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## SIR DAVID SALOMONS' MOTOR STABLES BROOMHILL, SOUTHBOROUGH, TUNBRIDGE WELLS, KENT SURVEY AND ANALYSIS

## HISTORIC BUILDING REPORT

John Minnis





ARCHITECTURAL INVESTIGATION

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#### SUMMARY

Sir David Salomons, widely credited with introducing the motor car to Great Britain, designed some of the earliest examples of a new building type, the motor house, at his residence, Broomhill, Southborough, Tunbridge Wells, Kent and described them in detail in 1902. Their history is examined and their present condition, which is remarkably unaltered, assessed.

#### CONTRIBUTORS

Photography by Steve Cole.

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Andrew Williams for assisting with the site survey. Kathy Chaney, Salomons Site Librarian, Canterbury Christ Church University for helping to arrange access and providing archive photographs.

## ARCHIVE LOCATION

NMR Swindon

#### DATE OF SURVEY

20 June 2007

#### DATE OF PHOTOGRAPHY

23 September 2008

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## CONTENTS

INTR	NTRODUCTION	
	The Original Motor Stables	Ι
	The Motor Stables in 1902	2
	The Present Condition of the Motor Stables	6
	Significance	11
end	endnotes	

## INTRODUCTION

Sir David Salomons (1851-1925) has been widely credited with introducing the motor car to Great Britain. He was responsible for organising the first public demonstration of motor cars or motor show at Tunbridge Wells in 1895. He founded the first British motoring organisation, the Self-Propelled Traffic Association, in the same year.<sup>1</sup> By 1906, it was recorded that he had owned 39 cars.<sup>2</sup>

An inveterate experimenter, he lit his house, Broomhill, by electricity, laid out a large workshop and built a large and highly ornate stable block in 1890-4 at the top of the drive. Attached to the house, he constructed a substantial private theatre. Against the east wall of this theatre, he built a range of garages or motor stables, some of the earliest in the country, which were rebuilt within a few years. In 1902 Salomons contributed a chapter 'The Motor Stable and its management' to the Badminton Library volume *Motors and Motor-driving* in which he gave a detailed description of the facilities at Broomhill as they existed at the time, intending them to be used as an exemplar.<sup>3</sup>

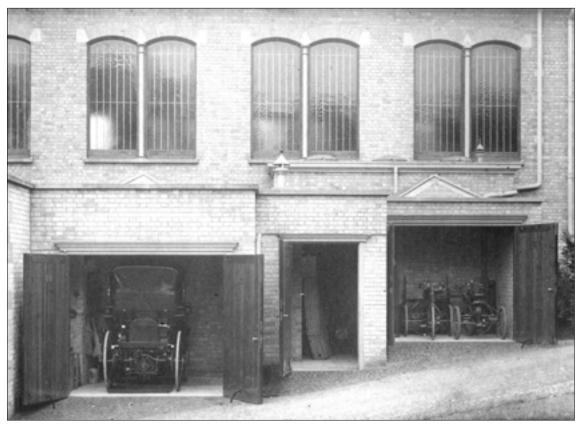


Figure 1. The original motor stables c. 1900, showing the buff brick façade similar to that of the theatre behind.

Canterbury Christ Church University, Salomons Campus

### The Original Motor Stables

A photograph of c. 1900 (Fig. 1) depicts the original form of the motor stables, which comprised two garages with a narrower bay between them, perhaps used for bicycles. These were slightly to the south of the existing buildings with the northernmost garage

approximately on the site of garage I (see next paragraph) as existing today. They were of buff brick matching that of that of the adjoining theatre. The photograph indicates that they were quite shallow, that on the right being just long enough to house a motor tricycle while that on the left houses a car of pre 1900 origin. No inspection pits are visible in the photograph. The earliest types of car had the engines more accessible than their successors and the rapidly changing technology of the motor car was probably a factor that led Salomons to decide to rebuild completely his motor stables. Firstly, cars were getting larger and the existing garages were too shallow to house them adequately and, secondly, the tendency for cars to become more complicated with the mechanical parts concealed under the bodywork meant that inspection pits were becoming essential. Whether any of the fabric of the earlier stables was retained is debateable. As the requirement was for 8ft deep pits and a basement, it would have been simpler for Salomons to build anew rather than to reuse the existing buildings. Most of the area occupied by the original motor stables, other than that forming the site of garage I, was subsequently incorporated into the house itself.

