



REPORT

BY THE FIREMASTER

ON THE WORK OF THE

City of Dundee Fire Brigade

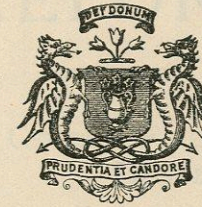
FOR THE

Year ending 31st December, 1915.

FEBRUARY 1916.

DUNDEE :
PRINTED BY HARLEY & COX, NETHERGATE.
1916.

F/D/1/12



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Members of Police and Lighting Committee, 1915-16.

Lord Provost DON.	Messrs GEORGE ROBERTSON
Bailie BUIST.	„ A. M. STRACHAN.
„ NICOLL.	„ G. A. JOHNSTON.
Hospital-Master MECHAN.	„ A. B. CRICHTON.
Messrs ROBERT ALLAN.	„ J. G. KINMOND.
„ DAVID NEAVE.	„ F. L. M'GRADY.

Mr ROBERT ALLAN, Convener.

REPORT.

CENTRAL FIRE STATION,
DUNDEE, February, 1916.

To the Honourable
THE POLICE AND LIGHTING COMMITTEE
OF THE TOWN COUNCIL.

GENTLEMEN,

I have the honour to present my twelfth Annual Report on the work of the City Fire Brigade for the year ending 31st December, 1915.

The Fire Brigade received 219 calls to fires, or supposed fires. Of this number—

- 167 were to fires in the City.
- 5 were to fires beyond the City boundaries.
- 24 were to chimney fires.
- 19 were to false alarms of fire.
- 4 were to pumping-out jobs.

102 calls were received between 6 p.m. and 6 a.m.
117 calls were received between 6 a.m. and 6 p.m.

Compared with the preceding year, this number shows a decrease of 32 calls.

- 134 calls were received by Exchange Telephone.
- 56 calls were received by Police Telephone.
- 3 calls were received by Harbour Telephone.
- 3 calls were received by Street and Private Fire alarms.
- 22 calls were received by Police or Strangers.
- 1 call was received by Telephone from Broughty Ferry Fire Station.

On 204 days there were no calls.

On 114 days there was one call.

On 38 days there were two calls.

On 7 days there were three calls.

On 2 days there were four calls.

The supposed causes of Fires may be summarised as follows:—

Lights carelessly thrown down	45
Defective Flues and Fireplaces	30
Sparks from Fires, Chimneys, and Engines ...	20
Naked Lights, Gas Escapes, Electric Lights, and Paraffin Oil Lamps	20
Children playing with Matches and Lighted Paper	11
Hot Ashes	6
Friction of Machinery	5
Overheating of Stoves, Furnaces and Flues ...	5
Spontaneous Combustion	4
Smoking in Bed	2
Fat, Tar, and Oil Boiling Over	3
Back-Fire in Carburetter	2
Lightning	1
Cleaning Stove with Naphtha	1
Goods coming in contact with open fire ...	1
Not ascertained	16

Description of Property in which Fires occurred:—

Boot and Shoe Warehouses 2, Bakers and Confectioners 6, Brokers' Shops 2, Brewery 1, Cellars 6, Cooperage 1, Dwelling-houses 57, Drapers and Clothiers 2, Engine Room 1, Flax Warehouse 1, Farm Steadings 2, Grocers and Provision Merchants 4, Hacklemaker's Works 1, Hotels 4, Hairdresser and Tobacconist 1, Hall 1, Ironmongers and Metal Merchants 3, Jute Works 8, Jute on Street, Fields, and Open Spaces 10, Jute Warehouse 1, Jute Shed Harbour 1, Jeweller's Shop 1, Joiners and Cabinetmakers 2, Lodging-houses

2, Motor Vehicles on Street 2, Motor Garage 1, Offices 3, Open Spaces 10, Paper Store 1, Rag Store 1, Restaurant 1, Photographer's Saloon 1, Post Office, General, 1, Railway Goods Yards 2, Public Houses 2, School 1, Steam Ships in Dry Dock 2, Steam Ship in Dock 1, Stackyards 2, Sheds 2, Stable and Hay Loft 1, Stores (various) 3, Shipyards 2, Stationers and Printers 2, Dressmakers and Milliners 2, Tenements 6, Waste Stores 2, Wood Distillation Works 1.

