public bodies, and the cases in which no inspection had been made by any competent person for several years before the explosion.

A report by the Board's Solicitor on the formal investigations is given in Appendix C. In three out of the four cases in which these investigations were held, the Courts found that persons who had been connected with the boilers were to blame for the explosions, and they made orders for the payment of costs in all of these cases, the total sum ordered to be paid amounting to £780.

Statistics of the explosions which have occurred each year since 1882 are shown in Appendix D.

ERNEST G. MOGGRIDGE,
Assistant Secretary.

BOARD OF TRADE,
MARINE DEPARTMENT.

No. of Report.	General description and age of boiler or vessel which exploded.	Part of the boiler which gave way.	Purpose for which boiler was used.
2259	Single-ended marine type. 16 years.	The joint of a manhole door was blown out.	Propelling the vessel.
2260	Locomotive type. Age of boiler 27 years. Age of tube 5 years.	One of the tubes.	Shunting purposes.
2261	Cast-iron blow-down pipe. 4 years.	Pipe fractured.	Blowing down the boilers.
2262	Cast-iron oil purifier. 1 month.	Whole apparatus wrecked.	Vaporising benzene from a mixture of oil and benzene.
2263	Vertical type. 8 years.	Bottom of cross tube fractured.	Supplying steam to capstan used for hauling in the fishing nets.
2264	Cast-iron steam-heated hose press 6 years.	Both the hollow steam heated blocks forming the press were shattered.	Finishing hosiery goods.

Whether inspected or insured by any Company or Association, &c.	Cause of Explosion.
Inspected by Surveyors to Lloyd's Register and insured by various Companies.	The upright of the manhole door was a bad fit in the hole.
Ocean Accident and Guarantee Corporation, Limited.	Wasting of the tube internally by corrosion and erosion.
Not inspected or insured by any Company or Association.	The pipe was so reduced in thickness by internal and slight external corrosion that it failed to withstand the pressure generated.
Not inspected or insured by any Company or Association.	Overpressure, due to the safety valve being set fast on its seat.
Not inspected; insured by The North British Fishing Boat Insurance Company, Ltd.	Corrosion on the water side.
Not inspected by any Company or Association.	The block which burst was unable to withstand the ordinary working pressure owing to the development of flaws in the material.

No. of Report.	General description and age of boiler or vessel which exploded.	Part of the boiler which gave way.	Purpose for which boiler was used.
2265	Single-ended marine type. About 8½ years.	A fracture developed in the front end plate immediately above the port furnace.	Propelling the vessel.
2266	Cast-iron steam trap. 8 years.	Trap completely broken up.	In connection with an iron-machine.
2267	Single-ended marine type. 6 years.	The crown of the port combustion chamber collapsed.	Propelling the vessel.
2268	Two tubes in a baker's oven. 3 years.	Tubes burst.	Heating the oven.
2269	Portable locomotive type. 37 years.	One of the smoke tubes.	Driving a mortar mill.
2270	Cast-iron steam-jacketed pan. Age not ascertained, but probably over 20 years.	Outer pan fractured.	Melting pitch.

Whether inspected or insured by any Company or Association, &c.	Cause of Explosion.
Inspected by Surveyors to Lloyd's Register, and insured with Lloyd's Underwriters.	Fatigue of the metal owing to expansion and contraction stresses.
Not inspected or insured by any Company or Association.	Overpressure.
Inspected by Surveyors to Lloyd's Register and insured by Lloyd's Underwriters.	Overheating of the plate through shortness of water owing to neglect of attendant to test the water gauge properly.
Not inspected or insured by any Company or Association.	The tubes failed under severe working conditions caused by a greater length of the tubes being exposed to the fire than was originally intended.
Vulcan Boiler and General Insurance Company, Ltd.	Wasting of the tube by corrosion and erosion.
Not inspected or insured by any Company or Association.	The reducing valve was inoperative, so the pan was subjected to a pressure greater than it was able to withstand.

