



Statistics of Fires in London

Source: Journal of the Statistical Society of London, Sep., 1844, Vol. 7, No. 3 (Sep.,

1844), pp. 255-265

Published by: Wiley for the Royal Statistical Society

Stable URL: https://www.jstor.org/stable/2337942

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## Statistics of Fires in London.

In the number of this Journal for September, 1838 (vol. i. p. 283), an account was given of the formation and organization of "The London Fire-engine Establishment," which not only created for the first time an effective system for extinguishing or arresting actual conflagration, but also originated a regular accumulation of data respecting the most prevalent accidental causes of fire, calculated to afford important suggestions as to the means, yet more desirable, of preventing the occurrence of this formidable species of individual disaster and public danger. As regards the primary object of the combination, the more prompt extinction of fires actually broken out, the paper in question shows to what extent it had been attained in the course of the first five years during which the establishment was in operation, from 1833 to 1837, from the data furnished by the registry which it regularly keeps of the number, extent, &c. of fires in every year; the most important fact thus indicated being, a considerable diminution of the proportion which the number of fires wherein the premises were either wholly consumed or seriously damaged, bore to the total number of cases.

As regards the causes of fires, the first class of facts furnished by the records of the Establishment is that which relates to the respective degrees of liability to such accident attaching to the nature of the premises or their occupancy. The paper in this journal already referred to, presents a list of those descriptions of occupation of premises in which fires had occurred most frequently during the same period of five years, stating the number that had happened in each kind of occupation; from whence naturally follow certain deductions as to the comparative chances

of fire necessarily attending particular trades and occupations.

A still more important kind of data supplied by the same systematic registration, consists in the specification of the ascertained cause of each individual fire. Herein the prompt attendance and the diligent endeavours constantly used by the firemen of the Establishment to trace out the particular occasion of each conflagration had already been so satisfactory in their result, that the same period of five years had sufficed to reduce the cases in which the cause was undiscovered to a very small proportion. Accordingly, the paper in question presents a tabular statement of the several causes which had led to fires, and the number of instances under each head, so far as the same could be ascertained, in each year from 1833 to 1837; from whence is shown the relative frequency of the several causes, whether arising from negligence, from necessary nature of occupation, or from inevitable accident.

And finally, a third statement in the same paper, combining the materials of the two former, exhibits the several causes of fires in the different classes of buildings and trades furnishing the greatest number of fires, specifying the numbers in each class assignable to each cause respectively; thus affording means to discover those peculiar circumstances in a given trade which subject it to this kind of danger.

Again, the quarterly number of the Journal of December last (vol. vi. p. 361) presents a continuation of the results of the operations and the observations of the Metropolitan Fire-engine Establishment, in the shape of extracts from the Report of Mr. Braidwood, superintendent of

the Metropolitan Fire Brigade, to the managing Committee of the Establishment, on the fires which occurred in the year 1842, including an abstracted statement of the fires during each of the ten years previous. Here, again, the leading fact regarding the increased effectiveness of the Establishment appears in the still decreasing proportion of the cases of total destruction to that of the whole number of conflagrations. The other most remarkable fact presented by this tabular view is, that the proportion of cases of fire in which gas was found to be used on the premises, had increased in the same ten years from one-fourth to three-fourths of the whole number of fires—a fact, however, which of itself cannot be taken to indicate anything beyond the rapid progress of the substitution of gas-lights for the old modes of artificial lighting.

We now extract from the Appendix to the same Report a particular statement of the fires which took place in London in each of the same ten years. The former of the two papers already referred to, having confined its list of the occupations of premises to those classes in which more than six fires had occurred during the five years, the present table, specifying every class in which any fires whatever have occurred, exhibits upwards of a hundred several descriptions of occupancy which do not appear in the former statement. In like manner, the account of the causes of fire in the several classes of buildings having, in the same paper, been limited to those classes (18 in number) wherein more than 20 fires had occurred during the five years, the present statement will be found to specify the causes, so far as discovered, in each several description of occupancy, amounting to upwards of a hundred and eighty. Since, also, the latter statement extends over ten years in lieu of five from the complete organization of the Establishment, it presents the means of carrying out the deductions of the preceding paper with greater fulness, precision, and certainty.

The following table, then, based on the experience of ten complete years, supplies all the further data on this subject which it will be requisite to place on record in the pages of this journal, excepting only a brief statement of the gross result of each succeeding year's operations.

