25th July at Beacon Hill in Leicestershire. Here Harry Smallwood was second quickest overall and also took two class wins.

Road-equipped TT car at the Beacon Hill hillclimb.

While the factory hadn't raced at Brooklands during 1914, private owner Arthur Williams\* had appeared regularly, and on 3<sup>rd</sup> August, at the last Brooklands meeting to be held before the start of the First World War, he managed a couple of third places in the Lightning Handicaps. The following day Britain was at war



### 1915 and Beyond - All Change

During the War the Fishponds factory continued vehicle production, but also engaged on other war production activities, producing munitions, and increasingly becoming involved with aircraft engines, manufacturing various Rolls-Royce and Renault engines and spares. Eventually, in 1917, Fedden and his team produced their own aero-engine design, the sleeve-valved radial Mercury, soon to be followed by the bigger Cosmos Jupiter.

At the end of the war significant changes came about. While Brazil, Straker, & Co. Ltd, continued activities at their St. Philip's Vulcan Ironworks facility, the Fishponds operation was sold, becoming the Cosmos Engineering Company, although remaining under Roy Fedden's leadership as before. Although the Bristol team had designed a new car for 1919, the 20/25, with a six-cylinder 4-litre engine, the agreement between Brazil, Straker, Ltd. and Straker-Squire (1913) Ltd. was ended in 1917 and Sidney Straker moved all Straker-Squire vehicle manufacturing to premises in Edmonton, North London. Bristol then had no further involvement with Straker-Squire cars, either the new 20/25 or an updated variation on the pre-war 15HP which was re-introduced in 1923. Straker-Squire cars continued to be made in London until 1926 when, after many financial difficulties, the latest embodiment of the company was finally wound up.

Back in Bristol, although now well embarked upon aero-engine development, Fedden still had ambitions to produce a new small car, in effect a successor to his original 'Shamrock'. In 1919 he produced a radical design for a lightweight three-seater car with a 1200cc, air-cooled, three-cylinder radial engine. The body was a moulded composite, and the novel suspension featured coil springs, rather than the more usual leaf-springs of the time, and the car was said to have exceptional roadholding. Initially designated the C.A.R. (Cosmos Air-cooled Radial), it was exhibited at the Olympia Motor Show in November 1919, attracting a great deal of interest, and plans were put in hand to start quantity production. However, by late 1919 Cosmos were in severe financial difficulties and in 1920 the aero-engine designs and equipment were taken over by the Bristol Aeroplane Company, along with Fedden and his team, leaving Cosmos's C.A.R. still-born. Fedden went on to establish the B.A.C.'s new Engine Department at Filton, and during the inter-war war years built it into the leading aero-engine manufacturer in the world.

Knighted in 1942, Sir Roy Fedden left the B.A.C. later that year. Although occupied for the rest of the war as a special advisor to the Minister for Aircraft Production, in 1943 he also founded his own company, Roy Fedden Ltd., based in Cheltenham, aiming to produce a car that would sell well after the war. As with the 'Shamrock' and the Cosmos 'C.A.R.', he again intended to create a "people's car", and with his small team produced a radical design. Their initial 1943 concept<sup>19</sup> was for a three-door, four-seater saloon with a streamlined monocoque body, and a rear-mounted 1495cc three-cylinder radial, sleeve-valve, air-cooled engine driving through an automatic torque-converter. This was later revised to become a 1600cc four-door, six-seater, but the 1947 prototype Fedden demonstrated an

<sup>\*</sup> Williams' car was a single-seater, perhaps the old 'works' car?

inherent instability caused by the swing-axle rear suspension. Discontinuing that project, a new design was quickly produced for a more conventional front-engine rear-wheel-drive car with a normal gearbox, although the water cooled, in-line 4-cylinder engine still featured sleeve valves. However, by then, as they were simultaneously developing ranges of new piston and gas turbine aero-engines, the small operation had become financially unsound, and Roy Fedden Ltd. was liquidated in mid-1947.

After taking various engineering consultancy roles: at Leyland Motors; Technical Advisor to NATO; with the Dowty Group; Roy Fedden finally retired in 1960, at the age of 75, and died 13 years later in 1973. In the preface to his definitive biography of Fedden, eminent aviation historian Bill Gunston said of Sir Roy: "He was one of the greatest intuitive engineers in history."

## **Postscript**

While Fedden's greatest achievements were with aero engines, his Straker-Squire cars in the early years of motoring and motor sport were also outstanding. In the Bristol area his name still figures in local motor sport with the Bristol Motor Club's annual Roy Fedden Trophy Trial, an event which originated in 1936 when he presented the club with an impressive sterling silver cup.

Pete Stowe July 2020

≈ ≈ ≈ ≈

Notes & sources of quoted text

<sup>&</sup>lt;sup>1</sup> The Autocar 13 July 1907

<sup>&</sup>lt;sup>2</sup> The Globe 20 November 1907

<sup>&</sup>lt;sup>3</sup> The Automobile May 1990, Michael Worthington-Williams. The 16/20 model: "...was designed in London by Clare, Head of the London drawing office and incorporated both CSB and Itala design features. Only two or three were built." & "....it seems unlikely that any licence-production of the CSB ever took place in Bristol, all the cars sold being imported."

<sup>&</sup>lt;sup>4</sup> AutoMotor Journal 27 June 1908

<sup>&</sup>lt;sup>5</sup> The Globe 1 August 1908

<sup>&</sup>lt;sup>6</sup> Manchester Evening News 19 June 1909

<sup>&</sup>lt;sup>7</sup> The Autocar 10 June 1911

<sup>&</sup>lt;sup>8</sup> The Sportsman 18 May 1911

<sup>&</sup>lt;sup>9</sup> The Autocar 3 August 1912

<sup>&</sup>lt;sup>10</sup> The Autocar 28 June 1913

<sup>&</sup>lt;sup>11</sup> Motor 3 March 1914

<sup>&</sup>lt;sup>12</sup> The Autocar 6 June 1914. In 'Fedden – the life of Sir Roy Fedden', Bill Gunston stated "... they suffered the crushing disappointment of discovering carburettor and induction-pipe snags in the new engine installation that were not manifest in bench trials."

<sup>&</sup>lt;sup>13</sup> The Autocar 13 June 1914

<sup>&</sup>lt;sup>14</sup> The Autocar 20 June 1914

<sup>&</sup>lt;sup>15</sup> Isle of Man Times 6 June 1914. The AutoMotor Journal 14 May 1914, reporting on testing at Brooklands, stated that the Straker-Squire TT cars were "geared somewhat lower than the other TT racers so far seen on the track; their extreme speed is therefore not quite so high, but their powers of acceleration and hillclimbing are enhanced in proportion."

<sup>&</sup>lt;sup>16</sup> AutoMotor Journal 11 June 1914

<sup>&</sup>lt;sup>17</sup> Ramsey Courier 12 June 1914

<sup>&</sup>lt;sup>18</sup> Ramsey Courier 12 June 1914

<sup>&</sup>lt;sup>19</sup> Alex Moulton - a lifetime in engineering (Appendix 2 - Fedden Car Specification, 1943)

## **Appendix A - The People**

#### J P Brazil

Joseph Peter Brazil\* (1868-1947).

Born in Dublin in 1868, from November 1884 to November 1887 Joe Brazil was articled to hydraulics engineer Ralph Hart Tweddell in London. This time Included a period in the workshops of the Gloucester engineering firm Fielding & Platt, with which Tweddell was closely associated. Between 1888 and 1892 he worked in Tweddell's drawing office in London, in connection with hydraulic machinery.

In January 1893, with Cecil G Owen, he set up the firm of Owen, Brazil, Ltd. at the Vulcan Ironworks in St Philip's, Bristol, carrying on the business of a General and Hydraulic engineer. Over the next two decades the company went through many changes, with Brazil presiding over its expansion to be a major employer in Bristol, initially with road vehicles, and later, during the First World War with aircraft engines.

In 1897 steam engine maker Henry G Holborow joined the firm, which became Owen, Brazil & Holborow (although Cecil Owen had died in 1895). Then in 1899 the company became Brazil, Holborow & Straker, Ltd, when Sidney Straker joined. By mid-1906 a new factory had been built at Fishponds to cater for the expanded production of road vehicles. Midway through 1907, when the manufacture of Straker-Squire cars began, a new company Brazil, Straker, & Co. Ltd. was formed, and Brazil, Holborrow and Straker wound up.

The operations and factory at Fishponds were taken over by Cosmos Engineering late in 1918, however the firm of Brazil, Straker & Co. Ltd continued at the Vulcan Ironworks, only to close in the mid-1920s.

\* Note: Although author Bill Gunston in his biography of Roy Fedden gives Brazil's first name as John, all official documents (GRO Registrations, Census', Probate, etc.) clearly show that it was Joseph, and according to a direct descendant he was known as 'Joe' or 'JP.

#### **G** Brown



Head mechanic for Dick Witchell, and his riding mechanic in the 1914 Isle of Man Tourist Trophy race.

## **Leonard Butler**

Leonard Frederick George Butler (1888-1943)

Born 1888 in Paulton, Somerset. In 1904 he began a five-year engineering apprenticeship at Brazil, Holborow & Straker/Brazil, Straker, Ltd., and during 1907 worked in the drawing office on the designs of the new 'Shamrock' car alongside Roy Fedden. In November 1909 he moved to Rolls-Royce in Derby and worked in the drawing office on the 40/50 Silver Ghost design. In October 1910 he went to David Brown & Sons (gear manufacturers) in Huddersfield, and then to Crossley Brothers (engine manufacturers and the makers of Crossley cars) in Manchester.

In December 1911 he returned to Brazil, Straker, & Co. Ltd. in Bristol, and there carried out design work on the 15hp engine, the engine for Straker-Squire commercial vehicles, and in 1914 the engine for the TT racing cars. In 1914 he was appointed Chief Draughtsman at Brazil, Straker, and then during the First World War years became involved in their aero-engine work. He continued at Fishponds with Cosmos Engineering, and in 1920 went to the Bristol Aeroplane Company along with Roy Fedden, becoming Chief Designer in the Engine Department, and played a key role in the development of the Bristol aero-engines in the inter-war years.

### **Frank Clement**



Francis Charles Clement (1886-1970).

