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GUIDE TO THE HISTORICAL RECORDS
OF THE BRITISH MOTOR CAR INDUSTRY

by

Graeme Leng-Ward

A Master's Dissertation, submitted in partial fulfilment
of the requirements for the award of the Master of Arts
degree of Loughborough University of Technology.

September 1994

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The company business histories were compiled with reference mainly to Baldwin et al's World Guide to Automobiles: The Makers and Their Marques, Georgano's The Complete Encyclopedia of Motor Cars and Collins and Stratton's British Car Factories From 1896.
ABSTRACT

The aim of this project has been to provide an overview of the holdings of historical records of the British motor car manufacturing industry as this important industry approaches its centenary in 1996. Initial chapters review the background to the project and reasons for its undertaking, the history of the industry and the types of records generated by it. Chapter Four lists car manufacturing companies, brief accounts of their histories and the location and nature of record holdings. Because of the complex relationships in this industry and the constant redefining of the forms that companies take through mergers, liquidations, acquisitions and changes of name, the companies have been listed mostly in the form of 'groups of related companies'. Within each of these groups there are common factors with regard to the manufacturing process, locations and record generation. The study has been limited to locating the records of the sixty one groups that have manufactured for at least twenty years supplemented by a selection of six groups that manufactured for between two and twenty years. Summary descriptions of record holdings have been given where access to the records or to listings of the records have been obtained.
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1.

1.1 Background

The aim of this project is to compile a guide to the location and nature of surviving historical records of the British motor car manufacturing industry. These records are primary sources for the history of this section of the automobile industry, one of the world's major manufacturing industries. As Drucker points out:

The automobile industry stands for modern industry all over the globe. It is to the twentieth century what the Lancashire cotton mills were to the early nineteenth century: the industry of industries. The performance of all industry is likely to be judged by it. (1)

The automobile industry has had wide ranging influences on modern society contributing to advances in engineering, stimulation of industrial activity, demand for products and services in other sectors of the economy and the shaping of our environment and social behaviour as a result of the vast increase in personal mobility. The survival and keeping in safe custody of the historical records of such an important industry has been left to the fragmented efforts of individuals operating within some companies, archives and museums. No overall view of what records survive exists.

In 1962 Professor Saul commented that historians had largely ignored the formative years of one of Britain's major industries, motor manufacture (2). In Storey's view (3) this was still largely true in the mid 1970's with 'many original sources untraced and unworked'. The Business Archives Council attempted to compile details of the surviving records of past and present British motor vehicle manufacturers in 1966-7 by posting requests for a summary or description of record holdings to companies and organisations.
thought to possess them. Only a handful of companies responded, with many being negative or evasive.

An increased recognition of the importance of saving historical records of 19th and 20th century industries has led to the publication of guides to the historical records of four British industries since 1988. The Business Archives Council has promoted the compilation and publication of such guides for the brewing industry (4) and the shipbuilding industry (5). Morris and Russell of the Department of History of Science and Technology at the Open University have compiled and published a guide to the archives of the British chemical industry (6). The National Register of Archives published a guide to the archives of the textiles and leather industry (7) in 1990, as the first part of a series guide to records of British Business and Industry for the period 1760-1914. The National Register of Archives is currently working on the next in this series on the archives of the engineering and metal working industries. With regard to the motor industry, Jane Lowe (8) produced an unpublished guide to sources of the history of the cycle and motor industries in Coventry (1880-1939) while a member of staff at Coventry Polytechnic.

The driving force behind these projects is the realisation that such industrial records are of interest and value to a range of people and that they have been, and still are, at considerable risk. A guide to these records will be of value to scholars of social, economic, business, technical, industrial and urban history. Coleman commented that,

efforts to build change into British business organisations will be aided by a fuller and more analytical understanding of the history of those organisations. (9)
For accurate analysis it is important to have access to primary sources as a reliance on secondary material may lead to the perpetuation of inaccuracies and myths.

Other interested parties are archivists, motor museums, car clubs and those involved in maintaining and promoting Britain's industrial heritage. For example, Collins and Stratton (10) referred to primary source documentation to find details on factory buildings for their book on British car factories and for their study of the surviving car factories in Coventry (commissioned by Coventry City Council). Surviving records such as 'factory plans' and 'site deeds' are important to help back up attempts to prevent the loss of part of our industrial heritage and to help justify the preservation of remaining historic buildings. One of these buildings, the former Morris Engine factory in Coventry's Gosford Street, is currently being refurbished as the W.G. Morris Memorial building, the new Business Studies Department of Coventry University. The importance of retaining such links with the past has been mentioned by Professor Pressman in relation to town planning;

Recent town planning practice has contributed to urban alienation and a lack of identity. Instead it needs to 'embrace the historic fabric as a living part of the city thereby offering a depth of meaning enabling the city to speak of the continuity of its past and its present as well as its future'. (11)

The reasons why industrial and business records have been and continue to be at risk in Britain are that they:

- occupy space needed for other purposes,
- appear to be of no value and so are mislaid, lost or disposed of,
- are withheld by individuals for their own private use,
- have been destroyed by fire/ flooding/ air-raids.
The risk to records and the problems of access to them is compounded by a value system peculiar to Britain where businessmen, engineers and entrepreneurs have tended to be held in low esteem and by an obsession with secrecy. Professor D.C Coleman commented that;

the businessman has not simply been one of the more unloved figures of British history; worse than that, he has never quite been taken seriously. (12)

An insight into how real the risks to car industry records have been, and still are, can be judged by the following examples of some disastrous losses of records and by the haphazard way in which many have been saved. In 1939 the records of the Briton Motor Company Ltd of Wolverhampton were lost when the former factory was cleared out for war production; in the late 1960s some 300 boxes of Nuffield’s records were destroyed after a major reorganisation of British Leyland (13).

Fortuitous saves include: ~3000 Daimler Co Ltd glass plate negatives saved from being thrown on a Coventry rubbish tip by a former employee; a large number of Morris records were found by chance when part of a factory was being demolished at Cowley; Jowett production registers were recovered from a skip in Bradford after the company ceased car production in 1954; during the actual researching of this project records of companies making up the former Rootes Group were rescued by chance after a major car manufacturer in Coventry decided to dispose of them. David Burgess-Wise describes in detail the thrill of rediscovery when sorting the lost treasure of Dagenham in the mid 1970s, a hidden cache of Ford papers walled up beneath the engine building amongst piles extending deep down into the Thameside marsh (14).
The attitude of many companies has been to keep old records only as long as they have perceived a business reason for doing so (legal or technical). To a certain extent this is changing with the realisation that there may be value in promoting a company's past history and corporate culture, for example, by setting up heritage centres as have Jaguar, Rolls Royce, Rover and Vauxhall. However, there is often a problem where the link between the original starting companies and a later form of the company has been lost or obscured. This is the case with Peugeot-Talbot in Coventry where the link between historically important companies Humber, Hillman, Sunbeam, Talbot and Singer has been obscured by the merging into the Rootes Group followed by successive take overs by foreign companies, Chrysler (USA) and Peugeot (France). This project attempts to develop an overview of the industry's records, not only to facilitate study of the industry, but also to try and promote interest in maintaining records within private companies and to try and forestall any further disastrous losses.

1.2 Scope of project.

This project considers only the historical records of companies that have produced complete passenger cars for use on the open road. Such passenger cars are the dominant type of vehicle in peacetime motor vehicle output, averaging about 75% of world production from 1960 through to the mid 1980s (15). Just how this fits in to the overall scheme for the manufacture of motor vehicles can be seen in the following subdivision of the industry into four related sectors:

- the manufacture and assembly of complete motor vehicles such as passenger cars, taxis, vans, trucks, buses and special purpose vehicles.
- the making of bodies (body or coach building).
• the making of motor vehicle parts and accessories such as engines, clutches, brakes, wheels, gears, transmissions.
• a periphery of ancillary industries making products such as tyres, windows, automobile fabrics.

Those companies essentially producing only commercial vehicles, racing cars or kitcars have not been considered, eg. Carbodies (taxis), Scammell Lorries and Bedford (trucks, lorries, vans) and Ginetta (kitcars). However there is considerable overlap, with car and commercial vehicle manufacturing often closely linked within the same company in the early days or through related companies belonging to the same group.

The British motor industry has been characterised by a lack of vertical integration with a large proportion of companies buying components from suppliers rather than manufacture themselves. The largest supply companies such as Pressed Steel (bodies), Joseph Lucas (electrics) and Dunlop (wheels, tyres and rubber products) grew comparable to the large manufacturers in terms of capital and labour employed. This study does not consider these specialist suppliers directly although many were eventually acquired by car manufacturing companies.

A preliminary listing of British motor car manufacturing companies gave 821 companies or groups of closely related companies. Of these 607 went out of business within five years. To keep the project manageable only the 61 that manufactured motor cars over at least a twenty year period are considered, supplemented by 6 interesting selected ones that manufactured for between 2 and twenty years. An analysis of the length of time over which companies manufactured cars is shown in Figure 1.
The complex history and relationships between companies in the motor industry are contributing reasons why this type of project has not been successfully attempted before. The author's Coventry base, interest in industrial history and archiving, the local support of staff at the Modern Records Centre and British Motor Industry Heritage Trust and the approaching centenary of the British motor industry in 1996 have combined to provide the incentive for this project.

Figure 1.

Chart showing the number of British car manufacturing companies that have produced cars for varying lengths of time. [NB. War years when factories went over to war production have not been subtracted].
REFERENCES


2. HISTORY OF THE BRITISH MOTOR CAR INDUSTRY

The establishment of most of the engineering industries that were to form the basis of the British motor vehicle manufacturing industry were spread over a century before the 1880s. The first types of mechanically propelled vehicles on British roads were Trevithick's steam driven vehicle in 1801 and Anderson's electric road vehicle in 1839. Following on from the Belgian inventor Lenoir's invention of a two stroke spark-ignition engine in 1860 a rapid series of developments occurred in Germany, France, Italy, Britain and the United States during the 1870s-1890s.

Otto developed a practical four stroke engine in 1876, Karl Benz and Gottlieb Daimler independently produced practical and viable automobile designs in 1885 and Butler made an internal combustion engine vehicle in Britain in 1888. The automobile industry was brought properly into being in France by the firm 'Panhard and Levassor' when regular Panhard production commenced in 1891, and in 1895 De Dion and Bouton significantly advanced engine design with their more powerful high speed engine.

In Britain, F.R.Sims, a young mechanical engineer interested in motor launches, formed the Daimler Motor Syndicate in 1893 to exploit the manufacture of internal combustion engines under patent licence from Daimler Motoren Gesellschaft. Following the importation of a Daimler engined car into Britain in 1895 Sims sold the Daimler patent rights to Lawson, Hooley and Rucker. Lawson formed the British Motor Syndicate and attempted to monopolise the fledgling British motor industry by a combination of buying all the European patent rights and by the floating of a number of companies with similar aims. Lawson set up the Daimler Motor Company the
Great Horseless Carriage Company, the New Beeston Cycle Company and Coventry Motor Company all in one disused cotton mill in Coventry. Another company that Lawson was involved in together with fellow directors H. du Cros and S.F. Edge was the Dunlop Motor Company. A copy of one page from a directors' meeting of this company is reproduced later in Figure 4 (page 26) reporting the pending legal action on infringements of various patents including the De Dion patents.

The British automobile industry received a major impetus in 1896 when the 'Locomotives on Highways Act' repealed the 'Red Flag' legislation of 1865 which restricted motor vehicles to walking pace. The Daimler Motor Co. began production of the German Daimler car under licence in 1896. By 1900 approximately eighty British firms were involved in building at least prototype cars, although, only Daimler (Coventry), Arrol-Johnston (Glasgow) and the Motor Manufacturing Company (Coventry) were producing cars with any regularity. Only ten of these firms went on to be significant long term manufacturers, Albion, Argyll, Arrol-Johnston, Belsize, Daimler, Dennis, Humber, Lanchester, Star, Sunbeam and Wolseley (1). A court decision in 1901 ended the British Motor Syndicate's patent monopoly opening the way for entry into the new motor industry.

The origins of new car manufacturers were mainly established companies involved with cycles, motorcycles, horse drawn vehicles, marine engines, motor components or car importing and servicing. A modest capital sum and general engineering knowledge and facilities were all that was required for the pioneering firms to hand make cars. By 1905 there were some fifty British car manufacturers centred on Coventry, London and Birmingham with occasional manufacturers spread around the country. A few flourished as long
term manufacturers while the rest were quickly either forced into liquidation, receivership or to merge with similar, or larger, concerns to survive.

The location of so many manufacturers in the West Midlands in the early years was because of the wide range of light engineering firms already present, the pool of labour with skills relevant to the motor industry, easy access to all parts of the UK and Daimlers' initial fortuitous finding of premises in Coventry.

The early years of the twentieth century were characterised by a proliferation of car manufacturers (two hundred by 1914). However up to this time the British motor industry was handicapped by an inefficient component industry that was not geared to mass-production orders. While small car producers were not bothered by this the larger manufacturers were forced to invest high levels of capital to make most of their own components. Typically cars were produced in small numbers at high prices with production concentrating on high powered cars that could best bring in a good return on investment. However the Finance Act of 1909 did penalise large engines by introducing a tax related to piston diameter, prompting a boom in cyclecars and light cars and an influx of manufacturers specialising in these.

The American company Ford was responsible for the first large scale production of any one model in Britain. In 1911 the Ford Motor Company of Great Britain began to assemble its Model T, bringing in engines and chassis from Detroit and manufacturing their own bodies. By 1914 Ford had become Europe's largest car producer employing flow production and a powered production track under the guidance of manager Percival Perry. The varied use of motor vehicles during the 1914-1918 war demonstrated the value and versatility of the automobile and its derivatives with many people learning to
handle motor vehicles. When hostilities ended in November 1918, almost all the car manufacturers had been involved in war work resulting in spectacular growth in factories and in modern machine tooling. This gave companies the chance to perpetuate manufacturing processes learnt during the war.

Ford's success greatly influenced Herbert Austin and William Morris. The Austin Motor Co. had built its first car in 1906 but it was not until 1921 that the company produced a model in large quantities, the Austin Seven, the most famous of British cheap small cars that extended the industry’s sales by greatly increasing the public to which motoring was possible. Impressed by Ford's methods, William Morris decided to assemble cars largely from components made by other manufacturers and to cut prices aggressively as he obtained savings from efficiencies of scale and increased output.

The changes brought about by Austin and Morris had their effect during the 1920s with Austin and Morris holding 60% of Britain's car sales by 1930. Once a few firms achieved a high proportion of national output and share of the market other manufacturers were forced to emulate their high volume production methods and low-priced vehicles, or to specialise in high quality and individual designs for a smaller wealthy market, or to go out of business. Many new makes perished; of the eighty-six new makes appearing between 1919 and 1925, only two were of any significance, Armstrong Siddeley and Alvis (2). The total number of British car manufacturers declined from ninety in 1920 to forty-one in 1929 (3). Some of the then specialised smaller companies such as Rover did survive by just adopting some of the elements of Ford's mass production techniques, such as, special purpose machine tools, the moving assembly line, work rationalisation and the purchase of components from specialized outside suppliers.
While Ford had uncovered a market for rugged basic transportation through its Model T, innovations by Austin and Morris showed that the market for cheap cars in Britain had shifted to the area of diverse and well equipped small cars through the 1920s into the 1930s.

Ford sailed close to disaster by trying to transpose his methods of capital-intensive plants and labour relations designed for a single mass product when the British demands were for more varied and changing models. (4)

By the mid 1920s Ford’s sales collapsed from 24% of British sales to 4% because of its blind single-model strategy. Ford's fortunes only recovered with the introduction of new British style car in 1932, the Model Y, and the adoption of more suitable labour relations. By this time the British market demanded new models in an evolving market rather than simply trying to dominate market share through internal economies of scale. Britain had become chiefly renown in the 1920s and 1930s for two prestigious manufacturers, Rolls Royce and Bentley, and for the development of the sports model as a car type.

Location priorities began to change with the manufacturing methods introduced by Ford and with Morris's decision to concentrate on assembly as distinct from complete manufacture on one site. As mass-production assembly techniques were introduced in the interwar years the need for traditional engineering skills was greatly reduced. As motor car assembly became a semi-skilled process the industry could chose to locate according to new priorities such as, lower labour costs, close access to mass markets, weak trade unions and cheap land. Hence the developments of Ford at Dagenham, Morris at Oxford and Vauxhall at Luton.
Morris had been instrumental in introducing technology from the United States for producing pressed all steel car bodies to replace traditional wooded body frames in the late 1920s. During the 1930s Austin and Morris led the way in adopting more streamlined production methods, with powered assembly lines and components being fed to those lines at precise stages of manufacture. All but the specialist manufacturers had been driven out of business or taken over by large firms or merged into larger organisations. For example the Rootes Brothers’ company had become the largest car distributor in Britain and proceeded to takeover several ailing manufacturers such as Hillman (1927), Humber (1928) and Sunbeam-Talbot-Darracq (1935). The number of private manufacturers had declined to thirty-three by 1939, with six large groups controlled by Austin, Ford, Morris, Rootes, Standard and Vauxhall, accounting for nearly 90% of private car output.

From 1936 motor vehicle manufacturers again transformed their operations to support rearmament followed by the war effort, producing tanks, staff cars, military transport vehicles, aircraft and aircraft engines. The shadow factories erected to augment existing plants were a considerable asset to car manufacturers after the war with those built at Coventry still surviving today at Brown’s Lane (Jaguar), Ryton (Peugeot Talbot) and Banner Lane (Massey Ferguson). The immediate transition back to peacetime car manufacture was difficult, with materials scarce, a preference for revamping prewar models, a low priority on quality and a lack of concern for good labour relations. Despite this by 1950 successful new models introduced included Jaguar’s XK120, the Morris Minor, Standard’s Vanguard and the Land Rover.

Car manufacture became more universal with foreign competition growing in the 1950s. Austin and Morris merged to form the British Motor Corporation (BMC) in 1952 but some famous companies such as Jowett and Lea Francis
were forced out of business and Singer was acquired by Rootes. With Britain slipping from second to fourth car manufacturer in the world, BMC revived its fortunes in 1959 by introducing the legendary BMC Mini. During the 1960s a further series of mergers and acquisitions saw Jaguar acquire Daimler, Leyland taking over Standard Triumph and then absorbing Rover and Jaguar. Rootes was acquired by the American Chrysler Corporation and British Motor Holdings (formerly BMC) merged with Leyland to form British Leyland Motor Corporation. Despite technical developments, the British industry was under threat from growing European and Japanese imports and the new safety and emission controls necessary in the USA.

A major consequence of the high degree of concentration in the industry was the reduction of the number of independent firms. Between 1960 and 1969 the number of British manufacturers producing more than 1000 vehicles per year had declined from fourteen to seven. The cost and high risks had effectively closed off entry to the industry except in the specialist car sector where volumes are small and design quality and performance are important. The only post-1945 examples of significant new entries surviving for more than twenty years in Britain are Lotus (1952-to date) and TVR (1956-to date).

The priorities for locating the industry were modified in the post-1960 era (5) by government and regional policies providing subsidies, grants and loans in order to persuade the industry to locate in areas of high unemployment. Examples are Ford (South Wales and Liverpool), Vauxhall (Ellesmere Port), Rootes (Linwood), BMC (Llanelli).

By the mid 1970s there are were only twenty seven British car manufacturers with the major ones integrating their British and European operations and having to cope with the oil crisis, widespread industrial relations problems,
inflation and low productivity compared to the Japanese. British Leyland underwent a drastic reorganisation seeking to develop a new and viable product range, completing earlier mergers, centralising its pay negotiations and beginning collaboration with Honda. GM increasingly integrated its British base, Vauxhall, into its world operations while Ford's product base was already integrated into its world car concept. Chrysler's British operations were taken over by Peugeot. In 1984 Jaguar was returned to private ownership only to be acquired by Ford in 1989, although with assurances of maintaining a separate and individual identity. The Austin-Rover Group (formerly British Leyland) was renamed the Rover Group in 1986, eventually to be taken over by BMW in 1994.

This decline of a British owned motor car manufacturing industry has been followed by the emergence of a motor industry in Britain, globally based and foreign owned - Rover (BMW owned), Ford and Vauxhall (American owned), Peugeot (French owned) and the two Japanese giants Nissan and Toyota who have set up considerable manufacturing capability in Britain as a gateway into European markets. Smaller companies such as Jaguar, Aston Martin and Lotus do retain some independence although the first two are Ford owned and the latter now Bugatti owned. Remaining British controlled companies are confined to specialist manufacturers such as Rolls Royce and Morgan, the three-wheeler producer Reliant (saved by Beans Industries in 1991) and some very small companies with a high performance sporting bias such as TVR, AC and Bristol.