2271	Hot-closet, with steam chambers at the top and bottom. 3½ years.	The upper steam chamber exploded.	Keeping food hot.
2272	Steam-jacketed pan. Age not ascertained, but over 10 years.	The brazed seam securing the flanges of the inner and outer pans gave way for a distance of 3 ft. round the circumference.	Boiling meat and rendering lard.
2273	Blow-off valve. 2 years.	The blow-off pipe fractured at the neck of the flange.	Blowing down the boiler.
2274	Single-ended marine type. 5 years.	A salt chamber in the starboard combustion chamber exploded.	Propelling the vessel.
2275	Cast-iron stop-valve chest. Age not ascertained, but over 19 years.	Chest fractured.	Controlling supply of steam to haulage engine.
2276	Heating apparatus Age not ascertained.	The outlet circulating pipe was forced from its socket.	Heating the building.

Do	Overpressure, due to the reducing valves being inoperative and the outlet pipe being blocked.
Do.	Overpressure, due to reducing valve being inoperative.
The Vulcan Boiler and General Insurance Company, Limited.	Excessive stresses owing to the blow-off pipe being inadequately supported.
Inspected by Surveyors to Lloyd's Register. Insured by The West of England Steamship Owners' Protection and Indemnity Association and various Marine Insurance Companies.	The salt chamber was formed through leakage round stays in the back plate of the combustion chamber.
Not inspected or insured by any Company or Association.	Water-hammer action.
Do.	Ineffectual method of attaching the outlet pipe to the boiler.

No. of Report.	General description and age of boiler or vessel which exploded.	Part of the boiler which gave way.	Purpose for which boiler was used.	Whether inspected or insured by any Company or Association, &c.	Cause of Explosion.
2277	Vertical marine type. About 2½ years.	The packing in the stuffing box of the inspection door was destroyed and steam and water escaped.	Propelling the vessel.	North of Scotland Mutual Insurance and Indemnity Association.	Overheating of packing through shortness of water in the boiler.
2278	Single-ended marine type. 12½ years.	Two rivets in the back end circumferential seam of the shell were forced out.	Propelling the vessel.	United Scottish Herring Drifter Insurance Company, Limited.	The heads of the rivets were so wasted by corrosion that the rivets failed to withstand the boiler pressure.
2279	Single-ended marine type. 17 years.	A nut on one of the stays split open and was forced over the thread; the plate then bulged outwards	Propelling the vessel.	Mutual Steamship Insurance Company.	Overheating of the nut and plate due to a deposit of scale.
2280	Cast-iron blow-off pipe. Age not ascertained.	Pipe was fractured close to a flange.	Blowing down the boiler.	Not inspected or insured by any Company or Association.	Expansion and contraction stresses owing to the uneven thickness of the pipe and length of the range.
2281	Lancashire type. 31 years.	A patch on the bottom of the boiler fractured.	Supplying steam to pumping and winding machinery.	Do.	External corrosion.

2282	Heating boiler. 4 years.	Boiler completely ruptured.	Supplying hot water for various purposes in the hotel.
2283	Cast-iron stop-valve chest. 12½ years.	Chest factured circumferentially just below the top flange and at the bottom of the body.	Controlling supply of steam to engines.
2284	Drying cylinder. 18 years.	Cylinder ruptured through the longitudinal seam and circumferentially at each end.	Drying cloth in process of manufacture.
2285	Cast-iron steam pipe. 28 years.	Pipe fractured close to a flange; the engine stop-valve chest also fractured.	Conducting steam to engine.
2286	Starboard main steam pipe Age of part which failed, about 2 months.	The pipe fractured circumferentially close to the flange bolted to the boiler stop-valve.	Conducting steam to engine.
2287	Copper main steam pipe. 16 months.	Pipe fractured circumferentially close to a flange.	Conducting steam to engine.

Do.	Overpressure, due to the inlet pipe being blocked by scale, and a tap on the outlet pipe being of insufficient area to allow the steam generated to escape freely.
Do.	Deterioration of the material due to superheated steam.
Not inspected or insured by any Company or Association.	Overpressure, the outlet being blocked by ice.
Do.	The pipe failed under ordinary working conditions owing to fatigue of the metal due to expansion stresses set up in the pipe range.
Inspected by Surveyors to Lloyd's Register and insured by Lloyd's Underwriters and other insurance companies.	Failure of the pipe to withstand stresses caused by vibration of the engines and expansion due to heat.
Inspected by Surveyors to The British Corporation for Survey and Registry of Shipping, and insured with Lloyd's Underwriters and other insurance companies.	Vibratory stresses acting on material rendered brittle by overheating in the course of brazing on the flange.