Born in 1886 at Tring, Hertfordshire. He was educated at Sherborne College, Dorset (1900-02), then for three years was an articled pupil at engineers RJ Hodges & Co., Dunstable (1903-06). He then worked for Napier Motors in London as an improver (1906-07), Star Engineering in Wolverhampton superintending testing of repair cars (1907-08), and Messrs. J Taylor, Barnsley, where he was assistant garage manager (1908-09). During 1910 he was at Vauxhall Motors in Luton, where he

was second tester of chassis.

In January 1911 Clement moved to Brazil, Straker, & Co. in Bristol in the role of Superintendent Tester of Chassis (Pleasure & Commercial), in 1913 becoming responsible for the general efficiency of all 15HP Straker-Squire chassis. His first ever car race was in a Straker-Squire in the 1914 International Tourist Trophy, when he retired on the second day, and he also competed in the Straker-Squire TT car in various speed events during the remainder of that season.

During the First World War Clement served in the Royal Engineers, and afterwards, in 1920, joined W O Bentley as he started up Bentley Motors in London, running the experimental department and in charge of research and development. As Bentley's only professional racing driver he was an integral part of the works racing team throughout the 1920s, but also co-drove with privateer Bentley owner John Duff in the inaugural Le Mans 24-hour race in 1923, finishing fourth, then again the following year, when they won. Further long-distance racing successes with Bentleys included Le Mans (4th in 1929, 2nd in 1930) and winning the Montlhéry 24 Hours (1927); BRDC Brooklands 500 (1929) and JCC Brooklands Double 12 (1930).

Clement retired from racing in 1930. At the same time Bentley Motors were in serious financial problems, and were liquidated in 1931. Frank Clement had been an integral part of Bentley Motors for the complete "W O" era.

## **Roy Fedden**



Albert Hubert Roy Fedden (1885-1973).

Image c. 1910

Born in Bristol in 1885. Following education at Clifton College, Bristol (1895-1904), he took on an engineering apprenticeship with the Bristol Motor Company in their Daimler Department (1904-07).

From 1907 to 1918 he was employed by Brazil, Straker, & Co., at Fishponds, Bristol. From 1907 to 1914 on Straker-Squire car design and manufacture: draughtsman (1907-08); in charge of the testing and running department (1908-09); Works Superintendent (1909); Works Manager (1909-12) [during 1911 he had a year's leave recuperating from a rugby injury]; Technical Director (1913-14). From 1914 to 1918 he had complete charge of the Fishponds factory, now engaged in aero-engine manufacture.

From 1918 to 1919 he continued in charge of the Fishponds factory, now owned by Cosmos Engineering, still engaged on aero-engine design and manufacture, and also developing a new small car.

In 1920 he moved to the Bristol Aeroplane Company at Filton as Chief Engineer, and established their Aero Engine Department. He continued working on aero-engine design and manufacture for the B.A.C. until 1942. By the late 1930s, under his leadership, the B.A.C grew to become the leading aero-engine company in the world, whether measured in terms of numbers of engines, numbers of customers, or income.

Fedden was awarded a Knighthood (K.B.E.) in the 1942 New Year's Honours List; he had previously been awarded an M.B.E. in 1920. Sir Roy Fedden left BAC in October 1942, then became Special Technical Advisor to the Minister for Aircraft Production (1942-45).

In 1943 he also founded his own company, Roy Fedden Ltd., basing it in Cheltenham, aiming to produce a new small family car for after the war. From the summer of 1945 this became his full time activity, and he also began development of new range of piston engines for light aircraft and a new gas turbine aero-engine. Following financial difficulties, Roy Fedden Ltd was liquidated in June 1947.

From 1947 he was engaged in various engineering consultancy roles: commercial vehicle manufacturers Leyland Motors (1947-49); Technical Advisor on aircraft to The Director-General of NATO (1950-52); Dowty Group, Cheltenham (1952-60). In 1960, at the age of 75, Roy Fedden finally retired.

[A comprehensive account of Roy Fedden's career can be found in the biography by Bill Gunston, "Fedden – the life of Sir Roy Fedden"]

#### W T Lord

William Thorburn Lord (1871-1920).

Born circa 1871 in Wigan, Lancashire. For three months from May to August, 1907, between spells at Argyll Motors, WT Lord was the manger of the light pleasure motor car department of Sidney Straker & Squire Ltd. in London. During that time he drove a Straker-Squire 'C.S.B.' in the Scottish Reliability Trial, and in the first races at Brooklands. Before his first period with Argylls he'd worked for CS Rolls for two years.

### **Fred Preston**

Frederick James Preston (1894-).



Born in Bristol in 1894. Head of the repair department at Brazil, Straker, and riding mechanic with Frank Clement in the 1914 Isle of Man Tourist Trophy race.

### **Tom Rudman**

Tom William Griffin Rudman (1891-1919).

Born in 1891 in Bristol. Motor fitter at Brazil, Straker Ltd.; member of the 1914 Isle of Man Tourist Trophy team.

### **Harry Smallwood**

Harry Frederick Smallwood (1889-1975).

Born in 1889 in London. In 1903-04 studied mechanical engineering at Regent Street Polytechnic, followed by apprenticeships with the Royal Navy at Portsmouth and Mass Cars in London.

In 1909 he joined Brazil, Straker, & Co., at Fishponds, Bristol, as Chief Road Tester, and during 1911 raced the Straker-Squire single-seater at Brooklands on several occasions. He then became superintendent of the Road Test & Repair shop, and in 1914 Assistant Works Manager. In the later years of the First World War he was chief of the Planning Department, dealing with manufacture of lorries, aero-engines and munitions, and from 1917 to 1919 Works Manager. When the Fishponds

operation was taken over by Cosmos Engineering in 1919 he again became chief of planning, and was engaged on layout and planning for production of the new small light car, the Cosmos C.A.R.

Following the demise of Cosmos Engineering, in 1920 Smallwood moved to Palladium Autocars Ltd. in London as Chief Engineer, where he controlled the Design and Experimental Department. In 1924 he moved to the engineering firm WH Dorman & Co in Stafford, among whose products were engines for the motor industry, as Chief Engineer and Designer. In a long career at Dormans, by the mid-1950s he had risen to the position of Chairman and Managing Director.

### Le Roy Soher

Le Roy Soher (1882- ).

Born in 1882 in New York City, affluent American Le Roy Soher first arrived in England in October 1904. Between 1909 and 1912 he was the manager of the Pleasure Car Department of Sidney Straker & Squire Ltd. in London. He made occasional hillclimb appearances in a Straker-Squire, but more often acted as the cars' entrant at Brooklands. He returned to the USA for the duration of the First World War.

### **Lionel Squire**



Lionel Robert Littler Squire (1867-1961).

Image c.1905

Born in London in 1867, the son of William Stevens Squire, a manufacturing chemist. Educated at Clifton College, Bristol, which Roy Fedden later attended. In 1887 Squire began a seven-year apprenticeship with Robert Johnson, London, and afterwards was involved in various chemical,

mechanical and civil engineering projects.

By the end of the 19<sup>th</sup> century he was working as a consulting engineer based in the same London offices as Sidney Straker, and associated with the Straker Steam Vehicle Co. He was a partner and director of Sydney Straker & Squire Ltd. when that took over as the marketing outlet for Straker-Squire vehicles in 1906, and continued his involvement with the company until 1914 when he left the board following personal bankruptcy.

During his time with Straker & Squire he ran the Straker-Squire 'CSB' in the 1907 Isle of Man Tourist Trophy race, but more often appeared as the cars' entrant at Brooklands race meetings.

Note: Lionel Squire was not related to Adrian Morgan Squire, builder of the Squire sports car in the mid-1930s

### Sidney Straker



Sidney Samuel Straker (1861-1929)

Image c.1905

Born in 1861 in Sydenham, SE London, he studied engineering at Kings College, London, from 1875 to 1877, and then had various engineering jobs, including three years working in Germany. In June 1891 he set up in London as a Consulting Engineer in practice on own account, taking on various commissions of mechanical, hydraulic, electrical and civil engineering.

He built a petrol car in 1895, and for three years produced designs for "light pleasure carriages". In 1899 he began looking at heavier vehicles, building a compound steam engine which, installed in a 3½ ton "Steam Trolley", was entered by Bayleys Ltd of London in public trials in Richmond and in Liverpool. In 1899 he also became a partner in the Bristol engineering firm of Joseph Brazil and Henry Holborow, with the company becoming Brazil, Holborow & Straker, Ltd.

Straker had also been consulting engineer to the London Steam Omnibus Company and to the Daimler Motor Co., Ltd., but in 1901 established the Straker Steam Vehicle Co., Ltd., and now focused entirely on producing and selling his own heavy transport vehicles with associate Lionel Squire. In 1906 the company name was changed Sidney Straker & Squire Ltd., and midway through 1907, when manufacture of Straker-Squire cars began in Bristol, a new company Brazil, Straker, & Co., Ltd was formed, and Brazil, Holborrow and Straker wound up.

Sidney Straker & Squire Ltd underwent a financial restructuring in 1913, becoming Straker-Squire (1913) Ltd. Post-war it took over manufacture of the cars when production was moved from Bristol to London and the Brazil, Straker firm was no longer involved. By the early 1920s, as the company encountered further financial difficulties and underwent more restructuring, Sidney Straker no longer had any involvement.

Sidney had been heavily involved with the Society of Motor Manufacturers and Traders (SMMT) from its formation in 1902, being President for three years 1904-07, and he played a significant role in establishing the annual SMMT Motor Show at Olympia. He continued to play an active part in SMMT activities into the late 1920s.

### **G O Thompson**

G.O. Thompson was manager of the Sidney Straker & Squire Ltd. pleasure car department from 1906 to May 1907. In October 1906, along with Sidney Straker and Lionel Squire, he was one of the drivers of a Straker-Squire 'CSB' on a 4000 mile road trial observed by the RAC. In May 1907 he was entered in a 'CSB' in the Fromes hillclimb, near Hereford.

### **Sydney Ware**

Sydney John Ware (1884-1925)

Born in Englishcombe, Bath in 1884.

Employed at Brazil, Straker, & Co at Fishponds c.1911. Designed the 'Ware' carburettor, which became the standard Straker-Squire production carburettor.

### PFC Williams

Philip Francis Cunningham Williams (1884-1958).