The global standardization of products and techniques by the international companies means that the distinctive characteristics of national markets and production techniques have been all but eliminated. If this continues car enthusiasts and historians will not have the same wonderful variety of car
companies and cars to enthuse over when they look back on motor car manufacture from around the 1960s onwards. This makes this project's aim of trying to ensure the safe custody of the historical records of the British motor car manufacturing industry all the more important.
REFERENCES


3. COMPANY RECORD CREATION

Modern English company law began to emerge during the nineteenth century as a result of legislative changes just before the beginning of the motor industry in 1896. The Joint Stock Companies Registration and Regulation Act 1844 first introduced incorporation by registration replacing incorporation by Royal Charter or letters patent and created the office of Registrar of Companies. This made the formation of unlimited liability joint stock companies legal, cheap and easy and marked the first occasion when the government required that business firms maintain standard documentation such as books of account, a register of shareholders, a list of directors, board minute books, prospectus and balance sheets. Some of these records had to be submitted to the Registrar which increased their chances of survival as there were now another set of records held independently from the company.

The Limited Liability Act 1855 introduced the principle of limited liability for registered companies and the Joint Stock Companies Act 1856 introduced the requirement of a memorandum and articles of association as the documents regulating the company's affairs. Between 1856 and 1862 a series of acts were passed allowing joint stock companies to take limited liability cheaply and simply, but with now significantly reduced requirements to make returns (disclosures) to government. While enabling firms requiring large sums of capital to raise finance from a wider and less involved public this did allow unscrupulous individuals to profit by wheeling and dealing in companies. Such was the state of affairs in the mid 1890s when the entrepreneur Harry Lawson was attempting to monopolise the fledgling British motor vehicle industry.
From 1900 British governments progressively tightened up regulations on company formation, requiring a greater level of disclosure. The Stock Exchange also required the lodging of certain documents for companies wishing to have shares traded on exchange; eg. prospectus, articles of association, copies of share certificates.

The success that legislation has had on ensuring the survival of company records has varied with changes in successive Company Acts and with varying policies on the retention and stripping of the files of defunct companies. A select list of some more important changes in company organisation and record keeping requirements during the 1900s is as follows, with the year of the relevant Companies Act in brackets;

- Annual audit mandatory for all registered companies; directors no longer permitted to act as auditors; prospectuses and registers of mortgages to be lodged with registrar (1900).
- Distinguishing between public and private companies (1907).
- Re-established requirement for board minute books (1908).
- Profit and loss accounts available for shareholders (1928).
- Tightened requirements for balance sheet (1929).
- Consolidated accounts and independent audit mandatory (1948).
- Requirement for private companies to lodge balance sheets and profit and loss accounts with Registrar (1967).

The Registrar of Companies maintains separate files of statutory records for each company arranged by registration number. These files remain open and are retained in their entirety as long as a company remains on the register, even if it has changed its name, become a subsidiary of another
company or is dormant (1). All of these possibilities are very common in the motor industry.

After a company has been dissolved it is removed from the register of companies and placed in a separate register of defunct companies. These are held for twenty years after the company's dissolution at the Companies Registration Office and then transferred to the relevant national record office, for example the Public Record Office at Kew, or the Scottish Record Office at Edinburgh. These files may contain company formation documents, memoranda and articles of association, a statement of nominal share capital, a register of directors, annual share capital, and debenture and shareholder returns, annual balance sheets (compulsory from 1907 for public companies and from 1929 for private companies) and liquidation documents. The files of English companies dissolved after 1860 are located in the Public Record Office in class BT 31. The files of liquidation accounts have been preserved separately in class BT 34 for the years between 1890 and 1932.

Unfortunately the files of dissolved companies have been stripped of certain classes of documents. In 1950 it was agreed that all annual returns were to be destroyed except for the first, last and every intermediate fifth year (reduced to tenth year in 1960). The PRO retained only a one per cent of files of dissolved private companies (defined for the first time in 1907) until 1960. This practice of stripping the files of dissolved companies was not followed in Scotland where they have been retained intact. National record offices also hold other classes of documents relevant to the motor industry such as those for legal court cases.

Other institutions intimately associated with motor manufacturing companies generate their own records according to their own interests, and also hold
selected records created by companies. These institutions are accountants, stockbrokers, unions and banks. For example, the records of the Midland Bank cover the emergence of motor vehicle manufacture in the late nineteenth century through to the interwar years and beyond. The types of financial, structural and personnel information available in bank records is reviewed by David Thoms in his paper 'Bank records and the early history of the Coventry motor car industry' (2).

Jane Lowe (3) reviewed the type of information available in the records of Coventry stockbrokers Daffern and Stephenson held in the Coventry City Record Office. These records include director's reports, balance sheets, profit and loss accounts, notices and reports of meetings and usually a review of the company's performance during the past year.

Internal record creation is, of course, critical to the operation of a business for the following reasons;

- a permanent records of decisions made is required to ensure continuity.
- records of production, sales, expenditure and costs are required on which to base management decisions.
- technical specifications, blueprints, trial tests and performance data are needed to define product design.
- employee records are needed to manage the workforce.
- reports are required to communicate information/decisions/instructions.

The accounting records are often the most continuous and best integrated part of a company's information system and constitute the core around which most other records, financial and otherwise are grouped as discussed by Lee (4). A literature of professional accountancy had emerged by the end of the
nineteenth century reinforcing a developing regularity in accounting practice (5). Taken in conjunction with minute books, correspondence files and legal documents, accounts reveal the course of events over time, the important decisions taken by management, the outcome thereof, the profitability or otherwise at different periods, and, above all, whether, and why, the company ultimately succeeded or failed.

Following is a list of record categories with examples:

**Corporate.** Minute books of directors', shareholders', management and general meetings; memorandum and articles of association; annual reports; registers; seal books; amalgamation and liquidation papers; copies of annual returns to the Registrar; attendance books.

**Financial Accounting.** Balance books; audit papers; ledgers; cash books; invoices; investment records; tax records; management accounts.

**Share.** Prospectuses; registers; share and debenture certificates; application and allotment records.

**Legal.** Records of patents and trademarks; agreements; licences; litigation records, title deeds.

**Administration.** Correspondence; memoranda; notices.

**Operational and Technical.** Production records; chassis registers; service history; build cards/sheets; distribution records; technical drawings; research/development/laboratory reports; spare parts lists; manuals; photographs.

**Staff and employment.** Wages and salary records, contracts of employment, records of training and apprenticeship, medical, health and safety data, industrial relations.
Premises, property and plant. Property records (plans, registers, inventories, architectural drawings), repair records; insurance records,

Marketing and publicity. Stock catalogues; leaflets; advertisements; photographs; press releases; company magazines.

Photocopied examples of a selection of records from the motor industry are presented on the following pages. A description of these documents and their origins is given in the list of figures at the beginning of this dissertation on page iii.

REFERENCES


THE COMPANIES' ACTS, 1862 TO 1900.

COMPANY LIMITED BY SHARES.

Memorandum of Association

OF

THE AUSTIN MOTOR COMPANY

LIMITED.

1. The name of the Company is THE AUSTIN MOTOR COMPANY LIMITED.

2. The Registered Office of the Company will be situate in England.

3. The objects for which the Company is established are:—

(a) To acquire from HERBERT AUSTIN, certain Patents for Inventions relating to Motor Cars, Cycles, and other Automobiles, upon the terms of an agreement already engrossed and identified by the signatures of two of the subscribers of this Memorandum, and intended to be made between the said HERBERT AUSTIN, of the one part, and the Company of the other part, or on such other terms as may be agreed.

(b) To carry on the Business of Manufacturers of and Dealers in Omnibuses, Motor Cars, Cycles, and other Vehicles of any kind, and so constructed as to progress by means of horse-power or of automatic power, whether by means of electricity, steam, gas, oil, or otherwise, and of and in all accessories thereto.
AGENDA

for
BOARD MEETING TO BE HELD AT THE NEPTUNE WORKS, COVENTRY,
ON WEDNESDAY, 30th December, 1931, at 11.15 a.m.

Election of Chairman — Art. 1481 a. Dug

1. Minutes of Meeting held December 17th, 1931. Read


3. 1931/2 Banking arrangements:

   of report to
   Lloyds Bank Ltd.
   David Parsons & Co.
   SPEEDY, 9.6

4. Cheylesmore Sheet Metal Co. Ltd.:
   Calling in Debenture. Forward

5. New Zealand:
   Further Supplies. Defer

6. Reduction of Overheads. Govenors

7. Price of Cans. Costs & profits appear to be satisfactory

8. Future Policy of the Company. Forward

9. 1932/3 Programmes.

10. Neptune Works:
    1. Sale. Ask 96 to 98.

11. Helen Street.

12. Clay Lane. Odell & Co. 2. Revenue


R. L. Pool

26
At a meeting of the Directors of the Dunlop Motor Company, limited, held at 40, Holborn Viaduct, London, S.W., on Wednesday the 22nd November 1899 at 12 o'clock mid-day.

Present Wm. H. Lawson in the Chair
and Messrs. L. & Edge

G. Jarrott.

It was reported by Mr. Jarrott that the British Motor Company were taking action against P. Moffatt Ford, for infringement of various patents, including the De Dion Patents and it was necessary for this Company to be joined as co-plaintiffs. It was Resolved that the Secretary be instructed to write the British Motor Company Ltd., giving permission for the name of the Dunlop Motor Co., Ltd. to be joined with the British Motor Company as plaintiffs in the action.

[Signature] Secretary

27
This Indenture

made the

day of

One

thousand nine hundred

and fourteen

between The Austin Motor

Company Limited (hereinafter called "The Old

Company") of the one part and The Austin

Motor Company (1914) Limited (hereinafter
called "The New Company") of the other part.

Whereas by an Indenture of Lease dated the

twenty-second day of February One thousand nine

hundred and twelve and made between Percy

Preston Henry John Harvey and Bernard Addison of

the one part and the Old Company of the other part

First All that piece of ground situated on the South

side of Oxford Street in the Parish of St. George

Hanover Square in the County of Middlesex

towards the North-east of Oxford Street and which said

piece of ground with the dimensions thereof (be the

same little more or less) was delineated and coloured

in the plan in the margin of the Indenture in

detail together with the messuage and buildings

thereon erected being the eighth house Eastward

from Park Street the core house inclusive subject

nevertheless to all rights and easements belonging
to any adjacent property and subject to the adjacent

buildings or any of them at any time and time

rebuilt or altered according to plans both as to height eleva-
text and otherwise as should or might be approved
by the landlord for the time being.

Secondly, all that piece of ground situated on the South
side of North Row Oxford Street Eastward of Park
Street and Westward of North Audley Street in the
Parish of St. George Hanover Square approximating
northwards to the North of North Row and which said
piece of ground with the dimensions thereof (be the
same little more or less) is delineated and coloured in the
said plan together with the coach, stables and
buildings hereon erected together without including any
right of light or air over other premises) and subject
THE UNITED STATES OF AMERICA
TO ALL TO WHOM THESE PRESENTS SHALL COME:

Whereas

ARTHUR JOHN ROKLEDGE,

of

Birmingham, England,

HAS PRESENTED TO THE COMMISSIONER OF PATENTS A PETITION PRAYING FOR THE GRANT OF LETTERS PATENT FOR AN ALLEGED NEW AND USEFUL IMPROVEMENT IN VALVE-GEAR.

He having assigned his right, title, and interest in said improvement to The Wolseley Tool and Motor Car Company, Limited, of Birmingham, England,

A DESCRIPTION OF WHICH INVENTION IS CONTAINED IN THE SPECIFICATION OF WHICH A COPY IS HERETO ANNEXED AND MADE A PART HEREOF, AND HAS COMPLIED WITH THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED, AND

Whereas

UPON DUE EXAMINATION MADE THE SAID CLAIMANT IS ADOJUDGED TO BE JUSTLY ENTITLED TO A PATENT UNDER THE LAW.

NOW THEREFORE THESE LETTERS PATENT ARE TO GRANT UNTO THE SAID

The Wolseley Tool and Motor Car Company, Limited, its successors

OR ASSIGNS

FOR THE TERM OF SEVENTEEN YEARS FROM THE sixth DAY OF AUGUST, ONE THOUSAND NINE HUNDRED AND TWELVE,

THE EXCLUSIVE RIGHT TO MAKE, USE AND VEND THE SAID INVENTION THROUGHOUT THE UNITED STATES AND THE TERRITORIES THEREOF.

In testimony whereof, these presents, set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, sixth day of August, year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States of America the one hundred and thirty-seventh.

A. C. WILSON

Commissioner of Patents
Jany

Feb

Jany

Feb

Mar

March

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Jany

Mar

March

By Cash Woodworking Tools £68 8

By Cash Woodworking Tools £68 8

28. Pays to Mr. Taylor - 8 weeks to Feb 27 PA 7 183

28. To Royalty on Cecil Wood Milling during Feb. 1 185 15 5

31. By Sales from Obsolete Stock - January. 4 185

28. To Oxygen rebate for January £1 6 9

28. By Invoice, 3 lots Colson Shale £120 5 115 0 0

28. 1½ dozen Shells 3½ x 60 10227 116 10 8

28. 6 3½x2 Nickly Yarns & Dee Knop, showing Receipt. Shipment Court 26th June 1852

28. 1½ dozen Grammage 2 8 2

28. 6 3½y o Motter Fred Expenses 11 185 15 4

28. Messroom Cash £1 0 0

28. Leasing £3 17 6

28. £1 Passport Fee re Mr. J. Janes. Jan. 29 £1 188

28. Work Changes on H.S.S. Caron Building and Notice during February. £7 185 9

28. Packing, Freight £1 on goods shipped to Romney Jan 28th. 1861 4 274

28. Sales from Obsolete Stock during Feb. £1 185 9

1. Refund of Licences £6 8 3

30. To Cash Janet Chitty £10 0 0

31. Car of Pedler's Trolley, Trolley & Trolley for Car. 15th Feb 1851 £190 5 15 6

31. Great Western coaches Ltd. Ltd. £360 5 15 6

31. £360 5 15 6

31. £360 5 15 6

31. £360 5 15 6

31. £360 5 15 6

22. To Cash "Parrot" Drakes Royalty £8 8 8

31. Messroom Cash £1 71 1

31. £1 71 1

31. £1 71 1

22. To Cash "Parrot" Drakes Royalty £8 8 8

31. Messroom Cash £1 71 1

31. £1 71 1

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March

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22. To Cash "Parrot" Drakes Royalty £8 8 8
Estimate of Expenditure in connection with the establishing
of a works for manufacture of motor vehicles at
Longbridge near Birmingham —

Buildings and Land —
These consist of a well situated brick works,
capable of supplying about 200 men and 200
looms fitted with engines, generators, boilers,
turning to soap power, lighting and heating purposes.
All the buildings are also fitted with sprinklers
and there is a substantial water tower & tank
to supply these sprinklers.

Very little alteration would be required to make
the basins suitable, & a start could be
made in about 3 weeks time after taking possession.
The land is freehold and contains 26 acres.

The purchase price for the land,
works, store and fixtures is about £10,000
the fixtures being valued at £300.
The owner will let on lease the land & building
at about £400 a year subject to an option to
purchase during 1st 3 years of tenure, or if
purchased he would be willing to have a
mortgage about £5,000 at annual rates. He wishes
to sell the fixtures.

Plant — To obtain a reasonable & economical output
say 2 chassis per week of value £400 each — plant
at the value of about £7,700 would be required &
this amount would equip tool, building, machine,
Polishing, Plating, Smiths, Coachsmiths, &
cutting shops sufficient for above say the 1st year's
work.

Purchases — These would average about £250 weekly being
probably heavier during the 1st few months than
later on.

Wages — These would also average about £250 weekly being
heavier during 1st half of year —
Reverse - Calculate stress
let \( N \) be tangential force
then \( \tau = \frac{N}{A} \) arm on each piston.

Allow for \( 1\text{.}08 \) gradient
then if \( \text{gear} = 9.34 \text{ say} \)
8" equiv dia. @ weight
= 2000 lbs we have:

\[\tau \times 360 \text{ lbf} @ 4" \text{ effort} \]
\[1.08 \text{ gradian} \]
\[\text{But gear can} \]
\[1 : 5 \text{ ratio} \]
\[2.7 \text{ on force} = 54 \text{ lbf} \]
\[\text{or} \]
\[1.9" \text{ rad} \text{ or} \]
\[3.3 \text{ rad} \]
we require 600 lbf.

Pressure on ram must be 1200 lbf @ 2.7 sq in
\[= 1\frac{5}{8} \text{ ton} \]
WOLSELEY MOTORS LIMITED.
BIRMINGHAM.

CHEMICAL LABORATORY.

REPORT ON BROKEN FRONT HUB EX 10 HP. CAR NO. 32472
DELIVERED II, 22, 21 RETURNED BY D. KENNEDY,
SELHURST ROAD, LONDON. DESP: DEPT NOTE NO. 1149

Mr. Reeve,
Mr. Rapson,
Mr. Harris,
Mr. Leeding,
Mr. Palmer,

This component is a mild steel casting the composition of which is not in accordance with S.412, being slightly low in Carbon, slightly high in Silicon and very high in Phosphorus, the Brinell hardness being in the range called for.

<table>
<thead>
<tr>
<th>Element</th>
<th>Composition</th>
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</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>0.15 per cent.</td>
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<tr>
<td>Silicon</td>
<td>0.33 &quot; &quot;</td>
</tr>
<tr>
<td>Sulphur</td>
<td>0.033 &quot; &quot;</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.177 &quot; &quot;</td>
</tr>
<tr>
<td>Manganese</td>
<td>0.68 &quot; &quot;</td>
</tr>
</tbody>
</table>

Brinell hardness 137

The microstructure shows that the casting is much segregated and contains many contraction cavities and cracks the attached micrograph showing a typical area.

The failure is due to the unsatisfactory nature of the steel casting and it is probable that the casting was purchased from outside sources during the strike as it is not in accordance with the general composition of our own steel castings.

Segregated area x 50.

H. Spencer Kipling
**Conn. Rod Stresses at Max. Explosion Pressure**

So Sheet 1 for diagram.

It is difficult to obtain an exact value for the factor \(a\), but in the bending stress, which depends upon its only small contents with the direct stress, no serious inaccuracy should result in practice, though the figures would be fictitious, best used if regarded as comparative.

\[
\begin{align*}
a_1 &= 0.0002 \quad a_2 = 0.0005
\end{align*}
\]

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Piston Load (W)</th>
<th>Rod Part No.</th>
<th>Rod Dia. (Mm)</th>
<th>Rod Dia. (In.)</th>
<th>Area ( A_{yy} ) (Sq. In.)</th>
<th>Stress ( W_{yy} ) (Lbs./In.²)</th>
<th>Area ( A_{xx} ) (Sq. In.)</th>
<th>Stress ( W_{xx} ) (Lbs./In.²)</th>
<th>Ixx</th>
<th>Bending Stress ( W_{yy} ) (Lbs.)</th>
<th>Izz</th>
<th>Total Stress ( W ) (Lbs.)</th>
<th>ZZ</th>
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<td>USHM</td>
<td>15500</td>
<td>15600</td>
<td>165</td>
<td>6.46</td>
<td>920.0</td>
<td>126</td>
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<td>18,400</td>
<td>0.074</td>
<td>21,900</td>
<td>0.005</td>
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<td>143</td>
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<td>20,700</td>
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<td>20,700</td>
<td>17,800</td>
<td>0.074</td>
<td>20,520</td>
<td>0.006</td>
<td>21,520</td>
<td>19.8</td>
</tr>
</tbody>
</table>

*Highest Stress = 29,100 Lb./In.² (O.P.R. YIELD 25 Tons/In.²)
Ult. 47 Tons/In.² (Av.*)
See No. 104
"Ariel-Simplex" Rol-des-Belges side-entrance Body with collapsible wind screen and double extension Cape Cart Hood.

