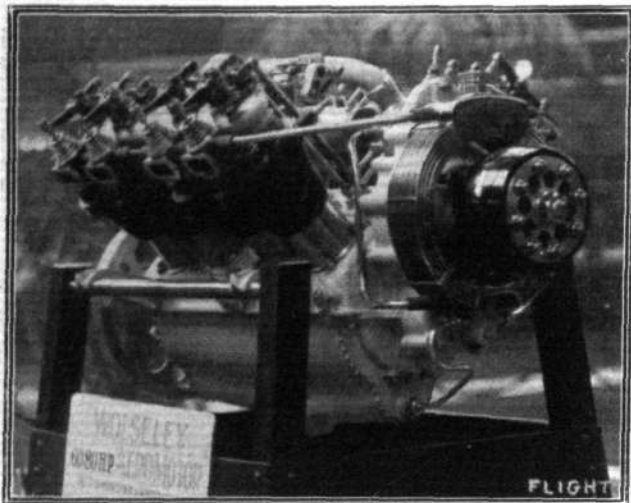


**ENGINES AT OLYMPIA.**



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**The 60-80-h.p. Wolsley motor.**

handle. The other engine, of 60-h.p., is of unconventional design. There are seven cylinders arranged round and parallel to the shaft, and in each cylinder there are two pistons. The explosion takes place between them, and the result—motion is transmitted to the shaft by an arrangement of "wobble" gear. The cylinders are water-cooled, a brass jacket enveloping the whole arrangement, the water being thoroughly circulated by means of a centrifugal pump. As our photo shows, this system makes for a very compact engine.

**Wolsley.**

Of the three engines exhibited by the Wolsley Tool and Motor Car Co., Ltd., of Adderley Park, Birmingham, the new 60-80-h.p. 8-cyl. V-type motor has secured the greatest amount of attention. The cylinder dimensions are the same as in the old 60-h.p. type, 3 $\frac{3}{8}$  bore by 5 $\frac{1}{2}$  stroke, but they are separate and air-cooled. The exhaust valve-boxes are, however, water-cooled, the water being circulated from the tube radiator by a gear pump. Both inlet and exhaust valves are in the cylinder head and work on removable seats. The carburettor, which is mounted in the centre between the cylinders, is pressure-fed, the air pump being driven from the camshaft. Forced lubrication is fitted, the oil being continually circulated by means of

Name.	h.p.	Type.	Cyls.	Bore.	Stroke.	Revs.	Weight	Price.
				mm.	mm.	per min.	lbs.	£
Anzani ...	30	V ...	3	105	120	1,300	121	160
	40-45	Radial ...	6	90	120	1,300	154	240
	50-60	" ...	6	105	120	1,300	200	320
	80	" ...	10	90	130	1,250	238	432
	100-110	" ...	10	105	140	1,200	308	536
Austro-Daimler ...	65	Vertical ...	4	120	140	—	255*	495
	90	" ...	6	120	140	—	360*	625
	120	" ...	6	130	175	—	450*	850
Benz ...	100	" ...	4	130	180	1,250	306	—
Clerget ...	50-60	Rotary ...	7	120	120	1,250	200	—
Gnome ...	50	" ...	7	110	120	1,200	167	—
	100	" ...	14	110	120	1,200	220	—
Green ...	30-35	Vertical ...	4	105	120	—	163	300
	50-60	" ...	4	140	146	—	298	400
	90-100	" ...	6	140	152	—	447	750
Laviator ...	80	V ...	8	100	130	1,200	320	—
	120	" ...	8	114	160	1,200	396	—
	250	Vertical ...	6	180	200	1,050	—	—
Mercedes ...	70	" ...	4	120	140	1,400	308	385
	90	" ...	4	140	150	1,200	400	510
	100	" ...	6	120	140	1,200	444	585
N.A.G. ...	55	" ...	4	118	100	1,600	192	—
	150	" ...	6	135	160	1,250	460	—
Renault ...	40	V ...	8	70	120	—	242	340
	70	" ...	8	96	140	—	397	480
	90-100	" ...	12	96	140	—	639	680
Salmson ...	85	Radial ...	7	120	140	—	—	—
	110	" ...	9	120	140	1,250	—	—
	60	Special ...	7	65	220	900	—	—
Wolsley ...	60	V ...	8	3 $\frac{3}{8}$ ins.	5 $\frac{1}{2}$ ins.	—	—	500
	60-80	" ...	8	3 $\frac{3}{8}$ ins.	5 $\frac{1}{2}$ ins.	—	—	—
	120	" ...	8	5 ins.	7 ins.	—	—	1100

