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FIRES IN POST-WAR DWELLINGS XXXVIII. AN ANALYSIS OF REPORTS OF FIRES ATTENDED BY FIRE BRIGADES IN GREAT BRITAIN 1953.

by

J. E. L. HINTON.

SUMMARY

An analysis has been made of reports of fires in post war non-traditional dwellings returned by Fire Brigades in Great Britain in 1953.

Two hundred and seventy seven temporary dwellings were damaged by fire in 1953 (17.7 per 10,000 dwellings at risk). Fires associated with the use of electricity accounted for almost half the fires of known cause. Thirty one non-fatal and two fatal casualties occurred as a result of fires in post war temporary dwellings in 1953. The total rate of incidence of fire in temporary dwellings is slightly higher than that for 1952, and continues the steady increase that has occurred since 1946, although it is still at about the level of the latest available overall figure for pre-war houses (1952). The increase is mainly due to the causes 'electric cooker', 'electric wire and cable' and 'flue'.

There were 218 permanent non traditional dwellings damaged by fire in 1953, (8.1 per 10,000 dwellings at risk). The causes 'fire in grate' and 'flue' together accounted for 39% of the fires of known cause, electrical causes were another important group. Thirteen serious fires were reported in permanent non-traditional dwellings, four of which occurred in B.I.S.F. houses. There were 22 non-fatal casualties and one fatal casualty reported as a result of fires in permanent non-traditional dwellings. The total rate of incidence of fire in permanent non-traditional dwellings (8.1 damaged dwellings per 10,000 at risk per year) is significantly lower than that for 1952. There have been corresponding decreases in the rates of incidence for each of the main types of permanent non-traditional dwelling with the exception of the Laing-Easiform and the Weir types. The distribution of the causes of fires in permanent non-traditional dwellings follows much the same pattern as in previous years, the decrease in the total rate of incidence being mainly due to the causes 'fire in grate' and 'flue'.

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FIRES IN POST-WAR DWELLINGS

An analysis of reports of fires attended by Fire Brigades in Great Britain during 1953.

by

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INTRODUCTION

This note continues the survey of fires in post war dwellings described in F.R. 70/1953.(1) Reports of 275 incidents in temporary houses and 213 incidents in permanent houses of non traditional construction have been analysed. In all there were 277 temporary dwellings (17.7 per 10,000 dwellings at risk) and 218 permanent non-traditional dwellings (8.1 per 10,000 dwellings at risk) damaged by fire in 1953.

The distributions of fires by type of house, by cause and by material first ignited, have been studied and the results compared with previous analyses.

I. TEMPORARY HOUSES

Rate of incidence. There were 275 incidents in temporary post-war houses attended by Fire Brigades during 1953. These involved 277 dwellings, corresponding to a rate of incidence of 17.7 damaged dwellings per 10,000 at risk per year. Of these outbreaks 245 were confined to the room of origin and there were 16 serious fires in which more than half the dwelling was damaged. In Table I the distribution of incidents in the main types of temporary dwellings is shown together with information on the extent of fire damage.

Causes and materials first ignited. The causes of fire are analysed in Table 2 and curves showing the changes in the more important causes are given in Fig. 2. The greatest individual contribution was that of the cause described as 'electric wire and cable' which was reported in 74 incidents (4.7 damaged dwellings per 10,000 at risk). Fires due to all electrical causes comprised almost half the total of the fires of known cause.

The causes of fire and the materials first ignited in the six main types of temporary dwelling are shown in Tables 3-8.

Forty-eight of the incidents in Aluminium houses were due to causes associated with the use of electricity, 30 of which were reported as faults in electric wire and cable (5.5 damaged dwellings per 10,000 at risk), the causes 'fire in grate' and 'flue' together accounted for a further 26 incidents (4.8 damaged dwellings per 10,000 at risk).

In Arcon dwellings there were 39 incidents due to electrical causes (10.1 per 10,000 dwellings at risk), in 23 of these faults in electric wire and cable caused ignition of the insulation and structural materials, 16 incidents (4.1 per 10,000 dwellings at risk) were due to 'fire in grate' and 10 to radiated heat and sparks from flues. In eight of the latter incidents constructional materials were ignited first.

In Uniseco dwellings 11 incidents were due to faults in electric wire and cable (3.8 damaged dwellings per 10,000 at risk), 9 incidents to electric cookers, eight of which were due to the material in the oven or on the hotplate becoming ignited.

About half the incidents in Tarran houses were due to causes associated with the use of electricity; another important cause was 'fire in grate'. In the U.S.A. and Phoenix houses no single cause was outstanding.

There were 115 incidents in temporary houses in which constructional materials were ignited first. These are analysed in Table 9. Forty-six of them involved fuse box panels and distribution boards. A further 21 incidents involved insulation of electric wiring from which the fire spread to other constructional materials.

Serious fires. Sixteen serious fires (1.0 damaged dwelling per 10,000 at risk) occurred in temporary dwellings during 1953, two of which were due to each of the causes 'electric wire and cable' 'fire in grate', 'children playing with matches' and 'smoking' materials. Data on these incidents is given in table 10.