**"ARIEL-SIMPLEX." 1906 PRICES.**

*WE MANUFACTURE 12 DISTINCT TYPES.*

<table>
<thead>
<tr>
<th></th>
<th>28/38 4-Cylinder</th>
<th>30/40 h.p. 4-Cylinder</th>
<th>35/45 h.p. 4-Cylinder</th>
<th>35/45 h.p. 6-Cylinder</th>
<th>40/50 h.p. 6-Cylinder</th>
<th>50/60 h.p. 6-Cylinder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Dimensions, dash to rear member</td>
<td>8 ft. 2 in.</td>
<td>9 ft. 2 in.</td>
<td>8 ft. 2 in.</td>
<td>9 ft. 2 in.</td>
<td>8 ft. 2 in.</td>
<td>9 ft. 2 in.</td>
</tr>
<tr>
<td><strong>CHASSIS</strong></td>
<td>£625</td>
<td>£650</td>
<td>£695</td>
<td>£720</td>
<td>£750</td>
<td>£795</td>
</tr>
<tr>
<td>COMPLETE CARRIAGES,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest class Coachwork:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Phaeton.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulip Side-entrance, Coachwork to seat 5 persons, highest-class finish, Upholstered in Real Leather, Aluminium Panels.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Illustrated, pages 13, 14 or 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rol des Belges.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulip Side-entrance Coachwork, ditto, ditto.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Illustrated, page 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Landaulette or Limousine Coachwork, with Canopy (detachable or fixed) and Collapsible Wind Screen, to seat two inside and two outside. ditto, ditto.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Illustrated, pages 12 or 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Landaulette or ditto, ditto, to seat 4 inside and 2 outside. ditto, ditto.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As Illustrated, pages 12 or 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>£725</td>
<td>£795</td>
<td>£850</td>
<td>£925</td>
<td>£995</td>
<td>£1050</td>
</tr>
<tr>
<td></td>
<td>£750</td>
<td>£820</td>
<td>£875</td>
<td>£950</td>
<td>£1020</td>
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<td></td>
<td>£825</td>
<td>£895</td>
<td>£950</td>
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<td>£1095</td>
<td>£1150</td>
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<tr>
<td></td>
<td>£725</td>
<td>£945</td>
<td>£1000</td>
<td>£1075</td>
<td>£1145</td>
<td>£1200</td>
</tr>
</tbody>
</table>

*We can supply a limited quantity of 28/38 h.p. Chassis with short 8' 2" wheel base, at £555, and 30/40 h.p. 6-Cylinder Chassis with 9' 2" wheel base, at £895. Above prices for Complete Carriages include Two Side Lamps, One Rear Lamp, Horn, Jack, Inflator, in addition to standard equipment of tools and spare parts. Chassis prices include tools and spare parts only.*
4. LISTING OF COMPANY RECORDS

4.1 Guide to layout.

**Arrangement of entries:** The entries for companies and groups of related companies are arranged alphabetically with each entry headed by a characteristic name in bold block type. This heading is either common to all the companies in a group or has been judged to be the most representative.

**Company names and location:** The company names, addresses and years between which cars were manufactured is listed alongside a vertical line. Where companies have come under the control of large organisations this is indicated alongside a '>' mark. The purpose of this format is to make the lineage and various forms that companies have taken clearly visible at first sight. Company names are indexed at the end of Chapter 4, page 88.

**History:** Brief company histories compiled from referring to published secondary sources are given as background information. These should not be regarded as definitive. They highlight how companies were initiated, changes in structure and form, important personalities and a few details on the scale of manufacture and products.

**Record location and description:** The location of each record holding is numbered and its address given. The scope and level of detail in record descriptions inevitably varies widely, depending on what access was available to the records or to a listing of the records. Most descriptions start with the term *Records include* indicating that this is a summary revealing the nature of the record collection, not a comprehensive listing. Records have been listed approximately in the following order: corporate records;
share records; accounting records; production and technical records; labour and staff records; property records; marketing records; miscellaneous other records and photographs. The files of dissolved companies held at the Public Record Office at Kew are referred to by their class, BT31, followed by /class number and /company registration number. Any extra relevant information is included as a Note.

Access to records: It should be noted that all the records in the hands of private companies are unlisted and uncatalogued, as are still a large proportion of those in archives, record offices and museums. Access to listed records held at public or educational archive repositories is normally available barring any special conditions or closure periods. It is recommended that researchers should contact repositories in advance of any visit. However access to privately held records will not necessarily be allowed and researchers should make written requests asking permission.

Abbreviations.

c.    circa
Co    Company
Ltd   Limited
(p)   photocopy
plc   public limited company
PRO   Public Record Office
Rd    Road
St    Street
WW1   World War One
WW2   World War Two
4.2 Motor Car Industry: location and description of records.

AC

<table>
<thead>
<tr>
<th>Company</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Carriers Ltd.</td>
<td>1907-1911</td>
</tr>
<tr>
<td>Ferry Works, Thames Ditton, Surrey.</td>
<td></td>
</tr>
<tr>
<td>Auto Carriers (1911) Ltd.</td>
<td>1911-1921</td>
</tr>
<tr>
<td>AC Cars Ltd.</td>
<td>1922-1927</td>
</tr>
<tr>
<td>AC (Acedes) Ltd.</td>
<td>1927-1951</td>
</tr>
<tr>
<td>Thames Ditton, Surrey, and Taggs Island.</td>
<td></td>
</tr>
<tr>
<td>AC Cars plc.</td>
<td>1951-1985</td>
</tr>
<tr>
<td>AC Cars Ltd.</td>
<td>1993-to date</td>
</tr>
<tr>
<td>Vickers Drive, Brooklands Industrial Park, Weybridge KT13 0YU.</td>
<td></td>
</tr>
</tbody>
</table>

History: John Weller and John Portwine founded Autocars and Accessories Ltd in 1904 to make a three-wheeled trade carrier. A passenger version was launched in 1907 by the renamed Auto Carriers Ltd. Post war production commenced with a two seater, four cylinder car selling for £255. Portwine and Weller became directors of British Anzani in 1919. Racing driver S.F. Edge of Napier fame joined board in 1921 and took control after Weller and Portwine resigned in 1921. By 1928 AC were offering seven models but the 1929 world recession saw the company go into voluntary liquidation and the Thames Ditton factory was bought by Hurlock brothers in 1930. AC continued with limited production of specialist hand-made cars and export sales were developed in North America. Car manufacture resumed in 1946 after the fulfilment of war contracts and AC became a public company in 1951. The AC Cobra was developed during the 1960s, winning the Sports Car World Championship in 1965. The mid 1980s were a chaotic period for AC with production of the Cobra being moved to Glasgow, then to Knebworth, before AC went out of business in 1985. The Hurlock family sold their controlling interest to the joint ownership of Autokraft Ltd and Ford in 1987 with Brian Angliss of Autokraft acquiring Ford’s 51% share in 1992. In 1993 AC resumed production of two models, the Cobra and Ace, in a new purpose-built factory on Brooklands Industrial Estate.

Record (1): AC Cars Ltd, Vickers Drive, Brooklands Industrial Park, Weybridge, Surrey KT13 0YU.

Note: Description not yet available. AC are in the process of compiling a description of their records in response to this project.
ALBION

Albion Motor Car Co Ltd.
Finnieston St / Scotstoun, Glasgow. 1899-1913

History: Two engineers Norman Fullerton and Thomas Murray formed Albion after both had worked together at the Mo-Car Syndicate. Dogcarts were produced until 1904. By 1912 the company was making nearly four times as many commercial vehicles as cars and car production ceased in 1913. Albion became a major producer of lorries and buses and was eventually acquired by Leyland Motors Ltd in 1951, although retaining its identity into the 1960s. Albion is the only example of a Scottish car factory involved in the motor industry in the 1990s, with part of the Scotstoun works next to the Yarrow shipyard producing components for Leyland Daf vehicles.

Record (1): Biggar Museum Trust, Moats Park Heritage Centre, Kirksdale, Biggar ML12 6PT.

Records include: Minute books; job sheets; service manuals; spares lists; photographs.

ALLARD

Adlards Motors Ltd.
Putney, London SW15. 1936-1945

Allard Motor Co Ltd.
24-28, Clapham High St, London SW4. 1946-1959

History: Sydney Allard's service garage firm produced a limited number of competition cars before WW2. The Allard Motor Co Ltd was formed and new premises acquired in Clapham. By 1948 Allard was a leading sports car maker with 432 cars produced that year and considerable competition success. During the mid-1950s sales dropped away with competition from Jaguar and Aston Martin with final production figures totalling some 1,900. After ceasing car production the company continued with a range of outside contracts into the 1970s.

Record (1): Mr T.Lush, 51 Upper Richmond Road, London SW 15.

Blueprints/technical drawings (~24), filed samples of publicity material, 50-60 photographs, 1947-57, production register.

Note: After production ceased in 1959 works drawings and records were stored at the head office of the firm. In April 1966 the company's premises were destroyed by fire and all records lost other than some material temporarily at Mr Lush's home for the preparation of a company history.
ALLDAY and ONIONS

Alldays and Onions Pneumatic Engineering Co Ltd.
Matchless Works, Birmingham. 1898-1918

History: The company was established in 1889 to manufacture bicycles and its first motor vehicle was a quadricycle in 1898. The company's most successful cars were made between 1905 and 1913 with commercial vehicles introduced in 1906. The Enfield Autocar Co Ltd of Redditch was acquired in 1908. In 1918 the motor interests of the two firms were merged into a new firm, Enfield-Alldays Motors Ltd, continuing on with motorcycle manufacture and general engineering until ceasing trading in 1927.

Records: see ENFIELD-ALLDAY.

ALVIS

T.G. John Ltd. 1919-1921
Hertford St, Coventry

Alvis Car & Engineering Co Ltd. 1921-1936
Holyhead Rd, Coventry.

Alvis Ltd. 1936-1967
Holyhead Rd, Coventry.

Rover Motor Co Ltd 1965-1967
Leyland Motors Ltd. 1967-1968
British Leyland Motor Corporation. 1968-1975
British Leyland Ltd. 1975-1981
United Scientific Holdings 1981-to date

History: In 1919 T.G. John formed his own engineering company in Coventry making engines, carburettors and scooters. In association with engineer G.P.H. de Freville the first Alvis was put into production by John in 1920 in the new Alvis Car & Engineering factory at Holyhead Road. With a high reputation for quality the company prospered in the late 1920s with yearly production of chassis reaching 1000 in 1927. Bodywork was contracted out to firms such as Vanden Plas, Charlesworth, Cross and Ellis and Holbrook and Mulliner. Larger more luxurious cars appeared from 1934 with the first all-synchromesh gearbox on a British car and independent front suspension.

Alvis changed its name in the mid 1930s and with the car market declining diversified into aero engines and armoured cars. After WW2 limited car production resumed until 1954 when Alvis' bodywork supplier, Mulliner, was taken over by Standard. Car manufacture resumed in 1958 using coachbuilder Park Ward, with car production eventually ceasing in 1967. Alvis had been acquired by Rover in 1965 and continued making armoured vehicles,
becoming part of British Leyland until bought by United Scientific Holdings in 1981.

Record (1): Coventry City Record Office, Bayley Lane, Coventry CV1 5RG.

Records include: Minutes of directors, shareholders, board meetings, 1925-68; memorandum and articles of association of TJ John, 1917; general, nominal, private, expense and supplier ledgers, salary records, petty cash books, detailed and final accounts, balance sheets, plant-capital-materials registers, income tax computations and correspondence, 1937-64; contractual and legal agreements, 1922-66, ; patents, 1940-63, trade mark certificates 1930,58; leases, trust declarations; register of documents sealed 1934-60; share and stock reports, registers, prospectuses, stock certificates, analyses of shareholding, summaries of stock, lists of transfers; affidavit and registrar's notes on liquidation and reconstruction, 1924-36; agreements and other records, 1952-65; documents on possible Alvis-Rover merger; Works Sick and Dividend Society summaries of sick and dividend members.

Accession numbers 985, 1012, 1042, 1260,1454.

Record (2): Museum of British Road Transport, Hales St, Coventry CV1 1PN.

Photographic archives (prints) including employees working in Alvis Works, 1925-30; wartime activities in factories; publicity shots of cars.

Record (3): Red Triangle Autoservices Ltd, Common Lane Industrial Estate, Kenilworth, Warwickshire CV8 2EL.

Production records, registers and photographs.

Record (4): British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 OBJ.

Memorandum and Articles of Association, 1949, with 1957,58,59 resolutions; Seal book, 1960-76.

Record (5): Modern Records Centre, Warwick University, Coventry CV4 7AL.

Reports to Rover Company board, 1966-71. MSS 226/RO/1/1/10-12.

Notes: Alvis records including drawings and photographs were partially destroyed by bombing on 14/11/40.
ARGYLL

<table>
<thead>
<tr>
<th>Argyll Motors Ltd.</th>
<th>1905-1907</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgeton, Glasgow.</td>
<td></td>
</tr>
<tr>
<td>Alexandria by Glasgow.</td>
<td>1906-1907</td>
</tr>
<tr>
<td>Argyll Ltd.</td>
<td>1907-1914</td>
</tr>
<tr>
<td>Brimlow, John and Charles.</td>
<td>1919-1928</td>
</tr>
<tr>
<td>Bridgeton, Glasgow.</td>
<td></td>
</tr>
</tbody>
</table>

History: Alexander Govan first designed a Renault inspired car in 1899 and with W.A. Smith formed Hozier Engineering Co Ltd in 1900. By 1902 production was up to 15 vehicles a week. Argyll Motors Ltd was formed in 1905 to take over Hozier and moved to an imposing new factory at Alexandria. Govan died in 1907 and over capacity forced a restructuring to form Argylls Ltd. After financial patent problems and despite high quality workmanship the company collapsed in 1914. The Alexandria factory was sold and the Bridgeton factory became a store for the remnants of the firm. Postwar production was revived under the Brimlows until 1928.

Note: No coherent holding of records found apart from occasional catalogues and brochures at the Glasgow Museum of Transport, Kelvin Hall, 1 Bunhouse Road, Glasgow, and at the Department of Science Technology and Working Life, Royal Museum of Scotland, Chambers St, Edinburgh.

ARIEL

<table>
<thead>
<tr>
<th>Ariel Motor Co Ltd.</th>
<th>1898-1906</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale Road, Bournbrook, Birmingham.</td>
<td></td>
</tr>
<tr>
<td>Ariel Motors Ltd.</td>
<td>1906-1915</td>
</tr>
<tr>
<td>Ariel Works Ltd.</td>
<td>1915-1916;1922-1925</td>
</tr>
</tbody>
</table>

> BSA.

History: The Ariel Motor Co Ltd was formed as a subsidiary of Cycle Components Manufacturing making initially tricycles and quadricycles and a car in 1901. Financial problems prompted a reorganisation to Ariel Motors Ltd in 1906 and then a rescue by Societe Lorraine de Dietrich. Ariel had cars made at Coventry Ordnance Company until 1916 with Ariel's car and motorcycle companies jointly registered from 1915 as Ariel Works Ltd. After 1925 the company made motorcycles only and eventually joined the BSA-Daimler group.
Record (1): Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT31/8869/65255 for Ariel Motor Co Ltd; BT31/13012/106328 for Ariel Motors Ltd; BT31/11465/88209 for Ariel Motors (1906) Ltd.

Note: No significant holding of records found other than the PRO. Birmingham Central Library does have a '1906 Ariel-Simplex Motor Carriages' catalogue with car specifications, prices and guarantee information in its local history section and there is an Ariel car in the Birmingham Science and Technology Museum.

ARMSTRONG SIDDELEY

Armstrong-Siddeley Motors Ltd.
Parkside, Coventry. 1919-1960

>Hawker Siddeley Aircraft Co. 1935-1946
>Hawker Siddeley Group 1946-1959

History: Formed from merger of Armstrong-Whitworth and Siddeley-Deasy Motor Manufacturing Co. Production reached 4000 per year by the mid-1920s with the company doing its own coachwork. From 1926 the Armstrong-Siddeley Development Co Ltd holding company controlled Armstrong-Whitworth Aircraft Ltd, Armstrong-Siddeley Motors Ltd, A.V.Roe Ltd and Burlington Carriage Co. Siddeley set up a separate company called Self Changing Gears Ltd making Wilson gearboxes that were an important step towards modern automatic transmission for a number of car makers. Merged with Hawker Engineering in 1935 and with its main aero engine rival Bristol in 1959. Car production continued after WW2 with over 12,000 made between 1945 and 1953, until, cars were no longer an economic proposition for the company by 1960.

Record (1): Coventry City Record Office, Bayley Lane, Coventry CV1 5RG.

Records include: Minutes of board of directors, 1906-56; register of directors or managers, 1919-46; memorandum and articles of association, 1906, 1920, 1927, 1936, 1949; legal agreements, licences, patents, seal registers, leases, title deeds (including site deeds and other legal documents from 1785), cash books, 1919-49; nominal, impersonal, sales, stores and private ledgers, c.1921-59; balance sheets and accounts, c.1906-66; shareholding records, 1906-50; correspondence files relating to suppliers and to a wide range of general matters; car delivery record book, 1920-1928, car and chassis record book, 1933-1946. salaries lists, 1915-17; wage table 1918; time rate record books ; apprenticeship records, 1912-1975; provident/benevolent/hospital fund receipts and payments, 1936-51; staff assurance scheme records, 1935-48; employers association correspondence
files, 1953-54; records of subsidiaries such as Stoneleigh Motors Ltd, The Burlington Carriage Co (1913) Ltd, the Self Changing Gear Trading Co Ltd, Improved Gears Ltd and J.A.Lawton and Co Ltd are also held. Accession numbers 748, 1020, 1060, 1074, 1128, 1150, 1207, 1343, 1359, 1397.

ARROL-JOHNSTONE

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Year Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arroll-Johnston and Co.</td>
<td>1902-1906</td>
</tr>
<tr>
<td>Arroll-Johnstone Car Co Ltd (The New)</td>
<td>1906-1915</td>
</tr>
<tr>
<td>Arroll-Johnston Ltd.</td>
<td>1913-1927</td>
</tr>
<tr>
<td>Galloway Motors Ltd [subsidiary].</td>
<td>[1921-1922]</td>
</tr>
<tr>
<td>Arroll-Johnston &amp; Aster Engineering Co Ltd.</td>
<td>1927-1929</td>
</tr>
</tbody>
</table>

History: George Johnston formed the Mo-Car Syndicate Ltd to manufacture dog carts with financial backing from Sir William Arrol in 1895. Following a factory fire, a newly named company Arroll-Johnston and Co was set up to produce newly designed cars. Another name change followed, and, by 1907 yearly production reached 700 with commercial vehicles also important. Production moved to Heathall (Dumfries) in 1913 and to Tongland, site of Arroll-Johnstone subsidiaries Galloway Engineering and Galloway Motors. Arroll-Johnston and Aster Engineering Co Ltd joined to from a new company in 1927 and Galloway Motors was liquidated in 1928 leaving car production to wind down at Heathall as the company expired.

Note: No coherent holding of records found apart from occasional catalogues and brochures at the Glasgow Museum of Transport, Kelvin Hall, 1 Bunhouse Road, Glasgow, and at the Department of Science Technology and Working Life, Royal Museum of Scotland, Chambers St, Edinburgh.
## History

Birmingham engineering firm, Renwick and Bertelli, started Aston Martin Ltd on acquiring Bamford and Martin Ltd. After financial difficulties in 1931 the company was bought by Prideaux-Brune, who was joined by Sutherland, with Bertelli as designer (until 1937). Aston Martin flourished in the early 1930s with prestigious successes at Le Mans and the Tourist Trophy. Cars were based on the original 1926 1.5 litre engine design of Renwick and Bertelli. A new range of saloons, two seaters and the streamline Atom saloon based a new 2 litre engine followed taking the company up to WW2. Tractor manufacture David Brown acquired a controlling interest in 1947 bringing with him the Lagonda Motor Co. A long line of DB Aston Martins followed which up to 1959 were based on a W.O.Bentley 2.5 litre engine and the Atom chassis. In 1972 David Brown divested himself of debts by selling the company to Company Developments. Insolvent in 1974, the company was rescued by Minden and Sprague forming Aston Martin Lagonda (1975) Ltd. Gauntlett and Healey bought the company in 1980 and by 1984 the 10,000th Aston Martin was completed with production running at ~4 per week. Prices lay in the $50,000-$80,000 bracket. Gauntlett became sole owner in 1985 and Ford acquired control in 1987.

### Record (1)

Aston Martin Lagonda Ltd, Tickford St, Newport Pagnell, Buckinghamshire MK16 9AN.

Unlisted business, operational and technical records.

### Record (2)

Aston Martin Owners Club, 1A High St, Sutton, Cambridgeshire CB6 2RB.