At a period when the municipal arrangements of our large towns for the purposes of public health and safety are undergoing so severe a scrutiny as that to which they are now subjected, it would be well that the subject of fire police should not wholly escape attention, with reference not only to supplies of water easily accessible, but also to express arrangements by which the services of some police officer of experience in these cases shall always be available for the direction of proceedings, where no such complete establishment exists as that of the London Fire Brigade. The supply of water for such purposes is too often left to the mere good-nature of private companies; and the less of life and property through the pure helplessness of alarm, of surprise, and of ignorance regarding the progress of such casualties, is very great. While there is a competition among some of our largest corporate towns for the best chief of their police, it would, therefore, not be amiss, were they to apply some of this spirit of rivalry in good administration to providing that each of their several police forces shall contain at least one person of skill in these matters; and Mr. Braidwood's is a normal school, in which they may always rely on finding men of character and experience.

List of Fires which took place in London in Ten Years, commencing 1st January, 1833, ending 31st December, 1842.

					D		
TRADES.	Totally Destroyed	Considerably Damaged.	Totally Considerably Destroyed Damaged. Damaged.	Gas.	No Gas.	Total.	CAUSES.
Apothecaries and Dealers in Drugs, but no Chemical Works carried on	-	10	œ	13	9	19	Trade 6; gas 3; unknown 10.
Archel-makers	:	1	:	:	1		Trade 1.
Asphalte Works	:	-	_	:	C1	67	Trade 2.
Bagnios	:	00	21	C3	27	53	Curtain 19; gas 1; intoxication 4; candle 1; un-known 4.
Bacon-dryers	:	:	က	67	-	က	Trade 3.
Bakers	7	46	82	108	32	140	Trade 88; gas 14; flue 11; candle 2; fire on hearth 1;
,, (Sea Biscuit)	:	67	~	61	-	က	Trade 3.
,, (Muffin)	:	:	_	:	_	_	Trade 1.
Barge and Boat Builders	:	2	9	:	11	11	Incendiarism 1; trade 9; unknown 1
Basket-makers	67	4	C3	:	<b>∞</b>	00	Trade 2; unknown 6.
Bath-keepers	:	:	_	_	:	_	Trade 1.
Beer-shops	က	6	20	54	00	35	Curtain 6; gas 5; flue 2; stove 1; smoking tobacco 3;
							pipe stove 1; lucifer 1; copper badly set 1; unknown 13.
Blacking-makers	:	_	_		_	67	Unknown 2.
Booksellers, Binders, and Stationers	:	40	33	22	24	79	Gas 23; flue 8; stove 2; trade 7; candle 6; incen-
							diarism 1; accidents 1; child 2; lucifer 1; lime
D 1 1		,			•	•	over-heating 1; unknown 27.
Dottive Interchants	:	- (	:	:	1	٠,	Candle I.
Drewers	:	20	ç	٥	_	13	Trade 5; flue 1; candle 1; making gas 1; coals over-
Brick-makers	-				,-		Trade 1.
Brokers and Dealers in Old Clothes	67	93	22	21	27	48	Infoxication 1: lime over-heating 1: flue 4: trade 3:
	)	3		 i	i	?	curtain 4; fire on hearth 1; gas 3; candle 4; luci-
							fer 1; stove 1; children 2; unknown 23.
Butchers	:	_	_	-	-	<b>C</b> 1	Lime over-heating 1; flue of copper, 1.
Builders	61	_	00	:	=	Ξ	Lime over-heating 3; trade 5; candle 1; unknown 2.
Cabinet-makers	15	33	90	18	99	84	Trade 37; flue 5; candle 5; stove 1; gas 1; un-
•							known 35.
Cane-dyers	:	C1	:	:	C1	67	Trade 2.
	_	_	_			_	

VOL. VII.-PART III.

List of Fires which took place in London in Ten Years, from 1833 to 1842.—continued.