The loss occasioned by Fires within the City is estimated at £51,035; the value of property at risk being £550,740. The estimated loss by Fires within the City for the previous year was £31,006.

The loss occasioned by Fires which the Brigade attended beyond the City boundaries is estimated at £3,150; the value of property at risk being £15,000.

Of the Fires which occurred within the City 6 resulted in damage amounting to £1,000 or over in each case.

The most serious losses incurred were in premises occupied by:—

1. Messrs Jas. Carmichael & Sons, Boot and Shoe Manufacturers, North Tay Street.
2. Messrs Dundee Harbour Trustees, Jute Shed, Eastern Wharf.
3. Messrs Wm. Cleghorn, Ltd., Waste Merchants, Arkley Street.
4. Messrs Dundee Harbour Trustees, Flax Warehouse, Cattle Depot, Carolina Port.
5. Messrs Jas. Scott & Sons, Ltd., Jute Warehouse, Alexander Street.
6. Messrs A. M. Macdiarmid & Co., Flax and Waste Warehouse, William Lane.

Included in the preceding list are recorded three of the most alarming and threatening Fires, as under :—

At 12.14 p.m., on 16th March last, a call was received by Exchange Telephone to "T" shed at the Eastern Wharf Harbour. This shed is situated in a range of buildings running east and west along the north side of the river Tay. The shed was one storey in height, and was constructed of brick walls on the north, east, and west, and on the south facing the river wood, with a slated roof. It contained about 8,000 bales of jute discharged from a ship. On the arrival of the Brigade at the scene of fire, a few minutes after the call had been received, the building and contents were doomed. The fire threatened to spread to the sheds east and west and to the timber wharf in front, of and partly under the burning building. All the available men and appliances were ordered out from the Central and District Fire Stations, and along with the River Float "S.S. Princess Louise" and the dredger "Charles Barrie," belonging to the Dundee Harbour Trustees, were brought into action. After several hours hard work the Brigade with motor pump, river float, street hydrants, and 18 lines of hose, succeeded in confining the fire to the shed in which it originated, and to part of the timber wharf. The berth in front, however, was not so seriously damaged as to prevent its being used. The cause of the outbreak was not ascertained. The damage was estimated at £24,100. The jute damaged by the fire was sold by public auction.

At 8.35 p.m., on 5th June last, a call was received by Exchange Telephone to a Jute Waste Warehouse at Arklay Street west side. The building on fire was constructed of wood. On the north of the burning building and adjoining was a brick building used as

a Jute Warehouse, containing a large quantity of material. On the south side, but separated by the width of the street, were the extensive works of Messrs Wm. Cleghorn, Ltd. At one time it looked as if these works would be seriously involved, the flames being blown across the street by a strong north-west wind. Fortunately the Brigade was successful in confining the fire to the wood building, only slight damage being done to the roof of the brick building and to the works. The Central and Harbour sections of the Brigade were engaged extinguishing the fire. Cause of outbreak—children playing with matches. Estimated damage, £2,000.

At 5.55 p.m., on 7th November last, a call was received by Exchange Telephone to a Flax Warehouse at the Cattle Depot, Carolina Port, Eastern Wharf. This building was constructed chiefly of wood with corrugated iron roof, and contained about 160 tons of loose flax. Within a few minutes the building and contents were blazing furiously, casting a vivid reflection over the east end of the City. When the Brigade arrived the flames were dangerously near to another wood building on the west, also used as a flax warehouse. The Brigade, assisted by a number of blue-jackets and soldiers, prevented the fire from spreading, and within half an hour had the conflagration under control, but not before the building in which the fire originated and its contents were destroyed. Cause of outbreak, children with matches; damage estimated at £11,750. The Central and Harbour sections of the Brigade were engaged extinguishing the fire.