No. of Report.	General description and age of boiler or vessel which exploded.	Part of the boiler which gave way.	Purpose for which boiler was used.	Whether inspected or insured by any Company or Association, &c.	Cause of Explosion.
2288	Vertical type. 8½ years.	The vertical seam and the seam of the crown plate of the firebox failed and the plate collapsed.	Driving machinery.	Not inspected or insured by any Company or Association.	Defective welding of the seams.
2289	Cast-iron steam pipe. About 7 years.	Pipe fractured longitudinally.	Conducting steam to air compressor engine.	Do.	Water-hammer.
2290	Revolving rag boiler. 9 years.	The cover of the right hand filling aperture became detached from the boiler.	Boiling rags and other material in the process of paper making.	The Gresham Fire and Accident Insurance Society, Limited.	One of the half-rings to which half the securing bolts were attached slipped over the edge of the flange of the cover.
2291	Copper steam-jacketed pan. 10 years.	The bottom was forced up and ruptured.	Boiling confectionery.	Not inspected or insured by any Company or Association.	Grooving of the copper plate by a rail which accidently got into the pan and was carried round by the stirrers.
2292	Vertical type. Age not ascertained.	The blow-down cock connection to the boiler-shell failed and and the cock was blown off.	Supplying steam for hauling and pumping purposes.	The British Engine, Boiler, and Electrical Insurance Company, Limited.	The iron nipple on which the blow-down cock was fixed perished where it was screwed into the brass cock.
2293	Portable locomotive type. 5 years.	One of the screwed gun-metal cleaning hole plugs in the front tube plate was blown out.	Road haulage.	National Boiler and General Insurance Company, Limited.	The thread on the plug and the thread in the hole were so worn that they were unable to withstand the working pressure.

2294	Tube in steam oven. 2 years.	Tube burst violently.	Heating the oven.	Not inspected or insured by any Company or Association.	Overpressure, due to overheating.
2295	Cornish type. 32 years.	Furnace tube completely collapsed.	Supply steam to blast engines, &c.	The Vulcan Boiler and General Insurance Company, Limited.	The furnace tube was worn out and unable to withstand the working pressure.
2296	Beesley boiler. 22 years.	The first ring of the centre flue collapsed for the full length of the ring and fractured circumferentially.	Supplying steam for works purposes.	Scottish Boiler Insurance and Engine Inspection Company, Limited.	The centre flue tube was worn out.
2297	Main steam pipe. 10 years.	Pipe blew out of flange at joint.	Distributing steam to machinery used in manufacture of armour plating.	Not inspected or insured by any Company or Association.	Attrition caused by rocking motion in vertical pipe.
2298	Vertical. 36 years.	The side plating of the firebox upturned in several directions.	Generating steam for the engine of a pile-driver.	Do.	Overpressure, due to overloading of safety valve.
2299	Locomotive type (ploughing engine). 37 years.	Boiler shell plating fractured in several directions.	Generating steam for engine.	Not inspected or insured at time of explosion by any Company or Association.	Plating was defective.
2300	Cast-iron steam isolating valve chest. 8 months.	Part of the side and cover were blown out and the chest fractured in other places.	Controlling supply of steam to cargo pumps.	Inspected by Surveyors to Lloyd's Register and insured by Lloyd's Underwriters.	Water-hammer.

No. of Report.	General description and age of boiler or vessel which exploded.	Part of the boiler which gave way.	Purpose for which boiler was used.
2301	Tube in baker's oven. 3 years.	Tube failed for over half its length through the weld and the solid metal opposite.	Heating the oven.
2302	Two tubes in a baker's oven. Age of tubes not ascertained.	Tubes burst	Heating the oven.
2303	Cylindrical return tube type. 14 years.	Two small holes developed in one of the plain tubes close to the back tube plate.	Propelling the vessel.
2304	Single-ended marine type. 16 years.	Front end plates of the boilers fractured circumferentially where flanged to take the wing furnaces.	Propelling the vessel.
2305	Cast-iron hot-plate. Age not ascertained.	The vertical sides of the hot-plate fractured circumferentially.	Heating and drying sawdust.

