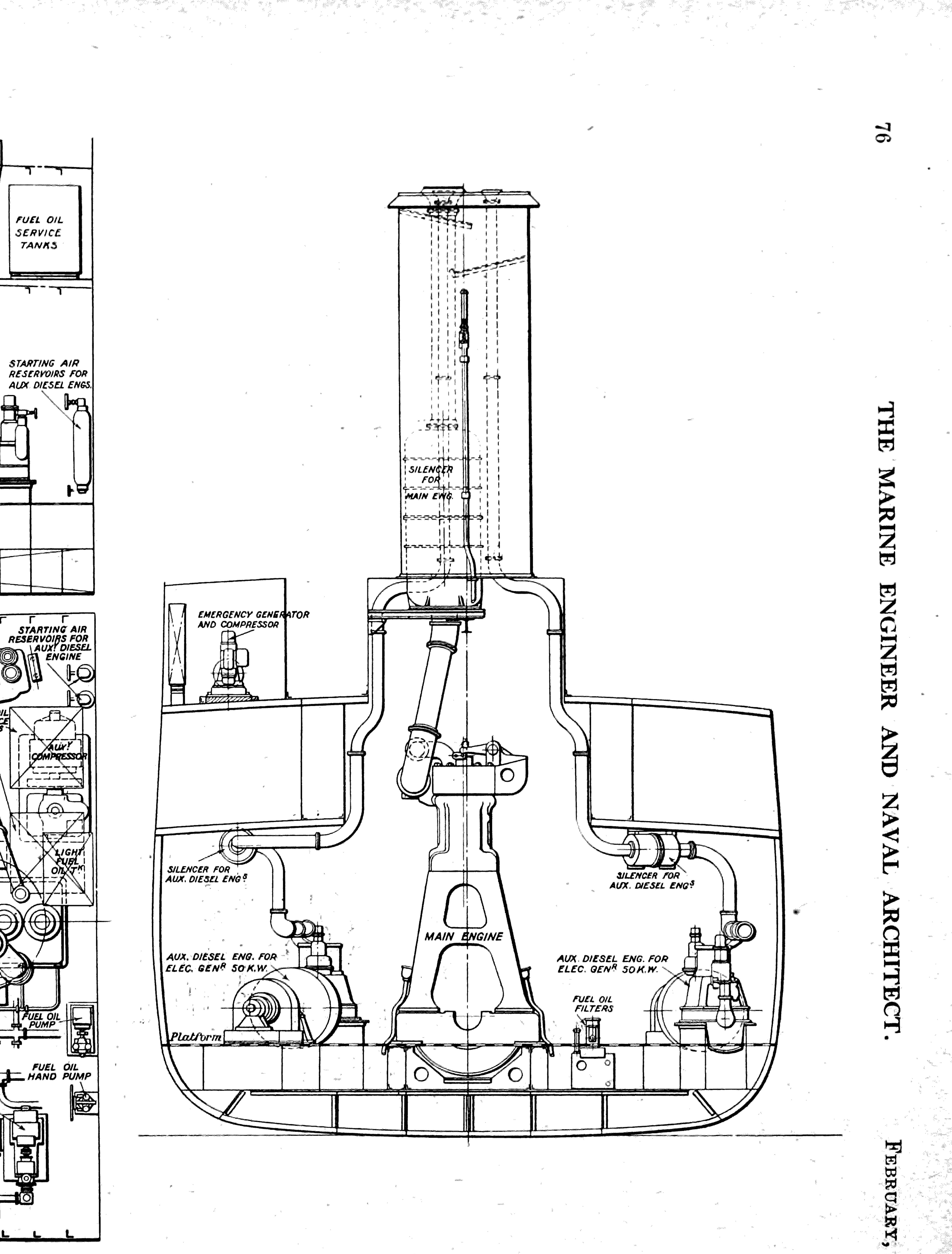


AUX DIESEL ENG. FOR ELEC. GENR 50 K.W. SWITCHBOARD <u>1010</u> Tank Top BALLAST JATER AUX! DIESEL ENGINE FOR ELECTRIC GENERATOR 50K.W. RESER SILENCER FOR AUX! SWITCH BOARD LUB OIL COOLER FUEL OIL FILTERS MAIN ENGINE 1,250 B.H.P. BALLAST PUMP -SILENCER FOR AUTO AIR EXHAUSTING PUMP

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General Arrangement of Machinery Space, M.S. "Pinzon," fitted with Beardmore-Tosi Marine Oil Engine, 1,250 b.h.p.

NO

FEBRUARY, 1922.

THE MARINE ENGINEER AND NAVAL ARCHITECT.

THE NEW MOTOR SHIP "PINZON."

First Vessel Fitted with Beardmore-Tosi Engines.

The m.s. Pinzon, which is the first vessel to be fitted with the Beardmore-Tosi type of marine Diesel engine, recently underwent a series of successful trials on the Clyde. In our January number a general description of this engine was given together with particulars of the test-bed trials. The engine is of the four-stroke cycle, single-acting, marine crosshead type having six cylinders of 720 mm. ($24\frac{7}{16}$ in.) with a stroke of 975 mm. (383), and at 120 r.p.m. develops 1,250 b.h.p., 1,620 Diesel i.h.p. equivalent to 1,500 steam engine i.h.p., and gave the vessel a speed of over 12 knots on trial.