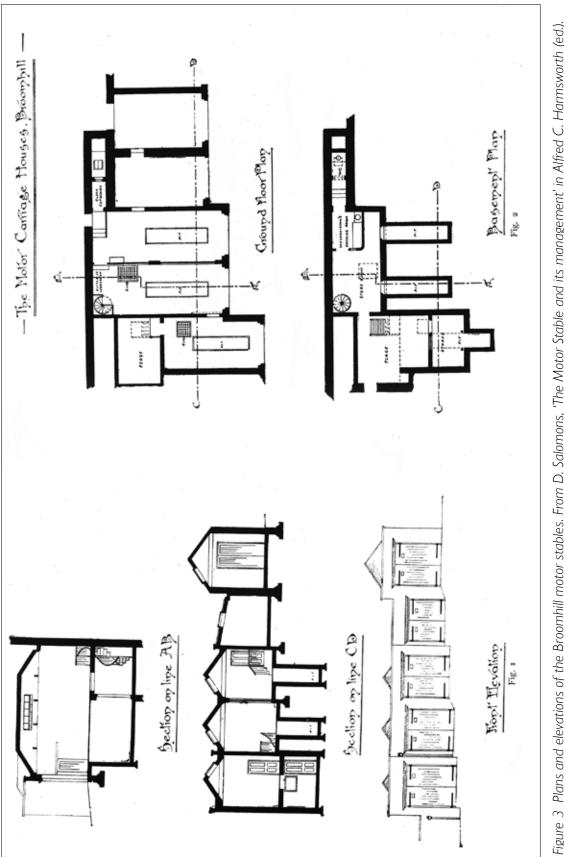


#### The Motor Stables in 1902

Figure 2 The rebuilt motor stables c. 1906. The cars are Brasiers of 15 h.p., 25 h.p. and 50 h.p. respectively.

Canterbury Christ Church University, Salomons Campus.

The exact date of rebuilding is unknown although it was completed by 1902, the date of the Badminton Library contribution. Salomons was evidently happy with the basic design as he retained the same layout as in the earlier motor stables, individual garages with dividing walls between them and hipped roofs partially hidden behind a parapet, together with a similar lintel moulding above the doors. There were five garages in all, numbered





I-5 for the purposes of identification from south to north or left to right in Fig. 3. They were built of buff brick and were faced with locally quarried sandstone, matching that of the house (Fig. 2). Only the front elevation was clad, with brickwork visible on the side wall of the northernmost garage. In the Badminton Library chapter, Salomons included a comprehensive set of plans and elevations of the motor stables (Fig. 3). Salomons described the stabling as being 'long narrow rooms' and these varied in size, one garage containing three small cars, 'another two large ones, the third two small or one very large car, the fourth room a small car, or may be used as a cycle house; and the fifth room will accommodate two moderate-sized vehicles, or can be used as a washing house in bad weather<sup>44</sup> The advantage of having the motor stables divided into individual garages or 'rooms' was that it gave additional wall space, essential bearing in mind the quantity of spares that were required for early motor cars. Garage I, the southernmost, was equipped as a workshop for running repairs.



Figure 4 The roof of garage 2, showing the surviving lifting apparatus. © English Heritage NMR DP070056



Figure 5 The removable timber boarding of the motor pits. © English Heritage NMR DP 070072