TRADES.	Totally Destroyed	Totally derably Bestroyed Damaged.	Slightly Damaged.	Gas.	Gas. No Gas. Total	Total.	CAUSES.
Carpenters and Workers in Wood, not Cabinet-makers.	24	96	125	22	188	245	Trade 100; flue 9; stove 4; incendianism 3; gas 5; children 2; candle 16; fire on hearth 3; accident 2; smoking tobacco 1; cinders 1; spark 2; carelessness 2; lucifers 1; curtain 1; working late 1; un-
Carriers	- :	~ ~	:	Ç1	:"	67 -	known 92. Unknown 2. Trade y
Cement and Plaster of Paris Works.	::	01 10	: ° °	::"	.01 <	110	Trade 1; unknown 1. Trade 5; 4ng 1: unknown 1
Chandlers	9	16	. 5 <sub>6</sub>	23	25	48	Trade 2; candle 3; gas 9; intoxication 1; stove 1; Trade 2; candle 3; gas 9; intoxication 1; copper lucifers 1; curtain 2; flue 2; accident 1; copper
Charcoal and Coke (Dealers in)	:	67 (	6;	- 7	10	11	flue 1; unknown 25. Accident 2; trade 5; unknown 4.
Cheesemongers	no 01	18	20	282	:53	34	Smoking hams 1; gas 4; unknown 15. Trade 31; flue 1; carelessness 1; experiment 1; un-
laboratories for chemical purposes. Chocolate-makers	:	:°°	9	: <sup>∞</sup>	10	18	Known b.  Known b.  Store 8; gas 1; flue 2; pipe stove 1; hot-air flue 1; descending stove 1; lightning 2; fire on hearth 1;
Cigar-makers	: 4	7 33	13	6 2	19	25	unknown 1. Trade 2; flue 1; doubtful 1. Smoking tobacco 1; stove 1; flue 2; lamp-black over-
Cochineal-dryers	:	∷∞		1.29		1 34	neating 2; trade 5; candle 1; unknown 13. Trade 1. Unknown 1. Flue 9; curtain 7; pipe stove 3; stove 1; trade 1;
Coffee-roasters	:	5	14	9	13	19	gas 2; candle 1; reading in bed 1; blocked up flue 1; unknown 8. Trade 17: unknown 2.
Colour-makers, not mere Colour-shops Confectioners and Pastry-cooks	:-	.c. 00	10	$\frac{2}{16}$	13	15	Trade 14; unknown 1. Trade 10: $sas 5$ : unknown 6.
Coopers Cork-burners			200		00 4	9	Candle 2; trade 4; flue 2; unknown 1. Gas 1; trade 4.

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List of Fires which too	k place in	London	in Te	n Year	s, fron	Lıst of Fires which took place in London in Ten Years, from 1833 to 1842.—continued.
TRADES. Des	Totally derably Bightly derably Destroyed Damaged.	Slightly d. Damaged.	Gas.	No Gas.	Total	CAUSES.
Gas Works	:	18	25	:	25	Gas 6; trade 19.
Glass and Emery Paper-makers	-	:	:		٠.	fine I.
Glass-blowers	:	-	:	_	- 1	Furnace 1.
,, (Illicit)		m	1	4	2	Trade 5.
Glass-benders	-		:	-	_	Trade 1.
Grocers	7 23	53	54	S	29	Gas 17; trade 3; flue 2; children 1; candles 6; lu-
						cifers 1; hot cinder 1; stove 1; unknown 27.
Glue-makers	-	_	:	67	67	Flue 1; trade 1.
Gunpowder (Sellers of)	-	:	_	:	_	Trade 1.
Granary-keepers	1	_	2	_	က	Kiln 1; steam-engine 1; unknown 1.
Hat-makers	2 32	23	36	21	57	Trade 27; flue 6; gas 4; airing clothes in stove 1;
						candle 1; incendiarism 1; boy lighting a fire 1;
						unknown 16.
Hemp and Flax Merchants	1	:	:	က	က	Trade 1; candle 1; smoking tobacco 1.
Horse-hair Merchants	2	2	:	00	00	Trade 4; stove 1; broken windows 1; unknown 2.
Hotels, including Club-houses	13	97	38	_	33	Flue 12; gas 6; curtain 8; trade 1; lamp 1; reading
)						in bed 2; candle 4; rarifying stove 1; steam fur-
						nace 1; defect in hearth 1; unknown 2.
Hair-dressers using ovens	:	_	:	_	_	Trade 1.
Ink-makers	_	:	:	67	67	Trade 2.
Japanners	- 2	ç	1	10	Ξ	Trade 10; unknown 1.
Lamp-black-makers	1 6	20	_	=	13	Trade 9; flue 1; unknown 2.
Laundresses	1	∞	<b>C</b> 7	13	15	Trade 9; ironing stove 1; flue 2; lucifer 2; spark 1.
Leather (Patent) Makers	- 5	ಣ	7	4	2	Trade 4; spontaneous ignition 1.
Lime Wharfs	:	_	;	_	_	Trade 1.
Livery Stables	-	4	:	ç	Š	Trade 5.
Lodging-houses	2 66	372	77	363	440	Intoxication 6; flue 86; curtain 225; children 27;
;	м					smoking tobacco 12; trade 2; fire on hearth 4;
						smoothing iron 1; gas 1; fumigation 4; candle 39;
						timber under hearth 1; accident 4; old age 1; in-
						cendiarism 2; fits 1; lucifers 7; spark 4; stove 1;
**		_	_	_		car 1; careresness 2; napuna lamp 1; unknown 50.
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Trade 60; curtain 1; unknown 2.  Trade 4; unknown 2. Unknown 1. Spark 1; trade 7; candle 2; curtain 1; smoking tobacco 1; gas 1; incendiarism 1; unknown 9. Steam-engine 1; trade 3. Unknown 1. Trade 1; unknown 2.	HE HEREE	Known 26.  Trade 1.  Trade 2; unknown 1.  Flue 1; trade 1; unknown 2.  Trade 4; lime and rain 1; unknown 8.  Curtain 1; illumination 1.  Flue 1; unknown 1.  Incendiarism 2; unknown 2.  Trade 3; candle 1; oil thrown on the fire instead of water 1; unknown 1.  Water 1; unknown 1.	Trade 1. Unknown 1. Trade 3; unknown 1 Trade 2; unknown 1. Trade 2; gas 1. Stove 1; trade 1.
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Lucifer-match-makers	Musical Instrument Makers	Oil Refiners Oil Works Painted Baize Makers Paunters, Plumbers, and Glaziers. Paper-hangers Paper-mills Paper-stainers	Perfumers Picture-dealers Pipe-makers Pitch-makers Plyting-card-makers Pork-butchers