The Pinzon, built by William Beardmore & Co., Dalmuir, has the following dimensions: 240 ft. length, 38 ft. beam, 18 ft. depth, 2,050 tons deadweight. The installation does

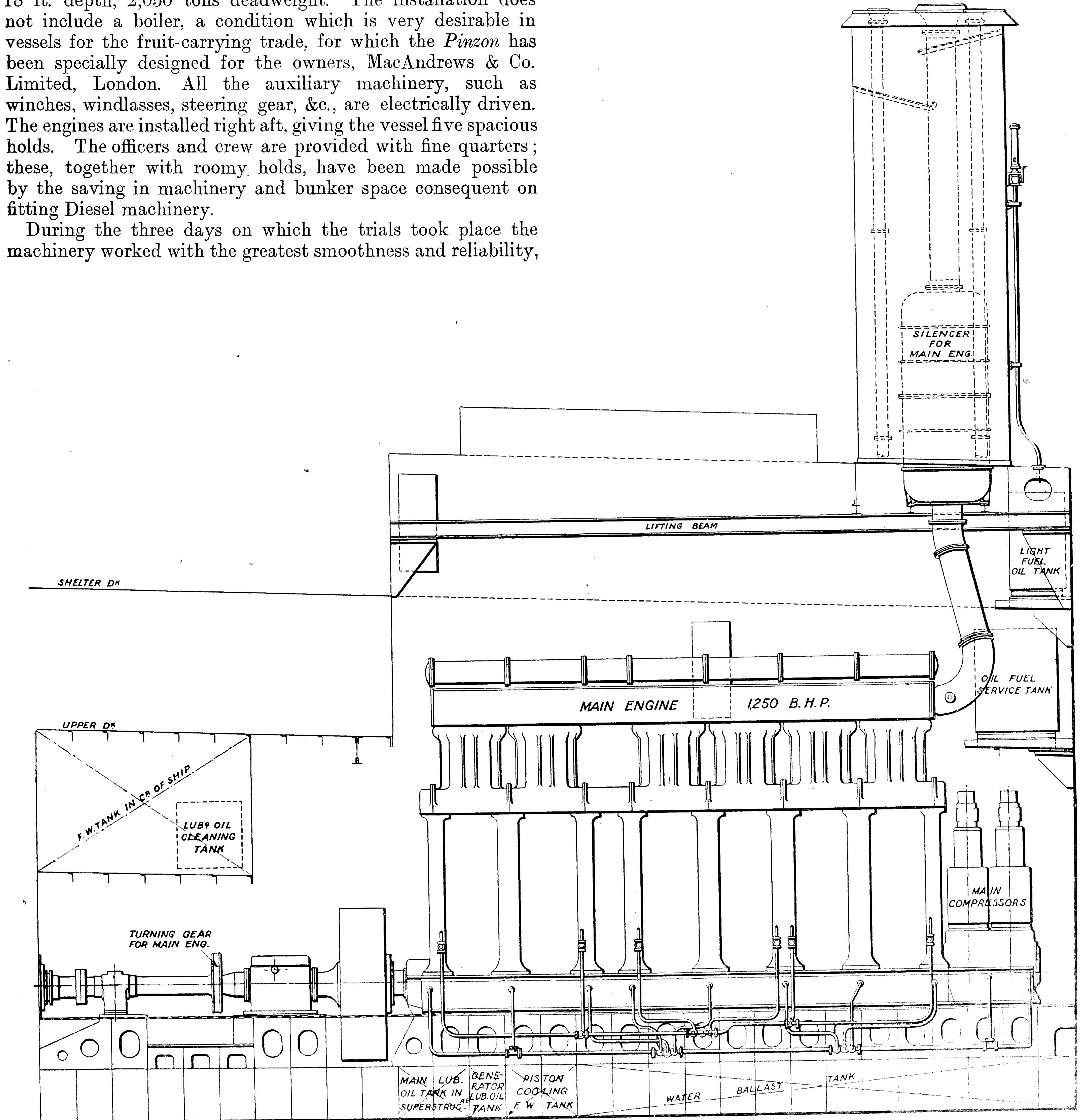
the owners and builders being highly satisfied with the results. With the vessel fully laden, the revolutions per minute of the engines for 9, 10 and 11 knots were 95, 105 and 115 respectively. Particulars of the fuel consumption form very interesting reading and are given below :---

DATA OF FUEL CONSUMPTION.

All purposes :---

(a)	Tons per day	3	4	$5 \cdot 2$
<i>(b)</i>	Cost of fuel per hour (at £4 per ton)	10/-	13/4	17/4
(c)	Cost of fuel per day (24 hours)	£12	£16	$\pounds 20 \cdot 8$
(d)	Cost of fuel per 1,000 ton miles	$6\frac{1}{2}$ d.	$7\frac{3}{4}$ d.	94d.

NOTE.—The cost of lubricating oil for all purposes averages one-sixteenth of the fuel cost.



Side Elevation of Machinery Space, M.S. "Pinzon," showing Profile of Main Engine.

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