Casualties. There were 31 non fatal casualties reported as a result of incidents in temporary dwellings, two of which were Fire Brigade personnel. There were also two fatal casualties.

Comparison with previous analyses. The overall rate of incidence for temporary dwellings (17.7 damaged dwellings per 10,000 at risk per year) is slightly higher than that of 1952 and continues the steady increase which has occurred since 1946 although it is not appreciably different from the latest available figure for the overall rate in pre-war houses. This may be seen from the curves given in Fig. 1. The increase is mainly due to the causes, 'electric cookers', 'electric wire and cable' and 'flue'.

In the individual types of houses the total rates of incidence for the Arcon and Tarran dwellings have remained constant although that for the Arcon type in 1953, compares unfavourably with the average rate for the years 1947-52, the rate of incidence for Aluminium dwellings has remained at about the same level as in 1952.

Phoenix houses appear to have an alarmingly high rate of incidence, but, since there are only 2,428 such dwellings at risk, a difference of only one fire alters the rate by 4.1 per 10,000 so that the rate is not necessarily a very good measure of the risk. The rate of incidence for Uniseco dwellings has jumped from 12.4 to 15.9 during 1953, thus maintaining the considerable fluctuations that have occurred since 1946.

The distribution of the causes of fire has remained approximately in the same pattern as in previous years, the rate of incidence of fires attributed 'electric cooker' is twice that for the year 1952 and there has been a further increase in fires due to 'electric wire and cable'. (Fig. 2), the rates of incidence due to this latter cause in the Aluminium and Arcon dwellings, which account for the largest proportion of such fires, have remained constant in 1952 and 1953 but that for Uniseco dwellings has risen from 0.7 to 3.8 damaged dwellings per 10,000 at risk in 1953.

The incidence of flue fires in temporary dwellings has risen from 14 in 1952 to 25 in 1953, 22 of the incidents in 1953 occurred in Aluminium and Arcon dwellings. In the latter type of dwelling the rate of incidence for this cause, which remained approximately constant at a low level from 1947 to 1952 has risen sharply to 2.6 damaged dwellings per 10,000 at risk in 1953, this is a significant increase.

II PERMANENT NON-TRADITIONAL HOUSES

Rate of Incidence. During 1953 Fire Brigades attended 213 incidents involving a total of 218 damaged permanent non-traditional dwellings (8.1 per 10,000 at risk per year). In 194 cases (90%), the outbreaks were confined to the room of origin and there were 13 'serious' fires where the fire spread beyond the room of origin damaging more than half the dwelling.

The individual rates of incidence are shown for the most frequently occurring types of dwelling in Table 11. B.I.S.F., Blackburn, Orlit and Unity types, all have high rates of incidence compared with other types of permanent non-traditional houses.

Causes and materials first ignited. The supposed causes of fire are analysed in Table 12. The causes 'fire in grate' and 'flue' together accounted for 39% of the fires of known cause. Electrical causes were another important group.

The causes of fires are grouped according to type of house in Tables 13-21.

The cause 'electric wire and cable' accounted for the largest number of fires in Aluminium dwellings giving a rate of incidence of 3.6 damaged dwellings per 10,000 at risk per year. The same cause accounted for the largest number of fires in the Blackburn dwellings giving a rate of incidence of 4.3 damaged dwellings per 10,000 at risk per year. 'Fire in grate' was the most important cause in the Weir, Laing Easiform, Orlit, Cornish Unit and Airey types of dwelling. In Airey houses there were also 4 incidents, (1.7 damaged dwellings per 10,000 at risk per year) caused by kitchen ranges.

Radiated heat and sparks from flues caused 17 incidents (4.7 damaged dwellings per 10,000 at risk) in B.I.S.F. dwellings, and 6 incidents (9.0 damaged dwellings per 10,000 at risk) in Unity houses. These incidents together represent almost three quarters of the total number of flue fires in permanent non-traditional dwellings.

There were 70 incidents in all in which constructional materials were the materials first ignited. These have been analysed in Table 22. In eleven incidents roofs and roof linings were ignited first and in a further 10 incidents the ceilings were ignited first.

Serious fires. Thirteen 'serious' fires, which spread beyond the room of origin damaging more than half the dwellings, were reported in permanent non-traditional dwellings; 3 of these were due to the cause 'flue'. Four of the serious fires occurred in B.I.S.F. dwellings.

Casualties. Twenty three casualties were reported as the result of fires in post-war permanent non-traditional dwellings. One of these was fatal.

Comparison with previous analyses. The overall rate of incidence in permanent non-traditional dwellings (8.1 per 10,000 dwellings at risk per year) is significantly lower than the rate for 1952 as may be seen from the curves in Fig. 1. There have been corresponding decreases in the rates of incidence for each of the main types of permanent non-traditional dwellings with the exception of the Laing Easiform and the Weir types. In the Laing Easiform dwellings the rate of incidence has been fairly consistently low but in 1953 it increased from 1.3 damaged dwellings per 10,000 at risk (3 incidents) to 5.1 (15 incidents) in 1953. This is a significant increase. Six of the 15 incidents in 1953 were due to the causes 'fire in grate' and 'flue'. Together these causes give a rate of incidence of 2.1 per 10,000 dwellings at risk.