Gordon Sutherland papers: summary of accounts, 1929-1938; accounts, 1927; specifications and prices, 1938, 1947; debentures 1932, 33, 37; vehicles delivered, 1934-35; night watchman's report book, 1939; graphs showing car sales and catalogue enquiries, 1933-39; patent for metal-framed bodies (Atom), 1952; notes on prototype Atom; Claude Hill engine calculations 1941; staff list, 1939; records of cars sold to different dealers, 1933-40; deliveries, model, colour, 1933-40;

File on rescue bid for Aston Martin Ltd 1974; production development projects, 1956-63; Master Engineering Department projects, 1956-63; Experimental Department technical sheets, 1950-61, 64; Experimental Department reports on petrol starvation, engine seizures, general, water temperature, engine assembly, brakes/linings, oil consumption, 1956-58; pre-war engineering drawings; files, calculations and drawings by E.J.Cutting, 1949-63; instruction books, 1953-54; annual summary tables with details on specifications, new cars, road tests, race results, prices, 1950-55; road test reports 1960-65; man hour schedule; UK dealers and distributors, 1950s; advertisements, 1950, 51, 58; service records; letter to distributors, 1983; press releases, including road tests. 1949-to date; rallying and racing documentation with teams, publicity, results; car specifications; competition programmes, press cuttings; 1950s; complete set of Aston Martin Quarterly.

AUSTIN

<table>
<thead>
<tr>
<th>Austin Motor Co Ltd.</th>
<th>1906-1914</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longbridge, Birmingham.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Austin Motor Co (1914) Ltd.</th>
<th>1914-1916</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Austin Motor Co Ltd.</th>
<th>1916-1952</th>
</tr>
</thead>
</table>

>British Motor Corporation 1952-1966
>British Motor Holdings. 1966-1968
>British Leyland Cars Ltd. 1968-1982
>Rover Group Ltd. 1982-1994
>BMW 1994-to date

History: Herbert Austin developed the first Wolseley car in 1896. In 1905 he formed the Austin Motor Co in 1905 with Kayser of the Sheffield Steel manufacturers 'Kayser, Ellison and Co', with much of the share capital held by Ducros (owner of the Dunlop patents). In 1914 Austin became a public limited liability company, employing over 2500, rising to over 22,000 during WW1. Austin went into receivership in 1921 following on from a failed £5 million share flotation in 1920. The firm was restructured in 1922 with Englebach from Coventry Ordnance and Marks from Alldays joining Herbert
and DuCros on the board. Vast factory expansion in late 1920’s. The diminutive four cylinder Austin Seven helped give Austin 37% of the British market in 1929 bringing affordable motoring to a mass market. The 1933 share issue was oversubscribed eight times and in 1936 Herbert Austin became Lord Austin. L.P. Lord took over as chairman of the board on Lord Austin’s death in 1941. The millionth Austin was made in 1946 and the bodywork firm Vanden Plas was taken over, to be followed by that of Fisher and Ludlow in the 1950’s. Austin and Morris merged to form British Motor Corporation in 1952 creating the fourth largest motor company in the world. BMC merged with Jaguar-Daimler to create British Motor Holdings in 1966. In 1968 Leyland (who already controlled Triumph, Rover, and Alvis) took over BMH. In 1982 British Leyland Cars Ltd became the Austin Rover Group Ltd.

Record (1): Modern Records Centre, Warwick University, Coventry CV4 7AL.


Record (2): British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 OBJ.

Records include: Minutes of annual general, board and directors meetings, 1959-77; directors' attendance book, 1962-77; minutes of inspectors' Benevolent Society meetings, 1934-1972; register of directors, 1938-76; register of directors holdings, 1948-66; draft agreements on formation of Austin Motor Co (1914); memorandum and articles of association, 1905.; draft copies of director's report and resolutions for general meeting, 1934; general ledger, 1912-14 ; private ledger 1906-14 ; summary of balance sheets, 1906-24; debenture certificates, 1913; prospectus, certificates, forms and correspondence relating to 1932 and 1933 debenture issues; indentures and agreements related to assigning premises, trade marks, book debts from the old company to the new; schedules of deeds relating to Longbridge, 1839-1919; copies of trust deeds for securing debenture stock (1926 and 1933); memorandum of satisfaction of mortgage, 1914; business, legal papers and agreements (unlisted) 1905-20s; agreements, valuations, licenses etc filed from A-W, 1905-1960s; copies of circular, letters etc sent out to creditors, shareholders, agents etc., 1926-34; staff share allocation, 1935; sales schedules 1941-45; motor car competitions agreement with Vacuum Oil, 1934; personal correspondence connected with Lord Austin, 1930s-40s; Lord Austin's original financial notes made prior to commencement of original Austin Motor Co, 1905.

Production registers, most models of cars and commercial vehicles, 1945-69; extensive photographic archive.
Record (3): Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT31/11340/86835 for Austin Motor Co Ltd.

**BEAN**

<table>
<thead>
<tr>
<th>Harper Bean Ltd.</th>
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</thead>
<tbody>
<tr>
<td>Tipton, Dudley, Staffordshire. 1919-1926</td>
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<table>
<thead>
<tr>
<th>Bean Cars Ltd.</th>
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</thead>
<tbody>
<tr>
<td>1926-1929</td>
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</tbody>
</table>

**History:** The company origins were with A. Harper and Sons (1901), makers of stampings, castings and forgings. A. Harper, Sons and Bean Ltd (formed in 1907) acquired Perry Motor Co Ltd, leading to the production of a Perry based car by the renamed Harper Bean Ltd in 1919. Acquired British Motor Trading Corporation and shares in Vulcan, Swift and ABC. The company was salvaged by Polson after being liquidated in 1920. Bean Cars Ltd were taken over by the steel producer Hadfields in 1927 with the company going over to commercial production in 1929. Part of the company survived receivership in 1931 as Bean Industries Ltd, later to become part of Standard-Triumph, British Leyland, and Rover, until a management buy-out in 1991 restored the firm's independence. Bean Industries purchased the bankrupt Reliant Motor Co Ltd in 1991.

**Record (1):** British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 OBJ.

Register of directors; A. Harper, Sons & Bean Ltd mortgage debenture stock trust deeds, 1922 (includes detailed plans of Dudley and Tipton properties); Bean Cars Ltd debenture stock deed, 1926.

**Record (2):** Modern Records Centre, Warwick University, Coventry CV4 7AL.


**Record (3):** Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT31/25209/160415 for Harper Bean Ltd.

**Record (4):** Old Bean Society, c/o Registrar, Mr Dave Foster, 10 Prospect Way, Gornal Wood, Dudley DY3 2TJ.

**Records include:** Assorted catalogues, photographs, parts lists and manuals; video film of Jack Bean on a sales mission to Australia.
BELSEIZE

Belsize Motor Car and Engineering Co Ltd.
Manchester. 1903-1906

Belsize Motors Ltd.
Belsize Works, Clayton, Manchester. 1906-1925

History: Formed from merger of Belsize Works and Marshall & Co. (1897-1902). Products included cars, commercial engines, chassis and marine engines. By 1914 workforce was 1500, but company suffered in post-war trading conditions, collapsing in 1925.

Record (1): Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT/31/10495/79205 for Belsize Motor Car and Engineering Co Ltd.

BENTLEY

Bentley Motors Ltd.
Oxgate lane, Cricklewood, London NW2. 1920-1931

Bentley Motors (1931) Ltd. 1931- to date

> Rolls Royce 1931- to date

History: Bentley made cars for the top end of the market appealing to the aristocracy and show business figures. Barnato took control of the under capitalised company in 1925. The years 1927-1930 saw four successive Le Mans victories and a production high of 408 in 1928. Ceased trading in 1931 and became a wholly-owned subsidiary of Rolls Royce under the guise of purchase by British Central Equitable Trust Ltd.

Record (1): Bentley Drivers Club Ltd, W.O. Bentley Memorial Building, 16 Chearsley Road, Long Crendon, Aylesbury, Buckinghamshire HP18 9AW.

Records include: Works service books (detailed); chassis build cards; assorted manuals and handbooks; some W.O.Bentley correspondence and papers; Nobby Clarke papers (early engineer); race cards, photographs.

Record (2): Rolls Royce Enthusiasts Club, Hunt House, Paulerspury, Towcester, Northamptonshire.

See ROLLS ROYCE.
History: Sir George White set up the British and Colonial Aeroplane Company in 1910, renamed the Bristol Aeroplane Company in 1920. During the inter-war years the company made bodies for Armstrong Siddeley cars and Bristol buses. Fedden and White redirected the company towards car manufacture after WW2, acquiring many BMW designs and the services of former BMW designer Dr Fritz Fiedler. The company was reorganised into three wholly owned companies in 1956 and when Bristol became part of the British Aircraft Corporation in 1960 the cars division of Bristol Cars Ltd passed into the joint ownership of the grandson of the founder and Tony Crook (Crook took over as sole owner in 1973). From 1961 the bodies of the now American engined cars were produced by Park Royal Vehicles Ltd at Acton.

Record (1): Bristol Cars Ltd, 368 Kensington High Street, London W14 8NL.

Note: Description not available but original engineering drawings and photographs of factories and cars are known to exist together with probably extensive business records.

BMC-BMH-BL-AUSTIN ROVER

- **British Motor Corporation Ltd.** 1952-1966
  (Austin, Morris, MG, Riley and Wolseley).

- **British Motor Holdings Ltd.** 1966-1968
  (BMC +Jaguar, Daimler, Coventry-Climax, Pressed Steel).

- **British Leyland Motor Corporation.** 1968-1975
  (BMH+ Leyland Motor Corporation Ltd)

- **British Leyland Ltd.** 1975-1982

- **Austin Rover Group Ltd.** 1982-1990

- **Rover Group Ltd.** 1990-to date
  - >British Aerospace 1988-1994
  - >B.M.W. 1994-to date.
Record (1): Legal Department, Rover Group Ltd, International House, Bickenhill Lane, Bickenhill, Birmingham B37 7HQ.

Records include: Directors' minute books.

Record (2): British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 0JB.

Note: Extensive unlisted records continually being deposited at Gaydon archive. This project has not attempted to describe these recent records.

Record (3): Modern Records Centre, Warwick University, Coventry CV4 7AL.

BMC annual reports and accounts, 1952-67; BLMC records, 1965-74. MSS226/BL, MSS 226/BM

BSA

Birmingham Small Arms Co Ltd.
Sparkbrook, Birmingham. 1907-1926; 1933-1937

Birmingham Small Arms Cycles Ltd.
Small Heath, Birmingham. 1929-1940

History: Origins in the manufacture of rifles, shotguns, machine guns and then in 1880 bicycles. Car production started in 1907, managed by E.E. Baguley (previously of Ryknield). On taking over Daimler in 1910, BSA's own car range was dropped and Baguley left. BSA motorcycles were manufactured at their Small Heath factory from 1910 and the Sparkbrook factory was turned over to machine tool manufacture. The BSA name appeared on cars that were actually small Daimlers made at Coventry until 1926. BSA Cycles Ltd manufactured ~8000 three wheelers between 1929-1936 together with ~400 derivative four wheelers. Between 1933 and WW2 a range of BSA cars were built at Lanchester together with one car made by BSA Cycles Ltd. Motor cycle manufacture lasted to 1973 when the assets were acquired by the Norton-Villiers-Triumph group.

Record (1): Modern Records Centre, Warwick University, Coventry CV4 7AL.

Records include: Board minutes (p), 1896-1901, 1912-17, 1926-60, 1969-73; annual meetings (p), 1875-1901; shareholders meetings (photocopies), 1897-1952; board minutes of BSA Cycles Ltd (photocopies), 1919-34; board papers, including reports between 1907-1960, particularly relevant to early car production; financial statistics including trade accounts, stock valuations, analyses of work, 1890-1938; production and sales figures, 1980-28; annual reports, 1936-49; salaries ledger, 1889-1937; MSS 19A and MSS 19C
Record (2): Solihull Central Library, Homer Road, Solihull.

**Records include:** Minutes, directors reports, agreements, licences, contracts, valuations, business correspondence, stock and debenture literature, reports of annual general meetings, publicity and patent records; employment agreements, directors fees, salaries, pension rights, annual accounts; correspondence re trademarks, patents, inventions. and technical specifications; pamphlets, catalogues, booklets, magazines, 1873-1976.  
**Note:** Much of this is to do with motor cycles.

Record (3): Birmingham Central Library, Archives Division, Chamberlain Square, Birmingham B3 3HQ.

**Records include:** 1876-1972: minute book, annual reports, accounting records, instruction manuals and specifications, salaries and wage books; Small Heath deeds, 1895-1972. **Accession numbers 91, 114.**

Record (4): Jaguar Cars Ltd, Legal Department, Brown's Lane, Allesley, Coventry CV5 9DR.

**Records include:** Directors reports and statement of accounts, 1951, 54; accounts and balance sheets of subsidiary companies, 1929.

Record (5): Nottingham Archives, County House, Castle Meadow Road, Nottingham.

Minutes, catalogues, etc. (BSA Cycles Ltd), 1902-56.  
**See also** Daimler Record (1) correspondence files.

**CALCOTT**

| Calcott Brothers Ltd. |
| Far Gosford St, Coventry |
| 1913-1926 |

**History:** Company formed in 1896 producing bicycles. Became subcontractor to Siddeley-Deasy and made motor cycles and engines. Following successful production for three years after WW1, under investment in machinery brought problems from 1924 on. Factory bought by Singer in 1926 and building survives today as Astley's.

Record (1): Coventry City Record Office, Bayley Lane, Coventry CV1 5RG.

Balance sheets and reports.

Record (2): Museum of British Road Transport, Hales St, Coventry CV1 1PN.

Photographs including album showing employees in full range of jobs in factory (building still standing today owned by Astley's).
CALTHORPE

| Calthorpe Motor Co.                        | 1905-1906        |
| Calthorpe Motor Co Ltd.                   | 1906-1912        |
| Calthorpe Motor Co (1912) Ltd             | 1912-1924        |

**History:** Evolved alongside George W. Hands’s Minstrel and Rea Cycle Co Ltd which remained in Barn Street while car production was centred at new premises in Cherrywood Road. Bought the Mobile Motor and Engineering Co Ltd in 1907 and Mulliners (Birmingham body making firm) in 1917. Hands left in 1921 to make car of his own name, assembled in the Barn Street factory of the Calthorpe Motor Cycle Co, but returned in 1923. Car production stopped in 1924 and the factory was put up for sale in 1926. Calthorpe Motor Cycle Co continued until 1938. Mulliners survived as a supplier of coachwork to Standard and Lanchester, being taken over by Standard-Triumph in 1957.

**Note:** No holdings of records identified.

CHAMBERS

| Chambers Motors Ltd.                      | 1904-1914        |
| 15 Cuba St, Belfast.                      | 1914-1925        |
| 106 University Street, Belfast.           | 1914-1925        |

**History:** The origins of the company were in the Chambers’ family engineering business founded in 1897. The Chambers car was an improved version of the 1903 car that one of the Chambers brothers had produced for Vauxhall. Production ~500. The firm continued as a Renault agency until going into voluntary liquidation in 1929.

**Record (1):** Public Record Office of Northern Ireland, 66 Balmoral Avenue, Belfast BT9 6NY.

Access to Chambers records is closed until 100 years after the company liquidation.
CLEMENT-TALBOT

Clement-Talbot Ltd.
Barlby Rd., North Kensington, London W1. 1903-1938

>Rootes Group 1934-1970

History: Formed by French car maker Adolph Clement, the Earl of Shrewsbury and Talbot. From initially assembling cars from French components, they were virtually all British by WW1. The company was taken over in 1919 by Society Alexandre Darracq becoming part of the Sunbeam-Talbot-Darracq group, British owned but based in Paris. Successful cars launched in 1926 revived the company, but, with serious financial problems in 1934 the whole group was taken over by the Rootes group.

See ROOTES GROUP.

CROSSLEY

Crossley Brothers Ltd.
Gorton, Manchester. 1904-1910

Crossley Motors Ltd.
Gorton, Manchester. 1910-1937

History: William and Frank Crossley acquired patent rights to Otto and Langen’s engines in 1869 and to the 'Otto' four-stroke engine in 1877. Car production followed in association with Jarrott and Letts' car dealers and designer J.S.Critchley from Daimler. Crossley Motors Ltd was formed from a merger with Jarrott and Letts. By 1913 output was 650 cars with ~10,000 cars supplied as staff cars, ambulances and armoured cars during WW1. The A.V.Roe aircraft company was acquired in 1920 and sold to Armstrong-Siddeley in 1928. Commercial vehicle manufacture grew, including Britain's first diesel double decker bus in 1930. Car manufacture ceased in 1937, the company being bought by AEC in 1948 to create Associated Commercial Vehicles Ltd (also joined by Maudslay).

Record (1): Modern Records Centre, Warwick University, Coventry CV4 7AL.

Records include: Board minutes, 1932-54; registers of shareholders, 1910-45, of seals, 1923-59; salary records of directors and senior staff, 1942-58; sales journal, 1949-59; correspondence about capital. MSS 226/CR.
CUBITT

Cubitt's Engineering Co Ltd (The).
Southern Works, Bicester Road, Aylesbury. 1920-1925

History: This company was a subsidiary of Holland, Hannen and Cubitt Ltd (now part of Tarmac) a respected building and civil engineering giant whose origins go back to 1810. A new factory was purpose built at Aylesbury in 1919. By 1921 weekly output of solid and durable cars with pedestrian performance was 60-70. The design was given a facelift in 1923 and spare factory capacity was used to make Anzani engines for AC. However Anzani was nearly bankrupted and AC's reputation ruined by the low quality of this work. Cubitt's went into voluntary liquidation in 1925 after making ~3000 cars.

Record (1). Local History Section, Aylesbury Reference Library, Aylesbury.

Copy of Buck Herald newspaper report on the meeting of Cubitt's creditors held in the Bankruptcy Buildings, Lincolns Inn, London, 29th August 1925 (contains liquidator's observations on the affairs of the company); assorted journal articles and reviews. Accession numbers L000:62 'E' and L372:62 'E'.

Note: After going into liquidation Cubitt's assets were taken over by its distributor Elephant Motors of Elephant and Castle (London). The company records are reported to have been thrown into a skip.

DAIMLER

Daimler Motor Co Ltd.
Motor Mills, Sandy Lane, Coventry. 1896-1904

Daimler Motor Co (1904) Ltd.
Motor Mills, Sandy Lane, Coventry. 1904-1910

Daimler Co Ltd.
Motor Mills, Sandy Lane, Coventry. 1910-1941
Radford Works, Daimler Rd, Coventry. 1912-1960

>BSA 1910-1960
>Jaguar Cars Ltd 1960- to date

History: F.R. Simms created the Daimler Motor Syndicate in 1893 to take over his own engineering firm that was fitting Gottlieb Daimler's engines to boats. Lawson, Hooley and Rucker's 'British Motor Syndicate Ltd' bought the company and floated it publicly in 1896. The first all-British Daimler was produced in 1897 and Britain's first four cylinder car in 1899. Daimler Motor Company (1904) Ltd was created with a £200,000 flotation in 1904. A factory was built at Sandy Lane in 1908-9 which today produces Jaguar engines.
Daimler was purchased by Birmingham Small Arms Co in 1910. The purchase of the Lanchester company in 1931 enabled Daimler to move into the family car market. In 1936 a separate company Transport Vehicles (Daimler) Ltd was formed to further Daimler's public service vehicle programme. During WW2 fifty factories came under Daimler control with its main shadow factory at Brown's Lane, Coventry. This became Jaguar's home after BSA sold Daimler to Jaguar in 1960.

Record (1): Coventry City Record Office, Bayley Lane, Coventry CV1 5RG.

Records include: Minute books 1896-1913, 1924-1932; share ledgers, books of share and stock transfers, registers, sales ledgers, 209 correspondence files relating to wide range of subjects such as meetings, statements, leases, patents, employment contracts; minute books, agenda books, financial accounts and ledgers, legal and contractual records, car assembly production records 1932-1944; Daimler Motor Mill site deeds, 1896-1915; lease agreements, licences and correspondence 1908-1918; agreement with Coventry Corporation 1897; agreements and papers 1897-1967; Daimler-Jaguar publicity material. Accession numbers 466, 594, 669, 680, 682, 698, 819, 1054, 1358, 1620.

Record (2): Jaguar Cars Ltd, Legal Department, Brown's Lane, Allesley, Coventry CV5 9DR.

