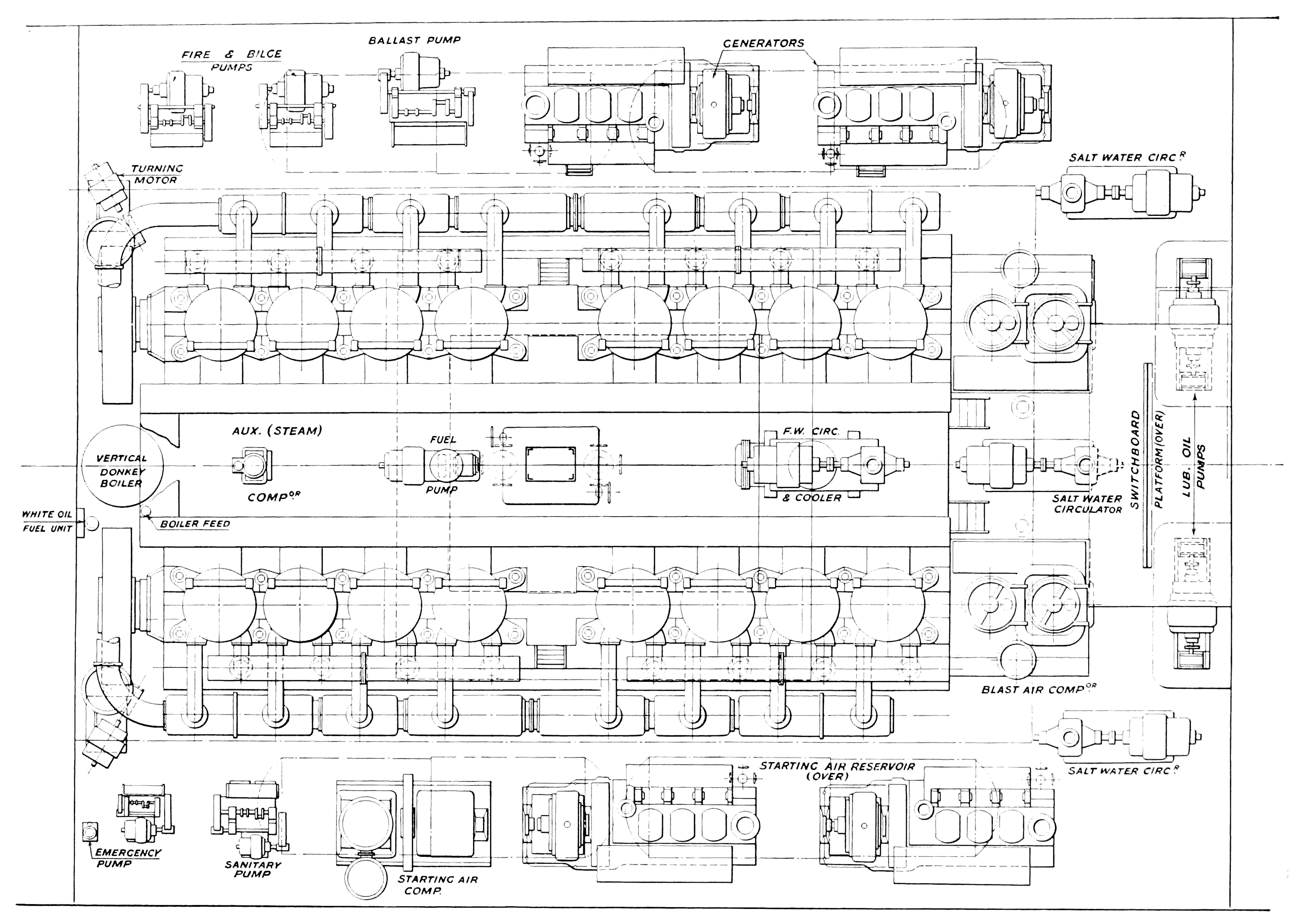
MODERN MACHINERY SPACES-VI.

The Motor Cargo Vessel "Tantalus," Built by the Caledon Shipbuilding & Engineering Co. Ltd., for Alfred Holt & Co. Ltd., Liverpool, and engined with Burmeister & Wain engines, constructed at Copenhagen and installed at Dundee.

We reproduce in this article some of the principal features of the machinery space of the cargo liner *Tantalus*, which was built by the Caledon Shipbuilding & Engineering Co., Dundee, engined by Burmeister & Wain, Ltd., Copenhagen, and completed towards the end of June of this year. She is intended for the Far Eastern service of her owners, and has the following dimensions and characteristics:—

Length overall	e we en ege	9 H 4 H;	>> - u ψ &	. · u _r	· or w	477 ft.
b.p.	i in in	√s u o ≯r	u :	9 b c · ·b	w o o k	452 ft.
Beam	>> -> to the	ئ ب د	שיי ביי	7 ν - 246	* .	58 ft.
Depth	ф . «. и ц	:· \$	%	· · · · · · · · · · · · · · · · · · ·	يو د د د	35 ft. 3 in.
Draught (load)	2 4 · · ·	4 , v p	> , b	w b x x	ν ψ ν 4	28 ft.
Deadweight capacity (fuel excluded)					# 4 1 24	10,000 tons
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about 3,000 I.H.P.; the cylinder diameter is 740 mm., and the stroke of 1,150 mm.; the engines run normally at 115 r.p.m.; and the ship has a service speed of about $13\frac{1}{2}$ knots. A general outlay of the machinery space will be found below, and from this it will be seen that there are two blast air compressers arranged at the forward end of each engine. These are driven off an extension to the crankshaft, and we illustrate the tops of the port pair on page 326. The control gear and manœuvring position is illustrated on page 328; the setting of the valve gear for ahead or astern running of the engines is carried out by means of a single lever. It will also be observed that there are two other levers shown in the photograph; each



The Machinery Space Outlay of the Motor Ship "Tantalus."

All necessary arrangements have been made in the vessel with a view to her carrying pilgrims, and she carries a Board of Trade passenger certificate.

Main Propelling Machinery.

The main propelling machinery consists of two sets of Burmeister and Wain eight-cylinder engines, each developing

of these controls one set of four cylinders and regulates the supply of starting air or fuel. Thus, in starting, the levers can be placed in such a position as to admit air only to the cylinders, and then, when they are pushed quite over, all cylinders are put on fuel, but usually the sets of four cylinders are not controlled separately, both levers being moved at the same time. Another interesting feature which will be noticed in