Several fires occurred in premises fitted with automatic sprinklers, which in each case operated on the fire and made the work easier for the Brigade.

For extinguishing fires and watching within the City the amount recoverable from proprietors and

occupiers is £800 17s 10d. For the previous year the amount was £508 4s 3d.

For special services rendered by the Brigade pumping out ships, and at the new addition to the General Post Office, the amount received was £24 10s.

For the attendance of the Brigade at Fires beyond the City boundaries, and including a contribution of £100 from the County Council of Forfarshire, the amount recovered and received was £206 6s 8d. For the previous year the amount was £268 19s.

The amount received from theatres and public places of entertainment for the services of firemen was £332 18s. For the previous year the amount was £383 12s.

The total income earned from the above-mentioned sources by the Department for the year ending 31st December, 1915, including £100 from the Dundee Harbour Trustees, was £1,464 12s 6d. For the previous year the total income was £1,289 17s 9d.

The nett cost of the Department for the financial year ending 15th May, 1915, was £2,262 15s 6d. For the previous year the amount was £2,561 14s 4d.

The amount paid, including retaining fees, to the Auxiliary Staff for attendance at fires, drills, and at places of entertainment for the year was £392 13s 4d. For the previous year the amount was £400 9s 6d.

The members of the Brigade, both permanent and auxiliary, are insured by the Corporation under the Workmen's Compensation Act, 1906.

The health of the men in the Brigade was fairly good. There were several cases of ordinary sickness, and in consequence firemen were absent from duty for a few days in each case.

There was one case of injury to a fireman while in the execution of his duties:—Injury to chest; 14 days incapacitated from duty.

Dundee Boundaries Act, 1913, provided that a properly equipped Fire Station shall be erected and maintained in Broughty Ferry within five years after the Act came into operation. In July, 1914, the Town Council sanctioned the erection of a new station on the site of the old one at Brown Street. The building was completed in July last, and taken over by the Department. The ground floor is used as Duty Room and Engine House; the two floors above are occupied by the Staff. At the rear of the station a large yard has been provided for drill, washing machines, drying green, and each man attached to the station has a plot of ground for a garden.

A Motor Fire Pump was ordered from Messrs Leyland (Motors 1914), Ltd., Leyland, Lancashire, in July, 1914, under guarantee to be delivered within four months, but owing to the war the firm was unable to make delivery until August last. The vehicle was sent north to Dundee by road, and made the whole journey of 320 miles without a single hitch of any kind. Since delivery the Leyland engine, fitted with a Rees Roturbo Pump, has given entire satisfaction both when travelling to fires and when at work.

The Boilers of the two Steam Fire Engines have been dropped during the year and thoroughly overhauled; also the two Argyll Motor Fire Vehicles have been dismantled, and any defects repaired by the Staff.

Eight Single Sluice Valve Hydrants have been introduced where new water mains have been laid down, and eight existing Hydrants found defective have been cut out and replaced by Sluice Valve Hydrants.

Special Services—1,197 turns of duty have been performed by the Staff at theatres and public places of entertainment in the City.

Cinematograph Theatres—At these places of entertainment, where a fireman is not on duty during the performance, the fire appliances are inspected and cleaned and the staffs drilled and instructed in the use of fire appliances on the premises, for which a charge of 5s per week is made against proprietors.—Some proprietors prefer to have a fireman from this Department, during each performance, and in such cases the charge is at the rate of 15s per week and 2s extra for each matinee.

The authorised strength of the Brigade is now as follows:—

Permanent Staff—

- 1 Firemaster.
- 1 Deputy Firemaster (2nd Officer).
- 1 Lieutenant (3rd Officer).
- 2 Motor Mechanic Drivers.
- 12 Firemen (4 being Motor Drivers).
- 1 Coachman and Fireman.