During the 1910s he lived in Bristol and was a director of Brazil, Straker, & Co. Ltd. In 1912-13 he competed in speed events at Shelsley Walsh; Weston Lane, Bath and Weymouth Sands. In 1943 he became Sir Philip, 2<sup>nd</sup> Baronet Williams of Bridehead, Dorset, Bridehead being the family estate.

#### **E Winstone**

A member of the 1914 Isle of Man Tourist Trophy team.

Possibly Edward Winstone (1893-1960).

Born in Kingwood, Bristol. In 1911 he was a motor fitter, and later worked in the Bristol Aeroplane Company Engine Department.

### **Dick Witchell**



Richard Sidney Witchell (1889-1975).

Dick Witchell was born in 1889, at Stoke Gifford, just to the north of Bristol, where his father was the tenant farmer at Bailey's Farm (the farmhouse is today Bailey's Court Inn in Bradley Stoke). He was educated at Clifton College, Bristol (1901-1906), where Roy Fedden was a few years ahead of him. By 1911 he had joined Fedden at Brazil, Straker, & Co. at Fishponds,

running the Experimental Department, and also taking over as the main Straker-Squire competition driver. Over the next three years he appeared in numerous speed events for Straker-Squire, raced frequently at Brooklands, also breaking speed records there, while his most outstanding performance was in the 1914 International Tourist Trophy race on the Isle of Man when he placed fourth.

During the First World War he initially joined the Royal Engineers, but in 1915 was commissioned into the Royal Flying Corps.

While he was at school at Clifton College he became great friends with Walter Bentley and, after the war, when "W.O." started up Bentley Motors in London, Witchell soon joined him, becoming Works Manager. In his autobiography Bentley said of him "Everybody respected Witchell, and there was never during all his time any labour trouble; he was an ideal man for the job, sound, steady and completely fair-minded." Following the demise of the original Bentley Motors firm in 1931, Witchell moved to the E.N.V. Engineering Company in north London, specialist gear manufacturers.

≈ ≈ ≈

The following team members at the 1914 Isle of Man Tourist Trophy race remain to be identified: Messrs. Turner, Warren, and Wiltshire.

## Appendix B - Royal Automobile Club International Touring Car Trial, 1908, June 8th to 27th.

Class D (Cars from 13 to 16 HP, RAC Rating) Number: D-21 Straker-Squire Shamrock 15.4 HP.

Entrant: S. Straker and Squire Ltd., Nelson Square, Blackfriars, London SE.

## **Specification**

Selling Price Complete: £365

Seating Capacity: 4

Wheel Base: 8 ft 10 in; Wheel Track: 3 ft 11 in; Distance of Dash to Back Axle: 5 ft 8 in

### **Engine**

No. of Cylinders: 4; Bore and Stroke: 79 x 90 mm [Capacity: 1764 cc; RAC HP: 15.4]

Lubrication: Ext. Pressure; Ignition: Accumulator & coil, High-tension magneto; Fuel Feed:Gravity

### Gearbox

No. of Speeds: 4

Speed ratios (Number of revolutions of engine to one revolution of road wheels)

1st 15.8; 2nd 6.9; 3rd 4.2; 4th 3.7

Direct Drive: 3; Type of Gear: Sliding; Power Transmission: Bevels

Clutch: Leather

Wheels: Wire; Detachable (Rudge Whitworth)

Tyres: Front: Palmer, Size 760x90, Plain tread. Rear: Palmer, Size 760x90, Plain tread

### Performance on Road

Day	Petrol	Climbs.	Minu	ites Occi	ıpied	Other	То	tal	Position in
	(gals.)	Time behind	Lubri- cation	Tyres	Other Stops	Penalties	Daily MinSec.	To Date MinSec	Class
		Fastest Car in Class.							
	4.4	MinSec.					110		4
1	14				4.0		14-0	04.0	4
2	4		3		10		17-0	31-0	4
3	4		1		20		25-0	56-0	4
4	10	12-3			12		34-3	90-8	4
5	10	6-11.6	2		1		19-11.6	109-14.6	3
6	10	2-20	2	2	2		20-20	129-34.6	3
7	6	2-11.8	7	8	28	41	92-11.8	221-46.4	3
8	8	2-21.8	3		264		277-21.8	499-8.2	3
9	6		2		245		253-0	752-8.2	3
10	8	1-23.6 2-46.8	2	5	4		23-10.4	775-18.6	3
11	6	1-0.6 3-16	2	2	48		62-16.6	837-35.2	3
12	6	0-52.2	3	5	1		15-52.2	853-27.4	3
13	6	2-25.8	2		145		155-25.8		3
Totals	98	36-53.2	29	24	780	41	1008	-53.2	

Day		Details
1	London to Nottingham	
2	to Newcastle	Near front wheel came off, 10 min.
3	to Glasgow	Cutting away dust cover, 20 min.
4	to Aberdeen	Flooded carburettor, 8 min. Filling radiator on road, 3 min. Engine stopped, 1 min.
5	to Inverness	Filling radiator on rank, 1 min.
6	to Pitlochry	Tyres, 4 min. Filling radiator on rank, 1 min. Clutch trouble, 1 min.
7	to Oban	Fitting new detachable wheel, 8 min. Various stoppages on hills, 27 min. Three passengers dropped, 30 min. Penalty for over maximum time, 11 min. Filling radiator on rank, 1 min.
8	to Glasgow	Carburettor choked, 19 min. Bevel pinion stripped, 244 min. Engine stopped changing speed, 1 min.
9	to Windermere	Broken front springs, 210 min. Adjusting clutch, 35 min.
10	to Windermere	Changing wire wheels, 5 min. Adjusting carburettor float, 3 min. Tightening fan belt, 1 min.
11	to Windermere	Pumping tyre, 2 min. Filling radiator on rank, 1 min. Broken differential cage, removing broken piece, 47 min.
12	to Church Stretton	Changing detachable wheel, 5 min. Filling radiator on rank, 1 min.
13	to Brooklands	Filling radiator on rank, 1 min. Engine stopped, 2 min. Differential trouble, 142 min.
14	Brooklands	Although arrived at Brooklands, was unable to race on the track, as handicap would not allow it to start until after the race was won and the time limit expired. In order to satisfy the Judges that it was capable of running on the track, allowed to go three times round at full speed.

**Reference**: International Touring Car Trial, 1908 – Official Report. Royal Automobile Club Collections (RAC 3/1/24)

## Appendix C - Royal Automobile Club International Tourist Trophy, Isle of Man, 1914, 10th to 11th June

No.3 Straker-Squire RS Witchell & G Brown (reg. no. AE3804), colour: blue

No.14 Straker-Squire FC Clement & F Preston (reg. no. AE4400), colour: blue

## **General Specification**

Engine.

No. of Cylinders: 4; Bore and Stroke: 93 x 120 mm; Capacity: 3261 cc.

Cooling: Pump circulation; Lubrication: Forced feed lubrication to all bearings; Ignition: Bosch

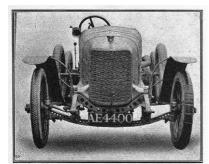
Carburettor: Ware; Fuel: Pratts

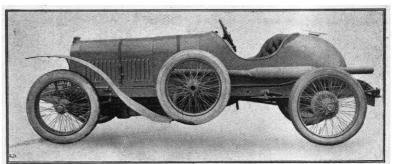
Gearbox: No. of speeds: 4; Final Drive: Bevel

Tyres: Dunlop, 820x120

Nominal Weight: 24 cwt.

Weights at Weighing-in: No.3, 25 cwt. 3 qr. 0 lbs. (2884 lbs.); No.14, 25 cwt. 2 qr. 0 lbs. (2856 lbs.)





\*Note: Both cars ran without mudguards during the race

## Race Data

	No.3 Strake	er-Squire RS	Witchell/G Brown	1	No.14 Strak	er-Squire	FC Clement/F Pre	eston
	Mountain	Lap	Cumulative		Mountain	Lap	Cumulative	
Lap	Road	Time	time	Pos	Road	Time	time	Pos.
	time*				time			
	m s.	m s.	h m s.		m s.	m s.	h m s.	
1	8 - 30 <sup>1</sup> / <sub>5</sub>	43 - 22	0 - 43 - 22	5	8 - 9	42 - 49	0 - 42 - 49	4
2	7 - 55 <sup>1</sup> / <sub>5</sub>	41 - 36	1 - 24 - 58	4	8 - 11 <sup>2</sup> / <sub>5</sub>	42 - 51	1 - 25 - 40	5
3	7 - 48 <sup>1</sup> / <sub>5</sub>	41 - 38	2 - 6 - 36	4	7 - 59 <sup>1</sup> / <sub>5</sub>	41 - 22	2 - 7 - 2	5
4	7 - 46 <sup>2</sup> / <sub>5</sub>	40 - 53	2 - 47 - 29	3	7 - 51 <sup>2</sup> / <sub>5</sub>	41 - 12	2 - 48 -14	5
5	7 - 42 <sup>1</sup> / <sub>5</sub>	40 - 41	3 - 28 - 10	3	9 - 56 <sup>2</sup> / <sub>5</sub>	58 - 09	3 - 46 - 23	7
6	7 - 41 <sup>1</sup> / <sub>5</sub>	41 - 40	4 - 9 - 50	4	7 - 38 <sup>2</sup> / <sub>5</sub>	45 - 46	4 - 32 - 9	7
7	7 - 42 <sup>1</sup> / <sub>5</sub>	42 - 34	4 - 52 - 24	4	9 - 16 <sup>4</sup> / <sub>5</sub>	45 - 11	5 - 17 - 20	7
8	8 - 15	41 - 33	5 - 33 - 57	5	9 - 47	62 - 05	6 - 19 - 25	10
9	7 - 34 <sup>2</sup> / <sub>5</sub>	45 - 50	6 - 19 - 47	4	7 - 40	67 - 58	7 - 27 - 23	10
10	7 - 31 <sup>1</sup> / <sub>5</sub>	39 - 50	6 - 59 - 37	=3			Retired	
11	7 - 32	39 - 54	7 - 39 - 31	4				
12	7 - 48 <sup>3</sup> / <sub>5</sub>	40 - 19	8 - 19 - 50	4				
13	9 - 27	60 - 45	9 - 20 - 35	5				
14	7 - 45	41 - 02	10 - 1 - 37	5				
15	7 - 40 <sup>2</sup> / <sub>5</sub>	40 - 22	10 - 41 - 59	5				
16	7 - 56	40 - 512/5	11 - 22 - 50 <sup>2</sup> / <sub>5</sub>	4				
Total	125 - 23 <sup>1</sup> / <sub>5</sub>							