Whether inspected or insured by any Company or Association, &c.	Cause of Explosion.
Not inspected or insured by any Company or Association.	Defective weld.
Do.	Overpressure, caused by overheating.
The United Kingdom Steam Tug and Trawler Insurance and Indemnity Association.	The tube was so reduced in thickness by pitting that it was unable to withstand the working pressure of the boiler.
Inspected by Surveyors to Lloyd's Register and insured by Lloyd's Underwriters	Plates were weakened by expansion and contraction stresses, and failed under ordinary working conditions.
Not inspected or insured by any Company or Association.	Undue working pressure.

2306	Cast-iron feed delivery pipe. New.	A piece of the pipe was blown out.	Conducting feed water from economiser to boilers.	Do.	Defective casting.
2307	Single-ended marine type. 3 years.	Furnaces collapsed.	Propelling the vessel.	The United Scottish Herring Drifter Insurance Company, Limited.	Overheating, due to shortness of water.
2308	Steam-pipe joint. Age of pipe, 1 year. Age of joint, 6 days.	A portion of the asbestos ring forming the jointing material was forced from between the flanges.	Conveying steam to pumps.	Not inspected or insured by any Company or Association.	Uneven compression of jointing ring.
2309	Vertical type. Age not ascertained.	Firebox collapsed and ruptured.	Heating food for pigs.	Do.	The firebox was worn out.
2310	Two tubes in a steam oven. 8 years.	Tubes burst.	Baking pastries.	Inspected by an engineer-inspector to the United Legal Indemnity Insurance Society. Not insured by any Company or Association.	Failure of the tubes to withstand the pressure generated within them under severe working conditions. The tubes had also been reduced in thickness by wastage.
2311	Range of steam-pipes. 6 years.	One of the pipes failed at the longitudinal seam.	Connecting a set of water-tube boilers to a pair of Lancashire boilers.	Not inspected or insured by any Company or Association.	Water-hammer action.
2312	Single-ended marine type. 16 years.	Upper part of the starboard combustion chamber back plate collapsed.	Propelling the vessel.	Grimsby Steam Fishing Vessels' Mutual Insurance and Protecting Company, Ltd. Also inspected by Surveyors to Lloyd's Register.	Overheating of the upper part of the combustion chamber owing to shortness of water.

No. of Report.	General description and age of boiler or vessel which exploded.	Part of the boiler which gave way.	Purpose for which boiler was used.
2313	Revolving rag boiler. Age not ascertained, but over 25 years.	The middle strake of plate in the cylindrical shell fractured circumferentially through the seams at the rivet holes.	Boiling rags and paper.
2314	Cast-iron blow-down valve chest. 1 year.	Chest fractured close to one flange.	Blowing down the boiler.
2315	Drying cylinder. 1 month.	One of the longitudinal seams ripped open the full length of cylinder.	Drying rubberized cloth.
2316	Drying cylinder. 14 years.	The inlet end of the cylinder was partially forced out.	Drying cotton yarn.
2317	L.P. receiver of a Corliss engine. 18 years.	The top flat wall of the receiver was blown out and broke in pieces.	Driving machinery in mill.

Whether inspected or insured by any Company or Association, &c.	Cause of Explosion.
Not inspected or insured by any Company or Association.	Overpressure, due to the safety valve being blocked by rags.
Valve chest externally examined by an Inspector to the Ocean Accident and Guarantee Corporation, Limited, who insured the boiler but not the valve chest.	Expansion stresses caused a flaw to develop until the chest failed as stated.
Not inspected or insured by any Company or Association.	Overpressure, due to the obstruction of the outlet from the cylinder and to a leaky reducing valve.
Do.	The circumferential seam at the inlet end of the cylinder was defective.
British Engine, Boiler and Electrical Insurance Company, Limited.	Overpressure, due to the high-pressure piston leaking and the relief valve being overloaded.