List of Fires which took place in London in Ten Years, from 1833 to 1842.—continued.

			_	-			-	_	_	_	-			_	-					_									
List of Fires which took place in London in Lea Lears, from 1855 to 1842.	CAUSES.	Pipe stove 2; stove 2; flue 4; trade 11; gas 6; steam- enoine 1: flue of steam-enoine 2; unknown 8.	Store 3; trade 9; gas 1; candle 1; unknown 1.	Trade 4.	Stove 1; time over-neating 1; unknown 4: Flue 7; incendiarism 1; late hours 1; timber under	hearth 1; fireworks 1; thawing water-pipe 1; illumination 1; kiln 1; stove 1; gas 3; spark 1; un-	known 4.	Lucifers 3; gas 11; curtain 855; flue 346; children 53;	mre on meanin 10; stove 20; reading in year 9, 10- migation 21; candle 123; fireworks 5; bug-hunt-	ing 2; chafing-pan 1; intoxication 11; timber under	hearth 2; hot air stove 2; incendiarism 8; smoking	tobacco 5; pipe stove 6; hot cinders 8; lightning 3;	boiling pitch 1; ironing-stove 1; spark 6; burning	cask 1; insanity 2; coppers bank set o; mawing	water-pipes 1; party wall 1; defect in nearth 3; care-	lessness of sewing in Dea 1; naplina jamp 1;	warming bed 1; plumbers 1; nearing rat 1; making	polish for furniture 2; children playing with lucifers 3;	children playing with nre 0; fainting 1; cat z; doubt-	Fireworks 1.	Fire on hearth 2; overheating 5; stove 1; candle 3;	trade 6; unknown 4.	Trade 1; unknown 1.	Trade 1.	Trade 9; smoking tobacco 1; fireworks 1; unknown 3.	Trade 3; old flue 1.	Candle 1; unknown 1.	Unknown 1.	
3, 1101	Total.	36	15	7' '	23.4			1,935												_	21		C3	_	14	4	C1	_	
na r na	No Gas.	14	11	4.0	7 =	1		444  1,491  1,935												-	19		_	_	13	4	<b>C</b> 7	_	
1 212 21	Gas.	22	4	:	7 2																. 2	· ·	1	:	_	:	:	:	
Tour	Totally derably Damaged.	23	^	:	13.2			1,604													:0		:	_	9	7	_	_	
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Gas 93; stove 12; trade 6; flue 42; candle 21; pipe stove 2; fireworks 1; heating by steam 1; fire on hearth 2; accident 6; lucifers 2; smoking tobacco 2; cat 1; spark 1; incendiarism 2; carelessness 1; working on Sunday 1; stove badly set 2; copper 1; curtain 1; inknown 125	Trade 1.  Trade 5; steam-furnace 2; steam-engine 1; rags overheating 1; friction 1; drying-stove 1; candle 1:		men 1; unknown 9. Incendiarism 1. Trade 8; unknown 4. Trade 9; steam 2; steam-engine 2; cooking 1;	carelessness 1; unknown 1. Trade 1. Trade 1. Trade 1. Stove 1. Fire in soot 1; trade 3; candle 1; flue 1; curtain 1;	unknown 2. Bleaching spice 1. Flue 6; candle 25; repairs 2; dung overheating 6; heating pitch 1; laboratory adjoining 1; accident 9; copper 1; incendiarism 1; smoking tobacco 3; lu-	cifers 1; charcoal stove 1; stove 1; fireworks 1; children 2; defect in wall 1; pipe stove 1; unknown 50. Trade 2; unknown 3. Flue 2; packing 1; trade 3; unknown 5. Trade 2; unknown 3. Trade 2; unknown 3.
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Sale Shops and Offices, no hazardous goods •	Saltpetre-refiners	Schools of Industry Ships	Ship-breakers	Ship (Steam) Builders	Stables	Starch-makers
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List of Fires which took place in London in Ten Years, from 1833 to 1842.—continued.