Auxiliary Staff—

- 3 Auxiliary Lieutenants.
- 1 Auxiliary Engineer.
- 15 Auxiliary Firemen.
- 2 Extra Coachmen, Hired.

Eight members of the Permanent and three members of the Auxiliary Staff are serving in H.M. Forces, and every member of the Department under military age has enlisted under Lord Derby's Scheme.

Arrangements have been made with the under-mentioned firms in the City for their Private Fire Brigades to assist the City Fire Brigade in the event

of any extraordinary emergency:—Messrs Cox Brothers, Ltd., Lochee; Messrs Baxter Brothers & Co., Ltd., Dens Road; Messrs J. & D. Grimond, Ltd.; Messrs Harry Walker & Sons, Ltd.; Messrs J. C. Duffus & Nephew; Messrs Thomson, Shepherd & Co., Ltd.; Messrs John Leng & Co., Ltd., Bank Street. Only one detachment of the respective Brigades with their appliances would leave any of the works at one time.

There are Four Fire Stations—

(1) Central, West Bell Street.

Staff—

15 Permanent Men and 6 Auxiliary Firemen.

Appliances—

- 1 75-horse power Self-starting "Argyll" Petrol Motor Turbine Pump with Escape.
- 1 40-50-horse power "Leyland" Petrol Motor Fire Pump with 40 feet Extension Ladder.
- 1 Steam Fire Engine (Shand Mason), 350 gallons capacity.
- 1 70-ft. Horsed Fire Escape and Hose Tender combined.
- 10,900 Feet 2½-in. Canvas Hose, fitted with Instantaneous Couplings.
- 2 Horses belonging to the Department.
- 21 Stand Pipes, which can be used for any type of Fire Hydrant within the City.
- 38 Branch Pipes.
- 8 Chemical Extincteurs, carried on motor vehicles.
- 4 Pompier Ladders.
- 5 Electric Hand Lamps.
- 2 Smoke Helmets and other gear.

(2) Southern, Harbour Fire Station, King William IV. Dock.

Staff—

- 1 Permanent Fireman on duty from Central.
- 8 Auxiliary Firemen, all connected by alarm bells with this station.

Appliances—

- 1 Steam Fire Engine (Shand Mason), 600 gallons capacity.
- 1,000 Feet 2½-in. Canvas Hose, fitted with Instantaneous Couplings.
- 2 Stand Pipes.
- 1 Electric Hand Lamp.
- 6 Branch Pipes and other gear.
- Horse and Driver supplied by a contractor under agreement.

(3) Western Station, Bank Street, Lochee.

Staff—

- 3 Auxiliary Firemen, all connected by alarm bells with Lochee Police Station.

Appliances—

- 1 Horse Hose Reel.
- 1 Hand Hose Cart.
- 1,800 Feet 2½-in. Canvas Hose, fitted with Instantaneous Couplings.
- 4 Stand Pipes.
- 4 Branch Pipes.
- 1 Electric Hand Lamp.
- 1 Chemical Extincteur and other gear.
- Horse and Driver supplied by a contractor.

(4) Eastern (Broughty Ferry) Station, Brown Street.

Staff—

- 2 Permanent Firemen.
- 2 Auxiliary Firemen.

Appliances—

- 1 40-horse power "Argyll" Petrol Motor Fire Tender with 36 feet Extension Ladder.

- 1 Horse Hose Reel.
- 1 Horse Fire Escape.
- 1,600 Feet 2½-in. Canvas Hose, fitted with Instantaneous Couplings.
- 3 Stand Pipes.
- 5 Branch Pipes.
- 1 Electric Hand Lamp.
- 4 Chemical Extincteurs and other gear.
- Horse and Driver supplied by a contractor.

The following are the Scales of Pay:—

PERMANENT STAFF.

2nd OFFICER, Deputy Firemaster.

On Appointment	£2	0	0	per week
After one year	2	2	6	„
„ two years	2	5	0	„
„ three years... ..	2	7	0	„

3rd OFFICER, Lieutenant.