The distribution of the causes of fire in permanent non-traditional dwellings follows much the same pattern as in the previous years, the decrease in the overall rate of incidence being mainly due to decreases in the fires due to 'fire in grate' and 'flue'. (See Fig. 3).

There has been a decrease since 1952 in the total number of incidents in which the fire spread beyond the room of origin; although the number of serious fires as previously defined has increased from 6 in 1952 to 13 (0.5 damaged dwellings per 10,000 dwellings at risk per year in 1953).

Reference

(1) Millar D. W. and Fry J. F. F.R. Note 70/1953 Fires in Post-War dwellings XXXVII Review of Statistical work on Reports of Fires attended by the N.F.S. and Fire Brigades 1946-1952. (Department of Scientific and Industrial Research and Fire Offices committee. Joint Fire Research Organisation).

TABLE 1

THE RATE OF INCIDENCE OF FIRES IN OCCUPIED POST WAR TEMPORARY DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Type of Dwelling	Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 at risk			
			Total	Fire confined to room of origin	Fire spread beyond room damaging		Total	Fire confined to room of origin	Fire spread beyond room damaging	
					less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Aluminium	54,465	93	93	88	2	3	17.1	16.1	0.4	0.6
Arcon	38,859	90	90	79	7	4	23.2	20.3	1.8	1.0
Phoenix	2,428	8	8	7	-	1	32.9	28.8	-	4.1
Tarran	19,014	28	28	23	2	3	14.7	12.1	1.1	1.6
Uniseco	28,999	44	46	37	4	5	15.9	12.8	1.4	1.7
U.S.A.	8,462	10	10	9	1	-	11.8	10.6	1.2	-
Orlit	255	1	1	1	-	-	39.2	39.2	-	-
Spooner	2,000	1	1	1	-	-	5.0	5.0	-	-
Universal	2,000	-	-	-	-	-	-	-	-	-
Other Types	141	-	-	-	-	-	-	-	-	-
Total	156,623	275	277	245	16	16	17.7	15.6	1.0	1.0

TABLE 2

CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS 1953

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	4(0.3)	31(2.0)	35(2.3)
Electric other apparatus	6(0.4)	11(0.7)	17(1.1)
Electric wire and cable	71(4.5)	3(0.2)	74(4.7)
Fire in grate	6(0.4)	39(2.5)	45(2.9)
Flue	20(1.3)	5(0.3)	25(1.6)
Gas cooker	-	5(0.3)	5(0.3)
Gas other apparatus	-	6(0.4)	6(0.4)
Smoking materials and matches	-	22(1.4)	22(1.4)
Other causes	8(0.5)	19(1.2)	27(1.7)
Total fires of known cause	115(7.3)	141(9.0)	256(16.3)
Unknown cause	-	-	21(1.3)
Total all fires	115(7.3)	141(9.0)	277(17.7)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 3

CAUSE OF FIRES IN OCCUPIED POST WAR TEMPORARY ALUMINIUM DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	2(0.4)	8(1.5)	10(1.8)
Electric other apparatus	4(0.8)	4(0.8)	8(1.4)
Electric wire and cable	30(5.5)	-	30(5.5)
Fire in grate	4(0.7)	10(1.8)	14(2.6)
Flue	10(1.8)	2(0.4)	12(2.2)
Gas cooker	-	1(0.2)	1(0.2)
Smoking materials and matches	-	8(1.5)	8(1.5)
Miscellaneous causes	1(0.2)	4(0.8)	5(1.0)
Total fires of known cause	51(9.4)	37(6.8)	88(16.2)
Unknown cause	-	-	5(0.9)
Total all fires	51(9.4)	37(6.8)	93(17.1)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 4

CAUSE OF FIRES IN OCCUPIED POST WAR TEMPORARY ARCON DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	1(0.3)	7(1.8)	8(2.1)
Electric other apparatus	1(0.3)	5(1.3)	6(1.6)
Electric wire and cable	23(5.9)	2(0.5)	25(6.4)
Fire in grate	1(0.3)	15(3.9)	16(4.1)
Flue	8(2.1)	2(0.5)	10(2.6)
Gas cooker	-	2(0.5)	2(0.5)
Gas other apparatus	-	2(0.5)	2(0.5)
Smoking materials and matches	-	6(1.6)	6(1.6)
Miscellaneous causes	3(0.8)	7(1.8)	10(2.6)
Total fires of known cause	37(9.5)	48(12.4)	85(21.9)
Unknown cause	-	-	5(1.3)
Total fires	37(9.5)	48(12.4)	90(23.2)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 5