Fastest race Lap: K Lee Guinness (Sunbeam) 37m 14s (lap 2) Fastest Minerva lap: C Riecken (Minerva) 38m 18s (lap13)

Fastest Straker-Squire laps: Witchell – 39m 50s (lap 10); Clement 41m 12s (lap 4)

#### Final result:

1 K Lee Guinness (Sunbeam) 10h 37m 49s

2 J Riecken (Minerva) 10h 57m 381/5s

3 L Molon (Minerva) 11h 22m 20s

4 RS Witchell (Straker-Squire) 11h 22m 50<sup>2</sup>/<sub>5</sub>s

5 J Porporato (Minerva) 11h 40m 44<sup>3</sup>/<sub>5</sub> s

## **Henry Edmunds Trophy**

\*Aggregate of 16 climbs of the Mountain Road

1 K Lee Guinness (Sunbeam) 1h 56m 46<sup>4</sup>/<sub>5</sub> s

2 J Riecken (Minerva) 2h 5m 23<sup>1</sup>/<sub>5</sub>s

3 RS Witchell (Straker-Squire) 2h 6m 364/5s

4 L Molon (Minerva) 2h 9m 144/5s

5 J Porporato (Minerva) 2h 18m 381/5s

Fastest time: A Lee Guinness, Sunbeam, 7m 31/5s, 55.38 mph

Fastest Straker-Squire time, Witchell 7m 31<sup>1</sup>/<sub>5</sub>s Fastest Straker-Squire time, Clement 7m 38<sup>2</sup>/<sub>5</sub>s Fastest Minerva time: C Reiken 7m 17<sup>4</sup>/<sub>5</sub>s

### References

Specifications from The Autocar Tourist Trophy Race supplement and the Auto Motor Journal. Race data from the Auto Motor Journal.

### Appendix D - Private Competitors

### **Brooklands**

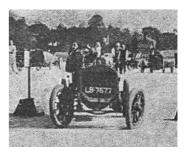
### 1909 ARV Garnett

Aubrey Richard Vivian Garnett (1887-1961).

Appeared in several events at Brooklands in 1909 in a Straker-Squire 15, registration LB7677 (RAC rating 18.8). [photo – May 1909]

A member of the Berkshire Automobile Club.

Note: Listed in 1911 census, as a "Partner in Motor Garage", living in Portsmouth.



### 1909 WH Milburn

Entered in several races at Brooklands in 1909 in a Straker-Squire 15 (RAC rating 18.8).

Possibly William Hudson Milburn (1891-1916), of Alnwick, Northumberland, a Cambridge University undergraduate [1911]



### 1909 JE Hollebone

Joseph Ernest Hollebone (1887 – 1970)

1909 Works manager of Rose & Hollebone Ltd, London, motor car repairers; raced a Straker Squire 15 at Brooklands in October. In following years raced a Diatto and Le Gui. Later regular Army career in RASC rising to rank of Brigadier.

#### 1909 JH Spottiswoode

John Roderick Charles Herbert-Spottiswoode (1882 – 1946)

Born Killarney, Ireland, in 1882 as John RC Herbert, in 1900 added Spottiswoode on succeeding his great-aunt Lady Scott-Spottiswoode.

An aviator. Raced a Straker-Squire 15 at Brooklands in October 1909.

### 1910 Gordon Webster

A Cambridge University undergraduate. Family home was in Wallingford, Berkshire. Entered in a couple of races at Brooklands in 1910 in a Straker-Squire 15 (RAC rating 18.8). Frederick Juffkins, mechanic to the Webster family, also drove the car in one Brooklands race.

### 1910-1914 WJ Jones

A member of the Middlesex County Automobile Club. Entered his Straker-Squire 15 in the RAC Associate Clubs' Gala Day meetings 1911-1913, and also in various Middlesex CAC club events. Pictured at Brooklands in 1912.



### 1911-1912 LW Cox

Leonard Walter Cox (1886-1986).

Sales manager for Rolls-Royce in their London showroom, having joined CS Rolls & Co. in 1905. Entered his Straker-Squire 15 in events at the RAC Associate Clubs' Gala Day meetings in 1911 & 1912. Pictured touring in Ventnor (Isle of Wight) in 1911.

After military service during the 1914/18 war (being awarded the MC in the 1918 birthday honours list) he returned to Rolls-Royce in London, later becoming Chief of Sales.



### 1913 GN Cadbury

George Norman Cadbury (1890 – 1980)

Entered several races at Brooklands in 1913 in a modified two-seater Straker-Squire 15 (2853cc, RAC rating 18.8). Won the Whitsun Private Competitors handicap (photo).

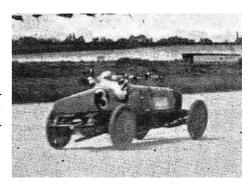
His father, also George, was part of the Cadbury chocolate family, however 'G.N.' was an engineer, and in 1913 was part owner and managing director of the Electro-Mechanical Brake Company (ENB) in West Bromwich.



### 1914 Arthur Williams

Entered several races at Brooklands in 1914 in a Straker-Squire. Driven by AN Appleford in one race at the June meeting (probably Walter Alexander Nelson Appleford).

From the photo (June 1914, when it was named "Nimph") the car appears to be the former factory racing Straker-Squire, although engine capacity was listed as 3054cc (in 1913 the factory car was 2853cc)



### **Speed Events**

### <u>1911-12 RS Morrison</u>

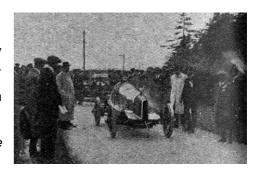
Reay Sutherland Morrison (1887-1919) was a partner with his older brother James in Morrison Bros., Automobile Engineers, in Edinburgh, agents for Straker-Squire cars. In 1911-12 he competed in Edinburgh & District MC trials and hillclimbs in a Straker-Squire 15, perhaps the one displayed on the Morrison Bros. stand at the Scottish Automobile Exhibition in Glasgow in January 1912 (photo right).



## 1913 Percy Smith

Percy Smith drove a single-seater Straker-Squire 15, entered by M Ross Browne, in the Clipstone Drive Speed Trials (nr. Mansfield, Notts) on 28 June 1913, finishing third in class. M Ross Browne & Co. were the Straker-Squire agents in Nottingham.

From the photograph it appears that he may have been using the factory racing car.



### Appendix E – Straker Squire '15' Competition Cars post-1918.

### Roy Fedden's special four-seater Straker-Squire 15

In August 1919 Roy Fedden, now no longer involved in producing Straker-Squire cars, drove his personal special-bodied four-seater Straker-Squire in a match race with a motor-cycle at the Weston-super-Mare Speed trials, winning the Hutchinson Cup.

In February 1921 he advertised this car for sale in a local Bristol newspaper (Western Daily Press), as follows:

"1914 Special Straker-Squire Competition Car; winner of Hutchinson Trophy, Weston speed trial, &c. Special light four-seater body, bosch ignition; electric light, self starter, two spare wheels; over £100 worth of spares, including hill-climbing back axle gears, complete set of springs. Licence paid for 1921." (No asking price was stated.)

### 1914 Tourist Trophy Straker-Squire.

In September 1922 Captain RG Cookson, of Mevagissey, the President of the Central Cornwall Motor Club, finished second overall on Formula in the club's open hillclimb at Grey Mare Hill near Bodmin Road. (Ref: Cornish Guardian)

### 1914 Tourist Trophy Straker-Squire 'AE3804'

An item in the October 1993 issue of Motor Sport magazine related that following the 1914-18 war naturalist Mortimer Batten owned the ex-Dick Witchell 1914 Tourist Trophy car for at least ten years, mentioning that: "During the war this car which Batten later used as his family hack in the Scottish Highlands was stolen, and found abandoned in a wood."

### The factory racing Straker-Squire

At some time in the period between the two World Wars the Factory competition car, driven by Roy Fedden, Harold Smallwood and Dick Witchell, and then by Arthur Williams in 1914, found its way to Australia. Nothing is known of its time in Australia until the remains were found in a scrapyard in Melbourne in 1952, as reported in the local newspaper:

'Vintage car enthusiasts from all over Australia wrote to Melbourne with offers to buy the 1908 Straker-Squire which was abandoned in Fitzroy [Melbourne, Victoria] last month. Members of Melbourne's Vintage Car Club searched for the car and finally found it in a wreckers' yard. Very little of it was left. The hand beaten aluminium body had been cut up for scrap and the engine and chassis had been dismantled. Mr George Brooks, of Adelaide, who has toured widely in his Straker Squire without mechanical trouble, asked a Melbourne friend to buy it for him "at any price." Mr Brooks said that the car was one of seven models still known to exist in the world. The car yielded £10 worth of scrap; it would have been worth £150 to vintage enthusiasts in Australia and probably more in America.'

The Herald 7<sup>th</sup> April 1952

These remains, along with the Buick engine which had been fitted at some point, had been covered with sheets of galvanised iron. The remnants of aluminium panels attached to the rear of the chassis suggested it was Fedden's Brooklands car, and Brooks contacted Roy Fedden who "was able to confirm in writing that this was indeed the car he had raced".

Australian Straker-Squire expert George Brooks kept all that remained of the car – the chassis, on rotten wheels, with both axles, the radiator, and parts of the steering gear - until 1994 when it was bought by Robin Hanauer and shipped back to the



UK. Hanauer began a lengthy rebuild in 2000, and with no original engines available, fitted a 1914 5.9 litre Cadillac unit and, rather than recreating the streamlined racing bodywork, fitted minimal engine panelling, similar to how it had first appeared at Brooklands. The work was completed by 2015, and the car registered BL1763.

<sup>&</sup>lt;sup>†</sup> The Automobile, August 2015, Back on the Road, Michael Ware.