Records include: Directors' minute books, 1896-1913, 1924-32; general minute book, 1896-1905; memorandum and articles of association, 1896; substituted articles of association, 1959; register of directors, 1896-78; share register 1909-78; share certificates, 1911-60; statutory returns, post-1952; weekly/monthly overhead expenses, 1939-40; agreements; register of mortgages or charges for Daimler Motor Co (1904) Ltd (also for SS Cars Ltd), 1902-42; documents relating to assignment of registered trade marks and patents between Daimler and Jaguar and the sale of Daimler assets to Jaguar; photographic album presented to Mr George Needle on 21 years service consisting of 82 photographs of members of staff, 1896-1917.

Record (3): Jaguar Heritage Trust Ltd, Browns Lane, Allesley, Coventry CV5 9DR.

Records include: Production records, from 1952; despatch records, from 1933; sales records, handbooks and brochures; photographs.

Record (4): University of London Library, Archives Department, Palaeography Room, Senate House, London WC1E 7HU.

Records include: Papers of Simms as consulting engineer to Daimler, 1896-97; reports and annual reports, accounts, share register, minutes, letter book and corresp, descriptions and specifications of cars, plans etc, 1893-1904 (all as part of Simms Papers).
Record (5): Museum of British Road Transport, Hales St, Coventry CV1 1PN.

Records include: Handbooks and brochures; production records; technical drawings; photographic archive of ~3000 glass plates, with all images available for viewing on laser videodisc.

Record (6): Modern Records Centre, Warwick University, Coventry CV4 7AL.

Board minutes (p), 1932-45.

Notes: The Daimler Motor Mills factory at Sandy Lane took a direct bomb hit in 1941 resulting in the probable loss of records. There are plans to relocate the Simms' papers from London University Library to the Veteran Car Club premises at Ashwell, Hertfordshire.

DEASY / SIDDELEY DEASY

<table>
<thead>
<tr>
<th>Deasy Motor Car Manufacturing Co Ltd.</th>
<th>1906-1911</th>
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<tbody>
<tr>
<td>Parkside, Coventry.</td>
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<tr>
<th>Siddeley-Deasy Motor Car Co Ltd.</th>
<th>1912-1919</th>
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</table>

History: Captain H.H.P.Deasy formed his own car company setting up in the defunct Iden Motor Co factory. Deasy’s cars proved unreliable and his place was taken by J.D.Siddeley in 1909, who had resigned from Wolseley. The firm became the Siddeley-Deasy Motor Car Manufacturing Co Ltd in 1912, making cars renowned for the quietness of their engines. Siddeley also formed Stoneleigh Motors Ltd to produce lower quality vehicles. Siddeley-Deasy’s wartime aero engine work was continued after WW1. The company was bought by Sir W.G.Armstrong, Whitworth and Co in 1919 and became a subsidiary company, Armstrong-Siddeley Motors Ltd.

Note: Records are part of Armstrong Siddeley records. See ARMSTRONG SIDDELEY.

ENFIELD / ALLDAY

<table>
<thead>
<tr>
<th>New Eadie Manufacturing Co Ltd.</th>
<th>1903-1906</th>
</tr>
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<tbody>
<tr>
<td>Hunt End Works, Redditch, Worcestershire.</td>
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<tr>
<th>Enfield Autocar Co Ltd.</th>
<th>1906-1918</th>
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<tr>
<th>Enfield-Allday Motors Ltd.</th>
<th>1918-1925</th>
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</table>

History: Company’s origins were in sewing machine and cycle manufacture. From 1903 some light cars were made by the New Eadie Manufacturing Co
Ltd/Enfield Cycle Co until car manufacture was rationalised at a new company, Enfield Autocar Co Ltd, under the directors A. Eadie and E. H. Lancaster. The company went into receivership in 1908 and was bought at auction by Alldays and Onions Pneumatic Engineering Co. Ltd. The two companies merged in 1918.

Record (1): Mr Barry Smith (grandson of founders of Enfield Cycle Co.),
246 Birchfield Road, Redditch B97 4LZ.

Records include: Correspondence on engineering design, 1905; correspondence from E. H. Lancaster on alterations in engine design, 1906; handwritten notes on the history, problems and winding up of the Enfield Autocar Co Ltd.

Note: The above records are collectively known as the Albert Eadie papers, photocopies of which are also possessed by Michael Stratton of the Ironbridge Institute. Redditch Library has original typescripts of two books by William J. Solloway, entitled 'Early Redditch motor cars' and 'Motor cars in needle land' published in 1960 and 1970 respectively and also has contacts with a lady currently writing the history of Royal Enfield.

FORD

<table>
<thead>
<tr>
<th>Ford Motor Co Ltd.</th>
<th>1911-1931</th>
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<tbody>
<tr>
<td>Trafford Park, Manchester.</td>
<td>1931-to date</td>
</tr>
<tr>
<td>Dagenham, Essex.</td>
<td></td>
</tr>
<tr>
<td>Halewood, near Liverpool.</td>
<td>1963-to date</td>
</tr>
<tr>
<td>+ ~8 other sites.</td>
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</tbody>
</table>

History: Assembly of the Model T began in 1911 after Ford cars had been sold in Britain since 1903. By 1914 Ford produced 29% of British production, but had fallen behind Morris by 1922. Trafford Park had produced 250,000 Model Ts and 14,000 Model As by its closure in 1932. The new site at Dagenham was set up to supply the European market, with its first big success being the Model Y marketed for under £100 in 1935. Tractors and commercial vehicles were also produced at Dagenham. By 1954 yearly vehicle production had risen to 297,768. Expansion in the 1950s included a product engineering division at Rainham (Essex), a commercial vehicle plant at Langley (Buckinghamshire), a new factory at Halewood (near Liverpool) and buying Briggs Car Bodies. Ford of Britain became a fully owned subsidiary of the American parent company in 1961 and in 1967 became Ford of Europe. During the 1970s Ford created an international production system with increasingly flexible technologies and adaptable workforces. By 1984 Ford was the UK market leader in cars, commercial vehicles and tractors with eight main plants in Britain. Ford of Europe was abolished in April 1994. The administrative headquarters is at Warley, Essex.

Records include: Minutes of directors' and stockholders' meetings.

Record (2): Ford Motor Co Archives, Fair Lane, Dearborn, Michigan, USA.

Note: The Bibliographical Essay chapter and the Notes section at the back of American Business Abroad:Ford on Six Continents, together with this book's detailed references to specific accession numbers gives an indication of the material held in the Ford Archives.

Record (3): Henry Ford Museum, 20900 Oakwood Blvd, Dearborn, Michigan.

Records include: Corporate organisation and administration, stock grants and correspondence about incorporation, 1911-1913; Sir Percival Perry correspondence; executive correspondence, 1938-48; correspondence between British Government and Henry Ford & Son (Cork), 1918-24; balance sheets, reports and correspondence, 1929-35; statement of accounts, 1933-44; International Division correspondence including photographs of Dagenham, 1946. Accession numbers 46, 49, 58, 225, 261, 266, 282, 478, 708.

Record (4): National Motor Museum, John Montagu Building, Beaulieu, Brockenhurst, Hampshire SO42 7ZN.

Records include: Parts and accessory bulletins, 1937-49; service bulletins, 1921-28; retail price lists, 1959-70, workshop manuals, spare parts lists, handbooks, sales manuals, sales catalogues, box of material relating to Jowett, assorted photos, press-cuttings, artefacts, production figures, instruction booklets, assorted blueprints and drawings, company publications.

Notes: Ford's UK archive was closed in 1991 and material moved to its museum and archive at Dearborn, Michigan, United States. What historical documentation that may remain in Ford UK's legal department or company secretary's office has not been determined. Ford material deposited at Beaulieu in the last five years is currently being reassessed and listed for Ford by Annice Collet.
FRAZER-NASH

Frazer Nash Ltd.
London Rd., Kingston on Thames, Surrey. 1922-1925

William G. Thomas & Frazer Nash Ltd. 1925-1926

A.F.N. Ltd.
London Rd., Kingston on Thames, Surrey. 1926-1930
Isleworth, Middlesex 1930-1957

History: The company's first cars were based on the GN cyclecar. Following the development of the first Frazer-Nash car in 1924, the company merged with W.G. Thomas in 1925. With the change in name to A.F.N. Ltd control passed from Archie Frazer-Nash to R. Plunkett-Greene and then to J. Aldington. The chain driven Frazer-Nash cars had a fanatical following among enthusiasts although only 328 (pre-war) + 84 (post-war) cars were produced. Peak production of ~50 per year was in 1925-26. Imported FN-BMWs were sold from 1934 and occasional models made up to 1957 in association with Bristol and Porche. AFN Ltd is now a Porche concessionaire.

Record (1): John Aldington, contactable through the Vintage Sports Car Club Ltd, 121 Russell Rd, Newbury, Berkshire RG14 5JX.

Records include: Business records, files on every car manufactured, correspondence, brochures, 1924-57.

GN

G.N. Ltd.
The Boroughs, Hendon, Middlesex. 1910-1920

G.N. Motors Ltd.
East Hill, Wandsworth, London SW. 1920-1923

G.N. Ltd.
East Hill, Wandsworth, London SW. 1923-1925

History: H.R. Godfrey and A. Frazer-Nash started building cyclecars at the family home. Bought by British Gregoire in 1919, the company employed 500 men, producing 58 cars per week in 1919 at East Hill. The French company Salmson manufactured GNs under licence up to 1922. Godfrey and Frazer-Nash left the company in 1922 after Black had bought the company and started production of a shaft drive four cylinder model. Production stopped in 1923 and a new company G.N. Ltd was formed, providing service and spares and assembling a few cars until 1925.

Record (1) J. Aldington, see FRAZER NASH.
GREAT HORSELESS CARRIAGE COMPANY.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Horseless Carriage Co Ltd.</td>
<td>1897-1898</td>
</tr>
<tr>
<td>Central Works, Motor Mills, Coventry.</td>
<td></td>
</tr>
<tr>
<td>Motor Manufacturing Co Ltd (MMC).</td>
<td>1898-1904</td>
</tr>
<tr>
<td>Central Works, Motor Mills, Coventry.</td>
<td></td>
</tr>
<tr>
<td>Parkside, Coventry.</td>
<td>1905-1907</td>
</tr>
<tr>
<td>Motor Manufacturing Co (1907) Ltd.</td>
<td>1907-1908</td>
</tr>
<tr>
<td>157A Manor St, High St., Clapham,</td>
<td></td>
</tr>
<tr>
<td>London SW.</td>
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</table>

**History:** Harry Lawson set up the Great Horseless Carriage Co Ltd in 1896 in part of the Motor Mills factory alongside Daimler. Several cars were made in 1897 with engines and gearboxes from Daimler, before reorganization as MMC. About 250 cars were made in the next two years followed by rationalization of the product range. MMC was declared bankrupt in 1904 and moved to Parkside. After another reorganization and move to London the company went into voluntary liquidation in 1908.

**Record (1):** University of London Library, Archives Department, Palaeography Room, Senate House, London WC1E 7HU.

**Records include:** Correspondence regarding appointments and applications for positions of works manager and consulting engineer (Simms), reports on patents, layout of Coventry works; report to directors; circular to shareholders, memorandum of articles, prospectus proofs, share certificates, 1896-97. MMC correspondence on technical trials, working drawings of new cars, 1898-1901 (Part of Simms Papers).

**Record (2):** Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT31/6814/47933 for the Great Horseless Carriage Company;
BT31/7780/ 55621, BT31/8897/65505, BT31/9927/74021 and BT31/17988/91952 for the Motor Manufacturing Co Ltd.
HILLMAN

<table>
<thead>
<tr>
<th>Hillman-Coatalen Motor Car Co Ltd.</th>
<th>1907-1909</th>
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<tbody>
<tr>
<td>Pinley Estate, Coventry.</td>
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<table>
<thead>
<tr>
<th>Hillman Motor Car Co Ltd.</th>
<th>1909-1928</th>
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<tbody>
<tr>
<td>Pinley Estate, Coventry.</td>
<td></td>
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</table>

> Rootes Group 1928-1970

History: William Hillman began his career in the cycle industry before founding Hillman-Coatalen with French born designer Louis Herve Coatalen. Production averaged 50 per year up to 1913. Coatalen left for Sunbeam in 1909. After a name change in 1910 and the arrival of a new designer Dawson in 1913 the company's fortunes improved. By 1927 Hillman was making its own bodies and its popular Fourteen model sold ~11,000. In 1928 Rootes bought Hillman bringing together Hillman, Humber and Commer commercial vehicles under their control, and, in 1935 acquired Sunbeam-Talbot-Darracq. The Hillman Minx was a classic car with pre-war production exceeding 152,000. The Hillman name ceased after 1978.

Record (1): Peugeot Talbot Motor Co Ltd, Aldermoor House, Aldermoor Lane, Coventry CV3 1LT.

No description available yet but Peugeot have given commitment to list surviving corporate, business and technical records.

Record (2): Coventry Record Office, Bayley Lane, Coventry CV1 5RG.

Records include: Nominal ledgers, 1919-39; journal, 1929-39; plus possibly other assorted records saved from disposal in 1994 and currently being sorted and listed.

HORSTMANN

<table>
<thead>
<tr>
<th>Horstmann Cars Ltd.</th>
<th>1914-1925</th>
</tr>
</thead>
<tbody>
<tr>
<td>James St. West, Bath, Somerset.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Horstman Ltd.</th>
<th>1925-1929</th>
</tr>
</thead>
</table>

History: Sidney Horstmann developed a light car in 1912. The company went on to produce cars with a range of original features such as hydraulic brakes, cellulose spray paint and four wheel independent suspension. Production is estimated at of the order of 2000. Horstmann Ltd continued as an engineering firm; parts of it were taken over by Simms in 1954.

Record (1): Brian Merry Esq., Esher Lodge, Chaucer Road, Bear Flat, Bath.
Records include: Business and personal correspondence and papers about sales, finance, shares, costs of components, draft prospectus, production and technical discussions; patents; trading and profit and loss accounts and balance sheet, 1917-18; balance sheets, 1925-7; agreements with creditors; (NB in hands of receiver in 1925); original engineering drawings; photographs, 1913-18; instruction manuals, publicity material.

HUMBER

| Humber Ltd. | 1898-1908 |
| Beeston, Nottinghamshire. | 1896-1897 |
| Motor Mills, Coventry. | 1908-1932 |
| Humber Road, Stoke, Coventry. |

> Rootes Group. 1931-1967

History: Company's origins are in Thomas Humber's cycle firm Humber & Co Ltd formed in Coventry in 1887. A prototype electric car was built in 1895, the tree wheeler Coventry Bollee in 1896, voiturettes in 1901 followed by four cylinder cars and the first really popular British light car, the one cylinder Humberette in 1903. Louis Coatalen was the leading designer between 1901 and 1907. Production in 1906 approached 75 per week with a work force of ~2000. The Progress Cycle Works and old Bayliss-Thomas factory were bought and a new factory built at Stoke in 1908. The slump in the motor industry led to the closure of the Beeston factory. Production reached about 2000 per year by 1913 making Humber the third largest British company behind Ford and Wolseley. In 1925 Humber bought Commercial Cars Ltd and in 1928 its neighbour Hillman. The Rootes Group took control of Humber in 1931. Production was running at 13,000 by 1951 but the company's fortunes then declined with Chrysler acquiring the Rootes group in 1967.

Record (1): Peugeot Talbot Motor Co Ltd, Aldermoor House, Aldermoor Lane, Coventry CV3 1LT.

No description available yet but Peugeot have given commitment to list surviving corporate, business and technical records.

Record (2): Coventry Record Office, Bayley Lane, Coventry CV1 5RG.


Other records saved from disposal in 1994 and currently being sorted and listed include private ledgers, 1902-22; nominal ledgers, 1912-41; remittance ledger, 1904-14; balance sheets and accounts book, 1909-28; journal, 1909-45; private journal 1945-55; private cash book, 1939.
INVICTA

<table>
<thead>
<tr>
<th>Invicta Cars.</th>
<th>1925-1933</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Fairmile, Cobham, Surrey.</td>
<td></td>
</tr>
<tr>
<td>Alpha Place, Chelsea, London SW.</td>
<td>1933-1938</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Invicta Car Development Co Ltd.</th>
<th>1946-1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Water, Surrey.</td>
<td></td>
</tr>
</tbody>
</table>

History: Noel Macklin set up Invicta assembling cars designed to obtain flexible top gear performance. Approximately 500 of Invicta's famous 4.5 litre cars were made including a winner of the 1931 Monte Carlo Rally. After the demise of the Cobham works only a few Invictas were made at Chelsea out of the remaining stock. The reformed company only made about 20 cars before being wound up in 1950.

Note: No records identified. The Vintage Sports Car Club Ltd (121 Russell Rd, Newbury, Berkshire RG14 5JX) does have an Invicta section which may lead to further information.

JAGUAR

<table>
<thead>
<tr>
<th>Swallow Sidecar and Coachbuilding Co.</th>
<th>1927-1928</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackpool.</td>
<td></td>
</tr>
<tr>
<td>Coventry</td>
<td>1928-1930</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Swallow Coachbuilding Co.</th>
<th>1930-1933</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coventry</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Swallow Coachbuilding Co (1935) Ltd.</th>
<th>[1954-1955]</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Airport, Walsall, Staffordshire.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SS Cars Ltd.</th>
<th>1933-1945</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jaguar Cars Ltd.</th>
<th>1945-1952</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swallow Road, Coventry.</td>
<td></td>
</tr>
<tr>
<td>Brown's Lane, Coventry.</td>
<td>1951-to date</td>
</tr>
</tbody>
</table>

>British Motor Corporation 1966-1968
>British Leyland Motor Corporation 1968-1975
>British Leyland Ltd. 1975-1984
>Ford. 1989-to date

History: Lyon and Walmsley's Blackpool company, the Swallow Sidecar Co, was registered in 1922. In 1927, the now Swallow Sidecar and Coachbuilding Co started designing and building car bodies leading to the SS1 in 1931, the first car with a Swallow chassis and body. In 1932 Swallow sold
776 cars and in the following year the car building business was separated as SS Cars Ltd. Swallow used the marque name Jaguar for the first time on the SS100 model in 1935, the same year that the company was publicly floated. Swallow Coachbuilding Co Ltd was put into voluntary liquidation and a separate private company, Swallow Coachbuilding Co (1935) Ltd was set up to continue sidecar production, briefly making sports cars during 1954-1956. SS Cars Ltd was taken over by Motor Panels (Coventry) in 1938 and then sold to Rubery Owen. After the war Swallow was sold to Helliwell and Jaguar Cars Ltd was created in 1945.

Remarkable export sales of its sports cars coupled with successful saloons such as the Mark VII (30,000 sold) enabled Jaguar to expand in the 1950s. Jaguar bought Daimler Co Ltd from BSA in 1960, Guy Motors Ltd in 1961 and Coventry Climax Engines Ltd in 1963, bringing its workforce to ~8000. In 1966 Jaguar merged with the British Motor Corporation to form British Motor Holdings with Lyons retaining control of Jaguar. A further merger with Leyland saw Jaguar became part of British Leyland Motor Corporation. Further sales success followed with 72,584 E-Type models sold in the mid 1970s. Despite arguments over autonomy Jaguar retained its identity within Leyland and eventually became Jaguar Cars Ltd again in 1980. It was privatized from the State-owned Leyland in 1984 and purchased by Ford in 1989.

Record (1): Jaguar Cars Ltd, Legal Department, Brown's Lane, Allesley, Coventry CV5 9DR.

Records include: Directors' minutes with articles of association, special resolutions, annual and extraordinary general meetings, directors' reports, conveyances, share transfers and accounts (SS/Jag), 1933-48; annual general meeting minutes (SS/Jag), 1939-76; memorandum and articles of association, 1935; register of members, 1932-35; register of members, 1933-54, with annual returns, 1938-42; offer for sale (SS), 1935; private cash book, 1934-40; petty cash book, 1934-39; private ledger, 1940-44; annual returns, 1943-77; sales comparison charts and sales summary (SCC/SS), 1935-40; accounts and general correspondence (SCC/SS), 1935-50; conveyance for purchase of property, certificate of valuation, original partnership agreement, agreements; photographic album, view of the works in 1929.

Directors minute book, 1949-to date; directors share-holdings, 1948-62; board meetings, 1978-80; nominal ledger 1950s; reports and accounts 1935-51; register of directors and secretaries, 1933-75; register of members and share transfers, 1965; register of directors' holdings, 1948-72; seal book, 1963-to date; directors' minutes, 1973-76; general minute book, 1963-75; annual reports and accounts, 1945-60, 1959-76, 1960-84,

Abreviations used: SS=SS Cars Ltd, SCC=Swallow Coachbuilding Co, Jag=Jaguar Car Ltd.
Record (2): Jaguar Daimler Trust Ltd, Brown's Lane, Allesley, Coventry CV5 9DR.