CAUSE OF FIRES IN OCCUPIED POST WAR TEMPORARY UNISECO DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric Cooker	1(0.3)	8(2.8)	9(3.1)
Electric other apparatus	-	-	-
Electric wire and cable	10(3.4)	1(0.3)	11(3.8)
Fire in grate	1(0.3)	6(2.1)	7(2.4)
Flue	2(0.7)	1(0.3)	3(1.0)
Gas apparatus other than cooker	-	2(0.7)	2(0.7)
Smoking materials and matches	-	4(1.3)	4(1.3)
Spread from other house	2(0.7)	-	2(0.7)
Miscellaneous causes	1(0.3)	3(1.0)	4(1.3)
Total fires of known cause	17(5.9)	25(8.6)	42(14.5)
Unknown cause	-	-	4(1.4)
Total all fires	17(5.9)	25(8.6)	46(15.9)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 6

CAUSE OF FIRES IN OCCUPIED POST WAR TEMPORARY U.S.A. DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	-	-
Electric other apparatus	1(1.2)	-	1(1.2)
Electric wire and cable	1(1.2)	-	1(1.2)
Fire in grate	-	2(2.4)	2(2.4)
Gas cooker	-	1(1.2)	1(1.2)
Gas other apparatus	-	2(2.4)	2(2.4)
Smoking materials and matches	-	1(1.2)	1(1.2)
Miscellaneous causes	1(1.2)	-	1(1.2)
Total fires of known cause	3(3.5)	6(7.1)	9(10.6)
Unknown cause	-	-	1(1.2)
Total all fires	3(3.5)	6(7.1)	10(11.8)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 7

CAUSE OF FIRES IN OCCUPIED POST WAR TEMPORARY PHOENIX DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	3(12.4)	3(12.4)
Electric other apparatus	-	2(8.2)	2(8.2)
Electric wire and cable	1(4.1)	-	1(4.1)
Smoking materials and matches	-	1(4.1)	1(4.1)
Total fires of known cause	1(4.1)	6(24.7)	7(28.8)
Unknown cause	-	-	1(4.1)
Total all fires	1(4.1)	6(24.7)	8(32.9)

TABLE 8

CAUSE OF FIRES IN OCCUPIED POST WAR TEMPORARY TARRAN DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	6(3.2)	6(3.2)
Electric wire and cable	6(3.2)	-	6(3.2)
Gas cooker	-	1(0.5)	1(0.5)
Fire in grate	-	6(3.2)	6(3.2)
Smoking materials and matches	-	2(1.1)	2(1.1)
Miscellaneous causes	-	4(2.1)	4(2.1)
Total fires of known cause	6(3.2)	19(10.0)	25(13.1)
Unknown cause	-	-	3(1.6)
Total all fires	6(3.2)	19(10.0)	28(14.7)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 9

NATURE OF CONSTRUCTIONAL MATERIALS FIRST IGNITED IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Nature of constructional materials	Number of incidents
Roof or roof linings	6(0.4)
Ceilings	9(0.6)
Partitions, walls, linings to walls	9(0.6)
Floor	1(0.06)
Insulation of electric wiring	
(a) no fire spread	6(0.4)
(b) fire confined to fuse box panel, switch-board, distribution board, pipe and tank laggings	45(2.9)
(c) fire involving (b) but spread to contents	1(0.06)
(d) Fire involving walls, floors, ceilings, rafters, built in cupboards	21(1.3)
(e) Fire involving other materials	2(0.1)
Flue casings	5(0.3)
Miscellaneous constructional materials	10(0.6)
Total fires in which constructional materials were first ignited	115(7.3)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 10

CAUSE OF SERIOUS FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of Fire	Type of House						
	Aluminium	Arcon	Phoenix	Tarran	Uniseco	U.S.A.	Total
Electric cooker					1		1
Electric wire and cable		1			1		2
Fire in grate		1		1			2
Smoking materials and matches	2	1			1		4
Miscellaneous causes				1			1
Unknown cause	1	1	1	1	2	-	6
Total	3	4	1	3	5	-	16

TABLE 11

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON TRADITIONAL DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Type of dwelling	Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 at risk			
			Total	Fire confined to room of origin	Fire spread beyond room damaging		Total	Fire confined to room of origin	Fire spread beyond room damaging	
					less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Airey	23,463	13	14	11	-	3	6.0	4.7	-	1.3
Aluminium	19,482	13	13	13	-	-	6.7	6.7	-	-
Atholl	5,277	4	4	3	-	1	7.6	5.7	-	1.9
B.I.S.F.	36,344	53	53	48	1	4	14.6	13.2	0.3	1.1
Blackburn	7,028	10	11	10	-	1	15.7	14.2	-	1.4
Cornish Unit	13,512	6	6	6	-	-	4.4	4.4	-	-
Cruden	8,252	3	3	3	-	-	3.6	3.6	-	-
Foamslag	1,622	-	-	-	-	-	-	-	-	-
Howard	1,404	3	3	3	-	-	21.4	21.4	-	-
Laing Easiform	29,397	15	15	15	-	-	5.1	5.1	-	-
Orlit	13,934	17	18	17	1	-	12.9	12.2	0.7	-
Spooner	2,111	-	-	-	-	-	-	-	-	-
Stuart	4,671	2	2	2	-	-	4.3	4.3	-	-
Swedish Timber	6,010	2	3	1	1	1	5.0	1.7	1.7	1.7
Trusteel	2,042	-	-	-	-	-	-	-	-	-
Unity	6,632	8	8	8	-	-	12.1	12.1	—	-
Wates	10,760	3	3	3	-	-	2.8	2.8	-	-
Weir	12,938	13	14	13	1	-	10.8	10.0	0.8	-
Whitson Fairhurst	3,326	1	1	1	-	-	3.0	3.0	-	-
Wimpey	27,100	9	9	8	1	-	3.3	3.0	0.4	-
Other types	34,079	38	38	29	6	3	11.1	8.5	1.8	0.8
Total	269,384	213	218	194	11	13	8.1	7.2	0.4	0.5