*model is liste	ed as described in	the information so	ource for each ev	rent, so HP may refer to the o	catalogue HP (eg. 1	5) or the RAC rated HF	o (eg 18.8 for	the 15 HP i	model	)		
									Comp. no.		o/a	Class
Date	Venue	Organising Club	Event type	Event / Class	Driver	Entrant	Model*	Reg no.	Co No	CC	pos	pos Notes
						Sidney Straker &						non-stop run apart from 11 min on
13/16-Jun-06	Scotland	Scottish AC		Class 4 - £500 to £600	S Straker	Squire Ltd	25 hp		83		finishe	er day 2 to fit new fan belt
07.0		Automobile Club				0:1	40.1		40		D.10	
27-Sep-06	Isle of Man	of GB&I Automobile Club	Race	Tourist Trophy		Sidney Straker	12 hp		40		DNS	withdrawn several days before event
27 San 06	Isle of Man	of GB&I	Race	Tourist Trophy		LRL Squire	12 hp		41		DNS	withdrawn several days before event
27-3ep-00	ISIE OI WAII	OI CIDAI	Tiace	Open / Class F (500 to		LITE Squire	12110		71		DINO	withdrawin several days before event
22/25-May-07	Ireland	Irish AC	Reliability Trial		S Straker	Sidney Straker	25-30		46			4
				Class 4 (cars whose		orano, orano						
	Frome's Hill,	Herefordshire		cylinders D2N is 65 and		Sidney Straker &						Result on formula, 15th fastest in
3-May-07	Hereford	AC	Hillclimb	under 90	GO Thompson	Squire Ltd	25	LN????	71			16 class. Rating 74
				(TT) International Heavy			25-30hp					
30-May-07	Isle of Man	RAC	Race	Touring Car Trophy	LRL Squire	Sidney Straker	"CSB"	LN3453	1		DNF	ran out of fuel on final lap
				Class 5 - cars between								
25/29-Jun-07	Scotland	Scottish AC	Reliability Trial	£500&£600, 25 to 30 hp	WT Lord	LRL Squire	25 hp	LN2978?	55	4942	finishe	er non-stop run
				Horsley Plate, cars cylinder								
				dimension 60 to under 85.								
6- Jul-07	Brooklands	BARC	Race	weight about 3000lbs	WT Lord	Sidney Straker	25hp "CSB"	,			2	
0-341-07	DIOONIAIIUS	BAITO	Tiace	Hollick Selling Plate,	VV I LOIG	Sidiley Straker	2311p 03b					
				weight 2600lbs for cars of								
				cylindrical dimension 75 or								
				under, plus 3.465lbs for		S Straker & Squire						
20-Jul-07	Brooklands	BARC	race	every additional 0.1	WT Lord	Ltd	25hp				starte	d not in first 3.
	England &											
5/8-Jun-08	Scotland	MCC	Reliability Trial	London-Edinburgh-London 2000 mile International	AJ Brown		25-30 hp	LN9136	105		finishe	er Gold award.
				Touring Car Trial								
				(incorporates Scottish								
	England &			Trial)/ <i>D</i> (13 - 16 hp RAC		S Straker & Squire	Shamrock					
11/27-Jun-08		RAC	Reliability Trial	, , ,	Roy Fedden	Ltd	15.4hp		21	1764		3 Special 15.4hp engine
11/2/ 0011 00	Ocoliana	TIAO	riciability iriai	1 Official)	rioy i caacii	Sidney Straker &	Shamrock		21	1704		o opecial 10.4tip engine
15/19-Jun-08	Scotland	Scottish AC	Reliability Trial	Class C (£250-£325)	Roy Fedden	Squire Ltd	12hp		21	1764		0
				4th Allcomers handicap,	.,		18.8hp					
1-Aug-08	Brooklands	BARC	race	3rd Heat	Roy Fedden	S Straker	Shamrock				DNS	excluded - number plate too small
				5th Allcomers handicap,								
3-Oct-08	Brooklands	BARC	Race	2nd heat`	Roy Fedden	S Straker	18.8hp				3	
		D. D. D. C.	_	5th Allcomers handicap,		0.01	10.01				_	
3-Oct-08	Brooklands	BARC	Race	Final Easter Junior handicap -	Roy Fedden	S Straker	18.8hp 18.5 (1909				2	
				cars under 25hp RAC			14/16hp					Standard chassis, racing seats &
10-Δnr-00	Brooklands	BARC	Race	rating	Roy Fedden	LRL Squire	model)		5		1	aluminium body
10 Api-03	Dioditianus	DAILO	1 1400	ramy	110y I COUCH	Li iL Oquile	18.5 (1909		5		- 1	aummum body
							14/16hp					3 officially timed runs, standing start,
10-Apr-09	Brooklands	BARC		Timed Trial - Test Hill	Roy Fedden	LRL Squire	model)		5		Cer	rtificate best 13.284s, 18.079mph
	Brooklands	BARC	Race	Obstacle race	ARV Garnett	ARV Garnett	18.7hp				2	
				Touring Car Reliability								non-stop run, no marks lost. Car from
May/1-Jun-09	Ireland	Irish AC	Reliability Trial	Trial/Class D	Roy Fedden	Sidney Straker	15hp		29	fi	nisher	4 stock.

model is list	ed as described in	The information so	l	ent, so HP may refer to the	datalogue III (eg. 16	or the rate rate are	1 (09 10.0 10	1 110 10 111	l loudi,				I
Date	Venue	Organising Club	Event type	Event / Class	Driver	Entrant	Model*	Reg no.	Comp. no.	CC	o/a	Class	Notes
Date	venue	Organising Club	Eveni type	Whitsun Junior Private	Driver	Entrant	iviodei	neg no.	ں د	CC	pos	pos	Notes
				Competitors handicap									
29-May-09	Brooklands	BARC	Race	(25hp & under)	ARV Garnett	ARV Garnett	17.9			st	arted		not in 1st 3
20	D. Coaa.	2,0	11400	Driving Competition - Test	71117 Garriott	7 II IV Gamot					.a. toa		1.00 1.1 1.00 0
29-May-09	Brooklands	BARC	Driving Test	Hill	ARV Garnett	ARV Garnett	17.9	LB7677		st	arted		not in 1st 3
,		Derbyshire &											
	Hazlewood,	North											
29-May-09	Duffield	Staffordshire AC	Hillclimb		RS Clifford, Jr.		12-14hp				8		on formula
				Scottish Trial/Class D									non-stop run, no marks lost. Car fro
4/19-Jun-09		Scottish AC	Reliability Trial		Roy Fedden		15hp	AE?589	33		nisher		stock.
30-Jun-09	Brooklands	BARC	Race	Summer handicap	WH Milburn	WH Milburn	18.8		6	st	arted		
			_	June Private Competitors									
30-Jun-09	Brooklands	BARC Berkshire AC.	Race	handicap	WH Milburn	WH Milburn	18.8						
		,											
40 1 1 00	D I I I .	Kent AC, West	D	T D	4 D) / O 11	Destables 40	40.0						Balan Balakin AO tanan (O ann)
10-Jul-09	Brooklands Shelsley Walsh	Surrey AC Midland AC	Race Hillclimb	Team Race Open/ Presidents Cup	ARV Garnett Roy Fedden	Berkshire AC Le Roy Soher	18.8 14-16hp				1	0	Relay. Berkshire AC team (2 cars) on Formula, 5th on time
	Brooklands	BARC		August Junior handicap	Roy Fedden	Le Roy Soher	18.8		4		2	9	on Formula, 5th on time
31-301-09	DIOOKIATIUS	DANG	nace	July Senior Private	noy redden	Le noy Sorier	10.0		4				
31_ []_09	Brooklands	BARC	Race	Competitors handicap	WH Milburn	WH Milburn	18.8				DNS		
01 001 00	Dioonanas	DAITO	riacc	July Junior Private	VVIIIWIIIWIII	VVIIIVIIIDUIII	10.0				DIVO		
31-Jul-09	Brooklands	BARC	Race	Competitors Handicap	ARV Garnett	ARV Garnett	18.8				6		
	Brooklands	BARC	Race	August Senior Handicap	WH Milburn	WH Milburn	18.8				DNS		
				2nd race for the O'Gorman									
2-Aug-09	Brooklands	BARC	Race	Trophy	Roy Fedden	Le Roy Soher	18.8				3		
													failed to leave the line "the magneto
													timing being upset by something
	Brooklands	BARC	Race	October Junior Handicap	JH Spottiswoode		18.8				etired		shearing as he put the clutch in"
6-Oct-09	Brooklands	BARC	Race	October Junior Handicap	JE Hollebone		18.8			St	arted		
			_	Autumn Junior Private									
	Brooklands	BARC	Race	Competitors Handicap	JH Spottiswoode	L - D - O - I	18.8			Fin	ished		
28-Mar-10	Brooklands	BARC	Race	March handicap	Roy Fedden	Le Roy Soher	18.8				3		
													"broke a valve just at the moment
28-Mar-10	Brooklands	BARC	Race	1st 21 Rating, handicap	Roy Fedden	Le Roy Soher	18.8			г	ONF?		when a win seemed assured" Autoc
20-IVIAI-10	Dioonanus	DAITO	riace	3rd 21-Rating Race	noy reducin	Le Hoy Sollei	10.0			-	) NI :		When a will seemed assured. Autoc
28-May-10	Brooklands	BARC	Race	(Handicap)	Roy Fedden	Le Roy Soher	18.8		2		1		
	Brooklands	BARC	Race	May handicap	Roy Fedden	Le Roy Soher	18.8		-		4		
	Brooklands	BARC	Race	Whitsun handicap	Roy Fedden	Le Roy Soher	18.8				5		
,		Oxford/Camb.			,	Cambridge					-		
25-Jun-10	Brooklands	Universities	Race	Large cars	Gordon Webster	University	18.8				2		Inter-university meeting
		Oxford/Camb.		-		, ·							, ,
25-Jun-10	Brooklands	Universities	Race	Large cars	R Yerburgh	Oxford University	18.8				DNS		Inter-university meeting
				Four or six cylinder Touring									
25-Jun-10	Saltburn Sands	Yorkshire AC	Speed Trials	Cars	J Coote		16hp				2		
			Speed Judging										
9-Jul-10	Middlesex	Middlesex AC	Trial	Newman Trophy	WJ Jones		12-14hp				1		10 mile course