Records include: Production records, from 1945; owners registers; manuals, service handbooks and spare parts catalogues; engine test reports, from 1945; competition and trial records; sales literature, catalogues and company magazines; Sir William Lyons' correspondence files; photographs (negatives and prints) showing factory life, motor sport, historic scenes, shows and exhibitions.

Record (3): Coventry Record Office., Bayley Lane, Coventry CV1 5RG.

Records include: Salaries agreement, 1975; Jaguar plc-Ford takeover, 1989; Annual reports and publications 1985-9; Acc 270, 1272, 1345, 1385.

JENSEN

Jensen Motors Ltd.
Carters Green, West Bromwich, Staffordshire. 1934-1953

History: A background in body building and styling starting in the mid 1920s led to the Jensen Bros taking over the bodybuilding company W.J.Smith & Sons as Jensen Motors Ltd. Contract work for outside companies such as Invicta, Lea-Francis, Austin, Volvo and Rootes was as important as its own car and lorry building. However Chrysler's take over of Rootes caused serious problems for Jensen in 1967. Refinancing temporarily revived Jensen but the company went into receivership in 1975 against a background of the oil crisis, labour unrest, and new US auto-legislation. An independent company Jensen Parts & Service Ltd remained in existence and relaunched the Jensen Interceptor in 1983. In 1989 Jensen was sold to Unicorn Holdings but went into receivership in 1992. Martin Robey took over the entire assets of the Jensen Car Co Ltd in 1993 re-establishing production and supply of spares.

Record (1): Modern Records Centre, Warwick University, Coventry CV4 7AL.

Records include: Agreements files, 1936-49, including re-purchase of Messers Smiths premises, Jen-Helecs production, wartime production details; Volvo agreement file, 1959-61; various financial records, including monthly analysis of sales & production costs, 1947-58, general ledgers, 1951-67, papers relating to annual accounts, including stock details, c. 1957-71, purchase balances, 1972-3; correspondence files relating to projects, suppliers, and other firms in the industry, c. 1969-74; Press-cuttings and public relations material, 1970s. MSS 215 has 30 year rule on most of material.
JOWETT

<table>
<thead>
<tr>
<th>Jowett Motor Manufacturing Co Ltd.</th>
<th>Back Burlington St., Manningham Lane, Bradford. 1906-1919</th>
</tr>
</thead>
</table>

History: The Jowett family were originally involved in building gas engines, bicycles, and car and motor cycle engines. Car production grew to just over 2200 in 1925 and peaked at 3134 vehicles (including commercials) in 1934. The company was publicly floated in 1935 with the Jowett brothers withdrawing from the firm. Jowett was bought by Charles Clore in 1945 and then sold to Lazards bank in 1947. By 1953 23,000 Jowett Javelins had been built and 43,000 Jowett Bradford vans. Lazards ceased Jowett production in 1954 with all the firms debts fully paid. The firm became Jowett Engineering Ltd in 1958 and became part of the Hawker-Siddeley group in 1963.

Record (1): Jowett Car Club, 626 Huddersfield Rd, Bradford BD12 8JR.

Chassis registers and despatch records for Javelin, Jupiter and Bradford (the Jowett Car Club holds these records on behalf of a private owner) and photographs.

Note: A relative of one of the original owners holds private material in Bradford. Details unknown, access via Jowett Car Club.
LAGONDA

<table>
<thead>
<tr>
<th>Company</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagonda Motor Co Ltd.</td>
<td>1906-1913</td>
</tr>
<tr>
<td>Staines, Middlesex.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagonda Ltd.</td>
<td>1913-1947</td>
</tr>
<tr>
<td>Staines, Middlesex.</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagonda Motors (Staines) Ltd.</td>
<td>1935-1947</td>
</tr>
<tr>
<td>Staines.</td>
<td></td>
</tr>
</tbody>
</table>

> Aston-Martin-Lagonda Ltd. 1947-to date

History: Wilbur Gunn’s original motorcycle company was Lagonda Engineering Co set up in 1900. This became Lagonda Motor Cycle Co Ltd in 1904 with the products developing into tricars before the company was wound up in 1910. Gunn produced cars from about 1906 but the company details are uncertain. From 1913 Lagonda Ltd produced advanced design cars mostly from its own components. At the end of a 6000 car production run for the small 12/24 model, Lagonda went up market and initially flourished, moving more into the sports market. By 1935 the company went into receivership with seven models in production. Alan Good’s newly purchased company Lagonda Motors (Staines) Ltd took on designer W.O. Bentley and produced handsome stylish cars. David Brown bought the company forming Aston-Martin-Lagonda Ltd as a subsidiary of David Brown & Sons Ltd. The company is considered using the marque name Lagonda solely on a new car again in 1995.


Records include: 1938-39 chassis registers; bill and service records; assorted publicity material; copies of photographs taken by Brentford photographers (A. E. Bowers) of factory work areas, 1923, 1931.

Record (2): Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT31/1062/81007 for Lagonda Motor Co Ltd.

Note: Lagonda Motors Ltd material was stored in a block of flats in Staines at the beginning of WW2 when the factory went over to war work. These flats were hit by V1 flying bomb in 1944 and all company records were lost, except those in private hands.
LANCHESTER

Lanchester Engine Co Ltd.
Armourer Mills, Montgomery St., Birmingham. 1899-1904

Lanchester Motor Co Ltd.
Fallow Rd., Birmingham. 1904-1931
Sandy Lane, Coventry. 1931-1956

History: Frederick William Lanchester built his first car during 1895 in a workshop rented from the Forward Gas Engine Co. His two brothers Frank and George joined him in 1897. Their Lanchester Engine Co Ltd was liquidated in 1904 and reorganised and refinanced as the Lanchester Motor Co Ltd. The cars were designed from 1st principles, being distinctive and comfortable and many of Fred's patents proved innovative and successful, eg. the torsional vibration damper for six cylinder engines and the harmonic balancer for four-cylinder engines. With Fred going to Daimler in 1913 George took over the design culminating in Lanchester's finest car the Straight-8 in 1928. Under financial pressure from the bank in 1931 Lanchester amalgamated with Daimler (owned by BSA) and was moved to the Daimler works at Coventry. George went to Alvis in 1936. The Lanchester name continued on a number of compromise Daimler-Lanchester cars until fading away in the mid 1950s.

Record (1): Coventry University Library, Gosford St, Coventry.

Private papers of F.W.Lanchester including thirteen sketchbooks of detailed drawings, calculations and comments; the over 400 patents applied for by the Lanchester brothers (244 of which were proceeded with), 1888-1949; car manuals; personal correspondence and wide range of material to do with F.W.Lanchester's other interests (eg. aeronautics, music, optics) and with other companies such as Lanchester Traction and Propulsion Ltd and Lanchester Laboratories Ltd.

Record (2): British Road Transport Museum, Hales St, Coventry CV1 1PN.

Engineering drawings showing side and top views, 1922-25; Glass plate negatives showing whole cars, components, scenic and factory shots.

Note: The Lanchester Motor Co still exists as a non-trading company owned by Jaguar Cars Ltd.
LEA FRANCIS

| Lea & Francis Motor Syndicate Ltd (The). | Lower Ford St, Coventry. | 1903-1909 |
| Lea & Francis Ltd. | 1919-1935 |
| Lea-Francis Cars Ltd. | Much Park Street, Coventry. | 1937-1960 |

History: Lea and Francis had been involved in a partnership building bicycles from 1895, forming Lea and Francis Ltd in 1896. In 1903 they hired an engineer to design cars and formed Lea & Francis Motor Syndicate Ltd. Their initial car venture was unsuccessful and Lea and Francis returned to cycle and motorcycle manufacture until 1919. By 1926 the company was having success with light cars, with 800 sold that year. The company went into receivership in 1931 after several years of high expenditure on racing with Lea resigning (Francis had left in 1924). Production faded away to none in 1936 and the Lower Ford Street works was sold to General Electric. The new company formed in 1937 lost money on the 100 pre-war cars it built but successfully went into post-war production. Production of its specialist hand-built cars reached 700 by 1950 but soon thereafter declined with competition from Alvis, Armstrong-Siddeley, Riley and Jaguar. Large scale car production effectively ceased in 1952. The assets and rights of Lea-Francis were bought in 1962 by B.Price (Studley) to handle spares and service.

Record (1): Coventry Record Office, Bayley Lane, Coventry CV1 5RG.

Records include: Minute books, 1939-64; financial records, shares register, production and marketing records, correspondence. Accession 1357, 626 (access closed to 2013).

Record (2): Museum of British Road Transport, Hales Street, Coventry CV1 1PN.

Records include: Memorandum and articles of association, 1937; correspondence about Much Park lease, 1954; technical drawings, data and miscellaneous correspondence, 1950s; instructions for stocktaking, 1957-59; road and engine test data and reports, 1953-54; component list for 1928 racing car; assorted specifications.

Record (3): A.B.Price Ltd, Hardwick House, Studley, Warwickshire. B80 7AF.

Records include: Some order and sales books, correspondence, etc, mainly post-1944.
LEYLAND

Leyland Motors Ltd.
Leyland, Lancashire. 1919-1928; 1961-1967

>British Leyland Motor Corporation. 1968

History: Company has origins in the Lancashire Steam Motor Co formed by J.Sumner and the Spurrier brothers in 1896. It became Leyland Motors Ltd in 1914 building trucks. Leyland built 18 expensive luxury Leyland Eight cars before financial difficulties forced a reorganisation in 1922. Leyland built Trojan cars for L.Hounsfield until 1928 with its own output being commercial vehicles. Leyland bought truck builders Albion in 1951 and Scammell in 1955 and then re-entered the car market by acquiring Standard-Triumph in 1961, ACV (owners of AEC, Thornycroft, Maudslay and Crossley) in 1962, and Rover (owner of Alvis) in 1967. Leyland merged with British Motor Holdings to form the British Leyland Motor Corporation.

Record (1): British Motor Industry Heritage Museum, Gaydon, Warwickshire CV35 0BJ.

Dead agreements, 1940s-1970s (mainly or all commercial); Memorandum and Articles of Association, 1919, with resolutions and scheme of arrangement, 1951.

Record (2): British Commercial Vehicle Museum, King St, Leyland, Preston, Lancashire PR5 1LE.

Records include: Minutes of directors' meetings for Lancashire Steam Motor Co Ltd and for Leyland Motors Ltd. Note: Extent of other records not determined.

LOTUS

Lotus Engineering Co Ltd
7 Tottenham Lane, Hornsey, London N. 1953-1959

Lotus Cars Ltd (Lotus Components Ltd) 1959-1986
Delamare Road, Cheshunt.

Lotus Cars Ltd.
Potash Lane, Hethel, near Wymondham. 1966-to date

>General Motors. 1985-1994
>Bugatti 1994

History: Colin Chapman formed Lotus Engineering with M.Allen in 1952 with the Lotus 6 being the first production car. While much emphasis was on
racing, many Lotus cars were successful as road cars, rally cars as well as circuit racing cars. Cars offered as complete road cars included the Mark 9 (1955), the Mark 14 (1000 of which were built between 1958 and 1962) and the Lotus Cortina (1963). Combined production of the Europa, Plus 2 and Elan up to 1975 was ~22,000. With the move to Hethel, Lotus started to build its own engines and became a public company in 1968. From 1969 Group Lotus Car Companies Ltd was formed as a holding company for subsidiaries including Lotus Cars Ltd. From 1974 Lotus concentrated on developing executive sports cars together with outside work for DeLorean, Chrysler and General Motors with the latter acquiring Lotus in 1985. By now the Chapman family interests were minimal.

Record (1): Lotus Cars Ltd, Hethel, Norwich, Norfolk NR14 8EZ.

No details available.

Record (2): Michael and Nigel Allen, no address available.

Records include: Photographs, press cuttings, correspondence, bills, notebooks, engineering drawings, 1950-4.

Record (3): Ron Hickman, St. Brelades Bay, Jersey.

Records include: Files of papers as design director at Lotus Cars Ltd.

MAUDSLAY

<table>
<thead>
<tr>
<th>Maudslay Motor Co.</th>
<th>1901-1903</th>
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</thead>
<tbody>
<tr>
<td>Parkside, Coventry.</td>
<td></td>
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</tbody>
</table>

| Maudslay Motor Co Ltd. | 1903-1923 |

History: The liquidation of Maudslay's marine engine factory in Coventry in 1899 was followed by Cyril C. Maudslay forming the Maudslay Motor Co, while his brother Reginald set up the Standard Motor Co. Commercial vehicles and industrial/marine engines were also built. Early cars pioneered pressure lubrication and the overhead camshaft. After 1923 only commercial vehicles were built with a move to Alcester after WW2. Maudslay merged with Crossley and AEC in 1948 and became Rockwell-Maudslay in 1972

Record (1): Museum of British Road Transport, Hales St, Coventry CV1 1PN.

Photograph album showing views inside works.

Record (2): Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT31/25357/76129 for Maudslay Motor Company.
MORGAN

Morgan Motor Co Ltd.
Pickersleigh Rd., Malvern Link, Worcestershire. 1910-to date

History: H.F.S. Morgan started limited production as the Morgan Motor Co Ltd in 1910 having previously developed the first independent front suspension in the engineering shop of Malvern College. Increasingly profitable, production of three wheelers approached 1000 by WW1 and quickly resumed with both racing and touring models. Morgan’s first four wheeler came in 1935 with three wheelers phased out in 1952. Production stood at 420 in 1985 with the US export market ever important.

Record (1): Morgan Motor Co Ltd, Pickersleigh Road, Malvern Link, Worcestershire WR14 2LL.

Records include: Minutes, from 1935; account and wages books, from 1946; legal papers, from 1912; correspondence, from 1955; blueprints and technical drawings, from 1935; photographs and publicity material from 1909; scrapbook history of firm.

MORRIS

W.R.M. Motors Ltd.
Cowley, Oxford. 1913-1919

Morris Motors Ltd. 1919-1926

Morris Motors (1926) Ltd. 1926-1952

>British Motor Corporation 1952

History: W.R.Morris Motors Ltd was formed by William Richard Morris to build cars using components bought in from well known suppliers. Production was 393 and 909 respectively for the first two years. The renamed Morris Motors Ltd cut prices competitively in the difficult post-WW1 period with startling results. Sales of the Bullnose Morris rose to 54,151 in 1925. Suppliers such as bodybuilders Hollick and Pratt, the SU carburettor firm, engine makers Hotchkiss and Wrigleys were bought and a number of suppliers moved to Oxford. Wolseley was acquired in 1927. The company went public in 1926, William Morris became Lord Nuffield in 1938 and the millionth Morris car was made in 1939. Production of the 1.5 million Morris Minors, designed by Alex Issigonis, lasted from 1956 to 1971. A popular range of light vans was made based on the cars. The Nuffield Organisation merged with Austin Motor Co in 1952 to form British Motor Corporation. The last Morris named car was the Austin-Rover Ltd 'Ital', discontinued in 1983.
Record (1):  British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 OBJ.


Production registers, cars and some light commercials, 1928-71.

Record (2):  Modern Records Centre, Warwick University, Coventry CV4 7AL.

Records include:  Directors' minutes, 1926-65, with supplementary minutes, 1937-1945; investment committee minutes, 1934-40; register of seals, 1926-52; financial records, including annual balance sheets and accounts, 1926-68; shareholding records; management salaries ledgers, 1940-70; memorandum and articles of association 1926,27,30,49.  MSS 226/MO

Record (3):  Coventry Record Office, Bayley Lane, Coventry.

Records include:  for the Engines Branch - factory site deeds and layout plans; records 1922-1982; calculations books, 1937-63.
Accession numbers 1508, 1361,1381.

Note:  The company records of the Bodies Branch of Morris Motors were destroyed during WW2 air raids.

Record 4:  Museum of British Road Transport, Hales St, Coventry CV1 1PN.

Records include  Technical information, blueprints, calculations, engine test data of Morris Engines branch, 1933-50s.
**Morris Garages**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morris Garages</td>
<td>Longwall/Alfred Lane/Radiator Branch, Oxford</td>
<td>1924-1927</td>
</tr>
<tr>
<td>Morris Garages Ltd.</td>
<td>Alfred Lane, Oxford</td>
<td>1927-1928</td>
</tr>
<tr>
<td>M.G. Car Co.</td>
<td></td>
<td>1928-1929</td>
</tr>
<tr>
<td>M.G. Car Co Ltd.</td>
<td>Pavlova Works, Abington, Berkshire.</td>
<td>1929-1935</td>
</tr>
<tr>
<td>Morris Motors Ltd.</td>
<td></td>
<td>1935-1952</td>
</tr>
<tr>
<td>British Motor Corporation</td>
<td></td>
<td>1952-1980</td>
</tr>
</tbody>
</table>

**History:** Cecil Kimber began modifying Cowley chassis with bodies made for him by Carbodies of Coventry and by Raworth of Oxford, and first advertising them as MG's in 1924. By 1927 the M.G. Car Co was buying in separate frames, engines and axles rather than complete Morris chassis. The company moved to Abington and by 1932 production was 2400 and the racing programme was bringing success. From 1933 coachwork was bought from Morris Bodies Branch and in 1935 Lord Nuffield sold the MG Car Co to Morris Motors leading to the closing down of the competition side of MG. Exports grew in importance with over 95% of the 29,000 TD Midgets sold overseas in the early 1950s, mainly to the USA. As part of BMC and later British Leyland scope for development of new cars was restricted for a number of years until the successful MGA and MGB sports cars models. Production peaked in 1972 with 55,639 sports cars made. After BMC merged with Jaguar to form British Motor Holdings in 1968 the MG Car Co Ltd became the MG division. British Leyland discontinued MG models in 1980, closed the Abingdon factory but kept the MG name to use on later BL models such as MG Metro.

**Record (1):** British Motor Industries Heritage Trust, Gaydon, Warwickshire CV35 OBJ.

*Records include:* Directors' meeting minutes, 1926-53, 57-77 (includes balance sheets and accounts, 1927-35); annual return books, 1935-48, 52-58; register of members, 1930-75; salaries and personal accounts, 1956-74, production registers.

**Record (2):** Oxfordshire Archives, County Hall, New Road, Oxford.

*Records include:* Financial and administrative records and publicity materials, 1900-1973.
Record (3): Modern Records Centre, Warwick University, Coventry CV4 7AL.

Records include: Minutes, 1930-40; annual accounts, 1936-68; shareholding records, 1937-48; registers of directors/managers; articles of association 1930, 36. MSS 226/MG

NAPIER

<table>
<thead>
<tr>
<th>D.Napier and Son Ltd.</th>
<th>1900-1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vine St., Lambeth, London SE.</td>
<td>1903-1906</td>
</tr>
<tr>
<td>Acton Vale, London W.</td>
<td>1906-1924</td>
</tr>
<tr>
<td>D.Napier and Son (1906) Ltd.</td>
<td>1906-1924</td>
</tr>
<tr>
<td>Acton Vale, London W.</td>
<td></td>
</tr>
</tbody>
</table>

History: Napier and Son was founded as an engineering firm in 1808. From 1900 they built quality reliable cars ably promoted by S.F. Edge Ltd. Production was 250 cars in 1902 prompting a move to larger premises in Acton. Commercial vehicles and motor boats were also built. In 1912 Napier bought Edge’s holdings after the liquidation of S.F. Edge (1907) Ltd following a legal argument between the two firms. Car sales peaked in 1911 with Napier the leading British make. WW1 brought about a change of emphasis to aero engines which continued until a take over by English Electric in 1945 followed by absorption into GEC. The name survived in the GEC power system subsidiary Napier Turbochargers Ltd until 1989 when its became part of the the GEC subsidiary European Gas Turbine Ltd, formerly Ruston & Hornsby Ltd.

Record (1): European Gas Turbines Ltd, Library and Archive, P.O. Box 1, Frith Road, Lincoln LN6 7AA.

Records include: Directors’ minute books, 1913-1925; general meeting minute book, 1913-1968; memorandum and articles of association, 1913; reports and balance sheets, from 1914; scrapbook of newspaper cuttings; directors’ minute book of the Dunlop Motor Co Ltd, 1898-1907 (directors-S.F. Edge, H.J. Lawson and H. Du Cros), and a D.Napier & Son ledger, 1832-1843.


Scale drawings, c.1900-15; catalogues, 1902-23; 13 instruction manuals; five volumes of approximately 800 photographs, including views of cars, factory, overseas locations, racing and land speed record cars, Napier football team.

Record (3): Brooklands Museum, Brooklands Rd, Weybridge, Surrey KT13 0QN.