TABLE 12

CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	20(0.7)	20(0.7)
Electric other apparatus	2(0.07)	12(0.4)	14(0.5)
Electric wire and cable	16(0.6)	3(0.1)	19(0.7)
Fire in grate	5(0.2)	44(1.6)	49(1.8)
Flue	25(0.9)	7(0.3)	32(1.2)
Gas cooker	1(0.04)	6(0.2)	7(0.3)
Gas other apparatus	1(0.04)	1(0.04)	2(0.07)
Smoking materials and matches	-	18(0.7)	18(0.7)
Naked light	-	10(0.4)	10(0.4)
Spread of fire from house or flat	6(0.2)	-	6(0.2)
Miscellaneous causes	14(0.5)	15(0.6)	29(1.1)
Total fires of known cause	70(2.6)	136(5.0)	206(7.6)
Unknown cause			12(0.4)
Total all fires	70(2.6)	136(5.0)	218(8.1)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 13

CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL AIREY DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	-	-
Electric other apparatus	-	1(0.4)	1(0.4)
Fire in grate	1(0.4)	3(1.3)	4(1.7)
Flue	2(0.8)	-	2(0.8)
Spread of fire from house or flat	1(0.4)	-	1(0.4)
Kitchen range	1(0.4)	3(1.3)	4(1.7)
Miscellaneous causes	-	1(0.4)	1(0.4)
Total fires of known cause	5(2.1)	8(3.4)	13(5.5)
Unknown cause			1(0.4)
Total all fires	5(2.1)	8(3.4)	14(6.0)

TABLE 14

CAUSES OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL ALUMINIUM DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	1(0.5)	1(0.5)
Electric other apparatus	-	1(0.5)	1(0.5)
Electric wire and cable	7(3.6)	-	7(3.6)
Fire in grate	-	1(0.5)	1(0.5)
Gas cooker	1(0.5)	-	1(0.5)
Miscellaneous causes	1(0.5)	1(0.5)	2(1.0)
Total fires of known cause	9(4.6)	4(2.1)	13(6.7)
Unknown cause			-
Total all fires	9(4.6)	4(2.1)	13(6.7)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 15

CAUSE OF FIRE IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL BLACKBURN DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	-	-
Electric other apparatus	1(1.4)	1(1.4)	2(2.8)
Electric wire and cable	3(4.3)	-	3(4.3)
Fire in grate	-	1(1.4)	1(1.4)
Gas cooker	-	1(1.4)	1(1.4)
Smoking materials and matches	-	2(2.8)	2(2.8)
Spread of fire from house or flat	1(1.4)	-	1(1.4)
Miscellaneous cause	-	1(1.4)	1(1.4)
Total fires of known cause	5(7.1)	6(8.5)	11(15.7)
Unknown cause	-	-	-
Total all fires	5(7.1)	6(8.5)	11(15.7)

TABLE 16

CAUSE OF FIRE IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL CORNISH UNIT DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Fire in grate	1(0.7)	3(2.2)	4(3.0)
Gas cooker	-	2(1.5)	2(1.5)
Total all fires	1(0.7)	5(3.7)	6(4.4)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 17

CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL B.I.S.F. DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	3(0.8)	3(0.8)
Electric other apparatus	1(0.3)	2(0.6)	3(0.9)
Electric wire and cable	2(0.6)	2(0.6)	4(1.1)
Fire in grate	-	4(1.1)	4(1.1)
Flue	15(4.1)	2(0.6)	17(4.7)
Gas cooker	-	1(0.3)	1(0.3)
Gas other apparatus	1(0.3)	-	1(0.3)
Smoking materials and matches	-	5(1.4)	5(1.4)
Miscellaneous causes	4(1.1)	8(2.2)	12(3.3)
Total fires of known cause	23(6.3)	27(7.4)	50(13.8)
Unknown cause	-	-	3(0.8)
Total all fires	23(6.3)	27(7.4)	53(14.6)

TABLE 18

CAUSES OF FIRE IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL UNITY DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	-	-
Electric other apparatus	-	1(1.5)	1(1.5)
Flue	4(6.0)	2(3.0)	6(9.0)
Smoking materials and matches	-	1(1.5)	1(1.5)
Total all fires	4(6.0)	4(6.0)	8(12.1)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings risk.