	described in t					Í							
									Comp. no.			Class	
Date Venu	ue	Organising Club Leicestershire	Event type	Event / Class Hartropp Cup/Class B, car	Driver	Entrant	Model*	Reg no.	ÖΞ	CC	pos	pos	Notes
Kettl	leby Hill,	AC & Leicester		with 4 cylinders, not		Derbyshire & North							
16-Jul-10 Melte			Hillclimb	exceeding 20hp	Le Roy Soher	Staffs club	15hp					3	3rd on formula (but not 3rd on tim
23-Jul-10 Kent			Fuel Consumpti		R Goose	Otano otab	15				1		29 mile route
23-Jul-10 Kent			Fuel Consumpti		H de B Crawshay		12-14				5		29 mile route
1-Aug-10 Broo		BARC	Race	August 76 mph handicap	F Juffkins	Gordon Webster	18.8				started		not in 1st three
1 7 tag 10 Dioo	ortiariao	D/ II IO	11400	August Private Competitors		GOIGOII WODOIGI	10.0				otartoa		THE THE CHIECO
1-Aug-10 Broo	oklands	BARC	Race	Handicap	Gordon Webster		18.8				started		not in 1st three
1-Aug-10 Broo		BARC	Race	August 50 mph handicap	Gordon Webster		18.8				dns		moved to 76mph handicap
17-Apr-11 Broo		BARC	Race	4th 100mph handicap	HF Smallwood	Le Roy Soher	18.8		4		started		
17-Apr-11 Broo		BARC	Race	Easter Sprint, handicap	HF Smallwood	Le Roy Soher	18.8		5		started		
0-May-11 Broo	oklands	BARC	Race	5th 100mph handicap	HF Smallwood	Le Roy Soher	18.8				DNF		accident
0-May-11 Broo	oklands	BARC	Race	May Sprint	HF Smallwood	Le Roy Soher	18.8				DNS		
		Edinburgh											
3-May-11 Scot	tland	&DMC	Reliability Trial	Cars	RS Morrison		15					1	car & m/c trial, 3 cars
5-Jun-11 Broo	oklands	BARC	Race	First Senior Long Handicap	HF Smallwood	Le Roy Soher	18.8				3		
				First Senior Short									
5-Jun-11 Broo		BARC	Race	Handicap	HF Smallwood	Le Roy Soher	18.8				2		
5-Jun-11 Broo	oklands	BARC	Race	Whitsun Sprint handicap	HF Smallwood	Le Roy Soher	18.8				started		
													11th on time, 8th on Formula. 4-
0-Jun-11 Shel			Hillclimb	Open event	Roy Fedden	Le Roy Soher	15hp		7			11	seater
29-Jul-11 Broo			Race	Declaration handicap	LW Cox		18.8hp				entry		
29-Jul-11 Broo		RAC	Race	Inter-Club Relay	WJ Jones	Middlesex AC	18.8hp				started		2-car club team
7-Aug-11 Broo		BARC	Race	100mph Short Handicap	RS Witchell	Le Roy Soher	20.1				started		not in 1st 3
7-Aug-11 Broo			Race	100mph Long Handicap	RS Witchell	Le Roy Soher	20.1				4		
7-Aug-11 Broo		BARC	Race	August Sprint handicap		Le Roy Soher	20.1				DNS		
		Leicestershire											
2-Sep-11 Bead		AC	Hillclimb	Du Pre Cup	EP Maltby		15				10		10th on index, 7th fastest time.
-	nmel Bridge,			Scottish Motor Trade		Morrison Bros.,							
3-Sep-11 Pertl			Hillclimb	Association class		Edinburgh	15					11	on formula
		Edinburgh										_	
8-Oct-11 Farm	m, Linlithgow	&DMC	Hillclimb	Handicap car class Brooklands/ RAC 21HP	RS Morrison		15					3	
50.445		D.4.D.O.	-		DO 1471 1 11		00.40			0050			
25-Oct-11 Broo	oklands	BARC	Records	Flying Mile Brooklands/ RAC 21HP	RS Witchell		20.16			3053	96.6	/mph	slighly bored out engine
5 O . 11 D	al dans da	DADO	December		DO Mitale ell		00.40			0050	05.5	4	all alabate have all and a section
25-Oct-11 Broo	okianas	BARC	Records	Flying Km Four-seated cars on	RS Witchell		20.16			3053	95.5	# mpn	slighly bored out engine
		Edinburgh		Formula, engines not									
1 1 10 0		&DMC	Lillaliash	exceeding 3100cc	RS Morrison		1 Ch.					2	
1-Jun-12 Sout	та нііі	&DIVIC	Hillclimb	Club Members, scratch,	RS Morrison		15hp						
		Ediphurah		engines not exceeding									
1-Jun-12 Sout		Edinburgh &DMC	Hillclimb	3100cc	RS Morrison		15hp					4	
1-Juri- 12 50Ut		Edinburgh	HIIICIIIID	310000	no Mollison		quei	+				4	
1-Jun-12 Sout		&DMC	Hillclimb	Scratch, unlimited capacity	DC Marrican		15hp					8	
1-Juli-12 50Ut	ud IIII	αDIVIC	THICHHID	эстакті, иншиней сараспу	no iviornisori		ionp	1				8	
1 lun 10 M-	mouth Cords	Doroot AC	Coood Trials	All comers bandioon	RS Witchell							4	2rd footoot time
1-Jun-12 Wey		Herts County	Speed Trials	All comers handicap 3 - over 16hp & up to 25	no witchell		15hp 2					1	3rd fastest time 3rd on Formula, fastest in class
0 1 10 4 - 1 -		,	Lillaliash	, ,	DC Witchell			A E 0 7 4 4	20			_	*
8-Jun-12 Asto	on HIII	AC	Hillclimb	hp	RS Witchell		seater	AE2741	30		3	3	time

									Comp. no.		o/a	Class
Date	Venue	Organising Club	Event type	Event / Class	Driver	Entrant	Model*	Reg no.	Co	CC	pos	
												open 4 seater. 6th on formula, 8th
22-Jun-12	Shelsley Walsh	Midland AC	Hillclimb	Presidents Cup	Roy Fedden		15	AE2741		2853		6 time
00 1 40	0					D :	4-	450744				other team drivers RS Witchell &
22-Jun-12	Shelsley Walsh	Midland AC Bristol &	Hillclimb	Team event	Roy Fedden	Bristol & Glos AC	15	AE2741				3 PFC Williams
		Gloucester AC										
29. lun.12	Weston, Bath	& Somerset AC	Hillclimh	C- 4 cylinder cars	RS Witchell		15					4 on formula. 5th in class on time
23-Juli-12	Weston, Datin	Bristol &	TIIICIITID	0-4 cylinder cars	TIO WILCITEII		13					4 on formula, sur in class on time
		Gloucester AC										
29-Jun-12	Weston, Bath	& Somerset AC	Hillclimb	C- 4 cylinder cars	Roy Fedden		15					7 on formula, 4th in class on time
	,	Bristol &		,	,							
		Gloucester AC										
29-Jun-12	Weston, Bath	& Somerset AC	Hillclimb	C- 4 cylinder cars	PFC Williams		15					9 on formula, 10th in class on time
				M - touring cars not								
				exceeding 2950cc. CP								
6-Jul-12	Saltburn sands	Yorkshire AC	Speed Trials	Hare Cup, Saltburn UDC cup. R -	RS Witchell		15hp			2854	1	
				Chassis price not								
6 Jul 10	Saltburn sands	Yorkshire AC	Speed Trials	exceeding £350	RS Witchell		15hp				1	
0-Jul-12	Sailbum sanus	TORSTILL AC	Speed mais	S - RAC Associates.	no witchell		тэпр				- 1	
6-Jul-12	Saltburn sands	Yorkshire AC	Speed Trials	handicap	RS Witchell		15hp				?	
	Clipstone Drive		Speed Trials	Open - flying kilometre	RS Witchell		15hp					3 3rd on time, 8th on handicap
		- Total grammer		Standard Car Race (100			10176					disqualified before start, fiited with
16-Jul-12	Brooklands	RAC	Race	laps, 277 miles)	FC Clement	Roy Fedden			8	2851	DSQ	higher gear than the standard mod
												at the middle S bend, hit bank,
												buckled wheel & punctured back t
		SWAC/Cardiff		6 - bore of 4-cyl cars not								finished on a flat. Fastest time in
	Caerphilly	MC SWAC/Cardiff	Hillclimb	exceeding 91mm 6 - bore of 4-cyl cars not	RS Witchell		15hp	AE2741(?	')	2853		2 class, 2nd on formula
	Rest Bay,	MC	Canad Trials	exceeding 91mm	RS Witchell		4 Ch					4
20-Jul- 12	Porthcawl	MC	Speed Trials	Skilful Driving Race &	RS WITCHEII		15hp					1 only runner in class
27-Jul-12	Brooklands	RAC	Race	Hillclimb	LW Cox		18.8hp				3	
	Brooklands	RAC	Race	Inter Club Relay	WJ Jones	Middlesex AC	18.8		23M		4	
							1010				-	4 car team, standard cars with tou
27-Jul-12	Brooklands	RAC	Hillclimb	Inter Club team hillclimb	WJ Jones	Middlesex AC	18.8		23M		3	bodies
												fastest time in hillclimb (near Kirkt
7/28-Jul-12	Lake District	Lancashire AC	Reliability Trial				15hp					Lonsdale)
	Greenhow,											1st on Formula. Special 4-seater
10-Aug-12	Pateley Bridge	Yorkshire AC	Hillclimb	A - Open	RS Witchell		15hp		27	2854	1	1 body
	Greenhow,			B - Yorkshire club	DO W. 1		4.51			005:		
10-Aug-12	Pateley Bridge	Yorkshire AC	Hillclimb	members	RS Witchell		15hp		27	2854		1 1st on Formula
	Beacon Hill	Leicestershire AC				1	1		1			