Salomons, who was his own architect, described the construction as being fire-proof, save for the roof which was of pitch-pine matchboarding with skylights of Mellow's patent glazing, a quarter of an inch thick to resist hailstorms (Fig. 4). Interior walls were of white brick other than those between garages 2 and 3 which were of vertical pitchpine boarding, the floors of Victoria stone laid on brick sleeper walls. There are sliding doors between garages 1 and 2, again in pitch-pine boarding. Roofs are slated behind a parapet. The garages were heated by hot water feeding radiators and lit by electricity. The three southernmost garages were provided with inspection pits, eight feet deep which were covered with two inch thick boards when not in use (Fig. 5). The concrete bottoms of the pits were sloped towards a gulley for drainage. The considerable height of these pits enabled entry to be made through conventional doorways (Fig. 6). They were accessed from a basement which was laid out to provide a forge, a store room, and a mechanician's [sic] dressing room, with a W.C. On the floor above the W.C. was a cloak cupboard, accessed from garage 3. This would have housed the heavy coats essential for early motoring. The basement was lit by glass blocks in the floor of the motor house above. An iron spiral staircase (Fig. 7) connected garage 2 with the store room, with a timber staircase leading from the forge to garage 1 (Fig. 8). The external doors to the garages were boarded with a ventilator to each of them (Fig. 9). A separate Benzine House was constructed, away from other buildings. It was a lean-to structure, 8



Figure 6 A motor pit showing the full height entrance doorway. © English Heritage NMR DP07066

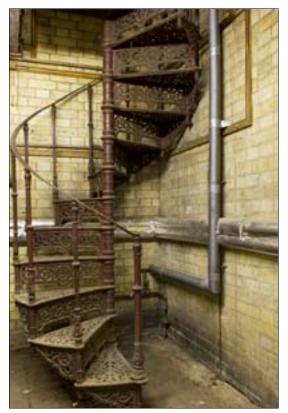


Figure 7 The spiral staircase rising from the basement level to garage 2. © English Heritage NMR DP070059



Figure 8 The basement from the inspection pit to the small forge.

© English Heritage NMR DP070068



Figure 9 The doors to garage 2, showing the ventilators installed. © English Heritage NMR DP070052

ft long, 3 ft wide and 9ft deep with walls of brick, gaps being left in the side walls for ventilation. A pair of doors, lined with iron sheeting gave access to two 300 gallon tanks mounted on brick bases.

# The Present Condition of the Motor Stables

Inspection revealed that the stables are in remarkably original condition. Internally, they are almost completely intact with the great majority of the features included in the plans given by Salomons in his Badminton Library article still present. Externally, although the garages appear at first sight to be unaltered (Figs. 10, 11), comparison with the c.1906 photograph (Fig. 2) reveals that garages 2 and 4 have been lengthened so as to render them flush with garages I and 3 respectively. The work was carried out with great care, reusing the existing doors and architraves. The date when this was



Figure 10 The motor stables from the north, showing brick construction exposed on the north wall.

© English Heritage NMR DP070050



Figure 11 The motor stables from the south, showing the extended garages 2 and 4.

© English Heritage NMR DP070051



Figure 12 Interior of garage 4, showing boards with hooks for tools.

© English Heritage NMR DP070074



Figure 13 Basement and mechanician's dressing room. © English Heritage NMR DP070061



Figure 14 Interior of mechanician's dressing room. © English Heritage NMR DP070062

undertaken is unknown but is likely to have been done to accommodate the longer cars of the 1920s. Probably at the same time, the monopitch roof over garage 4 was replaced by a hipped roof similar to those of the other four garages. The lengthening of garage 2 can be clearly seen from above as the hipped roof stops some way short of the parapet and a flat roof covers the extended portion. Inside, all the original room divisions and partitions exist (Fig. 12), the only alterations being the adaptation in recent years of the southernmost garage 1 to form a fire exit from the private theatre with the insertion of a wall of plastered blockwork dividing the garage down its length. Starting with the basement, the mechanician's dressing room is divided from the rest of the store room by



Figure 15 Signage. © English Heritage NMR DP070054

a partition constructed of corrugated iron on a timber frame (including the door) with a distinctive rounded corner, as shown on the Salomons plan (Figs. 13,14). The doors to the pits are of high quality varnished wood, panelled, each with two small openings to provide ventilation and bear signage of paper labels framed behind glass each stating 'Carriage Pit'. The pits have a substantial timber plate half way down each side which may have supported boards for men working on the cars to stand on although Salomons



Figure 16 Light switch and socket for portable examination lamps. © English Heritage NMR DP070067



Figure 17 Timber electrical conduit, boards formerly carrying hooks for tools and signage. © English Heritage NMR DP070057



Figure 18 Benzine sign.