On Appointment	£1	14	0	per week
After one year	1	16	0	„
„ two years	1	17	0	„
„ three years... ..	1	18	0	„

1st MOTOR MECHANIC DRIVER.

On Appointment	£1	10	0	per week
After one year	1	12	6	„
„ two years	1	15	0	„
„ three years... ..	1	17	0	„

FIREMEN.

On Appointment—Fourth Class Firemen	£1	5	0	per week
After one year—Third Class Firemen	1	6	0	„
„ two years— „ „	1	7	0	„
„ three years—Second „ „	1	8	0	„
„ four years— „ „	1	9	0	„
„ five years— „ „	1	10	0	„
„ six years—First „ „	1	11	0	„
„ seven years— „ „	1	12	0	„
„ eight years— „ „	1	13	0	„

Men not provided with free quarters are allowed a maximum of 26/- per month and all taxes paid in lieu of quarters. Single men are allowed 4/6 per week. All ranks are provided with Uniform and Water Boots, and an allowance of 9d per week is allowed for light. Extra pay at the rate of 1/- per hour is allowed when attending fires outwith the City boundaries, and 2/- per night allowed when watching at salvage fires, which is equally divided among the members of the Permanent Staff.

SALARY AND WAGES PAYABLE TO AUXILIARY STAFF.

RANK.	Salary per Annum.	Drill Pay.	Allowance for turning out		Rate for first 3 hours.	Remainder at
			Turn out.	Premium.		
1st Lieutenant	£9	2/- p. drill	2/6		2/-	1/-
2nd do.	£8	"	"	1st man at each station	"	"
3rd do.	£7	"	"	receives 2/-.	"	"
1st Engineer	£7	"	2/-	2nd man at each station	"	"
2nd do.	£6	"	"	receives 1/-.	"	"
Fireman	£4	"	"		"	"

The following leave is granted to the Deputy Firemaster and men.

General leave one day every fortnight from 7 a.m. till 7 a.m. next day. Sunday is divided into three parts for the purpose of leave, four men being on leave from 6 a.m. till 1 p.m.; four men from 1 p.m. till 6 p.m.; four men from 6 p.m. till 11 p.m. Annual leave of 14 days is granted to each member of the staff.

The staff has been regularly employed during working hours keeping the plant in order, in addition to executing all the paint work, horse shoeing, joiner work, plumber work, and all other necessary repairs at the stations.

The street hydrants and underground water tanks have been inspected, tested, and cleaned during the year, and new indicating plates where required have been put up.

The staff has been regularly drilled and instructed in the use of the various appliances in the Department, and have also attended the Public Gymnasium, Ward Road, for gymnastic instruction.

In conclusion I beg to express my hearty thanks to the Convener and members of the Police and Lighting Committee for their valuable assistance, as well as to the Chief Constable, Water Engineer, City Engineer, Electrical Engineer, Gas Engineer and Harbour Engineer and their subordinates for assistance rendered at fires.

I annex Tabular Statements showing :—

- Table 1. General Information.
- „ 2. Showing how fires were extinguished.
 - „ 3. Number of fires and estimated loss.
 - „ 4. Comparative Table showing the number of calls received, and estimated loss since 1905.

I have the honour to be,

GENTLEMEN,

Your obedient Servant,

J. S. WEIR,

Firemaster.

TABLE I.

Confined to floor of origin	...	...	...	159
Extending beyond one floor	...	...	...	11
Extending to adjoining buildings	...	...	...	2
Extending beyond adjoining buildings	...	...	...	0
In wood shed buildings	...	...	...	5
On streets and open places	...	...	...	20
On unoccupied premises	...	...	...	10
Number of times the motors and horsed appliances at Central and District Stations were out simultaneously—all out except Broughty Ferry	...	...	...	2
Occupants removed to place of safety by Brigade				1
Number of lives lost at Fires	...	...	...	0
Population of City	...	...	...	177,300
Area—acres	...	...	...	6,548
Valuation of the City	...	...	...	£1,099,146
Mileage of streets and roads—miles	...			123.249
Extreme length of City from East to West				7 $\frac{1}{4}$ miles
Extreme breadth of City from North to South				3 $\frac{1}{4}$ „
There are firms in the City with Warehouses for Jute and Flax to the number of about	...			103
Cost of maintenance of the Brigade, including interest and sinking fund	...	...	...	.69d

TABLE II.