									Comp. no.		o/a	Cla	SS
Date	Venue	Organising Club	Event type	Event / Class	Driver	Entrant	Model*	Reg no.	S	CC	pos		os Notes
			_	9th 100mph Short									
28-Sep-12	Brooklands	BARC	Race	Handicap September Sprint	RS Witchell		18.8 hp				DNS		
28-Sen-12	Brooklands	BARC	Race	Handicap	RS Witchell		18.8 hp				DNS		
.0 OOP 12	Dicontando	B/ II IO	11400	Папагар	TIO WILDION		10.0 11p				5.40		would have finished 2nd but did a
28-Sep-12	Brooklands	BARC	Race	4th O'Gorman Trophy	RS Witchell	RS Witchell	18.8 hp			2853	3		extra lap
				Brooklands/ Class D ss 10								_	
28-Sep-12	Brooklands	BARC	Records	laps Brooklands/ Class D 1/2	RS Witchell						87.9	95 mp	oh set during O'Gorman Trophy race
6-Nov-12	Brooklands		Records	mile (fs)	RS Witchell						96.6	62 mr	nh
0 1407 12	Dioonanas		riccords	Brooklands/ Class D 1 mile							30.0	02 111	Pil
6-Nov-12	Brooklands		Records	(fs)	RS Witchell						94.9	94 m	ph
				Brooklands/ Class D 1 Km									
6-Nov-12	Brooklands		Records	(fs) Brooklands/ Class D ss 10	RS Witchell						96.5	50 mp	failed to improve on his existing
6-Nov-12	Brooklands		Records	laps	RS Witchell							f.	ail record. One lap at 94.41mph.
0-140V-12	DIOORIATIOS	Derbyshire &	riecorus	ιαρς	110 WILCHEII							10	an record. One rap at 34.41mpn.
	Hazlewood,	North											
23-Oct-12	Duffield	Staffordshire AC	Hillclimb		EJ Bolton		15						3 on Formula
			_	Easter Private Competitors									
24-Mar-13	Brooklands	BARC	Race	Handicap 10th 100mph Short	GN Cadbury		18.8			2853	started	d	
24_Mar_13	Brooklands	BARC	Race	Handicap	RS Witchell	LRL Squire	18.8			2853	etarto	hd	probably 5th or 6th
Z+ Mai 10	Dioonanas	BAITO	riacc	9th 100mph Long	TIO VVIICINCII	Lite oquire	10.0			2000	Starte	,u	probably stri or stri
24-Mar-13	Brooklands	BARC	Race	Handicap	RS Witchell	LRL Squire	18.8			2853	started	ed	probably 6th
				10th 70mph Short									
		BARC	Race	Handicap	GN Cadbury		18.8			2853	started	d	dilination Order Francis
3-May-13	Waddington Fells	Lancashire AC	Hillclimb	B - Closed, two-seaters Whitsun Private	JH Brereton		15hp						1 closed class. 2nd on Formula
12-May-13	Brooklands	BARC	Race	Competitors handicap	GN Cadbury	GN Cadbury	18.8		14	2853	1		fitted with a racing camshaft
ay	Dicontanto	27.11.0	. 1400	11th 100mph short	an Caasary	Ciri Gadadai y	10.0			2000			mice will a racing camenan
12-May-13	Brooklands	BARC	Race	handicap	RS Witchell	LRL Squire	18.8			2853	3		
			_	10th 100mph long									
	Brooklands Brooklands	BARC BARC	Race Race	handicap 9th 70mph long handicap	RS Witchell GN Cadbury	LRL Squire	18.8 18.8		5	2853	1 started	-1	
12-May-13	Brookianos	BARC	Hace	9th 70mph long handicap	GN Cadbury	GN Cadbury	18.8			2853	started	ea	
12-May-13	Brooklands	BARC	Race	11th 70mph short handicap	GN Cadbury	GN Cadbury	18.8			2853	started	ed	
2-May-13	Brooklands	BARC	Race	Whitsun Sprint Handicap	RS Witchell	LRL Squire	18.8				DNS		race cancelled, rain
12-May-13		BARC	Race	100mph Benzole handicap	RS Witchell	LRL Squire	18.8				DNS		race cancelled, rain
		Belfast Motor	LPHARAL	Diata O	E I I and all a soul		40/40						
24-May-13	Craigantlet	Traders Belfast Motor	Hillclimb	Private Owners class	E Uprichard		12/16hp						11 on index
24 May 12	Craigantlet	Traders	Hillclimb	Open event	J Spencer		15hp					١.	12 on index

*model is liste	ed as described in	the information so	ource for each ev	rent, so HP may refer to the	catalogue HP (eg. 15	) or the RAC rated HI	P (ea 18.8 for	the 15 HP	model)	)			
	2 22 22 22 23 23 24 24 24 24 24 24 24 24 24 24 24 24 24			2 3, 22 1 3 3 3 7 5 5 1 6 1 10		,	,-5 :0:0:01						
									Comp. no.		o/a	Class	
Date	Venue	Organising Club	Event type	Event / Class	Driver	Entrant	Model*	Rea no.	Son o	CC	pos		Notes
Date	Venue	Organising Olab	Event type	EVERT OIGSS	WJ Jones & EJ	Littiant	IVIOGCI	ricg no.	ے ن	00	pos	pos	140103
31-May-13	Brooklands	RAC	Hillclimb	Team Hillclimb	Harrison	Middlesex AC	18.8					5	4 car team, cars with touring bodies
,					WJ Jones & EJ								,
31-May-13	Brooklands	RAC	Race	Team Relay	Harrison	Middlesex AC	18.8					3	2 car team, cars with touring bodies
6-Jun-13	Weymouth Sands	Dorset AC	Speed Trials	Dorset AC handicap	PFC Williams								3rd in 1st round heat
6-Jun-13	Weymouth Sands	Dorset AC	Speed Trials	Inter County races	PFC Williams	Dorset AC							won qualifying race
6-Jun-13	Weymouth Sands	Dorset AC	Speed Trials	Open handicap	LRL Squire						3		3rd on handicap (2nd fastest time)
	Lake District		Reliability Trial				15hp						non-stop run
				Private Competitors									
21-Jun-13	Brooklands	BARC	Race	handicap	GN Cadbury		18.8			2853	?		
01 lun 10	Brooklands	BARC	Race	11th 100mph Long	RS Witchell	LRL Squire	18.8			2853	otorto	J	
	Brooklands	BARC	Race	1st 75mph Long handicap	GN Cadbury	LnL Squire	18.8			2853	started		
21-Juli-13	Biookianus	BANC	nace	12th 100mph Short	GIV Caubury		10.0			2000	Startet	,	
21-Jun-13	Brooklands	BARC	Race	handicap	RS Witchell	LRL Squire	18.8			2853	started	d	
21-Jun-13	Brooklands	BARC	Race	June sprint handicap	RS Witchell	LRL Squire	18.8			2853	started	t	
	Brooklands	BARC	Race	100mph Benzol handicap	RS Witchell	LRL Squire	18.8			2853	started	t	
	Rest Bay,	SWAC/Cardiff		9 - Cars exceeding 80mm									
21-Jun-13	Porthcawl	MC	Speed Trials	bore (Closed) 3 - Any car, members of	ER Insole	ER Insole	15hp					1	
				Notts, Lincs, Derby, N									
				Staffs & Leics clubs, flying									3rd on time & 3rd on handicap. Single
28. lun.13	Clipstone Drive	Nottingham AC	Speed Trials	KM	Percy Smith	M Ross Browne	15hp					3	seater. Was this the works car?
	Saltburn sands	Yorkshire AC	Speed Trials	Amateur Handicap	H Hemingway	WITIO33 DIOWIC	15hp			2853		- 0	Scator. Was this the works car:
0 00. 10	Canadin Canad	1011011110710	opoca maio	Q - Open - Racing cars up	gray					2000			
5-Jul-13	Saltburn sands	Yorkshire AC	Speed Trials	to 3450cc	RS Witchell	RS Witchell	15hp			2853		1	
				Q - Open - Racing cars up									
5-Jul-13	Saltburn sands	Yorkshire AC	Speed Trials	to 3450cc	R Wilkie		15hp					4	
<b>5</b> 1 1 40	0 111		0 17:1	R - Open - Racing cars	DO 147: 1 11	DO 14/11 1 11	4.51			0050			
5-Jul-13	Saltburn sands	Yorkshire AC	Speed Trials	unlimited capacity 12th 100mph Long	RS Witchell	RS Witchell	15hp			2853		4	new 5 inches narrower aluminium
4-Aug-13	Brooklands	BARC	Race	handicap - heat 1	RS Witchell	LRL Squire	18.8hp	A(F?)K1?	7	2853	1		body
+ Aug 10	Dioditianas	5, 10	11400	12th 100mph Long	TIO VVILOTICII	Er iE Oquiro	10.01p	, (( : )(X ! :	-	2000	- '		suffered a cracked sparking plug
4-Aug-13	Brooklands	BARC	Race	handicap - final	RS Witchell	LRL Squire	18.8hp			2853	started	d	insulator
				13th 100mph Short		·	·						
	Brooklands	BARC	Race	handicap	RS Witchell	LRL Squire	18.8hp				started		
4-Aug-13	Brooklands	BARC	Race	August Sprint handicap	RS Witchell	LRL Squire	18.8hp			2853	started	t	
5 Con 10	Possiara Strand	Irish AC	Speed Trials	Open - C - 10 to 20 HP	RS Witchell	Messrs Spence & Johnson	15hp	AEK14?				DNG	car not ready in time
5-Sep-13	Rosslare Strand	IIISII AU	Speed Itials	Goff Perpetual Challenge	no Wilchell	JUHISUH	15hp	AEN14!				פאום	car not ready in time
				Cup, Flying Mile, on		Messrs Spence &							
6-Sep-13	Rosslare Strand	Irish AC	Speed Trials	handicap	RS Witchell	Johnson	15hp	AEK14?				1=	single-seater
	Pateley Bridge	Yorkshire AC	Hillclimb	Open	RS Witchell		15hp		5	2854			sports open body. Result on formula