TABLE 19

CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL LAING-EASIFORM DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	2(0.7)	2(0.7)
Electric other apparatus	-	1(0.3)	1(0.3)
Electric wire and cable	-	1(0.3)	1(0.3)
Fire in grate	-	4(1.4)	4(1.4)
Flue	1(0.3)	1(0.3)	2(0.7)
Smoking materials and matches	-	3(1.0)	3(1.0)
Miscellaneous causes	1(0.3)	-	1(0.3)
Total fires of known cause			14(4.8)
Unknown cause	2(0.7)	12(4.1)	1(0.3)
Total all fires			15(5.1)

TABLE 20

CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL ORLIT DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	3(2.2)	3(2.2)
Fire in grate	-	6(4.3)	6(4.3)
Flue	3(2.2)	1(0.7)	4(2.9)
Gas cooker	-	1(0.7)	1(0.7)
Smoking materials and matches	-	2(1.4)	2(1.4)
Spread of fire from house or flat	1(0.7)	-	1(0.7)
Total fires of known cause	4(2.9)	13(9.3)	17(12.2)
Unknown cause			1(0.7)
Total all fires	4(2.9)	13(9.3)	18(12.9)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 21

CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL WEIR DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Material first ignited		
	Constructional Materials	Contents	Total
Electric cooker	-	3(2.3)	3(2.3)
Electric other apparatus	-	1(0.8)	1(0.8)
Electric wire and cable	-	-	-
Fire in grate	1(0.8)	5(3.9)	6(4.6)
Gas cooker	-	-	-
Gas other apparatus	-	1(0.8)	1(0.8)
Spread of fire from house or flat	1(0.8)	-	1(0.8)
Miscellaneous causes	1(0.8)	1(0.8)	2(1.6)
Total all fires	3(2.3)	11(8.5)	14(10.8)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 22

NATURE OF CONSTRUCTIONAL MATERIALS FIRST IGNITED IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Nature of constructional materials	Number of Incidents
Roof or roof linings	11(0.4)
Ceiling	10(0.4)
Partitions, walls, linings to walls	10(0.4)
Floor	2(0.07)
Insulation of electric wiring	
(a) No fire spread	2(0.07)
(b) Fire confined to fuse box panel, switchboard, distribution board pipe and tank laggings	7(0.3)
(c) Fire involving (b) but spread to contents	1 -
(d) Fire involving walls, floors, ceilings rafters, built in cupboards	4(0.1)
(e) Fire involving other materials	2(0.07)
Flue casings	2(0.07)
Miscellaneous constructional materials	19(0.8)
Total fires in which constructional materials were first ignited	70(2.6)

Note. The figures in brackets represent the number of damaged dwellings per 10,000 dwellings at risk.

TABLE 23

CAUSE OF SERIOUS FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from Fire Brigades in Great Britain 1953

Cause of fire	Type of dwelling						
	Airey	Atholl	B.I.S.F.	Swedish	Black-burn	Other types	Total
Electric iron					1		1
Fire in grate	1						1
Flue	1	-	2				3
Gas cooker						1	1
Smoking materials and matches	-	1					1
Spread of fire from house or flat	1					1	2
Miscellaneous causes	-	-	1				1
Unknown cause	-	-	1	1	-	1	3
Total	3	1	4	1	1	3	13