2318	Single-ended marine type. 21 years.	A small hole developed in the bottom of the shell plate.	Propelling the vessel.	Not inspected or insured by any Company or Association since 1905.	Local external and internal corrosion.
2319	Water-tube type. 9 years.	One of the tubes.	Supplying steam to electric plant.	Vulcan Boiler and General Insurance Company, Ltd.	External corrosion.
2320	Cast-iron feed water pipe. 21 years.	Pipe fractured circumferentially at root of flange.	Supplying feed water to boilers	Inspected in 1907 by Manchester Steam Users' Association. Not insured.	Fatigue of metal, due to vibration set up by working of feed pumps.
2321	Single-ended marine type. 20 years.	Crown plate of combustion chamber collapsed.	Propelling the vessel.	Lincolnshire Steam Trawlers' Mutual Insurance and Protecting Company, Limited.	Overheating, due to shortness of water.
2322	Vertical. Age uncertain.	The lower ring of the firebox plating ruptured circumferentially.	Driving a beam pump.	The Law Accident Insurance Society, Limited.	Weakness of furnace plate, arising from latent defects.
2323	Cast-iron evaporator. 3 years.	The shell, heating coil and pipe connections were fractured.	Distilling fresh feed water for boilers.	Insured by Lloyd's Underwriters and various Companies.	Overpressure.
2324	Babcock & Wilcox marine water-tube type. 3 years.	Tube ruptnred longitudinally.	Propelling the vessel.	Inspected by Surveyors to the Board of Trade. Insured by Lloyd's Underwriters.	Overheating, due to greasy deposit in tube.
2325	Cast-iron evaporator. 14 years.	Lower part of evaporator shattered.	Distilling fresh feed water for boilers.	Inspected by Surveyors to British Corporation. Insured by various Underwriters.	Corrosion.
2326	Single-ended marine type. 12 years.	The crown plate of the combustion chamber collapsed.	Generating steam for propelling machinery.	The Total Loss Mutual Steamship Insurance Company.	Overheating, due to shortness of water.

CLASSIFICATION OF CAUSES OF EXPLOSIONS AND TYPES OF BOILERS WHICH EXPLODED, 1913-1914.

Causes of Explosion.	No. of Cases.
Deterioration or corrosion.—Nos. 2,260, 2,261, 2,263, 2,265, 2,269, 2,278, 2,279, 2,281, 2,283, 2,292. 2,293, 2,297, 2,299, 2,303, 2,304, 2,309, 2,318, 2,319, 2,320, 2,325	20
Defective design or undue working pressure.—Nos. 2,262, 2,264, 2,266, 2,268, 2,270, 2.271, 2,672, 2,282, 2,285, 2,295, 2,296, 2,302, 2,305, 2,310, 2,313, 2,315, 2,317, 2,323, 2,326	19
Water-hammer action.—Nos. 2,275, 2,289, 2,300, 2,311	4
Defective workmanship, material, or construction.—Nos. 2,259, 2,276, 2,280, 2,286, 2,287, 2,288, 2,290, 2,301, 2,306, 2,308, 2,316, 2,322	12
Ignorance or neglect of attendants.—Nos. 2,267, 2,273, 2,277, 2,284, 2,294, 2,298, 2,312, 2,314, 2,321	9
Miscellaneous.—No. 2,274, 2,291, 2,307, 2,324	4
Total	68

Types of Boilers.	No. of Cases.
Horizontal multitubular.—Nos. 2,259, 2,265, 2,267, 2,274, 2,278, 2,279, 2,303, 2,304, 2,307, 2,312, 2,318, 2.321. 2,326	13
Vertical.—Nos. 2,263, 2,277, 2,288, 2,292, 2,298, 2,309, 2,322	7
Lancashire, Cornish and other flue boilers.—Nos. 2,281, 2,295, 2,296.	3
Locomotive.—Nos. 2,260, 2,269, 2,293, 2,299	4
Water-tube.—Nos. 2.319, 2,324	2
Tubes in steam ovens.—Nos. 2,268, 2.294, 2,301, 2,302, 2,310	5
Heating apparatus.—Nos. 2,276, 2,282	2
Steam pipes, stop-valve chests, &c.—Nos. 2,215, 2,283, 2,285, 2,286, 2,287, 2,289, 2,297, 2,300, 2,308, 2,311, 2,320	11
Hot-plates, &c.—Nos. 2,264, 2,271, 2,305	3
Calenders, drying cylinders, &c.—Nos. 2,284, 2,315, 2,316	3
Economisers.—	—
Steam-jacketed pans.—Nos. 2,270, 2,272, 2,291..	3
Rag boilers, kiers, stills, &c.—Nos. 2,262, 2,290, 2,313..	3
Miscellaneous.—Nos. 2,261, 2,266, 2,273, 2,280, 2,306, 2,314, 2,317, 2,323, 3,325	9
Total	68

INSPECTION OF BOILERS WHICH FAILED.

