
The Fires of London During the Year 1876, and the Metropolitan Fire Brigade

Source: *Journal of the Statistical Society of London*, Vol. 40, No. 1 (Mar., 1877), pp. 136-140

Published by: Wiley for the Royal Statistical Society

Stable URL: <https://www.jstor.org/stable/2339218>

Accessed: 13-08-2021 05:24 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Royal Statistical Society, Wiley are collaborating with JSTOR to digitize, preserve and extend access to *Journal of the Statistical Society of London*

lavish use of this graphic method, and the remark applies not only to the statistical publications prepared by the State Statistical Bureaux, but also to the various central administrations. Indeed, we find in the Italian exhibition, in addition to the well-known works of M. Bodio, and numerous meteorological diagrams, several interesting diagraphical representations relating to bridges, roads (*ponts et chaussées*), and finance. Besides the usual ones in curves, we find coloured plain surface diagrams extensively used.

If before taking leave of this exhibition, we give a retrospective glance at the different diagrams contained in it, we cannot fail to observe, that the most varied methods of diagraphical representations are here displayed, linear and plain surface diagrams playing the principal rôle. And it is with great satisfaction we record this fact, for it is only in exceptional cases that a complicated method of diagraphical representation should be resorted to, seeing the great danger there is of making the diagrams answer the opposite purpose for which they were intended. As one of these complicated forms which has been used to a considerable extent, the diagraphical representation in circles may be mentioned. That form has a real justification in those cases where a movement by months has to be shown, such as the deaths by months for an average year deduced from a long series of years; for the months January and December would be represented in this form in close proximity to each other, as they are in fact, which would not be the case if the linear system were used, as they would then be at the opposite extremities of a straight line.

In conclusion, we must not pass over unnoticed the significant fact that these numerous diagraphical representations which we have received, appear to us to have been drawn up and prepared with the greatest care, not merely to make statistics popular with the public in general, but with the steady object in view of rendering assistance to the State and other bureaus in their work of compiling statistical tables; for a proof of this we may refer to the diagrams furnished by the various railway companies. I take this opportunity of bringing prominently forward this characteristic application of diagrams, and to point out the practical value of their further use and application on statistical subjects, the more especially as we are enabled by such means to discern a method whereby the interest that diagraphical representation possesses may be greatly enhanced.

II.—*The Fires of London during the Year 1876, and the Metropolitan Fire Brigade.*

SUBJOINED are some particulars extracted from Captain Shaw's annual report to the Metropolitan Board of Works, in continuation of similar notices for previous years :—

“The number of calls for fires, or supposed fires, received during the year has

been 1,787. Of these 91 were false alarms, 64 proved to be only chimney alarms, and 1,632 were calls for fires, of which 166 resulted in serious damage, and 1,466 in slight damage.

"These figures refer only to the regular calls for fires, or supposed fires, involving the turning out of firemen, fire engines, horses, and coachmen; they do not include trifling damages by fires which were not sufficiently important to require the attendance of firemen; neither do they include the ordinary calls for chimneys on fire, which are separately accounted for further on.

"The fires of 1876, compared with those of 1875, show an increase of 103; and compared with the average of the last ten years, there is an increase of 42.

"The proportion of serious to slight losses—166 to 1,466—shows that our success in reducing losses during 1876 has been about the same as in the previous year.

"The following table gives it both in actual numbers and percentages:—

Year.	Number of Fires.			Percentage.		
	Serious.	Slight.	Total.	Serious.	Slight.	Total.
1866.....	326	1,012	1,338	25	75	100
'67.....	245	1,152	1,397	18	82	100
'68.....	235	1,433	1,668	14	86	100
'69.....	199	1,373	1,572	13	87	100
'70.....	276	1,670	1,946	14	86	100
'71.....	207	1,635	1,842	11	89	100
'72.....	120	1,374	1,494	8	92	100
'73.....	166	1,382	1,548	11	89	100
'74.....	154	1,419	1,573	10	90	100
'75.....	163	1,366	1,529	11	89	100
'76.....	166	1,466	1,632	11	89	100

"The number of fires in the Metropolis in which life has been seriously endangered during the year 1876 has been 72; and the number of these in which life has been lost has been 29.

"The number of persons seriously endangered by fire has been 123, of whom 88 were saved, and 35 lost their lives. Of the 35 lost, 23 were taken out alive, but died afterwards in hospitals or elsewhere, and 12 were suffocated or burned to death.

"The number of calls for chimneys has been 4,325. Of these 1,420 proved to be false alarms, and 2,905 were for chimneys on fire. In these cases there was no attendance of engines, but only of firemen with hand-pumps.

"The number of journeys made by the fire engines of the 49 land stations has been 7,445, and the total distance run has been 23,120 miles.

"The quantity of water used for extinguishing fires in the metropolis during the year has been 21,166,178 gallons—in round numbers a little more than 21 million gallons, or about 94,500 tons. Of this quantity 54,433 tons, or about three-fifths of the whole, was taken from the river, canals, and docks, and the remainder from the street pipes.

"During the year there have been six cases of short supply of water, twenty-four of late attendance of turncocks, and ten of no attendance, making altogether forty cases in which the water arrangements were unsatisfactory.

“The strength of the brigade at present is as follows:—

49	fire engine stations.
107	„ escape „
4	floating „
56	telegraph lines.
101	miles of telegraph lines.
3	floating steam fire engines.
1	iron barge, to carry a land steam fire engine.
5	large land steam fire engines.
21	small „
14	seven-inch manual fire engines.
58	six-inch „
20	under six-inch „
136	fire escapes.
400	firemen, including the chief officer, the superintendents, and all ranks.