Technical records.
### PICK

<table>
<thead>
<tr>
<th>Company</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pick (J.H.) &amp; Co Ltd.</td>
<td>1898-1908</td>
</tr>
<tr>
<td>Stamford, Lincolnshire.</td>
<td></td>
</tr>
<tr>
<td>New Pick Motor Co Ltd.</td>
<td>1908-1915</td>
</tr>
<tr>
<td>Pick Motor Co Ltd.</td>
<td>1915-1925</td>
</tr>
</tbody>
</table>

**History:** John Henry Pick and his two brothers graduated from making bicycles to dogcarts in 1898. After the firms collapse the New Pick Co Ltd formed with maximum output of around 1 per week. Production of Picks ceased in 1925.

**Record (1):** Stamford Museum, High St, Stamford.

Little survives except a few assorted catalogues, and a panoramic photograph of factory (museum staff member has just published a history of Pick based on secondary source material).

### RELIANT

<table>
<thead>
<tr>
<th>Company</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliant Engineering Co (Tamworth) Ltd.</td>
<td>1952-1963</td>
</tr>
<tr>
<td>Walling St., Two Gates, Tamworth, Staffordshire.</td>
<td></td>
</tr>
<tr>
<td>Reliant Motor Co Ltd.</td>
<td>1963-to date</td>
</tr>
<tr>
<td>Beans Industries Ltd.</td>
<td>1991-to date</td>
</tr>
</tbody>
</table>

**History:** T.L. Williams acquired the rights to the three wheeler Safety Seven that he had designed for the Raleigh Cycle Co of Nottingham. This was produced as a van only until 1952 when the Regal car was launched with immediate success. By 1962 the Regal was powered by Britain's first mass produced all alloy engine. Reliant specialised in tailoring car design and manufacture for overseas countries with a limited domestic market. Renamed in 1963, the company became part of the Reliant Motor Group which was part of the Hodge group. Bond Cars were bought in 1969 and by now Reliant was Britain's second largest all-British manufacturer with production of 20,000 three and four wheelers per year. Reliant went into receivership in 1991 and was purchased by Beans Industries (formerly Bean Cars Ltd).

**Note:** Records of Reliant Companies, Sharps Commercials Ltd and Bond Cars Ltd were destroyed by receivers in 1991 when they thought that Reliant would not be rescued.
History: The Riley Cycle Company's first motor vehicles (motorcycles, tricars and forecars) were powered by Dion-Bouton and MMC engines. Riley's own engines were made by the specially formed Riley Engine Co from 1903 and in 1907 the first four wheeled car was built. The Riley Motor Manufacturing Co was formed to just make cars in 1912. The Riley Cycle Co took over the Nero Engine Co Ltd and made cars from 1919 to 1922, until reverting to producing electric lighting and marine equipment. Production of the successful Riley Nine reached 10,000 between 1926 and 1938. A subsidiary, Autovia Cars Ltd, was formed to build a new luxury car. Financial, management and design problems grew after 1937 and both Riley companies were acquired by Lord Nuffield in 1938. The Riley name was continued with a successful range of post-war cars made at Abingdon from 1948. Riley progressively lost their identity from the mid-1950's within BMC.

Record (1): Modern Record Centre, Warwick University, Coventry CV4 7AL.

Records include: Board and general meetings minutes containing agreements and annual reports, 1938-61; annual balance sheets and accounts compiled by Thorton & Thorton (chartered accountants, Oxford), 1938-68; shareholding records, 1938-1950; articles of association 1938,49. MSS 226/R1

Record (2): British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 OBJ.

Three annual sales ledgers, c.1930; photographic archives.

Record (3): Coventry City Record Office, Bayley Lane, Coventry CV1 5RG.

Riley (Coventry) Ltd v Pugh. Court of Appeal judgements and related papers, 1911-14. Acc 684:
ROLLS ROYCE

History: Frederick Henry Royce's first company was formed in 1884 making bells, dynamos and electric cranes. Charles Stewart Rolls's sales company marketed the first cars that Royce made from 1904 and in 1906 the two companies merged to form Rolls-Royce Ltd. Royce & Co continued separately making electrical equipment until 1933.

The Rolls-Royce name became famous with the Silver Ghost, model first produced in late 1906. The onset of WW1 took Rolls-Royce into the aero engine business. In the post war years production of smaller cars enabled Rolls Royce to prosper. Bentley was acquired in 1931 and Bentley Motors (1931) Ltd became a wholly owned subsidiary. Rolls Royce aero engines were used in planes taking the world air speed record and in cars taking the world land speed record.

In 1946 a Rolls Royce factory car body was offered for the first time although H.J.Muliner and Park Ward & James Young continued to be the main coach building firms used. In the 1960s Rolls Royce developed a range of petrol and diesel engines that were used in a wide variety of commercial vehicles for other manufacturers. The aero engine division flourished until Rolls Royce was bankrupted in 1970 as a result of entering into an unrealistic contract to supply engines to American Lockheed Corporation.

A new nationalized company Rolls-Royce (1971) Ltd was set up and Rolls-Royce Motors Ltd was publicly floated to look after car manufacture. Yearly production reached 3347 by 1978. Vickers Ltd took over in 1980, separating the diesel, specialist engines and precision components divisions from car manufacture. Rolls Royce's 10,000th car was delivered in 1985.

Record (1): Rolls Royce plc, PO Box 31, Derby DE2 8BJ.

Records include: Board minutes from 1906; minutes of Rolls Royce Motor Car Division (Crewe), from 1958; ledgers, wages books (recent years only); staff records, from 1906; staff records, Rolls Royce (Crewe) post WW2; a little pre-WW2 correspondence.; blueprints and technical drawings, mostly post WW2; photographs (at Derby, Crewe, Hythe Rd, London), selection from 1904; publicity material (little pre WW2)

Note: There is only a small amount of 1906-7 material surviving. Many records were destroyed in WW2.
Record (2): Rolls Royce Enthusiasts Club, Hunt House, Paulerspury, near Towcester, Northamptonshire NN12 7NA.

Records include: Business and technical records of associated firms, particularly of coachbuilders; guarantee books recording chassis numbers and owners of Rolls Royce and Bentley cars, 1905-67; details of orders, specifications, cost, delivery etc; depot sheets, 1920s-1930s; technical drawings from early 1900s; test records; sales catalogues from 1905; photographs and glass plate negatives (~30,000 items); personal papers including correspondence, press cuttings, memoranda, and photographs, of Charles Stewart Rolls, Sir Frederick Henry Royce, Claude Johnson, and E.W. Hives.

Record (3): Coventry City Record Office, Bayley Lane, Coventry CV1 5RG.


ROOTES GROUP

| Rootes Securities Ltd. | 1928-1946 |
| Pinley Estate. | 1946-1970 |
| Ryton-on-Dunsmore, Coventry. | 1963-1970 |
| Linwood, Glasgow. | 1970-1978 |
| > Chrysler UK Ltd. | 1978-to date |
| > Peugeot-Talbot. |

History: The Rootes Group, built up by Reginald and William Rootes, included such marques as Hillman, Humber, Sunbeam (cars), Sunbeam-Talbot, Talbot and Commer and Kammer (commercial). The Chrysler Corporation acquired a minority interest in 1964 and Rootes became Chrysler UK in 1970. However, Chryslers global financial problems, a limited model range in the UK, and industrial relations problems resulted in sale to Peugeot in 1978.

Record (1): Peugeot Talbot Motor Co Ltd, Aldermoor House, Aldermoor Lane, Coventry CV3 1LT.

No description available yet but Peugeot have given commitment to list surviving corporate and business records which may involve records from all the constituent Rootes companies.

Record (2): Museum of British Road Transport, Hales St, Coventry CV1 1PN.

Records include: Product literature; technical handbooks, registers; sales brochures, publicity, correspondence, specifications, spare parts lists;
extensive photographic archive of approximately 30,000 negatives covering Humber, Hillman and Talbot and Rootes companies with wide range of subject matter, eg. car production, factories, shadow factory construction, women at work, wartime airplane production, publicity, racing, rallying, personalities.

Record (3): Modern Record Centre, Warwick University, Coventry CV4 7AL.

Records include: Industrial relations records covering the Rootes to Peugeot Talbot period such as Joint Shop Stewards' minutes, documentation on pay and conditions, productivity, participation etc. MSS 315.

Record (4): Coventry Record Office, Bayley Lane, Coventry CV1 5RG.

Records include: Various accounts and records rescued in 1994 (in process of being listed); reports of Coventry reconstruction Co-ordinating Committee, 1940-41. Acc 483.

Other records saved from disposal in 1994 and currently being sorted and listed include extensive correspondence for the 1940s, 50s and 60s; financial records from 1939; production records, 1950-1960; Sunbeam-Talbot material: private ledgers, 1935-1946; journal, 1935-43.

Record (5): Strathclyde Regional Archives, Mitchell Library, North Street, Glasgow.


Note: Considerable material lost in Chrysler era; Some material held by owners' clubs and by ex employees.
ROVER

<table>
<thead>
<tr>
<th>Rover Cycle Co Ltd.</th>
<th></th>
<th>1904-1905</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meteor Works, West Orchard, Coventry.</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Rover Motor Co Ltd.</th>
<th></th>
<th>1905-1932</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meteor Works, West Orchard, Coventry.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hay Hall Road, Tyseley, Birmingham.</td>
<td></td>
<td>1921-1935</td>
</tr>
<tr>
<td>New Meteor Works, Helen Street, Coventry.</td>
<td>1932-1945</td>
<td></td>
</tr>
<tr>
<td>Lode Lane, Solihull, Birmingham.</td>
<td></td>
<td>1945-to date</td>
</tr>
</tbody>
</table>

> Leyland Motors Ltd 1967-1968
> British Motor Holdings 1968-1972
> British Leyland Motor Corporation 1972-1978
> British Leyland Cars Ltd 1978-1982
> Austin Rover Group Ltd 1982-1990
> Rover Group Ltd. 1990-1994

History: The origins of the Rover lie in James Starley's Coventry Sewing Machine Company (1861), the Coventry Machinist's Company (1868) and John Kemp Starley's cycle company, Starley and Sutton, based at the Meteor Works where the name Rover was first used for a pedal cycle. Company name changes to J.K.Starley Co Ltd and then to the Rover Cycle Co Ltd in 1896 occurred with first motorcycles produced in 1902 and then cars in 1904. The Rover Motor Co Ltd was formed in 1906 with yearly car production of Lewis designed cars standing at 754. The Clegg designed Twelve was particularly successful from 1912 onwards and in 1919 a factory was bought at Tyseley to manufacture chassis for a new light car, the Eight. Car production approached 6000 during the mid 1920s. Spencer B. Wilks was appointed general manager in 1929 and regenerated Rover during difficult times by moving to production of high quality middle-class cars establishing a high reputation for the company. Production reached 11,103 by 1933 and the old Meteor Works was sold. Production was concentrated at the New Meteor Works in Helen Street (Coventry) until it was sold in 1945 and production shifted to the Solihull shadow factory.

Production of the P2, P3 and P4 saloons followed after WW2, the development of the Land Rover from 1948 and pioneering work on gas turbine engines in the 1950s and 1960s. Rover bought Alvis in 1965 and was acquired itself by Leyland in 1967 followed by the BMC/BMH/BL sequence. Under BL control car production moved to Cowley in 1981, with Land Rover Ltd taking over the Solihull site.

Record (1): British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 OBJ.

Records include: Rover Cycles Co Ltd directors' attendance book, 1896-1947; memorandum and articles of association and special resolutions
through to 1949; memorandum, 1954, and substituted articles of association, 1964, including certificate of incorporation of Rover Co (originally the Rover Cycle Co).

Memoranda of the annual accounts, 1928; board and annual general meeting minutes and reports containing detailed documentation of the running of the company including information on - annual accounts, balance sheets, directors' remuneration, contracts, trading accounts, profit and loss accounts, valuations of plant, machinery, furniture, stocks and tools, work in progress, sundry creditors and debtors, accrued charges, investments and cash at the bank and in hand, welfare fund, sundry working papers, cost balances, details on subsidiary companies, 1929-62 (NB. 1931 report contains chartered accountants' report on company); Rover Gas Turbines accounts and working papers; audit memoranda with detailed information on bills, balances, royalties, new patents, working expenses, rebates, insurance, license details, bank agreements, subscriptions, property additions, 1931; statutory accounts, 1971-72.

Rover Cycle Co Ltd register of mortgages and transfers of debentures, 1896-1929; trademark applications and correspondence, c.1890s-1930s (mostly Rover Cycle Co Ltd); circular and notice of meetings regarding share issues/allotments, special resolutions, proxy forms and underwriting agreements, Capital Issues Committee, stock exchange dealings and correspondence, 1954; summary of trade and service agreements and investments consisting of summary of an agreement (or investment) with name, particulars, date of commencement, payments and notes, and on the reverse side of page a list of documents generated and the location and date of their filing, 1896-1957.

Rover Cycle Co Ltd nominal ledger, 1896-1903; private ledger, 1906-21; book of running costs, chassis and tyre prices, quotes from companies for machining and castings, 1921-22; forward planning charts for car development projects, 1960; diary of Acocks green factory progress and visits and meetings, 1945-50; record of advertisement blocks available to dealers, 1954-59; pension fund rules, 1950; Rover sick benefit society rules 1957; employee transport, working conditions and hours, 1938-58; scrapbooks of cuttings on world's first gas turbine car, 1950; folder of rally cuttings, 1960s; production registers.

Record (2): Modern Record Centre, Warwick University, Coventry CV4 7AL.

Records include: Board minutes, 1890-1972, of J.K.Starley & Co Ltd, Rover Cycle Co Ltd and Rover Co Ltd. (detailed minutes with vast amount of subject matter); Executive Directors' minutes, 1961-8; Shareholder's minutes, 1896-1972; Shadow factories/Mo S&F Agency factory minutes, 1939-59; Rover Gas Turbines Ltd Minutes, 1953-72; Private ledgers, 1890-1903, 1906-16; Estimated liabilities and assets, 1906-31; Annual accounts, 1932-57; Audit memoranda, 1931-3, 1940-1; Property register, 1891-1941; SDI project estimates, 1971; Acocks Green factory diary, 1951-8. MSS 226/RO
**RUSTON AND HORNBY**

<table>
<thead>
<tr>
<th>Ruston and Hornsby Ltd.</th>
<th>1919-1924</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boultham, near Lincoln.</td>
<td></td>
</tr>
</tbody>
</table>

History: The firm Ruston-Hornsby were formed in 1857 and developed into well established makers of agricultural equipment and diesel engines. The company diversified into car manufacture after WW1 as a way of using factory capacity and skilled engineering personnel now surplus after the war. In common with contemporaries Angus-Sanderson, Bean and Cubitts, Ruston-Hornsby planned to use mass production techniques. Car production was abandoned after making ~1000 cars over a five year period and the company reverted to making diesel engines and gas turbines.

**Record (1):** Mr Ray Hooley, c/o European Gas Turbines Ltd, Library and Archive, P.O. Box 1, Frith Road, Lincoln LN6 7AA.

Unlisted Ruston material.

**Record (2):** Lincolnshire Archives Office, The Castle, Lincoln LN1 3AB.

Listed in Ritchie's 'The Shipbuilding Industry: A Guide to Historical Records'.

*Note: It was not determined how much of this large holding of material relates to the car manufacturing side of the business.*

**SCOUT**

<table>
<thead>
<tr>
<th>Dean and Burden Bros. Ltd.</th>
<th>1905-1906</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excelsior Works, Friary Lane, Salisbury.</td>
<td></td>
</tr>
<tr>
<td>Eclipse Works, Churchfields Road, Salisbury.</td>
<td>1906-1908</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scout Motors Ltd.</th>
<th>1908-1921</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Whatley &amp; Co.</th>
<th>1922-1923</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pewsey, Wiltshire.</td>
<td></td>
</tr>
</tbody>
</table>
History: Clockmakers since 1881 and involved with marine petrol engines from 1902, the Burden family went into car manufacture in 1904 backed by finance from P. Dean. Scout Motors were producing two cars per week by 1912, but Government requisitioning of the firm's machinery was a setback in 1915. The company folded in the slump following WW1 when the workforce numbered 150. Whatley and Co bought the spares and patterns and made a few more cars until 1923. The Scout factory is a British Telecom factory today.

Note: No records identified. Salisbury Museum does have small amount of material and book on history of Scout Motors.

SHARPS / BOND

| Sharps Commercials Ltd.         | Preston, Lancashire. | 1949-1964 |
| Bond Cars Ltd.                  | Preston, Lancashire. | 1965-1969 |

History: The Bond three wheeler became popular and well established by mid 1950s. Taken over by Reliant in 1969 with the Bond name was finally dropped in 1974.

See RELIANT.

SHEFFIELD-SIMPLEX

| Brotherhood Crocker Motors Ltd. | 158a Norwood Road, West Norwood, London. | 1904-1905 |
| Sheffield-Simplex Motor Works Ltd. | Canbury Park Road, Kingston-on-Thames; Tinsley, Sheffield. | 1906-1925 |

History: Sheffield-Simplex took over the production of Brotherhood-Crocker's 20hp model when that firm went out of business in 1907. By 1912 output had reached 12 chassis per month of their own design, but by 1925 car production ceased. Sheffield-Simplex sold Commer lorries under the name Shefflex until 1937 and the company then became Shefflex Ltd and still exists as a bodybuilder.

Record (1): Kelham Island Industrial Museum, Off Alma St, Sheffield.

Engineering drawings.
SINGER

Singer & Co Ltd.
Canterbury St., Coventry, Warwickshire. 1905-1936
Birmingham. 1927-1936

Singer Motors Ltd.
Coventry. 1936-1956
Birmingham. 1936-1955

> Rootes Group 1955-1970

History: George Singer worked at Coventry Machinists before making cycles on his own from 1876. Singer and Co Ltd made motor cycles and trikes from 1900 before first producing cars under licence from Lea-Francis in 1905. The company was reformed in 1909 after going into receivership and George Singer's death. Singer acquires the motorcycle firm Coventry Premier in 1922 and the Calcott factory in 1926. Production included 25,000 Juniors between 1927-1930, the first cheap British car with an overhead-cam engine. Singer moved into an additional factory in Birmingham in 1927, unusually making nearly all its own components. The company was restructured and renamed Singer Motors Ltd in 1937 following financial difficulties from 1935. After WW2 all car production was in Birmingham. In 1955 Singer was bought by William Rootes' company (a former Singer apprentice) and the Singer name was used on Rootes marques until the Chrysler takeover in 1970.

Record (1): Peugeot Talbot Motor Co Ltd, Aldermoors House, Aldermoors Lane, Coventry CV3 1LT.

No description available yet but Peugeot have given commitment to list surviving corporate, business and technical records.

Record (2): Coventry Record Office, Bayley Lane, Coventry CV1 5RG.

Records saved from disposal in 1994 and currently being sorted and listed may include a few Singer records.

Notes: Many Singer records were destroyed during bombing of Coventry.
History: Reginald W. Maudslay set up Standard with Alex Craig as works manager and designer. By 1914 production was 50 per week and by 1924, after rapid expansion, approaching 200 per week with production centred at Canley. Standard made chassis for Swallow and engines for Jaguar, Morgan and Railton. Keen pricing, modern styling and high reputation enabled Standard to continually expand through to WW2. Car production revived to 37,000 by 1947, with Triumph being a fully owned subsidiary of Standard from 1945. Standard built Ferguson tractors from 1946 until it sold the former Banner Lane shadow factory to Massey-Ferguson in 1959. A one-model Standard Vanguard policy was used in the early 1950s with 60,700 cars produced in 1950. The Birmingham bodybuilder Mulliner was acquired in 1958. Following deteriorating sales in the late 50s, Leyland bought Standard-Triumph in 1961, with the Standard marque name lasting to 1965.

Record (1): Modern Record Centre, Warwick University, Coventry CV4 7AL.

Records include: Various series of Board Minutes, 1903-71; Standard-Triumph International Ltd minutes, 1970-6; Standard-Triumph Sales Ltd Board minutes, 1959-71; general meetings, 1960-75; printed reports and balance sheets, 1913-60; post-war subject files relating to overseas trading, directors, acquired companies, relations with other firms featuring suppliers and distributors, patents, trade marks, property; personnel and labour; files relating to acquisitions of Beans and Mulliners; merger negotiations with Rootes and Rover, 1950s; Sir John Black file relating to business expenses, company finances and policy. MSS 226/ST.

Record (2): Coventry City Record Office, Bayley Lane, Coventry CV1 5RG.


Record (3): British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 OBJ.