\* Including radiator.

rotary pumps of the tandem type. The other engines on view were both water-cooled. In the 60-h.p. the cylinders are in pairs, with aluminium water-jackets, while in the 120-h.p. engine, which is similar to those supplied to the Italian Government for dirigible work, the cylinders are separate and the water-jackets are of spun aluminium.

**THE KING'S VISIT TO OLYMPIA.**

THE Olympia Aero Show could not have been inaugurated in a more auspicious manner than that its first visitor should be no less a personage than His Majesty King George. His presence there on the opening day tells of the interest he holds for aviation, and by his action he sets his subjects a notable example, although we should have liked it to have gone a step further, by making a formal public opening of the Exhibition. His Majesty went to Olympia to acquaint himself with all the progress that aviation has made, to see for himself the important part that aircraft will play in wars of the future; his subjects should also go to Olympia while there is still time, and there learn the importance of this new science and industry, for it is to be feared that their knowledge of the subject is none too extensive.

And we venture to think that the example has already been well followed, for the attendances at Olympia since the opening day have been very satisfactory.

Among those present in the large hall on Thursday last, the day before the opening of the Exhibition, there were rumours in circulation that gave one to doubt if the King would be able to honour the Exhibition with his presence on the morrow. However, later in the evening came a semi-official report that the King would arrive on the following day at a quarter to three. And punctually to that time did he arrive, driving up to the Hammersmith Road entrance, where he was received by Sir Charles Rose, M.P., chairman of the Royal Aero Club, Mr. Roger Wallace, K.C., its past chairman, Mr. Harold Perrin, its well-known Secretary, and Mr. E. Manville, President of the Society of Motor Manufacturers and Traders. His Majesty was attended by Lord Charles Fitzmaurice, Lord Loch, and Major Clive Wigram. Inside Olympia there were comparatively few people present, for only a privileged few and those whose presence on the various stands was absolutely essential were in the building. In this way, the King was able to make his tour of the exhibits in perfect comfort. His attention was first drawn towards H.M.A.

"Delta," the largest dirigible that the British Government has in its service, which is suspended from the roof of the exhibition. The King mounted the platform from which to view the car, and all its details were pointed out to him by Mr. Mervyn O'Gorman, the Superintendent of the Royal Aircraft Factory. He was shown how the balloon was made to rise and fall without loss of gas or ballast by changing the inclination of the propellers, how it was steered, and how the whole control of the vast machine was operated by the pilot from his comfortable seat in the nose of the body. The only detail that was not explained to him was the wireless telegraphy outfit by which, when the balloon is in flight, communication is kept up with headquarters. This apparatus had been dismantled from the car, for, naturally, it is not in the country's interest to make public such important details. Evidently vastly interested, the King passed on to the stand on which the two magnificent Bristol machines were shown. Here a detailed explanation of the machines was given by Sir George White and Mr. Thurston. Passing then to the stand of the Aircraft Manufacturing Co., he conversed for some time with Mr. Holt Thomas, the managing director of that firm constructing Farman aeroplanes in England. He was apparently much struck with the excellence of the finish of both machines, and had a remark to pass on the wind chart, exhibited on the stand, which recorded the strength of wind that was blowing at the time that Verrier started from Hendon to deliver a Maurice Farman biplane to Farnborough.

Engines next received the King's attention. He specially inspected the Green, the Renault, and the Gnome, and proceeded to the Handley Page stand, where it was explained to him by Mr. Page the system by which his machines are rendered, to a great extent, automatically stable. On the Royal Aero Club stand His Majesty became vastly interested in the neatly constructed models that were there exposed for exhibition. Mr. Harold E. Perrin explained to him their details. He was particularly drawn towards the model hydro-aeroplanes, and expressed a desire that he would