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TRADES.	Totally Const. Slightly Destroyed Damaged.	Consi- derably amaged.	Slightly Jamaged.	Gas.	No Gas.	Total.	CAUSES.	
Tailors	1	19	22	23	19	42	Stopped up flue I; gas 7; trade 4; candle 7; flue 2; curtain 2; pipe stove 1; stove 1; incendiarism 1; unknown 16.	
Tanners	:	00	4	:	12	12	Over-heating 1; tan over-heating 4; trade 2; steamenrine 2; unknown 3.	
Tallow Chandlers, Melters, Wax Chandlers,	9	==	50	6	28	37	Trade 23; gas 1; flue 3; unknown 10.	
Tarpaulin-makers	61 -	<b>-</b> :	:6	:6	es –	10	Trade 1; unknown 2. Gas 6; trade 1; fireworks 1; smoking tobacco 1;	
Tinmen, Braziers, and Smiths	4	15	36	19	36	55	Lime over-heating 1; trade 29; stove 1; steam-boiler bursting 1; flue 1; pipe stove 1; candles 2; spark 1;	
Two-founders	:	:		-	•		unknown 18. Trade 1.	
Tobacco Manufacturers	:	2	က	~	_	∞	Trade 2; candle 1; gas 2; unknown 3.	
Tobacconists	:	4	9	9	•	2	Lucifers 4; candle 2; smoking tobacco 1; gas 1; un-known 2.	
Tow Warehouses	:	67	:	-		<b>C</b> 1	Unknown 2.	
Turpentine Distillers	67	:	•	• !	61;	67 5	Trade 2.	
Victuallers	12	82	219	274	44	818	Gas 42; fine 53; curtain 43; trade 3; stove 10; smoking tobacco 19; spirit lamp 1; candle 17; tar	
							boiling over 1; pipe stove 3; fire on hearth 2; fumigation 2; spark 3; lucifers 3; airing a bed 1; children playing with lucifers 1; naptha 1; cutting	
			-		-	_	away party wall 1; oven adjoining 1; unknown 93.	
Virial Works	:	. 7	- 6	:	4 00	• 00	Trade 8.	
Variation of the Vinegar Works	· :		101	::	က	က	Trade 1; Pitch boiling over 1; stove 1.	
Under repair, and building	67	15	32	9	43	49	Repairs 15; flue 5; candle 1; trade 15; gas 1; fire	
							ness 1; unknown 4.	-
	-	-	-	-				

Flue 6; incendiarism 6; curtain 1; fire on hearth 2; gas 2; candle 1; smoking tobacco 2; children 3; chordanous inclined 1; resolution 1; trade 1; seconics 1; horizon	spontaneous ignition 1; take 1; repairs 1; inchers 1; burning a straw bed 1; unknown 17. Candle 1; gas 1; trade 3; pipe store 1; hot water store 1 - rurbain 1 - smoking thesen 1 - rurbain 1 - smoking thesen 2	Stove 1; trade 2; incendiarism 1; unknown 1. Stove 2; flue 5; pitch boiling over 1; floor falling 1; incendiarism 6; spark from fire 1; trade 1; candle 2;	rags over-heating 3; cotton waste 2; shoddy over-heating 2; lighting gas 1; unknown 18.  Pipe stove 1; flue 5; gas 1; carelessness 1; incendiction 1; nuchnown 9	Candle I. Candle I. Candle I.	Unknown 4; curtain 1; trade 1; candle 3.		Rags over-heating 1.  Gas 1; spark 1; sewing by candle-light 1; unknown 3.  Tinknown 9.	Hearth decayed 1; curtain 2; stove 1; flue 2; gas 1; stove for drying linen 1; spark from fire 1; trade 1; unknown 2; cooking apparatus 1.			
45	16	11 45	11		<b>0</b> 0	54	1 9 0	13	5,774	1,725	7,499
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