“The number of firemen employed on the several watches kept up throughout the metropolis is at present 95 by day and 182 by night, making a total of 277 in every twenty-four hours; the remaining men are available for general work at fires.

“Our list of wounds and other injuries for 1876 is, as usual, large; but, so long as the men work well, no diminution of accidents can be expected.

“There have been during the year 287 cases of ordinary illness, and 70 injuries, making a total of 357 cases, of which many were very serious, and two terminated in death.”

From the tables appended to the report are taken the following particulars:—

(a) The fires classified according to trades, arranged in the order of frequency:—

	Number of Fires.
1. Private houses	327
2. Lodgings	193
3. Victuallers	58
4. Farming stock	41
5. Oil and colourmen	31
6. Cabinet makers	30
7. Tailors, clothiers, and outfitters	30
8. Stables	25
9. Grocers	25
10. Drapers	22
11. Boot and shoe makers.....	22
12. Booksellers and stationers	22
13. Builders	21
14. Under repairs and building	20
15. Railways	17
16. Coffee houses	17
17. Greengrocers and fruiterers	17
18. Carpenters and workers in wood (not cabinet makers)	15
19. Bakers	15
20. Schools	14

	Number of Fires— <i>Contd.</i>
21. Chandlers	14
22. Engineers and machinists	13
23. Hairdressers	13
24. Printers.....	13
25. Let out in tenements	12
26. Milliners and dressmakers	12
27. Laundries	12
28. Furniture makers and dealers	12
29. Confectioners and pastry cooks.....	12
30. Refreshment rooms.....	11
31. Beershop keepers.....	11
	<hr/>
	1,097
Remainder, varying from 10 to 1.....	535
	<hr/>
Total.....	1,632

(b) The fires classified according to the causes to which they have been assigned, arranged in the order of frequency.

Causes.	Number of Fires.
1. Unknown	331
2. Lamps (not gas) and lights	249
3. Sparks from fires, &c.....	179
4. Flues—defective	175
5. Candle	152
6. Gas	146
7. Children playing with fire and matches	60
8. Hot ashes	47
9. Overheating of stoves, coppers, kilns, ovens, and furnaces	44
10. Airing and drying stoves	32
11. Smoking tobacco	28
12. Lucifers.....	27
13. Vapour of spirits and oil	24
14. Boiling over of oil, fat, pitch, &c.....	23
15. Spontaneous ignition	17
16. Stoves, &c., improperly set.....	13
17. Overheating of boilers, &c.....	13
18. Lime	12
19. Hearths and fireplaces—defective.....	11
20. Burning rubbish	9
Miscellaneous and doubtful	40
	<hr/>
Total.....	1,632

(c) The usual summaries for 1876 show :—that the greatest number of fires occurred in July (214), and the smallest number in October (110); that the largest number of fires (260) occurred on Sunday, and the smallest number (218) on Monday; and that the hours during which the greatest number of fires have occurred are from 8 to 11 P.M., and those most exempt from such disaster are from 5 to 8 A.M.

With reference to the daily summary, the following table, which gives

the total of the fires for each day of the week for the last ten years, shows on the *average* that the largest number of fires occur on Saturday and the smallest number on Monday. The annual average number of fires for the ten years is 1,620.

Years.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Total.
1867....	202	169	219	210	191	198	208	1,397
'68....	233	227	234	267	229	225	253	1,668
'69....	220	220	229	251	199	235	218	1,572
'70....	290	252	258	266	300	258	322	1,946
'71....	286	202	247	302	271	258	276	1,842
'72....	199	206	213	207	220	220	229	1,494
'73....	202	209	237	199	230	243	228	1,548
'74....	222	228	228	195	240	231	229	1,573
'75....	200	203	231	227	236	209	223	1,529
'76....	260	218	226	235	242	221	230	1,632
Total...	2,314	2,134	2,322	2,359	2,358	2,298	2,416	16,201

"The number of lives lost during the year by fire is 35, the number saved 88.

Captain Shaw in his report recommends six firemen for special merit, who collectively saved 23 lives during the year.

III.—*English Literature in 1876.*

THE following extracts, analytical table, and monthly summary of books published in 1876, are taken from the December (1876) number of the *Publishers' Circular*, in continuation of a series of similar extracts for previous years :—

"Last December, in examining the statistics for the year, we had occasion to express our surprise at the favourable nature of the returns. It is again our pleasant duty to chronicle a degree of prosperity which the most sanguine individual could hardly have predicted. While it must be regretted that there has been a decline in the number of new works issued in some of the most important branches of literature, the total number of books published in 1876 shows a satisfactory increase as compared with 1875. The year has been marked by a decided falling-off in new books, and an increase, equally noteworthy, in new editions. Let us hope that the modest increase of the past year may be set down as a delicate indication of improvement in the general trade of the country.

"The number of works published during 1876, as compared with the previous year, stands thus :—1876, 4,888 ; 1875, 4,854.

"In theology there has been a decline : a fact which may or may not prove satisfactory. Many distinguished theologians have doubtless been devoting their leisure to education and to social reform. In theology we chronicle a falling short of 66 from the number of 1875.

"In educational, classical, and philological works, as might have been expected, we note steady progress in the number of new works and reprints. This year produced 470 ; last year, 335.