Production registers, cars and light commercials, 1945-63
STAR / BRITON

<table>
<thead>
<tr>
<th>Company</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Star Motor Co Ltd.</td>
<td>1898-1902</td>
</tr>
<tr>
<td>Frederick St., Wolverhampton.</td>
<td></td>
</tr>
<tr>
<td>Star Engineering Co.</td>
<td>1902-1932</td>
</tr>
<tr>
<td>Frederick Street /Bushbury, Wolverhampton.</td>
<td></td>
</tr>
<tr>
<td>Star Cycle Co Ltd.</td>
<td>1905-1909</td>
</tr>
<tr>
<td>Briton Motor Co Ltd.</td>
<td>1909-1912</td>
</tr>
<tr>
<td>Willenhall Road, Wolverhampton, Staffordshire.</td>
<td></td>
</tr>
<tr>
<td>Briton Motor Co (1912) Ltd.,</td>
<td>1912-1928</td>
</tr>
<tr>
<td>Walsall St, Wolverhampton.</td>
<td></td>
</tr>
</tbody>
</table>

History: The Lisle family started business in 1883 as the bicycle makers Sharrat & Lisle with the company name changed to Star Cycle Co Ltd in 1896. The Star Motor Co Ltd was formed in 1898 to deal with the motor car side of the business. This company became Star Engineering Co in 1902, with Star Cycle Co Ltd as a wholly owned subsidiary.

Star Engineering prospered with a range of conventional cars, becoming one of Britain's six largest vehicle producers by 1914 (1000+ per year). Post war production was resumed in cramped Wolverhampton premises with cars and commercial vehicles. When the Lisle family sold out to Sidney Guy in 1927 the company moved to Bushbury on the outskirts of the city. Old fashioned machinery and lack of capital investment from Guy resulted in Star going into receivership in 1932. Meanwhile the Star Cycle Co had started car production in 1905, and, in 1909 it was sold off to become the Briton Motor Co Ltd (still under the direction of a family member Edward Lisle Jr).

Briton cars sold well in 1913-1914 but foundered after WW1. Bought by Weight in 1922 following liquidation. Total Briton production ~1000 cars.

Record (1): Wolverhampton Borough Archives, Central Library, Snow Hill, Wolverhampton.


Record (2): Star, Starling, Stuart & Briton Register, New Wood Lodge, 2a Hyperion Rd, Stourton, Stourbridge DY7 6SB.

Small amount of surviving Briton advertising literature and photographs.

Note: Almost all Briton records held by company and tons of spare parts were lost in 1939 when the factory was cleared out for war production.
SUNBEAM

Sunbeam Motor Car Co Ltd.
Moorfield Works, Wolverhampton. 1905-1935

>STD Motors Ltd 1920-1935
>Rootes 1935-1970

History: Sunbeam grew from John Marston Ltd (1895) and from the Villiers Engineering Co (1898). The Sunbeam Motor Car Co Ltd was formed in 1905 building an all British designed car. Louis Coatalen arrived as designer in 1909 and over two thousand men were employed by 1913. Twenty cars per week were being made by 1919 and in 1920 Sunbeam became part of STD Motors Ltd (including Talbot, Darracq and W&G Ducros).

Racing and record breaking was important to the company until financial restrictions halted the racing programme in 1926. Sunbeam Trolleybuses Ltd was formed in 1934 but the car side of the business went into decline. Rootes salvaged Sunbeam from a chaotic STD in 1935. Sunbeam-Talbot Ltd was formed to make sporting versions of Hillmans and Humbers, initially at Talbot's London factory and later at Ryton-on-Dunsmore.

Record (1): Peugeot Talbot Motor Co Ltd, Aldermoor House, Aldermoor Lane, Coventry CV3 1LT.

No description available yet but Peugeot have given committment to list surviving corporate, business and technical records.

Note: Most of the records lost due to enemy action in WW2.

SWIFT

Swift Cycle Co Ltd. 1900-1902: 1912-1913

Swift Motor Co.
Cheylesmore, Coventry. 1902-1919

Swift of Coventry Ltd.
Cheylesmore and Quinton Works, Coventry. 1919-1931

History: Swift Cycle Co was formed in 1896 to acquire Coventry Machinists Co. The company made motor quads from 1900 and cyclecars from 1912-1913. The Swift Motor Co was formed as a subsidiary in 1902 and moved to a separate factory in Cheylesmore (Coventry) where from 1910 it concentrated on small to medium lightly built and well designed cars. The bicycle and motor firms were combined as Swift of Coventry Ltd in 1919. Not able to compete with mass produced rivals Swift went into liquidation in 1931.
Record (1): Coventry Record Office, Bayley Lane, Coventry CV1 5RG.

Records include: Notes and photocopies of articles; deeds and papers, 1897-1934. Acc 961, 1207, 1296.

Record (2): Public Record Office, Ruskin Avenue, Kew, Richmond, London TW9 4DU.

BT31/318521/72123 for Swift Cycle Co Ltd.

TRIUMPH

<table>
<thead>
<tr>
<th>Triumph Cycle Co Ltd.</th>
<th>1923-1929</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priory St, Coventry.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Triumph Motor Co Ltd.</th>
<th>1930-1935</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner Lane, Coventry.</td>
<td></td>
</tr>
<tr>
<td>Gloria Worjs, Holbrooks Lane, Coventry.</td>
<td>1935-1939</td>
</tr>
</tbody>
</table>

History: Siegfried Bettmann exported bicycles under the name Triumph in the late 1880s and in 1895 his Triumph Cycle Co went public. Production of motor cycles started in 1902 and cars in 1923. The Super Seven was their first successful car with 17,000 built in seven years. A new factory was bought in 1935, the motorcycle business sold off in 1936 and a new range of cars introduced in 1937. Triumph went into receivership in 1939 and was sold to Sheffield steelmaker Thomas Ward & Co. In 1944 Sir John Black of Standard Motor Co bought the bomb damaged Triumph factory remains and the rights to the Triumph name. The Triumph Motor Co (1945) Ltd was formed as a wholly-owned subsidiary of Standard. The Triumph marque was used on the successful TR series of sports cars starting in 1953 and on the Triumph Herald in 1959. Standard-Triumph was taken over by Leyland in 1961.


BT31/6232/44166 for Triumph Cycle Co Ltd.

See STANDARD.

TURNER

<table>
<thead>
<tr>
<th>Turner's Motor Manufacturing Co Ltd.</th>
<th>1902-1930</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lever St., Green Lane, Wolverhampton.</td>
<td></td>
</tr>
</tbody>
</table>

History: The Turner Motor Manufacturing Co built Belgian Miesse steam cars under licence for Miesse Steam Motor Syndicate Ltd from 1902 to 1913. From 1906 they built the Seymour-Turner petrol car for Seymour's of London.
and in 1911 a separate company, Turner Petrol Cars Ltd was set up. The
two firms were merged into the Turner Motor Manufacturing Co in 1922 with
Turner resuming its own postwar car production until 1930. The company
continued as a producer of motor components and after WW2, diesel
engines, gearboxes and occasional commercial vehicles until being acquired
by Spicer who merged with ZF in 1984 to form ZF Spicer International.

Note: No records found.

VAUXHALL

<table>
<thead>
<tr>
<th>Vauxhall IronWorks Co Ltd.</th>
<th>1903-1904</th>
<th>1905-1906</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wandsworth Rd., London SW.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luton, Bedfordshire.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vauxhall and West Hydraulic Engineering Co Ltd.</th>
<th>1906-1907</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luton, Bedfordshire.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vauxhall Motors Ltd.</th>
<th>1907-to date</th>
<th>1964-to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luton, Bedfordshire.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ellesmere Port.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

> General Motors. 1925-to date

History: Vauxhall has its origins in Alex Wilson & Co, an engineering firm
founded in 1857. The company name was changed to Vauxhall Iron Works
Co Ltd in 1897, their first petrol engine designed by F.W.Hodges in 1898 and
their first car marketed in 1903. Production was 43 and 75 cars for the first
two years. Two name changes and one site change brought the company to
its present title of Vauxhall Motors Ltd. By 1913 car production had
overtaken marine engines in importance and Vauxhall cars had had
successes in racing and record breaking.

Continued wartime car production enabled Vauxhall to continue straight on
into civilian car production in 1919, with production reaching 1444 by 1923.
In 1925 General Motors took over Vauxhall and their development of Bedford
trucks saw 10,000 trucks sold in 1931 compared to 2136 cars. By 1937 cars
sales had caught up and by 1939 sales had peaked at 34,367. Bedford
production was transferred to Dunstable in the early 1950s. American car
styling was evident and popular in the Velox/ Cresta/ Victor cars. Vauxhall's
first million seller was the Viva made in a new factory at Ellesmere Port,
Cheshire from the mid 1960s. Vauxhall returned to racing, in particular
rallying from 1978. From 1974 outdated models were replaced by cars of
international pedigree made around the world in various versions such as the
Chevette, Cavalier, Astra and Nova. Total production in 1985 was 152,587.
Record (1): Vauxhall Heritage Building, Vauxhall Motors Ltd, Osbourne Rd, Luton LU2 0SY.

Separate archive room holds wide range of unlisted material including financial accounts, from 1907; engineering drawings and plans (microfiche); handbooks, manuals and publicity literature; ~40,000 photographs.

Note: The extent of this material is unknown, computer indexing and listing under the guidance of Mr Tony Burnip is due to start in 1994/95.

Record (2): Legal Department, Vauxhall Motors Ltd, Osbourne Rd, Luton LU2 0SY.

Minutes of directors' meetings, from 1907.

Record (3): National Motor Museum, John Montagu Building, Beaulieu, Brockenhurst, SO42 7ZN.

Publicity literature (100s); photographs (1000s).

VULCAN

Vulcan Motor Manufacturing and Engineering Co Ltd.
Crossens, near Southport, Lancashire. 1902-1906

Vulcan Motor and Engineering Co (1906) Ltd. 1906-1928

History: The company originated with the Hampson Brothers experimenting with cars in 1896. Production reached six per week by 1909 with commercial vehicles becoming important by 1914. The Hampson brothers left in 1916 and the firm changed name. Harper Bean Ltd acquired 75% of Vulcan's share capital in 1919 and Vulcan managed to survive the Harper-Bean liquidation in 1920. More than 90% of Vulcan's production were commercial vehicles in the early 1920s. Vulcan and Lea-Francis had close ties from 1922 but financial difficulties developed and most of Vulcan's work force was laid off in 1929. Tilling-Stevens acquired the rights to Vulcan commercial vehicles in 1937 with Rootes acquiring control in 1950.

Note: No records identified.
WAIT

Clyde Cycle & Motor Car Co Ltd.
Queen St, Leicester. 1901-1904

Wait, G.H.
London Rd, Leicester. 1905-1907

Wait, G.H. & Co Ltd.
London Rd, Leicester. 1908-1932

History: Bicycle manufacturer that also made motor cycles and cars. Financial problems caused wind up and the restructuring to Wait and Co Ltd. Production ~245 cars.

Note: No records identified in the Leicester Record Office or the local history section of library except some personal press cuttings relating to Mr G.H.Wait (eg. obituary).

WOLSELEY

Wolseley Sheep Shearing Machine Co Ltd.
Drews Lane, Birmingham. 1899-1901

Wolseley Tool and Motor Car Co Ltd. 1901-1914

Wolseley Motors Ltd.
Ward End, Birmingham. 1914-1927

Wolseley Motors (1927) Ltd.
Birmingham. 1927-1948
Oxford. 1949-1952

>Morris Motors 1935-1952
>British Motor Corporation Ltd 1952

History: Frederick York Wolseley set up the Wolseley Sheep Shearing Company in Sydney in 1887, with a British company of the same name formed two years later. Wolseley resigned in 1894, however, with Herbert Austin as the works manager the company widened its range of products to eventually include Austin’s first four wheeler car in 1899. Vickers Son & Maxim Ltd bought the car-making interests from the Wolseley Co in 1901, registering the new company as the Wolseley Tool & Autocar Co Ltd. Sales of Austin’s Wolseleys peaked in 1903 but Austin left in 1905 after J.D.Siddeley had been invited to become sales manager.
Production was 453 in 1906 with almost the whole car made in house. Commercial vehicle (buses), aero and marine engines were also made. Siddeley left for Deasy in 1909. The company expanded into other Vickers sites and by 1913 was in the top four British manufacturers. Production peaked in 1921 at 12,000 cars (no commercials) and then demand dropped at a time of moderately high interest charges for factory expansions and of Morris price cuts. Wolseley was declared bankrupt in 1926 and was bought by William Morris in 1927, renamed Wolseley Motors (1927) Ltd and sold to Morris Motors Ltd in 1935. Thereafter Morris-Commercial truck production was shifted to Adderley Park and Wolseley to Ward End. By 1937 sales of the Wolseley marque were 30,000 with differences in the engine and a better equipped interior distinguishing them from Morris cars. Wolseley production moved to Cowley in 1949 and the Wolseley marque phased out after the Morris/Austin merger to form the British Motor Corporation. Wolseley plc is currently a holding company for a number of companies that are descendants of the above motor manufacturing companies.

Record (1): Wolseley plc, Box 18, Vine Lane, Droitwich.

Records include: Board meeting minutes from the Wolseley Sheep Shearing Machine Co Ltd.

Record (2): British Motor Industry Heritage Trust, Gaydon, Warwickshire CV35 0BJ.

Records include: Directors' meeting minutes, including balance sheets and accounts, 1927-67; balance sheet and accounts, 1936-68; memorandum of articles of association, 1927; copy of special resolution and articles of association, 1936; accounts and AGM, 1952; authorities to bankers, 1930s-40s; banking related records, 1930-40s; copies of returns filed with the registrar of Joint Stock Companies, 1930-48; summary of share capital and shares, analysed trading accounts, 1935; stock summaries, 1935; ledger cards, 1970s; register of members, share, transfers, 1927-48; expenses ledger, 1936-42; wage analysis book, 1944-48; general ledgers, 1906-42; ledger of sundry debtors and creditors accounts, 1915-34; nominal ledgers, 1924-26; reserve journals, 1923-37; factory ledgers, 1910-34; sales ledgers, 1906-20; balance sheets, accounts and schedules, 1910-1949; trade mark and patent correspondence, 1940s-50s; specifications of foreign patents, 1912-1920s; cash paid, 1932-48; private ledgers, 1926-46; salary book, 1920-31; cash books, 1927-48; cash books factories and depots, 1906-10; capital expenditure and depreciation, 1901-23; cash received books, 1927-48; capital expenditure, buildings and plant, 1935; plans of properties, Adderley Park, Ward End, Chelsea, Bombay; visitors book, 1935-58; chemical laboratory reports, 1923.

Production registers, 1901-30, 1948-74 (earliest very detailed and previously in custody of owners club)
History: The Yorkshire Motor Car Manufacturing Company assembled the Jackson car designed by R. Reynolds Jackson (based on an imported engine).

Record (1): London University Library, Archives Department, Palaeography Room, Senate House, London WC1E 7HU.

Records include: Some one hundred and fifty items of correspondence from potential customers, 1899-1900; director's report, 1900; publicity material.
4.3 Index of companies.

This index has the most common form of a company name plus any other variations that are significantly different from the common one.

AC Cars Ltd, 38
Adlards Motors Ltd, 39
A.F.N. Ltd, 60
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Allard Motor Co Ltd, 39
Alldays and Onions Pneumatic Engineering Co Ltd, 40
Alvis Car and Engineering Co Ltd, 40
Alvis Ltd, 40
Argyll Motors Ltd, 42
Ariel Motors Ltd, 42
Armstrong-Siddeley Motors Ltd, 43
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Arrol-Johnston & Aster Engineering Co Ltd, 44
Aston Martin Ltd, 45
Aston Martin Lagonda Ltd, 45
Austin Motor Co Ltd, 46
Austin-Rover Group Ltd, 50
Auto Carriers Ltd, 38

Bean Cars Ltd, 48
Belsize Motor Car and Engineering Co Ltd, 49
Belsize Motors Ltd, 49
Bentley Motors Ltd, 49
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Birmingham Small Arms Cycles Ltd, 51
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Brimlow, John and Charles, 42
Bristol Aerplane Co Ltd, 50
Bristol Cars Ltd, 50
British Leyland Ltd, 50
British Leyland Motor Corporation Ltd, 50
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Briton Motor Co Ltd, 88
Brotherhood Crocker Motors Ltd, 85
BSA, 51

Calcott Brothers Ltd, 52
Calthorpe Motor Co Ltd, 53
Chambers Motors Ltd, 53
Clement-Talbot Ltd, 54
Clyde Cycle & Motor Car Co Ltd, 54
Crossley Brothers Ltd, 54
Crossley Motors Ltd, 54
Cubitt’s Engineering Co Ltd, 55

Daimler Motor Co Ltd, 55
Dean and Burden Brothers Ltd, 84
Deasy Motor Car Manufacturing Co Ltd, 57

Enfield Autocar Co Ltd, 57
Enfield-Allday Motors Ltd, 57

Ford Motor Co Ltd, 58
Frazer Nash Ltd, 60

Galloway Motors Ltd, 44
GN Ltd, 60
Great Horseless Carriage Co Ltd, 61

Harper Bean Ltd, 48
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Hillman Motor Car Co Ltd, 62
Horstmann Cars Ltd, 62
Humber Ltd, 63

Invicta Cars, 64

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SS Cars Ltd, 64
Standard Motor Co Ltd, 87
Star Cycle Co Ltd, 88
Star Motor Co Ltd, 88
Sunbeam Motor Car Co Ltd, 89
Swallow Coachbuilding Co, 64
Swallow Sidecar and Coachbuilding Co, 64
Swift Cycle Co, 89
Swift of Coventry, 89
Swift Motor Co Ltd, 89

Triumph Cycle Co Ltd, 90
Triumph Motor Co Ltd, 90
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Vauxhall and West Hydraulic Engineering Co Ltd, 91
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Vauxhall Motors Ltd, 91
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Whatley & Co, 84
Wolseley Motors Ltd, 93
Wolseley Sheep Shearing Machine Co Ltd, 93
Wolseley Tool and Motor Car Co Ltd, 93
W.R.M. Motors Ltd, 73

Yorkshire Motor Car Manufacturing Co Ltd, 95
5. CONCLUSION

An overview of historical record holdings for the sixty-one groups of British motor car manufacturing companies that manufactured passenger cars for at least twenty years has been compiled. A small selection of companies that manufactured for two to twenty years was also included in this study (Albion, Calcott, Cubitts, GN, Ruston & Hornsby, Yorkshire).

Because of the complex relationships in this industry and the constant redefining of the forms that companies take through mergers, liquidations, acquisitions and changes of name, the companies have been listed mostly in the form of groups that are closely related or show a common lineage. Within each of these groups there are common factors with regard to manufacturing, history, locations and record generation. The format used for displaying entries closely follows that established in the recent Business Archive Council publications on the shipbuilding and brewing industries except for a modification that allows this company lineage to be visible at a glance, clearly headlined at the beginning of each group entry.

The information presented in the main part of this project consists of,

(a) a list of groups of manufacturing companies,
(b) brief history of each company, or, group of 'related companies',
(c) location of records,
(d) descriptions of the nature and types of these records.

Information on car industry listed records held in organisations committed to providing public access such as record offices, archive repositories, libraries and museums is generally easy to trace, describe and access (subject to legal restrictions such as a 30 year rule). The National Register of Archives business indexes and listings are particularly helpful. However quite a high
proportion of car industry records are only partly listed or not listed at all due to their bulk or to there being a low priority on their listing. Historical records held by currently operating private companies and car owners clubs are generally not listed.

A very personal approach via telephone calls and personal visits was taken to obtain information about records held by private companies rather than using blanket mailing requests for information. This was deemed necessary because private companies are very wary of such requests and it is necessary to target the very occasional employee who is in a position of influence and to interest him or her in your project. It is very noticeable that in modern businesses almost everyone is only interested in the present and it is very rare to find an employee with any interest in old historical records.

The necessity to restrict the scope of this project in terms of the number and type of companies was determined by the short time scale available. This project can now be built upon, expanding its scope to include all significant car manufacturers, commercial vehicles and racing cars manufacturers and also important suppliers to the industry such as coach and body builders and engine manufacturers. To this end this project will be made available to archivists at the Modern Records Centre and at the British Motor Industry Heritage Trust. The Business Archives Council have decided during the course of this project to proceed with the publication of a guide to the records of the motor industry as the third such book in their industry historical records series. It is hoped that the results of this project can be incorporated in this publication.
6. BIBLIOGRAPHY