	No. of Cases.
1. Cases in which the boilers were under the inspection of public bodies, Nos. 2,259*, 2,260, 2,265. 2,267*, 2,269, 2,273* 2.274, 2,277*, 2,278, 2,279*, 2,286*, 2,287, 2,290*, 2,292, 2,293*, 2,295, 2,296, 2,300* 2,303, 2,304, 2,307*, 2,310*, 2,312*, 2,317*, 2,319, 2,322, 2,324, 2,325, 2,326*	29
2. Cases in which no inspection had been made by a competent person for several years before the explosion, Nos. 2,261, 2,263, 2,264, 2,266, 2,268, 2,270, 2,271, 2,281, 2,291, 2,294, 2,299, 2,305, 2,309	13

* In these 14 cases the explosions were not due to defects in the material of the boilers.

STATISTICS.

TOTAL NUMBER OF EXPLOSIONS dealt with since the passing of the Acts, NUMBER OF LIVES LOST, and NUMBER OF PERSONS INJURED.

Year.	No. of Explosions.	Personal Injuries.		
		No. of lives lost.	No. of persons injured.	Total.
1882-83	45	35	33	68
1883-84	41	18	62	80
1884-85	43	40	62	102
1885-86	57	33	79	112
1886-87	37	24	44	68
1887-88	61	31	52	83
1888-89	67	33	79	112
1889-90	77	21	76	97
1890-91	72	32	61	93
1891-92	88	23	82	105
1892-93	72	20	37	57
1893-94	104	24	54	78
1894-95	114	43	85	128
1895-96	79	25	48	73
1896-97	80	27	75	102
1897-98	84	37	46	83
1898-99	68	36	67	103
1899-1900	59	24	65	89
1900-1	72	33	60	93
1901-2	68	30	55	85
1902-3	69	22	67	89
1903-4	60	19	45	64
1904-5	57	14	40	54
1905-6	54	25	21	46
1906-7	77	28	65	93
1907-8	73	23	50	73
1908-9	93	12	53	65
1909-10	103	14	62	76
1910-11	100	13	61	74
1911-12	106	30	75	105
1912-13	80	31	42	73
1913-14	68	22	74	96
Totals ..	2,328	842	1,877	2,719
Average of 32 years ..	72·8	26·3	58·7	85·0

NOTE.—The apparent discrepancy between the total number of reports published up to the end of the year (2,328) and the consecutive identification number (2,326) borne by the latest report included in this year's statement is due to the reports which followed No. 283 and No. 1,888 having been numbered 283A and 1,888A, instead of 284 and 1,889 respectively.

ELECTION OF MEMBERS.

List of Members elected at the meeting of Council held on the 18th May, 1915:—

As Members.

John Allan, 51, Cranford Road, Aberdeen.

Duncan Murray, Marine Engineers' Institute, Shanghai.

John McRae Knight, "Craiglyn," Milford Haven.

John Leslie Rutherford, 55, Warren Road, Leyton, N.E.

John Roxburgh, *c/o* Messrs. Butterfield & Swire, Shanghai, China.

As Associate Member.

John Alex. Chas. Frogley, 80, Gough Street, Poplar, E.

Transferred from Associate to Associate Member.

W. Jas. Holmes, 50, Hartington Street, Barrow-in-Furness.

Transferred from Associate Member to Member.

Maurice Norman Wyse, The North-Western Hotel, Karachi, India.

Notes.

LLOYD'S SCHOLARSHIP, 1915-16:—In view of present circumstances, and in accordance with a desire expressed by the Committee of Lloyd's Register, it has been decided to postpone the examination for the Lloyd's Scholarship this year. Those candidates who proposed entering now, will have their names retained for next examination, and the scholarship will simply be held over, so that there will be two scholarships vacant next year.

The Council of Armstrong College passed a resolution to the effect that in the case of students in their final year, who have passed their first and second examinations, an application may

be made to the Senate, so that if the professors and teachers concerned make special recommendation to this effect, they can be allowed to proceed to their degree without further examination.

This concession has been made to meet present circumstances. Many students, who have passed as "excellent" in their first and second examination, have been debarred from continuing their regular course on account of war service, and such cases will be carefully considered by the staff and recommendations made to the Senate in each case. One such case is that of Mr. Arch. Allan, who won the Lloyd's Scholarship in 1912 and attended the College for two sessions; he intended to take another session on his own account with a view to the B.Sc. degree, but laid his intention aside on patriotic grounds that he might serve against the enemy.

J. A.