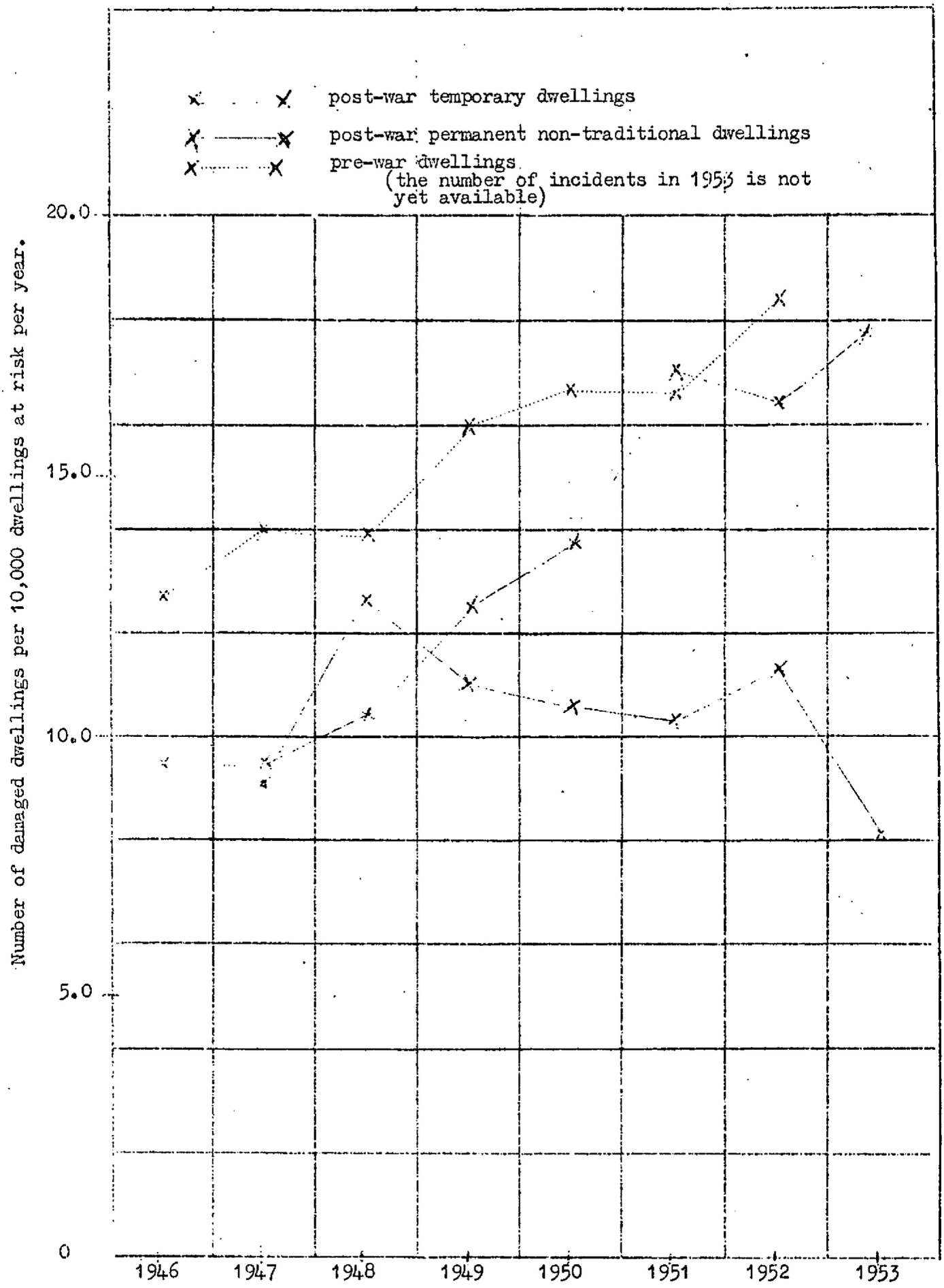

FIG. 1. FIRES IN HOUSES AND FLATS 1946 - 52

(Number of damaged dwellings per 10,000 dwellings at risk per year)