*model is liste	ed as described in	n the information so	ource for each ev	rent, so HP may refer to the	catalogue HP (eg. 15	) or the RAC rated HF	P (eg 18.8 for	the 15 HP	model	)		
Date	Venue	Organising Club	Event type	Event / Class	Driver	Entrant	Model*	Reg no.	Сотр. по.	CC		ass pos Notes
_ = ====		organien g orac		14th 100mph Short				ineg men			1001	
4-Oct-13	Brooklands	BARC	Race	Handicap 13th 100mph Long	RS Witchell	LRL Squire	18.8hp			2853	started	
4-Oct-13	Brooklands	BARC	Race	Handicap	RS Witchell	LRL Squire	18.8hp			2853	2	
												best consistent performance in
	Brooklands	BARC	Races	Pratts Points Prize	RS Witchell	LRL Squire	18.8hp			2853	1	100mph long handicap races in 1913
	Weston-super-											
4-Oct-13	Mare	Somerset AC	Races	Open/8 under 26 HP	ARH Fedden	ARH Fedden	15		10			dns
			_	Brooklands/Class D 1/2								
9-Oct-13	Brooklands		Records	mile (fs)	RS Witchell	LRL Squire				2853	98.74 r	nph lowered its existing record
0.0.140				Brooklands/Class D 1 Km	DO 14/11   11					0050	07.04	
9-Oct-13	Brooklands		Records	(fs) Brooklands/Class D 1 mile	RS Witchell	LRL Squire		+		2853	97.94 r	nph lowered its existing record
0 Oct 12	Brooklands		Records	(fs)	RS Witchell	LRL Squire				2853	06.20	nph lowered its existing record
9-001-13	Brooklands		Records	Brooklands/Class D 10	RS WITCHEII	LRL Squire				2853	96.391	nph lowered its existing record
0 Oot 12	Brooklands		Records	laps (ss)	RS Witchell	LRL Squire				2853	01 72 7	mph lowered its existing record
9-001-13	DIOOKIATIUS		necoras	iaps (ss)	no witchell	LnL Squire				2000	91./31	new record, Attempt at longer
				Brooklands/Class D 50								didtance records ended after 22 laps
13-Oct-13	Brooklands		Records	miles (ss)	RS Witchell	LRL Squire				2853	92.02 r	mph when back tyres expired
10-001-10	DIOONIAIIUS		riecorus	Times (83)	TIO WILCHEII	LITE Squire				2000	32.02 1	lowered existing record. Attempt at
												longer distance records ended in 18th
				Brooklands/Class D 10								lap owing to a leak in the water tank
16-Oct-13	Brooklands		Records	laps (ss)	RS Witchell	LRL Squire				2853	92 21 r	mph caused by excessive vibration
10 001 10	Brooklarido		11000100	Private Competitors	TIO WITOTION	Eric Oquiro				2000	02.211	inpit dadded by excessive vibration
13-Apr-14	Brooklands	BARC	Race	handicap	Arthur Williams		20.1hp			3054	sta	rted not in first 5
	Brooklands	BARC	Race	Easter Sprint, Handicap	Arthur Williams		20.1hp			3054		
9-May-14		Middlesex AC	Trial	Speed judging trial	WJ Jones		· ·				1=	
9-May-14		Middlesex AC	Trial	Speed judging trial	H Grose						1=	
16-May-14	North Wales	Manchester AC	Reliability Trial		JF Scott		15-20 hp				sta	rted
				Private competitors								
	Brooklands	BARC	Race	handicap - 1st Heat	A Williams		20.1				DNS	broke valve in practice
	Brooklands	BARC	Race	5th 75mph Short Handicap			20.1				DNS	
	Brooklands	BARC	Race	5th 75mph Long Handicap	A Williams		20.1				DNS	
	Brooklands	BARC	Race		A Williams		20.1				DNS	
10/11-Jun-14	Isle of Man	RAC	Race	Tourist Trophy	RS Witchell		15hp	AE3804	3		4	Blue. Riding mechanic G Brown
												Blue. Riding mechanic F Preston.
			_									retired 2nd day lap 10, Ramsey,
10/11-Jun-14	Isle of Man	RAC	Race	Tourist Trophy	FC Clement		15hp	AE4400	14		DNF	broken piston.
40/44 144	late of Man	DAG	L PH - P b	Tourist Trophy (Henry	DO Milata II		4.51	A = 000 4			0	ENGRADA AND TE
10/11-Jun-14	Handpost Hill	RAC Middlesex AC	Hillclimb Hillclimb	Edmunds Trophy0  Ladies Class	RS Witchell Mrs H Grose		15hp 18.8hp	AE3804	3		3	hillclimbs within TT.
13-Jun-14	Hanopost Hill	Middlesex AC	HIIICIIIID	Ladies Class	Mrs H Grose		18.8np					1st in class on Formula (Cardiff
		SWAC/Cardiff		6 - Open, 4-cyl cars, bore								Exchange Cup). Burst tyre,
25-Jun-14	Coorphilly	MC	Hillclimb	not exceeding 102mm	RS Witchell	Straker-Squire Ltd	15/20 hp					2 completed climb on rim.
25-Jun-14	Caerprilliy	SWAC/Cardiff	HIIICIIIID	not exceeding 102mm	no witchell	Suaker-Squire Ltd	13/20110	+				z completed climb on nin.
25-Jun-14	Caerphilly	MC	Hillclimb		FC Clement			AE??00	33		DNF D	ONF broke inner hub, wheel came off
25-Jun-14	Cacipiniy	SWAC/Cardiff	i iiiiGiiiiiD		1 O OIGINGIIL			AL::00	00		DINI L	DIONE IIIIIEI IIUD, WIIEEI CAIIIE OII
25-Jun-14	Caernhilly	MC	Hillclimb	7 - 1914 TT Cars	RS Witchell	Straker-Squire Ltd	15/20 hp				2	1 1st on time & formula
20 Juli 14	Cacipinity	10		. 1011111 0410	THOUGH	Totalion Oquilo Elu	10/20 HP	1	1			

				T '	1	5) or the RAC rated F	(-9			ĺ		
Date	Venue	Organising Club	Event type	Event / Class	Driver	Entrant	Model*	Reg no.	Comp. no.	CC	o/a pos	
	Rest Bay,	SWAC/Cardiff										
27-Jun-14	Porthcawl	MC	Speed Trials	1914 TT Cars	FC Clement		15-20					1
	Rest Bay,	SWAC/Cardiff										
27-Jun-14	Porthcawl	MC	Speed Trials	1914 TT Cars	RS Witchell		15-20					3
				June Private Competitors								single-seater. Possibly the old wo
27-Jun-14	Brooklands	BARC	Race	handicap	Arthur Williams				3	3054		3 car.
				16th 100mph Long								
27-Jun-14	Brooklands	BARC	Race	handicap	Arthur Williams					3054	finishe	er
				17th 100mph Short								
27-Jun-14	Brooklands	BARC	Race	handicap	Arthur Williams					3054		2
27-Jun-14	Brooklands	BARC	Race	June Sprint race	AN Appleford	Arthur Williams				3054		2
				Open / O - capacity not								bronze medal. Won first heat, 2nd
11-Jul-14	Saltburn Sands	Yorkshire AC	Speed Trials	exceeding 3450cc	RS Witchell		15/20 hp			3260		2 final
				Open / V - racing cars								
				capacity not exceeding								
11-Jul-14	Saltburn Sands	Yorkshire AC	Speed Trials	3450cc, flying start	RS Witchell		15/20 hp			3260		1 1 Km, flying start. Cup & silver me
		Leicestershire		A - Cars not exceeding								
25-Jul-14	Beacon Hill	AC	Hillclimb	20hp (makers rating)	HF Smallwood	Roy Fedden	15/20 hp	AE3804	15	3260		1 club medal (1st on time)
		Leicestershire										club medal (1st on time). 2nd on
25-Jul-14	Beacon Hill	AC	Hillclimb	B- cars of any HP	HF Smallwood	Roy Fedden	15/20 hp	AE3804	15	3260		1 formula
		Leicestershire		E - Fastest time, any car,							_	on time only. 3 reports says car
25-Jul-14	Beacon Hill	AC	Hillclimb	touring or racing	HF Smallwood	Roy Fedden	15/20 hp	AE3804	15	3260	2	2 driven by HF Smallwood
		D. A. D. C.		4th Lightning Long						0057	اء ا	
3-Aug-14	Brooklands	BARC	Race	Handicap	Arthur Williams		"Nimph"			3054	3	
			_	4th Lightning Short								
3-Aug-14	Brooklands	BARC	Race	Handicap	Arthur Williams		"Nimph"			3054	3	

### References

Fedden – the life of Sir Roy Fedden, Bill Gunston (Rolls-Royce Heritage Trust, 1998)

Alex Moulton From Bristol to Bradford-on-Avon – a lifetime in engineering (Appendix 2 - Fedden Car Specification, 1943), Alex Moulton (Rolls-Royce Heritage Trust, 2009)

W.O. An Autobiography, WO Bentley (Hutchinson, 1958)

British Trial Drivers – Their Cars and Awards 1902-1914, Donald Cowbourne (Westbury Publishing, 2003)

RAC International Touring Car Trial, 1908. Official Report. (Royal Automobile Club Collections, 3/1/24)

The Automobile, May & June 1990, Straker-Squire, Michael Worthington-Williams. The Automobile, August 2015, Back on the Road, Michael Ware

Royal Automobile Club Archives (www.royalautomobileclub.co.uk) Isle of Man Museum Archives (www.imuseum.im) Cliftonrfchistory.co.uk (RS Witchell)

General Record Office Birth, Marriage, Death Registrations; National Archives' Census's; Probate Registry; Institutes of Civil, Electrical, and Mechanical Engineers records (via. www.ancestry.co.uk)

Magazines: Auto Motor Journal, Autocar, Motor, Commercial Motor, Engineering, London Gazette

Newspapers: Bath Chronicle, Belfast Newsletter, Bristol Times & Mirror, Bystander, Cornish Guardian, Coventry Herald, Daily Telegraph & Courier, Dundee Courier, Era, Field, Globe, Graphic (Melbourne, Australia), Illustrated London News, Illustrated Sporting & Dramatic News, Isle of Man Times, Leeds Mercury, Liverpool Mercury, London Daily News, London Evening Standard, Manchester Evening News, Morning Post, Northern Whig, Nottingham Journal, Observer, Pall Mall Gazette, Ramsey Courier, Referee, Scotsman, Sketch, Sphere, Sporting Life, Sportsman, Sheffield Daily Telegraph, Taunton Courier, Truth, Western Daily Press, Western Gazette, Westminster Gazette.

Westcountry Motorsport History

Website https://bpmc.org.uk/petestowe/wmh.htm

petestowe @ talktalk.net