SHOWING HOW FIRES WERE EXTINGUISHED.

By Sprinkler Installation alone	...	...	...	2
„ Police, Strangers, or Occupiers of Premises	...	...	...	49
„ Firemen with Buckets	...	...	...	16
„ „ „ Hand Pump	...	...	...	4
„ „ „ Chemical Extincteurs	...	...	...	52
„ „ „ 1 Street Hydrant and 1 Line of Hose	...	...	...	21
„ „ „ 1 Street Hydrant and 2 Lines of Hose	...	...	...	6
„ „ „ 2 Street Hydrants and 2 Lines of Hose	...	...	...	7
„ „ „ 2 Street Hydrants and 3 Lines of Hose	...	...	...	3
„ „ „ 2 Street Hydrants and 4 Lines of Hose	...	...	...	1
„ „ „ 4 Street Hydrants and 4 Lines of Hose	...	...	...	2
„ „ „ 4 Street Hydrants and 5 Lines of Hose	...	...	...	1
„ „ „ 4 Street Hydrants and 8 Lines of Hose	...	...	...	1
„ „ „ 4 Street Hydrants and 9 Lines of Hose	...	...	...	1
„ „ „ 1 Steamer and 1 Line of Hose				1
„ „ „ 1 Motor Pump and 1 Line of Hose				1
„ „ „ 1 „ „ 2 „ „				1
„ „ „ 1 Motor Pump, 3 Street Hydrants, and 5 Lines of Hose	...	...	...	1
„ „ „ 1 Motor Pump, 1 River Float, 7 Street Hydrants, and 18 Lines of Hose	...	...	...	1
„ „ „ 1 Motor Pump, 8 Street Hydrants, 12 Lines of Hose	...	...	...	1

34,400 Feet of Canvas Hose and 86 Street Hydrants have been used in connection with the above during the year.

TABLE III.

The loss at Fires within and beyond the City, which the Brigade attended, was estimated by Assessors and Owners of Property to be as under :—

91 Fires under	£5		
35 Fires over	5 and under	£25	
9 „	25 „	50	
12 „	50 „	100	
5 „	100 „	200	
4 „	200 „	300	
2 „	300 „	400	
2 „	400 „	500	
1 „	500 „	600	
2 „	600 „	700	
1 „	700 „	800	
1 Loss of	1,000	City	
1 „	1,200	„	
1 „	2,000	„	
1 „	5,100	„	
1 „	11,750	„	
1 „	24,100	„	
1 „	1,000	County	
1 „	1,500	„	

TABLE IV.

Comparative Table showing the number of Calls received by the Department, and the Estimated Loss by Fire in the City since 1906.

Year.	Calls Received.	Chimney Fires.	Alarms of Fire.	Pumping-out Jobs.	Actual Fires.	Serious Fires City	At risk in the City.	Loss in the City.
1906	159	16	10	...	133	5	£1,227,600	£369,217
1907	199	20	22	...	157	2	589,910	19,001
1908	175	31	15	...	129	6	380,200	29,046
1909	185	25	33	...	127	5	316,005	19,047
1910	163	20	25	...	118	5	296,472	15,617
1911	243	30	24	...	189	6	363,735	44,600
1912	206	17	23	...	166	10	381,300	78,999
1913	235	30	23	...	182	6	512,680	72,684
1914	251	30	27	...	194	6	603,420	31,006
1915	219	24	19	4	172	6	550,740	51,035

* Year of Great Whisky Fire.