© English Heritage NMR DP070060



Figure 19 Shelves for spares in garage 2. © English Heritage NMR DP070055

refers to them standing on boards supported by trestles. Notices similar to those on the doors of the pits are to be found in the garages on the inter-connecting doors stating 'Motor Car House' and 'Cycle House' (Fig. 15). The rooms that made up the forge retain their form but not their contents, other than a framed notice 'Small Forge'.

Up the spiral staircase, the three garages fitted with inspection pits retain them and their timber covers. All internal doorways are original while the electrical fittings surviving include the wooden conduit and the porcelain and brass light switches and sockets which were intended for connecting the 'portable electric lamps which are most necessary for making examinations' (Fig. 16). Garage 5 provides access to the stage door of the theatre – this is denoted by the usual framed notice. Garage 2 has the cross timbers in its roof supporting two small H-shaped girders and which carry iron frames with pulley

blocks attached. These were used for lifting a car or major components off the ground and are still present. There is other evidence of the original use of the building: a notice converting gallons to litres (Fig. 17) and one recording quantities of benzene in store hang in garages 2 and 3 (Fig. 18). In addition, some wall-hung shelves with shaped ends (Fig. 19), described by Salomons as 'larger shelves to carry testing apparatus, pumps, a variety of tools, and such spare parts as are not carried on the vehicle, as well as oil, etc' are still there in garages 2 and 3 (the latter with panelled doors forming a cupboard) (Fig. 20), together with wall-mounted boards with hooks for tools. These, like the doors, roofs and other joinery are of high quality (there are shaped mouldings at the junction of wall and boarded roof) and reflect the need to carry large quantities of spares for early motor cars. No trace of the Benzine House could be found.

The garages are currently used by the present occupant of Broomhill, Canterbury Christ Church University, for storage of spare items of furniture. They are listed Grade II as part of the curtilage of the house and theatre.

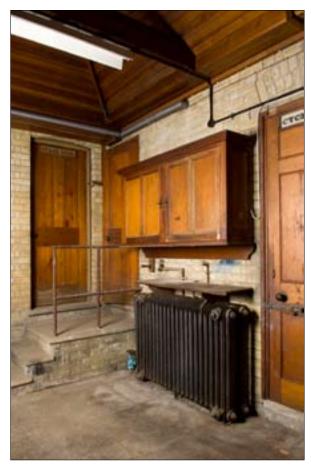


Figure 20 Cupboards for spares and central heating radiators in garage 3. Doorway to cloak cupboard to the right.

© English Heritage NMR DP070069

#### Significance

It has been stated that the Salmons motor stables were the first to be built in England, although no evidence was provided to support this statement.<sup>5</sup> The discovery of dated plans or references in account books would help to establish this claim but none have been found in the archives at David Salomons House. However, the Salomons facilities are among the earliest examples of a new building type, the purpose-built motor house, and internally are in remarkably original condition. Their enlargement too is of significance, reflecting the increasing size of motor cars as they evolved from the horseless carriages of the 1890s to the substantial luxury cars of the 1920s. The philosophy behind their design and construction is well-documented and the fact that they were designed and owned by a man with a good claim to have introduced motoring to Britain, who employed them as an exemplar in his writings, renders them of exceptional architectural and historical interest.

## ENDNOTES

- Piers Brendon, The Motoring Century: the story of the Royal Automobile Club (1997) p. 24-5.
- 2. 'Cars and Country Houses No. CXI Broomhill the Home of Sir David Salomons, Bart.', The Car Illustrated No. 235 21 November 1906.
- 3. Alfred C. Harmsworth ed., Motors and Motor-driving, (London, 1902).
- 4. This description is, and all subsequent quotations, unless separately identified, are taken from D. Salomons, 'The Motor Stable and its management' in Alfred C. Harmsworth (ed.) Motors and Motor-driving, (1902).
- 5. Brendon (1997) p. 24.



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