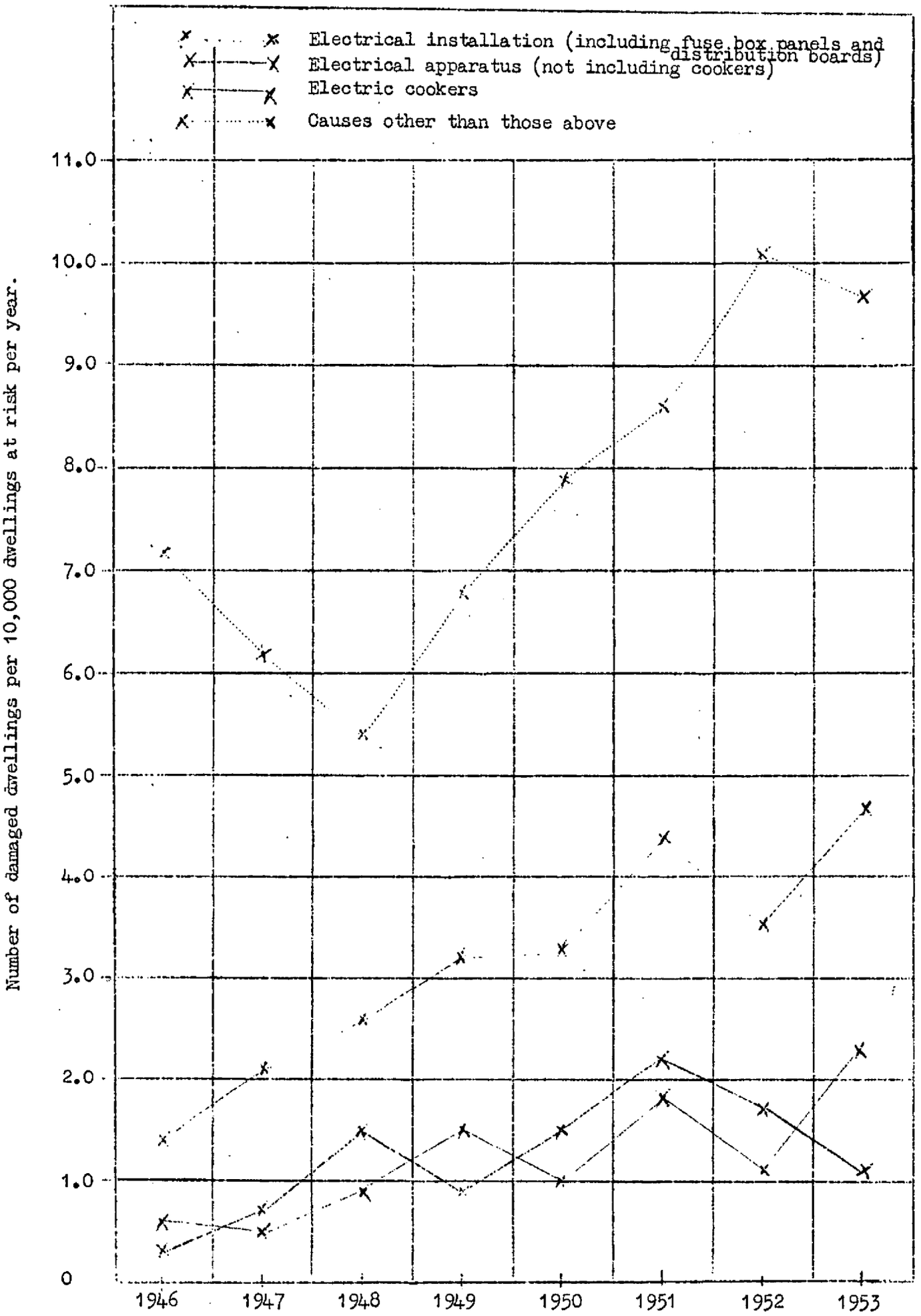

FIG. 2. CAUSES OF FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS 1946 - 53.

(Number of damaged dwellings per 10,000 dwellings at risk per year)

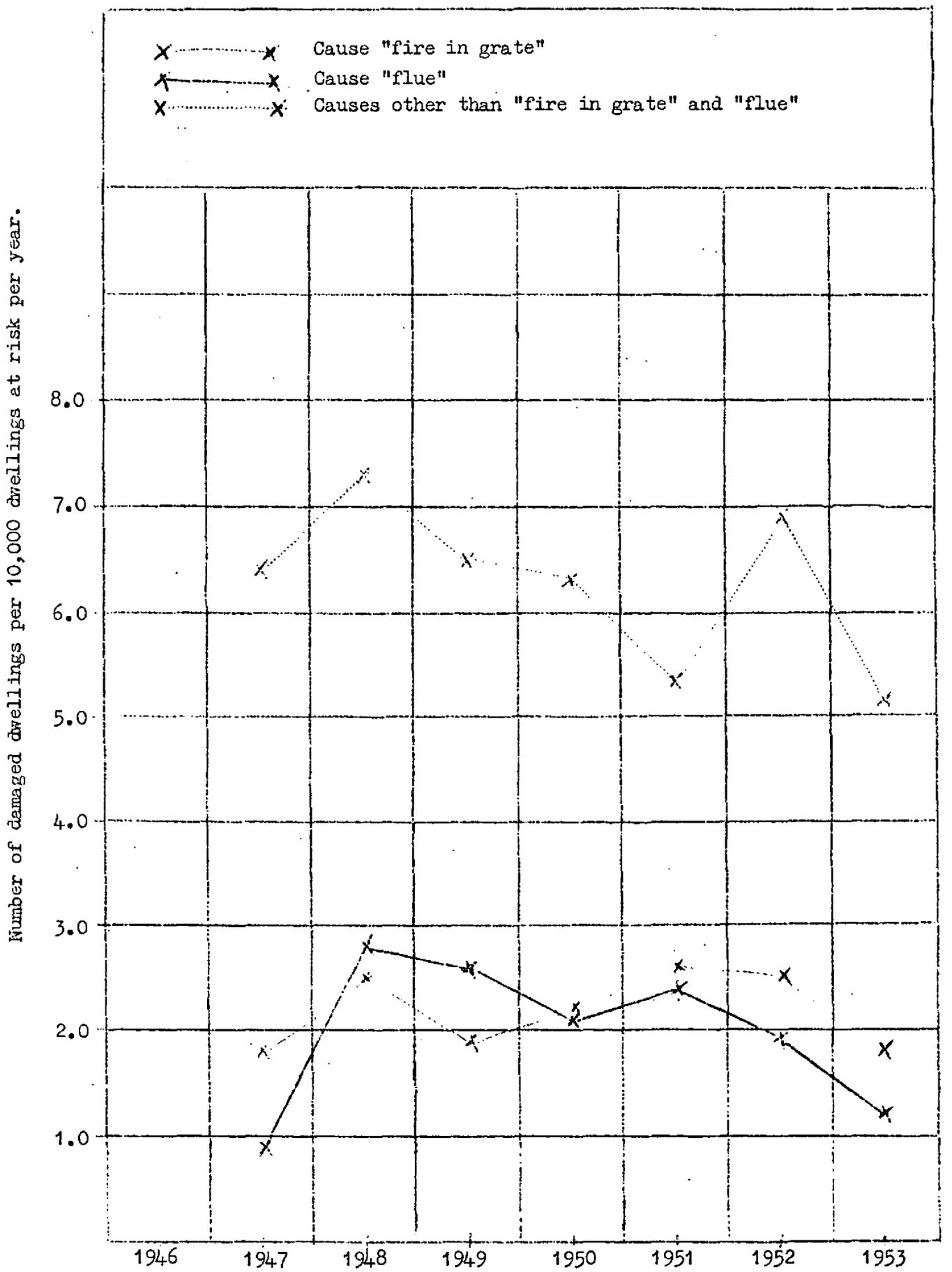

FIG. 3. CAUSES OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS (1947 - 53)

(Number of damaged dwellings per 10,000 dwellings at risk per year)